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**Via Overnight Mail**

June 29, 2011



Mr. Jeff Derouen, Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40602

**Re: Case No. 2011-00036**

Dear Mr. Derouen:

Please find enclosed the original and ten (10) copies of KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC's ("KIUC") MOTION TO DEVIATE FROM RULE GOVERNING FILING OF COPIES to be filed in the above-referenced matter.

Pursuant to the KIUC's Motion to Deviate, I also enclose eleven paper copies and 11 sets of the 4 CD's of the previously filed public version of KIUC's Data Responses and Exhibits to Commission Staffs Initial Information Requests and Big Rivers Electric Corporation First Data Requests.

By copy of this letter, all parties listed on the Certificate of Service have been served. Please place these documents of file.

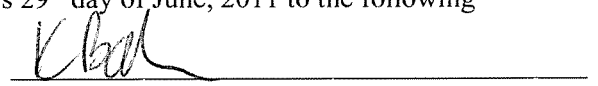
Very Truly Yours,

Michael L. Kurtz, Esq.
Kurt J. Boehm, Esq.
**BOEHM, KURTZ & LOWRY**

MLKkew
Attachment
cc: Certificate of Service
David C. Brown, Esq.

**CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing was served by electronic mail (when available) or by mailing a true and correct copy by overnight mail, unless other noted, this 29th day of June, 2011 to the following



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COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

| | | |
|---|---|---|
| APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES | ) ) ) | CASE NO. 2011-00036 |



**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF-1**

Refer to page 9, line 1-5, of the Direct Testimony and Exhibits of Henry W. Fayne ("Fayne Testimony"). Mr. Fayne states that there were 34 smelters in the U.S. in 1978 producing 31 percent of the world supply of aluminum. Today, there are ten smelters producing only 4.2 percent of the world's supply.

a. Explain where the production has moved and whether the price of electricity is the only reason smelters have left the U.S.
b. Considering the estimated cost impacts of the new and amended federal environmental regulations, explain whether Mr. Fayne believes that the aluminum industry in the United States can survive the impact if complying with the new regulations.

**RESPONSE**

a. In all cases, the smelters that shut down in the U.S. identified the cost of electricity as the primary reason for the closure. New production capacity has developed in places around the world with either low-cost hydro or geo-thermal sources of electricity or where government subsidies had been provided (e.g., Iceland, Middle East).

b. Considering the estimated cost impacts of the new and amended federal environmental regulations, Mr. Fayne believes that smelters supplied with electricity primarily from hydroelectric sources should continue to be viable. Smelters such as Sebree and Hawesville that are supplied with electricity primarily from coal sources are less likely to survive unless (1) the rest of the world adopts similar provisions which would adjust the LME to levels that would support such higher electricity costs or (2) special arrangements are implemented which would mitigate such costs for the smelters.

Witness: Henry W Fayne

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF-2**
Refer to page 9, line 18, of the Fayne Testimony and Exhibit HWF-1. Both refer to the average global price of electricity for smelters, excluding China, of approximately $27 per MWh. Explain why the "global price" does not include the price of electricity for smelters operating in China. If the price in China is available, provide it.

**RESPONSE**

The price of electricity for smelters in China is generally excluded from analyses intended to evaluate the competitive viability of smelters for the following reasons:

1. The high cost of electricity in China is offset by government subsidized labor and plant investment.
2. China is not an open market economy. Aluminum production in China is consumed internally (independent of price) and, therefore, the cost of production in China does not directly affect the LME price.

The cost of electricity in China is approximately $58/MWh.

Witness: Henry W Fayne

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF-3**
Refer to pages 18-19 of the Fayne Testimony. Provide copies of the following commission orders referenced by Mr. Fayne, which included decisions that specifically addressed cost-of-service issues for aluminum smelters:

a. Missouri commission – Case No. ER-2010-0036
b. Ohio commission – Case No. 09-119-EI-AEC
c. West Virginia – Case No. 05-278-E-PC-PW-42T

**RESPONSE**

Please see attached Exhibits STAFF-3A, STAFF-3B, and STAFF-3C on enclosed CD.

Witness: Henry W Fayne

# BEFORE THE PUBLIC SERVICE COMMISSION

# OF THE STATE OF MISSOURI

| | | |
|---|---|---|
| In the Matter of Union Electric Company, d/b/a AmerenUE's Tariffs to Increase Its Annual Revenues for Electric Service | ) ) ) | **File No. ER-2010-0036** Tariff No. YE-2010-0054 |

## REPORT AND ORDER

**Issue Date: May 28, 2010**

**Effective Date: June 7, 2010**

# BEFORE THE PUBLIC SERVICE COMMISSION
# OF THE STATE OF MISSOURI

| | | |
|---|---|---|
| In the Matter of Union Electric Company, d/b/a AmerenUE's Tariffs to Increase Its Annual Revenues for Electric Service | ) ) ) | **File No. ER-2010-0036** Tariff No. YE-2010-0054 |

## APPEARANCES

**Thomas M. Byrne**, Managing Assoc. General Counsel, and **Wendy K. Tatro**, Asst. General Counsel, Ameren Services Company, P.O. Box 66149, 1901 Chouteau Ave., St. Louis, Missouri 63103;

**James B. Lowery**, Attorney at Law, Smith Lewis, LLP, P.O. Box 918, Suite 200, City Centre Building, 111 South Ninth St. Columbia, Missouri 65205-0918; and

**James M. Fischer**, Attorney at Law, Fischer & Dority, 101 Madison, Suite 400, Jefferson City, Missouri 65101.

For Union Electric Company, d/b/a AmerenUE.

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For the Staff of the Missouri Public Service Commission.

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For the Office of the Public Counsel and the Public.

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For the Missouri Department of Natural Resources.

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For the Midwest Energy Users' Association.

**Michael C. Pendergast**, Vice President and Associate General Counsel, Laclede Gas Company, 720 Olive Street, Room 1520, St. Louis, Missouri 63101.

For Laclede Gas Company.

**Diana Vuylsteke**, Attorney at Law, **Mark Leadlove**, Attorney at Law, **Brent Roam**, Attorney at Law, and **Carol Iles**, Attorney at Law, Bryan Cave, LLP, 211 N. Broadway, Suite 3600, St. Louis, Missouri 63102, and **Edward F. Downey**, Attorney at Law, Bryan Cave, LLP, 221 Bolivar Street, Suite 300, Jefferson City, Missouri 65101

For Missouri Industrial Energy Consumers.

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For Missouri Energy Group.

**John B. Coffman**, Attorney at Law, John B. Coffman, LLC, 871 Tuxedo Blvd, St. Louis, Missouri 63119-2044.

For AARP and the Consumers Council of Missouri.

**Sherrie A. Schroder**, Attorney at Law, Hammond and Shinners, P.C. 7730 Carondelet Ave., Suite 200, St. Louis, Missouri 63105.

For International Brotherhood of Electrical Workers Locals 2, 309, 649, 702, 1439, 1455, AFL-CIO and International Brotherhood of Operating Engineers Local 148, AFL-CIO.

**Mark W. Comley**, Attorney at Law, Newman, Comley & Ruth, 601 Monroe, Suite 301, Jefferson City, Missouri 65102.

For Charter Communications, Inc..

**Leland B. Curtis**, Attorney at Law, Curtis, Oetting, Heinz, Garrett & O'Keefe, 130 S. Bemiston, Suite 200, St. Louis, Missouri 63105.

For the City of O'Fallon, the City of University City, the City of Rock Hill, and the St. Louis County Municipal Group (The Municipal Group).

**Douglas L. Healy**, Attorney at Law, Healy & Healy, LLC, 939 Boonville, Suite A, Springfield, Missouri 65802.

For the Missouri Joint Municipal Electric Utility Commission

Thomas R. Schwarz, Blitz, Bardgett & Deutsch, L.C. 308 East High Street, Suite 301, Jefferson City, Missouri 65101.

For the Missouri Retailers Association.

**CHIEF REGULATORY LAW JUDGE: Morris L. Woodruff**

# REPORT AND ORDER

## Table of Contents

The Missouri Public Service Commission, having considered all the competent and substantial evidence upon the whole record, makes the following findings of fact and conclusions of law. The positions and arguments of all of the parties have been considered by the Commission in making this decision. Failure to specifically address a piece of evidence, position, or argument of any party does not indicate that the Commission has failed to consider relevant evidence, but indicates rather that the omitted material was not dispositive of this decision.

## Summary

This order allows AmerenUE to increase the revenue it may collect from its Missouri customers by approximately $226.3 million based on the data contained in the Revised True-up Reconciliation filed by the Missouri Public Service Commission Staff on April 14, 2010.

## Procedural History

On July 24, 2009, Union Electric Company, d/b/a AmerenUE filed tariff sheets designed to implement a general rate increase for electric service. The tariff would have increased AmerenUE's annual electric revenues by approximately $401.5 million. The tariff revisions carried an effective date of August 23, 2009. By a separate tariff also issued on July 24, AmerenUE sought to implement an interim rate adjustment that would have allowed it to recover $37.3 million as an interim rate increase. The interim rate adjustment tariff carried an October 1, 2009 effective date.

By order issued on July 27, 2009, the Commission suspended AmerenUE's general rate increase tariff until June 21, 2010, the maximum amount of time allowed by the controlling statute.[1] In the same order, the Commission directed that notice of AmerenUE's tariff filing be provided to interested parties and the public. The Commission also established August 17, 2009, as the deadline for submission of applications to intervene. The following parties filed applications and were allowed to intervene: The International Brotherhood of Electrical Workers Locals 2, 309, 649, 702, 1439, and 1455, AFL-CIO and International Union of Operating Engineers Local 148 AFL-CIO (collectively the Unions); The Missouri Industrial Energy Consumers (MIEC);[2] The Missouri Energy Group (MEG);[3] The Missouri Department of Natural Resources; Laclede Gas Company; The Consumers Council of Missouri; AARP; The Missouri Retailers Association; The Natural Resources

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[1] Section 393.150, RSMo 2000.

[2] The following members of MIEC were allowed to intervene as individual entities and as an association: Anheuser-Busch Companies, Inc.; BioKyowa, Inc.; The Boeing Company; Doe Run; Enbridge; General Motors Corporation; GKN Aerospace; Hussmann Corporation; JW Aluminum; MEMC Electronic Materials; Monsanto; Pfizer; Precoat Metals; Proctor & Gamble Company; Nestlé Purina PetCare; Noranda Aluminum; Saint Gobain; Solutia; and U.S. Silica Company.

[3] The members of MEG are Barnes–Jewish Hospital; Buzzi Unicem USA, Inc.; and SSM HealthCare.

Defense Council; the Missouri Association of Community Organizations for Reform Now (MO-ACORN); the City of O'Fallon, the City of University City, the City of Rock Hill, and the St. Louis County Municipal League (the Municipal Group); the Midwest Energy Users' Association (MEUA);[4] Charter Communications, Inc.; the Missouri Joint Municipal Electric Utility Commission; and Kansas City Power & Light Company.

On September 14, 2009, the Commission established the test year for this case as the 12-month period ending March 31, 2009, trued-up as of January 31, 2010. In its September 14 order, the Commission established a procedural schedule leading to an evidentiary hearing regarding AmerenUE's general rate increase tariff.

The Commission addressed AmerenUE's interim rate increase tariff separately. The Commission suspended that tariff from its October 1, 2009 effective date until January 29, 2010. After accepting prefiled testimony and conducting an evidentiary hearing on December 7, 2009, the Commission rejected the interim rate increase tariff in a Report and Order issued on January 13, 2010.

In January and February, 2010, the Commission conducted seventeen local public hearings at various sites around AmerenUE's service area. At those hearings, the Commission heard comments from AmerenUE's customers and the public regarding AmerenUE's request for a rate increase.

In compliance with the established procedural schedule, the parties prefiled direct, rebuttal, and surrebuttal testimony. The evidentiary hearing began on March 15, 2010, and continued through March 26. The parties indicated they had no contested true-up issues and the Commission cancelled the true-up hearing scheduled for April 12 and 13, 2010.

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[4] The members of MEUA are Wal-Mart Stores and Best Buy Co. Inc.

The parties filed post-hearing briefs on April 23, 2010, with reply briefs following on April 30. Based on the revised true-up reconciliation filed by Staff on April 14, 2010, AmerenUE has reduced its rate increase request to $286,930,749.

**Pending Motion**

Following the hearing, on April 22, Staff and AmerenUE filed a written motion offering certain true-up exhibits into evidence. The written motion was necessary because the true-up hearing was cancelled at the request of the parties. The Commission issued an order on April 23 that established April 26 as the deadline for the parties to object to the admission of any of the submitted exhibits. MIEC filed a response on April 26 entitled Objection to True-Up Reconciliation. Despite its title, MIEC's pleading did not object to the admission of the true-up reconciliation that had been submitted by Staff as exhibit 244. Rather, MIEC's pleading asked the Commission to modify that reconciliation to correctly reflect MIEC's position on steam production – net salvage. The Commission issued an order on April 27 that modified the reconciliation as requested by MIEC and admitted all the true-up exhibits into evidence.

On May 3, AmerenUE filed a motion asking the Commission to modify a portion of its April 27 order admitting the true-up exhibits into evidence by rejecting the modification to the reconciliation offered by MIEC. MIEC filed suggestions in opposition to that motion on May 3.

AmerenUE contends the reconciliation should not be modified to reflect MIEC's asserted position on depreciation because that position is not supported by the evidence in the record. MIEC responds by asserting that its adjustment is correct. The challenged exhibit is simply Staff's reconciliation that purports to evaluate the monetary value of the

positions asserted by the various parties. At any rate, AmerenUE's motion indicates its motion will be moot if the Commission uses the life span approach to depreciation advocated by the company. This report and order does use the life span approach advocated by AmerenUE, so the motion is moot. On that basis, AmerenUE's Motion to Modify Order Admitting True-Up Exhibits is denied.

**The Partial Stipulations and Agreements**

During the course of the evidentiary hearing, various parties filed four nonunanimous partial stipulations and agreements resolving issues that would otherwise have been the subject of testimony at the hearing. No party opposed those partial stipulations and agreements. As permitted by its regulations, the Commission treated the unopposed partial stipulations and agreements as unanimous.[5] After considering both stipulations and agreements, the Commission approved them as a resolution of the issues addressed in those agreements.[6] The issues resolved in those stipulations and agreements will not be further addressed in this report and order, except as they may relate to any unresolved issues.

On March 17, 2010, the Office of the Public Counsel, Noranda, MIEC, AARP and the Consumers Council of Missouri, and the Missouri Retailers Association filed an additional non-unanimous stipulation and agreement that would have resolved various class cost of service and rate design issues.[7] MEUA opposed that non-unanimous stipulation and agreement, and as provided in the Commission's rules, the Commission will consider that

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[5] Commission Rule 4 CSR 240-2.115(C).

[6] The Commission issued an *Order Approving First Stipulation and Agreement* on March 24, 2010. The Commission issued an *Order Approving Second Stipulation and Agreement, Third Stipulation and Agreement, and Market Energy Prices Stipulation and Agreement* on April 14, 2010.

[7] The same parties filed an addendum to their stipulation and agreement on March 26, 2010. MEUA also opposed that addendum.

stipulation and agreement to be merely a position of the signatory parties to which no party is bound.[8] The issues that were the subject of that stipulation and agreement will be determined in this report and order.

**Overview**

AmerenUE is an investor-owned integrated electric utility providing retail electric service to large portions of Missouri, including the St. Louis Metropolitan area. AmerenUE has approximately 1.2 million retail electric customers in Missouri, more than 1 million of whom are residential customers.[9] AmerenUE also operates a natural gas utility in Missouri but the rates it charges for natural gas are not at issue in this case.

AmerenUE began the rate case process when it filed its tariff on July 24, 2009. In doing so, AmerenUE asserted it was entitled to increase its retail rates by $401.5 million per year, an increase of approximately 18 percent.[10] AmerenUE attributed approximately $227 million of that increase to the rebasing of fuel costs that would otherwise be passed through to customers by operation of the company's existing fuel adjustment clause.[11] AmerenUE set out its rationale for increasing its rates in the direct testimony it filed along with its tariff on July 24. In addition to its filed testimony, AmerenUE provided work papers and other detailed information and records to the Staff of the Commission, Public Counsel, and to the intervening parties. Those parties then had the opportunity to review AmerenUE's testimony and records to determine whether the requested rate increase was justified.

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[8] Commission Rule 4 CSR 240-2.115(2)(D).

[9] Baxter Direct, Ex. 100, Page 4, Lines 14-15.

[10] Baxter Direct, Ex. 100, Page 5, Lines 7-8.

[11] Baxter Direct, Ex. 100, Page 5, Lines 8-11.

Where the parties disagreed, they prefiled written testimony to raise those issues to the attention of the Commission. All parties were given an opportunity to prefile three rounds of testimony – direct, rebuttal, and surrebuttal. The process of filing testimony and responding to the testimony filed by other parties revealed areas of agreement that resolved some issues and areas of disagreement that revealed new issues. On March 8, the parties filed a list of the issues they asked the Commission to resolve.

As previously indicated, a number of the identified issues were resolved by the approved partial stipulations and agreements and will not be further addressed in this report and order. The remaining issues will be addressed in turn.

**Conclusions of Law Regarding Jurisdiction**

A. AmerenUE is a public utility, and an electrical corporation, as those terms are defined in Section 386.020(43) and (15), RSMo (Supp. 2009). As such, AmerenUE is subject to the Commission's jurisdiction pursuant to Chapters 386 and 393, RSMo.

B. Section 393.140(11), RSMo 2000, gives the Commission authority to regulate the rates AmerenUE may charge its customers for electricity. When AmerenUE filed a tariff designed to increase its rates, the Commission exercised its authority under Section 393.150, RSMo 2000, to suspend the effective date of that tariff for 120 days beyond the effective date of the tariff, plus an additional six months.

**Conclusions of Law Regarding the Determination of Just and Reasonable Rates**

A. In determining the rates AmerenUE may charge its customers, the Commission is required to determine that the proposed rates are just and reasonable.[12] AmerenUE has the burden of proving its proposed rates are just and reasonable.[13]

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[12] Section 393.150.2, RSMo 2000.

B. In determining whether the rates proposed by AmerenUE are just and reasonable, the Commission must balance the interests of the investor and the consumer.[14] In discussing the need for a regulatory body to institute just and reasonable rates, the United States Supreme Court has held as follows:

> Rates which are not sufficient to yield a reasonable return on the value of the property used at the time it is being used to render the services are unjust, unreasonable and confiscatory, and their enforcement deprives the public utility company of its property in violation of the Fourteenth Amendment.[15]

In the same case, the Supreme Court provided the following guidance on what is a just and reasonable rate:

> What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.[16]

The Supreme Court has further indicated:

> '[R]egulation does not insure that the business shall produce net revenues.' But such considerations aside, the investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated.

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[13] *Id.*

[14] *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603, (1944).

[15] *Bluefield Water Works & Improvement Co. v. Public Service Commission of the State of West Virginia*, 262 U.S. 679, 690 (1923).

[16] *Id.* at 692-93.

> From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.[17]

C. In undertaking the balancing required by the Constitution, the Commission is not bound to apply any particular formula or combination of formulas. Instead, the Supreme Court has said:

> Agencies to whom this legislative power has been delegated are free, within the ambit of their statutory authority, to make the pragmatic adjustments which may be called for by particular circumstances.[18]

D. Furthermore, in quoting the United States Supreme Court in *Hope Natural Gas*, the Missouri Court of Appeals said:

> [T]he Commission [is] not bound to the use of any single formula or combination of formulae in determining rates. Its rate-making function, moreover, involves the making of 'pragmatic adjustments.' ... Under the statutory standard of 'just and reasonable' it is the result reached, not the method employed which is controlling. It is not theory but the impact of the rate order which counts.[19]

**The Rate Making Process**

The rates AmerenUE will be allowed to charge its customers are based on a determination of the company's revenue requirement. AmerenUE's revenue requirement is calculated by adding the company's operating expenses, its depreciation on plant in rate base, taxes, and its rate of return multiplied by its rate base. The revenue requirement can

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[17] *Federal Power Commission v. Hope Natural Gas Co.,* 320 U.S. 591, 603 (1944) (citations omitted).

[18] *Federal Power Commission v. Natural Gas Pipeline Co.* 315 U.S. 575, 586 (1942).

[19] *State ex rel. Associated Natural Gas Co. v. Pub. Serv. Comm'n*, 706 S.W. 2d 870, 873 (Mo. App. W.D. 1985).

be expressed as the following formula:

Revenue Requirement = E + D + T + R(V-AD+A)
Where: E = Operating expense requirement
D = Depreciation on plant in rate base
T = Taxes including income tax related to return
R = Return requirement
(V-AD+A) = Rate base
For the rate base calculation:
V = Gross Plant
AD = Accumulated depreciation
A = Other rate base items

All parties accept the basic formula. Disagreements arise over the amounts that should be included in the formula.

## The Issues

### 1. Rate of Return

**Findings of Fact:**

**Introduction:**

1. This issue concerns the rate of return AmerenUE will be authorized to earn on its rate base. Rate base includes things like generating plants, electric meters, wires and poles, and the trucks driven by AmerenUE's repair crews. In order to determine a rate of return, the Commission must determine AmerenUE's cost of obtaining the capital it needs.

#### a. Capital Structure

2. The relative mixture of sources AmerenUE uses to obtain the capital it needs is its capital structure. All parties agree that AmerenUE's actual capital structure as of the true-up date, January 31, 2010, should be used for purposes of establishing its rates in this case. Staff's True-Up Accounting Schedules described AmerenUE's actual capital structure as of January 31, 2010 as:

| | |
|---|---|
| Long-Term Debt | 47.26% |

| | |
|---|---|
| Short-Term Debt | 00.00% |
| Preferred Stock | 01.48% |
| Common Equity | 51.26%[20] |

Since all parties accept this capital structure, the Commission will not further address this matter.

3. Similarly, AmerenUE's calculation of the cost of its long-term debt and preferred stock is not disputed by any party,[21] and will not be further addressed.

**b. Return on Equity**

**Introduction:**

4. Determining an appropriate return on equity is without a doubt the most difficult part of determining a rate of return. The cost of long-term debt and the cost of preferred stock are relatively easy to determine because their rate of return is specified within the instruments that create them.[22] In contrast, in determining a return on equity, the Commission must consider the expectations and requirements of investors when they choose to invest their money in AmerenUE rather than in some other investment opportunity. As a result, the Commission cannot simply find a rate of return on equity that is unassailably scientifically, mathematically, or legally correct. Such a "correct" rate does not exist. Instead, the Commission must use its judgment to establish a rate of return on equity attractive enough to investors to allow the utility to fairly compete for the investors' dollar in the capital market, without permitting an excessive rate of return on equity that would drive up rates for AmerenUE's ratepayers. In order to obtain guidance about the

[20] Staff True-Up Accounting Schedules, Ex. 243, Schedule 12.

[21] Transcript, Page 1953, Lines 3-5.

[22] Lawton Direct, Ex. 304, Page 9, Lines 4-5.

appropriate rate of return on equity, the Commission considers the testimony of expert witnesses.

5. Four financial analysts offered recommendations regarding an appropriate return on equity in this case. Dr. Roger A. Morin testified on behalf of AmerenUE. Dr. Morin is Emeritus Professor of Finance at Robinson College of Business, Georgia State University, and Professor of Finance for Regulated Industry at the Center for the Study of Regulated Industry at Georgia State University. He holds a Bachelor of Engineering degree and an MBA in Finance from McGill University, as well as a Ph.D. in Finance and Econometrics from the Wharton School of Finance, University of Pennsylvania.[23] He recommends the Commission allow AmerenUE a return on equity of 10.8 percent.[24]

6. David Murray testified on behalf of Staff. Murray is the Acting Utility Regulatory Manager of the Financial Analysis Department for the Commission. He holds a Bachelor of Science degree in Business Administration from the University of Missouri – Columbia, and a MBA from Lincoln University. Murray has been employed by the Commission since 2000 and has offered testimony in many cases.[25] Murray recommends a return on equity within a range of 9.0 percent to 9.7 percent,[26] with a recommended midpoint of 9.35 percent.[27]

7. Stephen G. Hill also offered rate of return testimony on behalf of Staff. Hill is self-employed as a financial consultant, specializing in financial and economic issues in regulated industries. He earned a Bachelor of Science degree in Chemical Engineering from Auburn University, and a Masters degree in Business Administration from Tulane

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[23] Morin Direct, Ex. 111, Page 1, Lines 6-16.

[24] Morin Rebuttal, Ex. 112, Page 52, Line 13.

[25] Staff Report – Revenue Requirement/Cost of Service, Ex. 200, Appendix 1, Page 42.

[26] Staff Report – Revenue Requirement/Cost of Service, Ex. 200, Page 37, Lines 24-26.

[27] Transcript, Page 2022, Lines 24-25.

University.[28] Hill did not offer a recommended a return on equity for AmerenUE. Instead, he offered testimony to support Murray's recommended rate of return, and to rebut the testimony offered by the other testifying return-on-equity witnesses.[29]

8. Michael Gorman testified on behalf of MIEC. Gorman is a consultant in the field of public utility regulation.[30] He holds a Bachelors of Science degree in Electrical Engineering from Southern Illinois University and Masters Degree in Business Administration with a concentration in Finance from the University of Illinois at Springfield.[31] Gorman recommends the Commission allow AmerenUE a return on equity within a range of 9.5 percent to 10.5 percent, with a recommended midpoint of 10.0 percent.[32]

9. Finally, Daniel J. Lawton testified on behalf of Public Counsel. Lawton is a consultant who holds a Bachelor of Arts degree in Economics from Merrimack College and a Master of Arts in Economics from Tufts University.[33] Lawton recommends the Commission allow AmerenUE a return on equity within a range of 9.3 percent to 10.9 percent,[34] with a recommended midpoint of 10.1 percent.[35]

**Specific Findings of Fact:**

10. A utility's cost of common equity is the return investors require on an investment in that company. Investors expect to achieve their return by receiving dividends and stock

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[28] Hill Rebuttal, Ex. 212, Page 1, Lines 7-15.

[29] Hill Surrebuttal, Ex. 213, Pages 22-23, Lines 20-26, 1-23.

[30] Gorman Direct, Ex. 408, Page 1, Line 5.

[31] Gorman Direct, Ex. 408, Appendix A, Page 1, Lines 10-12.

[32] Gorman Direct, Ex. 408, Page 2, Lines 9-11.

[33] Lawton Direct, Ex. 304, Schedule DJL-1.

[34] Lawton Direct, Ex. 304, Page 5, Lines 11-12.

[35] Transcript, Page 2186, Lines 15-17.

price appreciation[36] Financial analysts use variations on three generally accepted methods to estimate a company's fair rate of return on equity. The Discounted Cash Flow (DCF) method assumes the current market price of a firm's stock is equal to the discounted value of all expected future cash flows. The Risk Premium method assumes that all the investor's required return on an equity investment is equal to the interest rate on a long-term bond plus an additional equity risk premium to compensate the investor for the risks of investing in equities compared to bonds. The Capital Asset Pricing Method (CAPM) assumes the investor's required rate of return on equity is equal to a risk-free rate of interest plus the product of a company-specific risk factor, beta, and the expected risk premium on the market portfolio. No one method is any more "correct" than any other method in all circumstances. Analysts balance their use of all three methods to reach a recommended return on equity.

11. Before examining the analyst's use of these various methods to arrive at a recommended return on equity, it is important to look at another number. For 2009, the average return on equity awarded to integrated electric utilities by state commissions in this country was 10.59 percent, as reported by Regulatory Research Associates.[37]

12. The Commission mentions the average allowed return on equity not because the Commission should, or would slavishly follow the national average in awarding a return on equity to AmerenUE. However, AmerenUE must compete with other utilities all over the country for the same capital. Therefore, the average allowed return on equity provides a reasonableness test for the recommendations offered by the return on equity experts.

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[36] Gorman Direct, Ex. 408, Page 15, Lines 10-12.

[37] Morin Rebuttal, Ex. 112, Page 2, Lines 11-14.

13. In his direct testimony filed on behalf of AmerenUE, which he submitted in July 2009, Dr. Morin recommended AmerenUE be allowed a return on equity of 11.5 percent.[38] By February 11, 2010, when he submitted his rebuttal testimony, Dr. Morin had reduced this recommended return on equity to 10.8 percent.[39] Dr. Morin did not change his methodology, but his updated analysis used December 2009 stock prices that were higher than the prices he had used in his July 2009 testimony.[40] He testified that his rebuttal testimony was intended to supersede his direct testimony[41] and that a recommendation of 11.5 percent would be ludicrous at the time of the hearing.[42] The Commission will consider Dr. Morin's recommendation of 10.8 percent when deciding an appropriate return on equity for AmerenUE.

14. Three of the four return on equity experts offered recommendations between 10.0 percent and 10.8 percent. The fourth recommendation, the 9.35 percent recommended by Staff's witness David Murray, is lower than the other recommendations, and is substantially lower than the 2009 national average of allowed returns on equity of 10.59 percent.[43]

15. Murray's recommendation is low because the three stage DCF analysis he performed relies on an unreasonably low long-term growth estimate of 3.1 percent. Murray based his long-term growth rate on the Energy Information Administration's projection of long-term growth in the usage of electricity plus an inflation factor.[44] Murray's calculation of

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[38] Morin Direct, Ex. 111, Page 5, Lines 17-20.

[39] Morin Rebuttal, Ex. 112, Page 56, Lines 9-11.

[40] Morin Rebuttal, Ex. 112, Pages 52-53.

[41] Transcript, Page 1828, Lines 1-4.

[42] Transcript, Page 1898, Lines 19-20.

[43] Morin Rebuttal, Ex. 112, Page 6, Lines 22-28.

[44] Staff Report – Revenue Requirement/Cost of Service, Pages 26-27, Lines 6-28, 1-8.

a long-term growth rate based on the anticipated growth of demand for electricity is inconsistent with the requirements of the DCF model, which relies on earnings/dividends growth.[45] If Murray had instead relied on the historical growth in real GDP for the United States from 1929 through 2008, plus an inflation factor, he would have derived a long-term growth forecast of 6.0 percent.[46]

16. Murray's DCF analysis also contrasts sharply with the DCF analysis performed by the other return on equity experts, who relied on forecasted growth rates published by reputable investment analysts. As Public Counsel's witness, Daniel Lawton, explained at the hearing, the growth in the use of electricity is not a good measure of the actual growth in an electric utilities earnings because earnings growth can come from more than just the growth in the demand for electricity.[47] Lawton also defended his, and other analyst's use of forecasted growth rates, testifying: "relying on published price, dividend and growth rate data and forecasts is not different or unique. ... this is what regulatory authorities typically consider to determine a reasonable return for setting fair and just rates for consumers."[48] Lawton testified that he would never use projected growth in electricity demand as a component in the growth rate in a DCF analysis so long as analyst forecasts were available[49] and that he has never seen another analyst use such a projection in the way Murray used it.[50]

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[45] Morin Rebuttal, Ex. 112, Page 18, Lines 1-2.

[46] Morin Rebuttal, Ex. 112, Page 18, Lines 6-22.

[47] Transcript, Page 2183, Lines 19-25.

[48] Lawton Surrebuttal, Ex. 306, Page 5, Lines 15-18.

[49] Transcript, Page 2211, Lines 8-15.

[50] Transcript, Pages 2210-2211, Lines 12-25, 1-7.

17. In an attempt to support the reasonableness of his very low return on equity recommendation, Murray cites several analyst reports that suggest they anticipate AmerenUE will earn a return on equity of under 9 percent.[51] As further support, Murray points to information from the Missouri State Employees' Retirement System's website that would indicate the pension fund expects future returns on equities of only 8.5 percent.[52]

18. Murray's reliance on analyst reports to support his recommendation is misplaced. Most investors do not have access to the specific analyst reports that Murray examined and thus they cannot rely on them in deciding where to invest their money.[53] More fundamentally, the analyst reports upon which Murray relies are designed to project what the analyst expects a company to earn, not what would be a reasonable return for the company to earn.[54] In other words, an analyst may conclude that AmerenUE will not earn a reasonable return and recommend that investors not invest in that company. That analyst's projection should not then be used to test the reasonableness of a recommendation of the amount a company will need to earn to attract investment.

19. Similarly, Murray's use of information about the investment expectations of a state pension fund to test the reasonableness of his recommendation is not appropriate. Murray indicated he is not aware of any other analyst who uses such information in that manner;[55] although Staff's other return on equity witness, Stephen Hill, recently had a similar

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[51] Staff Report – Revenue Requirement/Cost of Service, Ex. 200, Pages 31-35.

[52] Staff Report – Revenue Requirement/Cost of Service, Ex. 200, Page 35, Lines 20-27.

[53] Transcript, Page 2213, Lines 4-24.

[54] Transcript, Page 2298, Lines 3-11.

[55] Transcript, Page 2058, Lines 2-8.

argument rejected by the California PUC.[56] The problem with using a pension fund's expectations in this way is that pension funds have different investment goals and thus are not well suited to assessing the cost of equity capital in a rate proceeding.[57]

20 The Commission finds that Staff's recommended return on equity of 9.3 percent is not an appropriate return on equity for AmerenUE.

21. The other three witnesses who recommend rates of return used similar methods of analysis and achieved similar results.[58] The recommendations offered by Gorman for MIEC and Lawton for Public Counsel are very close to each other, with Gorman at 10.0 percent and Lawton at 10.1 percent. Dr. Morin is higher at 10.8 percent.

22. Part of the reason Dr. Morin's recommendation is higher than the other recommendations is that the only DCF model he relied on was a constant growth DCF model. As Gorman explained in describing why he did not rely on this own constant growth DCF results that showed a return on equity of 11.2 percent, "the constant growth DCF return is not reasonable and represents an overstated return for AmerenUE at this time."[59] He went on to explain that the constant growth DCF result is overstated because it is based on a unsustainably high dividend yield and median growth rate.[60] Morin's constant growth DCF suffers from the same deficiencies as Gorman described for his own constant growth analysis.[61]

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[56] Morin Rebuttal, Ex. 112, Page 26, Lines 1-30, *citing, In re S. Cal Edison Co.,* 262 P.U.R. 4th 53, 72 (Ca. Pub. Utils. Comm'n. 2007).

[57] Morin Rebuttal, Ex. 112, Pages 26-27, Lines 33-34, 1-5., *see also,* Transcript, Page 2212, Lines 4-19.

[58] Transcript, Page 1839, Lines 8-13.

[59] Gorman Direct, Ex. 408, Page 24, Lines 11-12.

[60] Gorman Direct, Ex. 408, Page 24, Lines 12-16.

[61] Gorman Rebuttal, Ex. 409, Page 10, Lines 1-6.

23. Gorman and Lawton took those deficiencies into account and based their recommendations on additional sustainable growth DCF and multi-stage DCF models. Gorman's sustainable long-term growth rate resulted in a median DCF return of 10.2 percent,[62] while his multi-stage growth rate resulted in a DCF return of 10.16 percent.[63] Lawton's two-stage DCF analysis showed a cost of equity between 10.2 and 10.4 percent,[64] compared to the 10.9 to 11.1 percent cost of equity shown by his constant growth DCF analysis.[65]

24. In contrast, despite his belief that it is important to "use a whole bunch of techniques",[66] Morin relied on his constant growth DCF analysis and did not analyze any other form of DCF. However, in his rebuttal testimony, Gorman reworked Morin's constant growth DCF analysis as a multi-stage growth analysis, using updated stock price data, current dividends and recent analysts' growth rate estimates. Gorman arrived at a 10.0 percent cost of equity, which is 56 basis points lower than his similar reworking of Morin's constant growth DCF analysis.[67] All three analysts balanced the results of their DCF analysis with risk premium and CAPM analyses that ranged between the low to mid 9 percent and the low ten percent area. Thus, the chief difference between their recommendations is their non-constant growth analyses. Therefore, it is reasonable to believe that if Dr. Morin had performed a multi-stage DCF analysis, as he should have, his recommendation might be in the low 10 percent area along with Gorman and Lawton.

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[62] Gorman Direct, Ex. 408, Page 31, Lines 13-14.

[63] Gorman Direct, Ex. 408, Page 34, Lines 5-8.

[64] Lawton Direct, Ex. 304, Page 25, Lines 19-21.

[65] Lawton Direct, Ex. 304, Page 24, Lines 15-16.

[66] Transcript, Page 1890, Lines 23-24.

[67] Gorman Rebuttal, Ex. 409, Page 12, Lines 1-8.

25. Based on its consideration of the testimony of all the experts, the Commission finds that a return on equity of 10.1 percent is a fair and reasonable return on equity for AmerenUE at this time. That is the return on equity recommended by Lawton and the Commission finds that Lawton was the most credible and reliable expert witness. However, 10.1 percent is a reasonable return on equity aside from the fact that it happens to match the recommendation of one of the witnesses. The Commission's decision to use the return on equity recommended by Lawton should not be taken to disparage the credibility of the other witnesses.

26. A return on equity of 10.1 percent is somewhat lower than the 10.59 percent 2009 average return on equity awarded to integrated electric utilities by state commissions. However, as Dr. Morin and the other expert witnesses indicated, economic facts have changed substantially since 2009. Dr. Morin's own recommendation dropped 70 basis points between July 2009 and February 2010 due to changes in the capital market.[68] Therefore, a slight reduction in allowed return on equity from the 2009 average is reasonable.

**Conclusions of Law:**

A. In assessing the Commission's ability to use different methodologies to determine just and reasonable rates, the Missouri Court of Appeals has said:

> Because ratemaking is not an exact science, the utilization of different formulas is sometimes necessary. ... The Supreme Court of Arkansas, in dealing with this issue, stated that there is no 'judicial mandate requiring the Commission to take the same approach to every rate application or even to consecutive applications by the same utility, when the commission in its expertise, determines that its previous methods are unsound or inappropriate

[68] Transcript, Page 1827, Lines 9-21.

> to the particular application' (quoting *Southwestern Bell Telephone Company v. Arkansas Public Service Commission,* 593 S.W. 2d 434 (Ark 1980).[69]

Furthermore,

> Not only can the Commission select its methodology in determining rates and make pragmatic adjustments called for by particular circumstances, but it also may adopt or reject any or all of any witnesses' testimony.[70]

B. In another case, the Court of Appeals recognized that the establishment of an appropriate rate of return is not a "precise science":

> While rate of return is the result of a straight forward mathematic calculation, the inputs, particularly regarding the cost of common equity, are not a matter of 'precise science,' because inferences must be made about the cost of equity, which involves an estimation of investor expectations. In other words, some amount of speculation is inherent in any ratemaking decision to the extent that it is based on capital structure, because such decisions are forward-looking and rely, in part, on the accuracy of financial and market forecasts.[71]

**Decision:**

Based on the evidence in the record, on its analysis of the expert testimony offered by the parties, and on its balancing of the interests of the company's ratepayers and shareholders, as fully explained in its findings of fact and conclusions of law, the Commission finds that 10.1 percent is a fair and reasonable return on equity for AmerenUE. The Commission finds that this rate of return will allow AmerenUE to compete in the capital market for the funds needed to maintain its financial health.

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[69] *State ex rel. Assoc. Natural Gas Co. v. Public Service Commission,* 706 S.W. 2d 870, 880 (Mo. App. W.D. 1985).

[70] *Id.*

[71] *State ex rel. Missouri Gas Energy v. Public Service Commission*, 186 S.W.3d 376, 383 (Mo App. W.D. 2005).

## 2. Depreciation

**Findings of Fact:**

**Introduction to Depreciation Issues:**

1. Depreciation is the means by which a utility is able to recover the cost of its investment in its rate base by recognizing the reduction in value of that property over the estimated useful life of the property. Depreciation rates should be designed to allow the utility to recover, over the average service life of the assets in that account, the original cost of the assets, plus an estimate of any cost to remove the asset, less scrap value of the asset.[72]

2. The fundamental goal of depreciation is to ensure that the correct amount of depreciation is recovered from each generation of customers over the actual service life of the property.[73] If a depreciation rate is set too high, an excess amount will be recovered from current customers. If a depreciation rate is set too low, the cost of the asset will not be fully recovered during its life, and the unrecovered cost will be dumped on the customers receiving service at the time the asset is retired.

3. The parties disagreed about several aspects of depreciation. The most fundamental disagreement is about whether to use a life span or a mass property approach to determine an appropriate depreciation rate for AmerenUE's steam and hydraulic electric production plant accounts. That is the first depreciation issue the Commission will address.

### a. Use of Life Span Versus Mass Property Approach to Determine Depreciation Rates for Steam and Hydraulic Plant Accounts

**Introduction:**

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[72] Staff Report – Revenue Requirement/Cost of Service, Ex. 200, Page 96, Lines 9-11.

[73] Wiedmayer Rebuttal, Ex. 105, Page 15, Lines 2-5.

4. John Wiedmayer, a consultant with Gannet Fleming, Inc., sponsored the depreciation study submitted by AmerenUE[74] His depreciation study uses a life span approach for determining appropriate depreciation rates for steam and hydraulic plant accounts. The steam and hydraulic plants to which these depreciation rates would apply, are AmerenUE's four coal-fired steam generating electric plants, the Meramec, Sioux, Labadie, and Rush Island stations, and hydraulic generating plants at Osage (Bagnall Dam), Keokuk, and Taum Sauk.

5. Arthur Rice, a Utility Regulatory Engineer I for the Commission sponsored a depreciation study submitted by Staff.[75] Staff's depreciation study treats all steam production and all hydraulic plant as mass property.

6. James Selecky, a consultant with Brubaker & Associates,[76] and William Dunkel, a consultant with William Dunkel and Associates,[77] offered testimony on behalf of MIEC that proposed adjustments to the depreciation studies of both AmerenUE and Staff. Selecky advocated the use of a mass property approach because this Commission has used that approach in the past. As an alternative, Selecky suggested modifications to AmerenUE's life span approach if the Commission decided to use that approach.

7. The life span approach to depreciation is premised on the fact that the equipment in a power plant does not remain unchanged during the life of the plant. Instead, interim additions, replacements, and retirements occur regularly throughout the life of the plant.[78] For example, a particular valve on a boiler might have an estimated service life of 50 years.

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[74] Wiedmayer Direct, Ex. 104, Page 1, Lines 10-11.

[75] Staff Report – Revenue Requirement/Cost of Service, Ex. 200, Appendix 1. Page 51.

[76] Selecky Direct, Ex. 404 NP, Page 1, Lines 5-6.

[77] Dunkel Rebuttal, Ex. 407, Page 1, Lines 6-7.

[78] Wiedmayer Direct, Ex. 104, Page 5, Lines 9-10.

A depreciation rate for that valve would be set accordingly. In a power plant that went into service in 1960, that valve might be replaced in 2010 with a new valve that again has an estimated service life of 50 years. However, the valve installed into the plant in 2010 has been installed in a power plant that is already 50 years old. If it is assumed that the entire power plant will be retired when it is 60 years old, in 2020, the estimated service life of the valve installed in 2010 will have to be truncated at 10 years. Thus, the depreciation rate for that valve will need to be set to recover its cost over 10 years instead of 50. The life span approach reflects the unique average service lives that are experienced by each year of installation by recognizing the amount of time remaining between the year of installation and the anticipated final retirement of the power plant.

8. For purposes of its life span depreciation study, AmerenUE engaged the services of Black & Veatch Corporation to prepare a study to estimate the retirement dates for its steam powered electric plants.[79] Larry Loos, a Professional Engineer employed by Black & Veatch, sponsored that study through his testimony. The Black & Veatch study estimated the following retirement dates for AmerenUE's steam generating plants:

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|---|---|
| Meramec | 2022 |
| Sioux | 2033 |
| Labadie – Units 3 and 4 | 2038 |
| Labadie – Units 1 and 2 | 2042 |
| Rush Island | 2046[80] |

[79] Loos Direct, Ex. 107, Page 5, Lines 18-19.

[80] Loos Direct, Ex 107, Page 14, Lines 2-8.

9. To estimate retirement dates for the hydraulic plants, AmerenUE assumed that the plants would be retired when the operating licenses for the plants expire.[81] The resulting estimated retirement dates for the hydraulic plants are as follows:

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|---|---|
| Osage | 2047 |
| Keokuk | 2055 |
| Taum Sauk | 2049[82] |

10. Staff contends that estimated retirement dates for power plants are inherently unreliable. For that reason, Staff advises the Commission to use a mass property approach to establish depreciation rates for those accounts. Under a mass property approach, all steam plant property from all the plants is examined in a single mortality study. That single study does not differentiate between interim and final retirements; all retirements are considered when determining an estimated service life for the property. Because final retirements that occur when an entire power plant is retired are included in the mix, Staff contends the early retirement of some property will be taken into account when depreciation rates are established.[83]

**Specific Findings of Fact:**

11. There is nothing wrong with the use of a mass property approach in theory. For some items of property it is perfectly appropriate and is properly used for many purposes in the depreciation studies of both AmerenUE and Staff. For example, the mass property approach is used to determine depreciation rates for items such as poles, meters, and line transformers. Every year AmerenUE adds thousands of poles, meters, and line

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[81] Wiedmayer Rebuttal, Ex. 105, Page 12, Lines 3-12.

[82] Wiedmayer Direct, Ex. 104, Schedule JFW-E1, Page III-6.

[83] Staff Report – Revenue Requirement/Cost of Service, Ex. 200, Page 104, lines 1-29.

transformers to its system. Those individual poles may be retired at any age, depending upon accidents, lightning strikes, road construction, insect damage, or any number of independent causes.[84] The key point is that the life of each pole is independent of other poles. One may be hit by a truck when it is only one year old, while another may still be in service 60 years later. But there are enough poles in service to allow for a meaningful study to determine how long an average pole will remain in service and establish a depreciation rate accordingly.

12. The problem with treating power plant equipment as mass property is that retirements of large electric power plants are rare events. When Staff's witness examined AmerenUE's property retirement data, that data included final retirement data from only four steam plants, Mound, Cahokia, Venice 1 and Venice 2.[85] The first three of those retired plants were old, small, and inefficient plants retired in the 1970s.[86] Venice 2 was retired in 2002 after a fire.[87] Furthermore, there is very little retirement date available from even those plants because the dollars involved are very small compared to AmerenUE's investment in its current steam plants.[88] There is no final retirement data for the hydraulic plants, as AmerenUE has never shut down a hydraulic plant.[89]

13. Thus, the available retirement data for AmerenUE's steam and hydraulic plants is only indicative of interim retirements that occur during the life of the power plants and fails to provide any useful information about final retirements. As a result, a mass property

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[84] Wiedmayer Rebuttal, Ex. 105, Page 8, Lines 6-12.

[85] Transcript, Page 1384, Lines 11-16.

[86] Selecky Rebuttal, Ex. 405, Page 4, Lines 1-14. See also, Wiedmayer, Surrebuttal, Ex. 106, Page 4-5, lines 21-23, 1.

[87] Selecky Rebuttal, Ex. 405, Pages 4-5, Lines 15-24, 1-5.

[88] Transcript, Pages 1384-1385, Lines 21-25, 1-2.

[89] Transcript, Page 1385, Lines 3-8.

analysis will overstate the average service life of the steam plant property.[90] Indeed, when cross-examined, Staff's witness agreed that he did not have enough data to obtain a true mass property result for the steam or hydraulic plants.[91]

14. The problem of a lack of reliable data is likely the reason all authority cited by the parties states that life span is the appropriate method to use in determining depreciation rates for power plant accounts. *Public Utility Depreciation Practices*, published in 1996 by the National Association of Regulatory Utility Commissioners (NARUC), specifically states that electric power plants are to be treated as life span property.[92] Similarly, the leading textbook on depreciation accounting, *Depreciation Systems*, written by Dr. Frank Wolf and Dr. Chester Finch, clearly indicates that electric generating equipment is to be depreciated using a life span approach instead of a mass property approach.[93] Even Staff's own depreciation manual, which Staff's witness relied upon in preparing his depreciation study,[94] indicates the life span approach is appropriately used to determine depreciation for electric power plants.[95]

15. Not surprisingly, given the support in the literature for the use of the life span approach when determining depreciation rates for electric power plant property, it appears that every other state commission around the country uses the life span approach for

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[90] Wiedmayer Surrebuttal, Ex. 106, Page 9, Lines 1-11.

[91] Transcript, Page 1385, Lines 9-16.

[92] Wiedmayer Rebuttal, Ex. 105, Pages 12-13, Lines 13-25, 1-4.

[93] Wiedmayer Rebuttal, Ex. 105, Page 13, Lines 6-25.

[94] Transcript, Page 1362, Lines 17-21.

[95] *Contents & Outline of a Depreciation Study*, Ex. 231, Pages 44-45. Specifically, that manual states: "Unlike mass utility property such as poles, mains, conductors, etc. there exists utility property that requires some forecast as to its date of retirement. Types of plant applicable to this type of analysis are buildings, *electric power plants*, telephone switching equipment, gas storage fields, etc." (emphasis added).

electrical production facilities.[96] Unfortunately, it appears that the only state commission that has used a mass property approach to determine depreciation rates for electric production facilities is this commission. In an earlier AmerenUE rate case, ER-2007-0002[97], the Commission authorized the use of a mass property approach for electric production facilities. The Commission did so because of frustration over the inadequate evidence AmerenUE presented to establish reasonably likely retirement dates for its electric power plants.

16. In that earlier case, AmerenUE initially estimated that all its power plants would be retired in 2026. After the other parties criticized that retirement date as arbitrary, the company arbitrarily estimated that all its power plants would be retired 60 years after they went on line. In accepting Staff's proposed mass property proposal in that case, the Commission said "without better evidence of when those plants are likely to be retired, allowing the company to increase its depreciation expense based on what is little more than speculation about possible retirement dates would be inappropriate."[98] Thus, the Commission authorized the use of a mass property approach in that particular case, but did not reject the life span approach in general.

17. For this case, AmerenUE presented a detailed study by Black & Veatch that presented thoughtfully calculated retirement dates for each of its coal-fired steam production plants. Those estimated retirement dates would retire the steam production

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[96] Wiedmayer Direct, Ex.104, Pages 30-31, Lines 5-23, 1-10.

[97] *In the Matter of Union Electric Company d/b/a AmerenUE's Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area,* Report and Order, Case No. ER-2007-0002, May 22, 2007.

[98] *Id.* at Page 84.

plants after between 61 and 72 years of service,[99] which is on the high-end of estimated retirement dates used for life span analysis for other utilities by other state commissions.[100]

18. Aside from a proposal to extend the life span of the Meramec unit, which will be addressed in detail later in this Report and Order, MIEC's expert witness, James Selecky, agreed that the Black & Veatch study produced reasonable retirement dates that he used to develop his own life span depreciation rates. He also agreed that the Black & Veatch study was reasonable and logical, and substantially better than the approach AmerenUE used in ER-2007-0002.[101]

19. Staff's expert witness, Arthur Rice, agreed that the Black & Veatch study is "relatively complete and logical" and "well done".[102] He also agreed that the estimated retirement dates presented by AmerenUE are "reasonable."[103] Although Staff's brief claims that AmerenUE's estimated retirement dates are unreliable because AmerenUE did not perform an economic study regarding the retirement of those plants, the number of assumptions and the nature of the assumptions required to make such an economic analysis for events that will happen 12 to 37 years in the future, render such analysis impractical.[104]

20. The Black & Veatch study does not independently establish retirement dates for AmerenUE hydraulic production plants. Instead, AmerenUE's life span study assumes that

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[99] Selecky Direct, Ex. 404 NP, Schedule JTS-2.

[100] Transcript, Page 1482, Lines 14-21.

[101] Transcript, Page 1483, Lines 3-23.

[102] Transcript, Page 1397, Lines 2-12.

[103] Exhibit 168.

[104] Loos Surrebuttal, Ex. 108, Page 8, Lines 9-11.

those plants will be retired when their operating licenses expire.[105] That is the same assumption the Commission has previously used to estimate the retirement date of AmerenUE's Callaway nuclear production plant for purposes of a life span depreciation calculation.[106] AmerenUE's estimated retirement dates would have Taum Sauk retire after 86 years of service, Osage after 94 years of service, and Keokuk after 142 years of service.[107]

21. There is no way to know for sure when the hydraulic plants will be retired. The same can be said about the steam production plants. But it is unreasonable to assume that the plants will last forever. As previously indicated, a mass property approach is not appropriate because of the lack of available retirement data upon which such a study could be based. A life span depreciation study requires an estimated retirement date and the assumed retirement dates for the hydraulic plants are reasonable.

22. It is important to remember that the assumed retirement dates for purposes of a depreciation study are not fixed forever and certainly do not mean that the plant will actually be retired on the assumed retirement date. Future depreciation studies in future rate cases may rely on different estimated retirement dates as further information becomes available and circumstances change. Ultimately, depreciation rates will be adjusted to match the new information so that the correct amount of depreciation is recovered from each generation of customers over the actual service life of the property.

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[105] Wiedmayer Rebuttal, Ex. 105, Page 12, Lines 3-12.

[106] *In the Matter of Union Electric Company d/b/a AmerenUE's Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area,* Report and Order, Case No. ER-2007-0002, May 22, 2007, Pages 87-88.

[107] Selecky Direct, Ex. 404 NP, Schedule JTS-2.

**Conclusions of Law:**

There are no additional conclusions of law for this issue.

**Decision:**

The Commission finds that it is appropriate to use a life span approach to determine depreciation rates for AmerenUE's steam and hydraulic electric production accounts. The Commission finds that the estimated retirement dates proposed by AmerenUE for that purpose are reasonable, with the exception of the retirement date for the Meramec steam production plant, which is addressed later in this order.

**b. Proposed Extension of the Lifespan of the Meramec Plant**

**Findings of Fact:**

**Introduction:**

23. AmerenUE currently operates the Meramec coal-fired steam production plant, located southeast of St. Louis, at the confluence of the Meramec and Mississippi Rivers. The Meramec Generating Station has four pulverized coal subcritical power generating units. Units 1 and 2 were built in 1953 and 1954 respectively; each has a capacity of 138 MW. Unit 3, which has a capacity of 289 MW, was built in 1959, while Unit 4, which has a capacity of 359 MW, was built in 1961.[108] The Black & Veatch study upon which AmerenUE relies to calculate depreciation rates for its steam production plant estimates that AmerenUE will retire its Meramec coal-fired steam production plant in 2022.[109] MIEC's

[108] Loos Direct, Ex. 107, Schedule LWL-E1, Appendix B, Page B-2.

[109] Loos Direct, Ex. 107, Page 14, Line 4.

witness, James Selecky, contends the estimated retirement date for the Meramec plant should be extended by five years to 2027.[110]

**Specific Findings of Fact:**

24 There are two reasons the estimated retirement date for the Meramec plant should be extended. First, AmerenUE forecasts an average life span for its other steam production units of approximately 69 years. AmerenUE's predicted life span for Meramec Unit 3 is only 63 years, with a predicted life span for Meramec Unit 4 of 61 years. Extending the predicted life span of Meramec by five years would bring it more in line with the predicted life span of the other coal-fired plants.[111]

25. Second, the Black & Veatch study, upon which AmerenUE based its predicted life spans, indicates that its choice of an expected retirement date for the Meramec plant is based, at least in part, on the assumptions of AmerenUE's Integrated Resource Plan.[112] That plan assumed that AmerenUE would build a second nuclear reactor at its Callaway plant to replace the capacity of the Meramec plant,[113] but AmerenUE is no longer planning to build Callaway 2,[114] and has no plans on how to replace the Meramec plant's capacity.[115] That implies that AmerenUE may keep Meramec in operation beyond 2022.

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[110] Selecky Direct, Ex. 404 NP, Page 22, Lines1-15.

[111] Selecky Direct, Ex. 403HC, Page 22, Lines 3-8.

[112] Loos Direct, Ex. 107, Page 14, Lines 1-13. The Black & Veatch study is attached to Loos' direct as Schedule LWL-E1. The study's reference to the IRP filing is found at page 3-4 of the schedule.

[113] Transcript, Page 1286, Lines 14-18.

[114] Birk Rebuttal, Ex. 103, Page 12, Lines 16-.

[115] Transcript, Page 1286, Lines 19-22.

26. Indeed, the study prepared for AmerenUE by Burns & McDonnell Engineering Company indicates the Meramec plant could be kept in operation substantially past 2022 if its capacity is needed and if its operation is economically viable.[116]

27. Of course, no one can know for certain whether the continued operation of the Meramec plant beyond 2022 will be economically viable. As AmerenUE's own witness testified, the number of assumptions and the nature of the assumptions required make that sort of economic analysis impractical.[117] AmerenUE's estimated retirement dates are not set in stone and may change in a future depreciation study as more information becomes available. But based on the evidence presented, the Commission finds that it is reasonable to assume an additional five years of life for the Meramec plant. This adjustment will reduce AmerenUE's revenue requirement by approximately $10 million.[118]

**Conclusions of Law:**

There are no additional conclusions of law for this issue.

**Decision:**

AmerenUE shall calculate depreciation for its steam production plant based on the assumption that the Meramec steam production plant will be retired in 2027.

**c. Net Salvage Percentage for Account 312 Boiler Equipment**

**Findings of Fact:**

**Introduction:**

28. Net salvage is the salvage value of property retired, less the cost of removal. Net salvage value is positive if the salvage value exceeds removal cost and negative if removal

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[116] Ex 434 HC, Page 5-2. The entire exhibit is highly confidential so the Commission will not disclose the details of the report.

[117] Loos Surrebuttal, Ex. 108, Page 8, Lines 9-11.

[118] Transcript, Page 1523, Lines 14-19.

costs exceed the salvage value.[119] AmerenUE chose not to request depreciation recovery of terminal net salvage[120] for its power plants, so the net salvage percentages at issue are only for interim net salvage.[121] AmerenUE's depreciation witness, John Wiedmayer, testified that the historical net salvage indication for Account 312, Boiler Plant Equipment is negative 25 percent. He adjusted his net salvage estimate to 15 percent on the assumption that 60 percent of the retirements are interim retirements, based on an estimated interim survivor curve.[122] Presumably, the other 40 percent of retirements would be terminal, when the power plant is finally retired.

29. MIEC's depreciation witness, James Selecky, recommended the net salvage ratio for this account be reduced from negative 15 percent to negative 10 percent.[123] Selecky recommends this reduction because of his contention that AmerenUE's current interim net salvage depreciation rates have allowed the company to collect more depreciation from customers than the depreciation expenses the company has actually experienced.[124] To avoid what he describes as an over collection, Selecky calculated the average amount of depreciation expense AmerenUE has experienced over the last five and ten years, adjusted that average for inflation to derive an annual amount AmerenUE could expect to recover over the next thirty years, and reduced the net salvage ratio to allow AmerenUE to recover only that amount.

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[119] Wiedmayer Rebuttal, Ex. 105, Page 60, Lines 5-9.

[120] Terminal net salvage relates to decommissioning and dismantlement costs associated with the final retirement of power plants.

[121] Wiedmayer, Rebuttal, Ex. 105, Page 47, Lines 16-19.

[122] Wiedmayer Rebuttal, Ex. 105, Page 47, Lines 19-23.

[123] Selecky Direct, Ex. 404 NP, Page 23, Lines 7-12.

[124] Selecky Direct, Ex. 404 NP, Page 24, Lines 1-7.

**Specific Findings of Fact:**

30 Selecky's reliance on recent historical levels of interim net salvage expense to set future rates is misplaced. As Wiedmayer explains in his rebuttal testimony:

> net salvage percents are likely to increase as plants age due to the increasing average age of retirements. As the average age of retirements increase, the price level change from the year of initial construction to the year the asset is retired becomes more pronounced and this has an impact on the historical net salvage percents due to the effect of inflation.[125]

For example, a valve that is on the company's books at a cost of $100 when it was installed in 1960, might have cost $125 to remove if it had been replaced in 1990. Because of inflation, to remove the same $100 valve in 2010, might cost $150. To remove it in 2020 might cost $175. Thus, for each year that passes, the ratio of cost of removal to the cost of the valve will increase. For that reason, net salvage estimates need to consider what is likely to occur in the future and properly reflect that information in the estimates.

31. Selecky's proposed reduction to the net salvage ratio simply looks at recent historical depreciation expenses and inflates those number by a constant three percent per year.[126] This arbitrary approach contrasts with Wiedmayer's considered analysis to arrive at a conservative net salvage ratio of 15 percent. In fact, that analysis revealed that a three-year moving average of net salvage percents is above negative 30 percent for every three-year period since 1998.[127]

32. Selecky's only response to Wiedmayer's detailed analysis was to criticize Wiedmayer's decision to reduce his net salvage estimate from negative 25 percent to negative 15 percent based on an assumption that 60 percent of the retirements will be

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[125] Wiedmayer Rebuttal, Ex. 105, Page 48, Lines 8-12.

[126] Selecky Direct, Ex. 404 NP, Schedule JTS-6.

[127] Wiedmayer Rebuttal, Ex. 105, Page 48. Lines 14-19.

interim retirements, meaning that the remaining 40 percent would be final retirements. Selecky points out that elsewhere in his testimony, Wiedmayer states that when the four coal plants currently in service retire nearly 50 to 80 percent of the retirements will be final retirements. Selecky implies that this supposed inconsistency makes Wiedmayer's study unreliable and justifies his simpler approach based on recent historical expenses.[128]

33. The supposedly inconsistent statement is in Wiedmayer's rebuttal testimony. When discussing the general mix of interim and final retirements and the difference between life span and mass property analysis, Wiedmayer said "a substantial portion, nearly 50 to 80 percent, of the retirements associated with life span property will occur on one date in the future when the plant is retired."[129] Wiedmayer's general statement applied to all of the numerous plant accounts for which the company used a life span approach to calculate depreciation rates. For Account 312, the account at issue, the actual data shows that 65 percent of the investment in that account will be retired by interim retirement.[130] Thus, a closer look at the supposed inconsistency in Wiedmayer study indicates there is no inconsistency.

34. The Commission finds that AmerenUE's use of a negative 15 percent net salvage ratio is well supported by the company's data on interim retirements. The Commission also finds that MIEC's proposed adjustment is not supported by the evidence. MIEC's proposed adjustment to require the use of a negative 10 percent net salvage ratio is rejected.

**Conclusions of Law:**

There are no additional conclusions of law for this issue.

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[128] Selecky Surrebuttal, Ex. 406, Pages 1-15, Lines 11-24, 1-10.

[129] Wiedmayer Rebuttal, Ex. 105, Page 20, Lines 3-5.

[130] Wiedmayer Direct, Ex. 104, Schedule JFW-E1, Page A-5.

**Decision:**

AmerenUE's use of a negative 15 percent net salvage ratio for Account 312 Boiler Equipment is appropriate. The adjustment to a negative 10 percent net salvage ratio proposed by MIEC is rejected.

**d. Inclusion of Retired Steam Generators in Depreciation Analysis for the Callaway Nuclear Plant**

**Findings of Fact:**

**Introduction:**

35. James Selecky, the witness for MIEC, proposed certain adjustments to AmerenUE's depreciation rates for the Callaway nuclear plant. Those adjustments are predicated on Selecky's adjustment to remove from the plant's retirement history a retirement of four steam generators in 2005.[131] Excluding this particular retirement from the plant's retirement history reduces the interim retirement activity, thereby increasing the average remaining life from 29.8 years to 32.6 years, and decreases the net salvage ratio from a negative 10 percent to a negative 1.2 percent.[132] These changes would reduce AmerenUE's depreciation expense by approximately $5 million.[133] Both AmerenUE and Staff oppose Selecky's proposed adjustment.

**Specific Findings of Fact:**

36. In 2005, AmerenUE replaced the four, twenty-year old, steam generators at Callaway. Selecky contends the retirement of the steam generators should not be considered as part of the Callaway plant's retirement history because this retirement is not

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[131] Selecky Direct, Ex. 404 NP, Page 18, Lines 5-6.

[132] Selecky Direct, Ex. 404 NP, Page 19, Lines 7-8.

[133] Selecky Rebuttal, Ex. 405, Page 8, Lines 1-8.

typical and dominates the retirement history. This single retirement represents approximately 46 percent of the total retirement in this account from 1986 through 2008. The net salvage expense associated with this retirement is approximately 80 percent of the total net salvage expense this account has incurred since 1986.[134]

37. While this single retirement is substantial compared to retirements that have occurred early in the life of the plant, AmerenUE plans further significant major component replacement projects in the next five years. The retirements associated with those projects will total approximately $48 million.[135] Once these retirements occur, the dollars associated with the steam generator replacements will not be extraordinary in relation to the dollars retired in the future.[136]

38. Also, it is not surprising that equipment retirement has been relatively rare early in the life of the plant. However, interim retirements of equipment will increase as the plant ages, meaning that if actual retirement experience from when the plant is young is excluded from the calculation, the calculation will not be representative of the retirement to be expected in the future when the plant is older.[137]

39. The retirement of the steam generators was also unusual in that while the expected design life of the steam generators was 40 years, the steam generators were only

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[134] Selecky Direct, Ex. 404 NP, Page 18, Lines 8-12.

[135] Wiedmayer Rebuttal, Ex. 105, Page 39, Lines 12-14.

[136] Wiedmayer Rebuttal, Ex. 105, Page 39, Lines 6-9.

[137] Wiedmayer Rebuttal, Ex. 105, Page 41, lines 16-20.

approximately 20-years old at the time of replacement.[138] That means their actual life was only half of what was expected.[139]

40. The shortened life of the generators was due to problems with deteriorating tubes.[140] Because of the problems with the generators, AmerenUE asserted a claim against the manufacturer that resulted in a settlement whereby Westinghouse paid AmerenUE $10 million in cash. AmerenUE also received a fuel credit of $20 million and a non-fuel related credit of $5 million.[141]

41. Selecky asserts that the payments from Westinghouse are a further indication that the premature retirement of the steam generators is abnormal and should be excluded from the company's retirement history.[142] Indeed, Staff's witness agreed that retirements should be removed from the life analysis if they are found to be reimbursed retirements from insurance proceeds or third party payments.[143] However, the payments AmerenUE received from Westinghouse do not make this a reimbursed retirement because none of the payments were booked against accumulated depreciation.[144]

42. The weakness of Selecky's position is demonstrated by the very low net salvage ratio that he calculates. Selecky proposes a net salvage ratio of just negative 1.2

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[138] Wiedmayer Rebuttal, Ex. 105, Page 37, Lines 14-16.

[139] Selecky Rebuttal, Ex. 405, Page 6, Lines 13-16.

[140] Wiedmayer Rebuttal, Ex. 105, Page 38, Line 16.

[141] Selecky Rebuttal, Ex. 405, Page 6, Lines 17-20. The settlement agreement between Westinghouse and AmerenUE is Ex. 438 HC.

[142] Selecky Rebuttal, Ex. 405, Page 6, Lines 9-12.

[143] Rice Rebuttal, Ex. 216, Page 4, Lines 14-16.

[144] Transcript, Page 1421, Lines 7-12. Ex. 169 describes how AmerenUE accounted for the payment received from Westinghouse.

percent.[145] Using that ratio would allow AmerenUE to accumulated only $8.9 million for net salvage for Account 322 over the next 36 years of the life of the Callaway plant. The company has already incurred $32 million in net salvage in that account over the first 24 years of operation. That means Selecky's net salvage estimate would not allow AmerenUE to recover the amount it has already spent on removal costs, let alone the additional costs it will surely incur over the remaining life of the plant.[146]

43. The most important fact is that the steam generators have in fact been retired. That retirement occurred sooner than AmerenUE expected, but it is a part of the plant's retirement history and is not so unusual that it should be ignored. In fact, most nuclear plants have experienced problems with their steam generators and most have replaced or are planning to replace their steam generators.[147] The Commission will reject Selecky's proposed adjustments predicated on the exclusion of the steam generator retirement from the Callaway plant's retirement history.

**Conclusions of Law:**

There are no additional conclusions of law for this issue.

**Decision:**

The Commission rejects Selecky's adjustments to the proposed depreciation rates for the Callaway nuclear plant and accepts the depreciation rates proposed by AmerenUE and Staff.

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[145] Selecky Direct, Ex. 404 NP, Schedule JTS-4.

[146] Wiedmayer Surrebuttal, Ex. 106, Pages 12-13, 16-26, 1-16.

[147] Wiedmayer Rebuttal, Ex. 105, Page 38, Lines 4-7.

### e. Transmission and Distribution Plant Depreciation

**Findings of Fact:**

**Introduction:**

44. AmerenUE's transmission and distribution accounts include items such as poles and fixtures, overhead conductors and devices, and line transformers.[148] In other words, the equipment used to transmit and distribute electric power to the company's customers. MIEC's witness, James Selecky, asserts that AmerenUE is accruing too much net salvage expense in these accounts and would establish an accrual offset of $25 million to reduce the depreciation expense the company recognizes for these accounts.[149] Staff and AmerenUE oppose Selecky's proposal to establish an accrual offset.

**Specific Findings of Fact:**

45. The depreciation studies submitted by AmerenUE and Staff both calculated net salvage for these accounts using the accrual method that allows a utility to recover future net salvage over the life of plant through the use of current depreciation rates.[150] The Commission upheld the use of the accrual method in a 2005 decision involving Laclede Gas Company.[151] Subsequently, the Commission upheld AmerenUE's use of the accrual method in AmerenUE's 2007 rate case.[152]

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[148] A list of the accounts included in Transmission and Distribution Plant may be found at Selecky Direct, Ex. 404 NP, Schedule JTS-8.

[149] Selecky Surrebuttal, Ex. 406, Page 16, Lines 1-7.

[150] Wiedmayer Rebuttal, Ex. 105, Page 49, Lines 15-18.

[151] *In the Matter of Laclede Gas Company's Tariff to Revise Natural Gas Rate Schedules*, Third Report and Order, 13 Mo. P.S.C. 3d 215 (2005).

[152] *In the Matter of Union Electric Company d/b/a AmerenUE's Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area*, Report and Order, Case No. ER-2007-0002, May 22, 2007, Page 92

46. Selecky does not oppose the continued use of the accrual method, but he contends AmerenUE is accruing what he describes as excessive amounts of net salvage expense that greatly exceed the level of net salvage expense the company actually incurs.[153] Indeed, AmerenUE's average actual annual net salvage expense over the last five years is $15.1 million and over the last ten years, that average expense has been $11.8 million.[154] Selecky contrasts those actual expenses with the $55 million annual net salvage expense AmerenUE will accrue under the depreciation studies prepared by Staff and AmerenUE. Over the years, AmerenUE has accrued approximately $582 million for future net salvage. This amount "seems excessive" to Selecky and he proposes a $25 million offset to reduce that accrual.[155]

47. The amount of Selecky's proposed offset is arbitrary. In his direct testimony, he proposed a $35 million offset,[156] based on his calculation showing that AmerenUE's proposed depreciation expense would include $76.1 million for annual net salvage.[157] After acknowledging a calculation error in his direct testimony, Selecky agreed that AmerenUE's proposed depreciation expense would be only $55 million, a reduction of $21 million.[158] However, he reduced his recommended offset by only $10 million, to $25 million.[159] In fact,

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[153] Selecky Direct, Ex 404 NP, Page 25, Lines 21-23.

[154] Selecky Direct, Ex. 404 NP, Page 27, Lines 8-11.

[155] Selecky Surrebuttal, Ex. 406, Page 16, Lines 12-23.

[156] Selecky Direct, Ex. 404 NP, Page 31, Lines 8-9.

[157] Selecky Direct, Ex. 404 NP, Page 27, Lines 7-8.

[158] Selecky Surrebuttal, Ex. 406, Page 15, Lines 18-22.

[159] Selecky Surrebuttal, Ex. 406, Page 16, Lines 8-18.

Selecky acknowledged the arbitrariness of the amount of his proposed offset when he described it as just a number that he ran up the flagpole.[160]

48. Although Selecky says he is not opposing the use of accrual accounting to calculate net salvage costs, his claim that an offset is needed is firmly based in the discredited method of expensing those costs that the Commission rejected in the *Laclede* decision.[161] His claim that AmerenUE is accruing too much net salvage expense makes sense only if it is accepted that the company's net salvage collections should be limited to something approaching its actual current expenses. As the Commission has held on numerous occasions, expensing is not a reasonable way to calculate net salvage costs and would ensure that the company would under-recover its net salvage costs to the detriment of future generations of ratepayers who would have to pay a disproportionate share of unrecovered net salvage costs when the plant is actually retired.

49. The fact that AmerenUE is currently accruing more than its actual net salvage expense is reasonable and necessary because the transmission and distribution systems are continuously growing and because inflation will make future removal costs more expensive that the cost to remove plant in the past.[162] The size of AmerenUE's system has nearly doubled in the last 50 years and the total distribution plant investment has increased by a factor of sixteen.[163] Current net salvage accruals are larger than current net salvage costs because AmerenUE is accruing dollars for a larger system than the system that

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[160] Transcript, Page 1516, Lines 12-24.

[161] *In the Matter of Laclede Gas Company's Tariff to Revise Natural Gas Rate Schedules*, Third Report and Order, 13 Mo. P.S.C. 3d 215 (2005).

[162] Wiedmayer Rebuttal, Ex. 105, Page 69, Lines 9-12.

[163] Wiedmayer Rebuttal, Ex. 105, Page 69, Lines 16-18.

existed 40 or 50 years ago when the property currently being retired was added to the system. In addition, current accruals are for future net salvage costs and those future costs will be higher than current expenses due to the effect of inflation.[164] In fact, the theoretical reserve amount related to net salvage for transmission and distribution is $720 million, and the company has thus far accrued only $582 million for that purpose. Thus, far from over-accruing for net salvage, the company is behind in its recovery of net salvage.[165]

**Conclusions of Law:**

There are no additional conclusions of law for this issue.

**Decision:**

Selecky's proposed allocation offset of $25 million is arbitrary, is based on a expensing method the Commission has previously rejected, and is unnecessary and inappropriate. That proposed allocation offset is rejected and the net salvage rates proposed by AmerenUE for its Transmission and Distribution accounts are accepted.

### 3. Coal-Fired Plant Maintenance Expense

**Findings of Fact:**

**Introduction:**

1. AmerenUE spends a large sum of money each year to maintain its coal-fired electric generating fleet. During the test year, the twelve months ending March 31, 2009, the company spent $118,967,000 for that purpose.[166] Part of that maintenance expense is incurred for routine maintenance on the power plants, and part is associated with major

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[164] Wiedmayer Surrebuttal, Ex. 106, Page 19, Lines 4-13.

[165] Wiedmayer Surrebuttal, Ex. 106, Page 20, Lines 1-12.

[166] Meyer Direct, Ex. 400, Page 4, Chart at Line 9.

overhauls of the production plant that occur during scheduled outages.[167] AmerenUE contends future maintenance expenses will be at or near that test-year level and would use that amount to establish rates in this case.[168]

2. Staff notes that the test-year maintenance expense was substantially higher than the expense for previous years, and, for that reason, proposes to normalize the test-year expense by averaging AmerenUE's maintenance expense over the last three years and using that amount to set rates.[169] Specifically, Staff averaged AmerenUE's non-labor maintenance costs for the 36 months ending at the true-up date, January 31, 2010, and subtracted that amount from the non-labor portion of AmerenUE's test-year maintenance expense, to arrive at a negative adjustment in the amount of $14,939,835.[170] Thus, Staff would subtract $14,939,835 from the test-year expense of $118,967,000, to arrive at an expense level of $104,027,165.

3. MIEC's witness, Greg Meyer, also proposed to normalize AmerenUE's maintenance expense, but he used a more complex method than that proposed by Staff. For each of AmerenUE's four coal-fired production plants Meyer calculated a base level of maintenance expense. That is, a level of maintenance expense that will be incurred each year regardless of whether that power plant undergoes the extra maintenance associated with a scheduled outage. As a second step, Meyer calculated the amount of expense associated with a scheduled outage at each power plant. He then averaged those scheduled outage expenses based on the anticipated number of years between scheduled outages to derive

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[167] Transcript, Page 1075, Lines 11-21.

[168] Birk Rebuttal, Ex. 103, Page 17, Lines 3-8.

[169] Staff Report – Revenue Requirement/Cost of Service, Ex. 200, Page 93, Lines 6-14.

[170] Grissum True-Up, Ex. 242, Page 2, Lines 1-11.

an estimate of the annual expense associated with scheduled outages. He added the base level of maintenance expense to the annual expense associated with scheduled outages to arrive at a total annual steam production maintenance expense of $104.6 million.[171] Meyer then rounded that number up and recommended $105 million as a normalized level of expense for purposes of establishing rates.

**Specific Findings of Fact:**

4. Undeniably, AmerenUE's test-year coal plant maintenance expenses of $119 million were significantly higher than they had been in previous years. In the 12 months ending March 31, 2006, those expenses totaled $88.9 million, for the same period ending March 31, 2007, they totaled $93.4 million, and for the twelve-month period ending March 31, 2008, they totaled $91 million.[172] Furthermore, the level of expenses can vary from year to year depending upon how many scheduled outages are planned for that year. That situation requires the Commission to consider whether the test year expense is truly representative of the level of expense the company is likely to experience while the rates established in this case are in effect.

5. AmerenUE offered two reasons why the test-year level of expense is representative of future expense levels. First, in 2003, AmerenUE decided to approximately double the length of scheduled maintenance outage cycles for its coal-fired power plants. As a consequence, AmerenUE undertook fewer scheduled maintenance outages for those plants in the years immediately following 2003. The scheduled outages that would have been undertaken in those years were instead pushed back into later years, with the

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[171] Meyer Surrebuttal, Ex. 402 NP, Pages 4-7.

[172] Meyer Direct, Ex. 400, Page 4, Chart at Line 9.

attendant costs also being pushed back.[173] A calculation of actual scheduled outages during the periods of 2001 -- 2004 and 2005-2008, and planned outages for 2010 and 2011, was received in camera during the hearing.[174] Those numbers are considered highly confidential so they will not be stated in this order, but they confirm that the number of scheduled outages decreased during the period 2005 to 2008, and that the number of scheduled outages in 2010 and 2011 was expected to return to the level seen in 2001 to 2004.

6. Second, AmerenUE contends the test-year level of expense is representative of future expense levels because of the effects of the global financial crises of 2009. AmerenUE was concerned that it would not be able to obtain the financing needed to perform the maintenance work associated with scheduled outages, and therefore deferred the scheduled outages planned for 2009 into 2010.[175] That deferral has the effect of increasing the level of scheduled outage expense AmerenUE will incur in the future.

7. The Commission traditionally determines a representative future level of expense by looking at numbers in a historic test year. The goal is to establish rates that will give a utility a reasonable opportunity to recover its prudent costs during the period when the rates are in effect. The presumption is that test year expenses will be the best measure of future expenses. However, that presumption is not always correct and it may be appropriate to normalize certain expenses if it appears that a normalized level of expense will be more representative of future expenses.

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[173] Birk Rebuttal, Ex. 103, Page 14, Lines 1-23.

[174] Transcript, Pages 1132-1133, Lines 11-25, 1-9. *See also*, Ex. 162 HC.

[175] Transcript, Page 1049, Lines 6-16.

8. It is, however, inappropriate to blindly "normalize" a test year expense by calculating an average expense from years of lower expense without considering whether the resulting expense level is truly representative of likely future costs. Yet, Staff never looked at the history of scheduled outages to consider whether the period it used to normalize maintenance expense was likely to be representative of future expenses.[176] In fact, Staff's witness testified she ignored everything except the historical numbers.[177] Therefore, Staff's purported normalization is unreliable.

9. MIEC's proposed normalization is more carefully thought out to give appropriate consideration to whether the normalized expense level will be representative of future costs. It does that by taking into account the scheduled outages for each of the power plants and recognizing the effect those scheduled outages will have on the expenses the company will incur.

10. AmerenUE criticizes MIEC's proposed normalization on two bases. First, it contends MIEC's normalization uses expenses from five or six years ago that have not been adjusted to recognize the effect of inflation.[178] However, the Commission finds that MIEC's numbers do not have to be adjusted for inflation because the base line for maintenance expense, excluding scheduled outage expense, remained essentially flat between 2005 and 2007, indicating that despite inflation, other techniques, technologies, or cost of materials have decreased enough to offset the cost of inflation.[179]

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[176] Transcript, Page 1190, Lines 8-16.

[177] Transcript, Page 1212, Lines 9-21.

[178] Birk Supplemental Testimony, Ex. 158, Page 3, Lines 17-19.

[179] Transcript, Pages 1144-1145, Lines 9-25, 1-19.

11. AmerenUE's second criticism of MIEC's normalization is that it fails to take into account the reduced number of scheduled outages that occurred during the period it used to normalize the maintenance expenses. That criticism is valid, but can be avoided if Meyer's normalization technique is applied to the actual outages planned for the period when the rates established in this case will be in effect.

12. AmerenUE anticipates filing its next rate case sometime before the end of 2010, meaning the rates established in this case will likely remain in effect for only about 18 months.[180] During an in camera cross examination of Mr. Birk, MIEC elicited testimony that took Meyer's estimation of a base level of annual maintenance expense and added his estimation of the expense associated with each scheduled outage AmerenUE plans to undertake in 2010.[181] That calculation resulted in an estimated expense for 2010 of $110.2 million.[182]

13. MIEC offered that number to show that Meyer's normalization method would result in an estimate relatively close to the amount AmerenUE has budgeted for maintenance expense in 2010. However, using that number, which is based on the scheduled outages actually planned for 2010, as the basis for establishing rates also eliminates AmerenUE's criticism that the normalization fails to take into account the increasing number of scheduled outages that will occur while the rates established in this case are in effect. Therefore, the Commission finds that $110.2 million is a reasonable normalization of AmerenUE's coal-plant maintenance expense.

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[180] Transcript, Page 1098, Lines 7-12.

[181] Transcript, Pages 1009-1013. See also Ex. 443.

[182] Ex. 443 HC.

**Conclusions of Law:**

A. In a 1984 case addressing a Commission rate case decision, the Missouri Court of Appeals described the concept of normalization of a test-year expense as follows:

> The test year is a period past, but is employed as a vehicle upon which to project experience in a future period when the rates determined in the case will be in effect. Normalization of a test year cost by multi-year averaging of the cost based on experience assumes that the cost rises and falls, with the consequence that the actual cost incurred in the test year is not representative.[183]

That means that in normalizing a test year expense, the Commission is attempting to establish rates that will allow the utility a reasonable opportunity to recover its anticipated expenses. For that reason, the Commission must consider whether a proposed normalized test year expense is reasonably related to anticipated future expenses.

**Decision:**

The Commission concludes that $110.2 million is a reasonable normalization of AmerenUE's annual coal-plant maintenance expense.

**4. Nuclear Fuel Expense**

**Findings of Fact:**

**Introduction:**

1. AmerenUE's Callaway nuclear plant is refueled every 18 months. During each refueling, about half of the uranium fuel assemblies in the reactor core are removed and replaced with new assemblies.[184] AmerenUE refueled the Callaway plant beginning in April

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[183] *State ex rel. Missouri Power and Light Co. v. Public Service Com'n*, 669 S.W.2d 941, 945, (Mo App. W.D. 1984).

[184] Irwin Rebuttal, Ex. 127, Page 3, Lines 13-15.

2010, with fuel assemblies purchased and delivered to the plant before January 31, 2010.[185]

2. AmerenUE would include the increased cost of the fuel assemblies installed during the April 2010 refueling in the average nuclear fuel cost to be recovered in base rates resulting from this case.[186] Staff, supported by MIEC, would base AmerenUE's nuclear fuel cost on its average cost for fuel actually burned during the fifteen-month period beginning October 2008 and continuing through January 31, 2010, the true-up cut off date established for this case.[187] Under Staff and MIEC's proposal, AmerenUE would not be allowed to recover the increased cost of the nuclear fuel loaded into the Callaway plant in April 2010. The difference between the proposals amounts to approximately $11 million.[188]

**Specific Findings of Fact:**

3. The facts surrounding this issue are not in dispute. AmerenUE has bought and paid for nuclear fuel assemblies to refuel the Callaway nuclear power plant beginning in April 2010. Those assemblies are highly engineered and specifically designed for use at Callaway.[189] The Callaway plant must be shut down to be refueled and a shut-down is costly, so AmerenUE must purchase those fuel assemblies and have them available on-site well in advance of the shut-down.[190]

4. The nuclear fuel assemblies are accounted for as construction work in progress until they are fully assembled; once assembled they are accounted as nuclear fuel assembly

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[185] Irwin Rebuttal, Ex. 127, Page 4, Lines 2-5.

[186] Finnell Direct, Ex. 130, Page 9, Lines 5-7.

[187] Grissum Surrebuttal, Ex. 224, Page 2, Lines 9-12. See also, Transcript, Page 2657, Lines 6-14.

[188] Revised True-Up Reconciliation, Ex. 242.

[189] Irwin Rebuttal, Ex. 127, Page 4, Lines 20-22.

[190] Transcript, Pages 2665-2666, Lines 21-25, 1-7.

stock. The fuel assemblies were completed and accounted for as stock in October 2009.[191] When burned in the reactor, the assemblies are expensed as fuel expense.[192] During the time after the fuel assemblies are completed, until the time they are loaded and burned in the reactor, the company receives no carrying costs on those fuel assemblies.[193]

5. The nuclear fuel price is based on the amortization of the initial costs of the fuel assemblies. As such, the nuclear fuel price AmerenUE proposes to include in rates in this case has not and will not occur until the new fuel assemblies have been loaded into the Callaway reactor during refueling and the Callaway unit is placed back in-service sometime in June 2010.[194] This will be approximately four months after the January 31, 2010 true-up date.

6. If AmerenUE's increased nuclear fuel costs are not included in base rates, the company will be able to recover those costs through the operation of its fuel-adjustment clause, subject to the 95/5 sharing mechanism included in that fuel adjustment clause.[195] Because of the way the fuel adjustment clause works, AmerenUE would not be able to fully recover its 95 percent share of those increased costs until September 30, 2011.[196]

7. In AmerenUE's last rate case, ER-2008-0318, AmerenUE was allowed to recover the increased cost of nuclear fuel associated with a refueling that occurred approximately

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[191] Transcript, Page 2665, Lines 12-15.

[192] Transcript, Page 2664, Lines 12-20.

[193] Transcript, Page 2665, Lines 16-20.

[194] Grissum Surrebuttal, Ex. 224, Page 3, Lines 17-22.

[195] Transcript, Page 2660, Lines 4-25.

[196] Transcript, Pages 2661-2662, Lines 1-25, 1-7.

one month after the true-up cut off date for that case. No party in that case objected to AmerenUE's recovery of those costs.[197]

**Conclusions of Law:**

A. The disagreement between the parties concerns the application of the true-up cut-off date. The Commission employs a test-year concept to evaluate a utility's income and expenses for the purpose of setting just and reasonable rates. For this case, the test year was established as the twelve-month period ending March 31, 2009, with an additional true-up period extending through January 31, 2010. That means that for that test-year period, extended through the true-up, the Commission has examined the company's income and expenses to determine the amount of revenue the company should be allowed to generate through the rates to be established as a result of this case. The goal is to match income and expenses over the same period so that a true level of required revenue can be determined.

B. The increased cost of the fuel assemblies loaded into the Callaway reactor during the April shut-down will not begin to be expensed until the reactor is back in operation, and thus will fall outside the test-year and the true-up period. In most situations, the Commission will not allow for out-of-period adjustments because to do so risks upsetting the matching principle. That is, reaching outside the test year to pull in an expense could allow the company to recover excess revenue if that out-of-test-year expense would otherwise have been offset by some unconsidered item of out-of-test-year income.

C. However, the matching principle is not an absolute bar to an appropriate out-of-period adjustment. When faced with this question in the past, the Commission has said

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[197] Transcript, Pages 2658-2659, Lines 21-25, 1-6.

"when such known and measurable increases in expenses occur it is more equitable to allow such an expense to be reflected in the revenue requirement than to disallow it for the sole reason that corresponding revenues may be lacking."[198] On that basis, the Commission has, for example, allowed a company to recover for a known postage rate increase that would occur outside the test year,[199] and a known wage increase and FICA withholding tax increase, again outside the test year.[200]

D. In this case, AmerenUE's cost to purchase the fuel assemblies is absolutely known and measurable, and has been known and measurable since October 2009. The fuel assemblies are presumably now in place and will be generating electricity at the time rates resulting from this case go into effect. Ultimately, AmerenUE would recover 95 percent of its increased nuclear fuel costs through operation of its fuel adjustment clause, but it would have to wait many months to fully recover those costs.

E. The matching principle is important, but the ultimate purpose of a test year is to establish rates that will give a utility a reasonable opportunity to recover its prudent costs during the period when the rates are in effect. Allowing AmerenUE to recover its increased fuel costs in its base rates is necessary to allow the company a reasonable opportunity to recover its prudent costs.

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[198] *In the Matter of St. Louis County Water Company, St. Louis, Missouri, for Authority to File Tariffs to Increase Water Service Provided to Customers in the Missouri Service Area of the Company,* Report and Order, 29 Mo. P.S.C. (N.S.) 425, 435 (1988).

[199] *Id.*

[200] *In the Matter of Citizens Electric Corporation of Ste. Genevieve, Missouri, for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company,* Report and Order, 24 Mo. P.S.C. (N.S.) 450, 457 (1981).

**Decision:**

AmerenUE shall recover its increased nuclear fuel costs associated with the April 2010 refueling of the Callaway nuclear plant as part of its base fuel costs. The adjustments proposed by Staff and MIEC that would deny that recovery are rejected.

**5. Vegetation Management and Infrastructure Inspection Expense**

**Findings of Fact:**

**Introduction:**

1. AmerenUE's vegetation management and infrastructure inspection expense is closely associated with two Commission rules. Following extensive storm related service outages in 2006, the Commission promulgated new rules designed to compel Missouri's electric utilities to do a better job of maintaining their electric distribution systems. Those rules, entitled Electrical Corporation Infrastructure Standards[201] and Electrical Corporation Vegetation Management Standards and Reporting Requirements,[202] became effective on June 30, 2008.

2. The rules establish specific standards requiring electric utilities to inspect and replace old and damaged infrastructure, such as poles and transformers. In addition, electric utilities are required to more aggressively trim tree branches and other vegetation that encroaches on transmission lines. In promulgating the stricter standards, the Commission anticipated utilities would have to spend more money to comply. Therefore, both rules include provisions that allow a utility the means to recover the extra costs it incurs to comply with the requirements of the rule.

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[201] Commission Rule 4 CSR 240-23.020.

[202] Commission Rule 4 CSR 240-23.030.

3. In ER-2008-0318, the Commission allowed AmerenUE to recover $54.1 million in its base rates for vegetation management costs, and $10.7 million for infrastructure inspection costs. However, since the rules were new, the Commission found that AmerenUE had too little experience to reasonably know how much it would need to spend to comply with the vegetation management and infrastructure inspection rules. Because of that uncertainty, the Commission established a two-way tracking mechanism to allow AmerenUE to track its vegetation management and infrastructure costs.

4. The base level for that tracker was set at $64.8 million ($54.1 million for vegetation management plus $10.7 million for infrastructure inspection). The order required AmerenUE to track actual expenditures around that base level. In any year in which AmerenUE spent below that base level, a regulatory liability would be created. In any year in which AmerenUE's spending exceeded the base level, a regulatory asset would be created. The regulatory assets and liabilities would then be netted against each other and would be considered in AmerenUE's next rate case. The tracking mechanism contained a 10 percent cap so if AmerenUE's expenditures exceeded the base level by more than 10 percent it could not defer those costs under the tracking mechanism, but would need to apply for an additional accounting authority order. The Commission's order indicated that the tracking mechanism would operate until new rates were established in AmerenUE's next rate case.[203]

5. This is, of course, the next rate case, and AmerenUE asks that the tracker be continued. Staff, MIEC, and Public Counsel contend the Commission should eliminate the

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[203] *In the Matter of Union Electric Company, d/b/a AmerenUE's Tariffs to Increase its Annual Revenues for Electric Service*, Report and Order, Case No. ER-2008-0318, January 27, 2009, Pages 48-49.

tracker and establish an allowance for vegetation management and infrastructure inspection expenses based on the company's expenditures during the test year.

**Specific Findings of Fact:**

6. The Commission must resolve two issues regarding these vegetation management and infrastructure expenses. First, the Commission must decide whether the existing tracker should be continued.

7. The Commission approved a tracker in the last rate case because the vegetation management and infrastructure rules were still very new. As a result, no one knew with any certainty how much AmerenUE would need to spend to comply with the rules' provisions.[204] AmerenUE has now been operating under those rules for two years. Although the rule went into effect on June 30, 2008, AmerenUE began complying with the requirements of the rules on January 1, 2008.[205]

8. Staff and MIEC contend that experience is sufficient to allow the Commission to confidently set AmerenUE's rates without renewing the tracker. However, the new rules impose substantial new requirements for tree trimming[206] and infrastructure inspections. AmerenUE has not yet completed a full four/six year vegetation management cycle on its entire system. Over half of its circuits have not yet been trimmed to the new standards. That is important because every circuit is unique, with different amounts of vegetation that must be trimmed, and requires a different amount of work to meet the standards imposed

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[204] *In the Matter of Union Electric Company, d/b/a AmerenUE's Tariffs to Increase its Annual Revenues for Electric Service*, Report and Order, Case No. ER-2008-0318, January 27, 2009, Page 41.

[205] Meyer Rebuttal, Ex. 402NP, Page 11, Line 13.

[206] Transcript, Page 1759, Lines 8-13.

by the rules.[207] Therefore, it is still difficult to predict what AmerenUE's normal level of vegetation management expenses will be.[208] The same is true for AmerenUE's efforts to comply with the infrastructure inspection rule.[209]

9. As the Commission said in the last rate case, the tracker serves to protect both the company and its ratepayers during this initial period of uncertainty about the cost to comply with the new rules. If the company spends less than the base level set in the tracker, the excess allowance will be tracked and returned to ratepayers in the next rate case. That is exactly what has happened in this case, and thus, ratepayers have already benefited from the existence of the tracker.

10. AmerenUE's system reliability has improved since the new rules went into effect,[210] and the Commission believes that vegetation management and infrastructure inspection is very important to that improved reliability. The Commission wants to encourage AmerenUE to continue to spend the money needed to improve reliability. Because there is still a great deal of uncertainty about the amount of spending needed to comply with the rules, the Commission finds that the tracker is still needed. That does not mean the tracker will become permanent. AmerenUE's witness suggests the company will have a level of experience needed to better predict costs in two to four years.[211] It may not take that long, and the Commission will certainly revisit this issue in AmerenUE's next rate case, but for this case, the Commission will renew the existing vegetation management and infrastructure inspection tracker.

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[207] Wakeman Rebuttal, Ex. 109, Page 8, Lines 7-8.

[208] Wakeman Rebuttal, Ex. 109, Page 7, Lines 1-23.

[209] Wakeman Rebuttal, Ex. 109, Pages 8-9, Lines 16-23, 1-11.

[210] Zdellar Direct, Ex. 157, Pages 3-15.

[211] Wakeman Rebuttal, Ex. 109, Page 7, Lines 20-21.

11. Having renewed the tracker, the Commission must decide the dollar amount to be included as a base level for that tracker. AmerenUE spent $50.4 million on vegetation management in the twelve-month period ending at the true-up date, January 31, 2010.[212] For the same period, AmerenUE spent $7.6 million on infrastructure inspection expenses.[213] That is a total of $58 million. The non-AmerenUE parties would use those actual expenditures to establish AmerenUE's rates for this case.

12. AmerenUE contends its forecasted expenditures for 2010 and 2011 should be used to set its new rates. The average forecasted expenditures for those two years are $53.7 million for vegetation management and $8.9 million for infrastructure inspections, for a total of $62.6 million.[214] AmerenUE would use that amount as the base level for a renewed two-way tracker.

13. In general, the Commission prefers to use historical information rather than forecasts to establish rates. In the last rate case, the Commission used the company's forecasted budget amounts to set the base level of the tracker. It did so because at that time there was very little historical information upon which to base its decision. More information is available now and while there is still enough uncertainty to justify the continuation of the tracker, the additional historical information is sufficient to set a reasonable base level for that tracker. Therefore, the Commission will set the base level of the tracker at $58 million,

14. One other matter remains to be resolved. Through February 28, 2010, AmerenUE has collected approximately $5 million more than it actually incurred to comply with the

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[212] Meyer Rebuttal, Ex. 402NP, Page 10, Lines 7-10.

[213] Meyer Rebuttal, Ex. 402NP, Page 14, Lines 1-5.

[214] Wakeman Rebuttal, Ex. 109, Page 10, Lines 14-20.

Commission's vegetation management and infrastructure inspection rules.[215] Staff proposed to reduce that over-collection by $2 million, which is the amount the company incurred from October 1, 2008 through February 28, 2009, in excess of the amount included in rates.[216] That would indicate a remaining over-collection of $3 million, but Staff updated that number at the end of the hearing to $3.4 million.[217]

15. Staff recommends that the $3.4 million remain in the tracker as an addition or offset to any future amounts deferred. The Commission would then address ultimate disposition of any amounts deferred in the next rate case.[218] AmerenUE did not offer a proposal on how the $3.4 million over-collection should be returned to its customers until its initial brief. At that time, the company recommended that the over-collection be returned to customers, amortized over three years.[219]

16. Staff's proposal would potentially offset an increase in AmerenUE's expenses for the next rate case and thereby decrease any rate increase that would result from that future case. AmerenUE's proposal has the advantage of decreasing the rate increase that will result from this decision. The Commission will accept AmerenUE's proposal and directs that the $3.4 million over collection be returned to customers, amortized over three years.

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[215] Rackers Surrebuttal, Ex. 203, Page 4, Lines 11-12.

[216] Rackers Surrebuttal, Ex. 203, Page 4, Lines 19-21. In ER-2008-0318, the Commission allowed AmerenUE to accumulate and defer those expenses in an Accounting Authority Order for consideration in this rate case.

[217] Exhibit 240.

[218] Rackers Surrebuttal, Ex 203, Page 5, Lines 4-9.

[219] Post-Hearing Brief of AmerenUE, Pages 119-120.

**Conclusions of Law:**

A. Commission Rule 4 CSR 240-23.020 establishes standards requiring electrical corporations, including AmerenUE, to inspect its transmission and distribution facilities as necessary to provide safe and adequate service to its customers. Specifically, 4 CSR 240-23.020(3)(A) establishes a four-year cycle for inspection of urban infrastructure and a six-year cycle for inspection of rural infrastructure.

B. Commission Rule 4 CSR 240-23.020(4) establishes a procedure by which an electric utility may recover expenses it incurs because of the rule. Specifically, that section states as follows:

> In the event an electrical corporation incurs expenses as a result of this rule in excess of the costs included in current rates, the corporation may submit a request to the commission for accounting authorization to defer recognition and possible recovery of these excess expenses until the effective date of rates resulting from its next general rate case, filed after the effective date of this rule, using a tracking mechanism to record the difference between the actually incurred expenses as a result of this rule and the amount included in the corporation's rates ... .

C. Commission Rule 4 CSR 240-23.030 establishes standards requiring electrical corporations, including AmerenUE, to trim trees and otherwise manage the growth of vegetation around its transmission and distribution facilities as necessary to provide safe and adequate service to its customers. Specifically, 4 CSR 240-23.030(9) establishes a four-year cycle for vegetation management of urban infrastructure and a six-year cycle for vegetation management of rural infrastructure. The vegetation management rule also includes a provision that would allow AmerenUE to ask the Commission for authority to accumulate and recover its cost

of compliance in its next rate case.[220]

**Decision:**

AmerenUE shall establish a tracking mechanism to track future vegetation management and infrastructure costs. That tracking mechanism shall include a base level of $58 million ($50.4 million + $7.6 million = $58 million). Actual expenditures shall be tracked around that base level with the creation of a regulatory liability in any year where AmerenUE spends less than the base amount and a regulatory asset in any year where AmerenUE spends more than the base amount. The assets and liabilities shall be netted against each other and shall be considered in AmerenUE's next rate case. The tracking mechanism shall contain a ten percent cap so expenditures exceeding the base level by more than ten percent shall not be deferred under the tracking mechanism. If AmerenUE's vegetation management and infrastructure inspection costs exceed the ten percent cap, it may request additional accounting authority from the Commission in a separate proceeding. The tracking mechanism shall operate until new rates are established in AmerenUE's next rate case.

The $3.4 million AmerenUE over-collected from its ratepayers under its previous tracking mechanism shall be returned to its ratepayers, amortized over three years.

**6. Storm Restoration**

**Findings of Fact:**

**Introduction:**

1. AmerenUE must spend money each year to restore electric service after its electric system suffers damage as the result of storms. Each year some of that damage results

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[220] Commission Rule 4 CSR 240-23.030(10).

from normal, routine storms. But occasionally, the electric system is struck by a truly extraordinary storm that can greatly increase restoration costs.

2. The Commission has generally allowed an electric utility to recover the Operations and Maintenance (O&M), excluding internal labor, costs to restore service after normal storms by including an amount in the cost of service based on some multiyear average level.[221] For the costs to restore service after an extraordinary storm, the Commission has usually allowed the utility to accumulate and defer those costs through an accounting authority order, an AAO.[222] The accumulated and deferred costs are then considered in the utility's next rate case. Generally, the Commission allows the utility to recover those costs amortized over a five-year period.[223]

3. Staff would use that same procedure in this case. Staff proposes to use a four-year average of AmerenUE's normal O&M, non-labor related, storm restoration costs to allow $6.4 million in AmerenUE's cost of service for normal storm restoration costs. AmerenUE's actual storm restoration cost during the test year totaled $10.4 million. Staff would remove $4 million from that amount as related to extraordinary storms, and allow AmerenUE to recover that $4 million amortized over five years.[224] MIEC's witness, Greg Meyer advocates the same approach, although he would allow only $5.2 million in AmerenUE's

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[221] A utility may also incur substantial capital investment costs to replace things like power poles after a storm. Those investment costs are added to the company's rate base and recovered in that manner. This issue does not concern those capital costs.

[222] Rackers Rebuttal, Ex. 202, Page 2, Lines 21-24.

[223] Rackers Rebuttal, Ex. 202, Page 2, Lines 5-11.

[224] Staff Report – Revenue Requirement/Cost of Service, Ex. 200, Pages 89-90, Lines 25-29, 1-16.

cost of service, as that was the amount allowed in the company's previous rate case, ER-2008-0318.[225]

4. AmerenUE proposes to use a new approach to the recovery of storm restoration expenses. It would have the Commission set the base level of storm restoration O&M costs at the actual amount incurred during the test year, which is $10.4 million. AmerenUE then proposes that the Commission establish a tracking mechanism to track actual expenses against that base level. If AmerenUE spent less than the base level, the difference could be returned to rate payers in the next rate case. If expenses exceeded the base level, AmerenUE could seek to recover the difference in its next rate case.[226]

**Specific Findings of Fact:**

5. The O&M non-labor cost AmerenUE incurs can vary greatly from year to year depending upon whether the electric system is struck by a major storm. For 2004 and 2005, those costs were only $1 million and $2 million respectively. For 2006 and 2007, the costs jumped to $26 million and $33 million. For 2008 and 2009, they fell again to $4 million and $9 million.[227] Under the approach the Commission has used in past cases, the company may under recover in years when costs are high, but may over recover in years when costs are low. If the company incurs truly extraordinary storm restoration costs in a particular year, it is able to recover those costs through the accounting authority mechanism. In this case, AmerenUE is recovering amortized storm restoration costs from five different storm events.[228]

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[225] Meyer Direct, Ex. 400, Pages 27-28, Lines 17-23, 1-2.

[226] Zdellar Direct, Ex. 157, Page 21, Lines 1-12.

[227] Rackers Surrebuttal, Ex. 203, Page 6, Chart at Line 6.

[228] Staff Report – Revenue Requirement/Cost of Service, Ex 200, Pages 90-91.

6. No party disputes that AmerenUE has provided good storm restoration service in recent years, and no one has alleged that any of its storm restoration expenses have been imprudent.

7. The Commission is unwilling to implement another tracker. As the Commission has previously indicated, trackers should be used sparingly because they tend to limit a utility's incentive to prudently manage its costs. If all such costs can simply be passed on to ratepayers, there is a natural incentive for the company to simply incur the cost. If the company must consider whether it will be able to recover a cost, it is more likely to think before it spends and maximize any possible cost savings.

8. The storm cost recovery method the Commission has used in the past has worked reasonably well. The company will ultimately recover its extraordinary costs resulting from unpredictable extraordinary storms through the accounting authority order mechanism, but the company still has a strong incentive to minimize its costs. Staff's proposal to include the four-year average of $6.4 million for storm restoration costs, while amortizing the extra $4 million in test year expense over five years is reasonable. MIEC's alternative proposal to include only $5.2 million in the company's cost of service is based only on the amount allowed in the last rate case. As such it is arbitrary and unsupported by any evidence offered in this case.

**Conclusions of Law:**

There are no additional conclusions of law for this issue.

**Decision:**

AmerenUE's request to establish a tracking mechanism is denied. AmerenUE shall include $6.4 million in its cost of service for storm restoration costs. The remaining $4

million in test year storm restoration expense shall be amortized and recovered over five years.

### 7. Union Issues

**Findings of Fact:**

**Introduction:**

1. The various unions that represent AmerenUE's employees appeared at the hearing to support the company's request for a rate increase. However, they asked the Commission to order AmerenUE to spend more money on employee training and to take specific steps to increase its internal workforce so that it will use fewer outside contractors. AmerenUE contends it is currently providing safe and adequate service and argues the Commission has no authority to manage the day-to-day affairs of the company.

**Findings of Fact:**

2. Michael Walter is the Business Manager of International Brotherhood of Electrical Workers Local 1439, AFL-CIO.[229] He testified that AmerenUE has not spent enough on training new workers and as a result has over-relied on outside contractors to perform normal and sustained work.[230] In particular, Walter is concerned that AmerenUE's trained work force is aging and he sees a need for increased training of new workers capable of stepping in when the current workforce retires.[231] He asks the Commission to require AmerenUE to spend a portion of its rate increase to improve training and increase the portion of the workload performed by its internal workforce.[232] AmerenUE's witness replied

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[229] Walter Rebuttal, Ex. 650, Page 1, Lines 2-3.

[230] Walter Rebuttal, Ex. 650, Pages 2-7.

[231] Transcript, Page 2575, Lines 18-24.

[232] Walter Rebuttal, Ex.650, Pages 7-9.

that the company must rely on outside contractors to meet some of its normal workforce needs because of a shortage of qualified personnel.[233]

3. In response to those concerns, Commissioners Davis and Jarrett asked the AmerenUE witnesses how the company would spend extra money to training power plant operators if provided additional training funds as a result of this case.[234] In response to Commissioners Davis' and Jarrett's questions, AmerenUE filed an exhibit detailing how it would spend extra money on training. AmerenUE also agreed to assess the incremental value to customers of its additional training investments and to present those findings to Staff and Public Counsel by December 31, 2011.[235] AmerenUE's witness explained that these additional funds would be used to train AmerenUE's distribution employees.[236]

4. The Commission finds that the evidence presented by the union witnesses does not demonstrate that AmerenUE has failed to supply safe and adequate service to the public. Furthermore, for reasons fully explained in its Conclusions of Law, the Commission does not have the authority to dictate the manner in which AmerenUE conducts its business. Therefore, the Commission will not attempt to dictate to the company regarding its use of outside contractors.

5. However, the union witnesses and AmerenUE agree that there is a need for improved training to replace skilled workers nearing retirement age. It takes five to seven

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[233] Wakeman Surrebuttal, Ex. 110, Page 10, Lines 5-15.

[234] Transcript, Page 2619, Lines 3-20, and Page 2621, Lines 5-9. The Commission allocated extra money for additional training in AmerenUE's last rate case, ER-2008-0318. AmerenUE explained how that money was spent in the direct testimony of Mark Birk, Ex. 102, Pages 15-16.

[235] Ex. 179.

[236] Transcript, Page 2783, Lines 21-24.

years of training to replace a skilled electrical worker.[237] For several job classifications, many workers are nearing retirement age and will soon be leaving the company.[238] Thus, the Commission finds that there is a need for additional training to attempt to meet that need.

6. Therefore, the Commission will add $1.29 million to AmerenUE's cost of service to fund increased training staff. The Commission will also allow AmerenUE $2.1 million for additional training equipment and materials, to be amortized over five years and recovered in rates. That would increase AmerenUE's cost of service by an additional $420,000 per year, for a total annual increase of $1,710,000.

**Conclusions of Law:**

A. The Commission has the authority to regulate AmerenUE, including the authority to ensure that the utility provides safe and adequate service. However, the Commission does not have authority to manage the company. In the words of the Missouri Court of Appeals,

> The powers of regulation delegated to the Commission are comprehensive and extend to every conceivable source of corporate malfeasance. Those powers do not, however, clothe the Commission with the general power of management incident to ownership. The utility retains the lawful right to manage its own affairs and conduct its business as it may choose, as long as it performs its legal duty, complies with lawful regulation, and does no harm to public welfare.[239]

Therefore, the Commission does not have the authority to dictate to the company whether it must use internal workforce rather than outside contractors to perform the work of the company.

**Decision:**

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[237] Transcript, Page 2576, Lines 21-25.

[238] Transcript, Page 2593, Lines 4-9.

[239] *State ex rel. Harline v. Public Serv. Com'n*, 343 S.W.2d 177, 182 (Mo. App. 1960)

The evidence presented by the union witnesses does not demonstrate that AmerenUE has failed to provide safe and adequate service and the Commission will not dictate to the company whether it must use its internal workforce or outside contractors to perform the company's work. However, the Commission will add $1,290,000 to AmerenUE's cost of service to fund increased training staff. The Commission will also allow AmerenUE $2,100,000 for additional training equipment and materials, to be amortized over five years and recovered in rates. That increases AmerenUE's cost of service by $1,710,000 per year. AmerenUE shall assess the incremental value to customers of these additional investments and provide that assessment to Staff and Public Counsel by December 31, 2011.

### 8. Fuel Adjustment Clause

**Findings of Fact:**

**Introduction:**

1. In AmerenUE's last rate case, ER-2008-0318, the Commission allowed AmerenUE to implement a fuel adjustment clause.[240] The approved fuel adjustment clause includes an incentive mechanism that requires AmerenUE to pass through to its customers 95 percent of any deviation in fuel and purchased power costs from the base level. The other 5 percent of any deviation is retained or absorbed by AmerenUE.[241]

2. In the direct testimony of its witness, Lynn Barnes, AmerenUE proposed that its existing fuel adjustment clause be continued, with a few minor refinements.[242] When it filed

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[240] *In the Matter of Union Electric Company, d/b/a AmerenUE's Tariffs to Increase its Annual Revenues for Electric Service*, Report and Order, Case No. ER-2008-0318, January 27, 2009, Pages 69-70.

[241] *Id.* at Page 76.

[242] Barnes Direct, Ex. 121, Page 3, Lines 2-10.

its direct testimony, Staff agreed that AmerenUE's existing fuel adjustment clause should be continued with the refinements proposed by AmerenUE and some additional modifications proposed by Staff.[243] The minor modifications to the fuel adjustment clause were resolved in the First Stipulation and Agreement that the Commission approved on March 24, 2010. Therefore, the Commission will not further address those modifications.

3. In an order issued on February 17, 2010, after the parties had filed rebuttal testimony, the Commission indicated it wanted to hear more evidence from the parties about the continued appropriateness of the 95 percent pass-through mechanism in AmerenUE's current fuel adjustment clause. To that end, the Commission offered the parties an opportunity to file additional direct, rebuttal, and surrebuttal testimony on an expedited schedule before the start of the hearing.[244]

4. AmerenUE responded by filing extensive additional testimony explaining why the company still needs a fuel adjustment clause that incorporates the current sharing mechanism. MIEC, Public Counsel, and Staff also filed additional testimony regarding the fuel adjustment clause.

5. MIEC refiled the testimony that its witness, Maurice Brubaker, offered regarding the fuel adjustment clause in AmerenUE's last rate case.[245] In that testimony, Brubaker advised the Commission to implement an 80/20 sharing mechanism that would allow the company to pass-through to customers only 80 percent of the changes in fuel cost and off-

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[243] Staff Report – Revenue Requirement/Cost of Service, Ex. 200, Pages 105-111.

[244] *In the Matter of Union Electric Company, d/b/a AmerenUE's Tariffs to Increase its Annual Revenues for Electric Service*, Order Directing the Parties to Submit Testimony Concerning the Appropriateness of AmerenUE's Current Fuel Adjustment Clause, File No. ER-2010-0036, February 17, 2010.

[245] ER-2008-0318.

system sales.[246] Brubaker would, however, cap the impact of the sharing mechanism so that the sharing would have no more than a 50 basis point impact on AmerenUE's return on equity.[247]

6. Public Counsel also offered testimony supporting an 80/20 sharing mechanism. Ryan Kind offered his opinion that such a sharing percentage is necessary to ensure that AmerenUE continues to make its best efforts to minimize fuel costs and maximize its off-system sales margins.[248]

7. Staff filed supplemental testimony explaining that since little time has passed since AmerenUE's fuel adjustment clause went into effect, it has not compiled enough data to meaningfully analyze that fuel adjustment clause. As a result, Staff suggests the Commission leave the current fuel adjustment clause in place without changing the sharing mechanism.[249]

**Specific Findings of Fact:**

8. In AmerenUE's last rate case, the Commission found that AmerenUE should be allowed to establish a fuel adjustment clause because its fuels costs were substantial, beyond the control of the company's management, and volatile in amount. The Commission also found that AmerenUE needed a fuel adjustment clause to have a sufficient opportunity to earn a fair return on equity and to be able to compete for capital with other utilities that have a fuel adjustment clause.[250] In the same rate case, the

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[246] Brubaker Additional Direct – FAC, Ex. 413, Attachment 2, Page 11 of 19.

[247] Brubaker Additional Direct – FAC, Ex. 413, Attachment 2, Page 11 of 19.

[248] Kind Additional Direct – FAC, Ex. 301, Page 2, Lines 3-18.

[249] Mantle Supp. Direct – FAC, Ex. 221, Pages 5-6, Lines 15-23, 1-7.

[250] *In the Matter of Union Electric Company, d/b/a AmerenUE's Tariffs to Increase its Annual Revenues for Electric Service*, Report and Order, Case No. ER-2008-0318, January 27, 2009,

Commission found that a 95/5 sharing mechanism would give AmerenUE a sufficient opportunity to earn a fair return on equity, while protecting customers by preserving the company's incentive to be prudent.[251]

9. Nothing has changed in the months since the Commission established AmerenUE's fuel adjustment clause to cause the Commission to change that decision. The Commission finds that AmerenUE's fuel and purchased power costs are clearly substantial, comprising 47 percent of the company's total operations and maintenance expense. Furthermore, the revenue the company receives from off-system sales, which is also tracked through the fuel adjustment clause, is also substantial.[252] These fuel and purchased power costs continue to be dictated by national and international markets, and thus are outside the control of AmerenUE's management.[253] Finally, these costs and revenues continue to be volatile. For example, the price AmerenUE was able to obtain in the market for off-system electricity sales declined by nearly half from 2008 to 2009.[254]

10. Furthermore, the Commission finds that AmerenUE still needs a fuel adjustment clause to help alleviate the effects of regulatory lag as net fuel costs continue to rise. AmerenUE's regulatory lag problems have not improved since its last rate case. In recent years, the company has been unable to earn its allowed rate of return, and in large part, that problem is due to fuel-related issues.[255] Even with the fuel adjustment clause in place, AmerenUE's return on equity for the year ending December 2009, was only 7.27 percent.

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Pages 69-70.

[251] *Id.*, at Page 76.

[252] Barnes Direct, Ex. 121, Page 7, Lines 17-23.

[253] Barnes Direct, Ex. 121, Page 7, Lines 23-26.

[254] Haro Additional Rebuttal – FAC, Ex. 126, Page 13, Lines 13-19.

[255] Transcript, Page 2409, Lines 5-11.

Without a fuel adjustment clause, that return would have dropped to 6.69 percent, over 400 basis points below the company's authorized return on equity of 10.76 percent.[256] In addition, AmerenUE still must compete in the capital markets with other utilities and the vast majority of those utilities have fuel adjustment clauses.[257]

11. For the forgoing reasons, the Commission finds that AmerenUE should be allowed to continue to operate under a fuel adjustment clause. However, the Commission's chief concern about the existing fuel adjustment clause, and the reason it asked the parties to present additional testimony about this matter, is an uncertainty about the appropriate amount of sharing required to assure that AmerenUE continues to make its best efforts to control its fuel-related costs and to maximize its off-system sales.

12. The majority of electric utilities operate with a fuel adjustment clause that does not have any sort of sharing mechanism.[258] Yet, the Commission is concerned that allowing an uncontrolled pass-through of costs will reduce a utility's incentive to carefully examine and perhaps reduce those costs. In the last rate case, the Commission decided that a 95/5 sharing mechanism was appropriate to allow the company to recover its prudently incurred costs while still protecting ratepayers. But the Commission wanted to know how well that sharing mechanism was working in practice.

13. MIEC and Public Counsel advocated for a revised sharing mechanism that would require AmerenUE to absorb a larger percentage of increasing fuel costs to increase its incentive to properly manage those costs. However, the testimony those parties presented was based on little more than the opinions of their witnesses about an appropriate sharing

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[256] Barnes Additional Direct – FAC, Ex. 122, Page 5, Lines 16-19.

[257] Transcript, Page 2421, Lines 1-6.

[258] Transcript, Page 2421, Lines 7-14.

percentage. No party presented any evidence that would indicate how the 95/5 sharing mechanism is working in practice for this company. Certainly, no evidence was produced to show that AmerenUE had acted imprudently with regard to its procurement of fuel and off system sales since the fuel adjustment clause went into effect in March 2009. On the contrary, the efficiency of AmerenUE's power plant performance as measured by equivalent availability improved in 2009, after the fuel adjustment clause was put into effect.[259]

14. As Staff explained in its testimony, the implementation of AmerenUE's fuel adjustment clause has only just begun. Staff will not complete its first prudence review of AmerenUE's operations under the existing fuel adjustment clause until August 2010.[260] The prudence review is very important to Staff in determining whether the fuel adjustment clause was working in the manner intended, as is seeing whether AmerenUE has changed its practices regarding their purchase and hedging of fuel and regarding off-system sales.[261] Until that review process is complete, Staff concluded it would not have sufficient data to meaningfully analyze the effectiveness of AmerenUE's fuel adjustment clause.[262]

15. Substantially changing the existing fuel adjustment clause without a meaningful analysis could have severe adverse consequences for AmerenUE and ultimately for ratepayers. Gary Rygh, a witness for AmerenUE explained that a significant modification to AmerenUE's fuel adjustment clause outside the context of a prudence review process could lead investors to conclude either that AmerenUE was improperly managing its net

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[259] Barnes Additional Direct – FAC, Ex. 122, Page 8, Lines 10-11.

[260] Mantle Supplemental Direct – FAC, Ex. 221, Page 12, Lines 15-16.

[261] Transcript, Page 2517, Lines 17-23.

[262] Mantle Supplemental Direct – FAC, Ex. 221, Page 6, Lines 3-7.

fuel costs, or that the Commission was acting rashly in overturning regulatory stability in Missouri.[263] Julie Cannell, another witness for AmerenUE, explained that investors value certainty, fairness, stability, and predictability. She indicated "a lack of consistency in a commission's actions or decisions serves to increase the investment risk associated with a utility."[264] Increased financial risk results in an increase in a company's cost of borrowing, ultimately increasing costs that will be passed on to ratepayers.[265]

**Conclusions of Law:**

A. Section 386.266.1, RSMo (Supp. 2009), the statute that allows the Commission to establish a fuel adjustment clause provides as follows:

> Subject to the requirements of this section, any electrical corporation may make an application to the commission to approve rate schedules authorizing an interim energy charge or periodic rate adjustments outside of general rate proceedings to reflect increases and decreases in its prudently incurred fuel and purchased-power costs, including transportation. The commission may, in accordance with existing law, include in such rate schedules features designed to provide the electrical corporation with incentives to improve the efficiency and cost-effectiveness of its fuel and purchased-power procurement activities.

Subsection 4 of that statute sets out some of the provisions that must be included in a fuel adjustment clause as follows:

> The commission shall have the power to approve, modify, or reject adjustment mechanisms submitted under subsections 1 to 3 of this section only after providing the opportunity for a full hearing in a general rate proceeding, including a general rate proceeding initiated by complaint. The commission may approve such rate schedule after considering all relevant factors which may affect the cost or overall rates and charges of the corporation, provided that it finds that the adjustment mechanism set forth in the schedules:

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[263] Rygh Rebuttal – FAC, Ex. 120, Pages 5-6, Lines 20-23, 1-5. Rygh is a Managing Director at Barclays Capital, Inc., an investment bank in New York.

[264] Cannell Rebuttal, Ex. 117, Pages 25-26, Lines 21, 1-2. Cannell is a securities analyst in New York.

[265] Cannell Rebuttal – FAC, Ex. 118, Page 5, Lines 2-3.

> *(1) Is reasonably designed to provide the utility with a sufficient opportunity to earn a fair return on equity;*
> (2) Includes provisions for an annual true-up which shall accurately and appropriately remedy any over- or under-collections, including interest at the utility's short-term borrowing rate, through subsequent rate adjustments or refunds;
> (3) In the case of an adjustment mechanism submitted under subsections 1 and 2 of this section, includes provisions requiring that the utility file a general rate case with the effective date of new rates to be no later than four years after the effective date of the commission order implementing the adjustment mechanism. ...
> (4) In the case of an adjustment mechanism submitted under subsections 1 or 2 of this section, includes provisions for prudence reviews of the costs subject to the adjustment mechanism no less frequently than at eighteen-month intervals, and shall require refund of any imprudently incurred costs plus interest at the utility's short-term borrowing rate. (emphasis added)

Subsection 4(1) is emphasized because that is the key requirement of the statute. Any fuel adjustment clause the Commission allows AmerenUE to implement must be reasonably designed to allow the company a sufficient opportunity to earn a fair return on equity.

B. Subsection 7 of the fuel adjustment clause statute provides the Commission with further guidance, stating the Commission may:

> take into account any change in business risk to the corporation resulting from implementation of the adjustment mechanism in setting the corporation's allowed return in any rate proceeding, in addition to any other changes in business risk experienced by the corporation.

Finally, subsection 9 of that statute requires the Commission to promulgate rules to "govern the structure, content and operation of such rate adjustments, and the procedure for the submission, frequency, examination, hearing and approval of such rate adjustments." In compliance with the requirements of the statute, the Commission promulgated Commission Rule 4 CSR 240-3.161, which establishes in detail the procedures for submission, approval, and implementation of a fuel adjustment clause.

C. Specifically, Commission Rule 4 CSR 240-3.161(3) establishes minimum filing requirements for an electric utility that wishes to continue its fuel adjustment clause in a rate case subsequent to the rate case in which the fuel adjustment clause was established. AmerenUE has met those filing requirements.

**Decision:**

The Commission concludes AmerenUE should be allowed to continue to implement the fuel adjustment clause the Commission approved in the company's last rate case. Given the short amount of time AmerenUE's fuel adjustment clause has operated and the resulting lack of information about how effective the current sharing mechanism has been, the Commission will not modify that clause, except as provided in the previously approved stipulation and agreement. The Commission expects to further review AmerenUE's fuel adjustment clause and the appropriate sharing mechanism to be included in that clause as part of AmerenUE's next rate case.

## 9. Rate Design and Class Cost of Service Issues

### a. Rate Design

**Findings of Fact:**

***Introduction:***

1. After the Commission determines the amount of rate increase that is necessary, it must decide how that rate increase will be spread among AmerenUE's customer classes. The basis principle guiding that decision is that the customer class that causes a cost should pay that cost.

2. During the course of the hearing, Public Counsel, MIEC, AARP and the Consumers Council of Missouri, and the Missouri Retailers Association filed a nonunanimous stipulation

and agreement that reached an agreement on how the rate increase should be allocated to the customer classes. AmerenUE and Staff did not sign the stipulation and agreement but do not oppose the compromise agreement. MEUA, however, does oppose that agreement. Subsequently, the parties that signed the original stipulation and agreement submitted an addendum to that stipulation and agreement. MEUA also opposed the addendum.

3. Because the stipulation and agreement and the addendum to that stipulation and agreement are opposed, the Commission cannot approve the stipulation and agreement or the addendum. Nevertheless, the compromise described in the stipulation and agreement and addendum remains the position of the signatory parties and the Commission can consider that position as it decides this issue.

4. AmerenUE has seven customer classes.[266] The Residential class is comprised of residential households. The Small General Service and Large General Service classes are comprised of commercial operations of various sizes. The first three classes receive electric service at a low secondary voltage level. The Small Primary Service and the Large Primary Service are larger industrial operations that receive their electric service at a high voltage level. The Large Transmission Service class takes service at a transmission voltage level.

5. There is only one member of the Large Transmission class, Noranda Aluminum, Inc.[267] Noranda operates an aluminum smelter in Southeast Missouri and purchases

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[266] Cooper Direct, Ex. 134, Page 4, Lines 8-22.

[267] Staff's Class Cost-Of-Service and Rate Design Report, Ex. 205, Page 27, Lines 17-18.

massive amounts of electricity from AmerenUE. When the smelter is at full production, Noranda pays AmerenUE approximately $140 million per year for electricity[268]

6. AmerenUE's last customer class is the Lighting class, which consists of both area and street lighting.[269] The Lighting class has a unique load pattern in that it is on at night and, for the most part, off during the day. For that reason, its class load is typically very low during periods of peak demand.[270]

**Specific Findings of Fact:**

7. To evaluate how best to allocate costs among these customer classes, four parties prepared and presented class cost of service studies. The studies presented by AmerenUE and MIEC used versions of the Average and Excess Demand Allocation method (A&E). An A&E allocation method considers both the maximum rate of use (demand) and the duration of use (energy). The A&E method conceptually splits the system into an average component and an excess component. The average demand is the total kWh usage divided by the total number of hours in the year. This is the amount of capacity that would be required to produce the energy if it were taken at the same demand rate each hour. The system excess demand is the difference between the system peak demand and the system average demand. The average demand is allocated to the various classes in proportion to their average demand (energy usage). The difference between the system average demand and the system peak or peaks is then allocated to customer classes on the basis of a measure that represents their peaking or variability in usage [271]

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[268] Gregston Direct, Ex. 422, Page 3, Lines 5-14.

[269] Cooper Direct, Ex. 134, Page 4, Lines 15-16.

[270] Staff's Class Cost-Of-Service and Rate Design Report, Ex. 205, Page 12, Lines 15-16.

[271] Brubaker Direct, Ex. 429, Pages 23-24, Lines 15-22, 1-5.

8. Staff and Public Counsel also presented class cost of service studies, but they used a different allocation method known as a Peak and Average Demand Allocation method. Staff's allocation method is based on the assumption that an electric utility adds capacity to meet its entire load rather than to just meet its peak load demand.[272] Public Counsel also presented a second study using a time of use method.

9. The following chart compares the results of each of the class cost of service studies, indicating the percent change in class revenues required to equalize class rates of return, as well as the dollar amounts needed to bring a class to its indicated cost of service. A negative number means the class is paying more than its indicated share of costs. A positive number means the class is paying less than its indicated share. All dollar figures are in millions.

| Study | Residential | Small General Service | Large General Service | Large Primary Service | Large Transmission Service |
|---|---|---|---|---|---|
| Staff - 4 CP A&P[273] | 8.67%<br>$83.5 | -4.24%<br>$(10.5) | -11.40%<br>($73.7) | -0.55%<br>($0.9) | 3.57%<br>$5.0 |
| AmerenUE[274] | 7.99%<br>$78.0 | -7.01%<br>($17.6) | -9.74%<br>($64.8) | 1.21%<br>$2.1 | 1.63%<br>$2.3 |
| OPC (TOU) | 1.23%<br>$11.8 | -9.40%<br>($23.3) | -3.77%<br>($24.4) | 8.80%<br>$14.7 | 15.27%<br>$21.2 |
| OPC (A&P)[275] | 3.35%<br>$32.2 | -7.60%<br>($18.9) | -4.69%<br>($30.3) | 7.17%<br>$12.0 | 3.56%<br>$5.0 |
| MIEC[276] | 13.30%<br>$129.6 | -4.30%<br>($10.7) | -12.70%<br>($84.6) | -7.40%<br>($12.7) | -15.50%<br>($21.6) |

[272] Scheperle Rebuttal, Ex. 207, Page 2, Lines 13-19.

[273] Ex. 553.

[274] Ex. 551.

[275] Ex. 552.

[276] Brubaker Revised Direct, Ex. 429, Schedule MEB-COS-5.

For example, Staff's study indicated the Residential class is currently paying $83.5 million less than AmerenUE's cost to serve that class. In contrast, according to Staff's study, the Large General Service class is currently paying $73.7 million more than AmerenUE's cost to serve that class. Although the exact numbers vary among the various studies, all the studies agree that the Residential class is currently paying substantially less than its cost of service and that the Large General Service class is currently paying substantially more than its cost of service.

10. In starting the process to develop just and reasonable rates, the first question the Commission must resolve is which of the submitted class cost of service studies best describes AmerenUE's cost to serve its various customer classes. As a first step, the Commission will discard the Staff and Public Counsel studies that utilize a Peak and Average Demand production demand allocation method.

11. Staff asserts that its Peak and Average Demand allocation method is superior to the Average and Excess method because it considers each class' contribution to the system's total peak rather than each class' excess demand at peak.[277] However, what Staff describes as its method's strength is actually its downfall because the Peak and Average demand method double counts the average demand of the customer classes.

12. Some customer classes, such as large industrials, may run factories at a constant rate, 24 hours a day, 7 days a week. Therefore, their usage of electricity does not vary significantly by hour or by season. Thus, while they use a lot of electricity, that usage does not cause demand on the system to hit peaks for which the utility must build or acquire additional capacity. Another customer class, for example, the residential class, will

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[277] Scheperle Rebuttal, Ex. 207, Page 5, Lines 11-14.

contribute to the average amount of electricity used on the system, but it will also contribute a great deal to the peaks on system usage, as residential usage will tend to vary a great deal from season to season, day to day, and hour to hour.

13. To recognize that pattern of usage, the Average and Excess method separately allocates energy cost based on the average usage of the system by the various customer classes. It then allocates the excess of the system peaks to the various customer classes by a measure of that class' contribution to the peak. In other words, the average and excess costs are each allocated to the customer classes once.

14. The Peak and Average method, in contrast, initially allocates average costs to each class, but then, instead of allocating just the excess of the peak usage period to the various classes to the cost causing classes, the method reallocates the entire peak usage to the classes that contribute to the peak. Thus, the classes that contribute a large amount to the average usage of the system but add little to the peak, have their average usage allocated to them a second time. Thus, the Peak and Average method double counts the average system usage, and for that reason is unreliable.[278]

15. Public Counsel also offered a time of use study that assigns production costs to each hour of the year that the specific production occurs. The method then sums each class' share of hourly investments based on only those hours when the class actually uses the system.[279] Public Counsel's time of use method is also unreliable because it considers every hour in the year to be a demand peak. As a result, the actual peaks in usage are given no additional weight. This, of course, benefits the residential class, which tends to

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[278] Brubaker Rebuttal, Ex. 430, Pages 12-14. See also, Transcript, Pages 3095-3096, Lines 24-25, 1-22.

[279] Meisenheimer Direct, Ex. 307, Page 7, Lines 5-7.

drive peaks, at the expense of industrial users of electricity that have high load factors and contribute little to the peaks in usage.[280]

16. Since the class cost of service studies offered by Staff and Public Counsel are unreliable, the Commission must choose between the Average and Excess method studies submitted by AmerenUE and MIEC. That task is difficult in this case because most of the testimony offered by AmerenUE and MIEC's witnesses criticize the methods used by Staff and Public Counsel and offer little criticism of each others studies. Yet, the studies do reach different results.

17. Significantly, MIEC's study tends to shift more cost causation from the Large General Service, Large Primary Service and especially the Large Transmission Service classes to the Residential class than does the AmerenUE study. AmerenUE's witness, William Warwick, explained those cost shifts in his rebuttal testimony.[281] In the allocation of transmission costs, non-fuel generation expenses, off-system sales revenue, and general plant, MIEC advocated modifications to AmerenUE's study that would tend to decrease the allocation of those costs to the large industrial customers who are the members of MIEC.[282] AmerenUE contends most of these adjustments are inappropriate.

18. However, AmerenUE's witness agrees that one of the adjustments proposed by MIEC's witness is credible. In his class cost of service study, MIEC's witness, Maurice Brubaker allocated revenues from off-system sales to customer classes on the basis of class energy (kWh) requirements.[283] Staff made a similar allocation of revenues in its class

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[280] Brubaker Rebuttal, Ex. 430, Page 18, Lines 12-19.

[281] Warwick Rebuttal, Ex. 147.

[282] Warwick Rebuttal, Ex. 147, Pages 2-8.

[283] Brubaker Direct, Ex. 429, Page 30, Lines 11-14.

cost of service study, and AmerenUE's witness concedes that such an allocation could be appropriate.[284] In addition, Brubaker's allocation is consistent with the methodology the Commission approved in a slightly different context in a recent Kansas City Power & Light rate case, ER-2006-0314.[285]

19. If AmerenUE's class cost of service study is modified to allocate revenues from off-system sales on the basis of class energy requirements, then that study would show that the large transmission service class is currently paying approximately 8 percent more than its indicated revenue share. The revised study would also show that the large general service class is overpaying by 11 percent and the residential class is underpaying by 11 percent.

20. After carefully considering all the studies, the Commission finds that AmerenUE's class cost of service study, modified to allocate revenues from off-system sales on the basis of class energy requirements, is the most reliable of the submitted studies.

21. Evaluating the submitted class cost of service studies is only the Commission's first step in designing just and reasonable rates for AmerenUE. In general, it is important that each customer class carry its own weight by paying rates sufficient to cover the cost to serve that class. That is a matter of simple fairness in that one customer class should not be required to subsidize another. Requiring each customer class to cover its actual cost of service also encourages cost effective utilization of electricity by customers by sending correct price signals to those customers.[286] However, the Commission is not required to precisely set rates to match the indicated class cost of service. Instead, the Commission

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[284] Warwick Rebuttal, Ex. 147, Pages 5-7.

[285] Brubaker Direct, Ex. 429, Page 30, Line 14.

[286] Cooper Direct, Ex. 134, Pages 16-17, Lines 13-22, 1-2.

has a great deal of discretion to set just and reasonable rates, and can take into account other factors, such as public acceptance, rate stability, and revenue stability in setting rates.

22. AmerenUE and, initially, Public Counsel, proposed that any rate increase should be allotted equally to each customer class. In other words, each class would receive the system average percentage increase.[287] That would leave the existing disparities revealed in the class cost of service studies unchanged.

23. Staff proposed that a small adjustment be made to shift $3 million in revenue responsibility from the large general service class to the residential class. Staff's adjustment would represent approximately a 0.3 percent increase in revenue responsibility to the residential class and a 0.5 percent decrease in revenue responsibility to the large general service class.[288]

24. MIEC proposed that each customer class be moved 20 percent toward its cost of service as shown in MIEC class cost of service study. That move would require a 2.6 percent revenue neutral increase from the residential class,[289] to collect $25.9 million in additional revenue from the residential class.[290] However, MIEC would not stop there: Brubaker also advocated that the Large Transmission class, whose only member is Noranda, be moved entirely to its cost of service as shown in MIEC's class cost of service

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[287] Cooper Direct, Ex. 134, Page 18, Lines 12-13. *See also*, Kind Direct, Ex. 300, Page 8, Lines 7-11.

[288] Staff's Class Cost-of-Service and Rate Design Report, Ex. 205, Page 24, Lines 8-15.

[289] Brubaker Revised Direct, Ex. 429, Page 36, Lines 13-19.

[290] Brubaker Revised Direct, Ex. 429, Schedule MEB-COS-6.

study. That extra movement would require an additional $8.2 million from the residential class and would reduce the rate relief that would otherwise flow to the other rate classes.[291]

25. Finally, MEUA, whose members take electric service as part of the large general service class, recommended the Commission adopt MIEC's proposed 20 percent revenue neutral adjustment, but without the extra adjustment to move the large transmission class to its cost of service.[292]

26. The stipulation and agreement to which MEUA objected would shift revenue responsibility to the residential, small general service and large primary service classes from the large transmission class and to a lesser extent, the large general service and small primary service classes. The addendum to the stipulation and agreement, to which MEUA also objected, would allocate a slightly larger revenue responsibility reduction to the large general service class.

27. Specifically, for an overall rate increase of $225 million, which is approximately the rate increase that will result from this order, the addendum to the stipulation and agreement would impose a roughly 1.5 percent revenue-neutral increase on the residential and small general service classes. That amounts to a revenue neutral increase of $14.5 million for the residential class and $3.8 million for the small general service class. It would also impose a 1.25 percent revenue neutral increase, amounting to an additional $2 million, on the large primary class.

28. On the other side of the coin, the large transmission class, whose only member is Noranda, would receive a revenue neutral reduction of 11.74 percent, which amounts to a reduction of approximately $16.3 million. That means Noranda would receive an actual

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[291] Brubaker Revised Direct, Ex. 429, Schedule MEB-COS-6.

[292] Chriss Rebuttal, Ex. 550, Page 11, Lines 3-12.

rate reduction of approximately $2.1 million, or a 1.54 percent overall reduction. That would occur while the residential class received an 11.70 percent rate increase. The large general service/small primary service class would receive a smaller revenue neutral reduction of 0.7%, amounting to $4.579 million. That means the large general service/small primary service class would receive an overall rate increase of 9.59 percent.

29. The reallocation of revenue responsibility the signatories agreed to in the stipulation and agreement, now their joint position, bears some resemblance to the results of AmerenUE's modified class cost of service study, which the Commission found to be the most reliable of the submitted studies. AmerenUE's study, and indeed, all the submitted studies, indicate that the residential class is paying substantially less than its actual revenue responsibility. The stipulated position would bring that revenue class closer to its actual cost of service. The stipulated position would also provide the large transmission service class, Noranda, with the largest rate reduction, even though AmerenUE's modified class cost of service study indicates the large general service class is currently overpaying its actual cost of service by a larger percentage.

30. MIEC, and in particular, Noranda, attempt to justify these results by claiming that Noranda needs special rate consideration to remain competitive with other aluminum smelters in the United States, lest it be forced to close, resulting in economic devastation to Missouri.

31. There is no doubt that the closure of Noranda's New Madrid aluminum smelter would have a severe impact on the economy of Southeast Missouri. Noranda directly employs some 900 people at its smelter, at an annual payroll of $60 million. Were the plant to close,

the Southeast Missouri region could lose over 3,200 jobs from its economy and state and local governments would lose $16 million per year in tax revenues.[293]

32. Noranda's aluminum smelter produces molten aluminum from aluminum oxide, known as alumina. The alumina is brought up the Mississippi river by barge for delivery to the smelter.[294] The processing of the alumina into aluminum requires a tremendous amount of electricity. When the smelter is at full production, at current electric rates, Noranda pays AmerenUE $140 million for electricity each year. The cost of electricity represents a little less than one-third of the smelter's cost of producing aluminum.[295]

33. Electricity is not the only cost factor affecting the continued viability of the New Madrid smelter, and MEUA demonstrated that the New Madrid smelter appears to possess certain competitive advantages over other competing smelters apart from the cost of electricity. For example, the smelter's geographic location on the Mississippi river reduces its cost to transport supplies of alumina.[296] If the market price of aluminum rises, Noranda may also benefit from paying a fixed rate for electricity while many of its competitors pay a rate for electricity that varies with the market price of aluminum.[297] Noranda expects that aluminum prices will rise in the future.[298] Still, while there is no evidence to indicate that Noranda is on the verge of shutting down its smelter with or without an electric rate increase, the smelter's long-term viability is dependent upon maintaining reasonably competitive electric rates.

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[293] Coomes Direct, Ex. 419, Page 2, Lines 4-12.

[294] Gregston Direct, Ex. 422, Page 1, Lines 12-17.

[295] Gregston Direct, Ex. 422, Page 3, Lines 5-14.

[296] Transcript, Page 2948, Lines 17-21.

[297] Transcript, Page 2948, Lines 2-7.

[298] Transcript, Page, 2959, Lines 1-5.

34. The large general service customer class is also currently paying more than its indicated revenue share and the stipulated position would provide that class with $4,579,000 of rate relief. But no evidence was presented that would show that the members of the large general service customer class need rate relief to remain competitive in the same way that Noranda needs that relief.

35. Clearly, Noranda will be affected by the rate increase that will result from this case. But the same can be said about all the other businesses and families that must pay AmerenUE for the electricity they need. The reduction proposed by the stipulated position would give Noranda an actual rate decrease of $2.147 million while all other customers have to absorb a rate increase. That result is inappropriate. While generally accepting the joint position, the Commission will modify that position to provide that the revenue neutral reduction in the large transmission service class's rate shall be set at a level that leaves that class' total revenue contribution unchanged. The joint position's revenue increase for the residential class shall be reduced by the amount taken from the large transmission class' revenue reduction. The lighting class' class revenue responsibility will be addressed in the next section of this report and order.

36. The objected to stipulation and agreement also purports to resolve certain issues regarding customer charges, Rider B voltage credits, and the Reactive Charge. No party, including MEUA, objects to that aspect of the stipulation and agreement.[299]

37. Specifically, the signatories agree that the residential customer charge should be set at $8.00 per month, with the remaining revenue assigned to the residential class to be allocated to volumetric charges. AmerenUE proposed that the residential customer charge

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[299] *See.* Initial Posthearing Brief of Midwest Energy Users Association, Page 11.

be increased to $10.00 per month from its current level of $7.25.[300] Staff recommended the residential customer charge be increased to $8.50 per month.[301] However, neither Staff nor AmerenUE objects to a residential customer charge of $8.00 per month. The Commission finds that $8.00 per month is a reasonable residential customer charge.

38. The signatories also agree as follows:

> the Small Power Service (SPS), Large Primary Service (LPS) and Large Transmission Service (LTS) customer charges should be set to $234.33, then those customer charges should be increased by the same percentage as the system average percentage increase, i.e., each will be increased by the same percentage and each will be the same. The signatories agree the rates for Rider B voltage credits (Tariff Sheet 99) should remain the same for all applicable rate schedules. The existing Rider B voltage credits should be increased by the same percentage as the system average percentage increase. The particular Rider B voltage credits as they now exist follow:
> - A monthly credit of $0.90/kW of billing demand for customers taking service at 34.5 or 69kV.
> - A monthly credit of $1.06/kW of billing demand for customers taking service at 115kV or higher.
>
> The Signatories agree the rate for the Reactive Charge should be the same for all applicable rate schedules and that the existing Reactive Charge should be increased by the same percentage as the system average percentage increase. The current Reactive Charge for SPS (Tariff Sheet 37), LPS (Tariff Sheet 67.1) and LTS (Tariff Sheet 68) classes are $027 per kVar. The Signatories agree the customer charge associated with Time-of-Day rates should be the same for all applicable non-residential rate schedules and that the existing Time-of-Day customer charge should be increased by the same percentage as the system average percentage increase. The current Time-of-Day customer charge for the Large General Service class (LGS)(Tariff Sheet 34), SPS (Tariff Sheet 37, LPS (Tariff Sheet 67.1) and LTS (Tariff Sheet 68) is $15.25. The Signatories agree the Small General Service class (SGS) customer charge should be $9.28 for single-phase service and $18.56 for three-phase service (Tariff Sheet 32). With the foregoing exceptions, all other rate elements within each rate schedule shall be increased by an equal percentage basis so that collectively all rate elements on that schedule are designed to collect the revenue assigned to the class to which that rate schedule applies.

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[300] Cooper Direct, Ex. 134, Page 21, Lines 1-7.

[301] Staff's Class Cost-of-Service and Rate Design Report, Ex. 205, Page 24, Line 18.

The agreed upon positions are generally consistent with the positions taken by Staff and AmerenUE and neither party has objected to those positions. The Commission finds that the agreed upon positions stated in the stipulation and agreement are reasonable and the Commission adopts those positions.

39. The signatories also agreed to adopt Staff's position that the following features should be returned to uniformity:

- The value of the customer charge be uniform across rate schedules, with the customer charges on the SPS, LPS, and LTS rate schedules being the same.
- The rates for Rider B voltage credits be the same under all applicable rate schedules.
- The rates for the Reactive Charge be the same for all applicable rate schedules.
- The rates associated with Time-of-Day meter charge be the same for all applicable non-residential rate schedules.[302]

Staff's testimony explained that these features had been uniform until implementation of the rate design in AmerenUE's last rate case. The Commission finds that the agreed upon position is reasonable and that position is adopted.

**Conclusions of Law:**

There are no additional conclusions of law for this issue.

**Decision:**

The Commission generally accepts the joint position, but will modify that position to provide that the revenue neutral reduction in the large transmission service class's rate shall be set at a level that leaves that class' total revenue contribution unchanged. The joint position's revenue increase for the residential class shall be reduced by the amount

[302] Staff's Class Cost-of-Service and Rate Design Report, Ex. 205, Page24, Lines 1-6.

taken from the large transmission class' revenue reduction. The lighting class' class revenue responsibility will be addressed in the next section of this report and order.

### b. Street Lighting

**Findings of Fact:**

**Introduction:**

40. The members of the lighting class of customers largely consists of municipalities that purchase electricity from AmerenUE to light their streets at night. The lighting class has a unique load pattern in that the street lights are generally on only at night. That means street lights are drawing power when demand from other users tends to be low, and as a result the lighting class does not contribute much to peak demand. As previously discussed, peak demand tends to drive costs, so the lighting class does not fit well into a general class cost of service study.[303] For that reason, the class cost of service studies submitted by Staff and AmerenUE did not separately calculate the cost of serving the lighting class. Instead, their cost of service studies allocated all direct lighting costs and revenues to the other classes based on each class' share of AmerenUE's total cost-of-service.[304] That allocation method assumes that the company's rates for lighting service have been established at or near their cost of service,[305] but it does not actually determine whether that assumption is correct.

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[303] Staff's Class Cost-of-Service and Rate Design Report, Ex. 205, Page 12, Lines 15-21.

[304] Staff's Class Cost-of-Service and Rate Design Report, Ex. 205, Page 12, Lines 21-25.

[305] Staff's Class Cost-of-Service and Rate Design Report, Ex. 205, Page 13, Lines 1-3. *See also*, Warwick Direct, Ex. 146, Page 4, Lines 1-15.

41. The same allocation method was used in AmerenUE's last two rate cases, and no actual cost of service study has been done for the lighting class over that time.[306] AmerenUE may have last performed a comprehensive street lighting study sometime in the1980's but it has been unable to locate that study.[307] Since AmerenUE's cost to serve the lighting class has not been studied since at least the 1980's, the lighting class has simply been allocated the same across the board rate adjustments allocated to the other rate classes. AmerenUE and Staff would continue that practice in this case.

42. The lighting class has not been represented in AmerenUE's previous rate cases, but the Municipal Group intervened in this case to bring the lighting class' issues to the Commission's attention. In the First Stipulation and Agreement, filed on March 10, before the start of the hearing, the signatory parties agreed that AmerenUE would cooperate with all interested parties in preparing a cost of service study regarding the lighting class for use in the company's next rate case.[308] The Municipal Group did not sign that stipulation and agreement, but it did not oppose it, and the Commission approved the stipulation and agreement on March 24.[309]

43. Despite the stipulation and agreement's provision for a future class cost of service study, the Municipal Group continues to seek immediate relief in this case. Specifically, the Municipal Group seeks:

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[306] Transcript, Page 2871, Lines 3-20.

[307] Transcript, Page 2872, Lines 1-4.

[308] First Nonunanimous Stipulation and Agreement, Page 7.

[309] In the Matter of Union Electric Company, d/b/a AmerenUE's Tariffs to Increase Its Annual Revenues for Electric Service, File No. ER-2010-0036, Order Approving First Stipulation and Agreement (March 24, 2010).

1. A moratorium on any new street lighting rates under the 5M and 6M tariffs pending the outcome of the cost of service study and its introduction in AmerenUE's next rate case, or, in the alternative that AmerenUE hold in escrow any increase ordered for the 5M and 6M street lighting rates pending the review of the street lighting cost of service study in AmerenUE's next rate case; and
2. The elimination of any future pole installation charges from 5M customer bills until such pole installation charges can be justified in AmerenUE's next rate case; and
3. A credit for the 5M customers for all other revenues received by AmerenUE for itself and other entities for their use of these same poles for telephone, cable TV, electric distribution lines, etc.[310]

**Specific Findings of Fact:**

44. AmerenUE currently collects roughly $31 million per year system-wide from the lighting class.[311] That represents about 1.4 percent of the company's total base rate revenues.[312] The company collects a part of that revenue from its 5M and 6M rates for street lighting, but the exact amount AmerenUE collects under those two particular rates is not revealed in the record.

45. The 5M classification is for street lights that are owned and maintained by AmerenUE. Those street lights are not metered. Instead, the 5M customer is billed by

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[310] Initial Brief of the Municipal Group, Pages 10-11.

[311] Transcript, Page 2869, Lines 6-15.

[312] Warwick Direct, Ex. 146, Page 4, Lines 11-12.

fixture and pole type according to the number of lights in each rate category.[313] The street lighting bill can be a significant expense for a municipality. For example, the City of University City budgets approximately $640,000 per year for 5M street lighting.[314] The 6M classification covers metered and unmetered street lighting that is owned by the customer rather than AmerenUE.[315]

46. After comparing the 5M rate to the 6M rate, the Municipal Group contends it is being overcharged for maintenance portion of the 5M rate.[316] The Municipal Group also contends it is being overcharged under the 5M rate for pole installation charges for poles installed before 1988. The Municipal Group claims that having collected an installation charge for more than 20 years, AmerenUE should have recovered its installation costs by now.[317]

47. Finally, the Municipal Group notes that AmerenUE collects revenue from other entities for various installations added onto the street lighting poles, such as cable TV lines. The municipalities contend that since they are in effect renting the poles, they should receive a cut of that revenue.[318] AmerenUE explains that it accounts for that extra revenue as an offset to its base rate revenues in its rate cases. In other words, a dollar collected from a cable company for hanging a line on a light pole would be a dollar the company would not collect from its customers, including the lighting customers.[319] Thus, the Commission finds that those revenues do, at least indirectly benefit the lighting customers.

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[313] Eastman Rebuttal, Ex. 750, Page 4, Lines 3-13.

[314] Eastman Rebuttal, Ex. 750, Page 4, Lines 15-17.

[315] Eastman Rebuttal, Ex. 750, Page 6, Lines 11-14.

[316] Eastman Rebuttal, Ex. 750, Page 9-11.

[317] Eastman Rebuttal, Ex. 750, Page 14, Lines 5-18.

[318] Transcript, Pages 2878-2880.

[319] Transcript, Page 2878, Lines 11-20.

48. AmerenUE generally denies that it is overcharging its lighting customers, but concedes that there is no specific cost study to support those rates. That deficiency should be corrected by the completion of such a cost study for the development of rates in the company's next rate case. The Municipal Group claims that pole installation charges are unfair, but could offer nothing other than speculation to prove that contention. Since there is no basis at this time to conclude that the current rates are not justified, the Commission will not eliminate future pole installation charges at this time. But the fairness of those charges should become clearer after completion of the costs study and may be revisited in the next rate case.

49. The record does not indicate the amount of revenue AmerenUE collects from 5M and 6M rates apart from the general lighting revenue numbers. Therefore, the Commission cannot exempt just the 5M and 6M ratepayers from the increased rates that will result from this rate case. However, because no class cost of service study has examined the lighting class since at least the 1980s, the entire class has been given rates that may or may not bear any resemblance to the cost to serve that class. The lighting class is only a small part of AmerenUE's entire customer base, but street lighting is a significant cost for the municipalities that take that service. Under the circumstances, the Commission will exempt the entire lighting customer class from the rate increase that will result from this report and order.[320]

50. The lighting class currently generates $31.295 million in revenue for AmerenUE. The roughly 10.2 percent system average rate increase that will result from this case would

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[320] The Municipal Group's alternative proposal to have AmerenUE hold the rate increase collected from the lighting group in escrow, subject to refund, would not be fair to AmerenUE because, if the lighting group's rates were found to be too high, the company would not be able to go back and collect any revenue shortfall after the fact from the other customer classes.

generate an additional $3.2 million in revenue from the lighting class. AmerenUE shall instead collect that $3.2 million of revenue from the other rate classes on a pro rata basis.

**Conclusions of Law:**

There are no additional conclusions of law for this issue.

**Decision:**

The entire lighting class is exempted from the rate increase that will result from this report and order. The additional revenue that would have been collected from the lighting class under a system average rate increase shall instead be collected from the other rate classes on a pro rata basis. The adjustments necessary to exempt the lighting class shall be made after the general adjustments made pursuant to section 9a of this Report and Order.

**IT IS ORDERED THAT:**

1. The tariff sheets filed by Union Electric Company, d/b/a AmerenUE on July 24, 2009, and assigned tariff number YE-2010-0054, are rejected.

2. Union Electric Company, d/b/a AmerenUE is authorized to file a tariff sufficient to recover revenues as determined by the Commission in this order. AmerenUE shall file its compliance tariff no later than June 8, 2010.

3. This report and order shall become effective on June 7, 2010.

**BY THE COMMISSION**

( S E A L )

Steven C. Reed
Secretary

Davis, C., concurs, with concurring opinion to follow,
Jarrett, Gunn, and Kenney, CC., concur,
Clayton, Chm., dissents, with dissenting opinion to follow.
and certify compliance with the provisions
of Section 536.080, RSMo.

Dated at Jefferson City, Missouri,
on this 28th day of May, 2010.

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

| | | |
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| In the Matter of the Application of Ormet Primary Aluminum Corporation for Approval of a Unique Arrangement with Ohio Power Company and Columbus Southern Power Company. | ) ) ) ) ) | Case No. 09-119-EL-AEC |

OPINION AND ORDER

The Commission, considering the above-entitled application, hereby issues its opinion and order in this matter.

APPEARANCES:

Sonnenschein Nath & Rosenthal LLP, by Clifton A. Vince, Douglas G. Bonner, Daniel D. Barnowski, and Emma F. Hand, 1301 K Street NW, Suite 600 East Tower, Washington, D.C. 20005, on behalf of Ormet Primary Aluminum Corporation.

Richard Cordray, Ohio Attorney General, by Duane W. Luckey, Section Chief, and Thomas Lindgren and Thomas McNamee, Assistant Attorneys General, 180 East Broad Street, Columbus, Ohio 43215, on behalf of the staff of the Public Utilities Commission of Ohio.

Marvin I. Resnik and Steven T. Nourse, American Electric Power Service Corporation, 1 Riverside Plaza, 29th Floor, Columbus, Ohio 43215, on behalf of Columbus Southern Power Company and Ohio Power Company.

Janine L. Migden-Ostrander, Ohio Consumers' Counsel, by Gregory J. Poulos, and Maureen R. Grady, Assistant Consumers' Counsel, Office of Consumers' Counsel, 10 West Broad Street, Columbus, Ohio 43215, on behalf of the residential consumers of Columbus Southern Power Company and Ohio Power Company.

Boehm, Kurtz & Lowry, by David F. Boehm and Michael L. Kurtz, 36 East Seventh Street, Suite 1510, Cincinnati, Ohio 45202, on behalf of Ohio Energy Group.

McNees, Wallace & Nurick, LLC, by Samuel C. Randazzo, Lisa G. McAlister and Joseph M. Clark, 21 East State Street, Columbus, Ohio 43215, on behalf of Industrial Energy Users-Ohio.

Chester, Willcox & Saxbe, LLP, by John W. Bentine, Mark S. Yurick, and Matthew S. White, 65 East State Street, Suite 1000, Columbus, Ohio 43215-4213, on behalf of The Kroger Company.

OPINION:

I. History of the Proceeding

On February 17, 2009, Ormet Primary Aluminum Corporation (Ormet) filed an application pursuant to Section 4905.31, Revised Code, to establish a unique arrangement with the Ohio Power Company and Columbus Southern Power Company (AEP-Ohio) for electric service to its aluminum-producing facility located in Hannibal, Ohio. In its application, Ormet requests that the Commission establish a unique arrangement for electric service with AEP-Ohio that links the price of electricity for its facility for calendar years 2010 through 2018 with the price of aluminum as reported on the London Metal Exchange (LME). Ormet filed an amended application on April 10, 2009, to reflect the possible curtailment of the equivalent of at least two of its six potlines.

On March 9, 2009, Industrial Energy Users-Ohio (IEU-Ohio) filed comments regarding Ormet's application. Further on April 28, 2009, Ohio Energy Group (OEG) and Kroger Company (Kroger) each filed comments regarding Ormet's amended application.

Motions to intervene were filed by AEP-Ohio, IEU-Ohio, OEG, Kroger, and the Ohio Consumers' Counsel (OCC). Those motions were granted by the attorney examiner.

Based upon the comments, the attorney examiner set this matter for hearing. The hearing in this matter commenced on April 30, 2009, and concluded on June 17, 2009. At the hearing, Ormet presented four witnesses, OCC presented three witnesses, and Staff presented one witness. Briefs were filed on July 1, 2009, by Ormet, AEP-Ohio, OCC and OEG, IEU-Ohio, Kroger, and Staff.

II. Discussion and Conclusions

In support of the unique arrangement, Ormet argues that the benefits to the region of keeping Ormet in operation will more than offset the delta revenue paid by other ratepayers. Ormet claims that the undisputed expert testimony in the record of this proceeding demonstrates that, at full operations, Ormet provides $195 million of benefits to the regional economy (Ormet Ex. 5 at 1).

Ormet also contends that the proposed unique arrangement furthers the policy of the State of Ohio as codified in Section 4928.02, Revised Code. Ormet claims that the

unique arrangement is designed to meet the specific needs of Ormet with respect to the price, terms, conditions, and quality options of electric service as specified by Section 4928.02(B), Revised Code. Further, Ormet claims that the unique arrangement will help Ohio compete in the global economy pursuant to Section 4928.02(N), Revised Code. Ormet contends that it competes in a global market and needs affordable energy in order to compete.

Ormet further contends that it has provided the information needed by the Commission to approve the unique arrangement. Ormet notes that it has provided an affidavit from its chief executive officer verifying the information provided in the application and that it has also provided verifiable data in support of the application.

OCC and OEG claim that Ormet's economic analysis of its impact on the region is flawed because it fails to factor in the negative economic impact on the rest of the state from raising electric rates to pay for the delta revenues (Tr. I at 263, 265). OCC and OEG assert that there will be a clear negative economic impact to requiring all other AEP-Ohio ratepayers to pay increased rates to pay for the delta revenues under the proposed unique arrangement.

IEU-Ohio notes that the Commission may approve a proposed unique arrangement if it is shown to be just and reasonable and that it furthers the policy of this state. However, IEU-Ohio argues that Ormet's application should not be approved. IEU-Ohio claims that there are no clear or reliable indications of how the proposed unique arrangement will produce sufficient beneficial outcomes to make the transfer of revenue responsibility just and reasonable. IEU-Ohio alleges that there are many unanswered questions regarding the proposed unique arrangement, including questions related to the future price of aluminum, the treatment of delta revenue, pending litigation between Ormet and its alumina supplier, Ormet's ability to negotiate a new tolling contract, the sale of significant assets currently owned by Ormet, and the minimum cash requirement associated with labor costs for 2010 and beyond.

The Commission finds that Ormet's application for a unique arrangement should be approved subject to a number of modifications set forth below. The evidence in the record of this proceeding demonstrates that Ormet provides significant economic benefits to the region. Specifically, the evidence demonstrates that Ormet provides $195 million in total employee compensation and benefits to the regional economy (Ormet Ex. 5 at 1). The evidence also indicates that Ormet is a key employer for the region (Ormet Ex. 5 at 3-4) and that Ormet's operations are responsible, indirectly, for the creation of an additional 2,400 jobs in the region (Tr. 1 at 262-263). Further, the record shows that Ormet's operations generate over $6.7 million in tax revenue each year (Tr. 1 at 271). Finally, although OCC and OEG, as well as Staff, claim that the increased rates paid by ratepayers

will have a negative economic effect on the state's economy, no party presented evidence in the record which quantified this negative effect (TR. 1 at 264-265).

The Commission notes that, although the proposed unique arrangement covers the period between January 1, 2009 and December 31, 2018, the specific terms and conditions of the unique arrangement are distinctly different for calendar year 2009 than for the remaining years of the unique arrangement. Therefore, the Commission will address the terms related to calendar year 2009 separately.

A. Terms of the Unique Arrangement for Calendar Year 2009

Under the terms of the amended application, for the balance of calendar year 2009, Ormet will pay AEP-Ohio the lesser of the applicable AEP-Ohio tariff rate or $38.00 per MWh. If Ormet reduced its production by the equivalent of at least two potlines, Ormet's rate would be reduced to the lesser of the applicable AEP-Ohio tariff rate or $34.00 per MWh. Ormet requests that the rate for 2009 going forward be set at a level that, taking into account the rate that Ormet has been paying to date, would result in an average rate of $38.00 per MWh for the portion of the year that Ormet was above the four potline operating level and an average rate of $34.00 per MWh for the portion of the year that Ormet was operating at four potlines or less.

OCC and OEG argue that, while Ormet's proposed unique arrangement for 2009 is reasonable in most respects, the provisions calling for retroactive recovery of discounted rates should be rejected. OCC and OEG note that the proposed unique arrangement requests the Commission make the unique arrangement retroactive to January 1, 2009. OCC and OEG allege that this would result in Ormet receiving discounted rates for electricity that were different from the rates which were approved and in effect at the time the service was delivered. OCC and OEG argue that this would constitute retroactive ratemaking which is prohibited. *Lucas County v. Public Util. Comm.* (1997), 80 Ohio St.3d 344, 348-349. Further, OCC and OEG contend that Ormet should be required to pay AEP-Ohio's economic development rider. OCC and OEG note that this rider is unavoidable and that Ormet should pay this rider just like all other customers.

Finally, OCC and OEG claim that the proposed unique arrangement for 2009 is unreasonable and unlawful because it provides compensation to AEP-Ohio for its POLR responsibilities when Ormet cannot shop under the contract. OCC and OEG claim that, because AEP-Ohio will not incur any risk that Ormet would leave and come back to system and seek service when the market makes it more economical, AEP-Ohio should not assess a POLR charge on Ormet, and ratepayers should not pay any discount which compensates AEP-Ohio for a non-existent POLR risk for this consumer.

AEP-Ohio argues that the Commission should not reopen its prior approval of the temporary amendment to the 2007-2008 contract between Ormet and AEP-Ohio. This temporary amendment was approved by the Commission effective January 1, 2009. AEP contends that, if the Commission approves the proposed unique arrangement, the unique arrangement should be effective on a prospective basis only because an earlier effective date would violate the terms of the temporary amendment.

Staff notes that Ormet's rate for 2009, the first year of the agreement, would be fixed at either $38 per MWh or $34 per MWh, depending on the number of potlines in operation (OCC Ex. 3 at 6-7). Although Staff had previously recommended that the Commission bifurcate this proceeding and address calendar year 2009 separately, Staff recommends Commission approval of the terms for the first year of the unique arrangement.

The Commission finds that the terms of the unique arrangement for 2009 should be approved subject to the following modifications. With respect to price, the Commission orders AEP-Ohio to bill Ormet, for the balance of 2009, at a rate which, for all of calendar year 2009, averages $38.00 per MWh for the periods when Ormet was in full operation (i.e., six potlines), $35.00 per MWh for the periods when Ormet curtailed production to 4.6 potlines, and $34.00 per MWh for the periods when Ormet curtailed production to 4 potlines. This rate will ensure that Ormet will receive the benefits of the rates proposed for calendar year 2009 in its amended application without bifurcating the proceeding as originally proposed by Staff. Further, this rate is contingent upon Ormet maintaining employment levels at 900 employees for calendar year 2009 pursuant to Ormet's representations in the record of this proceeding (Ormet Ex. 11A at 5-6; Tr. III at 425).

However, with respect to the delta revenue for 2009, the Commission believes further proceedings are necessary regarding the recovery of delta revenues by AEP-Ohio for calendar year 2009. Therefore, the Commission authorizes AEP-Ohio to defer the delta revenues created by the unique arrangement for the remainder of calendar year 2009, and the Commission directs AEP-Ohio to file an application to recover the appropriate amounts of the deferrals authorized by the Commission in Case No. 08-1338-EL-AAM and the delta revenues for calendar year 2009.

The approved unique arrangement shall be effective for services rendered following the filing in this docket of an executed power agreement which conforms to the modifications ordered by the Commission in this Opinion and Order. Although the power agreement shall be effective for services rendered after the filing of an executed power agreement, the Commission retains the right, upon review of the executed power agreement, to order further revisions to the power agreement in order to ensure that the power agreement conforms to the modifications of the proposed unique arrangement ordered by the Commission in this Opinion and Order.

B. Terms of the Unique Arrangement for Calendar Years 2010 through 2018

For calendar years 2010 through 2018, the rate Ormet will pay under the proposed unique arrangement will be determined based upon schedules filed each year with the Commission. Each schedule would include an "indexed rate" and a "target price." The indexed rate would be the rate that Ormet could pay to produce the minimum cash flow necessary to sustain operations and pay its required legacy costs depending upon the LME price of aluminum. The target price will be the projected average price of aluminum for the calendar year as reported on the LME at which Ormet would be able to pay the AEP-Ohio tariff rate and still maintain the minimum cash flow necessary to maintain its operations and pay its required legacy costs. Under the proposed unique arrangement, the Commission may require an independent third-party review of each year's schedule at Ormet's expense.

When the LME price of aluminum is less than or equal to the target price, Ormet will pay the indexed rate. When the LME price of aluminum is greater than the target price, but not more than $300 per tonne above the target price, Ormet will pay 102 percent of the AEP-Ohio tariff rate. When the LME price is greater than $300 per tonne than the target price, Ormet will pay 105 percent of the AEP-Ohio tariff rate. At the end of each year, there will be a true-up to reconcile the projected LME prices for the year with the actual LME prices.

With respect to the terms of the unique arrangement for calendar years 2010 through 2018, intervenors in this proceeding and Staff have raised a number of specific arguments related to: (1) the proposed discount and delta revenue recovery; (2) potential delta revenue credits; (3) POLR charges; (4) deposit and advance payment requirements; and (5) the need for future review of the proposed unique arrangement. Although the Commission will approve the proposed unique arrangement, the Commission will order a number of modifications to the unique arrangement in order to address the issues raised by intervenors and Staff.

1) Proposed Discount and Delta Revenue Recovery

IEU-Ohio argues that the unique arrangement, if approved, would impose an excessive burden on other customers of AEP-Ohio. IEU-Ohio claims that, under the pricing formula contained in the proposed unique arrangement and assuming an AEP-Ohio tariff rate of $44.24 per MWh, Ormet would need to sell aluminum at $2,843 per tonne to avoid creating delta revenues; however, if Ormet sold aluminum in 2010 at $1,602 per tonne, which was the LME forward price as of April 29, 2009, delta revenues would amount to $283 million (OEG Ex. 1; OEG Ex. 6).

Likewise, OCC and OEG claim that the proposed unique arrangement is unreasonable because it fails to limit the delta revenues that ratepayers could be asked to pay. OCC and OEG note that any LME price less than $2,200 per tonne will result in Ormet being paid, in the form of a credit on its bill, to use electricity (Tr. I at 153; Tr. II at 297). As of May 1, 2009, the LME futures price for July 2010 was $1,602 per tonne (Tr. I at 150-155). OCC and OEG claim that, if the futures price for July 2010 accurately reflects the actual LME price for July 2010, Ormet will be paid $77.1 million to use power in 2010 (Tr. I at 153). OCC and OEG contend that there is no basis in law for the proposed unique arrangement and that Ormet has failed to provide any credible legal justification for requiring ratepayers to pay cash to a company beyond discounting rates to zero dollars. Therefore, OCC and OEG conclude that the proposed unique arrangement would not be reasonable without an appropriate floor for the rate Ormet will pay.

OCC and OEG note that, although the total impact of wages on the states of Ohio, West Virginia and Pennsylvania, if Ormet were to close, would be $195 million per year (Ormet Ex. 8 at 4), half of the employees and retirees identified in the amended application reside in Pennsylvania and West Virginia (Ormet Ex. 5 at 5), and a substantial amount of the tax revenues received from Ormet goes to West Virginia (Ormet Ex. 5 at 11-12). Thus, OCC and OEG conclude that Ormet's economic study should be discounted by 42 percent before it can be considered a relevant study on the Ohio economic impact of a potential closing by Ormet. OCC and OEG note that Staff recommended in the hearing that the amount of the rate discount be limited to $54 million per year and that the discount be phased out over the term of the contract (Staff Ex 2 at 3). However, OCC and OEG maintain that the limit should not exceed $32 million, the amount of wages of the Ohio workers at the Ormet plant.

Kroger argues that, when considering a proposed unique arrangement, the Commission must balance all costs of the proposed arrangement with the benefits of assuming those costs. Further, Kroger contends that, in order to avoid exposing ratepayers to unreasonable and unlimited risk, any unique arrangement approved by the Commission in this proceeding should include reasonable protections for AEP-Ohio ratepayers. Kroger believes that the reasonable protections should include a definitive limit on the cost that ratepayers are required to pay, by either limiting the discount Ormet receives to a certain percentage below AEP-Ohio's tariff rates or placing a dollar limit on the amount of delta revenues AEP-Ohio may recover annually from the unique arrangement.

AEP-Ohio believes that the amount of any discount to be provided to Ormet is a matter for the Commission's judgment. However, AEP-Ohio claims that, under Section 4905.31(E), Revised Code, AEP-Ohio must be provided full recovery of all delta revenues under the unique arrangement because the statute specifies that all costs of an economic

development program or job retention program are recoverable by an electric utility, including all "revenue forgone."

Ormet claims that the potential harm predicted by the intervenors in this proceeding is speculative and based upon an unlikely worst case scenario. Ormet contends that the delta revenue calculations by OCC and OEG are based upon the erroneous assumption that current LME forward prices are reliable predictors of future LME prices and that future LME prices are likely to stay below $1,941 per tonne (OCC Ex. 3 at 11-12). However, Ormet contends that a more reliable projection predicts that aluminum prices will be near $2,000 per tonne by the end of 2009 (Ormet Ex. 9 at 1; Tr. I at 173-174). Ormet also claims that there are several additional factors that will lower its costs, and the need for rate discounts, over time; these factors include deleveraging through the proceeds raised by asset sales and internally-generated cash (Ormet Ex. 7 at 2), and reductions in Ormet's pension contributions beginning in 2013 (Tr. III at 434-436).

Staff argues that any unique arrangement approved by the Commission should contain a floor and a ceiling. The Staff believes that a price floor, below which a customer's payments cannot go, reflects the need to maintain the customer's incentive to operate efficiently and effectively. Staff maintains that a maximum reduction of 25 percent from the tariff rate is the appropriate balance, keeping the customer focused on efficiency but providing temporary assistance as well (Staff Ex. 2). This floor would result in a maximum rate discount of $54 million.

In addition, Staff argues that there should be a ceiling on the amount of delta revenue to be recovered from other ratepayers. Staff notes that the benefits of unique arrangements to other ratepayers are limited and that the ability of other ratepayers to pay for delta revenues is likewise limited. Staff believes that the primary benefit of the unique arrangement is the potential preservation of jobs in Ohio; thus, Staff argues that the cap on annual delta revenue recovery should be set initially at $54 million, which is the amount of Ormet's payroll. In addition, Staff recommends that the amount of any discount be reduced by 11 percent of the initial discount each year during the term of the unique arrangement.

Ormet argues that the $54 million cap proposed by Staff is insufficient. Although Ormet believes that the aluminum market will rebound, Ormet claims that this market is highly volatile and that any cap must address this volatility (Ormet Ex. 6 at 6-7). Ormet maintains that the $54 million cap proposed by Staff is inadequate given the volatility of the aluminum market. Ormet claims that, if the discount in any given year is not sufficient to keep Ormet in business, then the entire contract will fail and Ormet will likely need to curtail production at its Hannibal facility.

Moreover, Ormet contends that Staff's proposed cap is unreasonable and speculative. Ormet believes that Staff's proposed cap fails to consider what Ormet needs to operate or to balance the costs of discounts against Ormet's benefits to this state. Ormet also claims that Staff has provided no support for its position that a maximum reduction of 25 percent from the tariff rate is appropriate. Further, Ormet contends that Staff has not demonstrated that its proposed $54 million cap would enable Ormet to remain in business for the years 2010 through 2019.

The Commission agrees with Staff's position that, generally, unique arrangements must contain a floor, a minimum amount that the party seeking a unique arrangement should be required to pay, and a ceiling, a maximum amount of delta revenue which the ratepayers should be expected to pay. Ormet represents that it does not oppose the application of a cap or floor to its contract (Ormet Brief at 21).

With respect to a floor, Ormet proposes a number of different methods for establishing a floor, with a range of $93 million to $114 million as the maximum discount from tariff rates. This range includes the variable costs of production of the electricity consumed by Ormet, which testimony indicates would be approximately $90 million (Tr. I at 235; Staff Ex. 2A, Tr. IV. at 478-479, 491-492). On the other hand, Staff has proposed a floor in which Ormet would receive a maximum discount from tariff rates of $54 million. OCC and OEG propose a floor of $32 million, based upon the total wages paid to Ormet's employees who reside in this state.

Based upon the record in this case, the Commission finds that Ormet's rate should be determined as proposed in the unique arrangement, but with a floor, or maximum discount from tariff rates. Although the Commission does not agree with Staff's recommendation on the amount of the floor, this floor should be implemented in the manner proposed by Staff at the hearing (Staff Ex. 2). Moreover, the Commission is not persuaded by the arguments presented by OCC and OEG that the Commission should consider only the Ohio portions of the regional economy. All of the jobs which would be retained under the proposed unique arrangement are located in this state irrespective of where the employees reside. Further, neither OCC nor OEG presented any economic analysis regarding how much of the indirect benefits of Ormet's continuing to remain in operation advantage the residents of this state as opposed to other states.

Therefore, the Commission will modify the proposed unique arrangement to set the maximum rate discount at $60 million for calendar years 2010 and 2011. The Commission has based the floor upon the variable costs of production of the electricity consumed by Ormet at full capacity, which the testimony at hearing indicates would be approximately $90 million. However, testimony in the record also indicates that, at the time of the hearing, Ormet was in the process of curtailing production to 4 potlines (Tr. 1 at 70-71). This curtailment of operations should reduce Ormet's demand for electricity by

approximately one-third; therefore, the Commission has reduced the estimate of the variable costs of production of the electricity of $90 million by one-third to $60 million. The Commission finds that this is an appropriate floor or maximum discount for Ormet. This floor will be subject to two adjustments: a flexible phase down and a reduction in the discount due to reductions in employment, both of which will be discussed below.

With respect to the ceiling, or the maximum amount ratepayers should be expected to pay in any given year, the Commission agrees with Staff and the intervenors that the ability of ratepayers to fund the recovery of delta revenues is not unlimited. Ormet contends that the Staff has not offered proof for its recommendation of what ratepayers can afford to pay. However, Ormet, not Staff nor the intervenors, has the burden of proof in this proceeding, and it is Ormet that has failed to present evidence contravening the Staff's expert testimony, which was based upon substantial experience in relevant utility matters in this state (Staff Ex. 1 at 1; Tr. II at 336-338; Tr. IV at 505). Therefore, the Commission will adopt Staff's recommendation of $54 million as the maximum amount of delta revenue which ratepayers should be expected to pay in a given year.

However, this will result in a potential differential of up to $6 million per year between the $60 million maximum discount from tariff rates for Ormet and the $54 million maximum in delta revenues which ratepayers can be expected to pay. AEP-Ohio will be authorized to defer this differential, with carrying costs equal to AEP-Ohio's long term cost of debt, during the term of the unique arrangement. During this time, all delta revenue credits attributable to above-tariff payments by Ormet, to be calculated as discussed below, will be first applied to reduce or eliminate the deferral and carrying charges before being applied to AEP-Ohio's economic development rider. At the end of the term of the unique arrangement, AEP-Ohio will be permitted to recover any remaining deferred amounts, including carrying charges, through its economic development rider.

With respect to the adjustments to the floor, or maximum rate discount, the Commission agrees with Staff's recommendation that the unique arrangement be modified to phase down the discount over time. Ormet represents that there are several additional factors that will lower its costs, and in turn the need for rate discounts, over time; these factors include deleveraging through the proceeds raised by asset sales and internally-generated cash (Ormet Ex. 7 at 2) and reductions in Ormet's pension contributions beginning in 2013 (Tr. III at 434-436, 457-458). Therefore, although the $60 million floor will be in effect for calendar years 2010 and 2011, the Commission finds that, for calendar year 2012, the floor should be reduced to $54 million; for calendar years 2013 through 2018, the remaining six years of the contract, the floor should be reduced each year by $10 million, until it phases out completely for calendar year 2018.

The Commission also acknowledges that the aluminum market is subject to a great deal of volatility and that the unique arrangement should address that volatility.

Therefore, for calendar year 2013 through 2018, Ormet may elect to use, in the current year, any unused portion of the floor from a previous year (or years). Ormet shall apply this election by providing written notice to AEP-Ohio and by filing such notice in this docket. For example, if, due to LME prices in 2014, Ormet only uses a discount of $28.75 million, leaving $6 million of the 2014 discount unused, Ormet may elect to increase the floor in calendar year 2015 (or 2016 through 2018) by the $6 million unused discount. In no event will an adjusted floor be permitted to exceed $54 million in any year between 2013 and 2018. This should assist Ormet in weathering any short-term swings in the LME market while ensuring that the floor, or maximum rate discount, phases out over the duration of the unique arrangement.

Second, the Commission notes that the primary purpose of the unique arrangement is to retain jobs rather than to boost worldwide aluminum production or to enrich Ormet's investors. Any rate discounts provided to Ormet must be directly related to Ormet maintaining certain levels of employment. The record in this case demonstrates Ormet cannot continue to employ 900 employees beyond 2009 with curtailed production (Tr. III at 425). Therefore, under the unique arrangement, Ormet will be required to maintain an employment level of full-time employees of 650. Ormet will be required to provide a monthly report to Staff and AEP-Ohio detailing its employment levels. The floor will be reduced each month by $10 million for every 50 employees below 650 full-time employees that were employed by Ormet for the previous month. This reduction will be in addition to any planned phase down of the floor discussed above.

2) Potential Delta Revenue Credits

Kroger argues that the unique arrangement must provide for a greater share in the benefits for AEP-Ohio ratepayers in the event that aluminum prices rise above the target price. Kroger claims that ratepayers are being asked to bear the risk of declining aluminum prices and, therefore, should receive a reasonable return in the event that aluminum prices rebound. Kroger does not believe that a potential five percent gain is sufficient to compensate ratepayers for these risks.

OCC and OEG also allege that, under the proposed unique arrangement, AEP-Ohio's ratepayers bear great risks related to the price of aluminum while receiving little benefit if the price of aluminum rises. OCC and OEG cite to the testimony of OCC witness Ibrahim that the proposed unique arrangement lacks symmetry regarding the risks and benefits born by AEP-Ohio's customers (OCC Ex. 3 at 14-15). OCC and OEG claim that, if aluminum prices double from the price when Dr. Ibrahim filed his testimony, the possible benefit to AEP-Ohio's ratepayers would only be $3.6 million to $8.9 million (OCC Ex. 3 at 15). On the other hand, if the futures price for July 2010 accurately reflects the actual LME price for July 2010, Ormet will be paid $77.1 million to use power in 2010 and ratepayers would be responsible for delta revenues of $281.1 million. OCC and OEG contend that

this asymmetry is extremely disadvantageous to AEP-Ohio's ratepayers because these ratepayers will bear huge risks for delta revenues while the benefits are extremely unlikely and minimal compared to the risks. Consequently, OCC and OEG recommend that a reasonable symmetry would require Ormet to pay a rate that exceeds the tariff rate by $0.049 per MWh times 50 percent for each $1 per tonne when the actual LME price exceeds the target price. AEP-Ohio would receive delta revenue credits for the amount that Ormet pays in excess of tariff rates with a maximum delta revenue credit cap of $16.35 million per year.

Ormet contends that the proposed unique arrangement is designed to assure that Ormet is not unreasonably benefitted at the expense of AEP-Ohio's ratepayers. Ormet notes that the unique arrangement is designed to impose the minimum burden on ratepayers by providing for the minimum cash flow necessary to keep its Hannibal facility in operation and pay its required legacy costs; the unique proposed arrangement does not guarantee that Ormet will earn a profit or a particular rate of return. Further, Ormet notes that it has voluntarily offered to pay above-tariff rates when the LME price of aluminum is greater than the target price.

The Commission finds that the unique arrangement, as filed, contains insufficient potential benefits to ratepayers in relation to the risks which Ormet proposes the ratepayers bear. Further, the Commission notes that the record indicates that Ormet will be able to substantially reduce its pension fund obligations beginning in the future (Tr. III at 434-436). However, the Commission finds that this can be addressed by increasing the amounts that Ormet will pay when LME prices exceed the LME target price. Therefore, beginning in 2012, if the LME price is greater than the LME target price, but not more than $300 above the LME target price, Ormet will pay 104 percent of the AEP-Ohio tariff rate rather than 102 percent of the AEP-Ohio tariff rate. Assuming full operations at Ormet's facility, this will increase the Ormet's potential contribution to delta revenue credits to approximately $8.74 million per year from $4.37 million. Further, if the LME price is greater than $300 above the LME target price, Ormet will pay 108 percent of the AEP-Ohio tariff rate rather than 105 percent of the AEP-Ohio tariff rate. This will increase Ormet's potential contribution to delta revenue credits to approximately $17.48 million per year from $10.91 million.

The Commission finds that any amounts paid by Ormet in excess of AEP-Ohio's tariff rates should be considered as delta revenue credits. AEP-Ohio is directed to apply the delta revenue credits first to any deferred amounts, including carrying charges, of delta revenues. Any remaining delta revenue credits should be applied to AEP-Ohio's economic development rider.

3) POLR Charges

OCC and OEG claim that the proposed unique arrangement is unreasonable and unlawful because it compensates AEP-Ohio for POLR charges when Ormet cannot shop under the unique arrangement. Under terms of the proposed unique arrangement, AEP-Ohio would be the exclusive supplier to Ormet's Hannibal facility (Ormet Ex. 8, Attachment A at 8-9; Tr. I at 37; Tr. IV at 484). OCC and OEG reason that, since there is no risk that Ormet will shop generation service while the contract is in effect, there is no risk to AEP-Ohio that it will be called to serve as Ormet's provider-of-last-resort; therefore, a POLR charge should not be assessed upon Ormet, and the other ratepayers should not pay delta revenues for POLR charges.

Kroger also contends that POLR charges should be excluded from the amount of delta revenues recovered by AEP-Ohio. Kroger reasons that, because Ormet will be contractually obligated to receive electricity from AEP-Ohio under the proposed unique arrangement, there is no risk to AEP-Ohio that Ormet will purchase electricity from an alternative electric service supplier. Kroger claims that, under the proposed unique arrangement, AEP-Ohio would still receive compensation for being the POLR supplier without incurring POLR costs. Further, Kroger believes that AEP-Ohio should be required to share the cost of any discount to Ormet since AEP-Ohio benefits financially from continued Ormet operations.

AEP-Ohio argues that the POLR charges authorized in its electric security plan should not be reduced. AEP-Ohio notes that the policy of the State is to promote competitive generation markets and customer choice. Section 4928.02, Revised Code. AEP-Ohio believes that any Commission order keeping Ormet's load out of the competitive markets for ten years would conflict with that policy. Further, AEP-Ohio contends that the Commission has already determined, in its electric security plan proceeding, that a customer should not be able to give up its statutory right to obtain service from a competitive supplier in exchange for avoiding the POLR charge. Instead, the only opportunity for a customer to avoid the POLR charge is to switch to a competitive supplier and agree to pay market rates for generation upon any return to the electric utility. *In re Columbus Sothern Power Co. and Ohio Power Co.*, Case No. 08-917-EL-SSO et al., Opinion and Order (March 18, 2009) at 40.

The Commission finds that, under the terms of the unique arrangement, AEP-Ohio will be the exclusive supplier to Ormet (Tr. I at 37-38; Tr. IV at 484). Therefore, there is no risk that Ormet will shop for competitive generation and then return to AEP-Ohio's POLR service. If AEP-Ohio were to retain these charges, AEP-Ohio would be compensated for a service it would not be providing. Moreover, our decision in the AEP-Ohio electric security plan is inapplicable to this case because that holding addressed customers receiving service under AEP-Ohio's standard service offer rather than a customer

receiving service under a unique arrangement specifically approved by the Commission. Therefore, the Commission finds that the unique arrangement should be modified such that any POLR charges paid by Ormet are used to reduce the AEP-Ohio's ratepayers' obligations under the unique arrangement. During the term of the unique arrangement, AEP-Ohio shall credit any POLR charges paid by Ormet to its economic development rider in order to reduce the impact of the unique arrangement on other ratepayers' bills.

4) Deposit and Advance Payment Provisions

IEU-Ohio observes that the proposed unique arrangement would shift all risk of a potential default by Ormet to AEP-Ohio's customers by relieving Ormet of its current obligation to provide a security deposit as long as AEP-Ohio is permitted to treat any defaulted amounts as delta revenue to be recovered from its customers (Ormet Ex. 8, Attachment A at 14). IEU-Ohio argues that there is no real offset to the costs as a result of shifting the default risks to the other ratepayers and that this is part of the excessive burden placed upon AEP-Ohio's ratepayers under the proposed unique arrangement.

Ormet claims that all it is seeking with respect to deposit and advance payment terms is a return to standard tariff terms (Tr. I at 124, 227). Ormet believes that these terms will benefit AEP-Ohio's other ratepayers. Ormet notes that the calculation of the rate that Ormet can afford to pay is based on the assumption that the cash deposit currently held by AEP-Ohio will be returned to Ormet, thereby increasing its cash flow. If this deposit is not returned, it will result in increasing the magnitude of the discount required and in increasing the delta revenues to be collected from ratepayers. Thus, Ormet claims that, if the deposit is returned, the certainty of lower delta revenues would offset any potential risk of default.

AEP-Oho argues that the provisions in the proposed unique arrangement regarding waiver of deposit and advanced payment should not be modified. AEP avers that any modification would jeopardize the ability of AEP-Ohio to recover any unpaid amounts.

The Commission finds that the provisions related to deposit and advance payments should not be modified. The record clearly demonstrates that these provisions are an essential element of the proposed unique arrangement (Ormet Ex. 11A at 3, 4). Further, the record also demonstrates that Ormet has curtailed its operations, which will result in less ratepayer exposure to the risk of default by Ormet.

5) Future Review of the Proposed Unique Arrangement

In addition, IEU-Ohio claims that the proposed unique arrangement would prohibit the Commission and other stakeholders from seeking to modify the unique arrangement, except in very limited circumstances, while allowing Ormet to request modifications that

would further benefit Ormet. Likewise, OCC and OEG claim that the proposed unique arrangement would unlawfully limit the Commission's jurisdiction to review and modify the agreement. Kroger also states that the Commission must have the ability to periodically review and, if necessary, modify the unique arrangement. Further, Kroger claims that ten years is an unreasonable amount of time to expose ratepayers to the risk and cost of a unique arrangement; thus there must be a reasonable time limit on the unique arrangement. Staff agrees that there should be some limit upon the length of the unique agreement. Thus, Staff believes that there should be periodic reviews of whether the unique agreements should continue.

The Commission believes that the provisions contained in the proposed unique arrangement for future review will be adequate to safeguard ratepayers from undue risks if supplemented by an additional, independent provision. The Commission notes that Ormet has repeatedly, throughout this proceeding, represented to the Commission its belief that, in the long-term, LME prices will recover sufficiently for Ormet to profitably operate. Ormet has disparaged the use of futures prices by OCC and OEG to predict future LME prices and has argued instead that the Commission should rely instead upon an analyst report which predicts a future rise in LME prices (Ormet Ex. 9 at 14).

Therefore, the Commission will modify the unique arrangement to provide an additional, independent, termination provision in the event that long-term LME prices do not recover as Ormet predicts. The Commission, above, has determined that, for calendar years 2010 and 2011, AEP should be permitted to defer for future recovery the differential between the floor, or maximum discount, of $60 million and the ceiling of $54 million. The Commission will modify the proposed unique arrangement to allow the Commission to terminate, by order, the unique arrangement if Ormet does not begin to reduce the amount of the accumulated deferrals, and carrying charges, through the payment of above-tariff rates, pursuant to the terms of the unique arrangement, by April 1, 2012. The Commission specifically notes that the crediting of POLR charges by AEP in the form of delta revenue credits shall not constitute the payment of above-tariff rates by Ormet for purposes of this termination provision. Unless otherwise ordered by the Commission, such termination shall be effective immediately upon issuance of a Commission order terminating the unique arrangement.

FINDINGS OF FACT AND CONCLUSIONS OF LAW:

(1) On February 17, 2009, Ormet filed an application pursuant to Section 4905.31, Revised Code, to establish a unique arrangement with AEP-Ohio for electric service to its aluminum-producing facility located in Hannibal, Ohio.

(2) Ormet filed an amended application on April 10, 2009.

(3) Comments regarding Ormet's application and amended application were filed by IEU-Ohio, OEG, and Kroger.

(4) Based upon the comments, the attorney examiner set this matter for hearing before the Commission.

(5) The hearing in this matter commenced on April 30, 2009, and concluded on June 17, 2009.

(6) The amended application is reasonable and should be approved as modified by the Commission.

ORDER:

It is, therefore,

ORDERED, That the amended application for a unique arrangement filed by Ormet be approved as modified by the Commission. It is, further,

ORDERED, That Ormet and AEP-Ohio file an executed power agreement in this docket that conforms to the modifications ordered by the Commission. It is, further,

ORDERED, That the approved unique arrangement shall be effective for services rendered following the filing in this docket of an executed power agreement. It is, further,

ORDERED, That AEP-Ohio be authorized to defer delta revenues for the remainder of calendar year 2009 and for calendar years 2010 and 2011, to the extent set forth in this Opinion and Order. It is, further,

ORDERED, That a copy of this Opinion and Order be served upon all parties of record.

THE PUBLIC UTILITIES COMMISSION OF OHIO

Alan R. Schriber, Chairman

Paul A. Centolella

Ronda Hartman Fergus

Valerie A. Lemmie

Cheryl L. Roberto

GAP:ct

Entered in the Journal

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Reneé J. Jenkins
Secretary

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**PUBLIC SERVICE COMMISSION**
**OF WEST VIRGINIA**
**CHARLESTON**

At a session of the Public Service Commission of West Virginia, in the City of Charleston, on the 26th day of July, 2006.

CASE NO. 05-1278-E-PC-PW-42T

APPALACHIAN POWER COMPANY and
WHEELING POWER COMPANY, both dba
AMERICAN ELECTRIC POWER

Rule 42T application to increase electric rates and charges; request for reactivation and modification of the Expanded Net Energy Cost mechanism; proposal for the disposition of Appalachian Power Company's ENEC over-recovery balance; request for implementation of a System Reliability Tracker mechanism; and request for waiver of certain provisions of the Commission's Rules.

## COMMISSION ORDER

The Commission approves the Stipulation.

## BACKGROUND

On August 26, 2005, Appalachian Power Company and Wheeling Power Company, both doing business as American Electric Power (AEP), filed a tariff containing increased rates and charges for furnishing electric service to approximately 474,965 customers. The initial proposed increased rates and charges were to become effective September 25, 2005.

In addition to the rate application, the joint application included (1) a request for approval to reactivate and modify the Expanded Net Energy Cost mechanism (ENEC); (2) approval of a proposal for the disposition of Appalachian Power Company's ENEC over-recovery balance; (3) approval to implement a System Reliability Tracker mechanism; and (4) a waiver of certain provisions of the Commission's rules: Rule 4.2.1.a. - waiver of refund requirement with respect to all non-residential customers; 4.8.1.a.F. - waiver of the 8-hour reconnect requirement; and 4.8.1.a.H. - wavier to avoid dangers associated with reconnect personnel acceptance and transportation of money.

On September 13, 2005, the Commission issued an order suspending the use of the rates and charges stated in the revised tariff sheets until 12:01 a.m., June 23, 2006, unless otherwise ordered by the Commission.

On November 10, 2005, the Commission issued an order that, among other things, set this matter for hearing to begin on February 28, 2006, and established a procedural schedule.

The following parties were granted intervenor status: the Commission's Consumer Advocate Division (CAD), the West Virginia Energy Users Group (WVEUG), Century Aluminum (Century), South Bluefield Neighborhood Association (SBNA), West Virginia Building and Construction Trades Council (Trades Council), Concept Mining, Inc. (Concept), The Kroger Co. (Kroger), Huntington Sanitary Board (Huntington), South Putnam Public Service District (South Putnam), and West Virginia Community Action Partnership (WVCAP). (See Orders dated November 10, 2005, and December 7, 2005).[1]

At AEP's request, the Commission issued an order on January 27, 2006, that tolled the statutory suspension period for five (5) weeks, from June 23, 2006, until July 28, 2006. The order rescheduled the hearing, including public comments, to begin on April 18, 2006, and established a new procedural schedule.

Public comment hearings were scheduled and conducted in Beckley, Logan, Huntington, and Bluefield between February 6, 2006, and February 15, 2006.

In accordance with the schedule established by the Commission, AEP, Commission Staff (Staff), CAD, Century, WVEUG, Kroger, South Putnam, Huntington, and WVCAP submitted pre-filed testimony in advance of the hearing.

On April 18, 2006, the Commission convened the hearing as scheduled. AEP, Staff, CAD, Century, WVEUG, Kroger, South Putnam, Huntington, and WVCAP appeared and were represented by counsel. There were no members of the public present to provide comments.

After a short recess in the proceedings, the parties advised the Commission that they had reached a settlement, in principle, on a majority of the issues in the case. The parties indicated that a rate issue involving Century was still open for further discussion and

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[1]Although Concept and the Trades Council had been granted intervenor status, both subsequently withdrew as parties to the case. Other than an appearance at the February 15, 2006 public comment hearing, SBNA did not participate in any other aspect of this case.

negotiation. The Commission directed the parties to reduce the settlement to writing. The parties were to reappear and submit the written settlement agreement to the Commission on April 21, 2006.

Prior to adjourning the hearing, the parties submitted into evidence the pre-filed testimony of various witnesses. (*See*, Exhibits contained in hearing transcript of April 18, 2006).

The hearing reconvened on April 21, 2006. At that time, the parties were not prepared to present a written settlement. The parties were directed to return on April 24, 2006, to either submit a written settlement or to proceed with the evidentiary hearing.

On April 24, 2006, the parties appeared before the Commission and announced that a Joint Stipulation and Agreement for Settlement (Stipulation) had been signed by the parties. The Stipulation was entered into evidence. (*See*, Joint Exhibit 1). The parties explained the Stipulation on the record and indicated that it resolved all issues except for the Special Rate Mechanism for Century Aluminum (Century Rate). The Century Rate proposal is set out in paragraph 37, pp. 14-16 of the Stipulation. Staff was the only party not in agreement with that aspect of the Stipulation.

The parties were instructed to file briefs supporting their respective positions on the Century Rate.

On April 24, 2006, AEP filed affidavits indicating that the required notices were published, posted and mailed in accordance with the Commission's orders and *Tariff Rules*.

*Initial Briefs*

Staff

Staff filed its Initial Brief on May 4, 2006. Staff reiterated that it was in agreement with all terms and conditions of the Stipulation with the exception of the Century Rate aspect. Additionally, Staff agreed that Century is a valuable industrial asset to the citizens of West Virginia and that Century provides much-needed jobs.

Nonetheless, Staff argued that the Commission is not statutorily authorized to authorize a special utility rate for certain energy-intensive industries. Staff cited *W. Va. Code* §§ 24-1-1(a)(4); 24-1-1(c); 24-2-2(a); 24-2-3; 24-2-7(a); 24-3-1; and 24-3-2 in support of its position.

Staff stated that the Commission had previously rejected a request that a special sewer rate be created for housing projects for the low income and/or the elderly. (*Jefferson County Public Service District*, Case No. 00-1329-PSD-19A, Recommended Decision entered March 9, 2001, final March 29, 2001, citing *Hope Gas Co.*, Case No. 82-158-G-42T (Hearing Examiner's Decision entered 1/11/83), Supplement to Vol. 70 ARPSCWV 1982-1983.)

Conversely, Staff acknowledged that in a separate case, the Commission had previously approved a settlement that did "not preclude AEP-APCo or AEP-WPCo from entering into special contracts for specific customers that provide for rates different from those contained in the companies' tariffs, or from seeking Commission approval of new or experimental rates of limited application. (*Appalachian Power Co.*, Case No. 99-0409-E-GI, June 2, 2000, at p. 8).

Staff made two observations with regard to its experience with special contracts and experimental rates. First, Staff stated that when a utility and a customer enter into a special contract under which the customer will be paying a rate that is less than the rate of the customer's class rate, the special rate is generally cost-based and beneficial to the utility and its other customers. (*See*, *Wheeling Power Company*, Case No. 90-243-E-42T, Commission order February 15, 1991, citing *Wheeling Electric Company*, Case No. 86-587-E-42, Commission order, August 5, 1988, discussing the benefits of having a special interruptible rate for electric service).

Staff's second observation regarding the use of special contracts filed pursuant to Rule 39 of the Commission's *Tariff Rules* is that special contracts are not approved in the manner requested in the Stipulation. Staff stated that the Commission has in the past declined to approve the specific terms and conditions of special contracts. However, the Commission has stated that it would review disputes over allegations of imprudence which may be made. (*See*, *Mountaineer Gas Co.*, Case No. 94-0895-GT-PC, Commission order June 1, 1995, *petition to reconsider denied*, Commission order July 28, 1995).

Staff indicated that there was "one glaring exception" to the Commission's policy of declining to approve the specific terms and conditions of a special contract. That exception is found in *Appalachian Power Company and American Alloys, Inc.*, Case No. 87-883-E-PC, Commission order December 24, 1987). In that case Staff stated that the Commission approved the special contract which provided for APCo charging American Alloys a lower deposit rate than that required by the Commission's *Electric Rules*. The Commission concluded that APCo would be permitted in future rate cases to recover any loss which it may experience by accepting less than the maximum allowed security deposit. Staff asserted that it was unaware of any statutory provision that would authorize the Commission to

guarantee a preferential rate treatment by permitting APCo to recover from its other ratepayers any loss it incurred as the result of American Alloys being given permission to pay a deposit less than required by the *Electric Rules*.

CAD

On May 4, 2006, CAD filed its Initial Brief. CAD advocated for the approval of the Stipulation, including the Century Rate provisions.

CAD stated that Century would bear a substantial amount of the costs related to the overall revenue increase agreed to in the Stipulation. (Stipulation, Ex. E). CAD explained that under the three-year Century Rate proposal, Century will pay a base rate each month to AEP equal to the currently effective rate, plus a surcharge based on the market price of aluminum. In months when the base rate plus the surcharge is higher than the rate that would otherwise be applicable to Century, a credit equal to the excess will be entered into the "Century bank." Conversely, in months when the base rate plus the surcharge is less than the otherwise applicable rate, a debit will be recorded. A cumulative running balance of the Century bank will be kept.

CAD stated that at the end of the three-year experimental rate period, in 2009, the operation of the Century Rate will be examined and parties will be free to make whatever recommendations related to continuation, elimination or modification of the rate that they believe are appropriate at that time. If the Century Rate is continued, then whatever balance is in the Century bank will simply be rolled forward and the monthly accounting will continue. However, if the experimental rate is ended in 2009, then the Stipulation provides that Century will keep any surplus in the Century bank while any deficit will be spread to all other AEP customers.

As a hedge against a possible deficit in the Century bank, CAD noted that Century agreed to two major changes in its experimental rate. First, Century agreed to deposit $1 million with AEP for the protection of other ratepayers. If there is a surplus at the end of the experimental rate, the $1 million deposit will be spread as a credit to all other ratepayers. If there is a deficit, the $1 million deposit will serve to reduce the deficit. Second, Century agreed to raise the ceiling on the surcharge so that greater surplus amounts would be built up during times of high aluminum prices. CAD asserted that raising the ceiling makes it more likely that any deficit in the latter part of the three-year rate period will be offset by surpluses developed during the early part of the three-year period.

CAD stated that it supports the experimental Century Rate within the context of the entire settlement. While there may be parts of the Century Rate proposal that CAD likes or

dislikes in isolation, CAD believes that the overall Century Rate is reasonable, and there are sufficient safeguards provided to protect the interests of the other ratepayers. Most importantly, CAD noted that the proposed Century Rate was of limited duration and would be thoroughly reviewed at the end of three years. At that time, CAD stated that if the Century Rate has not been beneficial to both Century and other ratepayers, it is doubtful that it would be renewed in its present form.

CAD reminded the Commission that the Century Rate was part of the resolution of controversies concerning proper allocation of the ENEC bank which was built up from 1996 through 1999. In return for getting agreement on the experimental rate design, Century gave up any claim to a portion of the ENEC bank. If the Commission declines to approve the experimental rate design for Century, then the parties have made clear that they reassert their original positions on the proper allocation of the ENEC bank. CAD indicated that these further controversies can be avoided by approving the Century Rate design as set forth in the Stipulation.

AEP

On May 4, 2006, AEP filed its Initial Brief. AEP asserted that the Century Rate contained in the Stipulation was reasonable and appropriate and an essential element of the Stipulation.

AEP noted that the Commission has a statutory obligation to balance the interests of customers, utilities and the state's economy. (*W.Va. Code* § 24-1-1(b)). AEP asserted that the Century Rate is an instance of such permissible balancing. It recognized the importance of Century to the West Virginia economy and the millions of dollars of AEP's fixed costs Century will bear. AEP argued that the fairness and reasonableness of Century's Rate was demonstrated by the support it has from the diverse interests supporting it.

AEP asserted that the *Code* does not contain a blanket prohibition of all preference and discrimination in rates. Instead, the *Code* prohibits discrimination that is unjust, undue, or unreasonable. (*See*, *W.Va. Code* §§ 24-1-1(a)(4); 24-2-2; 24-2-3; 24-3-1; and 24-3-2). AEP stated that to the extent the Century Rate constitutes a rate treatment that is at variance with what is available to other customers, the variance is just and reasonable because it serves the interests of all affected parties and fairly balances the interests of the utility, all classes of customers and the State's economy.

AEP argued that the *Code* does not require rates to be exclusively based on costs to be reasonable. *W.Va. Code* § 24-1-1(a)(4) simply mandates that rates be "based primarily on the costs of providing these services." In the case of the Century Rate, AEP stated that

the greatest part of the rate for service will be paid regularly, without discount adjustment or leeway in the timing of the payment. Depending on the prevailing commodity price of aluminum, Century may be required to pay a 100% cost-based rate and could be required to accrue amounts in excess of 100% which would be used to pay full rates at times when aluminum prices may be lower. AEP asserted that even if Century is paying the minimum amount required under the Century Rate proposal, that minimum rate satisfies the requirements of *W.Va. Code* § 24-1-1(a)(4), in that it is primarily cost-based.

Century

Century filed its Initial Brief on May 4, 2006. Century noted that the proposed Century Rate will provide it with some protection against a decline in the price of aluminum. Century stated that this would protect nearly 700 Century union jobs, potentially 1100 Alcan jobs and the economic benefits that Century brings to West Virginia.

Century stated that energy costs account for one-third of its production costs. Its energy expenditures exceed $75.6 million per year at AEP's current rates. Century is 11% of AEP's load and is AEP's largest single customer. Century stated that without it, AEP would have to pass on an additional $5 to $7 million dollars per year of AEP's fixed costs to the remaining rate payers. The proposed Century Rate is a means of controlling its energy costs. When aluminum prices are high, Century can afford to pay more for power. But, Century stated when the prices are low, it cannot afford the higher tariff rate and remain economically viable.

Century argued that economic development and job retention are matters which the Commission may address under its statutory authority. The key issue is whether a rate is unjustly discriminatory. Century stated that the fact that various classes of customers are charged different rates does not in and of itself make a rate discriminatory. It must be unreasonably discriminatory in light of the factors that the Commission can consider, such as the cost of service, purpose of service, quantity of service, or any other matter which presents a substantial difference.

WVEUG

The WVEUG filed its Initial Brief on May 4, 2006. WVEUG stated that the Stipulation is fair to all customer classes, including the members of the WVEUG. It noted that the Stipulation nearly cuts in half the rate increase as originally proposed. In reducing specific rate impacts, WVEUG believes that the Stipulation implicitly recognizes the inherent value of industrial customers, the jobs they provide, and the additional benefits that are created as a result of their investment in West Virginia. WVEUG requested that the

Commission be mindful of West Virginia business and industry when considering whether the Stipulation, is, without modification, in the public interest. WVEUG believes that the Stipulation is, as a whole, in the public interest.

WVEUG noted that Rule 39 of the Commission's *Tariff Rules* recognizes that large industrial customers are often better served through special service agreements. Such agreements balance the uniqueness of larger customers and the benefits they provide to the entire system in terms of their fixed contributions to the rate base. WVEUG asserted that Century is worthy of the service flexibility requested in the Stipulation.

*Reply Briefs*

Staff

Staff filed its Reply Brief on May 15, 2006. Staff repeated that Century is a valuable industrial asset to the state's economy and that it is engaged in an energy-intensive industry that has been on the decline in the United States. However, Staff opined that until the Legislature in West Virginia enacted a statute providing the Commission with the authority to allow for special utility rates for depressed energy-intensive industries, the Commission is not statutorily authorized to do so.

CAD

CAD filed its Reply Brief on May 15, 2006. CAD disagrees with Staff's assertion that the Commission is not authorized, by statute, to adopt the Century Rate. CAD asserts that *W. Va. Code* §§ 24-2-2 and 3 give the Commission plenary authority over the rates of utilities within its jurisdiction. Those statutes set out guidelines for the Commission in establishing rates. But, CAD argued that the guidelines are not absolute and recognize the quasi-legislative nature of the ratemaking process, whereby the Commission is able to fully inform itself about the impacts of various proposals and adapt to changing conditions. *See*, *Central West Virginia Refuse, Inc. v. PSC*, 438 S.E.2d 596 (W.Va.1993).

CAD stated that the entire ENEC concept adopted for AEP in 1984 is an experimental rate whereby shortfalls in particular cost or revenue items are not borne by the Company, but instead are recorded as a regulatory asset and ultimately recovered from ratepayers. (*Appalachian Power Company*, Case No. 83-697-E-42T, 72 ARPSCWV 834, 841-842 (Sept. 28, 1984)).

CAD also pointed to another experimental rate structure aimed at economic development for qualifying industrial customers. Under the economic development rider,

new industrial customers or existing customers that increased their billing demand would be billed at 70%, 80% and 90% of the full billing demand in succeeding years over a three-year period. *See*, Case Nos. 87-154-E-P, "Final Order" (April 7, 1987); Case No. 88-696-E-PC, "Final Order" (Dec. 2, 1988); Case No. 89-796-E-PC, "Final Order" (Dec. 7, 1989); Case No. 91-009-E-PC, "Final Order" (Jan. 18, 1991).

CAD asserted that the experimental rate proposed in this case is a variation on the themes set out in the previous experimental rates. At the end of the three-year period, the rate design will be reviewed and the Commission will ultimately have to determine whether the Rate provided sufficient flexibility to Century while at the same time adequately protected the interests of AEP and other ratepayers. CAD stated that modifications may need to be made. However, CAD urged that such changes should be based on actual experience.

CAD agreed with Staff that the Commission should be very cautious in allowing experimental rates. CAD believes that experimental rates should be carefully defined as the Century Rate in the Stipulation has been. CAD asserted that the Commission has the statutory authority to adopt the Century Rate and should do so.

Century

Century filed its Reply Brief on May 15, 2006. Century asserted that the Commission has the authority to approve the Century Rate, that the Rate is fair, just and non-discriminatory and primarily cost-based.

Century asserted that the Commission's only limitation on the power to approve experimental rates is that they must be reasonable. Approval of special rates to retain industry is included in the Commission's authority, Century argued.

Century noted that the Commission's failure to approve the Century Rate will result in a rejection of the Stipulation and a reversion to the parties' original position with regard to the ENEC bank balance. The Stipulation resolves numerous contentious issues that will have to be litigated if the Century Rate is not approved.

WVEUG

WVEUG filed its Reply Brief on May 15, 2006. WVEUG stated that the central issue is whether the Century Rate is generally cost-based and beneficial to the utility and its customers. WVEUG asserted that the Century Rate is primarily cost-based because the minimum rate that Century will pay is approximately 90% of the total rate that Century would otherwise pay. WVEUG also asserted that the Century Rate is beneficial to AEP's

other customers as Century will be paying a substantial portion of the costs related to the overall revenue increase in this case. Additionally, in exchange for the special rate, Century is agreeing to forgo any claim it may have to the ENEC bank balance which is arguably a benefit to other customers.

AEP

AEP's Reply Brief was filed on May 15, 2006. AEP stated the issue was whether the provisions of Chapter 24 of the *Code* grant the Commission sufficient flexibility to approve the Century Rate. AEP stated that it and all the other parties except Staff believe the Commission has the required flexibility to approve the Century Rate.

AEP asserted that Staff's proposal to defer a ruling on the treatment of a possible deficit is neither fair nor equitable. AEP stated that it is practically impossible the Century Rate will produce an exact zero balance at the end of the period, so there would be some surplus or some deficit. AEP stated that the question is whether the mechanism which could produce such a surplus or deficit is unduly, unjustly or unreasonably preferential or discriminatory.

AEP argued that the Century Rate assures the ratepayers a substantial benefit - that Century will be allocated the responsibility for many millions of dollars of fixed costs which were the responsibility of those customers until the recent appearance of Century as a customer and, which could become the responsibility of those customers again if Century ceases operation. AEP stated that the Century Rate offers ratepayers a balanced calculated risk. But, it does not provide Century a guaranteed subsidy. Overall, AEP asserted that the arrangement provides a risk/benefit prospect that commands the support of all ratepayer constituencies.

AEP disputed that the Century Rate constituted unjust or unreasonable discrimination. AEP stated that preference or discrimination involve treating similarly situated entities differently. Century is unique and no other entity is similarly situated. Even if the proposal does constitute some measure of preference or discrimination, AEP stated that it was completely just and reasonable. AEP referenced the Commission's decision in *Appalachian Power Company and American Alloys, Inc.* Case No 87-883-E-C. AEP asserted that the same compelling reasons for the special treatment given American Alloys is the same economic considerations that are pertinent to Century.

AEP asked that the Commission approve the Century Rate and approve the Stipulation.

## DISCUSSION

The Commission has had the opportunity to review the pre-filed testimony representing the respective parties' initial positions in this case. Additionally, the Commission has reviewed the Stipulation (attached hereto).

The only matter that remains for the Commission to resolve is the Century Rate. The Commission has carefully reviewed and considered the briefs and positions of the parties on that issue.

Staff's position as to the Commission's authority to approve the Stipulation inclusive of the Century Rate rests upon a narrow interpretation of the applicable statutes as well as past practices and policies of the Commission. The Commission is not persuaded that such an approach is appropriate and concludes that, in this case, the Commission is vested with the inherent jurisdiction, power and authority necessary to flexibly carry out its regulatory responsibilities while protecting the public interest and maintaining or enhancing West Virginia's economic viability.

It is no secret that in the past two decades the electric industry in the United States has undergone, and will continue to experience, tremendous change. Competitive forces in the market and demand for low-priced electricity are driving this change.

West Virginia, as a regulated state, cannot function obliviously to the changes occurring outside its boundaries. Instead, this Commission, if it is to protect the public interest and enhance the state's economic viability, must meet these challenges with unique and innovative approaches within the framework of traditional ratemaking and rate-based, rate-of-return regulation.

Introduction, development, testing and implementation of such unique and innovative approaches are within the scope of this Commission's statutory authority. The Commission encourages all parties to develop and propose unique and innovative approaches that will encourage investment in and expansion of capacity accompanied by an adequate rate of return, while at the same time maintaining and enhancing the state's position and that of its citizens.

For these reasons, the Commission concludes that the rates, charges, and terms and conditions of service contained in the Stipulation are reasonable and should be approved. The Stipulation will be approved as submitted.

## FINDINGS OF FACT

1. All parties to this case jointly presented a Stipulation in resolution of all issues.

2. The Stipulation left open the issue of whether to adopt the proposed Century Rate. Staff was the only party objecting to that aspect of the Stipulation.

## CONCLUSIONS OF LAW

1. The Commission is vested with the inherent jurisdiction, power and authority necessary to flexibly carry out its regulatory responsibilities while protecting the public interest and maintaining or enhancing West Virginia's economic viability.

2. The Commission concludes that it has the authority to approve the Century Rate.

3. The Commission concludes that the rates, charges, and terms and conditions of service contained in the Stipulation are reasonable and should be adopted. The Stipulation will be approved as submitted.

## ORDER

IT IS, THEREFORE, ORDERED that the Joint Stipulation and Agreement for Settlement filed on April 24, 2006, and attached hereto as Appendix A, is hereby adopted by the Commission as the final resolution of the issues in this proceeding.

IT IS FURTHER ORDERED that the parties shall abide by the terms and conditions of the Stipulation.

IT IS FURTHER ORDERED that within 10 days of the date of this order Appalachian Power Company and Wheeling Power Company, both doing business as American Electric Power, shall file with the Commission's Tariff Office the revised tariff sheets setting forth the rates and charges approved by this Order.

IT IS FURTHER ORDERED that the rates and charges approved by this order are hereby effective for all service rendered on and after July 28, 2006.

IT IS FURTHER ORDERED that upon entry of this order this case shall be removed from the Commission's docket of open cases.

IT IS FURTHER ORDERED that the Commission's Executive Secretary serve a copy of this order upon all parties of record by United States First Class Mail and upon Commission Staff by hand delivery.

A True Copy, Teste:

Sandra Squire
Executive Secretary

JMH/klm
051278cf.wpd

**PUBLIC SERVICE COMMISSION OF WEST VIRGINIA**
**CHARLESTON**



**CASE NO. 05-1278-E-PC-PW-42T**

**APPALACHIAN POWER COMPANY and**
**WHEELING POWER COMPANY**

Joint Application for Rate Increases on Notice with Proposed Effective Dates and Changes in Tariff Provisions, Pursuant to W.Va. Code, §24-2-4a, *inter alia*, for Reactivation and Modification of Expanded Net Energy Cost Mechanism, for Disposition of ENEC Over-recovery Balance, for Implementation of System Reliability Tracker Mechanism, and for Waiver of Provisions of the Commission's Rules.

## JOINT STIPULATION AND AGREEMENT FOR SETTLEMENT

Pursuant to *W. Va. Code* 24-1-9(f) and Rule 13.4 of Title 150, Series 1, *Rules of Practice and Procedure*, the following parties to this proceeding (hereinafter "the Stipulating Parties"), Appalachian Power Company ("APCo") and Wheeling Power Company ("WPCo") (collectively "the Companies"), the Staff of the Public Service Commission of West Virginia ("the Staff"), the Consumer Advocate Division of the Public Service Commission of West Virginia ("the CAD"), E.I. du Pont de Nemours and Company, Huntington Alloys Corporation, Bayer Crop Science/Bayer Material Science, PPG Industries, Inc., Union Carbide Corporation, and Steel of West Virginia, Inc. ("SWVA, Inc.") referred to collectively as West Virginia Energy Users Group ("WVEUG"), Century Aluminum of West Virginia, Inc. ("Century"), The Kroger Co. ("Kroger"), the Huntington Sanitary Board and South Putnam Public Service District (collectively "Huntington/South Putnam"), and the West Virginia Community Action

Partnership ("WVCAP"), join in this Joint Stipulation and Agreement for Settlement ("this Agreement"), and request that the Public Service Commission of West Virginia ("the Commission") approve and adopt it, in its entirety and without modification, as the full and final resolution of the instant proceeding. In support of this Agreement, the Stipulating Parties make the following representations:

**Procedural History**

1. On August 26, 2005 the Companies filed their Joint Application to reinstate the Expanded Net Energy Cost ("ENEC") proceedings, increase base rates and make changes in classifications, charges, rules and regulations, and other tariff provisions. The Joint Application was supported by seven volumes, including Rule 42 data, workpapers, ENEC data, proposed tariffs, a class cost of service study, and a report on emerging and state-of-the-art concepts.

2. On September 13, 2005 the Commission issued an Order which, among other things, suspended the use of the rates and charges stated in the Companies' revised tariff sheets until June 23, 2006. By order of January 27, 2006 the Commission, in response to a motion filed by the Companies, extended the suspension period until July 28, 2006, but authorized deferred accounting for ENEC to commence July 1, 2006.

3. At various dates various entities filed petitions to intervene, which were granted by the Commission. Intervenors Concept Mining, Inc. and the West Virginia State Building and Construction Trades Council, AFL-CIO later withdrew from this proceeding. The South Bluefield Neighborhood Association intervened but did not offer testimony, participate in any of the settlement meetings, or appear at the April 18, 2006 hearing in this matter.

4. On September 26, 2005 the Companies filed the direct testimony and exhibits of Dana E. Waldo, Terry R. Eads, Paul R. Moul, John M. McManus, Stephen D. Baker, Jeffrey B. Bartsch, Alan D. Bragg, Jeffrey L. Brubaker, Steven H. Ferguson, Chris Potter, Oliver J. Sever, O. Patrick Taylor, and Philip A. Wright.

5. The Companies provided public notice in substantial compliance with the Commission's directions.

6. In the course of the discovery phase of this proceeding, numerous requests for information were filed by various parties and responded to by the parties to whom they were addressed.

7. On January 18, 2006 the Companies filed the supplemental direct testimony and exhibits of Terry R. Eads, Steven H. Ferguson, and Chris Potter, and a revised Volume IV containing revised ENEC data.

8. On March 8, 2006 the Staff filed the direct testimony and exhibits of James W. Ellars, Michael L. Fletcher, Steven M. Kaz, Robert R. McDonald, Edwin L. Oxley, David L. Pauley, and Thomas D. Sprinkle, as well as Staff Rule 42 Reports for APCo and WPCo; the CAD filed the direct testimony and exhibits of Byron L. Harris, Emily Medine, Randall Short, and Ralph Smith; WVEUG filed the direct testimony and exhibits of Stephen J. Baron, Richard A. Baudino, Timothy R. Duke and Richard Piotrowski; Century Aluminum filed the direct testimony and exhibits of Gerald J. Kitchen and Ronald Thompson; WVCAP filed the direct testimony and exhibits of Dwight Coburn; The Kroger Co. filed the direct testimony and exhibits of Kevin C. Higgins; West Virginia Building and Construction Trades Council, AFL-CIO filed the direct testimony and exhibits of George L. Donkin; and the Huntington Sanitary Board

and South Putnam Public Service District filed the direct testimony of Jack D. Gaines, J. Bruce Fox, and Michael McNulty.

9. On April 7, 2006 the Companies filed the rebuttal testimony and exhibits of Dana E. Waldo, Terry R. Eads, Paul R. Moul, Stephen D. Baker, Steven H. Ferguson, Jeffrey L. Brubaker, Jeffrey B. Bartsch, James I. Warren, Philip J. Nelson, O. Patrick Taylor, Alan D. Bragg, and Chris Potter.

10. On April 7, 2006 the Staff filed the amended direct testimony and exhibits and rebuttal testimony of Robert R. McDonald and the amended direct testimony and exhibits of Thomas D. Sprinkle; the CAD filed the rebuttal testimony and exhibits of Byron L. Harris and Ralph C. Smith; WVEUG filed the rebuttal testimony and exhibits of Stephen J. Baron; Century Aluminum filed the rebuttal testimony and exhibits of Gerald J. Kitchen; the Huntington Sanitary Board and South Putnam Public Service District filed the rebuttal testimony and exhibits of Jack D. Gaines.

11. On April 14, 2006 the Companies filed the additional rebuttal testimony of Chris Potter.

12. For some weeks prior to hearing, the Stipulating Parties engaged in settlement discussions concerning all aspects of the instant proceeding, and have now reached agreement on a comprehensive series of proposals to recommend to the Commission as a fair and just settlement of the issues in this proceeding.

13. At a hearing held on April 18, 2006 the Stipulating Parties represented to the Commission that a settlement in principle had been reached among those parties. The Commission directed the Stipulating Parties to provide it with a written and executed

settlement agreement memorializing the settlement by 9:30 a.m. April 21, 2006. The Commission admitted into the record all of the testimony and exhibits specified above.

14. Except as set forth in paragraph 15 below, the Stipulating Parties agree that the substantive elements of the proposed settlement, which are hereby submitted for the Commission's approval, resolve all of the issues in this proceeding, and are set forth in particular below and in the exhibits attached hereto.

15. Although the Stipulating Parties have reached agreement on most of the substantive elements presented in the case, there remain two related issues in contention among the parties which will have to be resolved by the Commission. This first issue involves one aspect of the Special Rate Mechanism for Century Aluminum set forth in paragraph 37 below. As explained in paragraph 37d, there is the possibility that at the end of experimental rate program for Century in 2009, there may be a deficit (an under-recovery) which will be spread to other customers in future rate proceedings. The second issue is the treatment of the ENEC Bank discussed in paragraphs 19 to 24 below. As part of the consideration for the Special Rate Mechanism, Century has given up any claim for a portion of the ENEC Bank. If the Special Rate Mechanism, including the recovery of any deficit, is not approved, Century will reassert its claim for a portion of the ENEC Bank. Set forth below are the positions of the respective parties on these issues.

a. Staff. Staff has agreed to all terms and conditions of the Joint Stipulation and Agreement for Settlement except for the condition in the Special Rate Mechanism for Century Aluminum whereby any deficit that remains at the end of the experimental rate mechanism time period will be recorded by APCo as a regulatory asset and flowed back to all other ratepayers. Staff is willing to defer any argument concerning the deficit until

the end of the experimental rate period, and if a deficit in fact exists at that time, advance its arguments to the Commission regarding the proper treatment of such deficit.

b. The Companies. APCo and WPCo support approval of the Special Rate Mechanism for Century Aluminum, but do not support the special rate mechanism without the provision objected to by the Staff, which is an integral element of the negotiated special rate mechanism. The Companies ask the Commission to resolve here and now any issues about the experimental rate program and to approve it or disapprove it without deferring any critical issues for resolution at a later date.

c. Century Aluminum. If the Commission does not approve this experimental rate program in all its particulars, including providing APCo recovery of any deficit, and thereby APCo does not enter into a special contract with Century Aluminum, then Century withdraws its support for the remainder of this settlement and reasserts its claim to the ENEC Bank.

d. WVEUG. WVEUG supports approval of the Special Rate Mechanism for Century Aluminum. However, if the Special Rate Mechanism is disapproved and Century reasserts its claim for a portion of the ENEC Bank, WVEUG asserts that the allocation of the ENEC Bank set forth in Exhibit C continues to be reasonable and should be approved as part of this settlement.

e. The Kroger Co. The Kroger Co. takes the same position as WVEUG.

f. CAD. Within the context of the overall settlement, the CAD supports approval of the Special Rate Mechanism for Century Aluminum. However, if the Special Rate Mechanism is disapproved and Century reasserts its claim for a portion of the ENEC Bank, CAD asserts that Century has no legitimate claim on the ENEC Bank.

Accordingly, the ENEC Bank should continue to be allocated as set forth in Exhibit C hereto.

g. Huntington Sanitary Board and South Putnam Public Service District. These parties take the same position as the CAD.

h. Accordingly, the Stipulating Parties ask that the Commission render a specific decision on the issues outlined above. The Stipulating Parties stand ready to offer oral argument, witnesses and/or written briefs on these issues at the direction of the Commission.

16. **Expanded Net Energy Cost** The Stipulating Parties agree that the Expanded Net Energy Cost ("ENEC") mechanism should be reinstituted for the Companies, with new ENEC rates established in this proceeding, and annual ENEC proceedings to resume in 2007.

17. The Stipulating Parties agree to the following ENEC rates:

a. Consistent with the Commission's January 27, 2006 Order in this proceeding, the Stipulating Parties acknowledge that the Companies will commence deferred accounting for revenues and costs included in the ENEC on July 1, 2006 and agree that the ENEC rates to be used for such deferred accounting for each tariff class on July 1, 2006, shall be those set forth in Company Exhibit No. 1, Revised Volume IV, Revised Section 2, Attachment 1, which is attached hereto as Exhibit A and incorporated herein.

b. The Stipulating Parties agree that, beginning July 28, 2006, the ENEC rates for each tariff class shall be those set forth in Company Exhibit No. 1, Revised Volume IV, Revised Section 1, Attachment 1, which is attached hereto as

Exhibit B and incorporated herein. Those ENEC rates will stay in effect until July 1, 2007, or further order of the Commission, and are projected to produce additional annual revenues of $56.01 million.

18. The Stipulating Parties agree to the following elements and procedures to govern further ENEC proceedings.

a. The Companies will make their next ENEC filing by March 1, 2007, and then will make new ENEC filings by March 1st of each year thereafter.

b. In the ENEC filing of March 1, 2007:

i. the actual cost review period shall be July 1, 2006, through December 31, 2006; and

ii. the forecast period shall be July 1, 2007, through June 30, 2008.

c. In subsequent annual ENEC proceedings the actual cost review period shall be the immediately preceding calendar year, and the forecast period shall be the twelve months from July 1st of the year in which the proceeding is initiated through June 30th of the following year.

**ENEC Over-Recovery Balance**

19. The Stipulating Parties agree that the accumulated ENEC over-recovery balance ("the Bank") being held by APCo, and to be fed back to customers pursuant to this Agreement, is $51,207,683, plus simple interest on the principal balance as per the Commission's November 10, 2005 Order. That simple interest has been accrued since November, 2005 and will continue to be accrued on the declining principal balance until the entire balance has been fed back to customers.

20. The allocation of the Bank among customer classes and customers shall be in accordance with the proposal of WVEUG, which is attached hereto as Exhibit C and incorporated herein by reference.

21. Beginning July 28, 2006, the Companies shall implement negative surcharges by customer class, for all classes and customers receiving a portion of the Bank, designed to feed back one-third of the principal balance of the Bank to said customer classes and customers over the following eleven (11) months. Pursuant to the following paragraph, certain customers may elect an accelerated feedback of their portion of the Bank.

22. The Kroger Co., Huntington Sanitary Board, South Putnam Public Service District, and/or the members of WVEUG may request alternative feedback mechanism(s) designed to enable them to realize an accelerated feedback of their shares of the Bank. On condition that no alternative mechanism enables an electing customer to receive more than the shares of the Bank, plus interest up to the date of payout, which it would have received under the standard mechanism provided for in the preceding paragraph, the Companies are willing, after Commission approval of this Agreement, to negotiate reasonable mechanisms for accelerated feedback, subject to legal constraints and practical limitations.

23. In consideration of the Special Rate Mechanism discussed below, Century shall not be entitled to any share in the principal balance of the Bank or any interest accrued thereon.

24. The timing and particulars of the feed back of the residual balance of the Bank, plus interest, remaining after compliance with the preceding paragraphs of this

section, shall be as determined and directed by the Commission in the next ENEC proceeding filed by the Companies.

**Recovery of Expenditures Related to the 765 kV Line and Scrubbers**

25. APCo is currently engaged in the following extraordinary construction projects: (1) the Wyoming-Jacksons Ferry 765 kV Transmission Line; and (2) the retrofit of flue-gas desulfurization units ("scrubbers") on the Mountaineer generating plant and Units 1, 2 and 3 of the John Amos generating plant (collectively referred to as "the projects").

26. The Stipulating Parties adopt, with certain modifications, the CAD's proposal for rate increments in future ENEC proceedings. The Wyoming-Jacksons Ferry 765 kV line is to be provided electric plant in service ("EPIS") treatment at a 10.5% return on equity based on the construction work in progress ("CWIP") balance as of December 31, 2005, including projected depreciation, taxes and other fixed operating expense. The Wyoming-Jacksons Ferry line and each of APCo's planned scrubber projects will be afforded EPIS treatment at a 10.5% return on equity in succeeding ENEC proceedings after a given project has been placed in service, provided the project is in service no later than March 1st of the year the ENEC factor becomes effective. EPIS treatment will include the recovery of estimated fixed costs.

27. The Stipulating Parties agree that the Companies should be allowed to recover the construction expenditures and other costs related to the projects during the construction phase and, after the projects are classified as EPIS, in the following manner:

a. APCo shall accrue AFUDC on construction expenditures for each project, based on a 10.5% ROE. In each ENEC proceeding APCo shall be allowed to

recover a return and associated taxes ("Return") on all CWIP expenditures along with accrued AFUDC made in connection with the projects through the end of the ENEC review period, December 31st of each year. Rates recovering such return ("construction surcharges") shall go into effect on July 1st of the next succeeding year as part of the ENEC.

b. The return on such CWIP and EPIS shall be based on:

i. the amount of equity, long term debt, short term debt and preferred stock in APCo's capital structure based on a thirteen month average as of December 31st of each year;

ii. a rate of return on equity capital of 10.5%, and a return on other capital (long term debt, short term debt and preferred stock) at the thirteen month average cost of such other capital component as of December 31st of each year.

c. CWIP balances earning a CWIP allowance would not be subject to the accrual of AFUDC. CWIP balances in excess of amounts earning a CWIP allowance shall continue to be subject to the accrual of AFUDC during the construction period. In addition to a return on CWIP existing at December 31st of each year, all projects that are transferred to EPIS by March 1st of the succeeding year, shall also be allowed to recover depreciation, property taxes and other fixed costs associated with such EPIS to be incurred over the next succeeding ENEC recovery period.

d. In succeeding ENEC proceedings, projects previously transferred to EPIS shall be allowed to recover a Return on EPIS balances net of accumulated depreciation as of December 31st of each year, along with depreciation, property taxes and other fixed costs.

e. The Stipulating Parties agree that the Companies shall be allowed to recover in rates effective July 28, 2006, a total of $23.21 million associated with CWIP expenditures on the projects as of December 31, 2005. The Stipulating Parties also agree that the $23.21 million allowance includes recovery of depreciation, property taxes and other fixed costs associated with the Wyoming-Jacksons Ferry 765 kV transmission line.

f. Construction surcharges and EPIS surcharges shall be established as part of the Companies' annual ENEC proceedings, but the costs and revenues associated with these construction surcharges and EPIS surcharges shall not be subject to deferred accounting for regulatory purposes. The Stipulating Parties acknowledge that the construction and EPIS surcharges established in this case are calculated for the various customer classes based on the twelve coincident peak (12 CP) demand allocator.

**Base Rates**

28. The Stipulating Parties agree that effective July 28, 2006, the Companies' current base rates shall be reduced by $18,433,000 on an annual basis, based on a return on equity of 10.5%. Exhibit D, attached hereto and incorporated herein, is a cost of service showing the derivation of the Companies' stipulated base rate revenue requirement. Although no Stipulating Party agrees with each and every item in the attached cost of service, all parties agree that the overall cost of service is reasonable, and should be adopted by the Commission.

29. The base rates provided for in this Agreement reflect the recovery of the amortization of the Asset Retirement Obligation ("ARO") as proposed by the Companies in this case.

30. The rate changes with respect to base rate decreases, the feedback of the Bank, ENEC increases, and the 2006 construction surcharges shall be allocated among the customer classes as shown on Exhibit E attached hereto and incorporated herein.

**Reliability Expenditures**

31. The Companies shall collectively expend an average of $18,660,000 annually in each calendar year, 2007, 2008, and 2009, for measures designed to maintain and enhance reliability of service (i.e. right-of-way vegetation management and asset management activities). This annual sum constitutes an addition of $4.782 million over 2004 test year levels.

32. The Stipulating Parties agree that if APCo fails to earn a rate of return on common equity ("ROE") of at least 10.5% on a per books West Virginia retail jurisdictional basis during any of the calendar years, 2007, 2008, or 2009, APCo shall be entitled to defer an amount for T&D reliability expenditures sufficient to enable its ROE to equal 10.5%, up to a collective maximum annual deferral of $4.782 million. At its election, APCo shall be allowed to obtain appropriate recovery of any such deferrals in succeeding ENEC or base rate case(s) following such deferrals.

33. If the Companies intend to include in a case the issue of recovery of any deferral referred to in the preceding paragraph, the Companies will give prior notice to the other Stipulating Parties along with a calculation showing the derivation of the deferral. The other Stipulating Parties shall be free to take whatever position they deem appropriate concerning the appropriate amount of such recovery based on the ROE earned by APCo, the proper calculation of ROE, and the sums expended on T&D reliability measures.

34. The Companies recognize that it is their responsibility, as it is the responsibility of all public utilities in this State, under W Va. Code §24-3-1, to provide a reasonable level of reliable electric service to their customers. Nothing in this Agreement is intended to (1) relieve or limit the Companies' obligation to expend the funds needed to discharge this responsibility or (2) absolve the Companies of their legal duty as set forth in W. Va. Code §24-3-1.

**Depreciation Rates**

35. Effective July 1, 2006, APCo's West Virginia depreciation rates shall be modified in accordance with the schedule of depreciation rates attached hereto as Exhibit F and incorporated herein by reference.

36. Notwithstanding the provisions of this Agreement by which the Stipulating Parties agree to changes in the Companies' depreciation rates as a significant element of the Settlement, the Staff wishes to make clear that its agreement is due to the unique circumstances of this case. The Staff holds firm to its position that depreciation rate issues should not be part of any application filing in a base rate case, but should be addressed by a separate filing made pursuant to Rule 20 of the Commission's Rules of Practice and Procedure.

**Special Rate Mechanism for Century Aluminum**

37. The Stipulating Parties agree that Century provides important contributions to the economy of West Virginia in terms of good-paying industrial jobs, tax revenues, and other factors. In light of those contributions, the electric-energy-intensiveness of Century's operations, and the competitiveness of Century's industry, the Stipulating Parties agree that it is appropriate to undertake an experiment in devising and

applying a special rate mechanism to Century that is linked to the commodity price of aluminum and that compensates the Companies' ratepayers for the risks which the experiment poses for them. If approved by the Commission, the special rate mechanism experiment shall be implemented August 1, 2006 and shall operate as follows:

a. Century currently pays a rate equivalent to $27.16 per Mwh (the "current rate"). Subject to subpart c hereof, on and after August 1, 2006, Century shall pay each month to APCo the lower of the cost-based rate applicable to Century resulting from this or any future rate proceeding, or the current rate plus a surcharge based on the simple average daily price of aluminum for the month as quoted on the London Metal Exchange and as published by Reuters ("the LME price"). These surcharges are set forth in Exhibit G attached hereto and incorporated herein.

b. Each month the current price plus the surcharge will be greater than or less than the total rate responsibility allocated to Century. ("the otherwise applicable rate"). Century and APCo will keep a running cumulative balance of these monthly surpluses and deficits ("the Century Bank"). If in any month APCo does not receive adequate revenue under the experimental rate mechanism, including any payments from the Century Bank, equivalent to that which would be due from the otherwise applicable rate, APCo will be authorized to record a regulatory asset in the amount of such under-recovery for future recovery from the Companies' customers, as a part of its ENEC, at the conclusion of the experiment, pursuant to subpart d hereof. Century shall maintain a monthly accounting record of the Century Bank, subject to audit by the Companies and the Public Service Commission, showing the monthly and cumulative surplus or deficit.

c. As security for the Companies and other ratepayers, a portion of the monthly payments based on the current rate plus the applicable surcharge will be retained by APCo, up to $1,000,000, and will be paid by Century in months when the current price plus the applicable surcharge exceeds the otherwise applicable rate. That amount will be considered part of the Century Bank, although held by APCo as a regulatory liability to be credited to customers in accordance with subpart d hereof. At Century's option, the $1,000,000 amount can be paid to APCo in equal monthly payments during the first year of the experimental rate program. APCo will accrue interest on the amount collected under this subpart at the Commission's approved interest rate on deposits.

d. The experimental rate program will be reviewed by the Commission during the 2009 ENEC proceeding. If the experimental rate program is extended, any existing Century Bank balance will roll forward into the new plan. If the experimental rate program is terminated, Century will have no further obligations to pay or rights to receive payments under this program. If the program is terminated, the Companies will reflect any regulatory asset and/or regulatory liability as a net charge or credit to all customers, excluding Century, in the next ENEC proceeding.

e. If the Commission approves this experimental rate program in all its particulars, Century and APCo will negotiate a detailed contract to implement this experimental rate program and will file such contract with the Commission under Rule 39 of the Commission's Rules. If the Commission does not approve this experimental rate program in all its particulars, APCo shall have no obligation to provide service to Century other than at its otherwise applicable rate.

**RS Rate Design**

38. The increase allocated to the residential (RS) class shall be recovered from the usage blocks in that rate class. There will be no increase in the customer charge and no imposition of a separate minimum bill.

**LGS Rate Design**

39. The Stipulating Parties agree to modify the demand/energy split for the LGS rate schedule to reflect a demand charge at 80% of full cost. The base rate revenue reduction applicable to the LGS class shall be applied 80% to energy and 20% to demand. Customer migrations between MGS and LGS shall not be permitted until the next rate case, except in the case of material changes in load which result in a dramatic change in a customer's usage characteristics. However, the Companies agree that the accounts of Huntington/South Putnam and the water and sewer utilities that have supported the participation of Huntington/South Putnam in this proceeding (which are listed on Exhibit H attached hereto and incorporated herein) will have been placed on the appropriate MGS or LGS rate schedule for which they qualify prior to July 28, 2006.

**Low-Income Weatherization Projects**

40. For the next three years, the Companies shall make a collective annual contribution of $250,000 to the West Virginia Governor's Office of Economic Opportunity to be administered for WVCAP, to be used for low-income residential weatherization projects. The scheduling of the payments and the usage of the funds shall be arranged between the Companies and OEO weatherization staff on behalf of WVCAP.

**Terms and Conditions of Service**
**and Requested Rule Waivers**

41. The Companies have withdrawn their requests for a partial waiver of Electric Rule 4.2.1.a, for a grant of flexibility and discretion to require additional security deposits of non-residential customers, for the institution of fixed non-refundable charges for temporary service, and for a tariff modification concerning customer liability.

42. The Stipulating Parties agree that the Companies should be granted partial waivers of Electric Rules 4.8.1.a.F and 4.8.1.a H to enable them to defer non-emergency reconnections of service from times of darkness to times of daylight and authorize their field personnel to decline to accept cash payments to forestall disconnections of service for non-payment.

43. The Companies shall be authorized to impose a 1% delayed payment charge ("DPC") on a current bill owed by customers served under Rate Schedules R.S. and R.S. – T.O.D. if not paid "by the next scheduled read date." The DPC may be assessed only once on a given current bill. Before this new DPC is implemented, the Companies shall be required to give notice by bill message or bill insert to at least the customer classes affected, in two successive billing months, of the basic facts about the new DPC. The Companies shall change the proposed language in their tariffs about the point at which an account becomes subject to a DPC assessment for balances not paid "by the next bill preparation date" to "by the next scheduled read date." The approval and implementation of this new DPC shall have no effect on the DPCs already in operation under other rate schedules of the Companies.

**Base Rate Case Filing Commitment**

44. The Companies commit to filing a base rate case, predicated on a 2009 test year, by no later than the second quarter of 2010.

**General Matters**

45. The Stipulating Parties agree to waive their right to conduct in this proceeding any examination of the witnesses of any other party to this Agreement, except that the parties may ask clarifying questions concerning this Agreement.

46. This Agreement is entered into subject to the acceptance and approval of the Commission. It results from a review of any and all filings in this proceeding, the Stipulating Parties' prefiled testimony and exhibits, and extensive discovery and discussion. It reflects substantial compromises by the Stipulating Parties and the withdrawal of their respective positions asserted in this case, and is being proposed to expedite and simplify the resolution of this proceeding and other outstanding matters. It is made without any admission or prejudice to any positions which any party might adopt during subsequent litigation. The Stipulating Parties adopt this Agreement as being in the public interest, without adopting any of the compromise positions set forth herein as ratemaking principles applicable to future ENEC proceedings, Rule 42 proceedings, or other regulatory proceedings, except as expressly provided herein. The Stipulating Parties acknowledge that it is the Commission's prerogative to accept, reject, or modify any stipulation. However, in the event that this Agreement is rejected or modified by the Commission, it is expressly understood by the Stipulating Parties that they are not bound to accept this Agreement as modified or rejected, and may avail themselves of whatever

rights are available to them under law and the Commission's Rules of Practice and Procedure.

WHEREFORE, the Stipulating Parties (except the Staff with regard to the one element identified in Paragraph 15) on the basis of all the foregoing, respectfully request that the Commission make appropriate Findings of Fact and Conclusions of Law adopting and approving the Joint Stipulation and Agreement for Settlement in its entirety, including specifically Exhibits A through H.

Respectfully submitted this 24th day of April, 2006.

Respectfully Submitted

**APPALACHIAN POWER COMPANY and WHEELING POWER COMPANY**

By: _____

**STAFF OF THE PUBLIC SERVICE COMMISSION OF WEST VIRGINIA**

By: _____

**CONSUMER ADVOCATE DIVISION OF THE PUBLIC SERVICE COMMISSION OF WEST VIRGINIA**

By: _____

**WEST VIRGINIA ENERGY USERS GROUP**

By: _____

**CENTURY ALUMINUM OF WEST VIRGINIA, INC.**

By: _____

**THE KROGER CO.**

By: _____

**HUNTINGTON SANITARY BOARD AND SOUTH PUTNAM PUBLIC SERVICE DISTRICT**

By: _____

**WEST VIRGINIA COMMUNITY ACTION PARTNERSHIP**

By: _____

EXHIBIT A



**Revised Section 2: Actual Period Ended December 31, 2004**

## ENEC Rates

APPALACHIAN POWER COMPANY / WHEELING POWER COMPANY
EXPANDED NET ENERGY COST (ENEC) RATES
TWELVE MONTHS ENDED 12/31/2004
INCLUDES DATA CORRECTIONS

| CUSTOMER CLASS | | ENEC ENERGY FACTOR C/KWH | ENEC DEMAND FACTOR $/KW |
|---|---|---|---|
| RS | | 1.612 | |
| RS -TOD / RS-LM-TOD | | | |
| | ON-PEAK | 1.617 | |
| | OFF-PEAK | 1.106 | |
| SWS | | 1.619 | |
| SGS | | 1.526 | |
| SGS - LM-TOD | | | |
| | ON-PEAK | 1.526 | |
| | OFF-PEAK | 1.169 | |
| SS | -SEC | 1.107 | 1.342 |
| | -PRI | 1.076 | 1.303 |
| | -AF | 1.539 | |
| MGS | -SEC | 1.107 | 1.159 |
| | -PRI | 1.077 | 1.125 |
| | -SUBTRAN | 1.057 | 1.095 |
| | -TRANS | 1.041 | 1.077 |
| | -AF | 1.541 | |
| GS-TOD | | | |
| ON-PEAK | -SEC | 1.884 | |
| OFF-PEAK | -SEC | 1.256 | |
| ON-PEAK | - PRI | 2.040 | |
| OFF-PEAK | -PRI | 1.318 | |
| LGS | -SEC | 1.106 | 1.660 |
| | -PRI | 1.076 | 1.612 |
| | -SUBT | 1.057 | 1.570 |
| | -TRANS | 1.041 | 1.544 |
| LCP | -SEC | 1.106 | 1.597 |
| | - PRI | 1.076 | 1.550 |
| | - SUBT | 1.057 | 1.511 |
| | - TRANS | 1.040 | 1.486 |
| IP | -SEC | 1.105 | 1.884 |
| | - PRI | 1.075 | 1.829 |
| | - SUBT | 1.057 | 1.782 |
| | - TRANS | | |
| | All Other | 1.040 | 1.752 |
| | SPECIAL CONTRACT I | 1.040 | 1.752 |
| | SPECIAL CONTRACT G | 1.040 | 1.769 |
| | SPECIAL CONTRACT H | 1.040 | 2.212 |
| OL | | 1.105 | |
| SL | | 1.105 | |

| | | | |
|---|---|---|---|
| **SPECIAL CONTRACT A** | | | |
| | **FIRM POWER** | 1.040 | 1.752 |
| | **INTERRUPTIBLE DEMAND** | | 1.162 |
| | **P1** | 1.040 | |
| | **P2** | 1.040 | |
| | **P2.5** | 1.040 | |
| | **P3** | 1.040 | |
| | **P4** | 1.040 | |
| **SPECIAL CONTRACT B** | | | |
| | **138 KV SERVICE** | | |
| | **CAPACITY CHARGE** | | 0.913 |
| | **P1** | 1.040 | |
| | **P2** | 1.040 | |
| | **P2.5** | 1.040 | |
| | **P3** | 1.040 | |
| | **P4** | 1.040 | |
| | **46 KV SERVICE** | | |
| | **P1** | 1.055 | |
| | **P2** | 1.055 | |
| | **P2.5** | 1.055 | |
| | **P3** | 1.055 | |
| | **P4** | 1.055 | |
| **SPECIAL CONTRACT C** | | | |
| | **P1** | 1.096 | |
| | **P2** | 1.275 | |
| | **P3** | 12.752 | |
| | **P4** | 7.555 | |
| **SPECIAL CONTRACT D** | | | |
| | **FIRM POWER** | 1.054 | 1.777 |
| | **ON-PEAK DEMAND** | | 0.644 |
| | **OFF-PEAK DEMAND EXCESS** | | 0.118 |
| | **SHOULD. PEAK DEM. EXCESS** | | 0.379 |
| | **INTERR. ENERGY** | 1.040 | |
| **SPECIAL CONTRACT E** | | | |
| | **-SEC** | | |
| | **ON-PEAK** | 1.653 | |
| | **OFF-PEAK** | 1.385 | |
| | **SHOULDER PEAK** | 1.447 | |
| | **-PRI** | | |
| | **ON-PEAK** | 1.674 | |
| | **OFF-PEAK** | 1.333 | |
| | **SHOULDER PEAK** | 1.418 | |
| **SPECIAL CONTRACT F** | | | |
| | **FIRM POWER** | 1.057 | 2.048 |
| | **BACK-UP POWER** | 1.057 | 0.205 |
| | **MAINTENANCE** | 1.094 | |

**FLOODWALL** ENEC Factor for floodwall accounts is the energy component of the appropriate general service tariff for which the customer would qualify.

**Revised Section 1: Proposed Period Ending December 31, 2006**

## ENEC Rates

APPALACHIAN POWER COMPANY / WHEELING POWER COMPANY
PROPOSED EXPANDED NET ENERGY COST (ENEC) RATES
2006 ENEC FACTOR
INCLUDES DATA CORRECTION & INCLUDES CEREDO

| CUSTOMER CLASS | | ENEC ENERGY FACTOR | ENEC DEMAND FACTOR |
|---|---|---|---|
| | | C/KWH | $/KW |
| RS | | 1.932 | |
| RS -TOD / RS-LM-TOD | | | |
| | ON-PEAK | 1.938 | |
| | OFF-PEAK | 1.407 | |
| SWS | | 1.943 | |
| SGS | | 1.846 | |
| SGS - LM-TOD | | | |
| | ON-PEAK | 1.846 | |
| | OFF-PEAK | 1.473 | |
| SS | -SEC | 1.408 | 1.387 |
| | -PRI | 1.369 | 1.347 |
| | -AF | 1.853 | |
| MGS | -SEC | 1.408 | 1.198 |
| | -PRI | 1.370 | 1.162 |
| | -SUBTRAN | 1.345 | 1.132 |
| | -TRANS | 1.325 | 1.113 |
| | -AF | 1.856 | |
| GS-TOD | | | |
| ON-PEAK | -SEC | 2.339 | |
| OFF-PEAK | -SEC | 1.406 | |
| ON-PEAK | - PRI | 2.554 | |
| OFF-PEAK | -PRI | 1.367 | |
| LGS | -SEC | 1.407 | 1.715 |
| | -PRI | 1.369 | 1.685 |
| | -SUBT | 1.345 | 1.622 |
| | -TRANS | 1.325 | 1.595 |
| LCP | -SEC | 1.407 | 1.649 |
| | - PRI | 1.369 | 1.601 |
| | - SUBT | 1.345 | 1.580 |
| | - TRANS | 1.323 | 1.534 |
| IP | -SEC | 1.406 | 1.948 |
| | - PRI | 1.368 | 1.890 |
| | - SUBT | 1.344 | 1.842 |
| | - TRANS | | |
| | All Other | 1.323 | 1.811 |
| SPECIAL CONTRACT I | | 1.323 | 1.811 |
| SPECIAL CONTRACT G | | 1.323 | 1.834 |
| SPECIAL CONTRACT H | | 1.324 | 2.269 |
| OL | | 1.406 | |
| SL | | 1.406 | |

APPALACHIAN POWER COMPANY / WHEELING POWER COMPANY
PROPOSED EXPANDED NET ENERGY COST (ENEC) RATES
2006 ENEC FACTOR
INCLUDES DATA CORRECTION & INCLUDES CERRO

| CUSTOMER CLASS | | ENEC ENERGY FACTOR C/KWH | ENEC DEMAND FACTOR $/KW |
|---|---|---|---|
| SPECIAL CONTRACT A | | | |
| | FIRM POWER | 1.323 | 1.811 |
| | INTERRUPTIBLE DEMAND | | 1.852 |
| | P1 | 1.323 | |
| | P2 | 1.323 | |
| | P2.5 | 1.323 | |
| | P3 | 1.323 | |
| | P4 | 1.323 | |
| SPECIAL CONTRACT B | | | |
| | 138 KV SERVICE | | |
| | CAPACITY CHARGE | | 0.945 |
| | P1 | 1.323 | |
| | P2 | 1.323 | |
| | P2.5 | 1.323 | |
| | P3 | 1.323 | |
| | P4 | 1.323 | |
| | 46 KV SERVICE | | |
| | P1 | 1.343 | |
| | P2 | 1.343 | |
| | P2.5 | 1.343 | |
| | P3 | 1.343 | |
| | P4 | 1.343 | |
| SPECIAL CONTRACT C | | | |
| | P1 | 1.383 | |
| | P2 | 1.621 | |
| | P3 | 16.208 | |
| | P4 | 11.716 | |
| SPECIAL CONTRACT D | | | |
| | FIRM POWER | 1.3410 | 1.837 |
| | ON-PEAK DEMAND | | 0.659 |
| | SHOULD. PEAK DEM. | | 0.391 |
| | OFF-PEAK DEMAND | | 0.121 |
| | INTERR. ENERGY | 1.3230 | |
| SPECIAL CONTRACT E | | | |
| | -SEC | | |
| | ON-PEAK | 1.997 | |
| | OFF-PEAK | 1.665 | |
| | SHOULDER PEAK | 1.740 | |
| | -PRI | | |
| | ON-PEAK | 2.001 | |
| | OFF-PEAK | 1.593 | |
| | SHOULDER PEAK | 1.695 | |
| SPECIAL CONTRACT F | | | |
| | FIRM POWER | 1.344 | 2.120 |
| | BACK-UP POWER | 1.344 | 0.212 |
| | MAINTENANCE | 1.382 | |
| FLOODWALL | ENEC Factor for floodwall accounts is the energy component of the appropriate general service tariff for which the customer would qualify. | | |

# EXHIBIT C

Baron Exhibit__(SJB-1R)
(Modified per Stipulation)

Appalachian Power Company
WVEUG Proposal to
Distribute ENEC Overrecovery
Case No. 05-1 278-E-PC-PW4ZT

| Tariff | Voltage | WVEUG Settlement (total bank balance) | WVEUG Settlement (1st year 1/3rd feedback) |
|---|---|---|---|
| RS | | 27,899,511 | 9,299,837 |
| SWS | | 269,845 | 89,948 |
| SGS | | 1,222,031 | 407,344 |
| SS | Sec. | 803,504 | 267,835 |
| SS | Pri. | 46,266 | 15,422 |
| SS | Ath. Field | 10,983 | 3,661 |
| | | 860,752 | 286,917 |
| MGS | Sec. | 3,252,179 | 1,084,060 |
| MGS | Pri. | 364,330 | 121,443 |
| MGS | Subtr. | 21,653 | 7,218 |
| MGS | Trans. | - | - |
| MGS | Ath. Field | 6,011 | 2,004 |
| | | 3,644,173 | 1,214,724 |
| GS-LMTOD | Sec-peak | 35,690 | 11,983 |
| GS-LMTOD | Sec-off | 19,069 | 6,363 |
| GS-LMTOD | Pri -peak | 22,663 | 7,554 |
| GS-LMTOD | Pri- off | 8,443 | 2,814 |
| | | 86,066 | 28,695 |
| LGS | Sec. | 3,236,548 | 1,078,849 |
| LGS | Pri. | 493,058 | 164,353 |
| LGS | Subtr. | 12,999 | 4,333 |
| LGS | Trans. | - | - |
| | | 3,742,603 | 1,247,534 |
| LCP | Sec. | 250,008 | 83,336 |
| LCP | Pri. | 1,407,623 | 469,208 |
| LCP | Subtr. | 2,411,049 | 803,683 |
| LCP | Trans. | 723,990 | 241,330 |
| | | 4,792,671 | 1,597,557 |
| IP | Sec. | 201,991 | 67,330 |
| IP | Pri. | 2,282,228 | 764,076 |
| IP | Subtr. | 2,043,528 | 681,176 |
| IP | Trans. | 1,251,161 | 417,054 |
| | | 5,758,907 | 1,919,636 |
| SPECIAL A | | - | - |
| SPECIAL B | | 437,195 | 145,732 |
| SPECIAL C | | 4,244 | 1,415 |
| SPECIAL D | | 418,383 | 139,461 |
| SPECIAL E | | 9,998 | 3,332 |
| SPECIAL F | | 78,987 | 26,329 |
| SPECIAL G | | 1,217,003 | 405,668 |
| SPECIAL H | | - | - |
| SPECIAL I | | 552,492 | 184,164 |
| OL | | 137,008 | 45,669 |
| SL | | 76,093 | 25,364 |
| TOTAL | | 51,207,981 | 17,069,327 |

# EXHIBIT D

Exhibit _____

**Appalachian Power Company and Wheeling Power Company**
**Case No. 05-1278-E-PC-PW-42T**
**Revenue Requirement Calculation for Settlement**

| | Settlement |
|---|---|
| Weighted Cost of Capital | 7.601% |
| Return on Equity | 10.50% |
| Rate Base | 1,657,541,508 |
| Return on Rate Base | 125,996,586 |
| Federal Taxes | 31,499,147 |
| State Taxes | 11,969,676 |
| Operation & Maintenance Expense | 727,297,676 |
| Depreciation Expense | 79,833,661 |
| Taxes Other Than Income | 53,803,432 |
| Total Expenses | 904,403,591 |
| Revenue Requirement | 1,030,400,177 |
| Going Level Revenues | 1,048,473,441 |
| Subtotal | (18,073,264) |
| Additional Uncollectibles | (65,064) |
| Additonal B&O | (291,702) |
| Revenue Increase/(Decrease) | (18,430,030) |

EXHIBIT E

**Appalachian Power Company**
**Revenue Changes by Tariff Class**
**Case No. 05-1278-E-PC-PW-42T**

| Tariff | Base Rate Decrease | ENEC Increase | Construction Surcharge | Net Revenue Change | ENEC Bank Amortization | Net Impact |
|---|---|---|---|---|---|---|
| RS | $2,422,695 | $18,735,076 | $9,321,136 | $30,478,907 | ($9,299,837) | $21,179,070 |
| SWS | ($49,693) | $284,837 | $141,870 | $377,015 | ($89,948) | $287,066 |
| SGS | ($313,432) | $794,042 | $328,594 | $809,203 | ($407,344) | $401,860 |
| SS | ($202,033) | $1,068,225 | $513,713 | $1,379,905 | ($286,917) | $1,092,988 |
| MGS | ($4,769,035) | $4,649,496 | $2,168,946 | $2,049,407 | ($1,243,420) | $805,987 |
| LGS | ($3,846,810) | $4,846,586 | $1,921,120 | $2,920,896 | ($1,247,534) | $1,673,362 |
| LCP | ($4,361,852) | $6,185,894 | $2,461,890 | $4,285,933 | ($1,597,557) | $2,688,376 |
| IP | ($3,828,607) | $7,613,388 | $2,655,841 | $6,442,622 | ($1,919,636) | $4,522,986 |
| SPECIAL A | ($8,117) | $136,538 | $24,304 | $152,725 | $0 | $152,725 |
| SPECIAL B | ($203,009) | $598,431 | $190,164 | $583,586 | ($145,732) | $437,854 |
| SPECIAL C | ($8,105) | $6,739 | $256 | ($1,110) | ($1,415) | ($2,525) |
| SPECIAL D | ($392,810) | $594,700 | $139,778 | $341,668 | ($139,461) | $202,207 |
| SPECIAL E | $94 | $11,929 | $4,482 | $16,505 | ($3,332) | $13,173 |
| SPECIAL F | ($40,547) | $107,780 | $35,765 | $102,998 | ($26,329) | $76,669 |
| SPECIAL G | ($508,467) | $1,205,428 | $354,502 | $1,051,463 | ($405,668) | $645,796 |
| SPECIAL H | ($1,125,428) | $8,121,578 | $2,705,226 | $9,701,376 | $0 | $9,701,376 |
| SPECIAL I | ($431,249) | $742,623 | $242,311 | $553,685 | ($184,164) | $369,521 |
| | | | | $0 | | |
| OL | ($560,767) | $222,218 | $0 | ($338,549) | ($45,669) | ($384,218) |
| SL | ($204,858) | $87,575 | $0 | ($117,283) | ($25,364) | ($142,647) |
| TOTAL | ($18,430,000) | $56,011,083 | $23,209,899 | $60,790,982 | ($17,069,327) | $43,721,655 |

EXHIBIT F

Exhibit No _____

## Appalachian Power Company
## Depreciation Rates
### Case No. 05-1278-E-PC-PW-42T

| | Current Rates | New Rates |
|---|---|---|
| **Steam Production** | | |
| Mountaineer | 2.64% | 1.93% |
| Amos | 2.79% | 2.98% |
| Kanawha River | 3.88% | 1.19% |
| Sporn | 4.86% | 1.53% |
| Clinch River | 3.48% | 3.00% |
| Glyn Lyn 5 | 0.92% | 4.99% |
| Glyn Lyn 6 | 3.71% | 4.00% |
| **Hydro Production** | | |
| Claytor | 2.71% | 1.17% |
| Byllesby | 2.90% | 2.89% |
| Buck | 3.21% | 2.95% |
| Niagara | 2.31% | 2.41% |
| Ruesens | 1.69% | 1.64% |
| Leesville | 2.51% | 1.21% |
| London | 1.65% | 1.85% |
| Marmet | 1.65% | 1.91% |
| Winfield | 1.65% | 1.76% |
| Smith Mountain | 3.39% | 1.29% |
| **Other Production** | | |
| Central Maintenance | 4.02% | 2.07% |
| Central Machine | 4.02% | 2.10% |
| Little Broad Run | 4.02% | 1.76% |
| **Transmission Plant** | 2.21% | 1.63% |
| **Distribution Plant** | 3.20% | 3.37% |
| **General Plant** | 3.14% | 1.80% |

EXHIBIT G

**SCHEDULE B**
**CENTURY ALUMINUM OF WEST VIRGINIA, INC.**
**MAXIMUM MONTHLY SURCHARGE [1]**

| MONTHLY LME PRICE [2] | MAXIMUM MONTHLY SURCHARGE [3] |
|---|---|
| $2200/tonne or less ($0.998/lb or less) | Zero |
| $2300/tonne ($1.043/lb) | 1.87 mills/kWh |
| $2400/tonne ($1.089/lb) | 3.73 mills/kWh |
| $2500/tonne ($1.134/lb) | 5.56 mills/kWh |
| $2600/tonne ($1.179/lb) | 7.43 mills/kWh |
| $2700/tonne ($1.225/lb) | 9.30 mills/kWh |
| $2800/tonne ($1.270/lb) | 11.16 mills/kWh |
| $2900/tonne ($1.315/lb) | 12.99 mills/kWh |
| $3000/tonne ($1.361/lb) | 14.86 mills/kWh |

(1) The **Maximum Monthly Surcharge** shall remain in effect for the full term of this agreement, unless modified by Century Aluminum and approved by the PSC of West Virginia.

(2) The **LME PRICE** shall be defined as the daily cash settlement for high grade aluminum, as quoted on the London Metal Exchange (as published by Reuters). The monthly LME Price shall be the simple average of the daily prices.

(3) For LME prices not shown, the **Maximum Monthly Surcharge** may be interpolated between the points.

EXHIBIT H

# PUBLICLY-OWNED SEWER AND WATER UTILITIES SUPPORTING INTERVENTION OF SOUTH PUTNAM PSD AND HUNTINGTON SANITARY BOARD THROUGH CONTRIBUTIONS UNDERWRITING EXPERT WITNESS AND ATTORNEY FEES

Bluewell Public Service District

Chelyan Public Service District

Culloden Public Service District

Fayetteville, Town of

Hodgesville Public Service District/
Tennerton Public Service District

Hurricane Water & Sanitary Board

Lavalette Public Service District

Logan County Public Service District

Oakvale Road Public Service District

Pea Ridge Public Service District

West Hamlin, Town of

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF-4**
Refer to pages 23-24 of the Fayne Testimony concerning a "statewide solution" to address the issue of the price of electricity for the Sebree and Hawesville smelters.

a. Describe the extent to which KIUC believes solutions of this type referenced by Mr. Fayne, i.e. a statewide economic development fund, tax credits, redistribution of the smelter load among multiple utilities, etc., will require legislative involvement.

b. Describe the extent to which KIUC believes solutions of this type reference by Mr. Fayne are within the authority of the Commission.

**RESPONSE**

a. Although it is not possible to determine what legal authority will be required to implement a statewide solution since that solution has not yet been determined, KIUC believes that it is likely that such a solution will require legislative involvement.

b. KIUC believes that this Commission can be an active participant in and advocate for the development of a statewide solution, but that the Commission would not be able to unilaterally develop and implement such a solution.

Witness: Henry W Fayne

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC** | ) | |
| **CORPORATION FOR A GENERAL** | ) | **CASE NO. 2011-00036** |
| **ADJUSTMENT IN RATES** | ) | |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF-5**
Provide a schedule that shows the annual production capacity of the Sebree smelter in both metric tons and pounds, and show the total annual revenues that would be generated from selling the annual capacity at each of the following prices per metric tonne of aluminum: $1300; $1800; $2300; $2800; and $3000. Include all workpapers that support the calculations.

**RESPONSE**

Please see Exhibit Staff-5 on enclosed CD.

Witness: Henry W Fayne

Response STAFF-5

COMMONWEALTH OF KENTUCKY
CASE NO. 2011-00036

SEBREE SMELTER

| LME Price* | Production | | Revenues |
|---|---|---|---|
| ($/tonne) | (Metric Tonnes) | Pounds | ($ milions) column 1 x column 2 |
| 1300 | 196,000 | 431,200,000 | 255 |
| 1800 | 196,000 | 431,200,000 | 353 |
| 2300 | 196,000 | 431,200,000 | 451 |
| 2800 | 196,000 | 431,200,000 | 549 |
| 3000 | 196,000 | 431,200,000 | 588 |

*LME Prices determined by Commission Staff

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC** | ) | |
| **CORPORATION FOR A GENERAL** | ) | **CASE NO. 2011-00036** |
| **ADJUSTMENT IN RATES** | ) | |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF-6**
Provide a schedule that shows the annual production capacity of the Hawesville smelter in both metric tons and pounds, and show the total annual revenues that would be generated from selling the annual capacity at each of the following prices per metric tonne of aluminum: $1300; $1800; $2300; $2800; and $3000. Include all workpapers that support the calculations.

**RESPONSE**

Please see Exhibit Staff-6 on enclosed CD.

Witness: Henry W Fayne

Response STAFF-6

COMMONWEALTH OF KENTUCKY
CASE NO. 2011-00036

HAWESVILLE SMELTER

| LME Price* | Production | | Revenues |
|---|---|---|---|
| ($/tonne) | (Metric Tonnes) | Pounds | ($ milions) column 1 x column 2 |
| 1300 | 244,000 | 536,800,000 | 317 |
| 1800 | 244,000 | 536,800,000 | 439 |
| 2300 | 244,000 | 536,800,000 | 561 |
| 2800 | 244,000 | 536,800,000 | 683 |
| 3000 | 244,000 | 536,800,000 | 732 |

*LME Prices determined by Commission Staff

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF 7:**
Testimony of Paul A. Coomes at page 3. The table on that page, at line 9, lists Refer to the Direct "Corporate income and license taxes, State of Kentucky $350,000.

a. Was this amount provided to Dr. Coomes by the smelters or was it estimated by Dr. Coomes? If it was estimated, provide a detailed explanation of how the amount was determined and include all work papers that support the estimate.
b. Describe in detail the specific type of license taxes paid by each of the smelters to the State of Kentucky.

**RESPONSE:**

The corporate income and license taxes paid to Kentucky state government were provided by the aluminum companies. RioTinto reported $350,000 in payments for 2010, and Century did not report any corporate income tax payments.

Witness: Paul Coomes

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
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**Request STAFF-8**
Refer to page 5 of the Direct Testimony of Dr. Matthew J. Morey ("Morey Testimony"). Dr. Morey states that the sale of energy to the smelters over the three years 2011-2013 will contribute an average net margin of approximately $83 million per year more than can be obtained through Big Rivers' sale of energy to the wholesale market. Explain whether Dr. Morey believes that the smelters could achieve savings of this magnitude by purchasing energy directly from the wholesale market.

**RESPONSE**

I do not know what the Smelters could save by purchasing energy directly from the wholesale market. I have not conducted an analysis of that question. The fact that the wholesale market price in 2010 and the projected wholesale market price for the period 2011 – 2013 is below the effective price per kWh that the Smelters may pay during that same period under the rates proposed by BREC in this rate case, if such rates are approved by the Commission, suggests that they would be able to achieve some level of savings. But the price the Smelters would pay to purchase power from the wholesale market for firm service would entail several factors that will influence the ultimate price. I do not know what influence those factors would have on the price per kWh that the Smelters would pay.

Witness: Mathew J. Morey

COMMONWEALTH OF KENTUCKY
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**In the Matter of:**

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|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
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**Request STAFF-9**
Refer to the Morey Testimony at page 6, line 11. Dr. Morey states that Big Rivers would only be able to sell an average of about 4,200 GWh per year in the wholesale market and, further, that Big Rivers' generating units are frequently "out of the market." Provide all supporting documentation and the calculations performed to support this claim and explain the meaning of the phrase "out of the market" as used in the testimony.

**RESPONSE**

Please see KIUC Response to BREC 35, and the spreadsheet labeled Margin Analysis.xls on the CD accompanying this response for all supporting documentation and calculations performed to support this claim. The frequencies with which BREC generation units are in and out of the market are reported in the range C8774:L8778 on each of the three annual results pages (sheet tabs 2011, 2012 and 2013) of Margin Analysis.xls. (See CONFIDENTIAL CD Response to BREC-35 filed under seal).

The phrase "out of the market" means that the incremental (or marginal) cost of the generation at the busbar connection to the grid is above the locational marginal price (i.e., the market price) at the commercial node or interface/interconnection.

Witness: Mathew J. Morey

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
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**Request STAFF-10.**
Refer to the Morey Testimony at page 15, lines 1-9. Dr. Morey discusses why he did not extend his analysis beyond 2014. With new federal environmental requirements going into effect in 2014 and 2015 and their potential impact on the cost of electricity, explain whether the impact of these changes should be considered and what that impact might be to Big Rivers' opportunities in the wholesale market.

**RESPONSE**

For the purposes of my analysis, new federal environmental requirements going into effect beyond 2014 do not need to be considered. The purpose of my analysis was to demonstrate that margin contribution of the Smelters to BREC revenue recovery is significant, and loss of the Smelter load would create financial difficulty for BREC over the course of several years.

The environmental requirements going into effect in 2014 and 2015 may have a broadly felt impact on the cost of electricity within the MISO market and elsewhere around the country. With those requirements imposed on BREC as well as many other utilities with coal-fired generation technologies, the cost of producing electricity from coal may rise, and along with it the price of electricity in the MISO wholesale market during hours when such units set the market price. An analysis of whether BREC would be made relatively better off or worse off under these environmental requirements vis-à-vis the sale of its surplus energy in the wholesale market would depend on a host of assumptions. The loss of Smelter load under these circumstances would still require BREC to be selling substantially more power in the wholesale market than it currently sells at prices at or above the rates it would be receiving from the Smelters.

Witness: Mathew J. Morey

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

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| APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES | ) ) ) | CASE NO. 2011-00036 |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
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**Request STAFF-11**
Refer to the Morey Testimony, Exhibit MJM-3, which shows that during the period 2011-2013, the smelters will pay Big Rivers a total of $1,115,513,000. Based on Dr. Morey's analysis of prices in the wholesale energy market, how much would the smelters pay over this same time period if their energy purchases were from the wholesale market rather than from Big Rivers?

**RESPONSE**

The question asks me to conduct an analysis of Smelter purchases in the wholesale market but does not specify whether I am to consider the day-ahead spot market, the real-time spot market or the bilateral market. Prices in the day-ahead spot and real-time spot markets vary by the hour. The question asks me to perform an original analysis to provide a response, which I am not in a position to conduct. With regard to an analysis of Smelter purchases of firm power through the bilateral market, I am not in possession of data on bilateral energy market prices. Based strictly on the information contained in Exhibit MJM-3, an estimate of the amount that the Smelters would pay for 7,300 GWh of energy in each of the three years of the study period (2011-2013) can be obtained by multiplying the 7,300 GWh by the corresponding Average Market Prices ($/MWh) for each year. The result of this computation for each year of the study period is presented in the table below.

**Table 1 – Response to CS 11 – Computation of Smelter Energy Cost at Average Market Prices - 2011 to 2013**

| | | 2011 | 2012 | 2013 | Total |
|---|---|---|---|---|---|
| 1 | Sales To Smelters (MWh) | 7,300,000 | 7,300,000 | 7,300,000 | |
| 2 | Average Market Prices ($/MWh) | $38 | $41 | $42 | |
| 3 (1 x 2) | Smelter Market Cost | $277,400,000 | $299,300,000 | $306,600,000 | $883,300,000 |

Witness: Mathew J. Morey

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
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**Request STAFF-12**
Refer to the Morey Testimony. State any impact the Vectren transmission line approved by the Kentucky State Board on Generating and Transmission Siting in Case No. 2010-00223[1] would have on Big Rivers' position in the wholesale market and whether that impact was taken into consideration in Dr. Morey's analysis.

**RESPONSE**

I have not studied the impact of the Vectren transmission line on energy flows from BREC's generation units to either its loads or the MISO market in general. Therefore, I cannot state what the impact of the Vectren transmission line will have on Big Rivers' position in the wholesale market.

I have not taken the Vectren transmission line into consideration in my analysis. My analysis assumes that there are no constraints on transmission that would restrict the sale of energy from BREC's generation units to the MISO wholesale market. Consequently, my analysis overstates the revenues that BREC would receive from off-system sales to the wholesale market.

Witness: Mathew J. Morey

[1] Case No. 2010-00223, Application of Southern Indiana Gas and Electric Co. D/B/A Vectren Energy Delivery of Indiana, Inc. for a Certificate to Construct an Electric Transmisosn Line from it's A.B. Brown Plant to the Big Rivers Reid EHV Station (Ky. PSC Dec. 21, 2010).

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

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| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
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**Request STAFF-13**

Refer to page 11 of the Direct Testimony of Charles W. King and Schedule 1 of Exhibit (CWK-1). Both the testimony and exhibit indicate that Mr. King's determination of KIUC's recommended deprecation rates pertains only to Big Rivers' production plan. However, there is no discussion of why his analysis was limited to production plant. Clarify whether the lack of discussion of deprecation on transmission or general plant should be interpreted to mean that KIUC takes no exception to Big Rivers' proposed deprecation rates for transmission and general plant.

**RESPONSE**:

Mr. King was not retained to address the non-production accounts.

Witness: Charles W. King

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|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
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**Request STAFF-14**
Refer to pages 10-1 1 of the Direct Testimony and Exhibits of Lane Kollen ("Kollen Testimony"), specifically, the discussion of Big Rivers' proposal for the current recovery of interest of Construction Work in Progress ("CWIP").

a. Explain whether Mr. Kollen is aware that the current recovery of interest on CWlP has been authorized by the Commission for East Kentucky Power Cooperative, Inc. ("EKPC") and, for Louisville Gas and Electric Company and Kentucky Utilities Company, the Commission has authorized a current return on CWlP in lieu of accruing an Allowance for Funds Used During Construction ("AFUDC").
b. Mr. Kollen offers three reasons for opposing Big Rivers' proposal. Explain whether Mr. Kollen agrees that:
   (1) Current recovery of, or expensing, interest on CWlP results in the final installed cost of a construction project being lower than if recovery were deferred through the capitalizing of interest on CWIP.
   (2) Not capitalizing interest on CWIP, or not accruing AFUDC, results in a lower revenue requirement associated with a given construction project, or item of utility plant, over the life of the item of utility plant.

**RESPONSE**:

a. Yes. However, the circumstances with Big Rivers are different than with those other utilities because of the terms of the Smelter contracts and the fact that the Big Rivers revenue requirement is set based on the contract TIER as defined in those contracts and that deficiencies in the contract TIER can be recovered from the Smelters, subject to certain conditions. The contract TIER reflects a reduction in interest expense for AFUDC. If there is no AFUDC, then the interest expense is greater and the contract TIER revenue requirement is greater. If the Smelter TIER Adjustment Charge already is at the maximum, then Big Rivers has no ability to recover the interest expense that would have been capitalized and recovered in the future; the ability to recover this interest expense is lost forever. Consequently, the Company's proposal exerts greater financial pressure on the utility. This is not a good idea.

b.(1) Yes. However, the lower installed cost is illusory because that single measure ignores the fact that the carrying costs actually were incurred and were recovered from ratepayers, albeit prematurely. The carrying cost during construction is properly considered a capital

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

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cost and is no different than the cost of materials and labor. Another problem with providing current recovery of carrying costs during construction is that it violates the matching principle. It requires the payment of a portion of the capital cost before the assets are placed in service instead of over the service lives of those assets when they provide service.

b.(2) No. Conceptually, on a net present value basis, the revenue requirement is the same, although, as a practical matter, there may be some difference because the base ratemaking process does not provide real-time recovery. The question assumes that the revenue requirement does not start until the assets are placed in service. This is not correct because the revenue requirement for the test year starts when the interest on the construction amounts is included in rates, not when the interest on the completed cost amounts is included.

Witness: Lane Kollen

COMMONWEALTH OF KENTUCKY
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**Request STAFF-15**
Refer to pages 14-16 of the Kollen Testimony, which address the inflation portion of Big Rivers' proposed adjustment to non-outage related maintenance expense. Mr. Kollen's recommendation allows for the recognition of the 2011 inflation calculated by Big Rivers. On page 16, beginning on line 3, Mr. Kollen states, "At most, such an adjustment should be limited to the year immediately following the test year..." On the same page, on line 9, Mr. Kollen states that Big Rivers' "[e]stimate of inflation during 2012-2014 is not known and measurable ...." Explain how Mr. Kollen determined that Big Rivers' 2011 estimate of inflation was known and measurable and why it should be reflected in the adjustment to non-outage related maintenance expense.

**RESPONSE**:

Mr. Kollen agrees that 2011 also is not known and measurable, but conceded the 2011 inflation in the context of his other recommendations and his assessment of the overall result of the revenue requirement recommended by KIUC. Mr. Kollen recognizes that there is a balance between rigid adherence to the cost structure in the historical test year and the need to provide revenue sufficient to cover the present and ongoing cost structure of the utility.

Witness: Lane Kollen

COMMONWEALTH OF KENTUCKY
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**Request STAFF-16**
Refer to pages 17-19 of the Kollen Testimony regarding Big Rivers' proposal to include depreciation on CWIP in its pro forma depreciation expense and his recommendation to exclude depreciation on post test-year plant retirements from the pro forma depreciation expense. Refer also to pages 20-21 of the Kollen Testimony where he discusses KIUC's proposed adjustment to Big Rivers' depreciation expense.

a. Given the nature of Big Rivers' proposal, explain why Mr. Kollen chose to link depreciation on retirements with depreciation on CWIP rather than recommend that the proposal to include depreciation on CWIP be rejected.
b. Provide the calculation of Big Rivers' pro forma depreciation expense based on KIUC's proposed depreciation rates being applied to Big Rivers' test year-end plant in service without including the year-end CWIP balance.

**RESPONSE:**

a. The nature of the adjustment to include depreciation on CWIP is more appropriately considered as a post test year adjustment to plant in service for CWIP that was completed within six months after the end of the historic test year. Mr. Kollen recognizes that there was some growth in plant in service due to additions in excess of plant retirements in the six months after the end of the historic test year. This net increase in gross plant necessarily causes an increase in depreciation expense and thus, in the utility's cost structure. In the case of a cooperative, whose rates are set on the basis of TIER, the interest on the CWIP, to the extent not offset by AFUDC, is recovered; it matters not that the CWIP is not plant in service. However, the depreciation expense does not commence until the CWIP is completed and transferred to plant in service. Similar to Mr. Kollen's rationale in support of the 2011 inflation increase on maintenance expense, Mr. Kollen considered this issue in the context of his other recommendations and the overall result. The objective is to ensure that Big Rivers recovers sufficient revenues for its cost structure to the extent that the costs are just and reasonable.

b. Please refer to the file on the enclosed CD labeled "Depr wo CWIP."

Witness: Lane Kollen

# KIUC Adjustment to Depreciation Expense

| ACCT | BALANCE 10/31/2010 | COMPANY'S NEW YEARLY RATE | COMPANY'S NEW DEPRECIATION RATE | COMPANY'S PRO FORMA DEPRECIATION EXPENSE | VARIANCE | KIUC NEW YEARLY RATE | KIUC NEW DEPRECIATION RATE | KIUC PRO FORMA DEPRECIATION EXPENSE | KIUC ADJUSTMENT |
|---|---|---|---|---|---|---|---|---|---|
| 3010 | 419.82 | 0.00 | 0.000000 | 0.00 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 |
| 3020 | 66,475.65 | 0.00 | 0.000000 | 0.00 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 |
| 3030 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 |
| 3101 | 83,342.47 | 0.00 | 0.000000 | 0.00 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 |
| 3102 | 1,124,664.82 | 0.00 | 0.000000 | 0.00 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 |
| 3103 | 1,110,711.72 | 0.00 | 0.000000 | 0.00 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 |
| 3104 | 2,218,857.54 | 0.00 | 0.000000 | 0.00 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 |
| 3111 | 3,236,944.36 | 1.38 | 0.001150 | 44,669.83 | (10,681.92) | 1.17 | 0.000975 | 37,872.25 | (6,797.58) |
| 3112 | 18,977,054.83 | 1.38 | 0.001150 | 261,883.36 | (62,624.28) | 1.17 | 0.000975 | 222,031.54 | (39,851.82) |
| 3113 | 26,723,028.18 | 1.38 | 0.001150 | 368,777.79 | (88,185.99) | 1.17 | 0.000975 | 312,659.43 | (56,118.36) |
| 3114 | 73,073,034.47 | 1.38 | 0.001150 | 1,008,407.88 | (241,141.01) | 1.17 | 0.000975 | 854,954.50 | (153,453.38) |
| 3115 | 421,179.00 | 1.38 | 0.001150 | 5,812.27 | (1,389.89) | 1.17 | 0.000975 | 4,927.79 | (884.48) |
| 3116 | 577,533.07 | 1.38 | 0.001150 | 7,969.96 | (1,905.86) | 1.17 | 0.000975 | 6,757.14 | (1,212.82) |
| 3117 | 937,856.03 | 1.38 | 0.001150 | 12,942.41 | (3,094.93) | 1.17 | 0.000975 | 10,972.92 | (1,969.49) |
| 3119 | 693,609.79 | 1.38 | 0.001150 | 9,571.82 | (2,288.91) | 1.17 | 0.000975 | 8,115.23 | (1,456.59) |
| 3120 | 29,686.39 | 1.88 | 0.001567 | 558.10 | 26.59 | 1.54 | 0.001283 | 457.17 | (100.93) |
| 312A | 220,240.55 | 2.28 | 0.001900 | 5,021.48 | 858.93 | 1.95 | 0.001625 | 4,294.69 | (726.79) |
| 3121 | 7,193,006.17 | 1.88 | 0.001567 | 135,228.52 | 6,444.94 | 1.54 | 0.001283 | 110,772.30 | (24,456.22) |
| 312B | 5,061,431.08 | 2.28 | 0.001900 | 115,400.63 | 19,739.58 | 1.95 | 0.001625 | 98,697.91 | (16,702.72) |
| 3122 | 77,143,667.49 | 1.88 | 0.001567 | 1,450,300.95 | 69,120.73 | 1.54 | 0.001283 | 1,188,012.48 | (262,288.47) |
| 312C | 121,989,593.12 | 2.28 | 0.001900 | 2,781,362.72 | 475,759.41 | 1.95 | 0.001625 | 2,378,797.07 | (402,565.65) |
| 3123 | 161,617,029.17 | 1.88 | 0.001567 | 3,038,400.15 | 144,808.86 | 1.54 | 0.001283 | 2,488,902.25 | (549,497.90) |
| 312D | 113,968,704.31 | 2.28 | 0.001900 | 2,598,486.46 | 444,477.95 | 1.95 | 0.001625 | 2,222,389.73 | (376,096.73) |
| 3124 | 402,071,586.26 | 1.88 | 0.001567 | 7,558,945.82 | 360,256.14 | 1.54 | 0.001283 | 6,191,902.43 | (1,367,043.39) |
| 312E | 268,650,680.12 | 2.28 | 0.001900 | 6,125,235.51 | 1,047,737.66 | 1.95 | 0.001625 | 5,238,688.26 | (886,547.25) |
| 3125 | 17,389,606.87 | 1.88 | 0.001567 | 326,924.61 | 15,581.09 | 1.54 | 0.001283 | 267,799.95 | (59,124.66) |
| 312F&312K | 71,086,231.78 | 2.28 | 0.001900 | 1,620,766.08 | 277,236.30 | 1.95 | 0.001625 | 1,386,181.52 | (234,584.56) |
| 3126 | 2,554,464.97 | 1.88 | 0.001567 | 48,023.94 | 2,288.80 | 1.54 | 0.001283 | 39,338.76 | (8,685.18) |
| 312G | 1,899,172.74 | 2.28 | 0.001900 | 43,301.14 | 7,406.78 | 1.95 | 0.001625 | 37,033.87 | (6,267.27) |
| 3127 | 376,268.58 | 1.88 | 0.001567 | 7,073.85 | 337.14 | 1.54 | 0.001283 | 5,794.54 | (1,279.31) |
| 3128 | 1,186,252.75 | 1.88 | 0.001567 | 22,301.55 | 1,062.88 | 1.54 | 0.001283 | 18,268.29 | (4,033.26) |
| 312J | 15,438.27 | 2.28 | 0.001900 | 351.99 | 60.21 | 1.95 | 0.001625 | 301.05 | (50.94) |
| 3140 | 0.00 | 1.91 | 0.001592 | 0.00 | 0.00 | 1.54 | 0.001283 | 0.00 | 0.00 |
| 3141 | 4,310,530.58 | 1.91 | 0.001592 | 82,331.13 | 10,793.56 | 1.54 | 0.001283 | 66,382.17 | (15,948.96) |
| 3142 | 32,762,390.07 | 1.91 | 0.001592 | 625,761.65 | 82,037.02 | 1.54 | 0.001283 | 504,540.81 | (121,220.84) |
| 3143 | 57,679,599.22 | 1.91 | 0.001592 | 1,101,680.35 | 144,429.72 | 1.54 | 0.001283 | 888,265.83 | (213,414.52) |
| 3144 | 127,883,751.07 | 1.91 | 0.001592 | 2,442,579.65 | 320,220.92 | 1.54 | 0.001283 | 1,969,409.77 | (473,169.88) |
| 3145 | 4,991,571.10 | 1.91 | 0.001592 | 95,339.01 | 12,498.90 | 1.54 | 0.001283 | 76,870.19 | (18,468.82) |
| 3146 | 262,741.29 | 1.91 | 0.001592 | 5,018.36 | 657.91 | 1.54 | 0.001283 | 4,046.22 | (972.14) |
| 3147 | 18,495.15 | 1.91 | 0.001592 | 353.26 | 46.31 | 1.54 | 0.001283 | 284.83 | (68.43) |
| 3151 | 1,494,658.69 | 1.99 | 0.001658 | 29,743.71 | 5,835.15 | 1.08 | 0.000900 | 16,142.31 | (13,601.40) |
| 3152 | 8,552,676.77 | 1.99 | 0.001658 | 170,198.27 | 33,389.65 | 1.08 | 0.000900 | 92,368.91 | (77,829.36) |
| 3153 | 16,091,239.72 | 1.99 | 0.001658 | 320,215.67 | 62,820.20 | 1.08 | 0.000900 | 173,785.39 | (146,430.28) |
| 3154 | 35,070,442.41 | 1.99 | 0.001658 | 697,901.80 | 136,915.00 | 1.08 | 0.000900 | 378,760.78 | (319,141.02) |
| 3155 | 171,384.26 | 1.99 | 0.001658 | 3,410.55 | 669.09 | 1.08 | 0.000900 | 1,850.95 | (1,559.60) |
| 3159 | 43,548.07 | 1.99 | 0.001658 | 866.61 | 170.02 | 1.08 | 0.000900 | 470.32 | (396.29) |
| 3160 | 56,008.08 | 3.78 | 0.003150 | 2,117.11 | 1,092.16 | 3.77 | 0.003142 | 2,111.50 | (5.61) |
| 3161 | 1,227.09 | 3.78 | 0.003150 | 46.38 | 23.92 | 3.77 | 0.003142 | 46.26 | (0.12) |

# KIUC Adjustment to Depreciation Expense

| ACCT | BALANCE 10/31/2010 | COMPANY'S NEW YEARLY RATE | COMPANY'S NEW DEPRECIATION RATE | COMPANY'S PRO FORMA DEPRECIATION EXPENSE | VARIANCE | KIUC NEW YEARLY RATE | KIUC NEW DEPRECIATION RATE | KIUC PRO FORMA DEPRECIATION EXPENSE | KIUC ADJUSTMENT |
|---|---|---|---|---|---|---|---|---|---|
| 3162 | 849,312.17 | 3.78 | 0.003150 | 32,104.00 | 16,561.59 | 3.77 | 0.003142 | 32,019.07 | (84.93) |
| 3163 | 779,447.85 | 3.78 | 0.003150 | 29,463.13 | 15,199.23 | 3.77 | 0.003142 | 29,385.18 | (77.95) |
| 3164 | 749,577.26 | 3.78 | 0.003150 | 28,334.02 | 14,616.76 | 3.77 | 0.003142 | 28,259.06 | (74.96) |
| 3165 | 345,677.46 | 3.78 | 0.003150 | 13,066.61 | 6,740.71 | 3.77 | 0.003142 | 13,032.04 | (34.57) |
| 3166 | 308,147.79 | 3.78 | 0.003150 | 11,647.99 | 6,008.89 | 3.77 | 0.003142 | 11,617.17 | (30.82) |
| 3167 | 88,777.93 | 3.78 | 0.003150 | 3,355.81 | 1,731.17 | 3.77 | 0.003142 | 3,346.93 | (8.88) |
| 3169 | 107,699.80 | 3.78 | 0.003150 | 4,071.05 | 2,100.14 | 3.77 | 0.003142 | 4,060.28 | (10.77) |
| 3401 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 |
| 3410 | 154,232.79 | 1.17 | 0.000975 | 1,804.52 | (1,758.26) | 1.17 | 0.000975 | 1,804.52 | 0.00 |
| 3420 | 1,436,911.63 | 9.10 | 0.007583 | 130,758.96 | 97,428.36 | 9.10 | 0.007583 | 130,758.96 | 0.00 |
| 3430 | 4,915,885.63 | 3.02 | 0.002517 | 148,459.75 | 27,057.04 | 3.02 | 0.002517 | 148,459.75 | 0.00 |
| 3440 | 1,102,963.67 | 0.50 | 0.000417 | 5,514.82 | (19,076.86) | 0.50 | 0.000417 | 5,514.82 | 0.00 |
| 3450 | 383,519.62 | 2.05 | 0.001708 | 7,862.15 | (688.80) | 2.05 | 0.001708 | 7,862.15 | 0.00 |
| 3460 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 |
| 3500 | 13,151,946.52 | 0.00 | 0.000000 | 0.00 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 |
| 3501 | 704,868.36 | 0.00 | 0.000000 | 0.00 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 |
| 3520 | 5,817,594.61 | 1.90 | 0.001583 | 110,534.30 | 8,121.36 | 1.90 | 0.001583 | 110,534.30 | 0.00 |
| 3521 | 20,369.05 | 1.90 | 0.001583 | 387.01 | 28.43 | 1.90 | 0.001583 | 387.01 | 0.00 |
| 3522 | 157,304.64 | 1.90 | 0.001583 | 2,988.79 | 219.60 | 1.90 | 0.001583 | 2,988.79 | 0.00 |
| 3524 | 679,442.21 | 1.90 | 0.001583 | 12,909.40 | 948.50 | 1.90 | 0.001583 | 12,909.40 | 0.00 |
| 3530 | 78,645,358.50 | 2.23 | 0.001858 | 1,753,791.49 | 7,864.53 | 2.23 | 0.001858 | 1,753,791.49 | 0.00 |
| 3531 | 3,031,650.37 | 2.23 | 0.001858 | 67,605.80 | 303.16 | 2.23 | 0.001858 | 67,605.80 | 0.00 |
| 3532 | 5,573,659.91 | 2.23 | 0.001858 | 124,292.62 | 557.37 | 2.23 | 0.001858 | 124,292.62 | 0.00 |
| 3533 | 5,947,214.37 | 2.23 | 0.001858 | 132,622.88 | 594.72 | 2.23 | 0.001858 | 132,622.88 | 0.00 |
| 3534 | 22,364,145.19 | 2.23 | 0.001858 | 498,720.44 | 2,236.42 | 2.23 | 0.001858 | 498,720.44 | 0.00 |
| 3540 | 8,134,239.23 | 1.42 | 0.001183 | 115,506.20 | (69,954.45) | 1.42 | 0.001183 | 115,506.20 | 0.00 |
| 3541 | 146,747.32 | 1.42 | 0.001183 | 2,083.81 | (1,262.03) | 1.42 | 0.001183 | 2,083.81 | 0.00 |
| 3550 | 42,097,383.75 | 2.06 | 0.001717 | 867,206.11 | (496,749.12) | 2.06 | 0.001717 | 867,206.11 | 0.00 |
| 3551 | 234,314.24 | 2.06 | 0.001717 | 4,826.87 | (2,764.91) | 2.06 | 0.001717 | 4,826.87 | 0.00 |
| 3560 | 43,673,282.78 | 1.69 | 0.001408 | 738,078.48 | (340,476.91) | 1.69 | 0.001408 | 738,078.48 | 0.00 |
| 3561 | 86,900.75 | 1.69 | 0.001408 | 1,468.62 | (677.48) | 1.69 | 0.001408 | 1,468.62 | 0.00 |
| 3890 | 407,251.23 | 0.00 | 0.000000 | 0.00 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 |
| 3900 | 3,948,933.89 | 2.84 | 0.002367 | 112,149.72 | 9,888.13 | 2.84 | 0.002367 | 112,149.72 | 0.00 |
| 3910 | 589,902.92 | 17.12 | 0.014267 | 100,991.38 | 94,443.46 | 17.12 | 0.014267 | 100,991.38 | 0.00 |
| 3912 | 7,163,171.79 | 10.29 | 0.008575 | 737,090.38 | 657,579.17 | 10.29 | 0.008575 | 737,090.38 | 0.00 |
| 3913 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 | 0.00 | 0.000000 | 0.00 | 0.00 |
| 3916 | 1,894.73 | 17.12 | 0.014267 | 324.38 | 303.35 | 17.12 | 0.014267 | 324.38 | 0.00 |
| 3917 | 3,059.60 | 17.12 | 0.014267 | 523.80 | 489.84 | 17.12 | 0.014267 | 523.80 | 0.00 |
| 3922 | 1,764,679.12 | 4.39 | 0.003658 | 77,469.41 | (21,698.50) | 4.39 | 0.003658 | 77,469.41 | 0.00 |
| 3923 | 1,257,239.84 | 6.14 | 0.005117 | 77,194.53 | 6,542.68 | 6.14 | 0.005117 | 77,194.53 | 0.00 |
| 3930 | 98,765.68 | 4.40 | 0.003667 | 4,345.69 | 819.76 | 4.40 | 0.003667 | 4,345.69 | 0.00 |
| 3940 | 722,077.41 | 4.61 | 0.003842 | 33,287.77 | 12,708.56 | 4.61 | 0.003842 | 33,287.77 | 0.00 |
| 3950 | 221,278.64 | 4.41 | 0.003675 | 9,758.39 | 3,430.71 | 4.41 | 0.003675 | 9,758.39 | 0.00 |
| 3960 | 342,907.40 | 3.70 | 0.003083 | 12,687.57 | 1.37 | 3.70 | 0.003083 | 12,687.57 | 0.00 |
| 3961 | 183,073.76 | 3.70 | 0.003083 | 6,773.73 | 0.73 | 3.70 | 0.003083 | 6,773.73 | 0.00 |
| 3970 | 1,640,119.50 | 4.35 | 0.003625 | 71,345.20 | 0.00 | 4.35 | 0.003625 | 71,345.20 | 0.00 |
| 3980 | 165,070.19 | 11.80 | 0.009833 | 19,478.28 | 10,499.12 | 11.80 | 0.009833 | 19,478.28 | 0.00 |
| 3986 | 0.00 | 11.80 | 0.009833 | 0.00 | 0.00 | 11.80 | 0.009833 | 0.00 | 0.00 |

# KIUC Adjustment to Depreciation Expense

| ACCT | BALANCE 10/31/2010 | COMPANY'S NEW YEARLY RATE | COMPANY'S NEW DEPRECIATION RATE | COMPANY'S PRO FORMA DEPRECIATION EXPENSE | VARIANCE | KIUC NEW YEARLY RATE | KIUC NEW DEPRECIATION RATE | KIUC PRO FORMA DEPRECIATION EXPENSE | KIUC ADJUSTMENT |
|---|---|---|---|---|---|---|---|---|---|
| 3987 | 1,625.49 | 11.80 | 0.009833 | 191.81 | 103.39 | 11.80 | 0.009833 | 191.81 | 0.00 |
| 312 L-P | 3,208,938.00 | 20.22 | 0.016850 | 648,847.26 | 588,198.33 | 19.31 | 0.016092 | 619,645.93 | (29,201.33) |
| 312 V-Z | 868,755.00 | 14.39 | 0.011992 | 125,013.84 | 109,459.65 | 19.31 | 0.016092 | 167,756.59 | 42,742.75 |
| 3525 | 185,107.45 | 1.90 | 0.001583 | 3,517.04 | 258.41 | 1.90 | 0.001583 | 3,517.04 | 0.00 |
| 3535 | 6,511,340.66 | 2.23 | 0.001858 | 145,202.90 | 651.14 | 2.23 | 0.001858 | 145,202.90 | 0.00 |
| 3545 | 312,557.79 | 1.42 | 0.001183 | 4,438.32 | (2,688.00) | 1.42 | 0.001183 | 4,438.32 | 0.00 |
| 3555 | 79,206.80 | 2.06 | 0.001717 | 1,631.66 | (934.64) | 2.06 | 0.001717 | 1,631.66 | 0.00 |
| 3565 | 104,571.36 | 1.69 | 0.001408 | 1,767.26 | (815.23) | 1.69 | 0.001408 | 1,767.26 | 0.00 |
| Total - No CWIP Included | 1,942,558,139.59 | | | 40,218,778.28 | 4,017,641.32 | | | 34,367,973.80 | -5,850,804.48 |

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF-17**

Refer to pages 19-20 of the Kollen Testimony regarding his recommended reduction to Big Rivers' Transmission of Electricity by Others Expense and to Exhibit LK-11.

a. The testimony states that, since Big Rivers has proposed post-test year adjustments that increase its revenue requirement, the Commission should consider Mr. Kollen's proposed post-test year adjustment because it decreases Big Rivers' revenue requirement. Explain whether there are other reasons which support the Commission's consideration of this adjustment.

b. The exhibit, a response to a KIUC data request, indicates that in addition to costs incurred for transmission service provided in the test year by the Tennessee Valley Authority ("TVA"), Big Rivers also incurred costs for transmission service provided by the Midwest ISO. However, the budgeted amount upon which Mr. Kollen bases his proposed adjustment reflects only TVA transmission service. Explain whether or not Mr. Kollen has made an independent determination that Big Rivers will not incur costs in the future for transmission service provided by entities other than TVA.

**RESPONSE:**

a. Yes. The Company did not include this amount of expense in its 2011 budget or multi-year financial forecast.

b. No. Mr. Kollen relied on Big Rivers for this assumption.

Witness: Lane Kollen

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

| | | |
|---|---|---|
| APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES | ) ) ) | CASE NO. 2011-00036 |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF-18**
Refer to pages 30-33 of the Kollen Testimony which cover KIUC's proposal that Big Rivers be required to retire patronage capital on an annual basis equal to 25 percent of its prior year's margin. Explain, specifically, how 25 percent was chosen as compared to some other percentage.

**RESPONSE**:

Mr. Kollen chose the 25% because that is the maximum distribution that Big Rivers may make pursuant to its borrowing covenants with CoBank. It is Mr. Kollen's informed judgment that a 25% patronage capital distribution would be appropriate in light of its very strong equity capital percentage when compared to other G&T cooperatives. By way of comparison, NRECA uses a 50% factor. Big Rivers must carefully balance its financial health, its cost structure, and the rates necessary to recover its costs. The margin each year represents the amounts that the utility charged its member-owners in excess of its actual costs. These amounts belong to the member-owners, but also represent a source of capital for the utility. Recoveries from ratepayers in excess of the utility's costs are reported as margins on the utility's income statement and allow the utility to meet its required financial metrics, including MFIR and DSC. The margins, which were recognized through the utility's income statement, add to the utility's patronage capital. Unlike the margins, the retirements are not recognized through the utility's income statement. Thus, rates in excess of costs contribute to the utility's financial health and enable it to meet its required financial metrics, but retirements of patronage capital can be used to mitigate the effect of rates in excess of costs without harming the utility's financial health.

Witness: Lane Kollen

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF-19**
Refer to the Direct Testimony of Stephen J. Baron ("Baron Testimony") at page 14. Mr. Baron recommends using a 6 Coincident Peak ("CP") demand methodology to allocate production demand related costs, such as that used by Mr. Seelye for EKPC in Case No. 2008-00409.[2]

a. Explain why the 6 CP methodology is not less appropriate for Big Rivers than for EKPC given the share of Big Rivers' total load for which the smelters are responsible and the relative uniformity of the average demand of the smelters.
b. Provide a side-by-side comparison of the resultant wholesale rates for each Big Rivers rate class under the 6 CP and 12 CP methodologies, absent any other adjustments.

**RESPONSE:**

a. The relevant issue to consider in evaluating the "cost causative" factors associated with production demand (fixed generating plant revenue requirements and purchased power capacity costs) is the influence of customer loads at the time of the system peaks used by Big Rivers to determine the need for capacity. Based on Big Rivers IRP, the summer peak demand and, to a lesser extent, winter peak demands determine the need for capacity. Because of the near constant load of the Smelters (assumed 98% load factor), coupled with the fact that the Smelters comprise 70% of the total system load, Big Rivers' monthly peaks are relatively flat during the year. However, this does not change the fact that peak loads during the summer and winter months drive the need for capacity on the system. It does not matter, in this evaluation, whether the July, August or December peaks are only 200 MW greater than off-peak months such as April or October. What does matter is whether an increase in peak load during the summer or winter months (corresponding to the 6 CP used in the KIUC analysis) impacts the need for capacity on the system – the answer is that it does, while increases in the off-peak months do not cause a need for capacity (unless such an increase causes the off-peak months to become the peak month). Consider a system that is comprised of two customer classes. The first, class A, has a 100% load factor load of 90 MW. Class B has 10 MW of load only during the three summer month and three winter months, 0 MW of load in the other months. The Figure 1 below shows a plot of the monthly peaks.

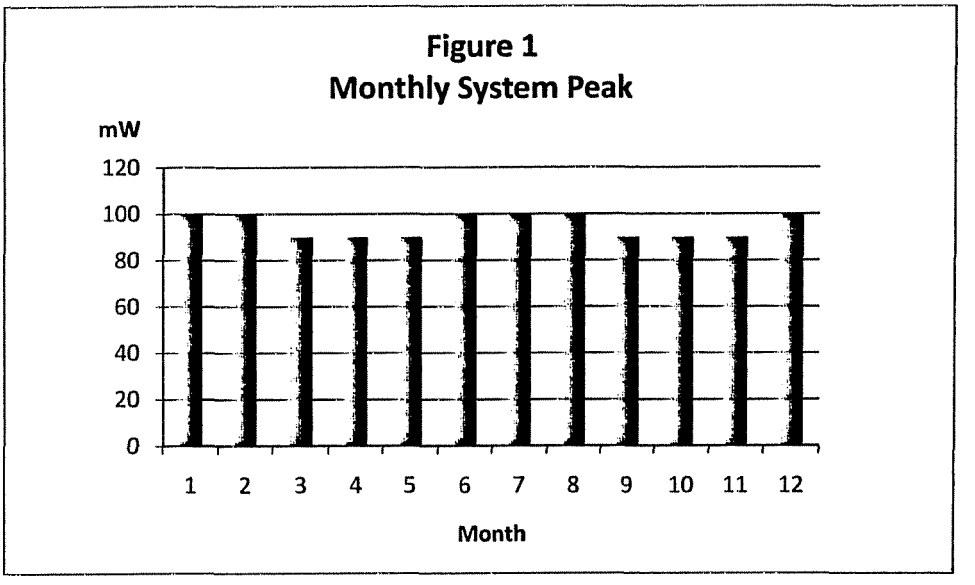
[2] Case No. 2008-00409, General Adjustment of Electric Rates of East Kentucky Power Cooperative, Inc. (Ky. PSC Mar. 31, 2009).

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES | ) ) ) | CASE NO. 2011-00036 |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**




Looking at this chart, the 12 monthly peaks are almost identical – yet it is the system peak load that occurs during the summer and winter months that determines the need for and investment in capacity on the system. This would indicate that a rational allocation method for this utility would be the class contribution to the three summer and three winter peaks (6 CP). In the same manner, on the Big Rivers system, class contributions to the three summer and three winter peaks is a reasonable measure of cost responsibility, irrespective of the size of the high load factor Smelter load.

b. See Table 1 below that shows a comparison of the revenue increases using the KIUC methodology without any KIUC revenue requirement adjustments, for each rate class under both the KIUC 6 CP and 12 CP cost of service studies. Because the KIUC class cost of service studies were developed with the full Smelter test year revenues (i.e., no pro-forma adjustment to move the Smelters to the mid-point of the TIER Adjustment), the overall Big Rivers' requested revenue increase is reduced by $7,114,653 to an increase of $32,839,312. Also attached is the spreadsheet used to develop Table 1.

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES | ) ) ) | CASE NO. 2011-00036 |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Table1**
**6 CP vs. 12 CP - Using KIUC Cost of Service Studies**

| Line | 6 CP | Total System | Rurals | Large Industrials | Smelters |
|---|---|---|---|---|---|
| 1 | Subsidy at Present Rates | - | (18,319,114) | (50,193) | 18,369,307 |
| 2 | **Big Rivers Requested Revenue Increase*** | **32,839,312** | | | |
| 3 | Eliminate Subsidy to Rurals | 18,319,114 | 18,319,114 | - | - |
| 4 | Spread of Increase Remainder | 14,520,198 | 3,969,904 | 1,372,143 | 9,178,151 |
| 5 | Step 1 Increase - Rurals Subsidy | 18,319,114 | 18,319,114 | - | - |
| 6 | Net Increase | 32,839,312 | 22,289,018 | 1,372,143 | 9,178,151 |
| | **12 CP** | | | | |
| 1 | Subsidy at Present Rates | - | (13,242,103) | (552,120) | 13,794,223 |
| 2 | **Big Rivers Requested Revenue Increase*** | **32,839,312** | | | |
| 3 | Eliminate Subsidy to Rurals | 13,242,103 | 13,242,103 | - | - |
| 4 | Spread of Increase Remainder | 19,597,209 | 5,357,988 | 1,851,915 | 12,387,307 |
| 5 | Step 1 Increase - Rurals Subsidy | 13,242,103 | 13,242,103 | - | - |
| 6 | Net Increase | 32,839,312 | 18,600,090 | 1,851,915 | 12,387,307 |

* Reflects KIUC Cost of Service Study use of full Smelter revenues (i.e., no pro-forma TIER Adjustment)

Witness: Stephen J. Baron

## Big Rivers Electric Corporation

### Analysis of Rate Increase Scenario

6 CP Cost of Service using Seelye model with TIER Adjustment at $1.95

| Line | | Total System | Rurals | Large Industrials | Smelters |
|---|---|---|---|---|---|
| 1 | **Rate Base - 6 CP** | 1,170,341,502 | $ 390,335,625 | $ 96,406,419 | $ 683,599,459 |
| 2 | Net Utility Operating Margin | 25,806,684 | $ (9,711,995) | $ 2,075,623 | $ 33,443,057 |
| 3 | Return on Rate Base | 2.21% | -2.49% | 2.15% | 4.89% |
| 4 | Subsidy at Present Rates | - | (18,319,114) | (50,193) | 18,369,307 |
| 5 | Adjusted Total Increase Required* | 32,839,312 | | | |
| | **Rate Base -12 CP** | 1,170,341,502 | $ 359,504,551 | $ 99,270,357 | $ 711,566,594 |
| | Net Utility Operating Margin | 25,806,684 | $ (5,314,827) | $ 1,636,847 | $ 29,484,664 |
| | Return on Rate Base | 2.21% | -1.48% | 1.65% | 4.14% |
| | Subsidy at Present Rates | - | (13,242,103) | (552,120) | 13,794,223 |
| | Adjusted Total Increase Required* | 32,839,312 | | | |

* Big Rivers, as-filed with full test-year Smelter TIER Adjustment revenues

# Table1

## 6 CP vs. 12 CP - Using KIUC Cost of Service Studies

| Line | 6 CP | Total System | Rurals | Large Industrials | Smelters |
|---|---|---|---|---|---|
| 1 | Subsidy at Present Rates | - | (18,319,114) | (50,193) | 18,369,307 |
| 2 | **Big Rivers Requested Revenue Increase*** | **32,839,312** | | | |
| 3 | Eliminate Subsidy to Rurals | 18,319,114 | 18,319,114 | - | - |
| 4 | Spread of Increase Remainder | 14,520,198 | 3,969,904 | 1,372,143 | 9,178,151 |
| 5 | Step 1 Increase - Rurals Subsidy | 18,319,114 | 18,319,114 | - | - |
| 6 | Net Increase | 32,839,312 | 22,289,018 | 1,372,143 | 9,178,151 |
| | **12 CP** | | | | |
| 1 | Subsidy at Present Rates | - | (13,242,103) | (552,120) | 13,794,223 |
| 2 | **Big Rivers Requested Revenue Increase*** | **32,839,312** | | | |
| 3 | Eliminate Subsidy to Rurals | 13,242,103 | 13,242,103 | - | - |
| 4 | Spread of Increase Remainder | 19,597,209 | 5,357,988 | 1,851,915 | 12,387,307 |
| 5 | Step 1 Increase - Rurals Subsidy | 13,242,103 | 13,242,103 | - | - |
| 6 | Net Increase | 32,839,312 | 18,600,090 | 1,851,915 | 12,387,307 |

* Reflects KIUC Cost of Service Study use of full Smelter revenues (i.e., no pro-forma TIER Adjustment)

| | | | |
|---|---|---|---|
| 10,675,114,974 | 2,449,147,804 | 928,887,170 | 7,297,080,000 |
| 1 | 0.229425895 | 0.087014254 | 0.683559851 |

# Big Rivers Electric Corporation

6 CP Cost of Service using Seelye model with TIER Adjustment at test year level of $1.95

| Line | 6 CP | Total System | Rurals | Large Industrials | Smelters |
|---|---|---|---|---|---|
| 1 | Rate Base - 6 CP | 1,170,341,502 | 390,335,625 | 96,406,419 | 683,599,459 |
| 2 | Net Utility Operating Margin | 25,806,684 | (9,711,995) | 2,075,623 | 33,443,057 |
| 3 | Return on Rate Base | 2.21% | -2.49% | 2.15% | 4.89% |
| 4 | Subsidy at Present Rates | - | (18,319,114) | (50,193) | 18,369,307 |
| 5 | **KIUC Proposed Revenue Increase** | **32,839,312** | | | |
| 6 | Eliminate Subsidy to Rurals | 18,319,114 | 18,319,114 | - | - |
| 7 | Remainder of Increase to be Allocated | 14,520,198 | | | |
| 8 | Demand/Energy Base Revenue - Current Rates | 118,930,921 | 88,490,963 | 30,439,958 | |
| 9 | Weather Normalization Adjustment | (421,610) | (421,610) | - | |
| 10 | Base Rate Revenue | 322,119,734 | 88,069,353 | 30,439,958 | 203,610,423 |
| 11 | Revenue Allocator using Smelter/Industrial Ratio | 322,119,734 | 88,069,353 | 30,439,958 | 203,610,423 |
| 12 | **Percent Allocator** | **100.00%** | **27.34%** | **9.45%** | **63.21%** |
| 13 | Spread of Increase Remainder | 14,520,198 | 3,969,904 | 1,372,143 | 9,178,151 |
| 14 | Step 1 Increase - Rurals Subsidy | 18,319,114 | 18,319,114 | - | - |
| 15 | Net Increase (before Rural Reserve or Capital Credits) | 32,839,312 | 22,289,018 | 1,372,143 | 9,178,151 |

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

| | | |
|---|---|---|
| APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES | ) ) ) | CASE NO. 2011-00036 |

KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO
COMMISSION STAFF'S INITIAL INFORMATION REQUEST
PSC CASE NO. 2011-00036
June 22, 2011

**Request STAFF-20.**
Refer to the Baron Testimony at page 20. Starting at line 14, Mr. Baron states that the smelter rates will automatically increase on January 1, 2012 by $.30 per MWh, or approximately $2.2 million, and that the $2.2 million "increase will flow directly to the Rural and Large Industrial customer classes." Explain the reason for the automatic increase and how the increase will flow to the non-smelter classes.

**RESPONSE:**

The increase occurs on January 1, 2012 automatically pursuant to the provisions of Section 4.11(a) of each Smelter Agreement (Surcharges). These amounts paid by the Smelters pursuant to Section 4.11(a) flow through as credits to Rural and Large Industrial customer classes pursuant to Big Rivers' Rate "US" (Unwind Surcredit).

Witness: Stephen J. Baron

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF-21**
Refer to page 29 of the Baron Testimony, lines 3-1 9. KIUC recommends that the Rural Economic Reserve ("RER") be used annually to partially offset the rate increase proposed by KIUC in this case.

a. Mr. Baron states that the Commission Order in Case No. 2007- 004553 "intended that the fund be used to mitigate the impact of future FAC and Environmental Surcharge increases." Provide the citation of the Order wherein this intention was stated.
b. Mr. Baron proposes to withdraw approximately $4.2 million annually from the RER fund to mitigate the Rural revenue increase proposed by KIUC, while stating that the Commission's intent for the RER fund is to mitigate future FAC and Environmental Surcharges. With environmental compliance casts accelerating due to federal environmental requirements, explain why those concerns should not be even greater given KIUC's interpretation of the Commission's intent in Case No. 2007-00455.
c. KIUC intends that this recommendation replace the method set out in Big River's current tariff for depletion of the RER or that the RER be depleted by both methods simultaneously (note that the tariff method would not begin until the Economic Reserve is depleted). If KIUC intends that both methods be used, state whether Mr. Baron believes that customers will experience rate shock when the RER is depleted.
d. Mr. Baron states that, if the Commission adopts the KIUC proposal, the fund would be fully utilized by late 2016 or early 2017. Provide the calculations supporting this projection.

**RESPONSE**:

a. The Commission order did not discuss the specific use of the RER fund. Rather, the order states that the RER is specifically to be used to "credit the bills rendered to the Rural Customers over a period 24 months commencing upon the depletion of all funds in the Economic Reserve." (order at Appendix A, paragraph 24). However, at page 11 of the Commission order, the Commission specifically states that the Economic Reserve account will be used "to offset future wholesale power cost increases for non-Smelter customers due to increases in fuel, environmental, and other costs. Since the RER

[3] Case No. 2007-00455, The Applications of Big Rivers Electric Corporation for: (I) Approval of Wholesale Tariff Additions for Big Rivers Electric Corporation, (2) Approval of Transactions, (3) Approval to issue Evidences of Indebtedness, and (4) Approval of Amendments to Contracts; and of E.ON U.S., LLC, Western Kentucky Energy Corp., and LG&E Energy Marketing, Inc. for Approval of Transactions (Ky. PSC Mar. 6, 2009).

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

provides credits upon the depletion of the Economic Reserve account (which is to be used to offset fuel, environmental, and other cost increases), the RER would be expected to offset the same cost increases (fuel, environmental, and other cost increases).

b. As discussed in response to Part (c) of this question, under the KIUC proposal the RER would be depleted about 12 months earlier than otherwise projected to occur by Big Rivers. KIUC believes that the current economic environment justifies the use of the RER beginning September 1, 2011 rather than imposing the full rate increase on Rural customers. The ultimate objective of the RER is to benefit Rural customers by reducing the otherwise applicable Big Rivers charges. The KIUC proposal accomplishes this objective by reducing known Rural rate increases.

c. KIUC's proposal is that the RER would begin providing $4.2 million annually to off-set the Rural rate increase in this case, beginning on September 1, 2011. When the Economic Reserve fund is depleted, the RER would also begin to off-set FAC and environmental compliance costs. As shown in the analysis in response to Part (d) of this question, based on Big Rivers' projections and adoption of the KIUC proposal to utilize the RER to partially off-set the Rural rate increase, the RER fund would be depleted in early 2017 (March), rather than Big Rivers' assumed depletion date in early 2018 (about 12 months difference). Mr. Baron does not know whether consumers will experience rate shock upon the depletion of the RER, whether or not the KIUC proposal is adopted. All else being equal, Rural rates would be higher without the RER credits – the determination of rate shock would be a function of the percentage change in rates as a result of the depletion of the RER credits.

d. See attached analysis on enclosed CD.

Witness: Stephen J. Baron

## Big Rivers Rural Economic Reserve Fund Analysis

| Month | Year | Beginning Balance | Interest Income | Forecasted Withdrawals | KIUC Mitigation | Ending Balance | BREC Implied Interest Rate |
|---|---|---|---|---|---|---|---|
| Aug | 2011 | 63,017,077 | 98,003 | | | 63,115,080 | |
| Sep | 2011 | 63,115,080 | 94,990 | | | 63,210,070 | 0.15050% |
| Oct | 2011 | 63,210,070 | 98,306 | | | 63,308,376 | 0.15552% |
| Nov | 2011 | 63,308,376 | 95,284 | | | 63,403,660 | 0.15051% |
| Dec | 2011 | 63,403,660 | 98,610 | | | 63,502,270 | 0.15553% |
| Jan | 2012 | 63,502,270 | 98,495 | | | 63,600,765 | 0.15510% |
| Feb | 2012 | 63,600,765 | 92,285 | | | 63,693,050 | 0.14510% |
| Mar | 2012 | 63,693,050 | 98,794 | | | 63,791,844 | 0.15511% |
| Apr | 2012 | 63,791,844 | 95,757 | | | 63,887,601 | 0.15011% |
| May | 2012 | 63,887,601 | 99,099 | | | 63,986,700 | 0.15511% |
| Jun | 2012 | 63,986,700 | 96,052 | | | 64,082,752 | 0.15011% |
| Jul | 2012 | 64,082,752 | 99,405 | | | 64,182,157 | 0.15512% |
| Aug | 2012 | 64,182,157 | 99,560 | | | 64,281,717 | 0.15512% |
| Sep | 2012 | 64,281,717 | 96,500 | | | 64,378,217 | 0.15012% |
| Oct | 2012 | 64,378,217 | 99,868 | | | 64,478,085 | 0.15513% |
| Nov | 2012 | 64,478,085 | 96,798 | | | 64,574,883 | 0.15013% |
| Dec | 2012 | 64,574,883 | 100,176 | | | 64,675,059 | 0.15513% |
| Jan | 2013 | 64,675,059 | 97,895 | | | 64,772,954 | 0.15137% |
| Feb | 2013 | 64,772,954 | 98,044 | | | 64,870,998 | 0.15137% |
| Mar | 2013 | 64,870,998 | 98,192 | | | 64,969,190 | 0.15137% |
| Apr | 2013 | 64,969,190 | 98,341 | | | 65,067,531 | 0.15137% |
| May | 2013 | 65,067,531 | 98,490 | | | 65,166,020 | 0.15137% |
| Jun | 2013 | 65,166,020 | 98,639 | | | 65,264,659 | 0.15137% |
| Jul | 2013 | 65,264,659 | 98,788 | | | 65,363,447 | 0.15137% |
| Aug | 2013 | 65,363,447 | 98,937 | | | 65,462,384 | 0.15137% |
| Sep | 2013 | 65,462,384 | 99,087 | | | 65,561,472 | 0.15137% |
| Oct | 2013 | 65,561,472 | 99,237 | | | 65,660,709 | 0.15137% |
| Nov | 2013 | 65,660,709 | 99,387 | | | 65,760,096 | 0.15137% |
| Dec | 2013 | 65,760,096 | 99,538 | | | 65,859,634 | 0.15137% |
| Jan | 2014 | 65,859,634 | 99,706 | | | 65,959,340 | 0.15139% |
| Feb | 2014 | 65,959,340 | 99,857 | | | 66,059,198 | 0.15139% |
| Mar | 2014 | 66,059,198 | 100,008 | | | 66,159,206 | 0.15139% |
| Apr | 2014 | 66,159,206 | 100,160 | | | 66,259,366 | 0.15139% |
| May | 2014 | 66,259,366 | 100,311 | | | 66,359,677 | 0.15139% |
| Jun | 2014 | 66,359,677 | 100,463 | | | 66,460,141 | 0.15139% |
| Jul | 2014 | 66,460,141 | 100,615 | | | 66,560,756 | 0.15139% |
| Aug | 2014 | 66,560,756 | 100,768 | | | 66,661,524 | 0.15139% |
| Sep | 2014 | 66,661,524 | 100,920 | | | 66,762,444 | 0.15139% |
| Oct | 2014 | 66,762,444 | 101,073 | | | 66,863,517 | 0.15139% |
| Nov | 2014 | 66,863,517 | 101,226 | | | 66,964,744 | 0.15139% |
| Dec | 2014 | 66,964,744 | 101,379 | | | 67,066,123 | 0.15139% |
| Jan | 2015 | 67,066,123 | 110,503 | 999,721 | | 66,176,905 | 0.16477% |
| Feb | 2015 | 66,176,905 | 109,038 | 999,721 | | 65,286,223 | 0.16477% |

## Big Rivers Rural Economic Reserve Fund Analysis

| Month | Year | Beginning Balance | Interest Income | Forecasted Withdrawals | KIUC Mitigation | Ending Balance | BREC Implied Interest Rate |
|---|---|---|---|---|---|---|---|
| Mar | 2015 | 65,286,223 | 107,571 | 999,721 | | 64,394,073 | 0.16477% |
| Apr | 2015 | 64,394,073 | 106,101 | 999,721 | | 63,500,452 | 0.16477% |
| May | 2015 | 63,500,452 | 104,628 | 999,721 | | 62,605,360 | 0.16477% |
| Jun | 2015 | 62,605,360 | 103,154 | 999,721 | | 61,708,792 | 0.16477% |
| Jul | 2015 | 61,708,792 | 101,676 | 999,721 | | 60,810,748 | 0.16477% |
| Aug | 2015 | 60,810,748 | 100,197 | 999,721 | | 59,911,223 | 0.16477% |
| Sep | 2015 | 59,911,223 | 98,714 | 999,721 | | 59,010,217 | 0.16477% |
| Oct | 2015 | 59,010,217 | 97,230 | 999,721 | | 58,107,726 | 0.16477% |
| Nov | 2015 | 58,107,726 | 95,743 | 999,721 | | 57,203,748 | 0.16477% |
| Dec | 2015 | 57,203,748 | 94,253 | 999,721 | | 56,298,280 | 0.16477% |
| Jan | 2016 | 56,298,280 | 106,525 | 2,199,905 | | 54,204,900 | 0.18921% |
| Feb | 2016 | 54,204,900 | 102,564 | 2,199,905 | | 52,107,559 | 0.18921% |
| Mar | 2016 | 52,107,559 | 98,595 | 2,199,905 | | 50,006,249 | 0.18921% |
| Apr | 2016 | 50,006,249 | 94,619 | 2,199,905 | | 47,900,963 | 0.18921% |
| May | 2016 | 47,900,963 | 90,636 | 2,199,905 | | 45,791,694 | 0.18921% |
| Jun | 2016 | 45,791,694 | 86,645 | 2,199,905 | | 43,678,434 | 0.18921% |
| Jul | 2016 | 43,678,434 | 82,646 | 2,199,905 | | 41,561,175 | 0.18921% |
| Aug | 2016 | 41,561,175 | 78,640 | 2,199,905 | | 39,439,910 | 0.18921% |
| Sep | 2016 | 39,439,910 | 74,626 | 2,199,905 | | 37,314,632 | 0.18921% |
| Oct | 2016 | 37,314,632 | 70,605 | 2,199,905 | | 35,185,332 | 0.18921% |
| Nov | 2016 | 35,185,332 | 66,576 | 2,199,905 | | 33,052,003 | 0.18921% |
| Dec | 2016 | 33,052,003 | 62,539 | 2,199,905 | | 30,914,637 | 0.18921% |
| Jan | 2017 | 30,914,637 | 73,568 | 2,203,525 | | 28,784,680 | 0.23797% |
| Feb | 2017 | 28,784,680 | 68,500 | 2,203,525 | | 26,649,654 | 0.23797% |
| Mar | 2017 | 26,649,654 | 63,419 | 2,203,525 | | 24,509,548 | 0.23797% |
| Apr | 2017 | 24,509,548 | 58,326 | 2,203,525 | | 22,364,348 | 0.23797% |
| May | 2017 | 22,364,348 | 53,221 | 2,203,525 | | 20,214,044 | 0.23797% |
| Jun | 2017 | 20,214,044 | 48,104 | 2,203,525 | | 18,058,623 | 0.23797% |
| Jul | 2017 | 18,058,623 | 42,975 | 2,203,525 | | 15,898,072 | 0.23797% |
| Aug | 2017 | 15,898,072 | 37,833 | 2,203,525 | | 13,732,380 | 0.23797% |
| Sep | 2017 | 13,732,380 | 32,679 | 2,203,525 | | 11,561,533 | 0.23797% |
| Oct | 2017 | 11,561,533 | 27,513 | 2,203,525 | | 9,385,521 | 0.23797% |
| Nov | 2017 | 9,385,521 | 22,335 | 2,203,525 | | 7,204,331 | 0.23797% |
| Dec | 2017 | 7,204,331 | 17,144 | 2,203,525 | | 5,017,950 | 0.23797% |
| Jan | 2018 | 5,017,950 | * | | | | |

* Per Balance shown on Big Rivers Response to KIUC 1 - 64.

KIUC Rural Economic Reserve Fund Analysis

| Month | Year | Beginning Balance | Interest Income | Forecasted Withdrawals | KIUC Mitigation | Ending Balance | BREC Implied Interest Rate |
|---|---|---|---|---|---|---|---|
| Aug | 2011 | 63,017,077 | 98,003 | | | 63,115,080 | |
| Sep | 2011 | 63,115,080 | 94,990 | | 353,792 | 62,856,278 | 0.15050% |
| Oct | 2011 | 62,856,278 | 97,756 | | 353,792 | 62,600,241 | 0.15552% |
| Nov | 2011 | 62,600,241 | 94,218 | | 353,792 | 62,340,668 | 0.15051% |
| Dec | 2011 | 62,340,668 | 96,957 | | 353,792 | 62,083,832 | 0.15553% |
| Jan | 2012 | 62,083,832 | 96,295 | | 353,792 | 61,826,335 | 0.15510% |
| Feb | 2012 | 61,826,335 | 89,710 | | 353,792 | 61,562,253 | 0.14510% |
| Mar | 2012 | 61,562,253 | 95,489 | | 353,792 | 61,303,950 | 0.15511% |
| Apr | 2012 | 61,303,950 | 92,022 | | 353,792 | 61,042,180 | 0.15011% |
| May | 2012 | 61,042,180 | 94,685 | | 353,792 | 60,783,073 | 0.15511% |
| Jun | 2012 | 60,783,073 | 91,243 | | 353,792 | 60,520,524 | 0.15011% |
| Jul | 2012 | 60,520,524 | 93,879 | | 353,792 | 60,260,611 | 0.15512% |
| Aug | 2012 | 60,260,611 | 93,477 | | 353,792 | 60,000,296 | 0.15512% |
| Sep | 2012 | 60,000,296 | 90,073 | | 353,792 | 59,736,577 | 0.15012% |
| Oct | 2012 | 59,736,577 | 92,668 | | 353,792 | 59,475,452 | 0.15513% |
| Nov | 2012 | 59,475,452 | 89,288 | | 353,792 | 59,210,948 | 0.15013% |
| Dec | 2012 | 59,210,948 | 91,855 | | 353,792 | 58,949,010 | 0.15513% |
| Jan | 2013 | 58,949,010 | 89,228 | | 353,792 | 58,684,446 | 0.15137% |
| Feb | 2013 | 58,684,446 | 88,828 | | 353,792 | 58,419,482 | 0.15137% |
| Mar | 2013 | 58,419,482 | 88,427 | | 353,792 | 58,154,117 | 0.15137% |
| Apr | 2013 | 58,154,117 | 88,025 | | 353,792 | 57,888,350 | 0.15137% |
| May | 2013 | 57,888,350 | 87,623 | | 353,792 | 57,622,180 | 0.15137% |
| Jun | 2013 | 57,622,180 | 87,220 | | 353,792 | 57,355,608 | 0.15137% |
| Jul | 2013 | 57,355,608 | 86,816 | | 353,792 | 57,088,632 | 0.15137% |
| Aug | 2013 | 57,088,632 | 86,412 | | 353,792 | 56,821,252 | 0.15137% |
| Sep | 2013 | 56,821,252 | 86,008 | | 353,792 | 56,553,468 | 0.15137% |
| Oct | 2013 | 56,553,468 | 85,602 | | 353,792 | 56,285,278 | 0.15137% |
| Nov | 2013 | 56,285,278 | 85,196 | | 353,792 | 56,016,682 | 0.15137% |
| Dec | 2013 | 56,016,682 | 84,790 | | 353,792 | 55,747,679 | 0.15137% |
| Jan | 2014 | 55,747,679 | 84,398 | | 353,792 | 55,478,285 | 0.15139% |
| Feb | 2014 | 55,478,285 | 83,990 | | 353,792 | 55,208,483 | 0.15139% |
| Mar | 2014 | 55,208,483 | 83,581 | | 353,792 | 54,938,272 | 0.15139% |
| Apr | 2014 | 54,938,272 | 83,172 | | 353,792 | 54,667,652 | 0.15139% |
| May | 2014 | 54,667,652 | 82,763 | | 353,792 | 54,396,622 | 0.15139% |
| Jun | 2014 | 54,396,622 | 82,352 | | 353,792 | 54,125,182 | 0.15139% |
| Jul | 2014 | 54,125,182 | 81,941 | | 353,792 | 53,853,332 | 0.15139% |
| Aug | 2014 | 53,853,332 | 81,530 | | 353,792 | 53,581,069 | 0.15139% |
| Sep | 2014 | 53,581,069 | 81,118 | | 353,792 | 53,308,395 | 0.15139% |
| Oct | 2014 | 53,308,395 | 80,705 | | 353,792 | 53,035,307 | 0.15139% |
| Nov | 2014 | 53,035,307 | 80,291 | | 353,792 | 52,761,806 | 0.15139% |
| Dec | 2014 | 52,761,806 | 79,877 | | 353,792 | 52,487,891 | 0.15139% |
| Jan | 2015 | 52,487,891 | 86,483 | 999,721 | 353,792 | 51,220,861 | 0.16477% |
| Feb | 2015 | 51,220,861 | 84,396 | 999,721 | 353,792 | 49,951,744 | 0.16477% |

KIUC Rural Economic Reserve Fund Analysis

| Month | Year | Beginning Balance | Interest Income | Forecasted Withdrawals | KIUC Mitigation | Ending Balance | BREC Implied Interest Rate |
|---|---|---|---|---|---|---|---|
| Mar | 2015 | 49,951,744 | 82,304 | 999,721 | 353,792 | 48,680,535 | 0.16477% |
| Apr | 2015 | 48,680,535 | 80,210 | 999,721 | 353,792 | 47,407,232 | 0.16477% |
| May | 2015 | 47,407,232 | 78,112 | 999,721 | 353,792 | 46,131,831 | 0.16477% |
| Jun | 2015 | 46,131,831 | 76,010 | 999,721 | 353,792 | 44,854,328 | 0.16477% |
| Jul | 2015 | 44,854,328 | 73,906 | 999,721 | 353,792 | 43,574,720 | 0.16477% |
| Aug | 2015 | 43,574,720 | 71,797 | 999,721 | 353,792 | 42,293,005 | 0.16477% |
| Sep | 2015 | 42,293,005 | 69,685 | 999,721 | 353,792 | 41,009,177 | 0.16477% |
| Oct | 2015 | 41,009,177 | 67,570 | 999,721 | 353,792 | 39,723,234 | 0.16477% |
| Nov | 2015 | 39,723,234 | 65,451 | 999,721 | 353,792 | 38,435,172 | 0.16477% |
| Dec | 2015 | 38,435,172 | 63,329 | 999,721 | 353,792 | 37,144,987 | 0.16477% |
| Jan | 2016 | 37,144,987 | 70,284 | 2,199,905 | 353,792 | 34,661,574 | 0.18921% |
| Feb | 2016 | 34,661,574 | 65,585 | 2,199,905 | 353,792 | 32,173,462 | 0.18921% |
| Mar | 2016 | 32,173,462 | 60,877 | 2,199,905 | 353,792 | 29,680,642 | 0.18921% |
| Apr | 2016 | 29,680,642 | 56,160 | 2,199,905 | 353,792 | 27,183,105 | 0.18921% |
| May | 2016 | 27,183,105 | 51,434 | 2,199,905 | 353,792 | 24,680,843 | 0.18921% |
| Jun | 2016 | 24,680,843 | 46,700 | 2,199,905 | 353,792 | 22,173,846 | 0.18921% |
| Jul | 2016 | 22,173,846 | 41,956 | 2,199,905 | 353,792 | 19,662,105 | 0.18921% |
| Aug | 2016 | 19,662,105 | 37,204 | 2,199,905 | 353,792 | 17,145,611 | 0.18921% |
| Sep | 2016 | 17,145,611 | 32,442 | 2,199,905 | 353,792 | 14,624,357 | 0.18921% |
| Oct | 2016 | 14,624,357 | 27,671 | 2,199,905 | 353,792 | 12,098,331 | 0.18921% |
| Nov | 2016 | 12,098,331 | 22,892 | 2,199,905 | 353,792 | 9,567,526 | 0.18921% |
| Dec | 2016 | 9,567,526 | 18,103 | 2,199,905 | 353,792 | 7,031,932 | 0.18921% |
| Jan | 2017 | 7,031,932 | 16,734 | 2,203,525 | 353,792 | 4,491,349 | 0.23797% |
| Feb | 2017 | 4,491,349 | 10,688 | 2,203,525 | 353,792 | 1,944,720 | 0.23797% |
| Mar | 2017 | 1,944,720 | 4,628 | 1,949,347 | - | (0) | 0.23797% |

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF-22**
Refer to pages 34-37 of the Baron Testimony regarding Big Rivers' proposal to include $1 million in its revenue requirement for the cost of Demand-Side Management ("DSM") programs. Mr. Baron's testimony emphasizes the distinctions between Big Rivers' proposal to recover these costs through its base rates and recovery pursuant to an alternative cost recovery mechanism pursuant to KRS 278.285. Explain, from a cost of service and revenue allocation perspective, whether KIUC would be opposed to an allocation of revenues which recognizes that none of Big Rivers' DSM costs are for programs that serve the aluminum smelters and which assigns them none of those costs.

**RESPONSE:**

KIUC believes that it is appropriate to use an alternative cost recovery mechanism in this particular case because Big Rivers has not established a reasonable estimate (via a supportable budget) to justify the inclusion of $1 million in its base rates. From a policy standpoint, it is not desirable, in Mr. Baron's opinion, to simply grant Big Rivers a $1 million checking account for possible DSM expenditures. The alternative cost recovery mechanism provides Big Rivers with cost recovery and at the same time permits the Commission and parties of this case to evaluate the reasonableness of actual expenditures. Notwithstanding this position, it would certainly be appropriate to limit the cost of service allocation of DSM costs that are included in base rates to the rate classes that cause the costs. In this case, these classes would not include the Smelter class. Based on Mr. Baron's review of Big Rivers data responses in this case, most of the costs would be assignable to the Rural rate class, though there does not appear to be any quantifiable allocation of the $1 million pro-forma expense between the Rural and Large Industrial rate classes.

Witness: Stephen J. Baron

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF-23**
Refer to the Baron Testimony at page 38. Mr. Baron proposes to expand the Rate LICX tariff to include existing large industrial customers that may want to expand their usage rather than be required to take power at market prices. Explain whether this proposal conflicts with the Morey Testimony wherein it is stated that Big Rivers' generation is frequently "out of the market." Include in the explanation whether Mr. Baron believes Big Rivers' standard cost-based tariffed rates are economically competitive with those rates of other utilities in the region.

**RESPONSE:**

Mr. Baron does not believe that the KIUC proposal conflicts with Dr. Morey's testimony. Dr. Morey developed an analysis of market prices and potential sales of Big Rivers' generation under a scenario wherein the Smelters are no longer served by Big Rivers. He did not compare projected Large Industrial rates to market prices. More significantly, the issue facing a potential Large Industrial customer that may increase load on the Big Rivers' system is the cost of power over the long term, the length of which may vary by customer. Potential Large Industrial expansion would normally consider the cost, and risk, of future electric prices over a longer period than three years. As such, the ability to purchase power under a cost-based tariff could be a significant factor in the overall economic evaluation made by such an expansion customer.

Mr. Baron has not performed a comparison of Big Rivers' cost-based Large Industrial rates to the rates of other utilities in the region.

Witness: Stephen J. Baron

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF-24**
Provide an electronic copy of Exhibits SJB-3, SJB-4, SJB-5, and SJB-6 with the formulas intact and unprotected.

**RESPONSE:**

See attached on enclosed CD.

Witness: Stephen J. Baron

# Table 4

## Subsidies Remaining at Proposed Rates

| | | Total System | Rurals | Large Industrials | Smelters |
|---|---|---|---|---|---|
| 1 | Rate Base - 6 CP | 1,170,341,502 | 390,335,625 | 96,406,419 | 683,599,459 |
| 2 | Net Utility Operating Margin | 25,806,684 | (9,711,995) | 2,075,623 | 33,443,057 |
| 3 | Return on Rate Base | 2.21% | -2.49% | 2.15% | 4.89% |
| 4 | Subsidy at Present Rates | - | (18,319,114) | (50,193) | 18,369,307 |
| 5 | **Adjusted Total Increase Required** | **18,679,000** | | | |
| 6 | Eliminate Rural Subsidy | 18,319,114 | 18,319,114 | | |
| 7 | Spread of Increase Remainder | 359,886 | 98,395 | 34,009 | 227,482 |
| | Step 1 Increase - Rurals Subsidy | 18,319,114 | 18,319,114 | - | - |
| 8 | **Net Increase** | **18,679,000** | **18,417,509** | **34,009** | **227,482** |
| 9 | Income at Proposed Rates (line 2 + line 8) | 44,485,684 | 8,705,513 | 2,109,631 | 33,670,539 |
| 10 | ROR - Proposed Rates (line 9/line 1) | 3.80% | 2.23% | 2.19% | 4.93% |
| 11 | Net Utility Operating Margin at System ROR | 44,485,684 | 14,836,992 | 3,664,491 | 25,984,202 |
| 12 | **Subsidy at Proposed Rates (line 11 - line 9)** | **-** | **6,131,478** | **1,554,859** | **(7,686,338)** |

## Big Rivers Electric Corporation

### Analysis of Rate Increase Scenario

6 CP Cost of Service using Seelye model with TIER Adjustment at $1.95

| Line | | Total System | Rurals | Large Industrials | Smelters |
|---|---|---|---|---|---|
| 1 | Rate Base - 6 CP | 1,170,341,502 | $ 390,335,625 | $ 96,406,419 | $ 683,599,459 |
| 2 | Net Utility Operating Margin | 25,806,684 | $ (9,711,995) | $ 2,075,623 | $ 33,443,057 |
| 3 | Return on Rate Base | 2.21% | -2.49% | 2.15% | 4.89% |
| 4 | Subsidy at Present Rates | - | (18,319,114) | (50,193) | 18,369,307 |
| 5 | Adjusted Total Increase Required | 18,679,000 | | | |

# Table 3

## KIUC Proposed Rate Increases

| Line | | Total System | Rurals | Large Industrials | Smelters |
|---|---|---|---|---|---|
| 4 | Subsidy at Present Rates | - | (18,319,114) | (50,193) | 18,369,307 |
| 5 | **KIUC Proposed Revenue Increase** | **18,679,000** | | | |
| 6 | Eliminate Subsidy to Rurals | 18,319,114 | 18,319,114 | - | - |
| 16 | Spread of Increase Remainder | 359,886 | 98,395 | 34,009 | 227,482 |
| 17 | Step 1 Increase - Rurals Subsidy | 18,319,114 | 18,319,114 | - | - |
| 19 | Net Increase | 18,679,000 | 18,417,509 | 34,009 | 227,482 |
| 20 | Rural Mitigation from RER Fund | (4,245,506) | (4,245,506) | - | - |
| 21 | Net Increase after Mitigation | | 14,172,003 | 34,009 | 227,482 |
| 22 | Patronage Capital Distribution | (2,708,000) | (621,285) | (235,635) | (1,851,080) |
| 23 | Final Effective Base Rate Increase | | 13,550,718 | (201,626) | (1,623,598) |
| 25 | Percent Increase | | 12.26% | -0.51% | -0.57% |

| | | | |
|---|---|---|---|
| 10,675,114,974 | 2,449,147,804 | 928,887,170 | 7,297,080,000 |
| 1 | 0.229425895 | 0.087014254 | 0.683559851 |

# Big Rivers Electric Corporation

## KIUC Proposed Rate Increases

6 CP Cost of Service using Seelye model with TIER Adjustment at test year level of $1.95

| Line | | Total System | Rurals | Large Industrials | Smelters |
|---|---|---|---|---|---|
| 1 | Rate Base - 6 CP | 1,170,341,502 | 390,335,625 | 96,406,419 | 683,599,459 |
| 2 | Net Utility Operating Margin | 25,806,684 | (9,711,995) | 2,075,623 | 33,443,057 |
| 3 | Return on Rate Base | 2.21% | -2.49% | 2.15% | 4.89% |
| 4 | Subsidy at Present Rates | - | (18,319,114) | (50,193) | 18,369,307 |
| 5 | **KIUC Proposed Revenue Increase** | **18,679,000** | | | |
| 6 | Eliminate Subsidy to Rurals | 18,319,114 | 18,319,114 | - | - |
| 7 | Remainder of Increase to be Allocated | 359,886 | | | |
| 8 | Demand/Energy Base Revenue - Current Rates | 118,930,921 | 88,490,963 | 30,439,958 | |
| 9 | Weather Normalization Adjustment | (421,610) | (421,610) | - | |
| 10 | Base Rate Revenue | 322,119,734 | 88,069,353 | 30,439,958 | 203,610,423 |
| 11 | Revenue Allocator using Smelter/Industrial Ratio | 322,119,734 | 88,069,353 | 30,439,958 | 203,610,423 |
| 12 | **Percent Allocator** | **100.00%** | **27.34%** | **9.45%** | **63.21%** |
| 13 | Spread of Increase Remainder | 359,886 | 98,395 | 34,009 | 227,482 |
| 14 | Step 1 Increase - Rurals Subsidy | 18,319,114 | 18,319,114 | - | - |
| 15 | Net Increase (before Rural Reserve or Capital Credits) | 18,679,000 | 18,417,509 | 34,009 | 227,482 |
| 16 | Rural Mitigation from Rural Economic Reserve Fund | (4,245,506) | (4,245,506) | - | - |
| 17 | Net Increase after Mitigation | | 14,172,003 | 34,009 | 227,482 |
| 18 | Patronage Capital Distribution per kWh | (2,708,000) | (621,285) | (235,635) | (1,851,080) |
| 19 | Final Effective Base Rate Increase | | 13,550,718 | (201,626) | (1,623,598) |
| 20 | Present Revenue | 432,165,302 | 110,513,089 | 39,260,372 | 282,391,841 |
| 21 | Percent Increase | | 12.26% | -0.51% | -0.57% |
| 22 | Amortization of Non-FAC PPA | (3,236,077) | (2,340,068) | (896,009) | - |
| 23 | Revenue Increase with Non-FAC PPA Amortization | | 11,210,650 | (1,097,635) | (1,623,598) |
| 24 | Percent Increase | | 10.14% | -2.80% | -0.57% |
| 25 | Impact of Lowering the Non-FAC PPA Base | (2,959,158) | (2,145,453) | (813,705) | - |
| 26 | Adjusted Revenue Increase | | 9,065,197 | (1,911,340) | (1,623,598) |
| 27 | Percent Increase | | 8.20% | -4.87% | -0.57% |

Big Rivers Electric Corporation
Cost of Service Study
Development of A&E Factor

| | |
|---|---|
| BR System Peak | 1,510,692 |
| BR System Energy | 10,491,356,334 |
| Average Demand | 1,197,643 |
| Annual Load Factor | 79.3% |

| | RURAL | LARGE INDUSTRIAL | SMELTERS | TOTAL |
|---|---|---|---|---|
| Energy | 2,449,147,804 | 928,887,170 | 7,113,321,360 | 10,491,356,334 |
| Average Demand | 279,583 | 106,037 | 812,023 | 1,197,643 |
| Allocation Vector | 0.233444 | 0.088538 | 0.678017 | 1.000000 |
| Weighted Vector (LF) | 0.185070 | 0.070191 | 0.537517 | 0.792778 |
| | | | | |
| Class NCP (60 minute) w/o Cogen | 539,955 | 106,622 | 850,000 | |
| Cogen | - | 25,000 | - | |
| Adjusted Class NCP | 539,955 | 131,622 | 850,000 | 1,521,577 |
| Excess Demand | 260,372 | 25,584 | 37,977 | 323,933 |
| Allocation Vector | 0.803783 | 0.078980 | 0.117237 | 1.000000 |
| Weighted Vector (1 - LF) | 0.166561 | 0.016366 | 0.024294 | 0.207222 |
| | | | | |
| Total A&E Factor | 0.351631 | 0.086558 | 0.561811 | 1.000000 |

0 1 3 5 7 9

| EBMTRY | EBMTRM | EBMTRD | HR1 | HR2 | HR3 | HR4 | HR5 |
|---|---|---|---|---|---|---|---|
| 20C | 2009 | 11 | 1 | 208,022 | 205,501 | 209,381 | 215,337 | 224,555 |
| 20C | 2009 | 11 | 2 | 208,024 | 209,332 | 212,315 | 218,772 | 234,204 |
| 20C | 2009 | 11 | 3 | 181,117 | 180,884 | 182,793 | 187,934 | 202,043 |
| 20C | 2009 | 11 | 4 | 227,349 | 223,105 | 220,989 | 222,352 | 232,527 |
| 20C | 2009 | 11 | 5 | 196,482 | 198,457 | 201,310 | 208,139 | 224,888 |
| 20C | 2009 | 11 | 6 | 226,695 | 227,232 | 228,083 | 234,048 | 248,389 |
| 20C | 2009 | 11 | 7 | 186,152 | 180,983 | 178,889 | 181,865 | 189,966 |
| 20C | 2009 | 11 | 8 | 154,843 | 151,568 | 151,523 | 154,002 | 159,866 |
| 20C | 2009 | 11 | 9 | 149,368 | 146,142 | 145,872 | 148,033 | 158,465 |
| 20C | 2009 | 11 | 10 | 152,699 | 152,224 | 152,053 | 153,755 | 165,959 |
| 20C | 2009 | 11 | 11 | 165,687 | 163,771 | 165,636 | 170,790 | 184,622 |
| 20C | 2009 | 11 | 12 | 209,969 | 210,850 | 213,453 | 219,137 | 234,114 |
| 20C | 2009 | 11 | 13 | 216,217 | 218,137 | 221,785 | 228,054 | 242,364 |
| 20C | 2009 | 11 | 14 | 197,415 | 195,440 | 195,556 | 201,259 | 211,937 |
| 20C | 2009 | 11 | 15 | 171,038 | 166,363 | 163,453 | 162,549 | 165,383 |
| 20C | 2009 | 11 | 16 | 148,258 | 144,510 | 143,170 | 146,149 | 157,053 |
| 20C | 2009 | 11 | 17 | 159,377 | 155,793 | 154,775 | 159,739 | 171,070 |
| 20C | 2009 | 11 | 18 | 209,556 | 206,163 | 206,388 | 208,998 | 221,283 |
| 20C | 2009 | 11 | 19 | 209,853 | 207,432 | 205,960 | 208,861 | 220,352 |
| 20C | 2009 | 11 | 20 | 221,471 | 220,575 | 222,465 | 229,195 | 242,953 |
| 20C | 2009 | 11 | 21 | 205,836 | 203,397 | 204,713 | 208,972 | 218,116 |
| 20C | 2009 | 11 | 22 | 192,217 | 189,930 | 190,914 | 193,930 | 201,264 |
| 20C | 2009 | 11 | 23 | 193,008 | 191,564 | 192,090 | 195,460 | 206,933 |
| 20C | 2009 | 11 | 24 | 181,743 | 176,687 | 175,506 | 178,503 | 187,470 |
| 20C | 2009 | 11 | 25 | 194,649 | 193,284 | 195,712 | 202,350 | 215,576 |
| 20C | 2009 | 11 | 26 | 220,377 | 218,162 | 220,137 | 227,366 | 238,605 |
| 20C | 2009 | 11 | 27 | 254,803 | 255,116 | 257,712 | 264,363 | 273,496 |
| 20C | 2009 | 11 | 28 | 252,534 | 248,281 | 247,425 | 249,630 | 254,758 |
| 20C | 2009 | 11 | 29 | 189,953 | 186,101 | 186,032 | 189,132 | 194,840 |
| 20C | 2009 | 11 | 30 | 187,659 | 187,597 | 191,091 | 197,885 | 212,446 |
| 20C | 2009 | 12 | 1 | 277,029 | 274,179 | 276,219 | 280,028 | 291,160 |
| 20C | 2009 | 12 | 2 | 245,441 | 242,256 | 240,077 | 241,490 | 249,475 |
| 20C | 2009 | 12 | 3 | 251,473 | 247,307 | 247,450 | 250,492 | 261,170 |
| 20C | 2009 | 12 | 4 | 293,908 | 295,703 | 299,509 | 306,117 | 318,791 |
| 20C | 2009 | 12 | 5 | 316,207 | 315,707 | 315,381 | 320,355 | 329,724 |
| 20C | 2009 | 12 | 6 | 333,777 | 332,250 | 332,688 | 334,700 | 338,217 |
| 20C | 2009 | 12 | 7 | 275,591 | 270,721 | 270,831 | 274,615 | 286,363 |
| 20C | 2009 | 12 | 8 | 256,965 | 254,380 | 255,645 | 260,650 | 270,600 |
| 20C | 2009 | 12 | 9 | 207,444 | 204,731 | 207,926 | 215,722 | 232,367 |
| 20C | 2009 | 12 | 10 | 353,983 | 351,747 | 353,388 | 359,590 | 372,744 |
| 20C | 2009 | 12 | 11 | 365,104 | 362,309 | 362,640 | 368,129 | 380,587 |
| 20C | 2009 | 12 | 12 | 337,081 | 332,131 | 329,868 | 331,033 | 336,984 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 20C | 2009 | 12 | 13 | 253,702 | 243,592 | 238,594 | 235,393 | 235,495 |
| 20C | 2009 | 12 | 14 | 215,446 | 210,579 | 208,964 | 210,855 | 221,905 |
| 20C | 2009 | 12 | 15 | 220,945 | 222,586 | 227,973 | 237,796 | 257,189 |
| 20C | 2009 | 12 | 16 | 346,777 | 347,723 | 351,187 | 358,255 | 373,337 |
| 20C | 2009 | 12 | 17 | 333,416 | 332,048 | 333,248 | 338,965 | 353,105 |
| 20C | 2009 | 12 | 18 | 286,405 | 281,685 | 278,963 | 281,156 | 291,378 |
| 20C | 2009 | 12 | 19 | 251,198 | 246,623 | 246,855 | 248,759 | 255,647 |
| 20C | 2009 | 12 | 20 | 306,331 | 299,384 | 296,004 | 296,102 | 300,205 |
| 20C | 2009 | 12 | 21 | 302,565 | 299,043 | 298,737 | 301,941 | 312,874 |
| 20C | 2009 | 12 | 22 | 288,154 | 284,063 | 282,546 | 286,538 | 296,403 |
| 20C | 2009 | 12 | 23 | 224,491 | 218,336 | 215,063 | 217,057 | 226,322 |
| 20C | 2009 | 12 | 24 | 217,951 | 210,851 | 207,805 | 209,695 | 215,733 |
| 20C | 2009 | 12 | 25 | 205,819 | 196,239 | 192,825 | 195,282 | 201,913 |
| 20C | 2009 | 12 | 26 | 311,863 | 307,745 | 306,807 | 309,100 | 316,642 |
| 20C | 2009 | 12 | 27 | 286,070 | 281,031 | 279,937 | 281,824 | 289,212 |
| 20C | 2009 | 12 | 28 | 341,114 | 338,172 | 338,315 | 343,321 | 355,155 |
| 20C | 2009 | 12 | 29 | 325,083 | 322,485 | 322,523 | 326,445 | 336,470 |
| 20C | 2009 | 12 | 30 | 303,546 | 299,981 | 297,536 | 298,575 | 305,622 |
| 20C | 2009 | 12 | 31 | 258,003 | 250,795 | 246,675 | 246,706 | 251,756 |
| 201 | 2010 | 1 | 1 | 333,463 | 338,215 | 342,936 | 348,279 | 356,926 |
| 201 | 2010 | 1 | 2 | 388,210 | 388,859 | 391,457 | 394,954 | 401,665 |
| 201 | 2010 | 1 | 3 | 409,414 | 408,830 | 409,673 | 413,781 | 420,993 |
| 201 | 2010 | 1 | 4 | 403,750 | 404,739 | 408,367 | 416,566 | 433,504 |
| 201 | 2010 | 1 | 5 | 413,085 | 415,555 | 419,977 | 428,361 | 443,249 |
| 201 | 2010 | 1 | 6 | 409,289 | 409,779 | 412,548 | 417,912 | 431,553 |
| 201 | 2010 | 1 | 7 | 344,198 | 341,852 | 342,413 | 346,715 | 357,456 |
| 201 | 2010 | 1 | 8 | 436,599 | 436,874 | 440,292 | 445,520 | 457,556 |
| 201 | 2010 | 1 | 9 | 418,661 | 417,046 | 417,318 | 418,944 | 423,237 |
| 201 | 2010 | 1 | 10 | 440,923 | 442,468 | 445,330 | 448,784 | 455,968 |
| 201 | 2010 | 1 | 11 | 397,508 | 394,226 | 393,276 | 393,247 | 401,982 |
| 201 | 2010 | 1 | 12 | 369,954 | 370,277 | 372,520 | 376,557 | 386,777 |
| 201 | 2010 | 1 | 13 | 370,493 | 374,134 | 378,948 | 386,081 | 399,840 |
| 201 | 2010 | 1 | 14 | 325,497 | 326,367 | 329,057 | 335,653 | 347,432 |
| 201 | 2010 | 1 | 15 | 244,765 | 240,921 | 240,502 | 243,888 | 254,515 |
| 201 | 2010 | 1 | 16 | 249,911 | 247,565 | 249,228 | 252,219 | 259,251 |
| 201 | 2010 | 1 | 17 | 227,569 | 223,816 | 221,934 | 224,546 | 229,122 |
| 201 | 2010 | 1 | 18 | 283,109 | 286,114 | 288,973 | 295,334 | 306,049 |
| 201 | 2010 | 1 | 19 | 266,041 | 266,750 | 267,334 | 270,984 | 282,380 |
| 201 | 2010 | 1 | 20 | 210,503 | 207,910 | 208,171 | 212,218 | 223,862 |
| 201 | 2010 | 1 | 21 | 204,591 | 202,197 | 202,050 | 206,623 | 217,928 |
| 201 | 2010 | 1 | 22 | 218,574 | 218,056 | 219,366 | 226,450 | 238,247 |
| 201 | 2010 | 1 | 23 | 237,131 | 230,859 | 227,017 | 227,032 | 228,853 |
| 201 | 2010 | 1 | 24 | 217,748 | 210,517 | 206,356 | 206,079 | 207,675 |
| 201 | 2010 | 1 | 25 | 232,754 | 235,246 | 240,483 | 247,802 | 264,007 |
| 201 | 2010 | 1 | 26 | 296,546 | 295,444 | 295,475 | 298,391 | 311,053 |
| 201 | 2010 | 1 | 27 | 348,284 | 347,493 | 349,623 | 353,987 | 364,816 |
| 201 | 2010 | 1 | 28 | 267,791 | 263,834 | 265,096 | 274,240 | 291,897 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 201 | 2010 | 1 | 29 | 350,856 | 352,681 | 353,973 | 360,352 | 373,203 |
| 201 | 2010 | 1 | 30 | 389,623 | 385,564 | 383,872 | 388,396 | 393,128 |
| 201 | 2010 | 1 | 31 | 392,332 | 397,983 | 404,753 | 413,330 | 422,231 |
| 201 | 2010 | 2 | 1 | 360,200 | 363,853 | 370,386 | 377,653 | 391,350 |
| 201 | 2010 | 2 | 2 | 289,069 | 287,584 | 287,813 | 292,839 | 305,757 |
| 201 | 2010 | 2 | 3 | 276,551 | 274,215 | 273,639 | 277,822 | 291,886 |
| 201 | 2010 | 2 | 4 | 301,523 | 300,182 | 300,391 | 304,361 | 316,889 |
| 201 | 2010 | 2 | 5 | 267,409 | 265,082 | 263,941 | 265,736 | 276,091 |
| 201 | 2010 | 2 | 6 | 291,747 | 291,107 | 293,445 | 298,553 | 307,205 |
| 201 | 2010 | 2 | 7 | 330,071 | 330,493 | 334,803 | 340,843 | 350,821 |
| 201 | 2010 | 2 | 8 | 336,202 | 337,664 | 340,502 | 343,434 | 352,215 |
| 201 | 2010 | 2 | 9 | 308,375 | 305,366 | 304,498 | 306,115 | 315,003 |
| 201 | 2010 | 2 | 10 | 398,924 | 395,622 | 391,678 | 388,991 | 393,305 |
| 201 | 2010 | 2 | 11 | 351,356 | 352,570 | 355,293 | 363,731 | 378,712 |
| 201 | 2010 | 2 | 12 | 357,585 | 362,320 | 368,172 | 376,732 | 392,668 |
| 201 | 2010 | 2 | 13 | 312,122 | 308,704 | 309,403 | 312,292 | 318,844 |
| 201 | 2010 | 2 | 14 | 321,058 | 318,333 | 318,208 | 319,728 | 323,201 |
| 201 | 2010 | 2 | 15 | 331,320 | 337,955 | 345,081 | 353,913 | 370,165 |
| 201 | 2010 | 2 | 16 | 359,269 | 356,533 | 358,274 | 361,394 | 370,367 |
| 201 | 2010 | 2 | 17 | 341,236 | 342,391 | 345,813 | 353,527 | 368,582 |
| 201 | 2010 | 2 | 18 | 323,830 | 325,766 | 330,029 | 340,042 | 356,217 |
| 201 | 2010 | 2 | 19 | 325,322 | 327,652 | 333,119 | 341,419 | 356,826 |
| 201 | 2010 | 2 | 20 | 272,169 | 265,261 | 263,512 | 265,406 | 271,331 |
| 201 | 2010 | 2 | 21 | 226,089 | 222,459 | 222,467 | 223,599 | 228,840 |
| 201 | 2010 | 2 | 22 | 192,570 | 191,407 | 192,311 | 196,563 | 208,156 |
| 201 | 2010 | 2 | 23 | 273,230 | 269,554 | 271,838 | 275,494 | 288,146 |
| 201 | 2010 | 2 | 24 | 300,943 | 300,660 | 300,933 | 307,663 | 323,396 |
| 201 | 2010 | 2 | 25 | 339,434 | 340,542 | 343,066 | 349,395 | 361,902 |
| 201 | 2010 | 2 | 26 | 329,474 | 329,033 | 333,676 | 341,008 | 355,019 |
| 201 | 2010 | 2 | 27 | 314,051 | 311,479 | 313,171 | 317,422 | 326,447 |
| 201 | 2010 | 2 | 28 | 277,805 | 276,494 | 277,778 | 280,727 | 287,596 |
| 201 | 2010 | 3 | 1 | 259,413 | 260,348 | 263,277 | 270,459 | 282,875 |
| 201 | 2010 | 3 | 2 | 268,618 | 267,463 | 266,362 | 272,550 | 286,145 |
| 201 | 2010 | 3 | 3 | 300,332 | 297,158 | 296,117 | 298,788 | 308,759 |
| 201 | 2010 | 3 | 4 | 291,036 | 288,877 | 292,835 | 301,861 | 318,468 |
| 201 | 2010 | 3 | 5 | 291,979 | 292,605 | 297,529 | 306,385 | 322,983 |
| 201 | 2010 | 3 | 6 | 282,800 | 282,221 | 285,781 | 292,996 | 303,280 |
| 201 | 2010 | 3 | 7 | 266,665 | 269,163 | 272,610 | 275,990 | 280,583 |
| 201 | 2010 | 3 | 8 | 187,143 | 187,700 | 191,169 | 198,001 | 215,355 |
| 201 | 2010 | 3 | 9 | 206,245 | 202,560 | 204,759 | 210,723 | 224,129 |
| 201 | 2010 | 3 | 10 | 175,349 | 166,740 | 163,672 | 164,621 | 175,274 |
| 201 | 2010 | 3 | 11 | 152,103 | 145,491 | 144,946 | 148,288 | 158,141 |
| 201 | 2010 | 3 | 12 | 166,781 | 162,172 | 162,856 | 167,860 | 181,727 |
| 201 | 2010 | 3 | 13 | 208,105 | 201,916 | 199,767 | 202,259 | 207,709 |
| 201 | 2010 | 3 | 14 | 215,319 | 211,597 | - | 208,951 | 210,254 |
| 201 | 2010 | 3 | 15 | 216,777 | 213,178 | 212,011 | 214,992 | 226,095 |
| 201 | 2010 | 3 | 16 | 216,689 | 209,910 | 206,975 | 208,729 | 218,749 |

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|---|---|---|---|---|---|---|---|---|
| 201 | 2010 | 3 | 17 | 205,003 | 198,259 | 197,358 | 202,263 | 213,965 |
| 201 | 2010 | 3 | 18 | 201,437 | 198,730 | 202,235 | 209,566 | 225,252 |
| 201 | 2010 | 3 | 19 | 184,248 | 183,542 | 186,792 | 195,608 | 211,405 |
| 201 | 2010 | 3 | 20 | 172,771 | 167,947 | 168,867 | 173,475 | 183,073 |
| 201 | 2010 | 3 | 21 | 162,521 | 158,219 | 156,110 | 157,095 | 160,796 |
| 201 | 2010 | 3 | 22 | 192,796 | 195,004 | 201,854 | 209,888 | 223,481 |
| 201 | 2010 | 3 | 23 | 223,941 | 222,451 | 222,886 | 228,746 | 240,330 |
| 201 | 2010 | 3 | 24 | 186,484 | 187,696 | 188,225 | 195,137 | 210,269 |
| 201 | 2010 | 3 | 25 | 161,205 | 158,911 | 155,317 | 156,317 | 165,762 |
| 201 | 2010 | 3 | 26 | 224,190 | 226,182 | 228,161 | 235,405 | 247,289 |
| 201 | 2010 | 3 | 27 | 233,085 | 233,288 | 235,083 | 237,272 | 244,291 |
| 201 | 2010 | 3 | 28 | 164,170 | 159,488 | 158,045 | 158,849 | 162,766 |
| 201 | 2010 | 3 | 29 | 199,683 | 201,464 | 205,972 | 213,070 | 227,353 |
| 201 | 2010 | 3 | 30 | 201,435 | 206,131 | 205,792 | 214,036 | 228,950 |
| 201 | 2010 | 3 | 31 | 168,197 | 168,685 | 170,928 | 177,576 | 190,760 |
| 201 | 2010 | 4 | 1 | 147,626 | 142,107 | 136,028 | 137,421 | 145,000 |
| 201 | 2010 | 4 | 2 | 151,585 | 143,601 | 135,381 | 132,654 | 137,284 |
| 201 | 2010 | 4 | 3 | 151,022 | 141,685 | 132,845 | 129,596 | 130,703 |
| 201 | 2010 | 4 | 4 | 149,621 | 142,363 | 139,379 | 139,059 | 145,962 |
| 201 | 2010 | 4 | 5 | 143,260 | 136,635 | 132,170 | 131,726 | 138,033 |
| 201 | 2010 | 4 | 6 | 165,676 | 154,173 | 144,970 | 141,985 | 145,496 |
| 201 | 2010 | 4 | 7 | 163,147 | 154,685 | 145,700 | 142,702 | 147,495 |
| 201 | 2010 | 4 | 8 | 147,239 | 141,178 | 136,098 | 133,501 | 139,599 |
| 201 | 2010 | 4 | 9 | 178,190 | 177,668 | 174,594 | 177,865 | 189,750 |
| 201 | 2010 | 4 | 10 | 172,357 | 171,259 | 167,930 | 170,059 | 177,190 |
| 201 | 2010 | 4 | 11 | 150,586 | 146,009 | 145,271 | 146,811 | 151,986 |
| 201 | 2010 | 4 | 12 | 141,085 | 134,882 | 132,352 | 135,076 | 145,109 |
| 201 | 2010 | 4 | 13 | 149,457 | 142,992 | 135,883 | 135,555 | 142,924 |
| 201 | 2010 | 4 | 14 | 155,063 | 147,036 | 137,044 | 135,058 | 141,474 |
| 201 | 2010 | 4 | 15 | 158,752 | 149,022 | 139,707 | 137,368 | 142,303 |
| 201 | 2010 | 4 | 16 | 158,156 | 149,971 | 140,720 | 138,017 | 143,087 |
| 201 | 2010 | 4 | 17 | 151,733 | 142,151 | 134,238 | 132,454 | 135,992 |
| 201 | 2010 | 4 | 18 | 157,107 | 149,382 | 147,576 | 149,599 | 157,262 |
| 201 | 2010 | 4 | 19 | 151,271 | 149,085 | 149,884 | 153,682 | 165,591 |
| 201 | 2010 | 4 | 20 | 152,633 | 148,308 | 143,689 | 144,457 | 154,011 |
| 201 | 2010 | 4 | 21 | 150,575 | 146,285 | 141,921 | 145,274 | 156,210 |
| 201 | 2010 | 4 | 22 | 146,004 | 143,071 | 139,059 | 141,428 | 149,965 |
| 201 | 2010 | 4 | 23 | 149,473 | 142,562 | 135,799 | 135,733 | 141,843 |
| 201 | 2010 | 4 | 24 | 161,818 | 152,938 | 142,018 | 138,305 | 138,858 |
| 201 | 2010 | 4 | 25 | 146,884 | 137,916 | 132,929 | 130,549 | 131,818 |
| 201 | 2010 | 4 | 26 | 146,908 | 141,444 | 139,795 | 140,986 | 150,353 |
| 201 | 2010 | 4 | 27 | 160,096 | 155,411 | 151,295 | 153,077 | 162,566 |
| 201 | 2010 | 4 | 28 | 178,015 | 176,252 | 173,856 | 179,213 | 190,670 |
| 201 | 2010 | 4 | 29 | 155,027 | 152,140 | 148,410 | 151,751 | 162,493 |
| 201 | 2010 | 4 | 30 | 153,120 | 145,401 | 137,871 | 135,709 | 142,656 |
| 201 | 2010 | 5 | 1 | 178,467 | 163,155 | 151,039 | 143,580 | 142,139 |
| 201 | 2010 | 5 | 2 | 154,004 | 144,707 | 139,535 | 137,080 | 136,621 |

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| 201 | 2010 | 5 | 3 | 152,221 | 142,735 | 137,081 | 134,997 | 140,880 |
| 201 | 2010 | 5 | 4 | 158,158 | 148,623 | 139,228 | 137,350 | 142,699 |
| 201 | 2010 | 5 | 5 | 159,915 | 149,637 | 141,406 | 139,715 | 145,908 |
| 201 | 2010 | 5 | 6 | 179,178 | 166,890 | 154,463 | 148,213 | 150,411 |
| 201 | 2010 | 5 | 7 | 166,941 | 156,145 | 146,750 | 143,878 | 149,350 |
| 201 | 2010 | 5 | 8 | 161,380 | 147,818 | 137,201 | 133,464 | 134,848 |
| 201 | 2010 | 5 | 9 | 158,073 | 152,633 | 149,960 | 150,656 | 153,867 |
| 201 | 2010 | 5 | 10 | 149,442 | 146,367 | 145,415 | 147,883 | 158,049 |
| 201 | 2010 | 5 | 11 | 157,978 | 154,035 | 148,094 | 148,111 | 155,331 |
| 201 | 2010 | 5 | 12 | 161,735 | 151,807 | 143,885 | 143,450 | 150,138 |
| 201 | 2010 | 5 | 13 | 177,655 | 165,218 | 156,862 | 155,318 | 161,612 |
| 201 | 2010 | 5 | 14 | 195,144 | 181,054 | 169,128 | 163,989 | 166,245 |
| 201 | 2010 | 5 | 15 | 165,288 | 153,213 | 143,488 | 140,204 | 140,200 |
| 201 | 2010 | 5 | 16 | 159,882 | 147,351 | 139,994 | 136,181 | 135,138 |
| 201 | 2010 | 5 | 17 | 148,243 | 140,692 | 136,801 | 135,969 | 142,313 |
| 201 | 2010 | 5 | 18 | 152,249 | 143,389 | 137,343 | 135,981 | 141,816 |
| 201 | 2010 | 5 | 19 | 150,992 | 144,426 | 137,962 | 137,456 | 144,521 |
| 201 | 2010 | 5 | 20 | 151,528 | 145,177 | 138,191 | 138,178 | 145,721 |
| 201 | 2010 | 5 | 21 | 151,949 | 146,114 | 140,428 | 139,344 | 145,051 |
| 201 | 2010 | 5 | 22 | 163,535 | 150,355 | 140,482 | 136,447 | 137,047 |
| 201 | 2010 | 5 | 23 | 179,446 | 164,511 | 155,064 | 148,836 | 146,034 |
| 201 | 2010 | 5 | 24 | 219,804 | 200,582 | 187,482 | 180,006 | 180,675 |
| 201 | 2010 | 5 | 25 | 203,109 | 186,072 | 171,962 | 165,923 | 169,277 |
| 201 | 2010 | 5 | 26 | 202,235 | 186,014 | 171,153 | 164,882 | 167,245 |
| 201 | 2010 | 5 | 27 | 205,304 | 188,373 | 173,209 | 166,095 | 168,034 |
| 201 | 2010 | 5 | 28 | 183,810 | 167,754 | 159,286 | 156,117 | 159,223 |
| 201 | 2010 | 5 | 29 | 200,906 | 182,452 | 167,968 | 159,974 | 157,571 |
| 201 | 2010 | 5 | 30 | 212,623 | 192,369 | 179,000 | 170,120 | 165,210 |
| 201 | 2010 | 5 | 31 | 210,336 | 191,201 | 177,684 | 169,122 | 166,346 |
| 201 | 2010 | 6 | 1 | 190,367 | 174,985 | 164,598 | 160,282 | 163,441 |
| 201 | 2010 | 6 | 2 | 231,208 | 212,220 | 197,690 | 190,514 | 192,701 |
| 201 | 2010 | 6 | 3 | 187,837 | 176,536 | 168,970 | 165,649 | 169,641 |
| 201 | 2010 | 6 | 4 | 218,389 | 197,898 | 182,532 | 175,388 | 175,512 |
| 201 | 2010 | 6 | 5 | 246,086 | 228,828 | 212,996 | 202,560 | 198,310 |
| 201 | 2010 | 6 | 6 | 251,764 | 231,920 | 218,857 | 210,326 | 207,232 |
| 201 | 2010 | 6 | 7 | 176,467 | 163,976 | 155,267 | 152,446 | 155,102 |
| 201 | 2010 | 6 | 8 | 191,471 | 177,435 | 165,859 | 161,732 | 162,838 |
| 201 | 2010 | 6 | 9 | 217,369 | 204,531 | 196,435 | 191,911 | 194,569 |
| 201 | 2010 | 6 | 10 | 234,870 | 218,514 | 202,724 | 193,630 | 192,049 |
| 201 | 2010 | 6 | 11 | 253,530 | 232,343 | 215,095 | 208,396 | 206,999 |
| 201 | 2010 | 6 | 12 | 248,132 | 230,965 | 217,582 | 211,479 | 210,093 |
| 201 | 2010 | 6 | 13 | 282,127 | 258,494 | 240,023 | 225,502 | 215,248 |
| 201 | 2010 | 6 | 14 | 279,952 | 257,900 | 240,868 | 232,027 | 230,106 |
| 201 | 2010 | 6 | 15 | 240,074 | 220,766 | 204,302 | 196,907 | 197,883 |
| 201 | 2010 | 6 | 16 | 235,082 | 218,692 | 204,941 | 198,145 | 198,592 |
| 201 | 2010 | 6 | 17 | 238,078 | 219,356 | 201,588 | 193,682 | 194,485 |
| 201 | 2010 | 6 | 18 | 224,652 | 208,351 | 193,085 | 186,281 | 186,658 |

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| 201 | 2010 | 6 | 19 | 294,477 | 267,479 | 247,594 | 237,039 | 230,834 |
| 201 | 2010 | 6 | 20 | 240,765 | 216,110 | 199,126 | 187,138 | 181,433 |
| 201 | 2010 | 6 | 21 | 285,137 | 261,147 | 241,978 | 230,060 | 225,369 |
| 201 | 2010 | 6 | 22 | 287,478 | 263,520 | 242,961 | 231,432 | 227,732 |
| 201 | 2010 | 6 | 23 | 298,362 | 275,221 | 256,217 | 245,395 | 243,090 |
| 201 | 2010 | 6 | 24 | 291,708 | 271,812 | 254,971 | 245,024 | 244,766 |
| 201 | 2010 | 6 | 25 | 237,133 | 216,722 | 199,512 | 191,607 | 190,083 |
| 201 | 2010 | 6 | 26 | 251,112 | 227,415 | 213,716 | 201,473 | 196,700 |
| 201 | 2010 | 6 | 27 | 301,647 | 276,001 | 256,381 | 242,139 | 234,445 |
| 201 | 2010 | 6 | 28 | 291,343 | 258,214 | 236,060 | 223,892 | 220,430 |
| 201 | 2010 | 6 | 29 | 226,556 | 206,961 | 193,867 | 186,925 | 187,012 |
| 201 | 2010 | 6 | 30 | 213,129 | 197,153 | 181,921 | 172,987 | 171,977 |
| 201 | 2010 | 7 | 1 | 189,465 | 173,731 | 161,795 | 156,791 | 159,128 |
| 201 | 2010 | 7 | 2 | 187,113 | 172,379 | 160,179 | 154,271 | 155,708 |
| 201 | 2010 | 7 | 3 | 195,514 | 177,698 | 163,359 | 155,445 | 153,825 |
| 201 | 2010 | 7 | 4 | 261,807 | 238,012 | 221,395 | 210,555 | 202,463 |
| 201 | 2010 | 7 | 5 | 248,826 | 223,633 | 205,606 | 194,185 | 188,817 |
| 201 | 2010 | 7 | 6 | 230,503 | 210,471 | 195,594 | 188,336 | 188,018 |
| 201 | 2010 | 7 | 7 | 265,955 | 243,623 | 223,157 | 211,694 | 209,803 |
| 201 | 2010 | 7 | 8 | 283,521 | 259,085 | 239,190 | 228,136 | 226,798 |
| 201 | 2010 | 7 | 9 | 278,617 | 257,722 | 240,558 | 230,210 | 228,895 |
| 201 | 2010 | 7 | 10 | 239,693 | 219,803 | 201,338 | 191,177 | 187,038 |
| 201 | 2010 | 7 | 11 | 229,021 | 203,554 | 188,016 | 177,339 | 171,826 |
| 201 | 2010 | 7 | 12 | 228,346 | 209,485 | 196,887 | 189,507 | 191,492 |
| 201 | 2010 | 7 | 13 | 250,725 | 233,653 | 220,374 | 214,768 | 215,752 |
| 201 | 2010 | 7 | 14 | 249,915 | 228,189 | 211,367 | 202,022 | 200,785 |
| 201 | 2010 | 7 | 15 | 287,255 | 262,394 | 242,291 | 229,958 | 227,550 |
| 201 | 2010 | 7 | 16 | 299,145 | 280,695 | 260,898 | 247,862 | 242,333 |
| 201 | 2010 | 7 | 17 | 286,090 | 262,570 | 240,936 | 227,120 | 221,185 |
| 201 | 2010 | 7 | 18 | 284,827 | 259,722 | 242,706 | 231,632 | 226,164 |
| 201 | 2010 | 7 | 19 | 240,024 | 227,033 | 219,048 | 214,373 | 214,753 |
| 201 | 2010 | 7 | 20 | 237,637 | 222,373 | 213,275 | 207,099 | 210,018 |
| 201 | 2010 | 7 | 21 | 282,835 | 267,028 | 253,214 | 245,350 | 245,298 |
| 201 | 2010 | 7 | 22 | 248,878 | 231,989 | 221,148 | 214,635 | 217,050 |
| 201 | 2010 | 7 | 23 | 307,081 | 282,310 | 263,449 | 250,315 | 246,790 |
| 201 | 2010 | 7 | 24 | 298,829 | 274,362 | 254,519 | 241,456 | 230,240 |
| 201 | 2010 | 7 | 25 | 307,836 | 284,592 | 268,994 | 257,013 | 249,582 |
| 201 | 2010 | 7 | 26 | 280,639 | 259,337 | 243,321 | 233,437 | 231,830 |
| 201 | 2010 | 7 | 27 | 276,699 | 259,894 | 247,239 | 238,171 | 236,988 |
| 201 | 2010 | 7 | 28 | 273,689 | 252,315 | 235,092 | 226,152 | 226,371 |
| 201 | 2010 | 7 | 29 | 270,564 | 255,799 | 242,528 | 236,285 | 235,740 |
| 201 | 2010 | 7 | 30 | 274,297 | 249,085 | 231,103 | 218,694 | 215,563 |
| 201 | 2010 | 7 | 31 | 256,192 | 235,838 | 221,131 | 213,511 | 208,445 |
| 201 | 2010 | 8 | 1 | 284,065 | 261,682 | 244,298 | 230,230 | 220,722 |
| 201 | 2010 | 8 | 2 | 232,100 | 213,061 | 199,810 | 191,929 | 192,111 |
| 201 | 2010 | 8 | 3 | 258,611 | 235,822 | 221,399 | 212,701 | 213,305 |
| 201 | 2010 | 8 | 4 | 336,841 | 312,611 | 293,295 | 279,825 | 276,469 |

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| 201 | 2010 | 8 | 5 | 341,393 | 317,625 | 297,595 | 285,393 | 282,149 |
| 201 | 2010 | 8 | 6 | 260,946 | 240,044 | 228,261 | 219,346 | 219,607 |
| 201 | 2010 | 8 | 7 | 233,422 | 212,694 | 197,704 | 188,166 | 183,715 |
| 201 | 2010 | 8 | 8 | 228,139 | 207,017 | 192,284 | 181,750 | 176,801 |
| 201 | 2010 | 8 | 9 | 262,747 | 240,578 | 225,938 | 216,651 | 216,120 |
| 201 | 2010 | 8 | 10 | 312,188 | 290,390 | 275,177 | 263,772 | 262,354 |
| 201 | 2010 | 8 | 11 | 323,467 | 300,795 | 285,225 | 273,787 | 271,474 |
| 201 | 2010 | 8 | 12 | 321,393 | 298,370 | 281,515 | 270,516 | 268,044 |
| 201 | 2010 | 8 | 13 | 251,848 | 234,397 | 223,513 | 220,730 | 221,062 |
| 201 | 2010 | 8 | 14 | 312,996 | 288,233 | 268,823 | 256,478 | 248,576 |
| 201 | 2010 | 8 | 15 | 267,542 | 249,631 | 236,183 | 227,681 | 223,785 |
| 201 | 2010 | 8 | 16 | 280,300 | 258,039 | 240,138 | 226,199 | 222,423 |
| 201 | 2010 | 8 | 17 | 212,296 | 196,223 | 189,286 | 182,009 | 184,285 |
| 201 | 2010 | 8 | 18 | 239,200 | 225,093 | 214,836 | 211,536 | 213,721 |
| 201 | 2010 | 8 | 19 | 241,994 | 222,225 | 211,438 | 203,903 | 206,922 |
| 201 | 2010 | 8 | 20 | 248,988 | 228,158 | 214,087 | 205,739 | 204,410 |
| 201 | 2010 | 8 | 21 | 271,192 | 254,560 | 245,501 | 239,732 | 239,459 |
| 201 | 2010 | 8 | 22 | 255,096 | 233,816 | 217,528 | 207,908 | 202,746 |
| 201 | 2010 | 8 | 23 | 239,479 | 219,275 | 205,514 | 197,199 | 197,503 |
| 201 | 2010 | 8 | 24 | 218,551 | 201,693 | 191,686 | 185,432 | 188,595 |
| 201 | 2010 | 8 | 25 | 222,021 | 203,921 | 192,238 | 185,851 | 189,807 |
| 201 | 2010 | 8 | 26 | 198,516 | 179,932 | 171,563 | 167,496 | 170,063 |
| 201 | 2010 | 8 | 27 | 185,595 | 172,297 | 164,296 | 160,813 | 164,700 |
| 201 | 2010 | 8 | 28 | 192,518 | 178,296 | 168,391 | 162,645 | 162,664 |
| 201 | 2010 | 8 | 29 | 254,534 | 234,944 | 221,121 | 210,258 | 203,364 |
| 201 | 2010 | 8 | 30 | 227,766 | 214,908 | 205,797 | 200,989 | 206,122 |
| 201 | 2010 | 8 | 31 | 224,725 | 207,923 | 194,454 | 187,512 | 189,653 |
| 201 | 2010 | 9 | 1 | 231,514 | 213,114 | 201,780 | 193,193 | 197,095 |
| 201 | 2010 | 9 | 2 | 234,451 | 218,042 | 205,451 | 200,462 | 200,404 |
| 201 | 2010 | 9 | 3 | 230,454 | 217,772 | 210,622 | 207,213 | 209,167 |
| 201 | 2010 | 9 | 4 | 178,413 | 165,678 | 158,086 | 154,591 | 155,166 |
| 201 | 2010 | 9 | 5 | 159,055 | 148,662 | 143,604 | 141,394 | 140,853 |
| 201 | 2010 | 9 | 6 | 167,283 | 155,316 | 147,519 | 144,271 | 145,057 |
| 201 | 2010 | 9 | 7 | 192,648 | 179,330 | 171,593 | 168,186 | 173,564 |
| 201 | 2010 | 9 | 8 | 226,622 | 211,231 | 199,589 | 192,429 | 192,653 |
| 201 | 2010 | 9 | 9 | 182,991 | 172,600 | 164,640 | 163,522 | 168,623 |
| 201 | 2010 | 9 | 10 | 173,862 | 166,514 | 161,228 | 158,410 | 163,534 |
| 201 | 2010 | 9 | 11 | 174,210 | 165,427 | 162,798 | 160,165 | 164,001 |
| 201 | 2010 | 9 | 12 | 180,705 | 166,649 | 156,553 | 150,421 | 148,010 |
| 201 | 2010 | 9 | 13 | 161,174 | 151,490 | 145,986 | 144,184 | 151,277 |
| 201 | 2010 | 9 | 14 | 182,095 | 168,735 | 162,671 | 158,416 | 165,025 |
| 201 | 2010 | 9 | 15 | 185,864 | 175,677 | 168,212 | 165,245 | 168,879 |
| 201 | 2010 | 9 | 16 | 229,850 | 218,690 | 210,759 | 207,190 | 208,089 |
| 201 | 2010 | 9 | 17 | 189,018 | 174,382 | 167,016 | 161,520 | 165,238 |
| 201 | 2010 | 9 | 18 | 175,055 | 163,147 | 155,963 | 151,291 | 151,731 |
| 201 | 2010 | 9 | 19 | 184,428 | 169,796 | 160,165 | 154,808 | 152,818 |
| 201 | 2010 | 9 | 20 | 182,888 | 169,543 | 161,380 | 158,142 | 162,878 |

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| 201 | 2010 | 9 | 21 | 216,744 | 202,445 | 192,546 | 185,078 | 185,965 |
| 201 | 2010 | 9 | 22 | 228,026 | 210,451 | 199,078 | 190,478 | 190,240 |
| 201 | 2010 | 9 | 23 | 216,702 | 202,725 | 189,692 | 183,095 | 185,906 |
| 201 | 2010 | 9 | 24 | 234,976 | 220,434 | 209,641 | 202,787 | 205,381 |
| 201 | 2010 | 9 | 25 | 192,520 | 175,910 | 164,296 | 156,712 | 155,207 |
| 201 | 2010 | 9 | 26 | 163,363 | 153,527 | 146,235 | 142,287 | 141,309 |
| 201 | 2010 | 9 | 27 | 142,985 | 137,602 | 134,941 | 135,347 | 142,476 |
| 201 | 2010 | 9 | 28 | 152,218 | 146,929 | 143,960 | 144,111 | 151,192 |
| 201 | 2010 | 9 | 29 | 151,715 | 146,458 | 144,173 | 143,801 | 151,727 |
| 201 | 2010 | 9 | 30 | 148,355 | 142,419 | 139,860 | 139,213 | 146,708 |
| 201 | 2010 | 10 | 1 | 157,780 | 150,141 | 144,590 | 143,768 | 149,500 |
| 201 | 2010 | 10 | 2 | 151,489 | 145,017 | 143,910 | 142,778 | 145,257 |
| 201 | 2010 | 10 | 3 | 153,707 | 147,706 | 145,202 | 144,434 | 146,394 |
| 201 | 2010 | 10 | 4 | 163,574 | 161,969 | 163,316 | 167,446 | 177,052 |
| 201 | 2010 | 10 | 5 | 174,705 | 172,634 | 172,228 | 175,077 | 186,008 |
| 201 | 2010 | 10 | 6 | 167,012 | 164,951 | 167,043 | 171,448 | 184,065 |
| 201 | 2010 | 10 | 7 | 153,973 | 149,102 | 146,424 | 148,393 | 155,292 |
| 201 | 2010 | 10 | 8 | 153,938 | 146,782 | 142,253 | 142,080 | 149,288 |
| 201 | 2010 | 10 | 9 | 154,144 | 147,402 | 143,049 | 141,958 | 145,614 |
| 201 | 2010 | 10 | 10 | 149,851 | 140,574 | 135,335 | 132,917 | 134,685 |
| 201 | 2010 | 10 | 11 | 149,487 | 141,037 | 136,187 | 135,273 | 141,192 |
| 201 | 2010 | 10 | 12 | 162,529 | 154,701 | 149,776 | 148,721 | 152,609 |
| 201 | 2010 | 10 | 13 | 152,079 | 143,204 | 138,986 | 137,837 | 143,626 |
| 201 | 2010 | 10 | 14 | 150,047 | 144,752 | 140,775 | 141,811 | 150,707 |
| 201 | 2010 | 10 | 15 | 157,246 | 153,003 | 150,068 | 151,017 | 159,490 |
| 201 | 2010 | 10 | 16 | 165,135 | 162,150 | 161,537 | 162,900 | 168,055 |
| 201 | 2010 | 10 | 17 | 152,300 | 147,646 | 144,635 | 144,606 | 148,653 |
| 201 | 2010 | 10 | 18 | 140,761 | 134,524 | 131,590 | 132,505 | 141,046 |
| 201 | 2010 | 10 | 19 | 150,514 | 144,625 | 139,804 | 140,014 | 148,298 |
| 201 | 2010 | 10 | 20 | 153,780 | 148,048 | 148,251 | 151,759 | 162,737 |
| 201 | 2010 | 10 | 21 | 150,560 | 146,230 | 145,544 | 148,730 | 158,467 |
| 201 | 2010 | 10 | 22 | 163,745 | 162,312 | 163,314 | 168,218 | 180,506 |
| 201 | 2010 | 10 | 23 | 155,059 | 149,435 | 146,277 | 145,700 | 150,652 |
| 201 | 2010 | 10 | 24 | 145,914 | 137,834 | 132,827 | 130,767 | 131,575 |
| 201 | 2010 | 10 | 25 | 143,702 | 137,433 | 132,699 | 133,027 | 139,879 |
| 201 | 2010 | 10 | 26 | 158,065 | 151,914 | 151,448 | 153,761 | 161,142 |
| 201 | 2010 | 10 | 27 | 153,630 | 150,093 | 148,871 | 150,598 | 161,397 |
| 201 | 2010 | 10 | 28 | 149,646 | 143,238 | 140,550 | 143,567 | 151,420 |
| 201 | 2010 | 10 | 29 | 189,926 | 189,071 | 190,476 | 197,239 | 210,472 |
| 201 | 2010 | 10 | 30 | 214,657 | 212,481 | 213,182 | 217,035 | 224,793 |
| 201 | 2010 | 10 | 31 | 170,345 | 166,665 | 166,400 | 168,623 | 173,662 |

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| HR6 | HR7 | HR8 | HR9 | HR10 | HR11 | HR12 | HR13 | HR14 |
|---|---|---|---|---|---|---|---|---|
| 239,078 | 252,083 | 260,572 | 255,349 | 238,491 | 220,265 | 210,762 | 207,163 | 203,624 |
| 267,885 | 292,964 | 276,365 | 254,080 | 239,685 | 229,326 | 219,557 | 214,274 | 210,654 |
| 235,097 | 263,609 | 255,955 | 240,459 | 229,843 | 222,831 | 215,703 | 209,911 | 206,576 |
| 262,748 | 289,903 | 274,563 | 258,949 | 241,847 | 227,320 | 216,715 | 210,671 | 205,326 |
| 259,942 | 291,282 | 271,307 | 252,199 | 238,396 | 227,062 | 216,593 | 210,608 | 206,215 |
| 279,440 | 303,935 | 279,169 | 254,261 | 235,968 | 223,847 | 213,839 | 207,698 | 203,673 |
| 203,141 | 213,967 | 219,095 | 218,599 | 216,390 | 212,311 | 206,477 | 202,517 | 199,024 |
| 171,419 | 182,453 | 199,443 | 209,238 | 206,031 | 197,492 | 195,342 | 198,726 | 198,346 |
| 189,146 | 221,470 | 218,095 | 210,583 | 206,501 | 207,635 | 207,095 | 205,681 | 204,244 |
| 197,049 | 231,023 | 224,843 | 219,869 | 215,268 | 212,482 | 206,772 | 206,244 | 205,585 |
| 217,481 | 251,320 | 240,694 | 229,111 | 223,472 | 217,915 | 211,619 | 207,063 | 204,665 |
| 270,461 | 300,851 | 279,005 | 255,006 | 238,055 | 227,081 | 217,730 | 211,337 | 207,154 |
| 275,527 | 302,785 | 287,268 | 264,429 | 246,237 | 230,616 | 216,667 | 207,161 | 203,481 |
| 225,352 | 237,984 | 240,303 | 234,391 | 224,951 | 215,954 | 207,782 | 201,080 | 197,193 |
| 170,439 | 179,801 | 194,658 | 211,101 | 210,239 | 200,606 | 198,059 | 199,691 | 197,470 |
| 186,119 | 215,795 | 214,199 | 211,774 | 210,733 | 209,945 | 207,779 | 206,099 | 204,984 |
| 202,042 | 238,522 | 233,551 | 231,571 | 231,968 | 232,280 | 229,700 | 228,721 | 230,316 |
| 250,573 | 282,763 | 271,008 | 262,875 | 256,056 | 254,525 | 250,294 | 249,009 | 249,034 |
| 250,391 | 279,856 | 269,326 | 264,361 | 256,333 | 245,734 | 236,251 | 224,677 | 218,367 |
| 275,157 | 304,022 | 287,551 | 261,516 | 242,276 | 227,707 | 213,922 | 207,411 | 203,275 |
| 233,467 | 248,135 | 254,561 | 247,669 | 236,171 | 224,025 | 215,124 | 206,989 | 201,631 |
| 212,670 | 227,445 | 244,649 | 259,563 | 248,376 | 227,932 | 215,858 | 209,684 | 204,598 |
| 237,115 | 269,947 | 262,168 | 254,080 | 250,273 | 246,561 | 242,289 | 238,909 | 236,782 |
| 215,949 | 248,931 | 243,566 | 239,618 | 237,083 | 232,456 | 223,042 | 215,706 | 213,681 |
| 239,933 | 263,013 | 268,763 | 264,357 | 256,184 | 248,637 | 238,439 | 229,988 | 226,397 |
| 255,190 | 271,507 | 287,629 | 306,134 | 318,658 | 321,739 | 305,109 | 277,423 | 261,952 |
| 289,607 | 304,510 | 305,654 | 299,670 | 287,475 | 270,329 | 255,854 | 242,077 | 232,186 |
| 266,025 | 276,439 | 280,267 | 272,813 | 261,876 | 247,491 | 232,030 | 216,281 | 205,484 |
| 205,558 | 216,867 | 228,966 | 245,525 | 246,362 | 235,781 | 231,429 | 232,597 | 231,664 |
| 246,279 | 285,466 | 284,057 | 282,901 | 284,405 | 279,210 | 272,112 | 264,123 | 252,552 |
| 324,291 | 356,319 | 337,351 | 308,514 | 283,736 | 264,327 | 246,377 | 236,678 | 227,243 |
| 277,425 | 309,920 | 300,361 | 294,774 | 294,330 | 292,281 | 285,468 | 279,929 | 276,375 |
| 293,790 | 330,127 | 323,049 | 316,815 | 313,355 | 310,032 | 304,057 | 299,151 | 295,582 |
| 350,850 | 387,196 | 372,408 | 343,918 | 320,606 | 301,106 | 282,652 | 271,754 | 268,537 |
| 347,951 | 368,035 | 374,297 | 360,565 | 339,819 | 318,665 | 300,228 | 284,003 | 271,674 |
| 349,654 | 365,000 | 376,449 | 377,390 | 362,197 | 336,613 | 321,890 | 313,819 | 307,830 |
| 316,440 | 351,595 | 341,264 | 331,995 | 324,679 | 314,709 | 303,671 | 296,488 | 292,092 |
| 301,173 | 338,914 | 327,376 | 319,777 | 320,019 | 319,315 | 315,735 | 315,075 | 313,784 |
| 268,242 | 310,623 | 309,322 | 310,203 | 322,561 | 332,593 | 331,949 | 335,365 | 336,811 |
| 403,537 | 441,047 | 428,597 | 408,615 | 394,555 | 380,622 | 365,374 | 353,736 | 343,022 |
| 410,879 | 441,496 | 425,571 | 405,559 | 386,828 | 352,282 | 319,422 | 300,401 | 288,726 |
| 349,398 | 363,869 | 367,566 | 364,853 | 355,309 | 343,047 | 328,936 | 315,800 | 310,361 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 241,308 | 253,063 | 268,223 | 286,668 | 287,480 | 276,714 | 273,004 | 271,973 | 266,456 |
| 250,666 | 283,893 | 274,218 | 265,814 | 261,009 | 250,389 | 238,121 | 230,378 | 228,228 |
| 296,197 | 339,749 | 336,963 | 338,552 | 342,126 | 341,114 | 334,498 | 328,625 | 329,402 |
| 406,550 | 441,602 | 422,173 | 390,747 | 366,942 | 342,388 | 319,144 | 301,360 | 289,500 |
| 385,016 | 419,509 | 401,027 | 373,586 | 346,283 | 323,596 | 301,912 | 284,871 | 273,187 |
| 319,180 | 354,140 | 341,897 | 330,552 | 321,228 | 305,502 | 288,872 | 273,874 | 261,145 |
| 270,925 | 289,788 | 307,154 | 326,433 | 337,990 | 340,860 | 339,294 | 338,017 | 337,809 |
| 309,094 | 324,249 | 342,564 | 362,824 | 363,011 | 349,698 | 343,532 | 343,496 | 342,562 |
| 334,484 | 355,704 | 357,843 | 362,313 | 363,366 | 358,936 | 349,523 | 341,703 | 335,426 |
| 319,048 | 341,560 | 349,085 | 351,263 | 341,793 | 316,186 | 288,080 | 269,936 | 257,290 |
| 248,650 | 272,335 | 282,221 | 288,178 | 292,346 | 288,947 | 276,423 | 263,744 | 256,581 |
| 229,239 | 249,168 | 265,883 | 283,646 | 296,768 | 296,159 | 283,417 | 270,722 | 265,015 |
| 215,847 | 238,768 | 263,395 | 294,564 | 318,380 | 334,725 | 342,156 | 338,021 | 332,498 |
| 328,633 | 341,474 | 345,067 | 343,597 | 339,498 | 337,884 | 329,172 | 313,159 | 300,562 |
| 301,770 | 317,961 | 331,344 | 342,964 | 346,019 | 340,381 | 345,992 | 350,721 | 346,393 |
| 375,056 | 395,311 | 399,077 | 402,831 | 406,133 | 407,244 | 402,944 | 396,787 | 387,695 |
| 358,977 | 382,757 | 387,664 | 375,144 | 356,333 | 340,498 | 322,425 | 308,319 | 301,435 |
| 324,545 | 343,473 | 347,547 | 350,154 | 352,720 | 348,574 | 339,319 | 329,240 | 322,931 |
| 265,365 | 282,822 | 291,466 | 298,979 | 307,158 | 311,543 | 309,461 | 307,963 | 306,452 |
| 369,556 | 383,576 | 387,076 | 387,774 | 385,812 | 380,548 | 369,301 | 354,889 | 341,255 |
| 415,579 | 431,612 | 442,512 | 444,798 | 432,906 | 414,547 | 395,809 | 380,395 | 366,796 |
| 432,694 | 448,832 | 459,349 | 465,547 | 451,280 | 420,937 | 394,842 | 379,326 | 368,068 |
| 466,129 | 496,244 | 491,105 | 471,737 | 449,958 | 429,838 | 409,889 | 391,624 | 379,365 |
| 477,034 | 511,386 | 499,174 | 477,049 | 456,443 | 434,176 | 411,282 | 394,151 | 377,806 |
| 463,042 | 499,061 | 486,447 | 458,123 | 433,588 | 411,584 | 386,289 | 364,550 | 342,339 |
| 380,151 | 398,980 | 401,296 | 404,526 | 413,778 | 421,670 | 424,380 | 420,312 | 420,402 |
| 477,489 | 499,106 | 502,390 | 503,463 | 497,923 | 490,975 | 479,020 | 468,341 | 463,579 |
| 433,310 | 447,581 | 458,163 | 468,477 | 468,507 | 454,003 | 434,473 | 412,846 | 397,928 |
| 468,206 | 484,160 | 495,892 | 492,192 | 464,069 | 426,371 | 399,015 | 381,739 | 365,780 |
| 425,642 | 452,890 | 448,102 | 433,202 | 413,560 | 387,192 | 372,664 | 362,906 | 362,450 |
| 415,793 | 445,646 | 432,301 | 415,876 | 398,193 | 376,369 | 351,637 | 327,896 | 316,297 |
| 432,533 | 466,975 | 451,987 | 412,679 | 380,011 | 353,482 | 326,028 | 304,049 | 289,571 |
| 378,870 | 414,001 | 397,850 | 371,141 | 343,054 | 316,124 | 289,979 | 271,129 | 258,140 |
| 281,968 | 316,526 | 308,468 | 299,020 | 294,160 | 286,972 | 274,724 | 257,841 | 243,701 |
| 271,359 | 286,751 | 298,685 | 310,182 | 304,830 | 292,312 | 276,215 | 261,598 | 253,506 |
| 239,689 | 254,393 | 273,383 | 293,616 | 298,407 | 288,396 | 279,496 | 272,893 | 261,012 |
| 325,224 | 346,799 | 352,359 | 356,544 | 359,654 | 357,215 | 342,058 | 325,091 | 309,239 |
| 310,020 | 343,340 | 329,391 | 313,394 | 293,056 | 273,752 | 253,189 | 237,846 | 228,448 |
| 253,676 | 287,826 | 284,773 | 275,641 | 275,072 | 273,423 | 266,776 | 261,277 | 257,729 |
| 247,389 | 284,381 | 282,414 | 273,389 | 273,034 | 274,131 | 270,535 | 266,527 | 263,944 |
| 269,996 | 306,377 | 301,990 | 298,200 | 298,599 | 299,572 | 295,466 | 288,769 | 283,703 |
| 238,000 | 251,882 | 262,097 | 275,344 | 281,562 | 277,235 | 266,314 | 251,945 | 241,735 |
| 212,806 | 222,866 | 235,872 | 252,347 | 254,897 | 247,087 | 242,866 | 242,594 | 239,314 |
| 298,554 | 337,326 | 331,667 | 327,801 | 328,930 | 331,270 | 331,199 | 333,024 | 335,314 |
| 343,004 | 379,586 | 374,906 | 369,244 | 367,720 | 369,871 | 362,876 | 353,637 | 350,488 |
| 394,578 | 425,457 | 409,943 | 385,838 | 367,719 | 346,165 | 318,130 | 297,226 | 293,651 |
| 326,510 | 366,365 | 362,595 | 349,858 | 340,486 | 331,955 | 318,690 | 306,813 | 302,470 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 401,572 | 434,200 | 434,333 | 434,653 | 435,401 | 431,829 | 427,217 | 420,159 | 414,251 |
| 402,256 | 409,952 | 413,520 | 420,591 | 424,182 | 419,550 | 403,026 | 385,931 | 374,591 |
| 434,291 | 449,009 | 456,178 | 441,957 | 406,326 | 368,614 | 342,017 | 322,765 | 305,544 |
| 421,548 | 453,772 | 446,232 | 405,340 | 367,018 | 340,396 | 315,773 | 294,774 | 281,121 |
| 338,512 | 374,948 | 364,295 | 343,169 | 319,139 | 298,858 | 288,864 | 286,134 | 284,929 |
| 328,781 | 366,445 | 359,181 | 333,443 | 310,052 | 293,180 | 278,413 | 265,888 | 257,384 |
| 348,098 | 382,387 | 370,960 | 360,728 | 352,945 | 342,874 | 327,425 | 314,370 | 304,785 |
| 306,934 | 341,809 | 334,538 | 327,047 | 324,035 | 320,115 | 314,172 | 308,179 | 303,805 |
| 321,217 | 339,930 | 357,057 | 378,013 | 389,363 | 390,380 | 383,770 | 377,261 | 372,769 |
| 363,835 | 378,038 | 391,516 | 384,232 | 361,801 | 336,906 | 321,013 | 312,707 | 305,336 |
| 380,180 | 412,591 | 402,919 | 389,443 | 373,205 | 360,626 | 349,640 | 338,950 | 334,915 |
| 335,932 | 353,689 | 353,596 | 358,969 | 361,049 | 365,901 | 365,763 | 363,591 | 364,126 |
| 410,057 | 427,205 | 424,105 | 421,903 | 413,942 | 401,059 | 385,331 | 371,460 | 359,510 |
| 408,868 | 437,743 | 428,466 | 395,904 | 363,839 | 341,762 | 322,194 | 306,802 | 295,104 |
| 425,934 | 454,033 | 447,552 | 413,769 | 373,487 | 341,940 | 316,539 | 297,509 | 286,608 |
| 333,472 | 348,253 | 361,867 | 371,489 | 372,140 | 361,593 | 350,717 | 338,542 | 328,650 |
| 330,989 | 341,319 | 354,881 | 365,400 | 361,332 | 349,904 | 342,131 | 338,430 | 332,352 |
| 394,239 | 415,964 | 424,085 | 429,897 | 433,141 | 426,951 | 415,762 | 402,515 | 394,984 |
| 391,802 | 413,644 | 411,046 | 401,307 | 392,142 | 380,622 | 372,142 | 366,416 | 363,301 |
| 398,165 | 425,142 | 416,664 | 400,499 | 382,676 | 362,412 | 342,107 | 328,373 | 321,120 |
| 389,817 | 424,165 | 400,097 | 359,582 | 332,069 | 311,584 | 292,976 | 276,974 | 266,515 |
| 390,958 | 423,829 | 400,684 | 358,151 | 322,624 | 295,866 | 272,365 | 254,413 | 240,886 |
| 282,828 | 295,735 | 304,522 | 301,920 | 292,185 | 275,554 | 253,509 | 236,271 | 224,656 |
| 238,455 | 249,484 | 264,956 | 271,416 | 259,517 | 240,326 | 223,107 | 214,502 | 208,107 |
| 240,747 | 278,817 | 276,873 | 276,480 | 282,737 | 290,233 | 292,547 | 294,106 | 297,608 |
| 320,970 | 357,379 | 352,245 | 346,607 | 341,599 | 339,507 | 330,092 | 318,870 | 312,518 |
| 360,151 | 396,337 | 389,610 | 383,942 | 375,836 | 365,497 | 355,388 | 350,020 | 347,746 |
| 394,557 | 428,461 | 415,196 | 396,611 | 379,321 | 360,673 | 340,780 | 323,546 | 310,226 |
| 388,936 | 418,373 | 395,334 | 362,463 | 339,648 | 321,658 | 302,862 | 287,830 | 276,499 |
| 339,643 | 352,278 | 360,874 | 361,945 | 348,480 | 330,054 | 310,757 | 295,313 | 286,704 |
| 295,872 | 307,480 | 323,099 | 333,840 | 325,092 | 302,165 | 286,304 | 279,003 | 268,111 |
| 314,032 | 346,107 | 337,150 | 324,718 | 317,451 | 309,404 | 300,482 | 295,205 | 292,982 |
| 320,846 | 356,627 | 349,509 | 341,804 | 334,777 | 324,197 | 310,531 | 297,147 | 288,825 |
| 339,169 | 367,530 | 357,525 | 341,863 | 327,105 | 314,831 | 305,653 | 299,077 | 294,692 |
| 354,802 | 381,753 | 355,514 | 324,001 | 300,685 | 283,000 | 264,376 | 250,186 | 239,940 |
| 358,236 | 383,859 | 354,746 | 315,774 | 286,876 | 265,211 | 247,542 | 233,951 | 223,505 |
| 319,997 | 331,091 | 324,775 | 307,280 | 284,351 | 263,559 | 243,051 | 226,544 | 214,689 |
| 290,138 | 298,211 | 309,272 | 300,897 | 276,375 | 249,615 | 231,000 | 217,926 | 206,060 |
| 251,970 | 284,169 | 274,275 | 259,645 | 252,200 | 243,476 | 232,937 | 221,989 | 209,993 |
| 256,805 | 281,975 | 268,317 | 251,302 | 242,559 | 235,048 | 226,465 | 221,265 | 217,124 |
| 205,721 | 231,153 | 222,531 | 211,658 | 204,697 | 200,661 | 196,413 | 194,328 | 192,870 |
| 188,917 | 223,146 | 221,476 | 217,620 | 213,619 | 209,907 | 203,940 | 201,676 | 197,844 |
| 215,116 | 247,678 | 248,080 | 246,588 | 249,609 | 250,113 | 246,078 | 241,236 | 234,880 |
| 220,096 | 230,852 | 248,851 | 259,284 | 261,953 | 260,520 | 259,272 | 251,952 | 248,346 |
| 214,082 | 223,978 | 238,514 | 256,757 | 263,017 | 261,027 | 262,845 | 263,808 | 260,485 |
| 254,624 | 292,558 | 286,418 | 277,100 | 273,802 | 269,261 | 263,104 | 261,136 | 256,575 |
| 247,181 | 284,305 | 276,806 | 268,260 | 264,216 | 257,476 | 244,004 | 231,730 | 223,041 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 244,806 | 281,492 | 275,510 | 266,339 | 263,455 | 260,591 | 252,904 | 244,183 | 235,271 |
| 260,332 | 299,266 | 288,333 | 261,471 | 239,881 | 224,942 | 212,587 | 204,948 | 197,041 |
| 247,708 | 288,964 | 278,100 | 251,370 | 231,368 | 217,424 | 206,330 | 198,980 | 193,316 |
| 198,411 | 217,453 | 232,984 | 234,122 | 226,521 | 216,953 | 204,768 | 195,843 | 190,826 |
| 169,102 | 182,440 | 199,583 | 223,324 | 230,587 | 223,780 | 225,309 | 230,291 | 231,523 |
| 257,770 | 296,440 | 295,063 | 291,333 | 290,610 | 287,980 | 278,200 | 270,362 | 262,052 |
| 271,848 | 307,525 | 298,030 | 283,751 | 270,286 | 253,789 | 234,143 | 218,845 | 208,935 |
| 245,159 | 282,688 | 270,469 | 244,371 | 226,348 | 212,803 | 201,930 | 196,497 | 194,334 |
| 194,241 | 231,925 | 228,371 | 224,971 | 227,978 | 229,812 | 228,370 | 227,957 | 226,787 |
| 279,580 | 317,822 | 308,554 | 289,223 | 277,150 | 263,548 | 246,251 | 231,225 | 219,961 |
| 258,875 | 277,219 | 286,673 | 281,782 | 266,461 | 248,196 | 229,393 | 214,573 | 203,613 |
| 171,342 | 187,159 | 205,437 | 227,452 | 235,166 | 227,780 | 225,312 | 227,155 | 227,223 |
| 259,612 | 294,959 | 285,116 | 265,012 | 251,802 | 242,196 | 231,268 | 221,345 | 212,474 |
| 262,311 | 298,438 | 286,007 | 256,234 | 232,729 | 216,502 | 205,382 | 200,273 | 194,940 |
| 220,080 | 254,078 | 243,736 | 224,119 | 211,092 | 204,441 | 197,375 | 195,473 | 193,517 |
| 169,553 | 202,978 | 200,597 | 196,524 | 195,605 | 196,871 | 196,740 | 199,521 | 202,182 |
| 155,883 | 182,635 | 189,172 | 191,837 | 194,812 | 198,907 | 198,386 | 200,532 | 203,813 |
| 138,404 | 151,079 | 168,664 | 192,163 | 207,543 | 211,633 | 207,468 | 200,885 | 195,513 |
| 157,964 | 170,916 | 194,359 | 211,502 | 206,442 | 191,073 | 185,269 | 184,852 | 180,270 |
| 158,317 | 176,121 | 183,792 | 196,880 | 209,952 | 220,828 | 228,912 | 236,575 | 242,479 |
| 164,713 | 179,503 | 187,623 | 197,826 | 209,480 | 220,554 | 225,568 | 231,740 | 238,703 |
| 167,815 | 183,094 | 188,704 | 198,227 | 205,000 | 209,526 | 209,158 | 207,563 | 206,852 |
| 159,528 | 180,730 | 188,615 | 196,665 | 204,121 | 207,763 | 205,425 | 199,478 | 195,653 |
| 217,668 | 239,011 | 235,631 | 221,076 | 211,225 | 208,236 | 201,028 | 195,316 | 190,880 |
| 191,033 | 203,613 | 212,827 | 213,118 | 208,825 | 202,227 | 195,413 | 191,196 | 188,872 |
| 161,970 | 171,252 | 186,773 | 197,531 | 195,537 | 187,629 | 186,978 | 191,797 | 195,559 |
| 175,570 | 205,865 | 203,636 | 195,879 | 195,766 | 201,262 | 204,791 | 210,245 | 215,944 |
| 170,835 | 200,615 | 199,588 | 194,881 | 197,107 | 203,455 | 211,060 | 223,821 | 234,788 |
| 168,556 | 196,388 | 195,306 | 193,937 | 199,968 | 210,433 | 221,918 | 237,517 | 251,642 |
| 167,997 | 194,747 | 195,157 | 198,027 | 207,805 | 221,462 | 234,579 | 249,293 | 259,570 |
| 166,963 | 192,266 | 195,713 | 199,460 | 209,215 | 221,436 | 231,899 | 241,021 | 250,928 |
| 143,433 | 149,094 | 167,616 | 184,140 | 192,296 | 194,937 | 192,884 | 191,126 | 189,155 |
| 167,663 | 178,666 | 198,838 | 210,586 | 205,042 | 192,362 | 187,058 | 186,385 | 184,303 |
| 198,416 | 227,824 | 222,921 | 210,726 | 203,492 | 200,127 | 197,637 | 196,656 | 196,104 |
| 181,888 | 208,903 | 205,678 | 198,615 | 194,387 | 195,369 | 194,592 | 195,520 | 198,373 |
| 187,085 | 216,428 | 212,844 | 204,080 | 198,875 | 198,010 | 197,139 | 198,656 | 200,745 |
| 177,846 | 204,108 | 203,145 | 196,594 | 195,954 | 198,293 | 201,358 | 205,935 | 210,631 |
| 165,931 | 192,936 | 194,737 | 194,864 | 200,489 | 208,529 | 214,201 | 223,601 | 233,958 |
| 144,549 | 151,071 | 167,623 | 190,888 | 208,229 | 218,635 | 219,620 | 219,072 | 215,264 |
| 136,188 | 138,527 | 162,005 | 187,132 | 194,328 | 191,303 | 191,358 | 194,542 | 193,987 |
| 177,857 | 207,499 | 210,358 | 209,537 | 213,509 | 217,579 | 215,899 | 210,730 | 208,501 |
| 190,703 | 220,316 | 221,180 | 218,111 | 221,753 | 223,917 | 223,503 | 219,155 | 213,786 |
| 221,722 | 246,965 | 235,338 | 218,340 | 208,995 | 203,765 | 198,321 | 197,687 | 196,670 |
| 191,406 | 218,676 | 211,807 | 202,858 | 201,194 | 200,192 | 198,512 | 200,840 | 201,720 |
| 165,583 | 189,363 | 195,063 | 197,670 | 201,636 | 207,550 | 209,781 | 216,455 | 223,782 |
| 145,931 | 156,670 | 169,966 | 191,957 | 209,260 | 219,453 | 220,984 | 219,931 | 215,923 |
| 140,557 | 145,724 | 161,210 | 188,852 | 207,714 | 213,621 | 218,603 | 223,870 | 226,012 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 163,442 | 188,406 | 197,536 | 203,487 | 215,886 | 229,388 | 238,197 | 246,771 | 255,208 |
| 164,427 | 189,761 | 194,042 | 197,809 | 207,373 | 219,682 | 229,517 | 240,328 | 251,266 |
| 167,630 | 193,581 | 200,199 | 206,907 | 221,224 | 238,502 | 252,065 | 266,757 | 280,308 |
| 169,005 | 194,278 | 201,699 | 205,874 | 212,651 | 222,834 | 231,230 | 241,379 | 252,456 |
| 171,410 | 198,882 | 211,078 | 223,457 | 241,605 | 259,942 | 272,578 | 284,273 | 298,019 |
| 139,449 | 148,780 | 169,349 | 184,996 | 193,174 | 194,430 | 190,353 | 186,881 | 184,462 |
| 160,692 | 170,855 | 190,016 | 207,355 | 206,774 | 192,716 | 184,044 | 181,007 | 175,697 |
| 185,423 | 213,355 | 212,305 | 206,224 | 207,371 | 209,094 | 207,133 | 204,894 | 201,422 |
| 179,187 | 201,430 | 200,126 | 197,943 | 200,196 | 204,664 | 205,340 | 207,736 | 209,627 |
| 175,676 | 205,137 | 212,126 | 211,795 | 218,837 | 226,381 | 232,540 | 244,470 | 255,905 |
| 183,874 | 212,331 | 229,365 | 243,860 | 255,435 | 268,260 | 279,853 | 287,714 | 297,646 |
| 186,162 | 213,431 | 221,569 | 225,612 | 234,756 | 244,231 | 251,520 | 257,142 | 265,895 |
| 143,410 | 150,397 | 171,452 | 190,529 | 204,851 | 217,310 | 226,753 | 235,512 | 243,065 |
| 137,962 | 140,295 | 160,484 | 185,975 | 199,466 | 199,476 | 203,341 | 209,566 | 211,211 |
| 164,902 | 190,642 | 198,686 | 202,912 | 210,520 | 218,291 | 223,169 | 227,859 | 231,261 |
| 158,609 | 173,798 | 185,349 | 192,319 | 199,225 | 206,835 | 206,851 | 207,938 | 209,126 |
| 165,418 | 190,749 | 194,799 | 193,572 | 196,844 | 201,983 | 203,487 | 205,665 | 208,211 |
| 165,756 | 191,490 | 195,890 | 196,746 | 200,919 | 204,020 | 204,139 | 201,964 | 201,271 |
| 166,024 | 192,134 | 199,632 | 203,504 | 208,442 | 213,785 | 217,625 | 223,668 | 229,143 |
| 139,265 | 151,140 | 176,305 | 199,599 | 220,592 | 239,232 | 250,306 | 262,215 | 275,842 |
| 142,988 | 150,634 | 183,579 | 226,244 | 262,358 | 290,862 | 318,990 | 345,391 | 363,554 |
| 196,646 | 226,251 | 247,028 | 268,636 | 293,754 | 320,321 | 345,630 | 370,344 | 384,368 |
| 185,464 | 213,767 | 231,226 | 249,564 | 273,546 | 301,032 | 325,249 | 349,596 | 367,933 |
| 184,212 | 210,640 | 231,826 | 256,378 | 287,670 | 318,191 | 341,501 | 362,206 | 378,049 |
| 183,787 | 211,306 | 232,883 | 257,533 | 287,379 | 320,004 | 348,688 | 369,450 | 371,254 |
| 175,561 | 198,893 | 216,522 | 239,028 | 264,290 | 293,189 | 317,556 | 339,712 | 357,366 |
| 157,119 | 166,616 | 197,757 | 236,896 | 275,031 | 306,957 | 330,638 | 349,028 | 364,552 |
| 160,747 | 171,655 | 209,241 | 257,437 | 294,256 | 317,528 | 337,322 | 356,416 | 370,757 |
| 166,739 | 171,546 | 197,831 | 236,787 | 269,289 | 293,615 | 311,784 | 327,136 | 338,844 |
| 176,486 | 200,703 | 225,348 | 247,020 | 272,503 | 306,592 | 335,355 | 364,044 | 384,789 |
| 205,471 | 224,964 | 244,750 | 260,122 | 282,179 | 314,102 | 345,545 | 375,526 | 387,721 |
| 182,388 | 200,177 | 221,980 | 247,517 | 281,049 | 313,335 | 340,379 | 364,445 | 383,640 |
| 185,174 | 206,574 | 233,549 | 262,605 | 296,120 | 324,953 | 353,146 | 376,312 | 394,861 |
| 196,911 | 208,727 | 243,190 | 283,932 | 321,557 | 350,866 | 372,357 | 385,320 | 397,864 |
| 206,667 | 215,213 | 242,939 | 270,308 | 284,869 | 295,544 | 301,220 | 309,302 | 319,024 |
| 164,398 | 183,671 | 207,618 | 232,872 | 260,744 | 290,428 | 313,549 | 334,813 | 351,184 |
| 172,491 | 192,414 | 216,412 | 239,624 | 266,854 | 297,465 | 321,113 | 344,284 | 362,622 |
| 210,454 | 222,640 | 242,097 | 260,674 | 272,666 | 284,474 | 298,020 | 313,898 | 331,257 |
| 199,989 | 218,927 | 244,381 | 274,704 | 307,112 | 337,477 | 360,258 | 383,223 | 401,424 |
| 217,209 | 238,061 | 261,502 | 284,235 | 302,792 | 320,979 | 337,542 | 354,451 | 373,334 |
| 210,147 | 222,210 | 254,391 | 296,876 | 338,860 | 375,180 | 402,376 | 419,930 | 433,320 |
| 204,213 | 215,049 | 256,386 | 304,289 | 344,694 | 374,238 | 401,520 | 425,173 | 441,800 |
| 237,431 | 258,670 | 300,274 | 340,122 | 377,544 | 413,391 | 434,823 | 442,755 | 441,787 |
| 206,557 | 230,332 | 268,991 | 305,050 | 345,280 | 386,832 | 418,615 | 441,947 | 458,529 |
| 206,059 | 227,936 | 259,736 | 290,547 | 326,239 | 356,670 | 379,801 | 397,011 | 411,065 |
| 203,773 | 223,143 | 243,556 | 261,555 | 282,991 | 310,381 | 337,931 | 365,287 | 364,901 |
| 196,153 | 217,555 | 251,520 | 286,697 | 327,329 | 368,493 | 401,404 | 430,139 | 452,943 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 221,797 | 214,162 | 226,475 | 245,947 | 275,863 | 316,840 | 351,109 | 380,589 | 403,662 |
| 174,700 | 186,250 | 225,927 | 277,996 | 325,314 | 362,558 | 396,297 | 424,537 | 442,353 |
| 229,615 | 251,122 | 289,293 | 326,941 | 370,802 | 411,867 | 442,896 | 466,132 | 483,142 |
| 234,282 | 251,709 | 285,289 | 320,965 | 358,568 | 395,718 | 428,908 | 454,496 | 471,279 |
| 248,980 | 270,828 | 306,865 | 341,565 | 378,683 | 412,376 | 436,387 | 453,648 | 467,233 |
| 253,076 | 271,691 | 304,486 | 339,882 | 372,043 | 397,523 | 406,155 | 408,323 | 417,220 |
| 196,662 | 215,446 | 247,056 | 279,522 | 314,036 | 347,922 | 375,462 | 397,982 | 419,922 |
| 194,756 | 205,547 | 241,816 | 287,160 | 332,708 | 374,590 | 410,809 | 437,774 | 458,268 |
| 227,544 | 234,258 | 266,641 | 307,336 | 344,611 | 368,968 | 396,744 | 426,896 | 445,592 |
| 226,715 | 242,471 | 268,365 | 293,396 | 320,587 | 350,678 | 364,353 | 373,218 | 390,582 |
| 194,037 | 215,064 | 248,074 | 277,772 | 311,199 | 342,013 | 364,459 | 381,175 | 394,440 |
| 179,901 | 195,979 | 219,682 | 242,051 | 265,616 | 288,990 | 305,940 | 323,294 | 334,708 |
| 167,117 | 183,494 | 207,013 | 225,167 | 247,599 | 269,243 | 286,581 | 303,564 | 319,842 |
| 162,633 | 177,465 | 200,136 | 220,262 | 242,952 | 264,631 | 282,590 | 300,271 | 318,978 |
| 151,677 | 160,161 | 185,734 | 222,216 | 268,653 | 314,032 | 353,952 | 383,277 | 404,546 |
| 194,898 | 201,044 | 240,458 | 293,701 | 336,553 | 366,054 | 390,438 | 412,935 | 427,487 |
| 185,790 | 192,659 | 225,820 | 272,807 | 321,456 | 364,751 | 391,414 | 408,371 | 420,973 |
| 194,796 | 213,167 | 248,436 | 285,102 | 329,283 | 372,785 | 406,223 | 431,683 | 451,197 |
| 214,448 | 230,947 | 264,217 | 305,372 | 348,399 | 392,978 | 427,147 | 448,334 | 464,112 |
| 231,998 | 248,400 | 284,203 | 322,778 | 366,200 | 408,961 | 437,800 | 458,966 | 473,932 |
| 239,221 | 250,138 | 267,078 | 284,344 | 302,763 | 325,111 | 340,491 | 350,394 | 357,308 |
| 184,921 | 192,873 | 227,799 | 270,861 | 313,393 | 351,352 | 378,320 | 397,896 | 410,975 |
| 166,187 | 172,304 | 207,343 | 255,762 | 300,243 | 334,669 | 367,148 | 395,110 | 412,406 |
| 203,192 | 222,275 | 247,606 | 277,416 | 303,524 | 322,475 | 340,236 | 362,815 | 381,336 |
| 228,145 | 239,373 | 251,193 | 260,348 | 274,182 | 292,349 | 314,992 | 345,292 | 370,969 |
| 209,191 | 227,484 | 262,725 | 301,373 | 343,797 | 384,614 | 415,868 | 439,723 | 458,284 |
| 235,206 | 249,199 | 282,336 | 322,409 | 368,275 | 414,480 | 445,494 | 468,352 | 485,831 |
| 247,689 | 258,004 | 283,823 | 314,945 | 353,275 | 391,473 | 421,351 | 445,223 | 462,680 |
| 219,953 | 225,054 | 252,326 | 286,671 | 318,605 | 350,098 | 379,586 | 406,030 | 429,222 |
| 221,529 | 226,138 | 261,778 | 301,916 | 329,869 | 351,912 | 377,742 | 403,443 | 403,903 |
| 225,024 | 241,372 | 270,741 | 300,530 | 335,929 | 373,172 | 405,065 | 432,171 | 451,505 |
| 220,405 | 234,062 | 251,810 | 275,981 | 316,008 | 350,010 | 381,255 | 409,001 | 419,692 |
| 254,183 | 262,811 | 283,478 | 307,771 | 344,561 | 382,711 | 397,823 | 394,195 | 386,757 |
| 224,634 | 241,073 | 275,180 | 312,996 | 358,901 | 404,872 | 437,612 | 458,646 | 475,474 |
| 250,660 | 263,489 | 297,978 | 335,729 | 375,540 | 415,892 | 445,437 | 468,596 | 484,971 |
| 227,167 | 232,523 | 269,721 | 320,401 | 370,801 | 413,442 | 445,198 | 467,512 | 484,225 |
| 245,830 | 246,085 | 275,038 | 320,836 | 357,474 | 381,522 | 405,510 | 429,788 | 449,869 |
| 240,526 | 254,684 | 280,162 | 302,639 | 328,501 | 359,163 | 385,279 | 409,025 | 418,256 |
| 244,350 | 253,638 | 279,743 | 307,280 | 336,434 | 361,641 | 380,397 | 397,263 | 412,435 |
| 236,942 | 253,124 | 281,455 | 313,533 | 351,991 | 392,146 | 424,043 | 444,196 | 447,776 |
| 245,329 | 261,399 | 290,115 | 320,936 | 361,242 | 407,326 | 439,328 | 460,694 | 475,915 |
| 220,126 | 232,045 | 256,655 | 285,062 | 319,010 | 350,696 | 377,056 | 399,294 | 418,111 |
| 208,894 | 210,262 | 236,123 | 270,957 | 307,945 | 344,183 | 380,682 | 411,186 | 435,761 |
| 216,241 | 215,592 | 238,636 | 269,934 | 296,120 | 315,263 | 338,018 | 362,239 | 384,645 |
| 204,507 | 219,516 | 245,972 | 280,673 | 322,228 | 366,528 | 400,158 | 427,055 | 448,700 |
| 223,577 | 238,906 | 269,782 | 303,507 | 342,892 | 391,307 | 434,231 | 467,624 | 493,478 |
| 284,688 | 295,855 | 325,724 | 368,870 | 416,911 | 461,446 | 493,520 | 518,595 | 532,924 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 292,976 | 309,426 | 327,067 | 344,507 | 358,853 | 374,248 | 393,025 | 416,672 | 439,531 |
| 230,221 | 244,714 | 264,660 | 286,327 | 317,123 | 347,649 | 375,578 | 400,348 | 420,568 |
| 181,278 | 181,655 | 206,288 | 243,470 | 283,467 | 321,169 | 352,776 | 376,609 | 397,131 |
| 175,243 | 174,479 | 206,432 | 255,241 | 301,823 | 340,553 | 376,652 | 412,024 | 438,321 |
| 232,945 | 252,382 | 271,647 | 298,608 | 339,815 | 391,769 | 433,382 | 463,685 | 481,215 |
| 273,850 | 290,161 | 310,017 | 346,171 | 392,937 | 438,704 | 469,316 | 487,296 | 499,848 |
| 286,361 | 305,623 | 321,864 | 355,587 | 399,428 | 441,862 | 469,098 | 487,965 | 504,684 |
| 282,045 | 301,086 | 320,500 | 357,134 | 405,057 | 452,863 | 486,199 | 508,250 | 519,735 |
| 237,828 | 260,975 | 279,564 | 310,305 | 349,496 | 393,520 | 431,148 | 463,612 | 487,716 |
| 248,952 | 252,540 | 283,061 | 322,653 | 364,283 | 403,534 | 439,460 | 470,010 | 485,209 |
| 224,643 | 226,091 | 248,123 | 284,821 | 316,912 | 351,425 | 389,463 | 424,296 | 451,370 |
| 238,440 | 257,437 | 267,145 | 286,289 | 308,595 | 329,962 | 349,553 | 368,731 | 387,996 |
| 203,079 | 225,175 | 236,934 | 257,339 | 284,505 | 315,967 | 344,353 | 372,348 | 397,906 |
| 231,596 | 254,876 | 264,039 | 280,700 | 311,114 | 345,041 | 375,140 | 402,208 | 425,557 |
| 225,948 | 250,938 | 257,897 | 273,830 | 302,161 | 342,304 | 379,712 | 413,471 | 436,364 |
| 220,606 | 244,975 | 258,676 | 285,935 | 323,133 | 364,109 | 397,877 | 427,612 | 450,317 |
| 241,945 | 246,503 | 253,492 | 271,876 | 290,522 | 308,613 | 335,127 | 368,829 | 396,038 |
| 202,601 | 202,873 | 236,064 | 288,769 | 332,591 | 363,245 | 390,663 | 416,050 | 435,292 |
| 217,014 | 239,215 | 252,970 | 275,342 | 303,957 | 337,234 | 363,616 | 382,530 | 400,003 |
| 205,529 | 230,434 | 242,132 | 261,274 | 289,996 | 320,537 | 346,345 | 366,177 | 379,891 |
| 209,186 | 234,097 | 238,662 | 250,915 | 271,063 | 298,177 | 321,645 | 347,403 | 371,610 |
| 188,498 | 209,317 | 213,778 | 227,583 | 246,218 | 268,908 | 290,888 | 311,471 | 330,406 |
| 181,846 | 203,597 | 209,003 | 221,053 | 240,346 | 264,786 | 286,341 | 308,075 | 332,174 |
| 166,312 | 169,610 | 190,699 | 222,381 | 260,083 | 304,241 | 348,816 | 385,548 | 415,766 |
| 202,015 | 200,313 | 230,138 | 280,077 | 321,207 | 350,696 | 378,319 | 399,503 | 408,554 |
| 229,009 | 261,188 | 263,490 | 271,877 | 292,826 | 319,812 | 345,408 | 370,655 | 389,430 |
| 211,499 | 238,068 | 241,768 | 256,601 | 287,314 | 325,694 | 354,433 | 377,325 | 399,682 |
| 219,293 | 245,017 | 255,842 | 273,902 | 306,104 | 339,398 | 363,571 | 384,085 | 402,405 |
| 218,124 | 242,620 | 256,521 | 275,899 | 306,051 | 342,102 | 362,303 | 376,542 | 391,918 |
| 232,466 | 259,396 | 262,883 | 264,298 | 270,410 | 284,122 | 305,201 | 316,702 | 327,172 |
| 159,610 | 162,401 | 178,305 | 199,126 | 216,144 | 225,027 | 234,140 | 242,858 | 253,791 |
| 144,540 | 146,471 | 163,435 | 186,194 | 199,594 | 206,684 | 218,866 | 234,207 | 250,292 |
| 150,638 | 152,368 | 167,035 | 194,891 | 225,798 | 256,310 | 284,209 | 308,038 | 330,984 |
| 199,204 | 230,048 | 240,985 | 264,122 | 299,074 | 342,505 | 379,755 | 408,448 | 429,816 |
| 211,005 | 236,434 | 232,204 | 240,459 | 259,596 | 279,119 | 296,060 | 312,341 | 327,621 |
| 190,102 | 217,043 | 215,259 | 219,712 | 230,562 | 241,113 | 247,415 | 253,579 | 260,544 |
| 185,424 | 217,746 | 213,163 | 211,853 | 217,440 | 221,016 | 221,013 | 218,760 | 220,893 |
| 171,900 | 181,462 | 199,165 | 228,984 | 262,463 | 290,007 | 298,280 | 299,457 | 300,945 |
| 149,872 | 151,023 | 170,267 | 201,960 | 224,916 | 240,918 | 258,896 | 279,067 | 294,745 |
| 174,495 | 199,841 | 201,330 | 209,497 | 226,025 | 248,855 | 272,362 | 299,048 | 325,646 |
| 186,096 | 214,119 | 214,308 | 223,034 | 243,555 | 271,234 | 296,079 | 324,786 | 343,874 |
| 192,178 | 220,064 | 219,235 | 231,957 | 255,280 | 289,928 | 320,496 | 351,018 | 374,674 |
| 228,589 | 255,749 | 249,780 | 255,592 | 271,592 | 288,422 | 293,832 | 309,170 | 335,531 |
| 186,183 | 213,333 | 212,235 | 220,207 | 235,933 | 253,748 | 267,319 | 287,291 | 307,817 |
| 157,576 | 164,247 | 179,765 | 199,013 | 220,983 | 246,451 | 270,732 | 296,489 | 324,250 |
| 154,693 | 156,340 | 173,612 | 205,086 | 229,044 | 251,375 | 282,301 | 313,685 | 335,955 |
| 183,926 | 214,108 | 215,981 | 230,368 | 259,068 | 293,415 | 326,665 | 360,807 | 388,366 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 208,287 | 235,613 | 236,496 | 254,184 | 285,625 | 324,334 | 360,405 | 395,654 | 425,029 |
| 216,124 | 244,757 | 243,438 | 262,779 | 296,707 | 335,675 | 367,452 | 392,556 | 411,810 |
| 208,975 | 239,619 | 238,405 | 257,707 | 290,180 | 331,553 | 366,373 | 396,079 | 418,702 |
| 226,047 | 255,784 | 258,001 | 278,390 | 309,915 | 344,387 | 374,406 | 381,864 | 375,827 |
| 159,565 | 166,061 | 176,700 | 197,469 | 215,881 | 234,938 | 249,676 | 264,213 | 280,667 |
| 144,559 | 151,335 | 163,870 | 185,786 | 193,958 | 192,228 | 195,050 | 199,326 | 200,821 |
| 167,445 | 196,393 | 192,497 | 194,622 | 200,438 | 206,756 | 209,945 | 215,445 | 221,259 |
| 173,717 | 204,725 | 198,962 | 196,779 | 198,997 | 202,351 | 203,723 | 208,406 | 214,490 |
| 176,718 | 206,555 | 199,036 | 195,894 | 198,678 | 203,927 | 208,410 | 214,161 | 223,321 |
| 171,699 | 203,129 | 195,088 | 194,488 | 198,355 | 207,637 | 216,203 | 227,532 | 241,697 |
| 172,028 | 199,208 | 194,731 | 195,699 | 200,064 | 205,522 | 207,023 | 210,300 | 217,460 |
| 155,858 | 169,099 | 179,406 | 189,558 | 192,656 | 195,089 | 194,187 | 193,317 | 190,402 |
| 153,726 | 165,399 | 181,858 | 202,283 | 204,175 | 196,360 | 192,439 | 192,583 | 190,705 |
| 203,983 | 236,767 | 235,692 | 229,176 | 222,014 | 215,659 | 207,785 | 201,903 | 200,255 |
| 212,698 | 245,162 | 240,718 | 225,974 | 215,932 | 207,747 | 203,453 | 200,165 | 199,364 |
| 208,722 | 235,721 | 230,083 | 219,681 | 210,734 | 205,909 | 201,120 | 201,375 | 202,030 |
| 178,079 | 204,952 | 203,164 | 198,326 | 200,815 | 205,170 | 209,979 | 216,718 | 225,427 |
| 172,447 | 200,065 | 199,757 | 198,788 | 200,735 | 207,551 | 213,686 | 221,749 | 233,268 |
| 155,542 | 165,757 | 175,216 | 186,959 | 193,311 | 200,022 | 208,295 | 219,756 | 233,408 |
| 140,032 | 148,714 | 160,541 | 181,070 | 189,999 | 196,319 | 211,650 | 233,544 | 253,154 |
| 162,214 | 187,252 | 188,498 | 195,562 | 205,094 | 218,945 | 233,969 | 255,067 | 273,720 |
| 173,702 | 197,699 | 195,737 | 196,876 | 205,142 | 218,877 | 229,482 | 238,579 | 242,280 |
| 164,693 | 190,006 | 188,493 | 192,111 | 198,208 | 204,168 | 207,066 | 211,801 | 214,482 |
| 174,589 | 200,893 | 199,882 | 195,693 | 196,150 | 196,839 | 196,226 | 197,909 | 199,611 |
| 182,918 | 208,248 | 204,111 | 200,464 | 198,946 | 198,333 | 195,906 | 196,461 | 197,062 |
| 179,807 | 195,049 | 206,306 | 211,253 | 207,135 | 200,127 | 194,054 | 190,975 | 190,086 |
| 156,353 | 168,671 | 181,875 | 197,323 | 195,793 | 188,783 | 190,035 | 196,168 | 202,972 |
| 167,281 | 201,905 | 197,264 | 194,753 | 196,878 | 204,253 | 212,281 | 222,745 | 233,689 |
| 173,218 | 208,018 | 199,808 | 195,343 | 195,918 | 196,913 | 194,593 | 195,255 | 195,238 |
| 192,344 | 233,692 | 224,231 | 212,326 | 203,010 | 199,250 | 196,819 | 196,413 | 197,795 |
| 187,132 | 222,300 | 213,126 | 203,022 | 199,361 | 198,487 | 197,458 | 196,710 | 196,864 |
| 211,348 | 250,973 | 241,194 | 226,770 | 214,423 | 205,705 | 199,078 | 196,347 | 195,855 |
| 160,579 | 173,963 | 182,307 | 191,891 | 198,343 | 198,674 | 196,669 | 194,945 | 195,173 |
| 136,532 | 147,667 | 158,701 | 180,574 | 190,367 | 191,750 | 198,521 | 205,247 | 209,324 |
| 166,000 | 200,603 | 200,082 | 195,401 | 199,263 | 204,238 | 206,830 | 212,039 | 213,495 |
| 189,684 | 228,367 | 228,308 | 218,518 | 209,753 | 206,309 | 202,049 | 200,084 | 198,313 |
| 189,004 | 226,435 | 218,499 | 206,593 | 201,252 | 200,139 | 197,820 | 198,599 | 201,495 |
| 180,820 | 218,865 | 213,588 | 205,878 | 203,265 | 202,264 | 197,551 | 194,117 | 192,431 |
| 245,401 | 286,894 | 278,179 | 261,398 | 244,872 | 234,183 | 219,003 | 207,924 | 200,541 |
| 238,634 | 257,232 | 269,077 | 269,174 | 257,351 | 240,224 | 222,788 | 208,059 | 199,486 |
| 183,546 | 199,830 | 215,291 | 225,288 | 215,028 | 198,752 | 192,416 | 192,929 | 191,740 |

| 29 | 31 | 33 | 35 | 37 | 39 | 41 | 43 | 45 |
|---|---|---|---|---|---|---|---|---|

| HR15 | HR16 | HR17 | HR18 | HR19 | HR20 | HR21 | HR22 | HR23 |
|---|---|---|---|---|---|---|---|---|
| 200,014 | 201,867 | 217,999 | 254,124 | 262,081 | 257,582 | 255,332 | 241,769 | 224,863 |
| 208,094 | 208,947 | 220,364 | 255,716 | 264,336 | 259,418 | 247,177 | 227,763 | 203,690 |
| 202,704 | 206,036 | 223,124 | 267,988 | 281,740 | 286,028 | 283,342 | 268,926 | 248,122 |
| 202,991 | 205,658 | 222,136 | 260,115 | 266,798 | 264,253 | 255,851 | 240,373 | 216,487 |
| 202,824 | 206,821 | 224,736 | 266,077 | 280,582 | 282,448 | 281,625 | 266,652 | 246,499 |
| 200,899 | 200,831 | 213,976 | 246,480 | 247,792 | 244,891 | 239,807 | 228,707 | 212,536 |
| 198,398 | 201,045 | 209,039 | 233,857 | 230,849 | 221,723 | 213,192 | 198,566 | 182,238 |
| 198,092 | 201,296 | 213,765 | 244,857 | 244,740 | 235,835 | 222,365 | 201,654 | 177,897 |
| 201,892 | 204,188 | 222,388 | 251,977 | 252,125 | 244,864 | 231,267 | 208,768 | 182,475 |
| 202,004 | 204,391 | 216,968 | 252,139 | 256,894 | 251,193 | 239,854 | 218,841 | 192,233 |
| 201,849 | 207,249 | 226,849 | 266,942 | 273,678 | 270,541 | 267,083 | 252,577 | 233,456 |
| 203,074 | 207,487 | 228,624 | 266,429 | 274,318 | 277,677 | 272,955 | 255,874 | 235,381 |
| 198,649 | 198,005 | 215,130 | 247,672 | 250,023 | 248,082 | 245,678 | 234,691 | 219,415 |
| 194,663 | 197,546 | 213,728 | 238,754 | 238,060 | 231,893 | 224,606 | 211,027 | 195,795 |
| 194,544 | 197,816 | 214,562 | 244,773 | 244,536 | 237,844 | 224,961 | 203,826 | 179,081 |
| 205,262 | 213,255 | 235,659 | 259,576 | 258,122 | 252,459 | 239,923 | 218,148 | 189,486 |
| 231,597 | 241,007 | 266,519 | 294,599 | 295,834 | 293,916 | 285,942 | 266,259 | 238,884 |
| 248,561 | 256,720 | 283,978 | 304,631 | 303,934 | 299,038 | 288,006 | 266,372 | 239,392 |
| 211,419 | 214,857 | 238,177 | 277,650 | 285,748 | 288,390 | 283,449 | 266,456 | 243,240 |
| 197,513 | 199,791 | 217,860 | 246,575 | 248,558 | 247,792 | 245,316 | 237,616 | 225,213 |
| 198,595 | 197,650 | 210,710 | 237,105 | 238,437 | 238,114 | 235,085 | 225,691 | 212,533 |
| 201,299 | 207,100 | 230,938 | 261,155 | 265,501 | 264,450 | 256,940 | 240,628 | 218,056 |
| 234,395 | 240,513 | 261,911 | 283,596 | 283,995 | 277,778 | 266,085 | 244,295 | 215,601 |
| 212,180 | 218,868 | 245,152 | 268,146 | 269,649 | 265,391 | 257,821 | 242,008 | 222,006 |
| 226,054 | 232,583 | 254,986 | 280,575 | 282,072 | 279,849 | 273,648 | 262,398 | 244,783 |
| 256,941 | 258,468 | 269,182 | 285,128 | 290,210 | 292,361 | 292,851 | 286,345 | 273,263 |
| 224,509 | 227,433 | 255,771 | 294,008 | 300,041 | 302,252 | 299,582 | 291,119 | 276,433 |
| 200,434 | 201,346 | 218,960 | 248,505 | 249,096 | 247,714 | 243,427 | 232,634 | 216,568 |
| 230,815 | 237,167 | 261,341 | 279,376 | 276,469 | 270,839 | 256,077 | 235,971 | 212,957 |
| 247,573 | 253,635 | 288,560 | 334,629 | 346,271 | 351,017 | 348,223 | 331,655 | 305,324 |
| 224,173 | 236,043 | 274,789 | 318,013 | 328,763 | 332,121 | 325,380 | 305,593 | 278,304 |
| 273,410 | 281,512 | 307,909 | 328,629 | 329,636 | 331,168 | 327,990 | 310,537 | 284,151 |
| 293,649 | 306,964 | 338,072 | 363,564 | 369,704 | 372,822 | 367,918 | 348,589 | 323,038 |
| 274,562 | 293,663 | 332,433 | 369,229 | 374,519 | 377,044 | 374,857 | 362,692 | 345,512 |
| 269,626 | 278,450 | 319,099 | 360,354 | 368,481 | 373,980 | 375,831 | 369,658 | 356,344 |
| 304,824 | 314,162 | 344,550 | 372,201 | 373,822 | 372,665 | 363,472 | 345,227 | 314,468 |
| 288,969 | 292,708 | 320,574 | 351,282 | 355,070 | 354,046 | 344,870 | 323,226 | 292,523 |
| 311,448 | 322,523 | 343,612 | 353,227 | 347,199 | 333,068 | 315,639 | 287,699 | 251,130 |
| 337,784 | 353,389 | 388,455 | 418,108 | 423,717 | 426,294 | 425,399 | 413,702 | 388,878 |
| 338,726 | 349,661 | 394,070 | 437,554 | 444,100 | 445,434 | 442,894 | 426,576 | 397,874 |
| 282,044 | 288,545 | 333,843 | 381,142 | 389,541 | 394,271 | 393,085 | 384,943 | 367,132 |
| 310,154 | 316,236 | 338,787 | 354,857 | 348,821 | 340,104 | 330,570 | 315,589 | 293,110 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 260,434 | 263,522 | 289,487 | 316,777 | 318,099 | 317,579 | 307,615 | 287,180 | 256,472 |
| 226,698 | 235,110 | 267,979 | 297,604 | 299,458 | 298,166 | 291,005 | 274,904 | 247,910 |
| 334,533 | 344,173 | 376,031 | 414,331 | 423,357 | 424,797 | 419,807 | 403,317 | 375,763 |
| 282,042 | 291,852 | 339,181 | 392,625 | 405,931 | 413,032 | 411,616 | 395,562 | 366,677 |
| 274,999 | 286,964 | 320,642 | 357,954 | 368,662 | 372,195 | 370,366 | 352,840 | 324,688 |
| 258,087 | 267,961 | 298,753 | 327,972 | 328,830 | 325,828 | 320,413 | 308,771 | 287,416 |
| 340,901 | 349,099 | 371,200 | 383,733 | 380,991 | 377,864 | 372,279 | 359,969 | 339,840 |
| 344,209 | 349,676 | 370,017 | 386,029 | 383,314 | 382,223 | 375,564 | 360,602 | 334,973 |
| 330,877 | 334,693 | 356,695 | 384,880 | 384,072 | 381,159 | 373,078 | 355,186 | 327,151 |
| 251,925 | 256,773 | 284,309 | 314,488 | 317,227 | 314,704 | 306,022 | 290,394 | 265,088 |
| 251,966 | 255,297 | 279,458 | 303,655 | 301,110 | 296,749 | 291,126 | 280,015 | 257,919 |
| 260,718 | 259,717 | 271,739 | 278,906 | 271,314 | 266,251 | 262,064 | 256,360 | 241,931 |
| 335,586 | 338,090 | 351,816 | 366,801 | 366,746 | 366,292 | 363,089 | 355,485 | 341,380 |
| 293,906 | 298,786 | 326,414 | 360,562 | 362,947 | 360,754 | 354,153 | 340,440 | 320,058 |
| 347,133 | 352,958 | 375,579 | 399,031 | 403,806 | 405,403 | 401,849 | 391,279 | 370,005 |
| 377,522 | 372,126 | 389,024 | 415,896 | 413,984 | 406,532 | 396,680 | 380,081 | 357,006 |
| 305,271 | 314,026 | 343,253 | 383,426 | 387,768 | 387,413 | 380,752 | 362,417 | 337,379 |
| 320,071 | 319,922 | 336,929 | 356,146 | 353,209 | 345,010 | 335,364 | 318,027 | 293,177 |
| 309,159 | 316,330 | 338,930 | 356,783 | 345,813 | 337,506 | 333,186 | 332,674 | 330,964 |
| 335,336 | 342,227 | 377,958 | 415,827 | 417,700 | 417,248 | 415,874 | 411,438 | 401,938 |
| 357,531 | 359,725 | 389,641 | 437,512 | 443,142 | 446,744 | 445,598 | 437,511 | 423,900 |
| 371,453 | 387,047 | 420,440 | 459,355 | 466,237 | 468,033 | 460,773 | 445,818 | 423,254 |
| 372,691 | 381,230 | 420,465 | 468,841 | 479,264 | 479,693 | 473,127 | 453,793 | 431,718 |
| 371,226 | 378,582 | 414,847 | 461,175 | 474,480 | 477,160 | 472,357 | 455,132 | 431,030 |
| 330,475 | 335,760 | 374,376 | 420,849 | 429,649 | 430,650 | 423,084 | 403,543 | 376,223 |
| 422,076 | 432,189 | 462,815 | 506,873 | 510,451 | 505,052 | 494,324 | 477,889 | 456,446 |
| 458,296 | 460,218 | 476,028 | 499,996 | 494,834 | 485,017 | 472,498 | 455,911 | 438,262 |
| 392,267 | 396,449 | 422,120 | 465,733 | 473,012 | 474,357 | 472,502 | 463,908 | 452,451 |
| 354,726 | 360,535 | 392,579 | 445,483 | 460,555 | 466,692 | 462,858 | 447,798 | 424,621 |
| 364,329 | 370,553 | 390,013 | 422,224 | 425,851 | 425,468 | 423,012 | 414,457 | 392,274 |
| 313,340 | 322,821 | 353,772 | 399,008 | 413,788 | 418,127 | 415,968 | 407,924 | 387,586 |
| 281,379 | 283,884 | 312,581 | 367,254 | 382,990 | 387,853 | 386,924 | 372,413 | 348,469 |
| 252,736 | 261,683 | 289,165 | 327,000 | 335,085 | 332,896 | 323,315 | 302,293 | 276,199 |
| 239,346 | 243,885 | 261,136 | 291,654 | 296,140 | 293,618 | 292,007 | 285,153 | 272,189 |
| 254,425 | 259,863 | 272,876 | 295,623 | 293,927 | 288,124 | 281,928 | 270,566 | 255,481 |
| 250,611 | 248,252 | 262,169 | 303,081 | 313,389 | 315,787 | 314,953 | 309,674 | 297,101 |
| 297,269 | 290,791 | 305,999 | 344,281 | 352,921 | 348,903 | 339,143 | 318,817 | 291,932 |
| 224,794 | 229,850 | 250,841 | 285,205 | 293,051 | 290,170 | 284,229 | 266,358 | 239,994 |
| 256,000 | 262,180 | 280,114 | 301,819 | 301,114 | 292,988 | 283,645 | 263,746 | 237,177 |
| 260,951 | 259,034 | 267,510 | 293,009 | 302,474 | 301,260 | 294,459 | 275,389 | 250,741 |
| 280,573 | 284,260 | 296,457 | 317,084 | 314,336 | 306,740 | 298,579 | 284,537 | 266,582 |
| 238,031 | 237,543 | 247,852 | 274,867 | 278,557 | 274,897 | 269,266 | 259,405 | 244,814 |
| 234,871 | 235,278 | 247,737 | 277,373 | 283,545 | 285,032 | 278,680 | 267,513 | 250,721 |
| 339,700 | 346,616 | 362,840 | 389,504 | 393,897 | 388,335 | 376,016 | 354,618 | 326,952 |
| 349,164 | 353,655 | 363,579 | 399,037 | 414,582 | 413,973 | 408,369 | 394,113 | 372,278 |
| 300,797 | 309,819 | 331,157 | 358,152 | 361,688 | 359,378 | 353,861 | 333,795 | 303,226 |
| 296,829 | 303,969 | 341,431 | 386,666 | 404,693 | 409,965 | 407,374 | 393,457 | 372,004 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 412,269 | 418,238 | 431,564 | 456,179 | 457,361 | 450,814 | 444,315 | 431,145 | 412,977 |
| 359,366 | 348,588 | 360,540 | 401,634 | 420,563 | 419,174 | 415,307 | 411,109 | 398,628 |
| 294,193 | 294,144 | 316,485 | 370,082 | 395,875 | 401,853 | 398,821 | 389,447 | 372,608 |
| 272,663 | 277,499 | 303,312 | 348,302 | 366,781 | 366,934 | 359,304 | 342,172 | 315,741 |
| 289,661 | 300,235 | 322,419 | 352,083 | 359,919 | 356,989 | 351,424 | 329,939 | 304,357 |
| 252,610 | 256,903 | 283,326 | 335,634 | 359,442 | 366,124 | 365,901 | 351,166 | 326,398 |
| 299,662 | 305,220 | 319,439 | 346,502 | 355,866 | 355,133 | 345,306 | 324,245 | 297,675 |
| 301,180 | 304,709 | 314,465 | 335,998 | 340,061 | 337,997 | 335,286 | 327,548 | 312,897 |
| 370,575 | 371,351 | 377,240 | 394,899 | 396,213 | 388,737 | 378,616 | 366,992 | 350,449 |
| 299,911 | 300,786 | 317,914 | 356,037 | 373,286 | 382,409 | 381,444 | 379,825 | 358,352 |
| 337,439 | 343,686 | 357,940 | 387,030 | 397,032 | 394,174 | 383,360 | 363,343 | 336,707 |
| 365,920 | 382,699 | 412,917 | 453,080 | 470,321 | 466,730 | 462,821 | 449,166 | 426,565 |
| 352,894 | 355,661 | 367,500 | 399,252 | 419,564 | 416,830 | 408,378 | 391,768 | 368,667 |
| 286,340 | 288,185 | 309,933 | 359,072 | 390,166 | 398,999 | 398,708 | 387,915 | 370,016 |
| 279,904 | 283,562 | 305,935 | 342,938 | 363,724 | 365,164 | 362,831 | 353,419 | 338,565 |
| 322,913 | 327,369 | 336,895 | 357,036 | 368,012 | 365,809 | 359,729 | 352,893 | 341,185 |
| 331,726 | 335,197 | 344,741 | 364,518 | 370,402 | 370,534 | 363,658 | 355,844 | 343,458 |
| 389,724 | 393,489 | 410,504 | 438,885 | 451,022 | 444,293 | 431,827 | 410,780 | 385,301 |
| 362,528 | 370,133 | 384,541 | 408,820 | 422,215 | 416,890 | 403,991 | 386,666 | 363,346 |
| 320,180 | 330,129 | 350,548 | 379,727 | 395,098 | 393,044 | 383,202 | 366,161 | 339,799 |
| 260,211 | 260,543 | 272,852 | 315,579 | 355,904 | 369,408 | 372,171 | 360,767 | 342,014 |
| 229,988 | 236,033 | 247,814 | 279,853 | 309,787 | 317,465 | 319,072 | 314,249 | 299,912 |
| 216,471 | 214,806 | 219,184 | 236,660 | 262,989 | 266,176 | 269,870 | 262,406 | 250,050 |
| 203,125 | 207,057 | 221,389 | 247,440 | 264,127 | 265,806 | 257,965 | 240,806 | 218,829 |
| 300,137 | 309,040 | 323,750 | 343,855 | 356,694 | 355,313 | 345,271 | 326,218 | 298,595 |
| 308,365 | 312,460 | 330,845 | 356,479 | 375,730 | 374,959 | 365,934 | 350,624 | 322,456 |
| 346,640 | 353,449 | 370,527 | 396,642 | 419,025 | 417,538 | 409,416 | 390,564 | 362,449 |
| 304,467 | 308,931 | 324,775 | 352,109 | 383,008 | 388,735 | 384,711 | 369,604 | 346,993 |
| 266,701 | 268,022 | 278,576 | 308,614 | 345,590 | 353,668 | 354,001 | 348,159 | 334,899 |
| 284,789 | 288,560 | 299,799 | 315,086 | 334,488 | 333,162 | 327,238 | 317,099 | 300,667 |
| 260,673 | 260,082 | 270,180 | 290,488 | 318,861 | 323,773 | 318,575 | 303,856 | 282,476 |
| 293,956 | 303,687 | 316,682 | 339,658 | 356,651 | 353,309 | 341,807 | 322,887 | 295,450 |
| 283,761 | 291,702 | 307,804 | 336,830 | 368,493 | 370,595 | 365,250 | 348,516 | 322,363 |
| 294,631 | 304,030 | 320,615 | 344,402 | 367,119 | 364,747 | 359,344 | 342,924 | 316,611 |
| 232,589 | 233,060 | 242,656 | 273,476 | 320,908 | 337,017 | 340,296 | 328,438 | 309,192 |
| 214,148 | 214,200 | 218,617 | 240,493 | 282,430 | 295,321 | 302,218 | 301,311 | 292,303 |
| 206,195 | 205,033 | 210,328 | 228,101 | 264,390 | 276,765 | 282,016 | 279,984 | 274,006 |
| 198,953 | 199,117 | 210,271 | 227,747 | 257,581 | 262,709 | 254,897 | 235,998 | 211,085 |
| 201,411 | 201,665 | 204,784 | 223,859 | 264,572 | 271,437 | 265,866 | 250,739 | 227,914 |
| 211,565 | 216,691 | 224,708 | 243,638 | 271,756 | 270,197 | 258,983 | 236,595 | 209,183 |
| 191,452 | 194,031 | 198,634 | 212,646 | 242,735 | 246,246 | 235,263 | 214,612 | 185,528 |
| 195,383 | 198,339 | 203,575 | 215,745 | 244,310 | 248,594 | 240,969 | 220,773 | 195,040 |
| 229,330 | 231,737 | 240,401 | 252,386 | 271,031 | 270,459 | 263,796 | 252,306 | 234,104 |
| 249,897 | 255,304 | 261,736 | 271,966 | 283,133 | 277,707 | 270,146 | 257,070 | 240,104 |
| 257,655 | 259,159 | 261,919 | 267,864 | 278,408 | 299,425 | 295,472 | 279,051 | 252,141 |
| 251,009 | 256,311 | 266,591 | 280,051 | 294,285 | 308,701 | 300,086 | 280,148 | 252,237 |
| 219,104 | 222,644 | 229,024 | 240,712 | 251,994 | 276,296 | 276,826 | 263,553 | 238,435 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 223,527 | 221,495 | 225,273 | 233,579 | 245,196 | 268,341 | 270,436 | 255,899 | 228,975 |
| 190,699 | 193,033 | 196,985 | 202,033 | 210,166 | 242,587 | 248,216 | 235,892 | 209,211 |
| 188,544 | 188,825 | 190,462 | 191,762 | 197,804 | 220,467 | 220,703 | 212,568 | 196,566 |
| 187,867 | 188,600 | 191,348 | 194,277 | 197,836 | 220,462 | 218,218 | 206,837 | 193,523 |
| 229,452 | 230,993 | 242,290 | 250,097 | 258,979 | 274,573 | 266,935 | 245,320 | 220,535 |
| 257,073 | 261,434 | 277,938 | 290,251 | 299,894 | 313,475 | 305,111 | 285,414 | 257,377 |
| 200,916 | 196,459 | 201,238 | 206,491 | 214,916 | 245,521 | 250,512 | 235,575 | 211,368 |
| 190,412 | 190,669 | 197,238 | 206,080 | 212,828 | 236,406 | 241,073 | 223,682 | 195,068 |
| 223,638 | 222,969 | 228,120 | 234,768 | 247,525 | 272,836 | 277,110 | 264,522 | 247,175 |
| 210,643 | 204,419 | 205,498 | 207,158 | 215,098 | 247,106 | 261,749 | 259,712 | 250,379 |
| 195,942 | 192,868 | 196,056 | 201,748 | 206,202 | 223,944 | 222,616 | 216,552 | 195,664 |
| 227,102 | 230,454 | 241,799 | 251,170 | 258,229 | 273,923 | 268,536 | 251,720 | 228,352 |
| 203,480 | 200,306 | 203,031 | 207,475 | 218,467 | 249,576 | 259,357 | 248,415 | 223,551 |
| 189,397 | 186,584 | 192,202 | 197,564 | 204,565 | 233,006 | 242,594 | 225,714 | 198,899 |
| 191,468 | 192,732 | 199,056 | 205,222 | 208,333 | 229,651 | 240,377 | 222,437 | 190,396 |
| 202,041 | 205,390 | 213,581 | 219,710 | 220,808 | 239,638 | 249,045 | 230,428 | 198,827 |
| 204,614 | 206,621 | 210,373 | 212,759 | 209,596 | 224,586 | 231,106 | 216,185 | 193,672 |
| 193,265 | 194,650 | 196,406 | 196,995 | 197,050 | 211,582 | 220,944 | 207,914 | 187,830 |
| 179,024 | 182,088 | 187,683 | 192,222 | 194,549 | 213,406 | 226,283 | 209,576 | 182,925 |
| 243,872 | 247,088 | 253,289 | 261,846 | 262,263 | 275,964 | 280,069 | 255,584 | 219,973 |
| 241,751 | 245,588 | 251,363 | 253,918 | 253,086 | 264,250 | 270,364 | 247,640 | 213,243 |
| 205,349 | 206,605 | 213,499 | 223,300 | 229,588 | 238,434 | 228,656 | 208,310 | 182,888 |
| 191,278 | 190,345 | 197,019 | 202,437 | 208,220 | 230,226 | 242,101 | 229,861 | 207,141 |
| 188,617 | 185,129 | 186,829 | 192,849 | 193,210 | 211,443 | 224,549 | 212,806 | 195,984 |
| 187,906 | 190,494 | 195,905 | 198,578 | 197,393 | 210,334 | 219,754 | 203,243 | 183,501 |
| 198,505 | 206,247 | 216,361 | 223,295 | 223,696 | 236,492 | 246,937 | 220,736 | 186,604 |
| 220,694 | 230,203 | 241,247 | 248,812 | 249,263 | 257,303 | 264,107 | 236,230 | 195,582 |
| 242,084 | 251,721 | 266,177 | 272,574 | 270,254 | 273,731 | 279,996 | 250,381 | 207,148 |
| 263,003 | 275,208 | 289,323 | 296,342 | 287,711 | 285,875 | 288,644 | 259,352 | 214,199 |
| 268,660 | 277,759 | 285,995 | 286,900 | 283,009 | 283,816 | 291,118 | 259,476 | 215,254 |
| 256,819 | 260,009 | 256,260 | 248,665 | 242,171 | 246,246 | 241,605 | 221,902 | 195,534 |
| 189,485 | 195,395 | 199,231 | 198,911 | 195,806 | 206,971 | 217,647 | 205,157 | 187,432 |
| 181,062 | 182,657 | 188,067 | 195,038 | 197,742 | 216,533 | 231,382 | 212,788 | 184,197 |
| 193,545 | 194,074 | 200,693 | 207,642 | 213,348 | 233,784 | 241,236 | 217,864 | 187,257 |
| 198,258 | 200,218 | 207,614 | 210,342 | 214,600 | 229,999 | 243,609 | 221,591 | 187,172 |
| 201,999 | 206,288 | 215,801 | 218,170 | 217,986 | 229,208 | 242,254 | 221,543 | 187,567 |
| 211,872 | 213,626 | 220,329 | 224,354 | 224,221 | 240,227 | 253,663 | 230,610 | 195,566 |
| 238,907 | 241,404 | 248,796 | 246,752 | 239,171 | 242,314 | 251,640 | 235,261 | 210,209 |
| 210,965 | 212,378 | 218,596 | 220,193 | 215,561 | 213,651 | 221,707 | 208,217 | 187,642 |
| 191,180 | 192,593 | 200,475 | 207,822 | 211,855 | 222,734 | 224,929 | 206,950 | 182,305 |
| 204,164 | 205,014 | 211,074 | 214,115 | 219,187 | 235,264 | 244,248 | 224,581 | 194,376 |
| 208,012 | 205,538 | 208,459 | 213,519 | 219,745 | 231,601 | 249,452 | 234,000 | 206,874 |
| 195,496 | 195,864 | 201,111 | 206,678 | 207,696 | 220,793 | 242,088 | 223,185 | 191,169 |
| 202,120 | 207,345 | 215,169 | 220,583 | 221,610 | 230,165 | 253,035 | 234,463 | 200,912 |
| 228,207 | 235,511 | 243,703 | 249,453 | 245,987 | 249,317 | 262,580 | 250,687 | 227,086 |
| 212,301 | 210,067 | 210,051 | 206,412 | 209,241 | 214,502 | 225,246 | 212,261 | 193,082 |
| 226,913 | 234,427 | 243,511 | 249,067 | 247,281 | 249,966 | 259,135 | 237,600 | 204,132 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 259,578 | 265,482 | 275,518 | 280,454 | 275,156 | 268,134 | 279,926 | 254,872 | 213,588 |
| 261,796 | 272,417 | 284,876 | 288,975 | 285,146 | 275,198 | 285,240 | 259,858 | 216,328 |
| 289,261 | 299,726 | 315,555 | 320,687 | 313,161 | 302,481 | 310,236 | 284,807 | 239,826 |
| 262,425 | 275,017 | 288,539 | 293,074 | 286,146 | 275,565 | 288,594 | 264,975 | 224,914 |
| 304,583 | 300,324 | 294,437 | 291,634 | 282,210 | 278,627 | 278,628 | 253,053 | 217,671 |
| 182,662 | 184,537 | 187,514 | 189,625 | 189,647 | 194,704 | 213,270 | 207,856 | 190,950 |
| 172,360 | 174,124 | 177,996 | 183,278 | 188,627 | 201,385 | 224,536 | 210,922 | 184,918 |
| 196,857 | 198,060 | 208,336 | 218,430 | 224,026 | 233,364 | 246,072 | 228,227 | 196,635 |
| 209,763 | 215,000 | 226,944 | 232,867 | 235,467 | 241,589 | 261,612 | 245,573 | 211,278 |
| 265,844 | 273,529 | 290,598 | 299,382 | 296,854 | 294,717 | 307,087 | 284,644 | 240,180 |
| 303,783 | 315,765 | 329,067 | 328,763 | 319,663 | 313,393 | 326,239 | 302,427 | 259,792 |
| 277,886 | 289,465 | 298,640 | 292,222 | 274,790 | 255,407 | 262,089 | 244,893 | 216,197 |
| 249,906 | 258,944 | 263,454 | 260,982 | 250,651 | 240,598 | 249,749 | 235,652 | 207,626 |
| 210,384 | 213,887 | 223,294 | 229,520 | 228,827 | 232,599 | 239,553 | 221,499 | 192,748 |
| 234,369 | 238,816 | 248,774 | 251,489 | 245,898 | 237,395 | 246,997 | 230,904 | 199,075 |
| 209,001 | 208,296 | 215,202 | 220,146 | 223,549 | 224,559 | 238,932 | 224,399 | 193,582 |
| 208,792 | 213,100 | 220,803 | 227,636 | 226,746 | 228,849 | 244,567 | 228,619 | 196,621 |
| 199,510 | 202,036 | 210,804 | 216,582 | 219,472 | 224,971 | 237,345 | 221,567 | 194,435 |
| 234,265 | 242,670 | 255,260 | 258,508 | 252,560 | 244,911 | 253,278 | 239,682 | 213,764 |
| 289,048 | 304,724 | 318,218 | 321,766 | 314,086 | 296,431 | 292,967 | 275,066 | 240,266 |
| 373,354 | 383,106 | 393,151 | 396,968 | 388,490 | 375,794 | 373,999 | 348,491 | 298,462 |
| 387,856 | 385,680 | 388,905 | 388,304 | 380,222 | 364,158 | 361,022 | 331,747 | 281,085 |
| 377,153 | 383,781 | 390,939 | 388,796 | 377,333 | 357,784 | 353,825 | 324,968 | 277,015 |
| 388,520 | 397,590 | 405,135 | 400,804 | 386,495 | 365,147 | 357,670 | 328,855 | 279,365 |
| 360,981 | 339,138 | 326,882 | 314,419 | 303,515 | 295,633 | 298,993 | 277,429 | 240,493 |
| 370,790 | 380,045 | 383,800 | 373,289 | 351,508 | 328,924 | 320,263 | 298,777 | 264,899 |
| 377,355 | 389,108 | 395,023 | 383,948 | 363,728 | 339,831 | 341,384 | 321,479 | 283,167 |
| 378,123 | 382,551 | 384,934 | 379,880 | 358,061 | 336,358 | 331,377 | 310,716 | 275,307 |
| 348,490 | 357,606 | 361,359 | 358,021 | 343,532 | 330,353 | 327,675 | 299,433 | 255,422 |
| 400,577 | 413,020 | 425,556 | 427,705 | 416,836 | 395,296 | 385,261 | 360,814 | 310,475 |
| 353,188 | 320,417 | 308,703 | 301,177 | 291,090 | 281,769 | 285,875 | 274,852 | 243,174 |
| 399,210 | 410,664 | 417,878 | 414,598 | 399,277 | 377,394 | 369,310 | 345,247 | 295,502 |
| 408,820 | 413,867 | 422,214 | 418,647 | 403,202 | 378,905 | 370,900 | 353,559 | 315,424 |
| 409,252 | 418,187 | 414,433 | 403,163 | 387,416 | 369,107 | 363,627 | 349,343 | 316,480 |
| 327,194 | 333,453 | 340,231 | 340,303 | 327,836 | 308,086 | 298,056 | 282,051 | 242,770 |
| 356,374 | 357,834 | 349,774 | 342,230 | 327,218 | 312,396 | 310,981 | 294,840 | 256,267 |
| 373,799 | 379,686 | 379,607 | 370,373 | 353,420 | 336,750 | 331,571 | 313,433 | 275,320 |
| 351,616 | 372,462 | 391,262 | 393,712 | 388,083 | 369,747 | 358,874 | 343,114 | 301,804 |
| 414,299 | 422,416 | 430,376 | 428,119 | 414,010 | 393,217 | 385,413 | 367,602 | 324,931 |
| 383,185 | 386,120 | 389,503 | 382,534 | 366,281 | 352,688 | 351,608 | 337,854 | 304,825 |
| 443,333 | 450,760 | 457,058 | 454,460 | 441,995 | 418,419 | 409,359 | 388,445 | 350,003 |
| 450,217 | 453,814 | 461,595 | 464,241 | 453,899 | 438,052 | 428,449 | 406,566 | 360,710 |
| 438,135 | 438,734 | 434,382 | 428,196 | 418,129 | 402,664 | 392,993 | 361,765 | 313,807 |
| 467,558 | 474,117 | 477,351 | 450,447 | 410,635 | 380,400 | 362,112 | 337,693 | 293,744 |
| 424,108 | 433,884 | 443,100 | 445,222 | 434,093 | 408,790 | 392,012 | 369,044 | 319,099 |
| 359,451 | 360,919 | 375,410 | 384,747 | 379,302 | 365,087 | 355,970 | 342,107 | 300,169 |
| 466,710 | 474,162 | 481,704 | 475,558 | 460,015 | 439,147 | 427,924 | 410,966 | 371,311 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 421,134 | 434,011 | 442,461 | 440,432 | 427,442 | 404,395 | 384,601 | 362,875 | 321,549 |
| 457,140 | 467,701 | 476,429 | 476,800 | 465,699 | 448,114 | 436,513 | 416,631 | 369,118 |
| 492,698 | 499,146 | 502,124 | 500,198 | 489,383 | 468,489 | 455,771 | 428,663 | 375,170 |
| 478,820 | 485,122 | 493,850 | 495,794 | 485,232 | 464,301 | 450,685 | 428,250 | 382,355 |
| 476,981 | 483,744 | 495,629 | 495,402 | 483,921 | 459,049 | 445,688 | 422,746 | 373,052 |
| 427,636 | 432,158 | 439,716 | 436,212 | 418,631 | 395,160 | 380,374 | 360,484 | 315,886 |
| 436,164 | 446,415 | 456,535 | 455,399 | 440,988 | 415,221 | 392,827 | 370,092 | 329,843 |
| 471,497 | 480,193 | 484,401 | 482,311 | 468,582 | 445,411 | 430,980 | 414,961 | 376,920 |
| 457,253 | 465,873 | 473,571 | 474,546 | 463,037 | 443,780 | 433,601 | 415,426 | 375,450 |
| 405,956 | 417,554 | 427,883 | 429,997 | 417,947 | 392,050 | 371,516 | 349,682 | 303,102 |
| 396,540 | 392,878 | 388,846 | 388,081 | 378,149 | 354,007 | 340,635 | 325,046 | 283,647 |
| 345,692 | 356,834 | 368,995 | 373,053 | 359,708 | 333,257 | 313,909 | 297,169 | 257,248 |
| 333,500 | 346,912 | 360,103 | 363,313 | 352,405 | 328,910 | 311,690 | 296,660 | 257,138 |
| 337,779 | 354,973 | 369,506 | 375,751 | 363,778 | 339,447 | 315,476 | 298,776 | 263,224 |
| 420,571 | 435,175 | 443,936 | 441,825 | 427,708 | 402,176 | 379,893 | 357,010 | 330,372 |
| 437,236 | 443,888 | 447,989 | 442,708 | 425,058 | 396,110 | 368,481 | 342,484 | 319,584 |
| 431,133 | 439,276 | 446,145 | 443,734 | 427,531 | 407,312 | 387,535 | 363,594 | 313,263 |
| 462,842 | 473,498 | 483,915 | 487,075 | 475,246 | 452,831 | 433,084 | 405,685 | 354,686 |
| 473,948 | 482,244 | 489,662 | 490,130 | 475,824 | 455,118 | 440,158 | 414,093 | 363,263 |
| 484,690 | 492,276 | 496,399 | 494,104 | 476,546 | 455,988 | 439,726 | 405,473 | 353,540 |
| 363,789 | 375,095 | 388,342 | 392,220 | 388,109 | 367,888 | 359,197 | 344,566 | 310,069 |
| 421,934 | 434,714 | 439,273 | 435,237 | 420,242 | 392,604 | 371,086 | 346,935 | 306,031 |
| 416,806 | 414,033 | 412,513 | 404,344 | 386,377 | 373,631 | 363,923 | 336,682 | 297,450 |
| 394,731 | 402,870 | 417,681 | 424,562 | 413,628 | 396,128 | 389,431 | 364,573 | 320,040 |
| 392,816 | 412,067 | 429,829 | 439,473 | 434,769 | 414,672 | 397,281 | 375,135 | 330,653 |
| 470,392 | 482,227 | 492,326 | 492,845 | 482,975 | 459,906 | 442,743 | 416,928 | 370,367 |
| 495,918 | 504,359 | 505,497 | 503,534 | 492,605 | 472,726 | 461,010 | 436,574 | 387,806 |
| 472,445 | 476,691 | 473,781 | 461,259 | 447,304 | 429,488 | 418,460 | 398,394 | 360,664 |
| 445,701 | 461,677 | 465,340 | 464,006 | 451,337 | 430,221 | 415,680 | 392,714 | 353,861 |
| 378,916 | 365,807 | 372,945 | 380,247 | 373,040 | 359,309 | 352,552 | 335,633 | 299,555 |
| 465,340 | 472,603 | 472,217 | 445,396 | 412,230 | 385,547 | 372,413 | 348,507 | 305,178 |
| 420,078 | 432,221 | 443,442 | 449,802 | 444,683 | 427,426 | 421,962 | 395,631 | 353,545 |
| 390,177 | 396,914 | 397,611 | 398,923 | 392,334 | 376,023 | 374,079 | 353,593 | 313,131 |
| 487,873 | 496,576 | 502,004 | 502,328 | 492,542 | 468,609 | 460,175 | 435,286 | 389,517 |
| 494,670 | 502,495 | 505,176 | 502,698 | 490,309 | 463,077 | 446,038 | 419,175 | 377,584 |
| 496,602 | 505,486 | 508,361 | 503,730 | 487,544 | 462,754 | 450,468 | 422,933 | 380,833 |
| 462,782 | 473,028 | 479,366 | 478,704 | 464,504 | 441,315 | 431,242 | 405,605 | 359,297 |
| 433,468 | 444,790 | 454,685 | 466,030 | 459,094 | 438,239 | 430,022 | 398,566 | 351,026 |
| 427,509 | 439,146 | 451,006 | 458,606 | 451,744 | 430,584 | 421,304 | 392,812 | 347,648 |
| 439,725 | 439,113 | 440,367 | 438,993 | 427,301 | 411,230 | 406,696 | 383,052 | 341,421 |
| 485,709 | 488,976 | 491,168 | 488,822 | 475,578 | 451,077 | 439,715 | 407,550 | 357,590 |
| 432,175 | 439,785 | 437,776 | 426,189 | 405,414 | 382,846 | 376,089 | 352,245 | 317,375 |
| 453,284 | 466,634 | 469,370 | 462,461 | 449,443 | 428,807 | 420,096 | 395,153 | 354,830 |
| 401,360 | 417,558 | 429,893 | 432,766 | 418,051 | 392,752 | 380,984 | 353,751 | 308,842 |
| 463,576 | 474,707 | 477,879 | 475,201 | 460,066 | 440,154 | 427,622 | 391,656 | 340,034 |
| 510,987 | 522,704 | 531,248 | 531,253 | 521,957 | 503,783 | 496,142 | 465,027 | 416,313 |
| 535,155 | 535,386 | 539,666 | 539,955 | 527,592 | 512,046 | 503,873 | 470,335 | 419,915 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 452,274 | 456,007 | 460,932 | 467,391 | 454,734 | 434,308 | 425,419 | 390,740 | 338,996 |
| 435,199 | 445,279 | 449,081 | 444,362 | 424,335 | 393,754 | 378,062 | 346,759 | 304,871 |
| 414,720 | 428,500 | 437,029 | 433,080 | 414,082 | 383,161 | 367,926 | 337,397 | 297,891 |
| 456,018 | 470,140 | 479,524 | 480,839 | 466,654 | 442,490 | 430,218 | 393,446 | 341,991 |
| 494,002 | 504,562 | 512,367 | 518,831 | 509,374 | 492,535 | 481,583 | 440,935 | 387,903 |
| 503,682 | 515,894 | 525,028 | 524,857 | 515,542 | 499,044 | 492,238 | 451,502 | 400,094 |
| 510,831 | 517,550 | 528,527 | 530,977 | 519,687 | 502,787 | 492,442 | 451,422 | 399,550 |
| 496,675 | 471,175 | 457,813 | 444,249 | 421,393 | 409,394 | 402,671 | 369,393 | 321,516 |
| 503,559 | 514,002 | 517,558 | 516,308 | 500,730 | 475,466 | 464,773 | 429,953 | 388,849 |
| 471,412 | 446,912 | 426,379 | 410,202 | 393,325 | 381,030 | 378,826 | 356,609 | 324,750 |
| 468,408 | 482,450 | 492,382 | 487,724 | 477,908 | 464,729 | 454,435 | 411,822 | 358,901 |
| 403,710 | 419,525 | 432,377 | 439,029 | 423,677 | 396,174 | 382,649 | 341,634 | 288,217 |
| 416,591 | 432,175 | 438,499 | 431,473 | 414,995 | 398,546 | 392,709 | 354,334 | 305,945 |
| 439,578 | 449,897 | 458,222 | 457,856 | 444,437 | 420,371 | 411,334 | 367,955 | 316,339 |
| 452,157 | 465,146 | 472,919 | 473,420 | 458,974 | 436,856 | 425,882 | 381,149 | 326,972 |
| 465,692 | 474,563 | 480,300 | 473,112 | 449,267 | 423,757 | 408,107 | 374,846 | 336,804 |
| 419,456 | 434,899 | 433,951 | 431,568 | 418,845 | 401,042 | 376,510 | 363,931 | 323,332 |
| 447,677 | 458,505 | 465,185 | 462,392 | 443,730 | 423,238 | 411,217 | 367,599 | 315,976 |
| 413,291 | 423,759 | 431,587 | 429,531 | 412,877 | 392,669 | 381,532 | 337,123 | 287,888 |
| 390,110 | 398,186 | 401,696 | 401,339 | 388,087 | 378,841 | 372,966 | 337,335 | 290,155 |
| 386,724 | 397,903 | 404,798 | 405,569 | 389,158 | 366,801 | 357,742 | 316,301 | 266,066 |
| 344,975 | 359,436 | 370,322 | 369,578 | 355,587 | 334,769 | 328,193 | 290,945 | 246,128 |
| 354,018 | 371,607 | 383,062 | 385,446 | 365,656 | 335,218 | 320,119 | 288,660 | 252,273 |
| 437,245 | 450,520 | 456,354 | 451,223 | 429,189 | 409,081 | 394,309 | 359,869 | 320,335 |
| 414,847 | 412,688 | 405,521 | 396,458 | 379,948 | 374,742 | 366,553 | 331,322 | 288,739 |
| 400,913 | 409,373 | 417,796 | 418,941 | 405,892 | 394,240 | 383,343 | 343,231 | 295,601 |
| 420,366 | 435,201 | 443,173 | 440,700 | 424,650 | 409,737 | 395,528 | 353,075 | 303,716 |
| 418,652 | 434,050 | 446,369 | 449,042 | 430,701 | 411,096 | 393,853 | 353,812 | 302,809 |
| 403,345 | 408,562 | 406,647 | 403,929 | 392,412 | 386,093 | 374,503 | 336,670 | 291,011 |
| 333,317 | 334,129 | 333,848 | 326,460 | 300,963 | 284,151 | 277,243 | 255,637 | 227,755 |
| 263,646 | 274,559 | 282,009 | 279,065 | 264,662 | 254,667 | 249,730 | 228,875 | 201,770 |
| 267,071 | 285,548 | 300,391 | 305,167 | 290,265 | 276,186 | 266,900 | 243,955 | 215,747 |
| 353,710 | 374,990 | 388,139 | 389,915 | 373,764 | 361,767 | 346,537 | 303,484 | 256,409 |
| 437,201 | 432,434 | 421,157 | 402,751 | 387,685 | 391,343 | 377,238 | 336,567 | 292,378 |
| 339,851 | 344,753 | 351,894 | 352,100 | 335,489 | 328,415 | 315,132 | 282,804 | 239,660 |
| 261,649 | 261,556 | 265,501 | 266,633 | 268,052 | 280,872 | 273,240 | 251,884 | 219,581 |
| 221,521 | 222,498 | 229,909 | 236,325 | 239,128 | 249,877 | 247,876 | 235,046 | 216,611 |
| 304,968 | 314,976 | 321,092 | 319,772 | 303,598 | 300,976 | 289,405 | 263,604 | 233,772 |
| 307,257 | 319,244 | 328,537 | 328,024 | 308,751 | 303,536 | 287,995 | 252,936 | 214,478 |
| 347,198 | 366,662 | 380,422 | 379,932 | 359,965 | 351,048 | 328,095 | 288,370 | 243,687 |
| 353,893 | 364,867 | 369,521 | 362,112 | 346,023 | 346,694 | 327,902 | 291,343 | 245,414 |
| 390,431 | 400,024 | 404,545 | 396,363 | 382,974 | 378,589 | 357,252 | 323,906 | 284,548 |
| 353,745 | 365,103 | 374,409 | 372,976 | 353,661 | 356,442 | 338,742 | 301,685 | 253,832 |
| 323,271 | 338,126 | 346,024 | 338,782 | 311,958 | 299,522 | 281,605 | 256,638 | 226,453 |
| 349,264 | 369,725 | 380,790 | 374,661 | 347,220 | 331,525 | 306,445 | 274,106 | 239,560 |
| 346,025 | 360,938 | 370,559 | 365,133 | 345,846 | 346,545 | 324,309 | 286,067 | 243,052 |
| 410,444 | 426,745 | 437,610 | 434,127 | 414,170 | 405,597 | 375,258 | 335,138 | 285,699 |

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|---|---|---|---|---|---|---|---|---|
| 438,095 | 446,931 | 446,737 | 437,505 | 420,541 | 411,310 | 382,502 | 341,337 | 292,966 |
| 424,189 | 432,216 | 438,333 | 433,098 | 410,671 | 401,699 | 373,413 | 331,384 | 280,477 |
| 434,975 | 441,329 | 441,426 | 434,253 | 416,795 | 412,564 | 384,955 | 346,207 | 302,938 |
| 365,901 | 365,247 | 364,956 | 355,170 | 336,966 | 331,173 | 307,142 | 281,386 | 251,152 |
| 293,519 | 296,142 | 287,209 | 272,963 | 260,808 | 265,236 | 251,236 | 229,777 | 205,272 |
| 200,940 | 202,212 | 206,891 | 211,016 | 218,938 | 237,618 | 227,499 | 206,091 | 178,203 |
| 226,268 | 232,952 | 240,884 | 241,802 | 243,154 | 260,703 | 248,251 | 222,007 | 191,472 |
| 221,360 | 228,920 | 236,718 | 239,351 | 240,706 | 255,408 | 243,380 | 220,608 | 187,818 |
| 232,001 | 243,166 | 253,683 | 257,673 | 253,284 | 262,485 | 248,420 | 223,053 | 189,319 |
| 251,477 | 261,170 | 267,536 | 263,832 | 260,274 | 274,474 | 261,436 | 237,448 | 204,302 |
| 224,568 | 230,087 | 234,333 | 230,684 | 224,401 | 231,272 | 221,253 | 207,443 | 188,545 |
| 190,061 | 190,793 | 191,319 | 193,070 | 202,798 | 218,248 | 211,889 | 199,419 | 182,780 |
| 187,210 | 188,440 | 193,485 | 201,369 | 215,380 | 234,251 | 227,770 | 211,799 | 189,761 |
| 198,217 | 199,323 | 203,621 | 210,386 | 225,851 | 244,618 | 236,329 | 222,884 | 200,301 |
| 197,607 | 197,446 | 200,376 | 205,344 | 219,914 | 238,703 | 230,237 | 212,739 | 189,857 |
| 202,081 | 205,258 | 211,680 | 215,132 | 225,614 | 238,046 | 228,958 | 211,051 | 184,179 |
| 233,558 | 239,639 | 246,623 | 246,911 | 250,271 | 258,764 | 245,462 | 224,188 | 194,021 |
| 243,225 | 251,768 | 258,369 | 254,046 | 247,533 | 245,857 | 230,424 | 213,162 | 192,345 |
| 247,049 | 260,641 | 268,550 | 264,145 | 256,312 | 253,543 | 235,224 | 213,608 | 189,268 |
| 267,924 | 282,912 | 292,005 | 288,140 | 280,257 | 278,303 | 255,268 | 225,042 | 194,097 |
| 286,000 | 293,160 | 295,509 | 291,383 | 293,554 | 291,156 | 267,600 | 240,534 | 209,540 |
| 242,968 | 244,736 | 246,064 | 248,243 | 258,486 | 257,753 | 243,175 | 223,536 | 192,409 |
| 214,492 | 217,956 | 220,970 | 226,398 | 239,678 | 240,399 | 230,907 | 213,890 | 187,156 |
| 200,189 | 203,078 | 206,480 | 207,329 | 222,316 | 234,481 | 227,622 | 212,077 | 189,442 |
| 197,703 | 199,373 | 202,149 | 201,616 | 212,537 | 220,229 | 214,743 | 206,477 | 189,797 |
| 191,214 | 194,091 | 198,188 | 197,057 | 209,136 | 215,369 | 208,287 | 195,541 | 179,166 |
| 210,807 | 219,689 | 229,154 | 232,307 | 245,372 | 250,159 | 235,001 | 210,889 | 181,030 |
| 242,713 | 248,587 | 252,774 | 252,376 | 263,776 | 266,025 | 249,649 | 224,248 | 189,131 |
| 193,393 | 195,266 | 201,243 | 207,503 | 232,169 | 239,972 | 232,138 | 213,786 | 185,056 |
| 196,892 | 200,584 | 207,898 | 212,191 | 231,525 | 237,587 | 230,556 | 211,003 | 183,882 |
| 196,852 | 199,195 | 203,251 | 208,315 | 229,993 | 239,183 | 232,007 | 215,833 | 192,553 |
| 197,434 | 199,409 | 203,092 | 202,461 | 217,361 | 219,681 | 212,548 | 201,768 | 187,472 |
| 196,077 | 198,397 | 202,098 | 202,094 | 218,362 | 219,309 | 210,261 | 196,636 | 178,457 |
| 210,547 | 212,779 | 220,225 | 227,083 | 241,190 | 242,325 | 230,339 | 209,704 | 182,949 |
| 212,101 | 213,724 | 219,849 | 231,200 | 253,442 | 254,551 | 243,014 | 224,331 | 196,093 |
| 196,779 | 199,297 | 204,832 | 212,923 | 235,850 | 241,285 | 230,679 | 212,594 | 184,873 |
| 203,144 | 206,128 | 210,923 | 215,750 | 237,922 | 240,031 | 232,754 | 216,712 | 186,761 |
| 190,307 | 191,462 | 197,713 | 212,382 | 245,400 | 256,966 | 256,109 | 242,012 | 217,872 |
| 194,464 | 193,112 | 196,781 | 205,491 | 234,246 | 242,214 | 244,430 | 241,498 | 231,152 |
| 194,722 | 192,889 | 190,591 | 189,456 | 208,431 | 214,257 | 212,811 | 206,026 | 192,322 |
| 189,310 | 188,775 | 189,545 | 193,614 | 216,033 | 222,289 | 218,805 | 205,228 | 184,606 |

| HR24 |
| --- |
| 211,168 |
| 186,585 |
| 232,253 |
| 201,293 |
| 231,739 |
| 197,328 |
| 165,129 |
| 158,212 |
| 162,689 |
| 172,290 |
| 215,744 |
| 219,539 |
| 205,861 |
| 180,757 |
| 158,510 |
| 168,496 |
| 218,556 |
| 218,651 |
| 227,871 |
| 211,934 |
| 199,563 |
| 200,203 |
| 193,681 |
| 202,360 |
| 229,127 |
| 260,149 |
| 261,816 |
| 199,449 |
| 194,030 |
| 285,568 |
| 254,586 |
| 264,684 |
| 300,493 |
| 326,202 |
| 341,607 |
| 289,510 |
| 268,478 |
| 220,986 |
| 364,337 |
| 375,840 |
| 347,335 |
| 269,256 |

230,573
227,057
353,792
342,913
298,665
264,576
320,237
314,168
302,472
240,325
234,923
221,241
324,584
299,509
351,702
335,302
314,965
271,306
330,762
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413,942
407,941
416,756
414,252
353,883
441,599
424,882
443,191
406,442
376,871
373,775
332,214
255,730
257,994
238,486
286,864
273,164
219,144
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248,261
229,000
236,653
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397,468
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354,526
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328,864
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265,743
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210,558
186,194
163,259
175,171
217,994
224,148
228,031
229,229
216,404

| | | | |
|---|---|---|---|
| 208,634 | | | |
| 189,859 | | | |
| 182,031 | | | |
| 174,404 | | | |
| 200,735 | | | |
| 235,564 | | | |
| 192,716 | | | |
| 171,974 | | | |
| 232,470 | | | |
| 239,469 | | | |
| 176,187 | | | |
| 207,686 | | | |
| 205,848 | | | |
| 176,279 | | | |
| 162,944 | | | |
| 168,776 | 4,616,995 | 4,618,761 | (1,766) |
| 169,017 | 4,495,011 | 4,496,569 | (1,558) |
| 165,577 | 4,331,416 | 4,332,424 | (1,008) |
| 157,968 | 4,324,755 | 4,325,377 | (622) |
| 187,966 | 5,023,591 | 5,025,195 | (1,604) |
| 182,268 | 5,031,482 | 5,033,179 | (1,698) |
| 160,606 | 4,626,899 | 4,628,536 | (1,636) |
| 187,125 | 4,521,343 | 4,523,160 | (1,818) |
| 181,307 | 4,790,860 | 4,792,502 | (1,643) |
| 163,692 | 4,616,716 | 4,617,451 | (736) |
| 156,479 | 4,531,040 | 4,531,708 | (667) |
| 164,238 | 4,805,139 | 4,806,785 | (1,646) |
| 173,698 | 5,030,720 | 5,032,233 | (1,513) |
| 179,421 | 5,230,416 | 5,232,098 | (1,682) |
| 180,183 | 5,287,958 | 5,289,633 | (1,675) |
| 170,470 | 4,978,533 | 4,980,069 | (1,536) |
| 168,271 | 4,265,554 | 4,266,565 | (1,011) |
| 161,321 | 4,422,618 | 4,423,337 | (719) |
| 162,848 | 4,675,707 | 4,677,362 | (1,656) |
| 161,098 | 4,590,924 | 4,592,664 | (1,740) |
| 160,385 | 4,655,327 | 4,656,938 | (1,610) |
| 165,320 | 4,693,177 | 4,695,046 | (1,869) |
| 183,675 | 4,872,785 | 4,874,340 | (1,555) |
| 165,083 | 4,542,883 | 4,544,136 | (1,254) |
| 158,501 | 4,268,811 | 4,269,391 | (580) |
| 171,673 | 4,714,649 | 4,716,175 | (1,526) |
| 186,120 | 4,898,189 | 4,899,722 | (1,533) |
| 167,239 | 4,877,126 | 4,878,846 | (1,720) |
| 170,196 | 4,752,621 | 4,754,212 | (1,591) |
| 200,006 | 4,914,176 | 4,915,877 | (1,701) |
| 170,624 | | | (42,872) |
| 171,956 | | | |

179,504
180,153
200,936
187,825
183,360
171,531
160,696
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180,716
199,798
220,180
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205,923
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155,469
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158,964
171,330
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161,535
198,041
220,260
178,323
166,037

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| | EBMTRY | EBMTRM | EBMTRD | HR1 | HR2 | HR3 | HR4 | HR5 |
|---|---|---|---|---|---|---|---|---|
| 20C | 2009 | 11 | 1 | 64,815 | 64,435 | 64,211 | 63,204 | 62,805 |
| 20C | 2009 | 11 | 2 | 74,246 | 74,712 | 75,248 | 76,721 | 77,769 |
| 20C | 2009 | 11 | 3 | 90,594 | 88,903 | 88,038 | 88,322 | 88,516 |
| 20C | 2009 | 11 | 4 | 86,552 | 83,738 | 83,872 | 89,821 | 89,587 |
| 20C | 2009 | 11 | 5 | 86,471 | 85,573 | 86,740 | 84,772 | 87,637 |
| 20C | 2009 | 11 | 6 | 91,675 | 89,052 | 89,824 | 87,655 | 90,167 |
| 20C | 2009 | 11 | 7 | 75,508 | 73,074 | 72,810 | 71,864 | 71,564 |
| 20C | 2009 | 11 | 8 | 68,510 | 68,020 | 67,537 | 67,021 | 64,286 |
| 20C | 2009 | 11 | 9 | 70,486 | 76,627 | 78,652 | 77,006 | 77,110 |
| 20C | 2009 | 11 | 10 | 87,242 | 85,243 | 83,829 | 83,097 | 85,533 |
| 20C | 2009 | 11 | 11 | 88,710 | 87,478 | 89,962 | 86,402 | 83,989 |
| 20C | 2009 | 11 | 12 | 83,913 | 82,609 | 81,899 | 75,931 | 76,217 |
| 20C | 2009 | 11 | 13 | 81,077 | 79,068 | 78,397 | 78,128 | 78,517 |
| 20C | 2009 | 11 | 14 | 65,918 | 69,052 | 66,772 | 63,380 | 69,262 |
| 20C | 2009 | 11 | 15 | 68,513 | 68,164 | 68,565 | 68,786 | 68,330 |
| 20C | 2009 | 11 | 16 | 70,759 | 70,831 | 71,467 | 72,819 | 76,974 |
| 20C | 2009 | 11 | 17 | 83,901 | 83,394 | 83,149 | 85,323 | 83,650 |
| 20C | 2009 | 11 | 18 | 86,947 | 85,443 | 83,720 | 83,124 | 79,956 |
| 20C | 2009 | 11 | 19 | 85,037 | 83,653 | 78,931 | 75,811 | 76,349 |
| 20C | 2009 | 11 | 20 | 91,727 | 84,478 | 83,494 | 81,567 | 82,837 |
| 20C | 2009 | 11 | 21 | 78,431 | 76,524 | 76,056 | 75,705 | 75,191 |
| 20C | 2009 | 11 | 22 | 69,761 | 69,748 | 69,621 | 68,932 | 68,904 |
| 20C | 2009 | 11 | 23 | 75,149 | 76,321 | 77,217 | 78,961 | 82,634 |
| 20C | 2009 | 11 | 24 | 87,478 | 84,677 | 82,439 | 80,918 | 81,482 |
| 20C | 2009 | 11 | 25 | 90,610 | 89,474 | 83,409 | 83,268 | 86,833 |
| 20C | 2009 | 11 | 26 | 72,327 | 70,834 | 70,641 | 69,610 | 69,521 |
| 20C | 2009 | 11 | 27 | 58,681 | 58,878 | 58,984 | 59,323 | 59,279 |
| 20C | 2009 | 11 | 28 | 63,828 | 63,964 | 64,195 | 64,641 | 65,720 |
| 20C | 2009 | 11 | 29 | 67,230 | 67,083 | 66,646 | 67,420 | 67,510 |
| 20C | 2009 | 11 | 30 | 77,659 | 79,637 | 81,641 | 81,275 | 83,323 |
| 20C | 2009 | 12 | 1 | 87,608 | 88,559 | 88,240 | 86,789 | 85,979 |
| 20C | 2009 | 12 | 2 | 85,509 | 86,924 | 85,790 | 85,719 | 85,829 |
| 20C | 2009 | 12 | 3 | 90,596 | 85,282 | 86,546 | 84,900 | 87,234 |
| 20C | 2009 | 12 | 4 | 91,749 | 90,765 | 88,208 | 89,432 | 89,822 |
| 20C | 2009 | 12 | 5 | 84,511 | 82,687 | 82,065 | 81,606 | 80,858 |
| 20C | 2009 | 12 | 6 | 70,813 | 70,685 | 70,477 | 70,237 | 70,046 |
| 20C | 2009 | 12 | 7 | 74,399 | 78,661 | 81,298 | 80,023 | 79,928 |
| 20C | 2009 | 12 | 8 | 87,708 | 86,180 | 85,544 | 87,710 | 84,927 |
| 20C | 2009 | 12 | 9 | 88,253 | 87,034 | 81,624 | 83,063 | 89,118 |
| 20C | 2009 | 12 | 10 | 88,517 | 92,654 | 93,242 | 92,186 | 94,367 |
| 20C | 2009 | 12 | 11 | 90,070 | 89,123 | 88,918 | 84,295 | 82,931 |
| 20C | 2009 | 12 | 12 | 84,281 | 87,224 | 87,424 | 83,927 | 84,261 |

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|---|---|---|---|---|---|---|---|---|
| 20C | 2009 | 12 | 13 | 71,600 | 71,121 | 71,618 | 72,895 | 71,764 |
| 20C | 2009 | 12 | 14 | 74,248 | 79,010 | 79,624 | 80,473 | 80,235 |
| 20C | 2009 | 12 | 15 | 92,374 | 89,887 | 86,705 | 85,520 | 85,232 |
| 20C | 2009 | 12 | 16 | 90,990 | 89,174 | 87,335 | 79,086 | 76,497 |
| 20C | 2009 | 12 | 17 | 84,360 | 90,599 | 88,142 | 86,237 | 87,763 |
| 20C | 2009 | 12 | 18 | 87,349 | 87,095 | 85,293 | 84,797 | 81,454 |
| 20C | 2009 | 12 | 19 | 73,232 | 72,545 | 72,892 | 71,752 | 72,553 |
| 20C | 2009 | 12 | 20 | 71,536 | 70,996 | 70,351 | 70,367 | 69,996 |
| 20C | 2009 | 12 | 21 | 74,981 | 75,454 | 76,484 | 77,484 | 81,618 |
| 20C | 2009 | 12 | 22 | 87,173 | 86,180 | 85,253 | 84,047 | 83,838 |
| 20C | 2009 | 12 | 23 | 87,852 | 87,495 | 85,448 | 84,279 | 83,465 |
| 20C | 2009 | 12 | 24 | 69,927 | 68,196 | 68,275 | 67,516 | 66,177 |
| 20C | 2009 | 12 | 25 | 58,076 | 58,251 | 58,095 | 58,062 | 58,113 |
| 20C | 2009 | 12 | 26 | 61,168 | 61,322 | 60,014 | 59,522 | 59,638 |
| 20C | 2009 | 12 | 27 | 69,073 | 69,753 | 70,000 | 70,156 | 70,429 |
| 20C | 2009 | 12 | 28 | 75,192 | 76,438 | 76,677 | 74,198 | 74,669 |
| 20C | 2009 | 12 | 29 | 87,366 | 86,525 | 86,033 | 85,073 | 85,700 |
| 20C | 2009 | 12 | 30 | 87,842 | 88,554 | 88,557 | 83,919 | 83,663 |
| 20C | 2009 | 12 | 31 | 85,620 | 84,074 | 77,920 | 72,504 | 72,878 |
| 201 | 2010 | 1 | 1 | 78,318 | 79,385 | 73,237 | 74,314 | 74,849 |
| 201 | 2010 | 1 | 2 | 70,913 | 70,049 | 70,235 | 69,343 | 69,400 |
| 201 | 2010 | 1 | 3 | 69,788 | 70,745 | 70,418 | 69,874 | 69,714 |
| 201 | 2010 | 1 | 4 | 75,457 | 76,841 | 78,256 | 81,223 | 86,534 |
| 201 | 2010 | 1 | 5 | 94,229 | 92,902 | 92,451 | 91,024 | 90,579 |
| 201 | 2010 | 1 | 6 | 95,076 | 91,259 | 89,435 | 88,839 | 88,908 |
| 201 | 2010 | 1 | 7 | 93,860 | 91,774 | 91,453 | 88,428 | 88,067 |
| 201 | 2010 | 1 | 8 | 95,607 | 89,861 | 92,600 | 90,617 | 89,406 |
| 201 | 2010 | 1 | 9 | 85,273 | 78,275 | 73,856 | 71,802 | 71,841 |
| 201 | 2010 | 1 | 10 | 74,354 | 74,361 | 74,483 | 73,550 | 73,656 |
| 201 | 2010 | 1 | 11 | 75,196 | 75,672 | 76,558 | 76,557 | 78,255 |
| 201 | 2010 | 1 | 12 | 88,693 | 85,947 | 82,199 | 88,939 | 91,429 |
| 201 | 2010 | 1 | 13 | 96,039 | 90,899 | 86,284 | 80,773 | 79,147 |
| 201 | 2010 | 1 | 14 | 96,246 | 89,454 | 91,078 | 87,837 | 90,413 |
| 201 | 2010 | 1 | 15 | 92,007 | 90,067 | 92,455 | 91,771 | 89,071 |
| 201 | 2010 | 1 | 16 | 84,764 | 82,195 | 80,970 | 79,681 | 83,758 |
| 201 | 2010 | 1 | 17 | 71,716 | 71,086 | 70,878 | 70,512 | 70,513 |
| 201 | 2010 | 1 | 18 | 74,604 | 75,968 | 76,673 | 77,460 | 81,822 |
| 201 | 2010 | 1 | 19 | 92,070 | 91,349 | 88,931 | 82,186 | 77,030 |
| 201 | 2010 | 1 | 20 | 74,387 | 72,999 | 72,248 | 74,405 | 78,482 |
| 201 | 2010 | 1 | 21 | 90,656 | 88,456 | 87,090 | 85,627 | 86,432 |
| 201 | 2010 | 1 | 22 | 93,313 | 89,004 | 86,998 | 88,856 | 90,699 |
| 201 | 2010 | 1 | 23 | 83,880 | 81,625 | 80,923 | 79,496 | 81,590 |
| 201 | 2010 | 1 | 24 | 67,031 | 66,874 | 66,471 | 66,506 | 66,655 |
| 201 | 2010 | 1 | 25 | 66,236 | 67,538 | 70,632 | 73,439 | 71,296 |
| 201 | 2010 | 1 | 26 | 91,467 | 89,494 | 89,858 | 87,824 | 88,186 |
| 201 | 2010 | 1 | 27 | 95,848 | 93,649 | 91,288 | 89,489 | 91,411 |
| 201 | 2010 | 1 | 28 | 93,919 | 91,772 | 92,695 | 93,376 | 94,883 |

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|---|---|---|---|---|---|---|---|---|
| 201 | 2010 | 1 | 29 | 92,027 | 90,581 | 89,476 | 88,403 | 88,838 |
| 201 | 2010 | 1 | 30 | 80,259 | 78,420 | 76,603 | 74,615 | 74,641 |
| 201 | 2010 | 1 | 31 | 69,435 | 69,615 | 69,809 | 69,415 | 70,445 |
| 201 | 2010 | 2 | 1 | 73,845 | 74,640 | 74,153 | 75,203 | 76,219 |
| 201 | 2010 | 2 | 2 | 93,253 | 90,001 | 88,386 | 87,880 | 88,316 |
| 201 | 2010 | 2 | 3 | 92,224 | 85,724 | 88,818 | 87,023 | 89,764 |
| 201 | 2010 | 2 | 4 | 90,929 | 91,719 | 89,519 | 88,914 | 91,591 |
| 201 | 2010 | 2 | 5 | 93,620 | 93,758 | 92,155 | 90,094 | 91,093 |
| 201 | 2010 | 2 | 6 | 88,491 | 82,715 | 79,780 | 81,705 | 76,998 |
| 201 | 2010 | 2 | 7 | 81,878 | 81,665 | 79,490 | 81,318 | 80,930 |
| 201 | 2010 | 2 | 8 | 79,164 | 80,341 | 81,138 | 80,572 | 82,220 |
| 201 | 2010 | 2 | 9 | 89,743 | 88,682 | 91,451 | 86,067 | 91,363 |
| 201 | 2010 | 2 | 10 | 92,612 | 90,611 | 90,552 | 85,718 | 86,583 |
| 201 | 2010 | 2 | 11 | 91,176 | 91,417 | 90,599 | 91,791 | 95,214 |
| 201 | 2010 | 2 | 12 | 93,778 | 94,664 | 94,627 | 93,253 | 91,761 |
| 201 | 2010 | 2 | 13 | 90,122 | 88,992 | 83,416 | 80,540 | 84,592 |
| 201 | 2010 | 2 | 14 | 80,795 | 79,745 | 79,993 | 79,075 | 82,004 |
| 201 | 2010 | 2 | 15 | 84,844 | 87,133 | 87,814 | 88,155 | 85,390 |
| 201 | 2010 | 2 | 16 | 94,538 | 92,145 | 87,112 | 83,509 | 85,548 |
| 201 | 2010 | 2 | 17 | 89,581 | 87,749 | 87,258 | 85,287 | 85,046 |
| 201 | 2010 | 2 | 18 | 87,687 | 89,117 | 88,826 | 88,038 | 88,946 |
| 201 | 2010 | 2 | 19 | 88,951 | 90,202 | 88,555 | 87,517 | 87,868 |
| 201 | 2010 | 2 | 20 | 85,934 | 84,991 | 83,987 | 83,978 | 81,847 |
| 201 | 2010 | 2 | 21 | 77,596 | 77,548 | 78,495 | 74,445 | 73,989 |
| 201 | 2010 | 2 | 22 | 80,613 | 79,139 | 78,085 | 79,152 | 76,313 |
| 201 | 2010 | 2 | 23 | 94,908 | 94,006 | 89,620 | 84,867 | 86,447 |
| 201 | 2010 | 2 | 24 | 88,443 | 85,212 | 85,163 | 83,293 | 83,977 |
| 201 | 2010 | 2 | 25 | 95,726 | 94,284 | 93,243 | 92,578 | 93,247 |
| 201 | 2010 | 2 | 26 | 90,482 | 95,819 | 92,605 | 91,740 | 90,842 |
| 201 | 2010 | 2 | 27 | 85,510 | 84,878 | 86,874 | 84,939 | 85,837 |
| 201 | 2010 | 2 | 28 | 77,459 | 77,657 | 77,108 | 81,047 | 80,342 |
| 201 | 2010 | 3 | 1 | 74,971 | 79,892 | 82,275 | 80,560 | 81,150 |
| 201 | 2010 | 3 | 2 | 90,565 | 88,438 | 86,207 | 85,006 | 87,300 |
| 201 | 2010 | 3 | 3 | 90,504 | 87,233 | 89,633 | 88,327 | 88,703 |
| 201 | 2010 | 3 | 4 | 87,361 | 86,871 | 90,939 | 90,734 | 91,073 |
| 201 | 2010 | 3 | 5 | 87,624 | 89,454 | 88,986 | 87,355 | 88,934 |
| 201 | 2010 | 3 | 6 | 83,147 | 80,887 | 80,169 | 79,321 | 79,887 |
| 201 | 2010 | 3 | 7 | 80,632 | 79,597 | 80,337 | 79,997 | 78,690 |
| 201 | 2010 | 3 | 8 | 79,136 | 79,106 | 79,356 | 81,465 | 82,433 |
| 201 | 2010 | 3 | 9 | 89,991 | 86,454 | 88,506 | 87,668 | 85,708 |
| 201 | 2010 | 3 | 10 | 93,687 | 88,312 | 89,087 | 88,122 | 87,844 |
| 201 | 2010 | 3 | 11 | 85,280 | 84,333 | 83,836 | 80,874 | 82,648 |
| 201 | 2010 | 3 | 12 | 92,137 | 85,761 | 86,755 | 85,397 | 85,074 |
| 201 | 2010 | 3 | 13 | 84,414 | 81,700 | 81,079 | 80,078 | 79,668 |
| 201 | 2010 | 3 | 14 | 79,196 | 79,963 | - | 79,428 | 79,608 |
| 201 | 2010 | 3 | 15 | 79,283 | 78,633 | 77,111 | 76,055 | 76,671 |
| 201 | 2010 | 3 | 16 | 88,076 | 85,046 | 83,837 | 83,305 | 84,665 |

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|---|---|---|---|---|---|---|---|---|
| 201 | 2010 | 3 | 17 | 83,502 | 81,830 | 81,427 | 76,403 | 75,456 |
| 201 | 2010 | 3 | 18 | 88,572 | 89,774 | 89,465 | 88,958 | 89,148 |
| 201 | 2010 | 3 | 19 | 88,103 | 89,085 | 86,304 | 82,047 | 88,112 |
| 201 | 2010 | 3 | 20 | 85,889 | 84,798 | 83,848 | 83,041 | 79,547 |
| 201 | 2010 | 3 | 21 | 72,445 | 71,605 | 70,283 | 69,708 | 72,599 |
| 201 | 2010 | 3 | 22 | 81,010 | 81,326 | 80,831 | 77,050 | 80,986 |
| 201 | 2010 | 3 | 23 | 93,948 | 92,216 | 88,885 | 88,672 | 84,044 |
| 201 | 2010 | 3 | 24 | 93,064 | 90,386 | 88,070 | 85,214 | 85,806 |
| 201 | 2010 | 3 | 25 | 91,514 | 90,945 | 89,924 | 82,257 | 81,101 |
| 201 | 2010 | 3 | 26 | 88,904 | 84,702 | 87,775 | 86,318 | 85,712 |
| 201 | 2010 | 3 | 27 | 87,298 | 84,957 | 84,223 | 81,347 | 81,709 |
| 201 | 2010 | 3 | 28 | 78,774 | 78,603 | 76,769 | 75,777 | 76,207 |
| 201 | 2010 | 3 | 29 | 81,543 | 79,605 | 79,780 | 79,548 | 80,926 |
| 201 | 2010 | 3 | 30 | 91,586 | 86,537 | 85,686 | 88,337 | 87,820 |
| 201 | 2010 | 3 | 31 | 89,987 | 87,447 | 86,156 | 85,914 | 89,333 |
| 201 | 2010 | 4 | 1 | 86,954 | 84,762 | 84,322 | 79,171 | 80,487 |
| 201 | 2010 | 4 | 2 | 85,965 | 85,437 | 84,796 | 83,867 | 83,529 |
| 201 | 2010 | 4 | 3 | 82,368 | 82,063 | 79,989 | 78,277 | 76,655 |
| 201 | 2010 | 4 | 4 | 75,028 | 76,059 | 76,335 | 75,451 | 76,610 |
| 201 | 2010 | 4 | 5 | 78,601 | 75,911 | 77,668 | 77,222 | 80,654 |
| 201 | 2010 | 4 | 6 | 92,082 | 86,887 | 86,236 | 84,896 | 86,150 |
| 201 | 2010 | 4 | 7 | 92,381 | 82,638 | 86,103 | 80,614 | 81,303 |
| 201 | 2010 | 4 | 8 | 89,499 | 86,821 | 86,307 | 85,352 | 87,009 |
| 201 | 2010 | 4 | 9 | 86,192 | 82,733 | 83,856 | 82,298 | 84,364 |
| 201 | 2010 | 4 | 10 | 80,559 | 72,407 | 73,407 | 74,351 | 77,772 |
| 201 | 2010 | 4 | 11 | 75,270 | 74,815 | 74,834 | 74,396 | 74,317 |
| 201 | 2010 | 4 | 12 | 78,277 | 78,152 | 81,976 | 81,800 | 79,342 |
| 201 | 2010 | 4 | 13 | 92,729 | 89,107 | 86,429 | 82,125 | 83,887 |
| 201 | 2010 | 4 | 14 | 94,941 | 91,855 | 88,716 | 82,891 | 84,958 |
| 201 | 2010 | 4 | 15 | 93,767 | 87,404 | 88,324 | 83,521 | 88,534 |
| 201 | 2010 | 4 | 16 | 90,849 | 87,491 | 90,575 | 84,872 | 86,454 |
| 201 | 2010 | 4 | 17 | 81,097 | 77,581 | 78,284 | 79,892 | 79,216 |
| 201 | 2010 | 4 | 18 | 79,916 | 74,786 | 77,991 | 77,689 | 78,022 |
| 201 | 2010 | 4 | 19 | 77,928 | 80,319 | 81,296 | 80,184 | 81,584 |
| 201 | 2010 | 4 | 20 | 91,882 | 87,317 | 86,399 | 86,282 | 87,137 |
| 201 | 2010 | 4 | 21 | 92,490 | 86,789 | 76,607 | 67,630 | 68,037 |
| 201 | 2010 | 4 | 22 | 85,877 | 85,511 | 87,237 | 86,850 | 86,382 |
| 201 | 2010 | 4 | 23 | 88,841 | 85,936 | 86,293 | 84,174 | 85,054 |
| 201 | 2010 | 4 | 24 | 87,545 | 87,502 | 86,899 | 85,076 | 84,479 |
| 201 | 2010 | 4 | 25 | 78,549 | 77,789 | 76,771 | 76,986 | 76,614 |
| 201 | 2010 | 4 | 26 | 80,156 | 79,334 | 79,899 | 81,087 | 82,372 |
| 201 | 2010 | 4 | 27 | 87,767 | 84,969 | 83,804 | 82,864 | 84,699 |
| 201 | 2010 | 4 | 28 | 90,114 | 89,470 | 86,934 | 82,160 | 83,222 |
| 201 | 2010 | 4 | 29 | 88,996 | 86,055 | 84,475 | 85,448 | 83,746 |
| 201 | 2010 | 4 | 30 | 92,173 | 91,650 | 84,955 | 86,441 | 87,509 |
| 201 | 2010 | 5 | 1 | 82,203 | 82,500 | 83,522 | 76,469 | 77,573 |
| 201 | 2010 | 5 | 2 | 76,339 | 76,065 | 75,122 | 74,487 | 76,750 |

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|---|---|---|---|---|---|---|---|---|
| 201 | 2010 | 5 | 3 | 74,252 | 70,908 | 75,014 | 73,538 | 74,127 |
| 201 | 2010 | 5 | 4 | 82,100 | 80,563 | 78,787 | 77,910 | 78,221 |
| 201 | 2010 | 5 | 5 | 83,041 | 81,443 | 80,789 | 78,966 | 79,023 |
| 201 | 2010 | 5 | 6 | 84,206 | 80,919 | 79,424 | 78,340 | 78,185 |
| 201 | 2010 | 5 | 7 | 84,449 | 80,793 | 80,147 | 78,338 | 79,069 |
| 201 | 2010 | 5 | 8 | 86,695 | 83,948 | 83,181 | 81,435 | 80,443 |
| 201 | 2010 | 5 | 9 | 81,156 | 79,028 | 78,401 | 79,769 | 77,734 |
| 201 | 2010 | 5 | 10 | 79,233 | 77,208 | 77,832 | 80,734 | 79,776 |
| 201 | 2010 | 5 | 11 | 89,667 | 87,755 | 85,609 | 88,125 | 88,959 |
| 201 | 2010 | 5 | 12 | 91,507 | 88,455 | 83,632 | 80,810 | 82,843 |
| 201 | 2010 | 5 | 13 | 91,519 | 89,025 | 87,322 | 86,836 | 86,470 |
| 201 | 2010 | 5 | 14 | 90,419 | 86,164 | 85,148 | 84,542 | 87,337 |
| 201 | 2010 | 5 | 15 | 83,518 | 80,060 | 80,095 | 75,418 | 76,252 |
| 201 | 2010 | 5 | 16 | 79,022 | 79,042 | 80,548 | 79,048 | 76,724 |
| 201 | 2010 | 5 | 17 | 81,906 | 80,948 | 82,236 | 82,867 | 83,649 |
| 201 | 2010 | 5 | 18 | 79,041 | 75,349 | 75,362 | 74,321 | 74,766 |
| 201 | 2010 | 5 | 19 | 81,338 | 77,630 | 71,454 | 70,265 | 69,012 |
| 201 | 2010 | 5 | 20 | 80,068 | 77,451 | 77,427 | 77,283 | 76,412 |
| 201 | 2010 | 5 | 21 | 87,658 | 85,220 | 83,811 | 81,168 | 84,928 |
| 201 | 2010 | 5 | 22 | 86,156 | 84,073 | 84,537 | 86,090 | 82,756 |
| 201 | 2010 | 5 | 23 | 81,785 | 81,681 | 79,931 | 80,161 | 72,989 |
| 201 | 2010 | 5 | 24 | 81,093 | 80,195 | 80,376 | 80,806 | 82,931 |
| 201 | 2010 | 5 | 25 | 97,247 | 94,940 | 93,981 | 92,146 | 93,916 |
| 201 | 2010 | 5 | 26 | 92,349 | 91,451 | 90,676 | 90,791 | 91,053 |
| 201 | 2010 | 5 | 27 | 95,862 | 91,769 | 91,016 | 88,896 | 89,291 |
| 201 | 2010 | 5 | 28 | 94,375 | 91,745 | 89,008 | 85,533 | 85,080 |
| 201 | 2010 | 5 | 29 | 85,577 | 84,703 | 84,390 | 82,280 | 78,404 |
| 201 | 2010 | 5 | 30 | 77,139 | 77,379 | 77,564 | 79,789 | 80,216 |
| 201 | 2010 | 5 | 31 | 75,132 | 71,491 | 74,225 | 73,696 | 75,426 |
| 201 | 2010 | 6 | 1 | 78,740 | 77,103 | 78,351 | 80,404 | 81,109 |
| 201 | 2010 | 6 | 2 | 93,628 | 90,635 | 86,579 | 78,980 | 77,293 |
| 201 | 2010 | 6 | 3 | 88,476 | 86,899 | 86,273 | 86,948 | 84,129 |
| 201 | 2010 | 6 | 4 | 88,447 | 91,477 | 91,621 | 88,831 | 89,730 |
| 201 | 2010 | 6 | 5 | 88,486 | 86,098 | 84,901 | 86,123 | 85,986 |
| 201 | 2010 | 6 | 6 | 84,178 | 82,987 | 81,276 | 79,915 | 80,337 |
| 201 | 2010 | 6 | 7 | 81,053 | 78,899 | 79,641 | 87,258 | 86,518 |
| 201 | 2010 | 6 | 8 | 96,064 | 87,802 | 90,932 | 89,264 | 89,493 |
| 201 | 2010 | 6 | 9 | 87,018 | 84,298 | 82,581 | 81,429 | 81,843 |
| 201 | 2010 | 6 | 10 | 88,601 | 85,898 | 83,983 | 81,845 | 82,429 |
| 201 | 2010 | 6 | 11 | 88,354 | 85,914 | 82,837 | 81,194 | 82,346 |
| 201 | 2010 | 6 | 12 | 84,462 | 82,745 | 86,324 | 82,078 | 79,254 |
| 201 | 2010 | 6 | 13 | 78,686 | 77,297 | 78,414 | 75,331 | 77,037 |
| 201 | 2010 | 6 | 14 | 80,443 | 79,906 | 81,742 | 81,865 | 81,331 |
| 201 | 2010 | 6 | 15 | 90,239 | 89,085 | 87,909 | 85,049 | 87,127 |
| 201 | 2010 | 6 | 16 | 96,739 | 95,362 | 92,739 | 92,446 | 93,069 |
| 201 | 2010 | 6 | 17 | 94,379 | 92,782 | 95,448 | 89,965 | 89,680 |
| 201 | 2010 | 6 | 18 | 93,290 | 88,639 | 86,710 | 85,326 | 86,326 |

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|---|---|---|---|---|---|---|---|---|
| 201 | 2010 | 6 | 19 | 89,282 | 87,695 | 88,420 | 85,131 | 88,280 |
| 201 | 2010 | 6 | 20 | 81,499 | 79,550 | 77,711 | 76,531 | 80,733 |
| 201 | 2010 | 6 | 21 | 78,637 | 81,268 | 81,106 | 80,870 | 86,025 |
| 201 | 2010 | 6 | 22 | 90,382 | 85,980 | 86,273 | 89,047 | 91,136 |
| 201 | 2010 | 6 | 23 | 89,582 | 89,549 | 89,494 | 87,863 | 86,770 |
| 201 | 2010 | 6 | 24 | 95,175 | 88,541 | 89,795 | 84,590 | 88,050 |
| 201 | 2010 | 6 | 25 | 91,211 | 89,131 | 87,425 | 85,282 | 89,402 |
| 201 | 2010 | 6 | 26 | 84,108 | 83,471 | 83,099 | 81,145 | 83,005 |
| 201 | 2010 | 6 | 27 | 75,390 | 75,364 | 75,094 | 74,344 | 74,280 |
| 201 | 2010 | 6 | 28 | 77,670 | 78,580 | 82,408 | 81,261 | 83,022 |
| 201 | 2010 | 6 | 29 | 87,240 | 87,337 | 86,644 | 86,705 | 85,786 |
| 201 | 2010 | 6 | 30 | 86,518 | 89,475 | 87,492 | 85,226 | 85,902 |
| 201 | 2010 | 7 | 1 | 89,807 | 85,075 | 86,979 | 83,450 | 83,154 |
| 201 | 2010 | 7 | 2 | 79,886 | 78,456 | 77,139 | 76,371 | 76,890 |
| 201 | 2010 | 7 | 3 | 78,155 | 80,632 | 80,513 | 80,534 | 78,698 |
| 201 | 2010 | 7 | 4 | 81,914 | 81,723 | 79,751 | 78,333 | 77,761 |
| 201 | 2010 | 7 | 5 | 72,336 | 73,445 | 70,115 | 70,271 | 70,770 |
| 201 | 2010 | 7 | 6 | 80,444 | 79,827 | 84,616 | 82,832 | 81,873 |
| 201 | 2010 | 7 | 7 | 88,290 | 86,438 | 84,604 | 82,105 | 81,880 |
| 201 | 2010 | 7 | 8 | 87,423 | 85,703 | 84,639 | 82,601 | 81,419 |
| 201 | 2010 | 7 | 9 | 87,909 | 86,187 | 86,323 | 85,081 | 85,803 |
| 201 | 2010 | 7 | 10 | 74,699 | 77,088 | 79,930 | 76,598 | 77,996 |
| 201 | 2010 | 7 | 11 | 76,232 | 75,477 | 75,774 | 74,935 | 74,751 |
| 201 | 2010 | 7 | 12 | 78,038 | 79,749 | 79,805 | 75,234 | 76,381 |
| 201 | 2010 | 7 | 13 | 92,562 | 89,081 | 90,637 | 88,780 | 89,318 |
| 201 | 2010 | 7 | 14 | 96,367 | 94,634 | 93,546 | 92,057 | 91,596 |
| 201 | 2010 | 7 | 15 | 86,951 | 87,257 | 86,066 | 84,915 | 86,076 |
| 201 | 2010 | 7 | 16 | 90,696 | 87,598 | 86,180 | 83,289 | 87,951 |
| 201 | 2010 | 7 | 17 | 86,154 | 82,372 | 86,052 | 83,680 | 83,029 |
| 201 | 2010 | 7 | 18 | 80,001 | 78,672 | 78,164 | 77,538 | 77,797 |
| 201 | 2010 | 7 | 19 | 75,843 | 78,132 | 78,751 | 78,491 | 79,580 |
| 201 | 2010 | 7 | 20 | 91,200 | 88,578 | 88,881 | 88,164 | 91,472 |
| 201 | 2010 | 7 | 21 | 76,513 | 68,643 | 67,636 | 61,579 | 59,851 |
| 201 | 2010 | 7 | 22 | 63,373 | 61,246 | 58,880 | 56,021 | 59,827 |
| 201 | 2010 | 7 | 23 | 89,157 | 82,779 | 84,578 | 83,102 | 85,811 |
| 201 | 2010 | 7 | 24 | 87,801 | 85,200 | 87,038 | 82,301 | 81,208 |
| 201 | 2010 | 7 | 25 | 80,810 | 82,806 | 84,290 | 78,473 | 78,515 |
| 201 | 2010 | 7 | 26 | 80,560 | 81,858 | 76,355 | 75,654 | 81,107 |
| 201 | 2010 | 7 | 27 | 89,982 | 85,953 | 82,193 | 84,368 | 84,025 |
| 201 | 2010 | 7 | 28 | 94,497 | 85,433 | 80,316 | 78,431 | 78,900 |
| 201 | 2010 | 7 | 29 | 89,761 | 85,592 | 87,233 | 85,665 | 85,922 |
| 201 | 2010 | 7 | 30 | 87,629 | 85,453 | 82,837 | 81,096 | 81,874 |
| 201 | 2010 | 7 | 31 | 85,342 | 82,678 | 82,439 | 82,923 | 83,522 |
| 201 | 2010 | 8 | 1 | 79,524 | 81,161 | 80,653 | 79,603 | 76,454 |
| 201 | 2010 | 8 | 2 | 74,743 | 74,279 | 77,491 | 77,360 | 79,395 |
| 201 | 2010 | 8 | 3 | 93,126 | 87,969 | 90,143 | 92,145 | 88,824 |
| 201 | 2010 | 8 | 4 | 92,901 | 86,993 | 87,382 | 86,193 | 84,058 |

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|---|---|---|---|---|---|---|---|---|
| 201 | 2010 | 8 | 5 | 87,352 | 89,595 | 89,792 | 88,160 | 86,261 |
| 201 | 2010 | 8 | 6 | 94,070 | 93,882 | 90,604 | 88,227 | 86,469 |
| 201 | 2010 | 8 | 7 | 86,496 | 83,614 | 83,374 | 82,656 | 81,863 |
| 201 | 2010 | 8 | 8 | 76,859 | 76,148 | 74,923 | 73,270 | 75,646 |
| 201 | 2010 | 8 | 9 | 74,759 | 75,496 | 75,337 | 75,357 | 78,247 |
| 201 | 2010 | 8 | 10 | 92,128 | 91,355 | 90,993 | 92,224 | 92,028 |
| 201 | 2010 | 8 | 11 | 91,463 | 89,796 | 90,699 | 90,747 | 85,122 |
| 201 | 2010 | 8 | 12 | 93,080 | 95,464 | 93,934 | 92,553 | 93,471 |
| 201 | 2010 | 8 | 13 | 94,206 | 92,072 | 90,461 | 86,772 | 88,171 |
| 201 | 2010 | 8 | 14 | 85,534 | 84,224 | 84,107 | 81,755 | 78,851 |
| 201 | 2010 | 8 | 15 | 82,802 | 82,057 | 83,043 | 81,789 | 81,185 |
| 201 | 2010 | 8 | 16 | 78,166 | 78,745 | 77,929 | 78,260 | 78,724 |
| 201 | 2010 | 8 | 17 | 92,534 | 94,211 | 94,552 | 93,545 | 93,446 |
| 201 | 2010 | 8 | 18 | 98,278 | 94,690 | 91,551 | 89,331 | 90,542 |
| 201 | 2010 | 8 | 19 | 90,370 | 87,530 | 88,670 | 82,079 | 82,045 |
| 201 | 2010 | 8 | 20 | 92,579 | 89,348 | 89,014 | 85,710 | 87,773 |
| 201 | 2010 | 8 | 21 | 86,206 | 86,854 | 86,330 | 82,814 | 81,145 |
| 201 | 2010 | 8 | 22 | 77,680 | 78,514 | 77,167 | 77,795 | 80,042 |
| 201 | 2010 | 8 | 23 | 75,753 | 78,549 | 81,109 | 76,768 | 77,639 |
| 201 | 2010 | 8 | 24 | 92,531 | 92,464 | 92,241 | 89,570 | 90,299 |
| 201 | 2010 | 8 | 25 | 97,072 | 94,430 | 90,360 | 85,875 | 86,721 |
| 201 | 2010 | 8 | 26 | 91,282 | 89,591 | 88,064 | 87,596 | 91,732 |
| 201 | 2010 | 8 | 27 | 92,479 | 91,502 | 92,185 | 91,182 | 91,783 |
| 201 | 2010 | 8 | 28 | 86,551 | 85,196 | 84,603 | 80,585 | 79,828 |
| 201 | 2010 | 8 | 29 | 84,794 | 81,255 | 79,502 | 80,397 | 79,279 |
| 201 | 2010 | 8 | 30 | 79,524 | 80,132 | 78,190 | 75,978 | 77,870 |
| 201 | 2010 | 8 | 31 | 91,017 | 86,010 | 84,650 | 85,338 | 92,103 |
| 201 | 2010 | 9 | 1 | 93,079 | 89,229 | 91,862 | 89,219 | 86,018 |
| 201 | 2010 | 9 | 2 | 95,770 | 96,007 | 94,058 | 89,150 | 89,376 |
| 201 | 2010 | 9 | 3 | 89,642 | 90,442 | 89,829 | 88,364 | 86,913 |
| 201 | 2010 | 9 | 4 | 79,369 | 77,263 | 75,874 | 76,621 | 76,019 |
| 201 | 2010 | 9 | 5 | 79,166 | 75,493 | 75,810 | 74,168 | 73,594 |
| 201 | 2010 | 9 | 6 | 74,823 | 73,353 | 72,534 | 70,991 | 70,292 |
| 201 | 2010 | 9 | 7 | 70,885 | 68,432 | 72,611 | 76,054 | 73,884 |
| 201 | 2010 | 9 | 8 | 88,064 | 83,469 | 85,267 | 81,128 | 80,007 |
| 201 | 2010 | 9 | 9 | 90,492 | 90,125 | 89,161 | 86,593 | 88,499 |
| 201 | 2010 | 9 | 10 | 91,189 | 88,494 | 87,626 | 85,484 | 87,233 |
| 201 | 2010 | 9 | 11 | 90,182 | 86,364 | 85,323 | 86,291 | 85,556 |
| 201 | 2010 | 9 | 12 | 80,483 | 80,087 | 79,554 | 78,255 | 80,208 |
| 201 | 2010 | 9 | 13 | 78,626 | 78,542 | 77,863 | 76,887 | 78,700 |
| 201 | 2010 | 9 | 14 | 94,911 | 94,351 | 92,990 | 90,203 | 90,515 |
| 201 | 2010 | 9 | 15 | 95,981 | 88,228 | 87,027 | 83,699 | 85,320 |
| 201 | 2010 | 9 | 16 | 92,033 | 85,405 | 87,110 | 87,072 | 86,696 |
| 201 | 2010 | 9 | 17 | 97,281 | 93,509 | 92,815 | 91,357 | 90,781 |
| 201 | 2010 | 9 | 18 | 90,121 | 84,130 | 82,378 | 81,309 | 81,731 |
| 201 | 2010 | 9 | 19 | 83,612 | 82,902 | 82,049 | 79,787 | 76,355 |
| 201 | 2010 | 9 | 20 | 80,590 | 80,279 | 81,345 | 80,938 | 80,979 |

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|---|---|---|---|---|---|---|---|---|
| 201 | 2010 | 9 | 21 | 97,222 | 88,556 | 90,955 | 93,204 | 94,180 |
| 201 | 2010 | 9 | 22 | 96,212 | 92,292 | 90,360 | 84,714 | 85,905 |
| 201 | 2010 | 9 | 23 | 92,858 | 89,801 | 89,760 | 85,436 | 87,673 |
| 201 | 2010 | 9 | 24 | 88,153 | 86,521 | 90,434 | 89,841 | 90,935 |
| 201 | 2010 | 9 | 25 | 89,942 | 89,624 | 91,467 | 90,212 | 87,066 |
| 201 | 2010 | 9 | 26 | 81,319 | 84,141 | 81,572 | 80,792 | 83,736 |
| 201 | 2010 | 9 | 27 | 80,182 | 85,949 | 83,743 | 83,482 | 84,977 |
| 201 | 2010 | 9 | 28 | 96,223 | 90,652 | 93,213 | 90,854 | 87,028 |
| 201 | 2010 | 9 | 29 | 96,139 | 94,126 | 95,041 | 87,488 | 86,539 |
| 201 | 2010 | 9 | 30 | 91,438 | 88,732 | 90,185 | 88,977 | 88,476 |
| 201 | 2010 | 10 | 1 | 90,199 | 84,239 | 86,869 | 84,324 | 82,974 |
| 201 | 2010 | 10 | 2 | 84,646 | 84,025 | 83,570 | 80,391 | 78,943 |
| 201 | 2010 | 10 | 3 | 77,904 | 76,886 | 77,627 | 75,523 | 73,133 |
| 201 | 2010 | 10 | 4 | 77,780 | 75,488 | 77,894 | 78,319 | 80,885 |
| 201 | 2010 | 10 | 5 | 87,351 | 86,468 | 89,389 | 85,293 | 85,495 |
| 201 | 2010 | 10 | 6 | 92,908 | 89,593 | 88,149 | 85,342 | 86,655 |
| 201 | 2010 | 10 | 7 | 87,019 | 82,730 | 82,432 | 82,301 | 81,600 |
| 201 | 2010 | 10 | 8 | 89,448 | 86,355 | 86,773 | 84,531 | 82,092 |
| 201 | 2010 | 10 | 9 | 76,858 | 75,975 | 74,966 | 75,805 | 74,385 |
| 201 | 2010 | 10 | 10 | 70,080 | 70,837 | 71,748 | 72,746 | 73,703 |
| 201 | 2010 | 10 | 11 | 75,920 | 76,079 | 77,547 | 76,086 | 78,558 |
| 201 | 2010 | 10 | 12 | 85,575 | 85,029 | 88,369 | 86,969 | 87,320 |
| 201 | 2010 | 10 | 13 | 83,750 | 81,060 | 79,911 | 79,821 | 79,103 |
| 201 | 2010 | 10 | 14 | 82,386 | 83,479 | 82,608 | 81,688 | 82,562 |
| 201 | 2010 | 10 | 15 | 94,250 | 91,371 | 89,747 | 85,752 | 86,989 |
| 201 | 2010 | 10 | 16 | 82,224 | 81,471 | 82,300 | 83,083 | 77,842 |
| 201 | 2010 | 10 | 17 | 73,267 | 72,524 | 73,337 | 72,493 | 72,201 |
| 201 | 2010 | 10 | 18 | 77,786 | 79,333 | 78,542 | 77,702 | 80,481 |
| 201 | 2010 | 10 | 19 | 93,284 | 92,864 | 90,663 | 89,406 | 88,316 |
| 201 | 2010 | 10 | 20 | 93,631 | 91,780 | 91,132 | 86,897 | 86,564 |
| 201 | 2010 | 10 | 21 | 93,988 | 89,194 | 87,882 | 85,551 | 82,321 |
| 201 | 2010 | 10 | 22 | 93,428 | 91,497 | 91,672 | 84,755 | 84,103 |
| 201 | 2010 | 10 | 23 | 86,418 | 84,238 | 84,820 | 82,664 | 82,368 |
| 201 | 2010 | 10 | 24 | 77,995 | 79,186 | 77,958 | 77,086 | 77,150 |
| 201 | 2010 | 10 | 25 | 75,871 | 75,975 | 75,863 | 75,489 | 73,553 |
| 201 | 2010 | 10 | 26 | 83,858 | 81,806 | 79,848 | 79,367 | 81,315 |
| 201 | 2010 | 10 | 27 | 87,424 | 85,807 | 85,167 | 83,458 | 82,235 |
| 201 | 2010 | 10 | 28 | 86,611 | 85,035 | 82,973 | 79,062 | 77,343 |
| 201 | 2010 | 10 | 29 | 80,866 | 79,502 | 76,606 | 75,614 | 75,325 |
| 201 | 2010 | 10 | 30 | 70,600 | 70,423 | 69,641 | 68,869 | 67,710 |
| 201 | 2010 | 10 | 31 | 62,350 | 62,596 | 62,383 | 62,121 | 62,135 |

| 11 | 13 | 15 | 17 | 19 | 21 | 23 | 25 | 27 |
|---|---|---|---|---|---|---|---|---|

| HR6 | HR7 | HR8 | HR9 | HR10 | HR11 | HR12 | HR13 | HR14 |
|---|---|---|---|---|---|---|---|---|
| 62,832 | 61,766 | 61,579 | 62,561 | 62,249 | 62,172 | 61,026 | 60,788 | 62,086 |
| 79,390 | 81,287 | 81,057 | 82,894 | 85,013 | 85,136 | 85,573 | 86,705 | 87,932 |
| 90,966 | 96,259 | 94,104 | 98,071 | 97,189 | 96,763 | 96,453 | 95,446 | 98,327 |
| 87,941 | 90,395 | 94,406 | 88,702 | 82,710 | 87,156 | 86,597 | 83,604 | 80,659 |
| 92,218 | 97,214 | 97,436 | 98,312 | 96,261 | 93,842 | 96,695 | 98,882 | 98,706 |
| 92,783 | 95,329 | 94,819 | 96,137 | 93,853 | 93,350 | 89,272 | 90,819 | 91,238 |
| 71,163 | 70,591 | 67,224 | 67,836 | 67,637 | 68,517 | 67,634 | 67,486 | 67,545 |
| 59,538 | 51,633 | 48,987 | 48,741 | 48,617 | 48,732 | 46,947 | 46,204 | 48,313 |
| 80,985 | 84,048 | 85,659 | 87,616 | 91,535 | 92,238 | 90,610 | 90,686 | 91,062 |
| 84,108 | 89,948 | 91,600 | 94,222 | 91,979 | 91,380 | 90,531 | 93,292 | 95,386 |
| 88,430 | 91,869 | 90,450 | 92,855 | 92,522 | 91,870 | 91,018 | 91,430 | 91,262 |
| 78,432 | 86,571 | 84,646 | 85,325 | 84,929 | 86,585 | 86,428 | 87,426 | 87,078 |
| 80,813 | 84,048 | 82,413 | 82,438 | 82,582 | 83,708 | 82,164 | 82,380 | 81,060 |
| 68,377 | 67,801 | 67,290 | 67,387 | 67,267 | 67,961 | 69,189 | 69,207 | 68,593 |
| 68,216 | 67,256 | 68,864 | 68,959 | 68,880 | 69,150 | 68,456 | 68,032 | 69,289 |
| 80,974 | 83,615 | 83,194 | 85,944 | 86,561 | 84,809 | 85,795 | 85,260 | 84,149 |
| 86,912 | 89,676 | 89,718 | 91,433 | 90,550 | 89,975 | 88,297 | 92,769 | 91,972 |
| 81,444 | 85,686 | 90,016 | 90,572 | 91,048 | 87,889 | 86,628 | 93,147 | 93,850 |
| 85,315 | 92,998 | 96,181 | 95,077 | 93,963 | 92,315 | 90,813 | 89,949 | 91,689 |
| 85,104 | 86,822 | 88,165 | 89,293 | 89,583 | 90,573 | 84,959 | 85,116 | 84,409 |
| 74,825 | 74,229 | 72,779 | 74,182 | 73,965 | 73,604 | 72,461 | 72,941 | 73,633 |
| 68,343 | 68,008 | 67,906 | 68,167 | 67,510 | 67,133 | 66,592 | 66,744 | 67,439 |
| 86,712 | 86,388 | 86,608 | 85,776 | 84,610 | 88,150 | 91,187 | 91,677 | 91,653 |
| 82,359 | 85,361 | 84,715 | 90,028 | 88,363 | 92,851 | 89,180 | 84,822 | 85,215 |
| 87,326 | 88,791 | 90,335 | 92,603 | 93,565 | 94,030 | 93,260 | 91,364 | 93,978 |
| 67,853 | 65,537 | 61,771 | 61,166 | 59,764 | 58,926 | 58,782 | 58,869 | 58,812 |
| 59,418 | 59,140 | 61,208 | 61,946 | 62,246 | 63,000 | 62,229 | 61,572 | 60,954 |
| 67,994 | 70,793 | 70,243 | 74,768 | 75,108 | 75,517 | 75,680 | 77,087 | 76,984 |
| 67,648 | 67,576 | 66,943 | 67,230 | 67,367 | 66,518 | 65,847 | 66,756 | 66,872 |
| 84,350 | 88,248 | 87,330 | 88,618 | 89,648 | 91,286 | 90,457 | 94,943 | 92,219 |
| 88,263 | 88,886 | 90,045 | 90,188 | 92,874 | 92,648 | 92,760 | 91,169 | 91,621 |
| 84,831 | 85,961 | 86,624 | 89,724 | 90,623 | 91,843 | 85,913 | 81,999 | 78,864 |
| 90,154 | 92,178 | 93,670 | 93,159 | 92,370 | 91,248 | 95,128 | 96,235 | 97,374 |
| 91,374 | 92,754 | 90,063 | 89,457 | 89,092 | 88,279 | 89,695 | 90,507 | 92,238 |
| 75,724 | 78,024 | 81,220 | 77,064 | 72,151 | 77,272 | 73,182 | 74,296 | 75,964 |
| 69,422 | 69,249 | 69,407 | 69,240 | 68,334 | 67,854 | 67,161 | 66,504 | 66,827 |
| 79,456 | 83,043 | 83,479 | 88,510 | 92,770 | 91,995 | 90,877 | 91,694 | 91,352 |
| 83,046 | 86,670 | 89,578 | 95,584 | 95,319 | 95,483 | 97,560 | 98,385 | 99,073 |
| 90,139 | 94,127 | 96,950 | 98,190 | 98,880 | 98,042 | 94,174 | 94,844 | 97,444 |
| 95,728 | 96,393 | 94,700 | 96,243 | 98,280 | 100,244 | 100,115 | 98,797 | 97,555 |
| 87,912 | 90,200 | 87,784 | 91,235 | 95,696 | 94,759 | 89,972 | 91,163 | 91,744 |
| 83,372 | 82,525 | 82,609 | 82,835 | 81,904 | 79,039 | 80,538 | 80,002 | 80,803 |

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|---|---|---|---|---|---|---|---|---|
| 71,327 | 70,750 | 70,344 | 70,260 | 70,041 | 69,495 | 68,223 | 68,374 | 68,135 |
| 80,579 | 83,437 | 83,834 | 85,687 | 89,698 | 91,472 | 91,061 | 90,505 | 91,707 |
| 89,602 | 92,777 | 91,267 | 93,322 | 93,722 | 94,212 | 93,466 | 91,664 | 91,739 |
| 82,175 | 84,734 | 87,485 | 89,794 | 91,131 | 90,432 | 90,268 | 89,569 | 89,996 |
| 88,702 | 91,717 | 90,086 | 91,641 | 92,587 | 94,644 | 92,942 | 91,624 | 90,237 |
| 82,188 | 86,470 | 89,235 | 88,070 | 86,735 | 89,246 | 88,415 | 87,648 | 83,889 |
| 70,715 | 71,671 | 72,082 | 72,379 | 73,697 | 74,307 | 73,428 | 74,132 | 73,353 |
| 67,255 | 67,362 | 66,647 | 67,183 | 67,110 | 67,703 | 68,011 | 68,793 | 69,282 |
| 86,272 | 88,337 | 86,571 | 87,062 | 86,329 | 89,284 | 90,116 | 90,874 | 90,339 |
| 88,057 | 92,323 | 91,272 | 93,372 | 95,273 | 93,325 | 91,640 | 89,999 | 87,193 |
| 83,076 | 86,368 | 87,908 | 88,795 | 88,864 | 89,777 | 89,230 | 85,338 | 88,044 |
| 66,099 | 64,374 | 62,844 | 62,713 | 62,942 | 61,973 | 58,188 | 57,523 | 59,097 |
| 58,089 | 58,337 | 58,237 | 59,686 | 59,822 | 59,572 | 59,604 | 60,023 | 59,940 |
| 60,033 | 60,543 | 63,587 | 64,810 | 65,007 | 67,985 | 67,413 | 67,557 | 68,012 |
| 69,065 | 68,637 | 67,480 | 67,842 | 67,588 | 68,134 | 67,759 | 67,376 | 67,424 |
| 74,682 | 77,484 | 78,731 | 78,605 | 79,100 | 84,013 | 82,090 | 85,532 | 81,223 |
| 85,749 | 88,064 | 90,188 | 91,569 | 89,230 | 89,029 | 87,547 | 84,855 | 85,495 |
| 84,599 | 85,103 | 85,976 | 88,457 | 85,659 | 89,335 | 85,929 | 90,394 | 89,841 |
| 77,836 | 80,410 | 82,944 | 81,411 | 80,271 | 81,373 | 80,566 | 81,133 | 79,241 |
| 74,052 | 73,795 | 72,871 | 75,407 | 74,201 | 72,859 | 70,749 | 70,298 | 69,448 |
| 69,626 | 67,556 | 68,067 | 70,675 | 71,807 | 73,369 | 72,663 | 74,358 | 74,348 |
| 68,992 | 68,462 | 68,965 | 69,924 | 69,545 | 69,557 | 68,775 | 68,861 | 68,018 |
| 89,869 | 90,199 | 88,003 | 91,310 | 93,362 | 96,932 | 95,666 | 91,266 | 90,485 |
| 92,648 | 96,303 | 96,099 | 94,973 | 95,128 | 99,120 | 94,817 | 94,820 | 91,428 |
| 93,323 | 97,172 | 98,099 | 96,964 | 96,808 | 95,734 | 93,150 | 93,991 | 100,190 |
| 91,788 | 97,993 | 98,584 | 97,760 | 99,170 | 98,881 | 100,181 | 101,853 | 100,602 |
| 95,025 | 96,908 | 98,386 | 99,278 | 100,058 | 100,532 | 96,021 | 95,020 | 93,625 |
| 70,541 | 69,648 | 73,298 | 74,834 | 75,472 | 75,286 | 75,824 | 74,968 | 75,224 |
| 73,669 | 73,314 | 72,414 | 71,764 | 71,531 | 71,637 | 71,210 | 70,766 | 70,480 |
| 81,341 | 83,537 | 86,366 | 87,917 | 89,097 | 90,356 | 88,998 | 94,978 | 93,019 |
| 93,727 | 98,186 | 98,268 | 89,042 | 87,736 | 92,140 | 96,198 | 99,720 | 99,835 |
| 83,441 | 89,259 | 89,740 | 91,512 | 91,526 | 85,015 | 86,214 | 87,460 | 87,638 |
| 91,279 | 95,875 | 90,540 | 93,929 | 100,339 | 95,867 | 97,032 | 98,568 | 99,143 |
| 91,752 | 93,491 | 93,032 | 95,928 | 98,214 | 95,522 | 94,398 | 94,164 | 93,860 |
| 87,187 | 81,724 | 75,593 | 78,494 | 83,961 | 82,590 | 81,127 | 78,469 | 79,939 |
| 69,495 | 67,934 | 66,787 | 66,092 | 66,139 | 65,619 | 65,440 | 65,822 | 66,164 |
| 84,289 | 88,199 | 88,901 | 92,958 | 95,342 | 95,216 | 95,482 | 95,991 | 97,345 |
| 73,070 | 74,802 | 74,396 | 78,755 | 78,185 | 72,438 | 72,053 | 73,298 | 71,078 |
| 89,296 | 92,209 | 93,984 | 97,197 | 95,740 | 93,060 | 94,980 | 96,198 | 96,321 |
| 91,440 | 93,724 | 93,131 | 86,467 | 88,278 | 89,830 | 90,013 | 91,807 | 92,441 |
| 93,290 | 96,478 | 96,304 | 94,438 | 96,358 | 96,102 | 95,274 | 95,084 | 94,439 |
| 81,499 | 82,683 | 84,545 | 83,270 | 81,602 | 81,791 | 83,241 | 84,021 | 80,087 |
| 67,327 | 66,607 | 65,959 | 64,901 | 64,353 | 64,365 | 63,759 | 64,035 | 64,809 |
| 72,623 | 76,655 | 76,809 | 79,676 | 80,122 | 80,355 | 80,141 | 79,744 | 80,409 |
| 91,054 | 92,678 | 94,893 | 97,308 | 100,077 | 101,429 | 100,407 | 101,324 | 103,209 |
| 94,411 | 95,883 | 96,263 | 93,600 | 91,992 | 93,190 | 97,347 | 97,652 | 96,056 |
| 96,134 | 99,647 | 95,325 | 98,211 | 92,028 | 92,915 | 92,005 | 92,508 | 93,913 |

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|---|---|---|---|---|---|---|---|---|
| 92,115 | 95,483 | 96,615 | 98,262 | 99,348 | 99,716 | 97,926 | 97,567 | 97,911 |
| 73,785 | 75,613 | 79,719 | 80,423 | 79,866 | 78,941 | 78,195 | 77,478 | 75,546 |
| 71,740 | 71,199 | 70,806 | 70,308 | 69,681 | 69,659 | 69,407 | 68,274 | 67,786 |
| 77,655 | 81,758 | 83,566 | 84,505 | 85,941 | 87,726 | 88,020 | 90,470 | 89,078 |
| 91,897 | 92,777 | 91,922 | 92,189 | 93,409 | 93,169 | 93,481 | 93,872 | 97,106 |
| 91,697 | 92,834 | 91,238 | 89,974 | 91,241 | 93,649 | 92,984 | 94,385 | 95,734 |
| 95,283 | 98,252 | 99,700 | 100,689 | 100,654 | 100,178 | 100,744 | 98,057 | 99,224 |
| 92,757 | 93,992 | 93,353 | 96,923 | 95,956 | 92,536 | 93,135 | 91,468 | 94,201 |
| 76,345 | 77,121 | 77,960 | 79,174 | 78,913 | 78,934 | 77,928 | 78,224 | 79,013 |
| 78,556 | 78,744 | 78,284 | 78,164 | 78,013 | 78,099 | 78,597 | 74,910 | 77,505 |
| 84,577 | 87,697 | 90,077 | 92,011 | 92,749 | 92,476 | 92,759 | 93,082 | 93,512 |
| 88,495 | 90,602 | 92,555 | 90,799 | 95,125 | 95,845 | 95,228 | 94,783 | 95,671 |
| 88,566 | 92,323 | 92,280 | 94,722 | 95,672 | 94,934 | 94,993 | 95,121 | 95,130 |
| 98,265 | 97,482 | 95,584 | 90,395 | 92,826 | 95,950 | 96,209 | 99,951 | 102,131 |
| 92,449 | 95,814 | 97,637 | 96,584 | 94,508 | 94,261 | 95,092 | 100,195 | 99,028 |
| 84,514 | 87,267 | 87,423 | 89,190 | 88,673 | 92,243 | 85,894 | 88,054 | 83,963 |
| 83,171 | 80,689 | 78,532 | 78,863 | 79,854 | 81,724 | 82,711 | 81,318 | 77,715 |
| 87,508 | 90,972 | 90,526 | 87,726 | 91,471 | 94,375 | 93,426 | 94,614 | 94,452 |
| 88,149 | 92,445 | 93,005 | 95,151 | 96,518 | 96,741 | 95,787 | 95,927 | 95,749 |
| 88,385 | 90,204 | 92,096 | 94,440 | 96,724 | 95,779 | 94,536 | 92,913 | 94,256 |
| 92,195 | 95,908 | 95,920 | 97,270 | 93,582 | 96,043 | 95,829 | 97,371 | 98,280 |
| 87,386 | 91,219 | 89,887 | 93,439 | 92,471 | 90,092 | 89,261 | 90,511 | 93,762 |
| 79,696 | 77,866 | 79,480 | 79,329 | 79,489 | 78,798 | 78,171 | 79,205 | 76,981 |
| 75,306 | 76,222 | 77,337 | 73,132 | 74,931 | 74,392 | 70,965 | 69,470 | 67,405 |
| 80,085 | 86,749 | 89,357 | 92,198 | 92,283 | 93,789 | 93,660 | 93,460 | 95,008 |
| 88,406 | 90,577 | 92,135 | 94,053 | 94,208 | 95,707 | 95,416 | 95,675 | 97,090 |
| 86,004 | 89,443 | 91,447 | 91,863 | 92,163 | 93,542 | 95,786 | 95,531 | 94,741 |
| 95,245 | 97,039 | 98,465 | 99,676 | 96,532 | 97,459 | 97,093 | 98,340 | 97,741 |
| 90,576 | 91,813 | 88,502 | 90,287 | 92,815 | 95,439 | 94,644 | 96,504 | 93,769 |
| 85,672 | 86,105 | 85,788 | 86,382 | 86,732 | 85,480 | 84,925 | 82,898 | 82,593 |
| 80,533 | 78,843 | 73,469 | 71,196 | 71,826 | 72,246 | 72,709 | 71,373 | 70,115 |
| 81,711 | 84,469 | 82,972 | 81,471 | 83,228 | 83,263 | 83,949 | 85,298 | 83,950 |
| 89,842 | 94,169 | 97,765 | 97,560 | 95,746 | 96,880 | 92,762 | 94,212 | 93,517 |
| 87,930 | 90,258 | 89,262 | 90,979 | 93,538 | 95,983 | 96,582 | 95,487 | 97,630 |
| 93,574 | 96,293 | 91,801 | 93,992 | 92,645 | 89,612 | 97,706 | 95,626 | 92,517 |
| 89,173 | 93,221 | 95,856 | 98,946 | 99,493 | 98,274 | 98,380 | 98,480 | 99,830 |
| 80,272 | 80,766 | 81,480 | 82,752 | 79,031 | 82,849 | 82,234 | 81,659 | 80,618 |
| 77,623 | 74,586 | 75,312 | 74,795 | 73,304 | 72,643 | 72,109 | 71,380 | 72,376 |
| 81,811 | 83,807 | 85,609 | 89,567 | 91,501 | 95,267 | 96,206 | 92,752 | 90,205 |
| 86,943 | 91,132 | 88,784 | 91,664 | 92,991 | 94,828 | 98,503 | 100,617 | 98,132 |
| 84,827 | 87,897 | 91,814 | 94,782 | 92,039 | 89,048 | 89,856 | 91,291 | 92,418 |
| 82,531 | 84,984 | 85,297 | 87,106 | 88,578 | 90,132 | 91,599 | 93,967 | 94,085 |
| 86,966 | 90,328 | 91,900 | 85,278 | 84,076 | 90,734 | 95,848 | 96,108 | 93,747 |
| 77,837 | 78,108 | 78,355 | 82,891 | 81,153 | 79,686 | 80,228 | 82,556 | 81,690 |
| 79,176 | 77,860 | 71,482 | 73,589 | 76,428 | 76,381 | 75,714 | 74,532 | 72,084 |
| 81,613 | 85,550 | 87,618 | 89,491 | 90,444 | 94,381 | 90,772 | 91,594 | 89,822 |
| 85,927 | 88,596 | 89,452 | 92,984 | 95,197 | 95,313 | 94,931 | 93,522 | 92,531 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 78,846 | 83,681 | 83,821 | 84,175 | 87,713 | 87,934 | 89,746 | 93,979 | 93,585 |
| 89,638 | 92,934 | 95,549 | 96,445 | 93,362 | 93,960 | 93,998 | 93,015 | 92,720 |
| 88,100 | 90,969 | 92,959 | 92,920 | 93,279 | 95,186 | 96,506 | 95,087 | 94,761 |
| 76,062 | 75,288 | 75,371 | 74,806 | 74,648 | 73,049 | 73,707 | 76,433 | 78,099 |
| 71,987 | 71,888 | 73,031 | 72,559 | 71,870 | 72,976 | 72,005 | 71,770 | 70,516 |
| 85,334 | 86,419 | 85,436 | 88,642 | 98,074 | 99,177 | 99,820 | 93,392 | 95,426 |
| 85,039 | 82,418 | 80,269 | 82,169 | 76,635 | 74,168 | 72,987 | 78,936 | 82,216 |
| 88,928 | 95,292 | 98,152 | 98,575 | 98,276 | 96,348 | 96,935 | 99,532 | 98,625 |
| 83,195 | 87,434 | 87,874 | 88,335 | 93,607 | 94,499 | 93,446 | 93,363 | 93,250 |
| 85,598 | 87,403 | 86,985 | 90,630 | 90,433 | 93,204 | 91,313 | 93,243 | 94,849 |
| 80,421 | 81,161 | 82,171 | 85,281 | 85,709 | 85,433 | 83,561 | 89,200 | 88,872 |
| 76,578 | 73,236 | 73,553 | 74,816 | 74,835 | 75,397 | 72,876 | 72,398 | 68,945 |
| 84,191 | 89,103 | 90,839 | 92,969 | 96,446 | 99,221 | 95,152 | 92,907 | 94,253 |
| 89,594 | 94,075 | 97,206 | 99,432 | 101,184 | 98,422 | 99,552 | 100,359 | 101,181 |
| 92,861 | 96,538 | 96,413 | 95,938 | 95,358 | 96,115 | 95,036 | 97,052 | 94,137 |
| 83,380 | 87,532 | 87,102 | 88,486 | 89,729 | 90,148 | 89,707 | 88,421 | 91,238 |
| 84,655 | 85,867 | 84,941 | 84,635 | 83,550 | 83,833 | 81,071 | 85,867 | 84,995 |
| 74,139 | 74,508 | 74,974 | 76,326 | 75,903 | 75,998 | 73,647 | 75,067 | 74,554 |
| 75,674 | 74,731 | 73,656 | 72,678 | 72,916 | 72,496 | 74,195 | 69,857 | 68,726 |
| 83,021 | 83,222 | 85,871 | 90,458 | 91,857 | 92,908 | 93,362 | 95,614 | 95,886 |
| 91,143 | 96,093 | 97,006 | 96,568 | 97,578 | 98,730 | 95,757 | 95,357 | 97,582 |
| 84,150 | 87,981 | 88,344 | 89,213 | 93,235 | 93,919 | 93,681 | 93,310 | 95,298 |
| 88,965 | 94,999 | 94,170 | 95,455 | 96,038 | 97,759 | 97,755 | 98,407 | 99,036 |
| 90,322 | 93,665 | 96,196 | 96,889 | 97,827 | 99,059 | 98,325 | 97,119 | 96,051 |
| 76,722 | 75,699 | 74,548 | 76,112 | 75,158 | 75,947 | 74,562 | 73,623 | 73,026 |
| 74,481 | 74,482 | 74,318 | 74,903 | 74,362 | 74,429 | 71,496 | 73,462 | 72,135 |
| 81,405 | 88,072 | 89,276 | 88,532 | 88,849 | 90,855 | 93,772 | 96,091 | 93,593 |
| 91,186 | 96,374 | 96,691 | 98,297 | 95,739 | 98,715 | 99,090 | 99,314 | 99,638 |
| 87,598 | 88,668 | 88,301 | 89,651 | 92,054 | 92,912 | 93,871 | 96,165 | 94,993 |
| 90,305 | 97,540 | 93,310 | 93,392 | 92,609 | 92,328 | 95,268 | 97,471 | 98,309 |
| 89,279 | 91,673 | 91,455 | 90,847 | 94,213 | 96,510 | 97,581 | 93,387 | 92,481 |
| 80,941 | 79,721 | 77,938 | 78,429 | 76,765 | 79,001 | 79,355 | 79,204 | 78,699 |
| 77,216 | 75,859 | 74,941 | 71,411 | 73,132 | 74,722 | 72,867 | 72,575 | 73,628 |
| 83,893 | 88,441 | 90,632 | 94,596 | 95,620 | 93,190 | 92,013 | 91,310 | 94,392 |
| 90,130 | 95,212 | 96,054 | 94,593 | 97,193 | 94,487 | 92,836 | 95,524 | 98,723 |
| 69,128 | 73,678 | 74,928 | 74,918 | 76,667 | 76,059 | 72,058 | 71,001 | 70,481 |
| 86,043 | 90,501 | 89,747 | 90,614 | 91,984 | 95,670 | 98,186 | 93,542 | 93,564 |
| 82,246 | 89,547 | 92,186 | 91,344 | 91,139 | 95,150 | 94,592 | 87,657 | 89,638 |
| 82,453 | 82,935 | 84,713 | 85,275 | 84,519 | 84,550 | 86,670 | 85,416 | 82,118 |
| 75,960 | 75,247 | 72,809 | 73,858 | 73,334 | 73,648 | 73,588 | 74,084 | 73,890 |
| 86,414 | 88,514 | 89,798 | 93,269 | 90,073 | 89,608 | 91,665 | 95,409 | 94,299 |
| 89,894 | 94,716 | 91,558 | 92,503 | 95,590 | 97,478 | 97,218 | 96,885 | 96,252 |
| 85,236 | 89,767 | 89,956 | 90,551 | 92,351 | 92,145 | 91,665 | 91,974 | 93,069 |
| 87,242 | 92,530 | 92,597 | 89,998 | 90,645 | 94,571 | 95,117 | 92,372 | 93,598 |
| 87,599 | 85,326 | 85,038 | 87,032 | 86,941 | 91,617 | 91,447 | 89,836 | 89,293 |
| 77,173 | 78,076 | 78,015 | 75,234 | 73,547 | 76,759 | 81,087 | 80,280 | 80,533 |
| 76,500 | 76,655 | 77,004 | 76,982 | 75,730 | 76,413 | 74,750 | 75,400 | 74,583 |

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|---|---|---|---|---|---|---|---|---|
| 77,458 | 80,868 | 82,173 | 84,410 | 83,169 | 83,427 | 83,332 | 82,383 | 82,091 |
| 81,467 | 85,888 | 87,637 | 88,497 | 89,700 | 91,163 | 90,988 | 87,686 | 85,147 |
| 83,550 | 87,222 | 88,441 | 90,326 | 89,934 | 88,697 | 87,782 | 87,902 | 90,089 |
| 79,519 | 83,352 | 85,067 | 87,741 | 88,353 | 88,607 | 88,127 | 88,611 | 89,694 |
| 79,741 | 84,877 | 87,016 | 87,516 | 87,829 | 88,700 | 89,150 | 91,252 | 93,501 |
| 81,611 | 80,215 | 83,381 | 84,777 | 83,186 | 83,308 | 84,215 | 84,213 | 85,782 |
| 76,915 | 76,997 | 76,980 | 77,219 | 75,972 | 74,971 | 73,432 | 75,326 | 72,345 |
| 80,673 | 86,416 | 89,622 | 91,899 | 93,451 | 94,996 | 94,794 | 90,215 | 92,380 |
| 92,119 | 95,682 | 94,440 | 94,018 | 97,464 | 96,363 | 95,897 | 98,693 | 97,788 |
| 82,481 | 89,318 | 93,924 | 95,885 | 96,514 | 99,132 | 100,610 | 100,870 | 96,216 |
| 89,928 | 92,704 | 90,439 | 92,252 | 93,095 | 93,603 | 91,595 | 92,345 | 93,098 |
| 89,827 | 94,435 | 95,462 | 95,532 | 97,435 | 98,007 | 95,979 | 98,335 | 100,473 |
| 78,231 | 79,523 | 78,306 | 79,822 | 79,273 | 82,879 | 85,048 | 80,572 | 78,046 |
| 78,900 | 78,352 | 77,645 | 77,806 | 76,461 | 78,219 | 77,725 | 77,891 | 75,988 |
| 84,103 | 86,406 | 89,123 | 89,494 | 91,367 | 93,751 | 94,817 | 97,488 | 95,788 |
| 74,047 | 79,893 | 78,291 | 79,538 | 82,974 | 82,421 | 83,119 | 83,431 | 83,560 |
| 73,173 | 76,706 | 76,962 | 77,642 | 78,556 | 79,955 | 79,350 | 79,821 | 80,645 |
| 79,108 | 86,052 | 84,709 | 85,074 | 89,362 | 91,836 | 88,881 | 89,612 | 90,777 |
| 90,354 | 91,304 | 89,585 | 91,209 | 93,446 | 96,166 | 99,077 | 99,301 | 99,126 |
| 85,715 | 86,225 | 84,400 | 82,986 | 83,478 | 85,747 | 84,735 | 86,976 | 86,523 |
| 73,289 | 73,947 | 76,033 | 79,977 | 79,781 | 77,736 | 73,609 | 73,736 | 72,887 |
| 80,817 | 82,302 | 83,198 | 89,108 | 92,105 | 93,358 | 94,982 | 97,362 | 100,642 |
| 96,248 | 98,808 | 97,448 | 95,378 | 99,195 | 101,035 | 102,696 | 102,356 | 99,216 |
| 93,829 | 97,051 | 95,863 | 97,334 | 97,500 | 96,756 | 97,343 | 91,253 | 92,387 |
| 92,303 | 98,360 | 98,005 | 99,593 | 99,216 | 98,328 | 98,007 | 96,652 | 97,055 |
| 87,758 | 90,626 | 90,278 | 92,128 | 93,846 | 91,481 | 90,154 | 89,250 | 92,146 |
| 81,612 | 84,109 | 82,957 | 81,531 | 79,560 | 82,072 | 83,290 | 80,974 | 80,003 |
| 75,132 | 73,773 | 74,944 | 74,489 | 74,153 | 70,672 | 71,896 | 72,603 | 72,466 |
| 70,943 | 68,285 | 70,113 | 71,998 | 69,554 | 67,599 | 68,437 | 70,820 | 70,653 |
| 83,129 | 85,130 | 88,614 | 90,632 | 93,666 | 88,621 | 87,319 | 92,070 | 93,520 |
| 74,722 | 74,110 | 74,547 | 72,767 | 74,847 | 73,245 | 75,002 | 75,061 | 71,113 |
| 88,392 | 95,230 | 95,757 | 96,543 | 97,108 | 97,821 | 97,549 | 98,097 | 99,295 |
| 92,052 | 97,125 | 95,954 | 96,817 | 93,180 | 100,296 | 98,216 | 97,470 | 96,201 |
| 85,161 | 86,863 | 82,980 | 83,123 | 85,786 | 88,823 | 88,442 | 88,317 | 88,275 |
| 78,218 | 81,311 | 83,791 | 80,314 | 78,529 | 75,201 | 74,118 | 74,214 | 74,043 |
| 87,290 | 87,538 | 90,355 | 92,374 | 93,608 | 96,293 | 96,778 | 94,110 | 95,713 |
| 90,581 | 96,035 | 96,541 | 97,024 | 94,541 | 98,471 | 97,308 | 96,646 | 95,436 |
| 86,233 | 88,757 | 90,741 | 90,152 | 90,061 | 89,790 | 90,672 | 92,384 | 94,237 |
| 86,122 | 90,540 | 87,594 | 88,206 | 90,486 | 92,984 | 94,261 | 92,639 | 96,440 |
| 87,975 | 93,943 | 91,378 | 95,165 | 95,754 | 97,001 | 94,454 | 95,570 | 95,917 |
| 79,372 | 79,724 | 80,467 | 80,299 | 80,204 | 81,095 | 77,676 | 76,173 | 77,359 |
| 76,699 | 75,583 | 76,433 | 76,662 | 73,972 | 75,369 | 74,789 | 76,100 | 74,419 |
| 79,738 | 86,805 | 90,999 | 92,072 | 90,005 | 95,375 | 95,231 | 97,506 | 97,241 |
| 88,535 | 91,657 | 94,148 | 92,477 | 93,645 | 95,738 | 95,785 | 96,701 | 100,147 |
| 97,033 | 100,240 | 99,176 | 96,748 | 97,623 | 98,912 | 97,828 | 98,168 | 98,138 |
| 93,771 | 97,304 | 98,197 | 101,806 | 101,445 | 97,492 | 98,242 | 97,586 | 97,677 |
| 90,657 | 95,771 | 97,960 | 99,576 | 97,833 | 99,878 | 97,746 | 97,671 | 98,621 |

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|---|---|---|---|---|---|---|---|---|
| 91,248 | 89,880 | 89,839 | 92,201 | 89,434 | 91,650 | 91,964 | 90,398 | 92,335 |
| 78,788 | 76,228 | 76,128 | 73,778 | 75,575 | 77,904 | 77,734 | 76,749 | 70,392 |
| 88,519 | 95,257 | 97,317 | 97,842 | 94,986 | 92,463 | 99,638 | 103,012 | 101,886 |
| 90,213 | 94,592 | 95,977 | 98,634 | 99,657 | 99,576 | 101,819 | 101,916 | 100,435 |
| 87,187 | 91,571 | 91,452 | 93,135 | 93,074 | 95,129 | 96,051 | 95,874 | 98,718 |
| 91,421 | 95,256 | 90,860 | 89,235 | 91,171 | 93,422 | 94,054 | 92,510 | 91,688 |
| 93,447 | 97,185 | 98,521 | 101,267 | 99,294 | 102,345 | 100,861 | 101,441 | 102,347 |
| 83,317 | 81,800 | 83,828 | 79,197 | 78,864 | 79,453 | 81,707 | 81,577 | 77,622 |
| 73,604 | 72,405 | 72,769 | 71,463 | 69,792 | 71,948 | 75,095 | 76,023 | 74,412 |
| 85,145 | 86,490 | 86,900 | 88,222 | 87,901 | 88,205 | 85,122 | 82,711 | 83,967 |
| 85,847 | 90,885 | 92,294 | 91,779 | 88,606 | 91,244 | 90,363 | 90,795 | 90,738 |
| 90,224 | 91,788 | 92,584 | 95,848 | 92,924 | 94,655 | 93,237 | 88,406 | 90,299 |
| 82,675 | 86,270 | 86,770 | 85,533 | 86,171 | 86,909 | 86,025 | 82,688 | 78,573 |
| 77,206 | 79,950 | 79,577 | 81,274 | 82,688 | 87,950 | 87,979 | 87,093 | 87,934 |
| 78,273 | 76,733 | 76,658 | 76,510 | 77,558 | 76,653 | 73,909 | 74,908 | 78,982 |
| 75,438 | 74,311 | 72,516 | 71,937 | 72,743 | 72,974 | 71,304 | 72,737 | 71,678 |
| 71,465 | 70,036 | 69,929 | 70,190 | 70,638 | 71,619 | 71,319 | 72,245 | 76,454 |
| 83,108 | 85,413 | 90,078 | 87,181 | 82,981 | 81,389 | 84,834 | 86,099 | 85,030 |
| 84,072 | 84,490 | 84,824 | 87,193 | 87,830 | 86,984 | 87,272 | 87,181 | 88,845 |
| 85,394 | 90,317 | 88,311 | 88,573 | 86,794 | 88,045 | 89,272 | 91,553 | 90,097 |
| 87,812 | 86,749 | 88,598 | 92,171 | 92,052 | 92,497 | 91,072 | 90,690 | 88,670 |
| 80,115 | 81,523 | 82,541 | 80,379 | 82,385 | 83,031 | 80,345 | 78,949 | 78,622 |
| 73,814 | 72,764 | 72,764 | 72,864 | 74,571 | 73,721 | 72,102 | 77,156 | 75,789 |
| 79,049 | 83,828 | 83,544 | 83,342 | 85,175 | 86,361 | 84,585 | 85,298 | 86,186 |
| 92,134 | 96,091 | 95,308 | 96,707 | 97,175 | 98,385 | 98,533 | 92,403 | 98,864 |
| 93,909 | 91,407 | 93,452 | 92,359 | 92,234 | 92,305 | 91,723 | 91,763 | 91,809 |
| 88,731 | 91,006 | 94,342 | 94,047 | 95,351 | 95,490 | 95,713 | 96,017 | 96,763 |
| 92,717 | 95,320 | 96,599 | 96,117 | 96,310 | 99,941 | 100,294 | 97,657 | 97,875 |
| 79,860 | 80,067 | 82,988 | 84,869 | 82,597 | 79,889 | 78,677 | 82,360 | 82,829 |
| 77,816 | 75,170 | 79,490 | 78,990 | 77,126 | 79,424 | 78,046 | 78,678 | 78,107 |
| 87,697 | 89,616 | 88,379 | 94,366 | 93,808 | 92,581 | 95,939 | 95,796 | 94,605 |
| 92,010 | 92,312 | 97,065 | 100,071 | 97,554 | 93,476 | 93,456 | 95,529 | 96,576 |
| 58,336 | 60,000 | 59,644 | 62,285 | 64,097 | 65,685 | 64,063 | 62,511 | 64,783 |
| 65,935 | 69,914 | 72,135 | 74,993 | 76,275 | 78,968 | 81,982 | 75,536 | 74,439 |
| 89,379 | 93,691 | 93,072 | 91,036 | 89,965 | 92,246 | 92,721 | 93,727 | 92,712 |
| 83,474 | 82,968 | 82,955 | 81,047 | 84,979 | 85,150 | 81,910 | 83,225 | 83,614 |
| 78,821 | 79,205 | 78,538 | 74,376 | 71,086 | 71,473 | 72,777 | 75,122 | 71,133 |
| 86,971 | 89,044 | 92,081 | 92,386 | 89,727 | 92,619 | 95,284 | 93,584 | 87,526 |
| 87,054 | 89,662 | 93,062 | 95,037 | 95,051 | 91,748 | 91,195 | 96,912 | 96,021 |
| 82,318 | 88,391 | 85,208 | 84,714 | 85,166 | 82,356 | 84,115 | 85,926 | 86,918 |
| 86,693 | 88,116 | 84,121 | 87,910 | 89,431 | 92,240 | 92,663 | 93,215 | 92,370 |
| 84,693 | 90,684 | 89,905 | 88,495 | 91,544 | 95,709 | 96,687 | 97,934 | 97,522 |
| 80,292 | 85,429 | 85,937 | 88,429 | 90,357 | 90,498 | 91,910 | 92,415 | 86,804 |
| 76,370 | 75,787 | 75,976 | 75,017 | 75,766 | 77,242 | 75,509 | 75,645 | 74,420 |
| 86,452 | 86,903 | 83,333 | 87,804 | 85,440 | 86,036 | 89,770 | 92,046 | 94,420 |
| 91,629 | 97,767 | 99,121 | 97,555 | 97,888 | 99,211 | 99,178 | 100,184 | 101,575 |
| 87,061 | 90,739 | 95,356 | 98,240 | 96,991 | 98,412 | 96,252 | 97,995 | 96,085 |

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|---|---|---|---|---|---|---|---|---|
| 87,614 | 92,490 | 97,478 | 97,754 | 96,987 | 96,568 | 96,620 | 96,065 | 98,122 |
| 89,787 | 92,533 | 93,938 | 91,786 | 92,225 | 95,623 | 98,040 | 97,192 | 98,508 |
| 78,476 | 76,746 | 78,948 | 78,142 | 79,206 | 79,742 | 78,648 | 78,433 | 77,261 |
| 77,349 | 74,726 | 74,508 | 74,755 | 74,140 | 73,682 | 73,858 | 73,067 | 73,734 |
| 84,662 | 88,688 | 90,872 | 90,729 | 87,732 | 90,055 | 90,368 | 90,139 | 90,184 |
| 93,628 | 94,846 | 94,947 | 92,152 | 99,376 | 102,596 | 96,407 | 94,477 | 96,285 |
| 86,774 | 89,294 | 90,434 | 89,697 | 90,178 | 92,115 | 93,727 | 98,039 | 98,457 |
| 96,080 | 100,827 | 98,667 | 96,604 | 101,471 | 100,173 | 100,103 | 100,189 | 99,842 |
| 89,331 | 94,286 | 100,779 | 103,398 | 99,048 | 99,310 | 103,566 | 102,740 | 102,019 |
| 70,268 | 70,983 | 71,739 | 73,351 | 77,287 | 76,265 | 71,867 | 77,419 | 80,528 |
| 79,119 | 77,357 | 76,198 | 77,917 | 79,857 | 80,233 | 79,094 | 78,231 | 77,038 |
| 79,458 | 83,564 | 85,671 | 86,491 | 86,950 | 86,634 | 86,114 | 87,979 | 89,817 |
| 96,554 | 96,242 | 95,663 | 98,259 | 97,763 | 98,313 | 95,820 | 100,700 | 102,633 |
| 93,316 | 94,241 | 96,859 | 96,521 | 98,502 | 94,090 | 94,323 | 100,562 | 100,433 |
| 89,695 | 94,194 | 93,209 | 96,163 | 96,818 | 99,202 | 100,638 | 101,178 | 100,840 |
| 91,789 | 94,803 | 93,355 | 92,394 | 94,761 | 97,020 | 99,474 | 99,496 | 98,386 |
| 82,779 | 84,182 | 83,350 | 82,924 | 82,385 | 82,951 | 83,499 | 82,339 | 79,356 |
| 82,589 | 81,416 | 77,643 | 78,154 | 78,368 | 75,757 | 69,778 | 75,219 | 73,177 |
| 81,340 | 83,945 | 84,803 | 84,508 | 86,712 | 90,933 | 93,873 | 95,838 | 96,447 |
| 91,106 | 92,667 | 93,763 | 92,619 | 94,236 | 93,657 | 98,039 | 100,328 | 97,644 |
| 88,581 | 92,406 | 92,677 | 93,878 | 95,731 | 96,849 | 95,251 | 94,670 | 94,712 |
| 93,598 | 94,413 | 90,357 | 91,831 | 97,528 | 96,955 | 96,146 | 94,951 | 93,831 |
| 94,715 | 96,419 | 99,244 | 100,362 | 100,245 | 102,705 | 100,591 | 95,788 | 95,145 |
| 84,357 | 83,477 | 84,412 | 86,005 | 83,636 | 83,972 | 82,209 | 81,853 | 79,295 |
| 79,157 | 76,987 | 75,845 | 75,866 | 78,181 | 74,942 | 71,768 | 75,426 | 75,498 |
| 83,083 | 84,194 | 86,122 | 89,619 | 90,782 | 90,182 | 90,811 | 90,499 | 88,809 |
| 95,680 | 97,743 | 96,180 | 97,088 | 98,599 | 98,017 | 98,738 | 94,948 | 91,171 |
| 88,713 | 93,136 | 92,513 | 91,673 | 95,230 | 97,756 | 97,341 | 97,141 | 97,562 |
| 91,732 | 91,334 | 92,965 | 94,849 | 93,284 | 90,028 | 94,082 | 94,765 | 96,654 |
| 85,941 | 89,888 | 93,249 | 93,707 | 90,387 | 94,047 | 91,545 | 90,565 | 92,798 |
| 76,689 | 77,115 | 79,242 | 79,021 | 77,648 | 75,467 | 79,459 | 78,877 | 78,205 |
| 69,771 | 68,404 | 69,841 | 72,014 | 75,276 | 73,114 | 72,447 | 72,747 | 73,238 |
| 71,174 | 69,385 | 67,561 | 65,598 | 64,286 | 64,162 | 67,372 | 66,967 | 65,306 |
| 79,632 | 85,462 | 85,515 | 82,888 | 84,933 | 88,560 | 89,432 | 90,110 | 91,229 |
| 78,633 | 80,554 | 80,417 | 78,270 | 76,370 | 78,535 | 79,308 | 82,077 | 85,269 |
| 89,363 | 92,619 | 91,999 | 90,822 | 90,273 | 89,576 | 83,729 | 85,764 | 89,404 |
| 90,132 | 90,725 | 89,398 | 92,555 | 96,799 | 98,781 | 99,223 | 95,196 | 90,547 |
| 85,760 | 87,782 | 87,415 | 89,415 | 89,536 | 90,029 | 88,937 | 87,866 | 87,805 |
| 81,451 | 81,298 | 80,321 | 80,034 | 79,059 | 77,020 | 74,521 | 76,745 | 77,237 |
| 82,572 | 87,180 | 91,895 | 94,773 | 95,077 | 93,335 | 95,794 | 94,955 | 97,857 |
| 92,732 | 96,263 | 97,722 | 100,973 | 103,509 | 99,666 | 98,073 | 100,306 | 99,052 |
| 88,913 | 92,812 | 94,877 | 95,811 | 98,065 | 100,067 | 98,479 | 97,244 | 96,242 |
| 89,363 | 95,995 | 95,367 | 91,127 | 88,089 | 90,115 | 87,807 | 88,669 | 94,949 |
| 95,153 | 98,406 | 100,201 | 98,071 | 101,208 | 102,019 | 102,084 | 101,906 | 101,404 |
| 85,201 | 85,209 | 85,552 | 83,719 | 84,448 | 90,221 | 92,606 | 86,624 | 89,383 |
| 75,129 | 76,574 | 75,848 | 77,423 | 78,212 | 78,982 | 77,034 | 76,478 | 73,909 |
| 85,182 | 89,276 | 91,950 | 93,915 | 94,391 | 95,520 | 100,430 | 99,949 | 99,992 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 98,355 | 100,726 | 102,830 | 104,484 | 105,066 | 102,346 | 103,801 | 105,233 | 103,043 |
| 89,001 | 89,560 | 89,783 | 95,221 | 95,888 | 95,414 | 93,966 | 94,036 | 94,574 |
| 90,507 | 96,511 | 95,862 | 98,027 | 101,141 | 102,196 | 99,611 | 100,971 | 101,243 |
| 92,085 | 94,325 | 96,375 | 98,508 | 101,352 | 103,298 | 98,963 | 98,909 | 102,547 |
| 86,379 | 86,302 | 85,330 | 86,461 | 90,174 | 91,216 | 90,468 | 88,888 | 88,001 |
| 81,256 | 80,957 | 79,534 | 78,406 | 77,804 | 78,841 | 77,808 | 73,650 | 74,176 |
| 87,444 | 92,761 | 94,434 | 96,148 | 96,012 | 96,433 | 96,661 | 97,560 | 97,663 |
| 90,086 | 95,569 | 99,610 | 102,863 | 102,655 | 105,593 | 102,789 | 102,370 | 106,622 |
| 89,947 | 93,906 | 95,415 | 97,638 | 97,535 | 98,031 | 96,283 | 98,897 | 100,055 |
| 88,851 | 91,963 | 94,567 | 98,257 | 100,360 | 100,021 | 99,605 | 99,030 | 99,042 |
| 84,715 | 88,108 | 87,490 | 90,835 | 91,156 | 90,111 | 96,175 | 97,940 | 97,185 |
| 82,416 | 82,116 | 80,883 | 79,823 | 79,422 | 77,242 | 74,858 | 75,682 | 75,511 |
| 73,865 | 75,186 | 72,619 | 70,831 | 69,871 | 69,308 | 70,355 | 74,376 | 74,995 |
| 80,194 | 85,586 | 86,910 | 87,450 | 87,174 | 86,639 | 84,935 | 87,580 | 88,844 |
| 86,664 | 91,757 | 93,341 | 97,446 | 98,355 | 99,565 | 99,040 | 99,950 | 98,946 |
| 88,331 | 95,416 | 99,953 | 98,643 | 100,082 | 96,177 | 96,999 | 97,966 | 97,489 |
| 83,736 | 88,021 | 90,543 | 93,245 | 93,532 | 94,321 | 91,640 | 91,015 | 91,422 |
| 79,642 | 86,584 | 93,431 | 96,739 | 98,221 | 98,863 | 98,202 | 100,328 | 99,522 |
| 74,740 | 70,595 | 69,271 | 70,398 | 70,264 | 72,446 | 74,544 | 75,337 | 77,358 |
| 73,542 | 71,949 | 71,642 | 71,886 | 72,040 | 68,533 | 68,046 | 71,179 | 70,740 |
| 79,876 | 80,722 | 82,923 | 85,385 | 87,318 | 89,860 | 89,405 | 89,350 | 89,592 |
| 88,168 | 92,167 | 96,355 | 96,703 | 96,749 | 101,474 | 98,462 | 99,493 | 101,184 |
| 82,121 | 85,221 | 84,216 | 82,721 | 81,650 | 81,933 | 80,749 | 82,820 | 90,911 |
| 86,209 | 88,854 | 91,683 | 93,688 | 96,388 | 96,268 | 96,209 | 94,228 | 95,320 |
| 89,232 | 98,494 | 101,264 | 101,869 | 98,242 | 99,740 | 103,362 | 105,233 | 103,096 |
| 81,006 | 81,157 | 80,888 | 79,771 | 79,677 | 81,285 | 77,295 | 75,648 | 79,739 |
| 70,781 | 70,388 | 69,594 | 70,329 | 69,171 | 69,844 | 68,816 | 70,571 | 73,751 |
| 81,080 | 87,171 | 88,783 | 94,047 | 93,310 | 88,736 | 85,051 | 88,642 | 93,873 |
| 93,489 | 98,958 | 100,949 | 97,076 | 97,121 | 98,240 | 98,814 | 99,994 | 103,139 |
| 87,276 | 89,446 | 92,448 | 94,721 | 96,791 | 96,653 | 96,560 | 97,274 | 97,343 |
| 83,257 | 89,244 | 92,574 | 92,450 | 93,424 | 94,098 | 97,608 | 101,956 | 103,782 |
| 87,778 | 93,730 | 95,127 | 99,511 | 100,072 | 96,739 | 94,516 | 95,215 | 101,848 |
| 80,632 | 81,603 | 81,898 | 82,654 | 81,896 | 84,996 | 84,226 | 84,046 | 84,005 |
| 79,742 | 77,445 | 78,682 | 78,739 | 74,392 | 64,803 | 64,806 | 63,926 | 67,122 |
| 72,434 | 77,788 | 80,747 | 83,334 | 84,158 | 85,467 | 85,143 | 85,778 | 86,578 |
| 83,758 | 88,686 | 91,436 | 94,083 | 93,338 | 94,444 | 90,831 | 92,618 | 94,014 |
| 84,572 | 87,875 | 90,739 | 93,644 | 94,440 | 95,320 | 92,188 | 92,253 | 92,174 |
| 82,864 | 88,024 | 88,569 | 91,521 | 92,485 | 93,890 | 92,491 | 93,763 | 92,309 |
| 78,478 | 83,549 | 83,325 | 83,785 | 84,872 | 83,917 | 81,613 | 81,575 | 81,980 |
| 66,061 | 64,659 | 64,208 | 62,534 | 62,206 | 61,924 | 62,552 | 62,733 | 60,966 |
| 62,254 | 61,641 | 61,215 | 61,727 | 60,783 | 60,231 | 56,728 | 55,220 | 51,851 |

| 29 | 31 | 33 | 35 | 37 | 39 | 41 | 43 | 45 |
|---|---|---|---|---|---|---|---|---|

| HR15 | HR16 | HR17 | HR18 | HR19 | HR20 | HR21 | HR22 | HR23 |
|---|---|---|---|---|---|---|---|---|
| 65,685 | 65,066 | 64,540 | 65,514 | 65,203 | 67,165 | 68,296 | 68,796 | 69,498 |
| 87,158 | 86,486 | 86,929 | 88,759 | 91,259 | 88,968 | 92,789 | 88,538 | 88,317 |
| 99,911 | 97,302 | 93,799 | 97,234 | 96,367 | 97,400 | 97,612 | 93,872 | 89,968 |
| 81,782 | 79,373 | 77,407 | 80,089 | 79,865 | 83,018 | 88,024 | 89,422 | 83,308 |
| 98,816 | 92,776 | 93,238 | 97,831 | 99,351 | 93,809 | 91,239 | 91,731 | 93,327 |
| 88,053 | 83,831 | 84,274 | 88,828 | 89,911 | 89,173 | 88,038 | 85,410 | 82,598 |
| 67,525 | 67,463 | 68,039 | 68,265 | 67,760 | 68,709 | 70,881 | 71,049 | 69,527 |
| 48,245 | 48,363 | 47,930 | 49,989 | 51,388 | 58,255 | 61,688 | 64,542 | 65,983 |
| 91,596 | 89,363 | 88,818 | 90,068 | 91,152 | 90,836 | 90,820 | 90,401 | 91,761 |
| 94,138 | 88,817 | 87,651 | 87,147 | 93,675 | 93,700 | 94,192 | 92,776 | 91,440 |
| 89,153 | 89,132 | 85,441 | 86,229 | 87,563 | 86,987 | 86,423 | 87,247 | 87,340 |
| 87,033 | 85,397 | 83,414 | 82,929 | 84,585 | 85,390 | 84,035 | 84,030 | 85,772 |
| 78,765 | 79,161 | 79,739 | 82,073 | 77,560 | 75,962 | 75,980 | 71,874 | 68,607 |
| 69,082 | 69,741 | 69,906 | 70,030 | 69,923 | 68,428 | 68,588 | 67,680 | 66,719 |
| 68,069 | 67,838 | 68,308 | 66,186 | 66,971 | 65,838 | 67,347 | 67,211 | 68,391 |
| 83,734 | 84,694 | 88,551 | 89,614 | 88,413 | 90,715 | 90,703 | 90,757 | 89,230 |
| 90,698 | 89,614 | 87,725 | 87,345 | 88,060 | 89,435 | 90,514 | 91,507 | 91,618 |
| 91,229 | 88,697 | 89,505 | 93,038 | 93,508 | 89,700 | 89,644 | 88,966 | 89,361 |
| 93,535 | 90,066 | 90,113 | 95,621 | 95,318 | 95,889 | 95,144 | 94,312 | 93,253 |
| 85,392 | 88,737 | 92,649 | 91,446 | 90,265 | 87,266 | 87,429 | 86,130 | 84,095 |
| 73,323 | 72,524 | 72,371 | 72,996 | 72,534 | 71,980 | 72,732 | 72,933 | 71,644 |
| 67,556 | 67,303 | 67,328 | 68,367 | 68,924 | 68,585 | 69,363 | 69,762 | 69,299 |
| 91,538 | 90,478 | 91,165 | 86,526 | 87,709 | 90,050 | 90,816 | 90,305 | 88,435 |
| 88,517 | 87,811 | 86,506 | 88,592 | 90,592 | 90,511 | 91,288 | 92,103 | 92,944 |
| 90,844 | 88,888 | 90,331 | 93,417 | 91,197 | 87,206 | 88,622 | 88,314 | 82,522 |
| 58,825 | 58,912 | 59,107 | 59,388 | 59,554 | 59,291 | 59,284 | 59,275 | 59,377 |
| 59,959 | 60,084 | 60,222 | 60,600 | 61,023 | 61,324 | 61,430 | 61,929 | 62,528 |
| 74,204 | 72,493 | 72,660 | 74,562 | 72,852 | 73,243 | 75,654 | 74,868 | 71,283 |
| 63,375 | 63,538 | 67,517 | 68,287 | 68,712 | 69,470 | 69,730 | 68,893 | 70,725 |
| 88,427 | 89,958 | 92,008 | 92,745 | 92,695 | 92,238 | 95,367 | 94,904 | 92,900 |
| 92,596 | 92,520 | 90,729 | 90,353 | 88,801 | 89,454 | 94,684 | 92,052 | 88,387 |
| 78,701 | 72,634 | 74,877 | 78,182 | 79,663 | 78,765 | 84,539 | 91,347 | 92,020 |
| 93,973 | 94,128 | 96,546 | 95,583 | 96,572 | 96,197 | 97,902 | 95,979 | 95,285 |
| 91,436 | 91,529 | 92,189 | 91,740 | 94,533 | 96,460 | 95,204 | 92,462 | 89,650 |
| 76,121 | 76,389 | 77,207 | 79,370 | 77,212 | 77,775 | 73,022 | 72,936 | 72,916 |
| 67,106 | 67,067 | 67,254 | 67,644 | 67,478 | 67,263 | 67,473 | 68,788 | 69,595 |
| 87,408 | 83,589 | 88,876 | 91,851 | 89,949 | 92,127 | 93,951 | 93,269 | 91,346 |
| 96,770 | 94,367 | 92,814 | 91,054 | 90,404 | 91,064 | 92,560 | 91,426 | 89,471 |
| 95,676 | 96,007 | 96,118 | 96,166 | 96,571 | 96,482 | 95,650 | 96,955 | 95,394 |
| 98,077 | 96,904 | 94,500 | 92,867 | 92,115 | 91,824 | 93,431 | 93,067 | 90,576 |
| 89,692 | 92,288 | 92,049 | 90,929 | 88,573 | 87,042 | 86,699 | 88,248 | 86,089 |
| 77,501 | 80,465 | 78,628 | 77,869 | 78,674 | 75,878 | 74,640 | 73,392 | 72,677 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 67,232 | 67,309 | 68,010 | 69,464 | 69,371 | 69,333 | 69,192 | 69,171 | 69,428 |
| 91,295 | 88,077 | 88,342 | 83,669 | 86,614 | 88,255 | 92,958 | 94,832 | 93,057 |
| 90,621 | 89,108 | 93,092 | 93,338 | 87,129 | 87,773 | 92,769 | 97,401 | 96,516 |
| 87,469 | 89,471 | 90,368 | 86,381 | 84,788 | 85,092 | 86,313 | 87,668 | 88,434 |
| 91,757 | 90,404 | 89,836 | 91,398 | 91,294 | 90,783 | 91,327 | 91,656 | 89,708 |
| 82,115 | 85,653 | 86,027 | 86,775 | 84,191 | 81,569 | 81,249 | 80,226 | 77,681 |
| 74,270 | 73,450 | 73,179 | 73,444 | 74,382 | 74,121 | 74,073 | 74,065 | 73,618 |
| 68,954 | 68,998 | 69,278 | 69,448 | 68,865 | 69,048 | 70,150 | 70,153 | 70,702 |
| 89,028 | 87,930 | 89,079 | 90,722 | 89,626 | 88,862 | 90,680 | 89,498 | 89,264 |
| 86,340 | 93,311 | 94,536 | 93,771 | 89,229 | 87,483 | 88,825 | 88,604 | 87,713 |
| 89,777 | 87,309 | 86,774 | 87,435 | 85,543 | 82,037 | 85,082 | 82,384 | 75,592 |
| 59,776 | 60,168 | 60,391 | 60,718 | 61,067 | 60,952 | 60,483 | 60,061 | 59,907 |
| 60,000 | 55,476 | 52,617 | 55,027 | 55,867 | 57,849 | 58,849 | 59,886 | 60,413 |
| 68,210 | 67,865 | 68,460 | 69,103 | 69,190 | 69,108 | 68,588 | 68,340 | 68,158 |
| 66,865 | 66,730 | 62,066 | 60,827 | 62,049 | 63,659 | 65,618 | 68,199 | 69,509 |
| 80,558 | 78,339 | 80,112 | 84,894 | 86,927 | 86,858 | 85,175 | 88,294 | 87,507 |
| 85,467 | 85,149 | 87,970 | 89,738 | 89,210 | 88,431 | 89,629 | 89,585 | 88,896 |
| 86,859 | 85,096 | 86,902 | 86,274 | 86,578 | 86,205 | 85,633 | 84,386 | 83,615 |
| 78,738 | 76,545 | 80,007 | 81,154 | 80,730 | 79,309 | 76,246 | 77,848 | 76,249 |
| 67,260 | 69,498 | 70,970 | 70,604 | 70,321 | 70,738 | 70,352 | 70,457 | 69,487 |
| 74,435 | 74,672 | 75,232 | 74,487 | 71,175 | 71,128 | 69,582 | 69,545 | 70,965 |
| 67,610 | 67,342 | 67,315 | 68,897 | 67,669 | 65,107 | 66,477 | 68,393 | 70,525 |
| 94,127 | 95,443 | 95,799 | 95,357 | 96,431 | 96,773 | 96,993 | 95,556 | 95,008 |
| 93,309 | 93,910 | 92,309 | 96,681 | 99,820 | 100,300 | 97,725 | 97,612 | 99,217 |
| 98,685 | 96,800 | 97,213 | 95,843 | 94,948 | 95,789 | 95,565 | 96,098 | 96,045 |
| 101,552 | 98,570 | 99,362 | 97,938 | 98,631 | 97,078 | 96,406 | 96,679 | 97,451 |
| 95,744 | 93,818 | 94,119 | 92,967 | 94,607 | 96,555 | 99,243 | 96,704 | 95,894 |
| 74,353 | 73,561 | 73,931 | 74,404 | 74,040 | 73,611 | 74,076 | 74,287 | 73,738 |
| 70,116 | 69,698 | 70,404 | 72,011 | 72,026 | 72,504 | 72,733 | 73,524 | 73,625 |
| 94,879 | 89,643 | 92,128 | 93,820 | 93,133 | 93,949 | 92,007 | 92,001 | 93,128 |
| 98,512 | 96,987 | 94,867 | 96,711 | 99,627 | 99,242 | 99,770 | 96,552 | 98,217 |
| 87,741 | 87,961 | 88,859 | 89,211 | 90,235 | 91,281 | 92,106 | 93,742 | 96,776 |
| 98,993 | 96,144 | 93,267 | 97,499 | 96,003 | 94,322 | 95,430 | 95,485 | 96,487 |
| 92,742 | 91,046 | 88,269 | 87,660 | 87,537 | 88,878 | 89,131 | 91,009 | 90,282 |
| 82,482 | 79,589 | 79,670 | 81,241 | 79,150 | 75,389 | 76,904 | 76,121 | 75,286 |
| 65,826 | 67,165 | 67,245 | 68,924 | 68,168 | 68,085 | 68,821 | 69,848 | 70,638 |
| 96,235 | 96,128 | 94,254 | 94,726 | 96,837 | 96,174 | 93,541 | 92,208 | 95,087 |
| 73,139 | 73,924 | 73,208 | 76,362 | 77,873 | 79,202 | 80,589 | 80,761 | 79,008 |
| 98,954 | 95,395 | 91,975 | 92,803 | 93,887 | 93,431 | 95,727 | 94,569 | 91,521 |
| 93,138 | 92,282 | 90,075 | 91,721 | 93,946 | 92,738 | 92,700 | 93,533 | 94,686 |
| 92,325 | 90,818 | 91,156 | 91,495 | 91,355 | 92,822 | 91,652 | 91,158 | 87,714 |
| 76,464 | 77,388 | 76,953 | 77,806 | 74,863 | 74,034 | 70,859 | 67,897 | 67,747 |
| 65,573 | 65,785 | 66,128 | 67,249 | 67,081 | 68,380 | 69,578 | 70,007 | 67,126 |
| 77,704 | 79,323 | 88,979 | 93,091 | 95,437 | 95,326 | 94,971 | 93,479 | 93,834 |
| 99,281 | 88,881 | 83,413 | 91,028 | 95,483 | 96,948 | 98,969 | 97,974 | 96,890 |
| 98,836 | 96,171 | 95,865 | 96,195 | 95,533 | 90,373 | 89,654 | 94,767 | 98,271 |
| 97,205 | 96,155 | 95,305 | 96,651 | 93,431 | 93,023 | 94,300 | 97,689 | 95,422 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 97,235 | 96,224 | 93,959 | 92,894 | 92,019 | 90,697 | 89,869 | 84,398 | 82,336 |
| 75,882 | 73,247 | 76,169 | 76,684 | 75,767 | 73,808 | 73,650 | 72,360 | 71,670 |
| 69,201 | 69,618 | 69,384 | 69,251 | 69,186 | 69,949 | 69,915 | 70,705 | 71,949 |
| 90,712 | 85,924 | 82,271 | 87,166 | 87,032 | 88,395 | 88,501 | 87,895 | 91,833 |
| 94,830 | 93,587 | 93,588 | 93,677 | 92,563 | 92,374 | 96,741 | 98,358 | 96,180 |
| 95,101 | 92,242 | 90,901 | 93,097 | 96,498 | 96,291 | 96,253 | 96,752 | 97,857 |
| 101,185 | 97,318 | 97,593 | 97,400 | 96,091 | 95,734 | 96,137 | 96,211 | 96,636 |
| 97,701 | 97,166 | 96,117 | 95,929 | 95,089 | 92,497 | 91,002 | 90,628 | 90,979 |
| 78,316 | 78,548 | 81,868 | 85,758 | 85,050 | 86,145 | 85,246 | 84,533 | 82,152 |
| 75,522 | 78,383 | 78,919 | 79,358 | 80,306 | 79,582 | 76,479 | 77,184 | 80,547 |
| 95,498 | 93,737 | 95,163 | 96,577 | 96,165 | 95,332 | 95,281 | 99,790 | 101,243 |
| 99,872 | 96,159 | 95,562 | 98,884 | 95,543 | 97,775 | 98,235 | 97,116 | 98,107 |
| 96,146 | 94,594 | 92,570 | 93,805 | 93,496 | 93,263 | 94,694 | 95,174 | 95,174 |
| 101,736 | 101,060 | 99,080 | 96,844 | 96,964 | 95,440 | 97,249 | 97,359 | 97,712 |
| 98,840 | 96,571 | 94,093 | 93,685 | 91,720 | 93,435 | 93,839 | 96,125 | 96,078 |
| 83,096 | 84,917 | 82,097 | 84,660 | 88,883 | 87,719 | 88,149 | 87,569 | 86,494 |
| 77,987 | 78,308 | 78,488 | 79,355 | 78,619 | 79,171 | 78,225 | 81,406 | 83,674 |
| 92,920 | 89,738 | 92,399 | 93,687 | 96,050 | 94,938 | 97,052 | 96,562 | 99,163 |
| 96,362 | 94,195 | 92,589 | 91,698 | 91,851 | 90,840 | 92,426 | 92,913 | 91,438 |
| 94,673 | 92,590 | 91,720 | 92,706 | 93,040 | 92,181 | 92,872 | 89,352 | 90,425 |
| 96,613 | 95,893 | 93,099 | 94,946 | 98,160 | 97,670 | 91,434 | 91,429 | 90,748 |
| 94,532 | 94,337 | 92,647 | 91,604 | 91,477 | 93,356 | 95,719 | 95,969 | 96,723 |
| 77,064 | 75,900 | 77,752 | 81,329 | 79,859 | 74,877 | 76,206 | 77,741 | 77,462 |
| 69,645 | 71,515 | 70,941 | 70,579 | 71,551 | 72,648 | 73,699 | 73,422 | 73,720 |
| 93,384 | 92,855 | 94,231 | 95,931 | 95,562 | 94,863 | 95,573 | 95,860 | 96,702 |
| 96,251 | 93,113 | 88,847 | 85,711 | 87,425 | 89,308 | 90,741 | 91,842 | 94,642 |
| 96,060 | 94,016 | 93,298 | 93,771 | 91,646 | 92,224 | 92,994 | 94,218 | 99,855 |
| 97,909 | 96,059 | 92,372 | 93,516 | 93,075 | 96,093 | 92,529 | 91,691 | 92,150 |
| 96,499 | 93,842 | 94,112 | 91,550 | 91,491 | 88,343 | 89,598 | 90,809 | 90,569 |
| 85,073 | 85,982 | 84,474 | 83,798 | 82,096 | 83,102 | 83,297 | 84,259 | 82,557 |
| 71,788 | 74,431 | 74,291 | 74,752 | 73,926 | 73,013 | 69,459 | 72,069 | 75,132 |
| 84,249 | 85,461 | 87,727 | 84,409 | 85,214 | 87,532 | 91,520 | 94,335 | 94,749 |
| 96,554 | 97,860 | 97,081 | 95,661 | 95,110 | 91,750 | 89,838 | 90,181 | 92,414 |
| 99,553 | 99,358 | 95,528 | 95,496 | 91,306 | 89,325 | 91,232 | 90,139 | 91,571 |
| 89,686 | 87,617 | 88,555 | 88,981 | 87,664 | 92,731 | 94,155 | 93,293 | 94,442 |
| 99,051 | 95,686 | 90,173 | 91,130 | 90,221 | 90,355 | 90,430 | 89,389 | 88,633 |
| 82,417 | 82,174 | 81,838 | 82,712 | 79,533 | 76,148 | 78,716 | 80,013 | 80,252 |
| 74,398 | 74,070 | 73,513 | 74,047 | 73,430 | 76,039 | 76,967 | 73,774 | 77,650 |
| 90,695 | 83,309 | 86,403 | 88,799 | 89,561 | 91,398 | 88,807 | 90,920 | 88,393 |
| 101,646 | 96,994 | 93,808 | 94,716 | 94,583 | 94,916 | 95,627 | 91,754 | 91,457 |
| 91,309 | 83,200 | 80,979 | 85,036 | 86,695 | 87,173 | 86,519 | 85,303 | 85,699 |
| 94,136 | 91,886 | 91,183 | 89,902 | 88,601 | 88,953 | 89,155 | 90,117 | 93,962 |
| 94,227 | 89,501 | 88,676 | 88,436 | 90,079 | 89,679 | 87,388 | 88,894 | 87,965 |
| 81,901 | 83,065 | 82,617 | 82,585 | 83,223 | 82,512 | 83,018 | 83,339 | 83,547 |
| 70,128 | 70,229 | 69,508 | 73,363 | 75,424 | 75,562 | 76,534 | 77,556 | 78,120 |
| 89,600 | 89,647 | 88,816 | 89,768 | 87,748 | 89,195 | 90,395 | 90,470 | 91,241 |
| 90,637 | 87,878 | 86,349 | 85,765 | 85,455 | 85,074 | 87,854 | 87,282 | 87,537 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 88,960 | 85,863 | 84,714 | 85,865 | 85,418 | 86,903 | 86,375 | 86,272 | 88,734 |
| 96,346 | 96,189 | 94,512 | 92,783 | 92,503 | 93,960 | 89,101 | 90,176 | 93,360 |
| 95,745 | 92,991 | 91,616 | 93,166 | 93,994 | 92,727 | 90,908 | 91,227 | 92,424 |
| 80,005 | 79,533 | 78,749 | 77,672 | 74,191 | 72,273 | 75,552 | 75,553 | 76,759 |
| 73,551 | 74,045 | 74,605 | 73,630 | 73,001 | 73,802 | 77,319 | 76,067 | 76,355 |
| 95,836 | 96,202 | 95,919 | 95,626 | 95,825 | 95,782 | 97,042 | 95,747 | 97,064 |
| 82,347 | 85,099 | 84,519 | 83,024 | 87,408 | 92,728 | 93,724 | 96,283 | 96,215 |
| 96,795 | 91,840 | 88,979 | 93,248 | 94,309 | 96,169 | 95,917 | 92,749 | 93,244 |
| 93,756 | 90,060 | 86,450 | 88,092 | 87,909 | 88,992 | 90,133 | 90,888 | 93,592 |
| 92,036 | 92,078 | 93,743 | 92,774 | 93,393 | 92,307 | 92,942 | 89,273 | 91,106 |
| 89,248 | 84,337 | 80,551 | 80,025 | 80,051 | 79,089 | 78,456 | 77,409 | 81,014 |
| 70,755 | 70,619 | 71,076 | 70,185 | 74,280 | 77,004 | 75,932 | 73,308 | 71,124 |
| 93,331 | 89,690 | 90,516 | 93,606 | 94,638 | 95,085 | 96,495 | 96,709 | 96,311 |
| 101,500 | 94,972 | 95,913 | 99,125 | 95,824 | 89,701 | 92,119 | 98,642 | 99,180 |
| 92,419 | 90,654 | 90,205 | 90,391 | 87,511 | 88,112 | 91,888 | 91,732 | 91,083 |
| 89,304 | 85,756 | 86,160 | 86,770 | 87,019 | 87,824 | 88,876 | 90,190 | 87,478 |
| 85,491 | 85,713 | 87,098 | 87,437 | 85,085 | 84,581 | 85,263 | 85,250 | 84,197 |
| 77,522 | 77,138 | 78,703 | 79,370 | 76,892 | 75,498 | 79,666 | 79,286 | 75,284 |
| 71,194 | 71,682 | 68,958 | 71,692 | 71,944 | 72,404 | 73,078 | 72,358 | 74,534 |
| 96,729 | 92,298 | 89,404 | 89,515 | 88,593 | 89,581 | 91,850 | 89,367 | 93,930 |
| 98,104 | 95,529 | 94,673 | 94,100 | 94,901 | 94,884 | 93,390 | 93,963 | 92,240 |
| 95,160 | 92,675 | 90,263 | 89,653 | 88,087 | 89,418 | 89,075 | 92,082 | 95,045 |
| 96,811 | 93,062 | 93,875 | 91,297 | 92,011 | 90,714 | 89,970 | 89,764 | 89,297 |
| 97,860 | 95,447 | 93,769 | 88,041 | 89,866 | 90,782 | 90,886 | 89,088 | 85,367 |
| 73,741 | 73,222 | 73,415 | 74,009 | 73,736 | 77,715 | 76,176 | 75,291 | 77,191 |
| 74,620 | 70,152 | 71,399 | 70,532 | 70,971 | 71,915 | 75,125 | 73,003 | 73,057 |
| 93,664 | 90,519 | 90,295 | 93,184 | 93,367 | 94,391 | 98,560 | 97,843 | 97,187 |
| 99,179 | 96,281 | 92,205 | 94,275 | 94,939 | 93,751 | 95,928 | 97,679 | 98,114 |
| 95,324 | 91,658 | 89,670 | 89,623 | 89,855 | 90,707 | 90,581 | 91,275 | 95,165 |
| 95,854 | 90,759 | 88,554 | 89,398 | 87,622 | 89,173 | 91,171 | 91,411 | 90,290 |
| 94,702 | 90,868 | 89,255 | 91,871 | 90,585 | 91,237 | 91,742 | 90,824 | 90,905 |
| 76,695 | 76,205 | 75,524 | 76,980 | 77,516 | 77,521 | 77,321 | 77,932 | 80,358 |
| 73,456 | 73,604 | 70,705 | 69,019 | 73,001 | 74,343 | 74,904 | 73,603 | 75,703 |
| 94,048 | 92,306 | 93,385 | 93,598 | 93,830 | 94,282 | 96,161 | 94,771 | 96,073 |
| 98,950 | 96,613 | 96,754 | 95,273 | 92,834 | 93,695 | 95,184 | 96,128 | 95,993 |
| 70,451 | 70,707 | 69,831 | 73,427 | 72,334 | 71,835 | 73,395 | 74,681 | 76,190 |
| 96,420 | 96,192 | 95,973 | 96,425 | 95,466 | 95,386 | 95,476 | 96,844 | 92,588 |
| 91,107 | 91,499 | 91,675 | 87,385 | 88,806 | 88,451 | 88,457 | 92,668 | 91,427 |
| 77,423 | 77,198 | 78,394 | 76,011 | 76,166 | 78,891 | 80,780 | 81,752 | 81,206 |
| 71,067 | 71,527 | 73,377 | 72,144 | 71,875 | 69,388 | 68,140 | 70,589 | 72,923 |
| 91,405 | 87,234 | 89,543 | 92,170 | 92,913 | 94,358 | 97,885 | 97,842 | 98,425 |
| 96,430 | 94,291 | 94,887 | 96,228 | 94,521 | 91,558 | 90,431 | 91,588 | 95,127 |
| 93,768 | 90,416 | 89,390 | 88,496 | 90,766 | 93,107 | 94,097 | 95,422 | 94,496 |
| 95,146 | 95,663 | 90,555 | 90,682 | 90,938 | 89,469 | 92,750 | 93,318 | 91,499 |
| 90,494 | 90,122 | 90,998 | 88,968 | 89,558 | 88,693 | 93,631 | 90,364 | 89,952 |
| 80,597 | 79,315 | 74,477 | 74,793 | 75,124 | 74,207 | 73,591 | 74,847 | 77,867 |
| 75,073 | 74,453 | 74,073 | 74,734 | 72,988 | 74,368 | 75,131 | 76,539 | 79,471 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 82,387 | 83,375 | 84,485 | 85,660 | 86,398 | 86,934 | 87,454 | 87,569 | 85,635 |
| 85,655 | 88,569 | 86,718 | 86,383 | 85,777 | 86,742 | 87,671 | 85,841 | 85,520 |
| 91,696 | 88,816 | 88,834 | 89,390 | 87,795 | 87,397 | 88,475 | 88,341 | 87,800 |
| 88,481 | 87,703 | 86,480 | 85,571 | 85,732 | 87,137 | 86,208 | 88,212 | 88,738 |
| 95,683 | 93,856 | 89,127 | 91,315 | 90,615 | 89,400 | 91,381 | 91,310 | 91,680 |
| 86,208 | 85,519 | 82,873 | 86,363 | 86,739 | 84,499 | 85,516 | 85,071 | 84,930 |
| 72,881 | 71,723 | 70,958 | 68,066 | 69,780 | 73,465 | 75,089 | 78,160 | 79,710 |
| 94,376 | 94,075 | 93,204 | 95,318 | 96,091 | 95,858 | 95,646 | 94,847 | 96,000 |
| 96,421 | 96,329 | 96,079 | 93,531 | 93,466 | 93,838 | 93,306 | 96,206 | 95,510 |
| 98,451 | 98,313 | 98,190 | 97,638 | 94,550 | 95,611 | 95,742 | 93,537 | 93,117 |
| 94,104 | 91,851 | 95,683 | 97,232 | 94,309 | 93,567 | 92,981 | 92,031 | 90,383 |
| 101,042 | 96,130 | 93,335 | 97,111 | 96,101 | 93,338 | 92,304 | 92,073 | 95,094 |
| 76,549 | 77,588 | 78,193 | 83,337 | 81,452 | 81,603 | 82,982 | 82,528 | 83,001 |
| 76,614 | 77,645 | 77,686 | 75,746 | 74,752 | 76,772 | 77,381 | 77,096 | 79,246 |
| 97,310 | 95,403 | 96,295 | 95,692 | 96,163 | 97,183 | 98,442 | 95,017 | 87,099 |
| 84,399 | 80,706 | 78,340 | 79,233 | 81,857 | 83,748 | 85,325 | 84,626 | 83,787 |
| 81,676 | 81,099 | 79,679 | 80,607 | 82,814 | 85,241 | 83,613 | 82,874 | 82,307 |
| 89,829 | 90,426 | 93,218 | 97,040 | 98,436 | 96,962 | 90,514 | 93,743 | 98,788 |
| 103,682 | 98,498 | 93,638 | 95,968 | 96,561 | 96,550 | 97,910 | 97,637 | 98,237 |
| 86,638 | 84,691 | 84,802 | 84,488 | 82,702 | 81,044 | 83,304 | 81,433 | 81,488 |
| 72,858 | 73,851 | 73,874 | 74,545 | 72,312 | 73,879 | 74,747 | 73,755 | 74,497 |
| 101,273 | 97,830 | 99,057 | 96,055 | 98,390 | 99,587 | 99,351 | 99,798 | 103,379 |
| 98,187 | 98,216 | 98,753 | 99,139 | 96,809 | 99,159 | 101,165 | 95,432 | 99,214 |
| 96,410 | 95,436 | 97,030 | 96,744 | 96,131 | 101,511 | 102,833 | 101,183 | 99,856 |
| 96,579 | 92,401 | 91,128 | 93,958 | 92,911 | 92,577 | 93,271 | 96,425 | 97,016 |
| 94,530 | 91,393 | 91,227 | 93,310 | 92,108 | 92,035 | 91,356 | 94,430 | 93,140 |
| 80,261 | 81,248 | 82,750 | 77,304 | 76,560 | 76,259 | 80,238 | 81,297 | 78,125 |
| 72,251 | 72,027 | 70,676 | 70,705 | 70,355 | 71,611 | 71,843 | 72,765 | 74,086 |
| 70,557 | 70,945 | 71,203 | 70,448 | 67,703 | 71,034 | 73,207 | 73,709 | 72,613 |
| 92,504 | 94,793 | 97,703 | 96,884 | 96,551 | 96,244 | 95,570 | 95,028 | 97,197 |
| 72,637 | 70,206 | 69,284 | 73,542 | 75,214 | 77,043 | 81,873 | 85,175 | 88,064 |
| 100,082 | 96,963 | 93,263 | 94,850 | 93,786 | 94,347 | 95,071 | 96,294 | 95,046 |
| 98,686 | 95,952 | 93,799 | 94,627 | 93,715 | 94,666 | 96,215 | 92,813 | 92,697 |
| 88,356 | 87,872 | 90,184 | 89,173 | 87,206 | 86,620 | 86,525 | 84,273 | 83,897 |
| 73,426 | 71,814 | 74,925 | 75,979 | 75,213 | 77,001 | 76,946 | 77,043 | 78,465 |
| 100,056 | 97,787 | 95,739 | 97,057 | 95,170 | 96,785 | 97,794 | 98,808 | 100,704 |
| 95,197 | 95,181 | 92,907 | 95,307 | 92,112 | 91,191 | 91,074 | 90,842 | 88,477 |
| 94,023 | 91,253 | 91,386 | 93,662 | 93,013 | 91,194 | 91,242 | 92,350 | 93,704 |
| 94,917 | 92,879 | 92,996 | 93,292 | 91,896 | 90,901 | 91,720 | 92,997 | 92,857 |
| 95,670 | 93,932 | 92,567 | 91,773 | 92,950 | 95,904 | 96,494 | 96,955 | 93,499 |
| 80,244 | 78,605 | 78,414 | 76,996 | 77,475 | 79,630 | 80,018 | 78,770 | 80,145 |
| 72,817 | 74,156 | 75,524 | 77,090 | 76,506 | 77,037 | 77,080 | 74,362 | 76,631 |
| 95,678 | 97,207 | 96,461 | 97,060 | 92,560 | 91,497 | 96,958 | 94,629 | 92,008 |
| 103,034 | 99,071 | 99,179 | 94,774 | 95,807 | 96,645 | 100,465 | 100,971 | 100,712 |
| 99,226 | 98,957 | 96,309 | 101,252 | 100,692 | 102,482 | 101,187 | 100,662 | 100,832 |
| 99,093 | 100,278 | 95,819 | 96,481 | 94,274 | 93,480 | 91,496 | 94,580 | 95,567 |
| 98,724 | 96,184 | 94,060 | 94,607 | 94,387 | 96,870 | 97,046 | 94,206 | 94,784 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 94,177 | 91,413 | 91,182 | 89,005 | 88,233 | 92,252 | 94,417 | 90,507 | 83,411 |
| 68,001 | 66,085 | 66,786 | 68,217 | 68,665 | 72,226 | 71,900 | 71,931 | 76,036 |
| 101,607 | 96,625 | 98,163 | 98,638 | 93,267 | 94,188 | 93,967 | 94,239 | 94,456 |
| 100,078 | 94,378 | 94,453 | 92,605 | 92,047 | 91,439 | 90,990 | 92,705 | 94,101 |
| 98,093 | 93,091 | 91,613 | 94,081 | 93,612 | 95,282 | 95,956 | 92,395 | 97,279 |
| 93,329 | 91,010 | 89,962 | 91,641 | 96,389 | 97,384 | 97,487 | 97,834 | 97,673 |
| 100,999 | 96,893 | 98,079 | 94,808 | 94,318 | 95,271 | 94,767 | 94,785 | 91,424 |
| 76,934 | 76,010 | 78,459 | 78,075 | 76,330 | 78,561 | 77,785 | 77,214 | 77,232 |
| 76,335 | 76,741 | 76,882 | 75,571 | 74,659 | 76,410 | 77,528 | 73,993 | 74,793 |
| 83,874 | 86,652 | 86,734 | 87,431 | 87,766 | 89,897 | 90,826 | 89,847 | 89,782 |
| 91,300 | 90,841 | 84,741 | 86,386 | 85,848 | 87,909 | 88,653 | 88,929 | 86,726 |
| 93,232 | 89,444 | 88,977 | 89,834 | 89,016 | 90,365 | 89,900 | 90,074 | 90,843 |
| 78,594 | 78,727 | 79,792 | 81,664 | 81,078 | 81,483 | 81,481 | 81,677 | 83,834 |
| 85,592 | 86,114 | 86,495 | 88,189 | 87,600 | 86,808 | 87,252 | 87,593 | 83,848 |
| 77,391 | 73,048 | 73,253 | 73,658 | 73,044 | 74,303 | 79,246 | 78,395 | 81,092 |
| 71,267 | 68,262 | 68,459 | 72,820 | 70,474 | 69,925 | 69,569 | 73,150 | 73,109 |
| 75,287 | 74,756 | 75,472 | 75,398 | 74,836 | 73,020 | 76,551 | 77,557 | 76,961 |
| 84,552 | 83,076 | 81,647 | 83,555 | 79,776 | 82,352 | 85,015 | 89,123 | 89,447 |
| 87,734 | 86,973 | 86,946 | 86,849 | 83,955 | 86,287 | 87,575 | 86,955 | 86,480 |
| 90,249 | 88,058 | 87,495 | 84,403 | 85,085 | 86,441 | 87,006 | 87,251 | 87,533 |
| 87,670 | 86,567 | 84,121 | 85,683 | 85,129 | 86,807 | 87,095 | 85,878 | 84,483 |
| 79,068 | 78,705 | 82,037 | 81,161 | 76,145 | 75,404 | 77,005 | 77,741 | 77,394 |
| 72,908 | 76,502 | 77,610 | 76,713 | 75,336 | 72,577 | 72,199 | 71,464 | 71,876 |
| 88,379 | 87,089 | 87,125 | 90,010 | 88,667 | 89,292 | 92,867 | 91,841 | 91,383 |
| 98,987 | 96,054 | 97,507 | 95,446 | 92,152 | 91,332 | 91,141 | 91,301 | 96,915 |
| 92,506 | 91,818 | 90,541 | 90,169 | 89,124 | 89,106 | 91,659 | 93,947 | 91,336 |
| 94,588 | 95,962 | 94,481 | 93,502 | 92,191 | 90,943 | 93,943 | 93,417 | 94,942 |
| 97,749 | 93,944 | 94,850 | 94,998 | 93,131 | 92,524 | 93,144 | 92,646 | 87,845 |
| 85,394 | 85,240 | 82,141 | 81,366 | 84,106 | 83,679 | 86,206 | 85,803 | 83,993 |
| 74,425 | 71,864 | 73,703 | 74,103 | 72,258 | 72,718 | 74,373 | 74,641 | 75,343 |
| 97,236 | 97,217 | 97,083 | 95,283 | 96,263 | 95,547 | 97,473 | 100,182 | 98,799 |
| 98,120 | 96,287 | 90,274 | 89,021 | 90,677 | 92,177 | 93,651 | 93,871 | 94,143 |
| 66,485 | 64,991 | 64,736 | 64,399 | 63,031 | 64,284 | 66,526 | 69,180 | 65,251 |
| 80,017 | 79,345 | 77,227 | 76,975 | 78,341 | 79,138 | 84,960 | 89,847 | 91,005 |
| 90,944 | 88,778 | 88,677 | 90,128 | 93,817 | 93,304 | 92,707 | 92,825 | 92,075 |
| 82,437 | 84,404 | 84,820 | 83,186 | 83,757 | 84,852 | 85,209 | 83,362 | 83,468 |
| 71,953 | 69,216 | 70,711 | 74,540 | 73,156 | 74,357 | 75,388 | 74,435 | 75,114 |
| 85,594 | 84,367 | 84,659 | 87,745 | 90,529 | 91,752 | 93,249 | 95,324 | 92,542 |
| 98,173 | 92,399 | 96,091 | 96,290 | 95,295 | 96,937 | 94,955 | 96,940 | 99,358 |
| 86,897 | 89,677 | 92,300 | 90,000 | 80,623 | 83,861 | 87,562 | 90,930 | 92,111 |
| 91,948 | 89,545 | 90,389 | 93,320 | 91,055 | 87,871 | 92,639 | 91,867 | 92,745 |
| 97,302 | 96,142 | 92,659 | 95,413 | 93,882 | 93,146 | 92,152 | 90,298 | 86,634 |
| 88,167 | 84,036 | 83,056 | 89,507 | 88,582 | 87,392 | 88,748 | 87,251 | 85,582 |
| 75,949 | 74,365 | 77,634 | 76,018 | 76,188 | 72,597 | 72,307 | 71,829 | 75,048 |
| 96,009 | 97,057 | 95,493 | 95,372 | 92,880 | 92,774 | 96,365 | 98,082 | 99,099 |
| 101,515 | 99,350 | 98,932 | 98,160 | 94,503 | 92,974 | 97,833 | 98,573 | 98,830 |
| 92,521 | 91,252 | 90,385 | 91,678 | 86,343 | 89,123 | 90,210 | 89,134 | 89,408 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 99,849 | 96,973 | 95,588 | 95,163 | 96,096 | 95,346 | 99,163 | 99,023 | 97,128 |
| 98,303 | 96,149 | 93,889 | 92,615 | 93,003 | 94,578 | 96,388 | 91,176 | 92,167 |
| 76,609 | 76,562 | 75,347 | 75,484 | 75,636 | 79,146 | 78,777 | 78,842 | 77,444 |
| 71,857 | 69,219 | 70,029 | 69,414 | 68,344 | 69,789 | 73,960 | 75,403 | 72,556 |
| 85,674 | 82,830 | 86,784 | 89,536 | 89,611 | 94,746 | 94,987 | 92,027 | 92,839 |
| 95,334 | 93,181 | 88,773 | 88,180 | 90,021 | 95,179 | 94,894 | 93,448 | 96,171 |
| 96,738 | 95,279 | 94,055 | 95,334 | 94,321 | 95,304 | 97,604 | 99,498 | 101,578 |
| 103,308 | 100,871 | 98,786 | 98,028 | 94,906 | 97,327 | 99,274 | 100,201 | 96,622 |
| 99,443 | 97,319 | 95,288 | 93,607 | 95,172 | 94,795 | 94,570 | 94,004 | 92,884 |
| 85,010 | 82,128 | 82,948 | 82,587 | 82,423 | 82,315 | 79,617 | 79,450 | 81,924 |
| 77,759 | 77,944 | 79,108 | 78,310 | 78,587 | 80,816 | 79,873 | 79,300 | 78,434 |
| 90,560 | 89,284 | 90,283 | 90,292 | 87,865 | 90,784 | 93,514 | 93,030 | 93,246 |
| 102,965 | 101,282 | 98,860 | 97,279 | 98,477 | 98,276 | 100,381 | 98,857 | 98,703 |
| 101,009 | 101,389 | 96,315 | 98,204 | 98,429 | 95,429 | 95,797 | 94,543 | 96,125 |
| 101,670 | 98,071 | 95,899 | 95,490 | 93,858 | 95,848 | 96,898 | 96,058 | 97,383 |
| 99,350 | 96,509 | 93,816 | 91,595 | 91,125 | 88,809 | 91,534 | 94,324 | 93,078 |
| 79,789 | 82,672 | 83,435 | 80,223 | 76,984 | 83,704 | 83,063 | 83,107 | 77,194 |
| 72,165 | 71,395 | 71,877 | 75,101 | 76,934 | 76,356 | 73,798 | 73,042 | 73,934 |
| 95,411 | 93,687 | 91,497 | 90,403 | 91,089 | 93,545 | 96,877 | 98,076 | 96,888 |
| 101,385 | 98,252 | 98,397 | 97,890 | 95,367 | 94,528 | 94,564 | 94,591 | 96,288 |
| 97,155 | 94,502 | 91,616 | 91,957 | 91,303 | 91,913 | 95,134 | 95,913 | 95,719 |
| 95,991 | 88,494 | 84,309 | 86,754 | 87,374 | 92,386 | 94,315 | 85,056 | 83,910 |
| 95,640 | 91,488 | 95,055 | 95,411 | 94,764 | 96,423 | 99,200 | 98,304 | 95,389 |
| 76,796 | 82,016 | 85,047 | 85,274 | 84,815 | 85,335 | 85,765 | 80,851 | 80,958 |
| 75,910 | 75,487 | 73,494 | 73,314 | 73,767 | 74,058 | 77,011 | 75,450 | 73,379 |
| 89,446 | 90,922 | 91,839 | 93,755 | 93,664 | 95,295 | 95,958 | 96,068 | 93,667 |
| 94,977 | 95,621 | 92,514 | 93,497 | 95,190 | 93,956 | 96,426 | 96,572 | 96,993 |
| 96,391 | 91,205 | 90,304 | 92,452 | 92,387 | 91,361 | 92,422 | 94,182 | 98,689 |
| 94,381 | 96,959 | 95,528 | 97,860 | 96,273 | 95,076 | 94,310 | 94,751 | 95,178 |
| 95,257 | 95,105 | 94,663 | 91,377 | 93,375 | 93,903 | 94,693 | 90,406 | 86,070 |
| 78,325 | 78,860 | 77,482 | 73,839 | 71,768 | 72,344 | 72,962 | 74,188 | 77,831 |
| 71,992 | 70,945 | 72,034 | 72,455 | 73,484 | 76,576 | 75,977 | 75,400 | 75,966 |
| 64,520 | 65,651 | 66,842 | 63,696 | 61,519 | 66,430 | 71,337 | 70,854 | 72,216 |
| 95,050 | 95,544 | 92,253 | 91,638 | 91,515 | 89,600 | 90,273 | 91,344 | 93,829 |
| 86,315 | 87,148 | 89,090 | 90,626 | 89,162 | 89,694 | 92,187 | 92,507 | 92,726 |
| 90,778 | 86,982 | 91,838 | 95,598 | 96,915 | 95,103 | 95,885 | 97,014 | 94,447 |
| 92,751 | 92,775 | 97,686 | 98,253 | 95,975 | 93,279 | 96,154 | 93,514 | 93,197 |
| 87,606 | 86,341 | 85,122 | 85,205 | 84,310 | 88,060 | 87,215 | 86,473 | 85,216 |
| 74,362 | 74,440 | 76,068 | 71,504 | 69,019 | 69,368 | 67,046 | 66,571 | 71,056 |
| 99,167 | 97,462 | 98,254 | 96,689 | 95,898 | 98,464 | 96,735 | 95,801 | 93,661 |
| 100,644 | 100,644 | 96,133 | 96,278 | 95,227 | 98,602 | 101,823 | 102,626 | 100,987 |
| 95,129 | 94,006 | 91,689 | 92,374 | 90,422 | 91,371 | 93,067 | 93,918 | 97,348 |
| 98,190 | 94,893 | 94,375 | 98,873 | 97,084 | 97,925 | 100,108 | 98,727 | 102,311 |
| 101,505 | 96,902 | 93,907 | 98,844 | 97,474 | 97,342 | 99,230 | 97,955 | 95,939 |
| 88,211 | 85,499 | 84,640 | 86,578 | 84,899 | 86,565 | 85,506 | 85,661 | 83,469 |
| 77,239 | 74,773 | 75,360 | 74,484 | 75,273 | 75,367 | 75,095 | 74,680 | 76,279 |
| 100,284 | 92,339 | 91,738 | 95,183 | 93,591 | 94,721 | 96,392 | 99,127 | 100,050 |

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|---|---|---|---|---|---|---|---|---|
| 105,314 | 97,596 | 93,833 | 97,982 | 95,777 | 95,603 | 95,115 | 93,264 | 98,078 |
| 99,355 | 97,193 | 95,859 | 95,910 | 94,905 | 96,823 | 97,668 | 97,128 | 97,448 |
| 103,733 | 99,863 | 99,894 | 96,681 | 95,836 | 96,299 | 99,002 | 99,607 | 95,729 |
| 106,243 | 103,235 | 99,654 | 98,985 | 99,589 | 100,325 | 99,878 | 100,199 | 98,501 |
| 90,005 | 90,756 | 91,561 | 89,382 | 89,247 | 88,780 | 89,305 | 88,992 | 82,629 |
| 80,552 | 79,005 | 78,829 | 75,891 | 72,569 | 72,283 | 73,361 | 73,782 | 74,311 |
| 98,629 | 96,714 | 96,271 | 96,703 | 94,771 | 98,705 | 100,266 | 100,505 | 97,051 |
| 103,436 | 98,806 | 99,967 | 101,343 | 99,546 | 104,153 | 104,543 | 103,702 | 102,795 |
| 98,994 | 96,176 | 93,196 | 93,028 | 92,809 | 94,176 | 94,860 | 95,067 | 95,080 |
| 99,384 | 97,004 | 96,231 | 95,995 | 95,036 | 94,733 | 96,076 | 93,831 | 93,286 |
| 97,722 | 94,294 | 96,518 | 96,312 | 94,646 | 95,198 | 94,185 | 91,296 | 92,062 |
| 74,587 | 75,478 | 75,708 | 74,404 | 73,930 | 74,266 | 78,827 | 80,490 | 80,892 |
| 72,715 | 73,076 | 73,328 | 73,949 | 73,800 | 74,364 | 74,419 | 74,677 | 74,918 |
| 91,325 | 90,404 | 91,021 | 92,268 | 90,489 | 92,079 | 92,544 | 87,396 | 89,857 |
| 95,761 | 96,754 | 96,205 | 95,136 | 94,429 | 98,373 | 98,706 | 96,315 | 95,936 |
| 98,255 | 92,673 | 94,768 | 96,318 | 96,201 | 93,970 | 92,455 | 92,234 | 92,913 |
| 92,236 | 92,336 | 92,739 | 91,616 | 91,710 | 92,387 | 92,437 | 93,574 | 96,016 |
| 98,348 | 95,124 | 92,208 | 92,587 | 91,638 | 92,392 | 92,349 | 89,195 | 84,806 |
| 77,683 | 74,807 | 72,514 | 72,610 | 71,418 | 71,175 | 75,127 | 76,542 | 75,186 |
| 71,208 | 71,657 | 70,589 | 69,117 | 71,247 | 72,670 | 72,668 | 72,670 | 72,842 |
| 91,039 | 86,401 | 90,191 | 91,746 | 90,285 | 91,435 | 93,545 | 90,059 | 87,495 |
| 102,245 | 98,628 | 95,414 | 97,441 | 97,252 | 98,552 | 100,264 | 99,748 | 99,103 |
| 92,612 | 91,591 | 89,843 | 89,180 | 88,390 | 89,032 | 90,744 | 88,293 | 86,735 |
| 96,452 | 95,889 | 96,999 | 97,486 | 97,271 | 100,761 | 102,224 | 101,256 | 98,912 |
| 101,499 | 100,892 | 98,113 | 98,791 | 96,195 | 92,658 | 89,683 | 87,947 | 87,020 |
| 82,144 | 81,013 | 80,340 | 80,816 | 81,410 | 82,855 | 76,704 | 76,773 | 74,921 |
| 75,837 | 73,523 | 75,925 | 74,825 | 75,152 | 74,698 | 73,297 | 72,984 | 73,955 |
| 93,065 | 91,027 | 89,964 | 88,063 | 90,025 | 90,584 | 90,450 | 91,982 | 93,498 |
| 102,846 | 94,949 | 94,389 | 95,155 | 93,943 | 94,901 | 101,429 | 102,597 | 101,192 |
| 96,690 | 93,163 | 93,748 | 97,839 | 98,253 | 100,487 | 99,429 | 101,611 | 99,033 |
| 100,116 | 95,724 | 95,602 | 95,279 | 98,931 | 97,910 | 95,190 | 93,357 | 97,269 |
| 101,973 | 96,712 | 93,094 | 89,600 | 89,005 | 88,418 | 88,729 | 91,765 | 89,962 |
| 83,740 | 80,470 | 80,728 | 84,112 | 84,264 | 84,374 | 83,456 | 80,987 | 79,937 |
| 69,138 | 70,445 | 69,052 | 69,902 | 68,897 | 69,911 | 69,953 | 70,701 | 74,785 |
| 85,791 | 84,513 | 84,779 | 84,349 | 84,811 | 86,849 | 88,520 | 88,111 | 86,299 |
| 93,605 | 89,535 | 89,308 | 90,735 | 90,756 | 91,040 | 90,125 | 89,079 | 89,755 |
| 91,904 | 90,276 | 91,623 | 91,697 | 90,880 | 91,660 | 92,165 | 91,579 | 91,233 |
| 91,702 | 89,617 | 87,145 | 85,724 | 84,298 | 83,903 | 84,002 | 84,437 | 83,592 |
| 81,735 | 76,020 | 72,561 | 75,737 | 74,539 | 73,386 | 75,041 | 74,271 | 73,795 |
| 62,415 | 63,050 | 63,367 | 63,553 | 63,027 | 63,428 | 64,287 | 63,439 | 62,300 |
| 52,073 | 53,540 | 55,879 | 57,124 | 58,878 | 59,026 | 59,048 | 59,260 | 60,800 |

| HR24 |
| --- |
| 71,611 |
| 92,334 |
| 89,829 |
| 85,445 |
| 92,656 |
| 78,938 |
| 68,918 |
| 67,025 |
| 89,859 |
| 91,900 |
| 87,373 |
| 81,978 |
| 65,766 |
| 67,621 |
| 71,111 |
| 88,244 |
| 90,532 |
| 90,053 |
| 93,640 |
| 81,608 |
| 70,700 |
| 73,105 |
| 89,013 |
| 94,210 |
| 74,331 |
| 59,404 |
| 63,725 |
| 67,823 |
| 75,908 |
| 91,899 |
| 86,489 |
| 90,905 |
| 94,019 |
| 85,991 |
| 71,422 |
| 72,344 |
| 89,592 |
| 89,732 |
| 94,140 |
| 88,185 |
| 84,507 |
| 71,989 |

70,332
90,492
94,483
86,264
89,283
74,698
72,471
73,822
88,425
87,426
71,782
58,418
60,971
68,504
72,376
88,674
90,431
84,291
77,519
70,493
69,778
72,978
96,757
98,831
95,022
98,518
91,726
73,088
75,119
92,514
99,494
98,527
97,180
88,557
72,500
72,294
96,877
76,750
92,079
95,974
85,814
67,713
63,787
94,742
99,206
97,847
93,990

80,675
70,588
73,205
95,434
94,762
93,115
94,219
90,427
83,090
83,402
98,460
96,398
94,967
91,677
93,605
82,270
83,040
98,664
91,606
89,872
89,513
93,791
77,304
77,025
98,238
92,184
98,437
90,247
89,411
78,036
73,966
92,930
93,944
89,584
93,118
86,765
80,884
78,914
88,204
94,907
85,649
95,012
86,267
82,189
78,066
92,047
88,054

| | | | |
|---|---|---|---|
| 87,976 | | | |
| 91,981 | | | |
| 88,376 | | | |
| 70,934 | | | |
| 78,616 | | | |
| 95,274 | | | |
| 91,467 | | | |
| 93,076 | | | |
| 95,507 | | | |
| 85,030 | | | |
| 79,920 | | | |
| 73,696 | | | |
| 95,143 | | | |
| 92,297 | | | |
| 90,069 | | | |
| 84,737 | 2,085,553 | 4,618,761 | ####### |
| 84,853 | 2,037,975 | 4,496,569 | ####### |
| 72,725 | 1,846,553 | 4,332,424 | ####### |
| 77,125 | 1,759,379 | 4,325,377 | ####### |
| 93,455 | 2,116,976 | 5,025,195 | ####### |
| 95,056 | 2,248,905 | 5,033,179 | ####### |
| 94,501 | 2,158,126 | 4,628,536 | ####### |
| 90,777 | 2,215,149 | 4,523,160 | ####### |
| 81,769 | 2,187,766 | 4,792,502 | ####### |
| 74,391 | 1,802,781 | 4,617,451 | ####### |
| 75,853 | 1,764,327 | 4,531,708 | ####### |
| 96,084 | 2,155,085 | 4,806,785 | ####### |
| 97,017 | 2,268,685 | 5,032,233 | ####### |
| 96,355 | 2,187,784 | 5,232,098 | ####### |
| 90,156 | 2,196,471 | 5,289,633 | ####### |
| 88,327 | 2,187,983 | 4,980,069 | ####### |
| 79,224 | 1,881,398 | 4,266,565 | ####### |
| 75,928 | 1,789,020 | 4,423,337 | ####### |
| 96,756 | 2,170,607 | 4,677,362 | ####### |
| 95,462 | 2,250,656 | 4,592,664 | ####### |
| 77,840 | 1,781,161 | 4,656,938 | ####### |
| 91,419 | 2,213,896 | 4,695,046 | ####### |
| 89,069 | 2,144,340 | 4,874,340 | ####### |
| 77,641 | 1,975,610 | 4,544,136 | ####### |
| 76,346 | 1,770,504 | 4,269,391 | ####### |
| 92,571 | 2,156,244 | 4,716,175 | ####### |
| 92,617 | 2,213,874 | 4,899,722 | ####### |
| 92,323 | 2,170,894 | 4,878,846 | ####### |
| 94,414 | 2,181,824 | 4,754,212 | ####### |
| 84,049 | 2,133,686 | 4,915,877 | ####### |
| 78,438 | | | ####### |
| 76,834 | | | |

84,349
85,739
86,765
86,463
90,442
82,941
79,725
93,959
95,539
93,054
90,360
90,414
84,159
81,938
84,732
82,857
81,232
96,724
90,697
80,854
77,056
102,886
93,590
97,475
92,549
88,022
77,585
75,020
75,586
96,064
89,675
90,266
91,195
84,301
82,251
102,009
88,458
92,613
91,155
90,066
79,628
80,637
90,218
99,190
100,597
96,302
94,259

82,110
76,755
94,991
93,924
97,944
94,943
87,413
76,598
73,769
88,145
86,289
91,914
83,838
82,934
81,882
71,187
79,594
88,965
90,189
87,846
79,072
76,930
77,445
91,506
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79,802
73,703
94,491
90,393
64,380
92,349
89,585
81,645
77,925
90,458
100,362
94,933
91,719
85,996
81,466
76,450
96,127
98,860
90,566

97,600
90,694
76,217
73,186
90,741
94,442
97,599
95,705
89,834
81,323
77,519
94,015
99,097
93,589
95,083
86,988
75,785
75,525
95,003
98,896
93,712
92,549
90,504
84,576
75,446
92,599
96,993
98,318
93,665
82,335
74,741
72,047
70,824
92,388
92,337
93,976
92,578
83,036
74,436
96,043
98,786
95,478
99,925
90,630
83,752
78,554
99,364

99,725
96,296
90,094
97,708
81,287
77,228
95,181
101,393
94,728
93,528
86,418
81,443
76,652
90,540
95,033
93,352
94,599
80,955
67,918
73,918
87,113
94,158
85,144
96,281
84,230
73,053
76,944
95,967
99,290
97,091
95,641
86,285
77,984
76,581
85,799
90,230
89,539
84,090
71,428
61,919
61,983

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Plant in Service** | | | | | | | |
| Intangible Plant | INTPLT | PT&D | $ 66,895 | 58,634 | - | - | 8,261 |
| Production Plant | PPROD | F001 | $ 1,686,796,955 | 1,686,796,955 | - | - | - |
| Transmission Plant | PTRAN | F002 | $ 237,659,206 | - | - | - | 237,659,206 |
| Distribution Plant | PDIST | F003 | $ - | - | - | - | - |
| **Total Production & Transmission Plant** | PT&D | | 1,924,456,160 | 1,686,796,955 | - | - | 237,659,206 |
| General Plant | PGP | PT&D | $ 18,511,051 | 16,225,043 | - | - | 2,286,008 |
| **Total Plant in Service** | TPIS | | $ 1,943,034,107 | $ 1,703,080,632 | $ - | $ - | $ 239,953,475 |
| **Construction Work in Progress (CWIP)** | | | | | | | |
| CWIP Production | CWIP1 | PPROD | $ 22,411,274 | 22,411,274 | - | - | - |
| CWIP Transmission | CWIP2 | PTRAN | $ 7,475,859 | - | - | - | 7,475,859 |
| CWIP Distribution Plant | CWIP3 | PDIST | $ - | - | - | - | - |
| CWIP General Plant | CWIP4 | PT&D | $ 16,915,005 | 14,826,100 | - | - | 2,088,905 |
| **Total Construction Work in Progress** | TCWIP | | $ 46,802,138 | $ 37,237,374 | $ - | $ - | $ 9,564,764 |
| **Total Utility Plant** | | | $ 1,989,836,245 | $ 1,740,318,006 | $ - | $ - | $ 249,518,239 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Rate Base** | | | | | | | |
| **Total Utility Plant** | TUP | | $ 1,989,836,245 | $ 1,740,318,006 | $ - | $ - | $ 249,518,239 |
| **Less: Acummulated Provision for Depreciation** | | | | | | | |
| Production | ADEPREPA | PPROD | $ 790,847,523 | 790,847,523 | - | - | - |
| Transmission | ADEPRTP | PTRAN | $ 107,564,747 | - | - | - | 107,564,747 |
| Distribution | ADEPRD11 | PDIST | $ - | - | - | - | - |
| General & Common Plant | ADEPRD12 | PT&D | $ 6,300,770 | 5,522,661 | - | - | 778,109 |
| Intangible, Misc, and Other Plant | ADEPRGP | PT&D | $ - | - | - | - | - |
| Retirement Work In Progress | ADEPRRT | PT&D | $ - | - | - | - | - |
| Total Accumulated Depreciation | TADEPR | | $ 904,713,040 | $ 796,370,184 | $ - | $ - | $ 108,342,855 |
| **Net Utility Plant** | NTPLANT | | $ 1,085,123,206 | $ 943,947,822 | $ - | $ - | $ 141,175,384 |
| **Working Capital** | | | | | | | |
| Cash Working Capital - Operation and Maintenance Expenses | CWC | OMLPP | $ 28,114,365 | 13,900,247 | 11,969,243 | - | 2,244,875 |
| Materials and Supplies | M&S | TPIS | $ 22,777,820 | 19,964,891 | - | - | 2,812,929 |
| Fuel Stock | PREPAY | TPIS | $ 34,326,112 | 30,087,036 | - | - | 4,239,076 |
| Total Working Capital | TWC | | $ 85,218,297 | $ 63,952,174 | $ 11,969,243 | $ - | $ 9,296,880 |
| **Net Rate Base** | RB | | $ 1,170,341,502 | $ 1,007,899,995 | $ 11,969,243 | $ - | $ 150,472,264 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses** | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | OM500 | PROFIX | $ 4,974,566 | 4,974,566 | - | - | - |
| 501 FUEL | OM501 | Energy | $ 200,919,367 | - | 200,919,367 | - | - |
| 502 STEAM EXPENSES | OM502 | PROFIX | $ 34,453,882 | 34,453,882 | - | - | - |
| 505 ELECTRIC EXPENSES | OM505 | PROFIX | $ 5,730,122 | 5,730,122 | - | - | - |
| 506 MISC. STEAM POWER EXPENSES | OM506 | PROFIX | $ 7,451,302 | 7,451,302 | - | - | - |
| 507 RENTS | OM507 | PROFIX | $ - | - | - | - | - |
| 509 ALLOWANCES | OM509 | Energy | $ 429,682 | - | 429,682 | - | - |
| Total Steam Power Operation Expenses | | | $ 253,958,921 | $ 52,609,872 | $ 201,349,049 | $ - | $ - |
| **Steam Power Generation Maintenance Expenses** | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | OM510 | Energy | $ 3,631,867 | - | 3,631,867 | - | - |
| 511 MAINTENANCE OF STRUCTURES | OM511 | PROFIX | $ 3,346,806 | 3,346,806 | - | - | - |
| 512 MAINTENANCE OF BOILER PLANT | OM512 | Energy | $ 30,113,309 | - | 30,113,309 | - | - |
| 513 MAINTENANCE OF ELECTRIC PLANT | OM513 | Energy | $ 6,251,804 | - | 6,251,804 | - | - |
| 514 MAINTENANCE OF MISC STEAM PLANT | OM514 | PROFIX | $ 877,364 | 877,364 | - | - | - |
| Total Steam Power Generation Maintenance Expense | | | $ 44,221,151 | $ 4,224,170 | $ 39,996,981 | $ - | $ - |
| Total Steam Power Generation Expense | | | $ 298,180,072 | $ 56,834,042 | $ 241,346,030 | $ - | $ - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Operation and Maintenance Expenses (Continued) | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | OM546 | PROFIX | $ - | - | - | - | - |
| 547 FUEL | OM547 | Energy | $ 706,789 | - | 706,789 | - | - |
| 548 GENERATION EXPENSE | OM548 | PROFIX | $ 34,608 | 34,608 | - | - | - |
| 549 MISC OTHER POWER GENERATION | OM549 | PROFIX | $ - | - | - | - | - |
| 550 RENTS | OM550 | PROFIX | $ - | - | - | - | - |
| Total Other Power Generation Expenses | | | $ 741,396 | $ 34,608 | $ 706,789 | $ - | $ - |
| **Other Power Generation Maintenance Expense** | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | OM551 | PROFIX | $ - | - | - | - | - |
| 552 MAINTENANCE OF STRUCTURES | OM552 | PROFIX | $ - | - | - | - | - |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | OM553 | PROFIX | $ 625,088 | 625,088 | - | - | - |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | OM554 | PROFIX | $ - | - | - | - | - |
| Total Other Power Generation Maintenance Expense | | | $ 625,088 | $ 625,088 | $ - | $ - | $ - |
| Total Other Power Generation Expense | | | $ 1,366,485 | $ 659,696 | $ 706,789 | $ - | $ - |
| Total Station Expense | | | $ 299,546,557 | $ 57,493,738 | $ 242,052,819 | $ - | $ - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Operation and Maintenance Expenses (Continued) | | | | | | | |
| **Other Power Supply Expenses** | | | | | | | |
| 555 PURCHASED POWER Energy | OM555 | OMPP | $ 19,466,790 | - | 19,466,790 | - | - |
| 555 PURCHASED POWER Demand | OMD555 | OMPPD | $ 4,210,045 | 4,210,045 | - | - | - |
| 555 PURCHASED POWER BREC Share of HMP&L Station Two | OMH555 | OMPPH | $ 58,293,374 | 13,175,571 | 45,117,803 | - | - |
| 555 PURCHASED POWER OPTIONS | OMO555 | OMPP | $ - | - | - | - | - |
| 555 BROKERAGE FEES | OMB555 | OMPP | $ - | - | - | - | - |
| 555 MISO TRANSMISSION EXPENSES | OMM555 | OMPP | $ - | - | - | - | - |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | OM556 | PROFIX | $ 909,422 | 909,422 | - | - | - |
| 557 OTHER EXPENSES | OM557 | PROFIX | $ 20,575,465 | 20,575,465 | - | - | - |
| 558 DUPLICATE CHARGES | OM558 | Energy | $ - | - | - | - | - |
| Total Other Power Supply Expenses | TPP | | $ 103,455,096 | $ 38,870,503 | $ 64,584,593 | $ - | $ - |
| Total Electric Power Generation Expenses | | | $ 403,001,653 | $ 96,364,241 | $ 306,637,411 | $ - | $ - |
| **Transmission Expenses** | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | OM560 | LBTRAN | $ 876,815 | - | - | - | 876,815 |
| 561 LOAD DISPATCHING | OM561 | LBTRAN | $ 1,454,938 | - | - | - | 1,454,938 |
| 562 STATION EXPENSES | OM562 | PTRAN | $ 1,163,408 | - | - | - | 1,163,408 |
| 563 OVERHEAD LINE EXPENSES | OM563 | PTRAN | $ 1,090,014 | - | - | - | 1,090,014 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | OM565 | PTRAN | $ 3,065,817 | - | - | - | 3,065,817 |
| 566 MISC. TRANSMISSION EXPENSES | OM566 | PTRAN | $ 475,381 | - | - | - | 475,381 |
| 567 RENTS | OM567 | PTRAN | $ 24,701 | - | - | - | 24,701 |
| 568 MAINTENACE SUPERVISION AND ENG | OM568 | LBTRAN | $ 647,227 | - | - | - | 647,227 |
| 569 STRUCTURES | OM569 | PTRAN | $ 26,913 | - | - | - | 26,913 |
| 570 MAINT OF STATION EQUIPMENT | OM570 | PTRAN | $ 1,936,760 | - | - | - | 1,936,760 |
| 571 MAINT OF OVERHEAD LINES | OM571 | PTRAN | $ 2,876,462 | - | - | - | 2,876,462 |
| 572 UNDERGROUND LINES | OM572 | PTRAN | $ - | - | - | - | - |
| 573 MISC PLANT | OM573 | PTRAN | $ 97,880 | - | - | - | 97,880 |
| *Total Transmission Expenses* | | | $ 13,736,318 | $ - | $ - | $ - | $ 13,736,318 |
| **Distribution Operation Expense** | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | OM580 | LBDO | $ - | - | - | - | - |
| 581 LOAD DISPATCHING | OM581 | PDIST | $ - | - | - | - | - |
| 582 STATION EXPENSES | OM582 | PDIST | $ - | - | - | - | - |
| 583 OVERHEAD LINE EXPENSES | OM583 | PDIST | $ - | - | - | - | - |
| 584 UNDERGROUND LINE EXPENSES | OM584 | PDIST | $ - | - | - | - | - |
| 585 STREET LIGHTING EXPENSE | OM585 | PDIST | $ - | - | - | - | - |
| 586 METER EXPENSES | OM586 | PDIST | $ - | - | - | - | - |
| 586 METER EXPENSES - LOAD MANAGEMENT | OM586x | PDIST | $ - | - | - | - | - |
| 587 CUSTOMER INSTALLATIONS EXPENSE | OM587 | PDIST | $ - | - | - | - | - |
| 588 MISCELLANEOUS DISTRIBUTION EXP | OM588 | PDIST | $ - | - | - | - | - |
| 588 MISC DISTR EXP – MAPPIN | OM588x | PDIST | $ - | - | - | - | - |
| 589 RENTS | OM589 | PDIST | $ - | - | - | - | - |
| Total Distribution Operation Expense | OMDO | | $ - | $ - | $ - | $ - | $ - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Operation and Maintenance Expenses (Continued) | | | | | | | |
| **Distribution Maintenance Expense** | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | OM590 | LBDM | $ - | - | - | - | - |
| 591 STRUCTURES | OM591 | PDIST | $ - | - | - | - | - |
| 592 MAINTENANCE OF STATION EQUIPME | OM592 | PDIST | $ - | - | - | - | - |
| 593 MAINTENANCE OF OVERHEAD LINES | OM593 | PDIST | $ - | - | - | - | - |
| 594 MAINTENANCE OF UNDERGROUND LIN | OM594 | PDIST | $ - | - | - | - | - |
| 595 MAINTENANCE OF LINE TRANSFORME | OM595 | PDIST | $ - | - | - | - | - |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | OM596 | PDIST | $ - | - | - | - | - |
| 597 MAINTENANCE OF METERS | OM597 | PDIST | $ - | - | - | - | - |
| 598 MISCELLANEOUS DISTRIBUTION EXPENSES | OM598 | PDIST | $ - | - | - | - | - |
| Total Distribution Maintenance Expense | OMDM | | $ - | $ - | $ - | $ - | $ - |
| Total Distribution Operation and Maintenance Expenses | | | - | - | - | - | - |
| Transmission and Distribution Expenses | | | 13,736,318 | - | - | - | 13,736,318 |
| Production, Transmission and Distribution Expenses | OMSUB | | $ 416,737,971 | $ 96,364,241 | $ 306,637,411 | $ - | $ 13,736,318 |
| **Customer Accounts Expense** | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | OM901 | F025 | $ - | - | - | - | - |
| 902 METER READING EXPENSES | OM902 | F025 | $ - | - | - | - | - |
| 903 RECORDS AND COLLECTION | OM903 | F025 | $ - | - | - | - | - |
| 904 UNCOLLECTIBLE ACCOUNTS | OM904 | F025 | $ - | - | - | - | - |
| 905 MISC CUST ACCOUNTS | OM903 | F025 | $ - | - | - | - | - |
| Total Customer Accounts Expense | OMCA | | $ - | $ - | $ - | $ - | $ - |
| **Customer Service Expense** | | | | | | | |
| 907 SUPERVISION | OM907 | TUP | $ - | - | - | - | - |
| 908 CUSTOMER ASSISTANCE EXPENSES | OM908 | TUP | $ 591,192 | 517,058 | - | - | 74,133 |
| 908 CUSTOMER ASSISTANCE EXP-INCENTIVES | OM908x | TUP | $ - | - | - | - | - |
| 909 INFORMATIONAL AND INSTRUCTIONA | OM909 | TUP | $ - | - | - | - | - |
| 909 INFORM AND INSTRUC -LOAD MGMT | OM909x | TUP | $ - | - | - | - | - |
| 910 MISCELLANEOUS CUSTOMER SERVICE | OM910 | TUP | $ - | - | - | - | - |
| 911 DEMONSTRATION AND SELLING EXP | OM911 | TUP | $ - | - | - | - | - |
| 912 DEMONSTRATION AND SELLING EXP | OM912 | TUP | $ - | - | - | - | - |
| 913 ADVERTISING EXPENSES | OM913 | TUP | $ 488,103 | 426,897 | - | - | 61,206 |
| 915 MDSE-JOBBING-CONTRACT | OM915 | TUP | $ - | - | - | - | - |
| 916 MISC SALES EXPENSE | OM916 | TUP | $ - | - | - | - | - |
| Total Customer Service Expense | OMCS | | $ 1,079,295 | $ 943,955 | $ - | $ - | $ 135,340 |
| Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service | OMSUB2 | | 417,817,266 | 97,308,197 | 306,637,411 | - | 13,871,658 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Operation and Maintenance Expenses (Continued) | | | | | | | |
| **Administrative and General Expense** | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | OM920 | LBSUB9 | $ 14,315,713 | 6,663,061 | 5,595,161 | - | 2,057,491 |
| 921 OFFICE SUPPLIES AND EXPENSES | OM921 | LBSUB9 | $ 6,915,648 | 3,218,798 | 2,702,915 | - | 993,935 |
| 922 ADMINISTRATIVE EXPENSES TRANSFERRED | OM922 | LBSUB9 | $ - | - | - | - | - |
| 923 OUTSIDE SERVICES EMPLOYED | OM923 | LBSUB9 | $ 3,954,189 | 1,840,425 | 1,545,457 | - | 568,306 |
| 924 PROPERTY INSURANCE | OM924 | TUP | $ - | - | - | - | - |
| 925 INJURIES AND DAMAGES - INSURAN | OM925 | LBSUB9 | $ 179,889 | 83,727 | 70,308 | - | 25,854 |
| 926 EMPLOYEE BENEFITS | OM926 | LBSUB9 | $ 169,663 | 78,967 | 66,311 | - | 24,384 |
| 927 FRANCHISE REQUIREMENTS | OM927 | TUP | $ - | - | - | - | - |
| 928 REGULATORY COMMISSION FEES | OM928 | TUP | $ 1,188,958 | 1,039,867 | - | - | 149,091 |
| 929 DUPLICATE CHARGES-CR | OM929 | LBSUB9 | $ - | - | - | - | - |
| 930 MISCELLANEOUS GENERAL EXPENSES | OM930 | LBSUB9 | $ 1,686,131 | 784,788 | 659,008 | - | 242,335 |
| 931 RENTS AND LEASES | OM931 | PGP | $ 1,933 | 1,694 | - | - | 239 |
| 935 MAINTENANCE OF GENERAL PLANT | OM935 | PGP | $ 208,156 | 182,450 | - | - | 25,706 |
| Total Administrative and General Expense | OMAG | | $ 28,620,280 | $ 13,893,778 | $ 10,639,160 | $ - | $ 4,087,342 |
| Total Operation and Maintenance Expenses | TOM | | $ 446,437,546 | $ 111,201,975 | $ 317,276,572 | $ - | $ 17,959,000 |
| Operation and Maintenance Expenses Less Purchase Power & Fuel | OMLPP | | $ 224,914,919 | $ 111,201,975 | $ 95,753,945 | $ - | $ 17,959,000 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Labor Expenses | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | LB500 | PROFIX | $ 4,967,667 | 4,967,667 | - | - | - |
| 501 FUEL | LB501 | Energy | $ 3,889,944 | - | 3,889,944 | - | - |
| 502 STEAM EXPENSES | LB502 | PROFIX | $ 9,023,322 | 9,023,322 | - | - | - |
| 505 ELECTRIC EXPENSES | LB505 | PROFIX | $ 4,523,897 | 4,523,897 | - | - | - |
| 506 MISC. STEAM POWER EXPENSES | LB506 | PROFIX | $ 940,518 | 940,518 | - | - | - |
| 507 RENTS | LB507 | PROFIX | $ - | - | - | - | - |
| 509 ALLOWANCES | LB509 | Energy | $ - | - | - | - | - |
| Total Steam Power Operation Expenses | LBSUB1 | | $ 23,345,348 | $ 19,455,404 | $ 3,889,944 | $ - | $ - |
| **Steam Power Generation Maintenance Expenses** | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | LB510 | Energy | $ 3,623,969 | - | 3,623,969 | - | - |
| 511 MAINTENANCE OF STRUCTURES | LB511 | PROFIX | $ 986,831 | 986,831 | - | - | - |
| 512 MAINTENANCE OF BOILER PLANT | LB512 | Energy | $ 8,700,235 | - | 8,700,235 | - | - |
| 513 MAINTENANCE OF ELECTRIC PLANT | LB513 | Energy | $ 1,595,642 | - | 1,595,642 | - | - |
| 514 MAINTENANCE OF MISC STEAM PLANT | LB514 | PROFIX | $ 200,886 | 200,886 | - | - | - |
| Total Steam Power Generation Maintenance Expense | LBSUB2 | | $ 15,107,564 | $ 1,187,718 | $ 13,919,846 | $ - | $ - |
| Total Steam Power Generation Expense | | | $ 38,452,913 | $ 20,643,122 | $ 17,809,791 | $ - | $ - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Labor Expenses (Continued) | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | LB546 | PROFIX | $ - | - | - | - | - |
| 547 FUEL | LB547 | Energy | $ - | - | - | - | - |
| 548 GENERATION EXPENSE | LB548 | PROFIX | $ - | - | - | - | - |
| 549 MISC OTHER POWER GENERATION | LB549 | PROFIX | $ - | - | - | - | - |
| 550 RENTS | LB550 | PROFIX | $ - | - | - | - | - |
| Total Other Power Generation Expenses | LBSUB7 | | $ - | $ - | $ - | $ - | $ - |
| **Other Power Generation Maintenance Expense** | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | LB551 | PROFIX | $ - | - | - | - | - |
| 552 MAINTENANCE OF STRUCTURES | LB552 | PROFIX | $ - | - | - | - | - |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | LB553 | PROFIX | $ 89,555 | 89,555 | - | - | - |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | LB554 | PROFIX | $ - | - | - | - | - |
| Total Other Power Generation Maintenance Expense | LBSUB8 | | $ 89,555 | $ 89,555 | $ - | $ - | $ - |
| Total Other Power Generation Expense | | | $ 89,555 | $ 89,555 | $ - | $ - | $ - |
| Total Production Expense | LPREX | | $ 38,542,468 | $ 20,732,677 | $ 17,809,791 | $ - | $ - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Labor Expenses (Continued) | | | | | | | |
| **Purchased Power** | | | | | | | |
| 555 PURCHASED POWER Energy | LB555 | OMPP | $ - | - | - | - | - |
| 555 PURCHASED POWER Demand | LBD555 | OMPPD | $ - | - | - | - | - |
| 555 PURCHASED POWER OPTIONS | LBO555 | OMPP | $ - | - | - | - | - |
| 555 BROKERAGE FEES | LBB555 | OMPP | $ - | - | - | - | - |
| 555 MISO TRANSMISSION EXPENSES | *LBM555* | OMPP | $ - | - | - | - | - |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | LB556 | PROFIX | $ - | - | - | - | - |
| 557 OTHER EXPENSES | LB557 | PROFIX | $ - | - | - | - | - |
| 558 DUPLICATE CHARGES | LB558 | Energy | $ - | - | - | - | - |
| Total Purchased Power Labor | LBPP | | $ - | $ - | $ - | $ - | $ - |
| **Transmission Labor Expenses** | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | LB560 | PTRAN | $ 835,977 | - | - | - | 835,977 |
| 561 LOAD DISPATCHING | LB561 | PTRAN | $ 1,304,969 | - | - | - | 1,304,969 |
| 562 STATION EXPENSES | LB562 | PTRAN | $ 598,382 | - | - | - | 598,382 |
| 563 OVERHEAD LINE EXPENSES | LB563 | PTRAN | $ 236,393 | - | - | - | 236,393 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | LB565 | PTRAN | $ - | - | - | - | - |
| 566 MISC. TRANSMISSION EXPENSES | LB566 | PTRAN | $ 312,375 | - | - | - | 312,375 |
| 567 RENTS | LB567 | PTRAN | $ - | - | - | - | - |
| 568 MAINTENACE SUPERVISION AND ENG | LB568 | PTRAN | $ 644,925 | - | - | - | 644,925 |
| 569 MAINTENACE OF STRUCTURES | LB569 | PTRAN | $ 318 | - | - | - | 318 |
| 570 MAINT OF STATION EQUIPMENT | LB570 | PTRAN | $ 1,433,304 | - | - | - | 1,433,304 |
| 571 MAINT OF OVERHEAD LINES | LB571 | PTRAN | $ 1,067,766 | - | - | - | 1,067,766 |
| 573 MAINT OF MISC. TRANSMISSION PLANT | LB573 | PTRAN | $ 46,439 | - | - | - | 46,439 |
| Total Transmission Labor Expenses | LBTRAN | | $ 6,480,848 | $ - | $ - | $ - | $ 6,480,848 |
| **Distribution Operation Labor Expense** | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | LB580 | F023 | $ - | - | - | - | - |
| 581 LOAD DISPATCHING | LB581 | PDIST | $ - | - | - | - | - |
| 582 STATION EXPENSES | LB582 | PDIST | $ - | - | - | - | - |
| 583 OVERHEAD LINE EXPENSES | LB583 | PDIST | $ - | - | - | - | - |
| 584 UNDERGROUND LINE EXPENSES | LB584 | PDIST | $ - | - | - | - | - |
| 585 STREET LIGHTING EXPENSE | LB585 | PDIST | $ - | - | - | - | - |
| 586 METER EXPENSES | LB586 | PDIST | $ - | - | - | - | - |
| 586 METER EXPENSES - LOAD MANAGEMENT | LB586x | PDIST | $ - | - | - | - | - |
| 587 CUSTOMER INSTALLATIONS EXPENSE | LB587 | PDIST | $ - | - | - | - | - |
| 588 MISCELLANEOUS DISTRIBUTION EXP | LB588 | PDIST | $ - | - | - | - | - |
| 589 RENTS | LB589 | PDIST | $ - | - | - | - | - |
| Total Distribution Operation Labor Expense | LBDO | | $ - | $ - | $ - | $ - | $ - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | | Total System | | Production Demand | | Production Energy | | Steam Direct | | Transmission Demand |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Labor Expenses (Continued) | | | | | | | | | | | | |
| **Distribution Maintenance Labor Expense** | | | | | | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | LB590 | F024 | $ | - | | - | | - | | - | | - |
| 591 MAINTENANCE OF STRUCTURES | LB591 | PDIST | $ | - | | - | | - | | - | | - |
| 592 MAINTENANCE OF STATION EQUIPME | LB592 | PDIST | $ | - | | - | | - | | - | | - |
| 593 MAINTENANCE OF OVERHEAD LINES | LB593 | PDIST | $ | - | | - | | - | | - | | - |
| 594 MAINTENANCE OF UNDERGROUND LIN | LB594 | PDIST | $ | - | | - | | - | | - | | - |
| 595 MAINTENANCE OF LINE TRANSFORME | LB595 | PDIST | $ | - | | - | | - | | - | | - |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | LB596 | PDIST | $ | - | | - | | - | | - | | - |
| 597 MAINTENANCE OF METERS | LB597 | PDIST | $ | - | | - | | - | | - | | - |
| 598 MAINTENANCE OF MISC DISTR PLANT | LB598 | PDIST | $ | - | | - | | - | | - | | - |
| Total Distribution Maintenance Labor Expense | LBDM | | $ | - | $ | - | $ | - | $ | - | $ | - |
| Total Distribution Operation and Maintenance Labor Expenses | | PDIST | | - | | - | | - | | - | | - |
| Transmission and Distribution Labor Expenses | | | | 6,480,848 | | - | | - | | - | | 6,480,848 |
| Production, Transmission and Distribution Labor Expenses | LBSUB | | $ | 45,023,316 | $ | 20,732,677 | $ | 17,809,791 | $ | - | $ | 6,480,848 |
| **Customer Accounts Expense** | | | | | | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | LB901 | F025 | $ | - | | - | | - | | - | | - |
| 902 METER READING EXPENSES | LB902 | F025 | $ | - | | - | | - | | - | | - |
| 903 RECORDS AND COLLECTION | LB903 | F025 | $ | - | | - | | - | | - | | - |
| 904 UNCOLLECTIBLE ACCOUNTS | LB904 | F025 | $ | - | | - | | - | | - | | - |
| 905 MISC CUST ACCOUNTS | LB903 | F025 | $ | - | | - | | - | | - | | - |
| Total Customer Accounts Labor Expense | LBCA | | $ | - | $ | - | $ | - | $ | - | $ | - |
| **Customer Service Expense** | | | | | | | | | | | | |
| 907 SUPERVISION | LB907 | TUP | $ | - | | - | | - | | - | | - |
| 908 CUSTOMER ASSISTANCE EXPENSES | LB908 | TUP | $ | 544,608 | | 476,316 | | - | | - | | 68,292 |
| 908 CUSTOMER ASSISTANCE EXP-LOAD MGMT | LB908x | TUP | $ | - | | - | | - | | - | | - |
| 909 INFORMATIONAL AND INSTRUCTIONA | LB909 | TUP | $ | - | | - | | - | | - | | - |
| 909 INFORM AND INSTRUC -LOAD MGMT | LB909x | TUP | $ | - | | - | | - | | - | | - |
| 910 MISCELLANEOUS CUSTOMER SERVICE | LB910 | TUP | $ | - | | - | | - | | - | | - |
| 911 DEMONSTRATION AND SELLING EXP | LB911 | TUP | $ | - | | - | | - | | - | | - |
| 912 DEMONSTRATION AND SELLING EXP | LB912 | TUP | $ | - | | - | | - | | - | | - |
| 913 WATER HEATER - HEAT PUMP PROGRAM | LB913 | TUP | $ | - | | - | | - | | - | | - |
| 915 MDSE-JOBBING-CONTRACT | LB915 | TUP | $ | - | | - | | - | | - | | - |
| 916 MISC SALES EXPENSE | LB916 | TUP | $ | - | | - | | - | | - | | - |
| Total Customer Service Labor Expense | LBCS | | $ | 544,608 | $ | 476,316 | $ | - | $ | - | $ | 68,292 |
| Sub-Total Labor Exp | LBSUB9 | | | 45,567,924 | | 21,208,994 | | 17,809,791 | | - | | 6,549,140 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Labor Expenses (Continued) | | | | | | | |
| **Administrative and General Expense** | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | LB920 | LBSUB9 | $ 14,315,714 | 6,663,061 | 5,595,161 | - | 2,057,491 |
| 921 OFFICE SUPPLIES AND EXPENSES | LB921 | LBSUB9 | $ - | - | - | - | - |
| 922 ADMIN. EXPENSES TRANSFERRED - CREDIT | LB922 | LBSUB9 | $ - | - | - | - | - |
| 923 OUTSIDE SERVICES EMPLOYED | LB923 | LBSUB9 | $ - | - | - | - | - |
| 924 PROPERTY INSURANCE | LB924 | TUP | $ - | - | - | - | - |
| 925 INJURIES AND DAMAGES - INSURAN | LB925 | LBSUB9 | $ 27,509 | 12,804 | 10,752 | - | 3,954 |
| 926 EMPLOYEE BENEFITS | LB926 | LBSUB9 | $ 17,136 | 7,976 | 6,698 | - | 2,463 |
| 928 REGULATORY COMMISSION FEES | LB928 | TUP | $ - | - | - | - | - |
| 929 DUPLICATE CHARGES-CR | LB929 | LBSUB9 | $ - | - | - | - | - |
| 930 MISCELLANEOUS GENERAL EXPENSES | LB930 | LBSUB9 | $ - | - | - | - | - |
| 931 RENTS AND LEASES | LB931 | PGP | $ - | - | - | - | - |
| 935 MAINTENANCE OF GENERAL PLANT | LB935 | PGP | $ 74,927 | 65,674 | - | - | 9,253 |
| Total Administrative and General Expense | LBAG | | $ 14,435,286 | $ 6,749,515 | $ 5,612,610 | $ - | $ 2,073,161 |
| Total Operation and Maintenance Expenses | TLB | | $ 60,003,210 | $ 27,958,509 | $ 23,422,401 | $ - | $ 8,622,301 |
| Operation and Maintenance Expenses Less Purchase Power | LBLPP | | $ 60,003,210 | $ 27,958,509 | $ 23,422,401 | $ - | $ 8,622,301 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Other Expenses | | | | | | | |
| **Depreciation Expenses** | | | | | | | |
| Production | DEPRDP2 | PPROD | $ 28,815,395 | 28,815,395 | - | - | - |
| Transmission | DEPRDP3 | PTRAN | $ 5,182,459 | - | - | - | 5,182,459 |
| Transmission | DEPRDP4 | PTRAN | $ - | - | - | - | - |
| Distribution | DEPRDP5 | PDIST | $ - | - | - | - | - |
| General & Common Plant | DEPRDP6 | PGP | $ 238,155 | 208,744 | - | - | 29,411 |
| Other Plant | DEPROTH | TPIS | $ - | - | - | - | - |
| Total Depreciation Expense | TDEPR | | $ 34,236,009 | 29,024,140 | - | - | 5,211,869 |
| **Accretion Expense** | | | | | | | |
| Production | ACRTNP | F017 | $ - | - | - | - | - |
| Transmission | ACRTNT | PTRAN | $ - | - | - | - | - |
| Distribution | ACRTND | PDIST | $ - | - | - | - | - |
| Total Accretion Expense | TACRTN | | $ - | $ - | $ - | $ - | $ - |
| Property Taxes & Other | PTAX | TUP | $ (94,563) | (82,705) | - | - | (11,858) |
| Amortization of Investment Tax Credit | OTAX | TUP | $ - | - | - | - | - |
| Other Expenses | OT | TUP | $ (365,864) | (319,986) | - | - | (45,878) |
| Interest | INTLTD | TUP | $ 47,622,710 | 41,650,995 | - | - | 5,971,715 |
| Other Deductions | DEDUCT | TUP | $ 109,257 | 95,557 | - | - | 13,700 |
| **Total Other Expenses** | TOE | | $ 81,507,549 | $ 70,368,000 | $ - | $ - | $ 11,139,549 |
| **Total Cost of Service (O&M + Other Expenses)** | | | $ 527,945,095 | $ 181,569,975 | $ 317,276,572 | $ - | $ 29,098,548 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Functional Vectors** | | | | | | | |
| Production Plant | F001 | | 1.000000 | 1.000000 | 0.000000 | 0.000000 | 0.000000 |
| Transmission Plant | F002 | | 1.000000 | 0.000000 | 0.000000 | 0.000000 | 1.000000 |
| Distribution Plant | F003 | | 1.000000 | 0.000000 | 0.000000 | 0.000000 | 1.000000 |
| Production Plant | F017 | | 1.000000 | 0.000000 | 1.000000 | 0.000000 | 0.000000 |
| Provar | PROVAR | | 1.000000 | 0.000000 | 1.000000 | 0.000000 | 0.000000 |
| PROFIX | PROFIX | | 1.000000 | 1.000000 | 0.000000 | 0.000000 | 0.000000 |
| Distribution Operation Labor | F023 | | - | - | - | - | - |
| Distribution Maintenance Labor | F024 | | - | - | - | - | - |
| Customer Accounts Expense | F025 | | 1.000000 | 0.000000 | 0.000000 | 0.000000 | 1.000000 |
| Customer Service Expense | F026 | | 1.000000 | 0.000000 | 0.000000 | 0.000000 | 1.000000 |
| Purchased Power Energy | OMPP | | 1.000000 | 0.000000 | 1.000000 | 0.000000 | 0.000000 |
| Purchased Power Demand | OMPPD | | 1.000000 | 1.000000 | 0.000000 | 0.000000 | 0.000000 |
| Purchased Power BREC Share of HMP&L Station Two | OMPPH | | 58,293,374 | 13,175,571 | 45,117,803 | 0.000000 | 0.000000 |
| Production Energy | Energy | | 1.000000 | 0.000000 | 1.000000 | 0.000000 | 0.000000 |
| **Internally Generated Functional Vectors** | | | | | | | |
| Total Prod, Trans, and Dist Plant | | PT&D | 1.000000 | 0.876506 | - | - | 0.123494 |
| Total Transmission Plant | | PTRAN | 1.000000 | - | - | - | 1.000000 |
| Operation and Maintenance Expenses Less Purchase Power | | OMLPP | 1.000000 | 0.494418 | 0.425734 | - | 0.079848 |
| Total Plant in Service | | TPIS | 1.000000 | 0.876506 | - | - | 0.123494 |
| Total Operation and Maintenance Expenses (Labor) | | TLB | 1.000000 | 0.465950 | 0.390352 | - | 0.143697 |
| Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service | | OMSUB2 | 1.000000 | 0.232897 | 0.733903 | - | 0.033200 |
| Total Steam Power Operation Expenses (Labor) | | LBSUB1 | 1.000000 | 0.833374 | 0.166626 | - | - |
| Total Steam Power Generation Maintenance Expense (Labor) | | LBSUB2 | 1.000000 | 0.078617 | 0.921383 | - | - |
| Total Transmission Labor Expenses | | LBTRAN | 1.000000 | - | - | - | 1.0000000 |
| Sub-Total Labor Exp | | LBSUB7 | 1.000000 | 0.465437 | 0.390841 | - | 0.143723 |
| Total General Plant | | PGP | 1.000000 | 0.876506 | - | - | 0.123494 |
| Total Production Plant | | PPROD | 1.000000 | 1.000000 | - | - | - |
| Total Intangible Plant | | INTPLT | 1.000000 | 0.876506 | - | - | 0.123494 |

**BIG RIVERS ELECTRIC CORPORATION**
**Cost of Service Study**
**Rate Schedule Allocation**
**12 Months Ended**
**October 2010**
**Average Excess Demand - Smelter TIER Adjustment Revenues at $1.95/mWh**

| Description | Ref | Name | Allocation Vector | Rurals | Large Industrials | Smelters | Total System |
|---|---|---|---|---|---|---|---|
| Cost of Service Summary – Unadjusted | | | | | | | |
| **Operating Revenues** | | | | | | | |
| Sales to Members | | REVUC | R01 | $ 110,934,700 | $ 39,110,620 | $ 282,406,135 | $ 432,451,455 |
| Off System Sales Revenue | | | OSSALL | $ 12,744,879 | $ 4,569,868 | $ 59,229,055 | $ 76,543,801 |
| Income from Leased Property Net | | OTHREV | RBPLT | $ 51,608 | $ 12,924 | $ 85,141 | $ 149,673 |
| Other Operating Revenue & Income | | OTHREV | RBPLT | $ 4,750,980 | $ 1,189,792 | $ 7,837,973 | $ 13,778,745 |
| Total Operating Revenues | | TOR | | $ 128,482,167 | $ 44,883,204 | $ 349,558,304 | $ 522,923,675 |
| **Operating Expenses** | | | | | | | |
| Operation and Maintenance Expenses | | | | $ 121,960,887 | $ 40,042,146 | $ 284,434,513 | $ 446,437,546 |
| Depreciation and Amortization Expenses | | | | $ 11,810,735 | $ 2,954,142 | $ 19,471,132 | $ 34,236,009 |
| Property and Other Taxes | | | NPT | $ (32,733) | $ (8,164) | $ (53,666) | $ (94,563) |
| Total Operating Expenses | | TOE | | $ 133,738,889 | $ 42,988,124 | $ 303,851,979 | $ 480,578,992 |
| Utility Operating Margin | | | | $ (5,256,723) | $ 1,895,081 | $ 45,706,325 | $ 42,344,683 |
| **Non-Operating Items** | | | | | | | |
| Interest Income | | | RBPLT | $ - | $ - | $ - | $ - |
| Other Non-Operating Income | | | RBPLT | $ - | $ - | $ - | $ - |
| Other Credits | | | RBPLT | $ - | $ - | $ - | $ - |
| Interest on Long Term Debt | | | | $ - | $ - | $ - | $ - |
| Other Interest Expense | | | RBPLT | $ - | $ - | $ - | $ - |
| Other Deductions | | | RBPLT | $ - | $ - | $ - | $ - |
| Total Non-Operating Items | | | | $ - | $ - | $ - | $ - |
| Net Utility Operating Margin | | TOM | | $ (5,256,723) | $ 1,895,081 | $ 45,706,325 | $ 42,344,683 |
| Net Cost Rate Base | | | | $ 403,539,604 | $ 101,058,766 | $ 665,743,132 | $ 1,170,341,502 |

**BIG RIVERS ELECTRIC CORPORATION**
**Cost of Service Study**
**Rate Schedule Allocation**
**12 Months Ended**
**October 2010**
**Average Excess Demand - Smelter TIER Adjustment Revenues at $1.95/mWh**

| Description | Ref | Name | Allocation Vector | Rurals | Large Industrials | Smelters | Total System |
|---|---|---|---|---|---|---|---|
| **Cost of Service Summary -- Pro-Forma** | | | | | | | |
| **Operating Revenues** | | | | | | | |
| Total Operating Revenue | | | | $ 128,482,167 | $ 44,883,204 | $ 349,558,304 | $ 522,923,675 |
| Pro-Forma Adjustments: | | | | | | | |
| To annualize revenue for new industrial customer | 2.01 | | | $ - | $ 149,752 | $ - | $ 149,752 |
| To adjust mismatch in fuel cost recovery | 2.02 | FACREV | | $ (25,166,503) | $ (9,525,471) | $ (73,123,203) | $ (107,815,177) |
| To eliminate Environmental Surcharge revenues | 2.03 | ESREV | | $ (5,315,462) | $ (2,025,233) | $ (15,493,538) | $ (22,834,232) |
| To reflect temperature normalized sales volumes | 2.04 | | EnergyR | $ (421,610) | $ - | $ - | $ (421,610) |
| To eliminate Non-FAC PPA revenues | 2.05 | NFPR | | $ 2,757,108 | $ 1,045,800 | $ 7,785,109 | $ 11,588,017 |
| To eliminate WKEC Lease Expenses | 2.19 | | RBPLT | $ (51,608) | $ (12,924) | $ (85,141) | $ (149,673) |
| To eliminate RRI Domtar Cogen Backup revenues | 2.09 | | | $ - | $ (1,115,159) | $ - | $ (1,115,159) |
| To adjust for Smelter TIER Adjustment Charge | 2.22 | | | $ - | $ - | $ - | $ - |
| Total Pro-Forma Operating Revenue | | | | $ 100,284,092 | $ 33,399,969 | $ 268,641,532 | $ 402,325,592 |

**BIG RIVERS ELECTRIC CORPORATION**
**Cost of Service Study**
**Rate Schedule Allocation**
**12 Months Ended**
**October 2010**
**Average Excess Demand - Smelter TIER Adjustment Revenues at $1.95/mWh**

| Description | Ref | Name | Allocation Vector | Rurals | Large Industrials | Smelters | Total System |
|---|---|---|---|---|---|---|---|
| **Cost of Service Summary -- Pro-Forma** | | | | | | | |
| **Operating Expenses** | | | | | | | |
| Operation and Maintenance Expenses | | | | $ 121,960,887 | $ 40,042,146 | $ 284,434,513 | $ 446,437,546 |
| Depreciation and Amortization Expenses | | | | $ 11,810,735 | $ 2,954,142 | $ 19,471,132 | $ 34,236,009 |
| Property and Other Taxes | | | NPT | $ (32,733) | $ (8,164) | $ (53,666) | $ (94,563) |
| Adjustments to Operating Expenses: | | | | | | | |
| To annualize expenses for new industrial customer | 2.01 | | | $ - | $ 110,607 | $ - | $ 110,607 |
| To adjust mismatch in fuel cost recovery | 2.02 | | FACREV | $ (25,685,949) | $ (9,722,081) | $ (74,632,493) | $ (110,040,523) |
| To eliminate Environmental Surcharge expenses | 2.03 | | ESREV | $ (5,462,944) | $ (2,081,425) | $ (15,923,422) | $ (23,467,791) |
| To reflect weather normalized sales volumes | 2.04 | | EnergyR | $ (295,293) | $ - | $ - | $ (295,293) |
| To eliminate Non-FAC PPA expenses | 2.05 | | NFPR | $ 2,858,740 | $ 1,084,350 | $ 8,072,083 | $ 12,015,173 |
| To reflect annualized depreciation expenses | 2.06 | | PLT | $ 2,164,890 | $ 539,845 | $ 3,547,916 | $ 6,252,651 |
| To reflect increases in labor and labor-related costs | 2.07 | | LBPLT | $ 186,980 | $ 54,413 | $ 383,501 | $ 624,894 |
| To reflect current interest on construction (CWIP) | 2.08 | | PLT | $ 178,577 | $ 44,531 | $ 292,659 | $ 515,767 |
| To eliminate RRI Domtar Cogen Backup expenses | 2.09 | | | $ - | $ (2,086,416) | $ - | $ (2,086,416) |
| To reflect levelized production expenses | 2.10 | | CP | $ 1,990,470 | $ 489,975 | $ 3,180,233 | $ 5,660,678 |
| To reflect levelized production expenses | 2.11 | | CP | $ 958,885 | $ 236,040 | $ 1,532,040 | $ 2,726,965 |
| To reflect going forward Information Technology support services | 2.12 | | RBPLT | $ 100,750 | $ 25,231 | $ 166,213 | $ 292,194 |
| To reflect amortizaton of rate case expenses | 2.13 | | RBPLT | $ 97,138 | $ 24,326 | $ 160,254 | $ 281,719 |
| To reflect MISO related expenses | 2.14 | | 12CPTR | $ 1,667,501 | $ 459,102 | $ 3,288,398 | $ 5,415,000 |
| To annualize interest on long-term debt | 2.15 | | RBPLT | $ 24,277 | $ 6,080 | $ 40,051 | $ 70,408 |
| To reflect leased property income (Soaper Building Rent) | 2.16 | | LBPLT | $ (38,410) | $ (11,178) | $ (78,780) | $ (128,368) |
| To adjust for costs related to LEM Dispatch | 2.17 | | CP | $ (329,413) | $ (81,089) | $ (526,313) | $ (936,815) |
| To adjust for costs related to APM | 2.18 | | CP | $ 72,116 | $ 17,752 | $ 115,222 | $ 205,090 |
| To reflect going forward level of Outside Services | 2.25 | | EnergyNS | $ (725,000) | $ (275,000) | $ - | $ (1,000,000) |
| To eliminate costs for SFPC membership | 2.20 | | RBPLT | $ (62,332) | $ (15,610) | $ (102,833) | $ (180,775) |
| To adjust for MISO Case-related expenses | 2.21 | | 12CPTR | $ (237,459) | $ (65,378) | $ (468,281) | $ (771,118) |
| To reflect commitment to Energy Efficiency Programs | 2.26 | | EnergyNS | $ 725,000 | $ 275,000 | $ - | $ 1,000,000 |
| To eliminate promo advertising, lobbying, donation and econ dev | 2.23 | | R01 | $ (130,114) | $ (45,872) | $ (331,230) | $ (507,216) |
| To reflect going forward level of income taxes | 2.24 | | NTPLT | $ 63,337 | $ 15,805 | $ 103,942 | $ 183,084 |
| Total Expense Adjustments | | | | $ (21,878,252) | $ (11,000,991) | $ (71,180,840) | $ (104,060,084) |
| Total Operating Expenses | | TOE | | $ 111,860,637 | $ 31,987,132 | $ 232,671,139 | $ 376,518,908 |
| Utility Operating Margins -- Pro-Forma | | | | $ (11,576,545) | $ 1,412,836 | $ 35,970,393 | $ 25,806,684 |
| **Non-Operating Items** | | | | $ - | $ - | $ - | $ - |
| Total Non-Operating Items | | | | $ - | $ - | $ - | $ - |
| Net Utility Operating Margin | | | | $ (11,576,545) | $ 1,412,836 | $ 35,970,393 | $ 25,806,684 |
| **Net Cost Rate Base** | | | | $ 403,539,604 | $ 101,058,766 | $ 665,743,132 | $ 1,170,341,502 |
| **Return on Rate Base -- Utility Operating Margin Divided by Rate Base** | | | | **-2.87%** | **1.40%** | **5.40%** | **2.21%** |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Rate Schedule Allocation
12 Months Ended
October 2010
Average Excess Demand - Smelter TIER Adjustment Revenues at $1.95/mWh

| Description | Ref | Name | Allocation Vector | Rurals | Large Industrials | Smelters | Total System |
|---|---|---|---|---|---|---|---|
| Subsidies Paid and Received at Present Rates | | | | | | | |
| (subisidies received shown as positive value) | | | | | | | |
| Rate Base | | | | $ 403,539,604 | $ 101,058,766 | $ 665,743,132 | $ 1,170,341,502 |
| Operating Margins (present rates) | | | | $ (11,576,545) | $ 1,412,836 | $ 35,970,393 | $ 25,806,684 |
| Operating Margins at Equal Rate of Return | ROR | | 2.21% | $ 8,898,274 | $ 2,228,402 | $ 14,680,008 | $ 25,806,684 |
| Subsidies Paid and Received | | | | $ 20,474,819 | $ 815,566 | $ (21,290,385) | $ (0) |

**Big Rivers Electric Corporation**
Summary of Cost of Service Study
For the 12 Months Ended October 2010

**Rate of Return Summary**

***Unadjusted***

| Rate Schedule | | Utility Operating Margins | | Net Cost Rate Base | Rate of Return |
|---|---|---|---|---|---|
| Total Rural | $ | (11,576,545) | $ | 403,539,604 | -2.87% |
| Total Large Industrial | | 1,412,836 | | 101,058,766 | 1.40% |
| Total Smelter | | 35,970,393 | | 665,743,132 | 5.40% |
| Total | $ | 25,806,684 | $ | 1,170,341,502 | 2.21% |

***Adjusted for Proposed Rate Increase***

| Rate Schedule | | Utility Operating Margins | | Net Cost Rate Base | Rate of Return |
|---|---|---|---|---|---|
| Total Rural | $ | 2,595,458 | $ | 403,539,604 | 0.64% |
| Total Large Industrial | | 4,641,403 | | 101,058,766 | 4.59% |
| Total Smelter | | 58,523,789 | | 665,743,132 | 8.79% |
| Total | $ | 65,760,649 | $ | 1,170,341,502 | 5.62% |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Plant in Service** | | | | | | | | | |
| Intangible Plant | INTPLT | PT&D | $ | 66,895 | | | | | |
| Production Plant | PPROD | F001 | $ | 1,686,796,955 | | | | | |
| Transmission Plant | PTRAN | F002 | $ | 237,659,206 | | | | | |
| Distribution Plant | PDIST | F003 | $ | - | | | | | |
| **Total Production & Transmission Plant** | PT&D | | | 1,924,456,160 | | | | | |
| General Plant | PGP | PT&D | $ | 18,511,051 | | | | | |
| **Total Plant in Service** | TPIS | | $ | 1,943,034,107 | | | | | |
| **Construction Work in Progress (CWIP)** | | | | | | | | | |
| CWIP Production | CWIP1 | PPROD | $ | 22,411,274 | | | | | |
| CWIP Transmission | CWIP2 | PTRAN | $ | 7,475,859 | | | | | |
| CWIP Distribution Plant | CWIP3 | PDIST | $ | - | | | | | |
| CWIP General Plant | CWIP4 | PT&D | $ | 16,915,005 | | | | | |
| **Total Construction Work in Progress** | TCWIP | | $ | 46,802,138 | | | | | |
| **Total Utility Plant** | | | $ | 1,989,836,245 | | | | | |
| **Rate Base** | | | | | | | | | |
| **Total Utility Plant** | TUP | | $ | 1,989,836,245 | | | | | |
| **Less: Acummulated Provision for Depreciation** | | | | | | | | | |
| Production | ADEPREPA | PPROD | $ | 790,847,523 | | | | | |
| Transmission | ADEPRTP | PTRAN | $ | 107,564,747 | | | | | |
| Distribution | ADEPRD11 | PDIST | $ | - | | | | | |
| General & Common Plant | ADEPRD12 | PT&D | $ | 6,300,770 | | | | | |
| Intangible, Misc, and Other Plant | ADEPRGP | PT&D | $ | - | | | | | |
| Retirement Work In Progress | ADEPRRT | PT&D | $ | - | | | | | |
| Total Accumulated Depreciation | TADEPR | | $ | 904,713,040 | | | | | |
| **Net Utility Plant** | NTPLANT | | $ | 1,085,123,206 | | | | | |
| **Working Capital** | | | | | | | | | |
| Cash Working Capital - Operation and Maintenance Expenses | CWC | OMLPP | $ | 28,114,365 | | | | | |
| Materials and Supplies | M&S | TPIS | $ | 22,777,820 | 20327197.9 | 85340.04 | -68898.4 | 208485.44 | -95121.11 |
| Fuel Stock | PREPAY | TPIS | $ | 34,326,112 | 39158400.85 | -1328756.9 | -4130766.79 | -359777.13 | 1918732.52 |
| Total Working Capital | TWC | | $ | 85,218,297 | | | | | |
| **Net Rate Base** | RB | | $ | 1,170,341,502 | | | | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Plant in Service** | | | | | | | | |
| Intangible Plant | INTPLT | PT&D | | | | | | |
| Production Plant | PPROD | F001 | | | | | | |
| Transmission Plant | PTRAN | F002 | | | | | | |
| Distribution Plant | PDIST | F003 | | | | | | |
| **Total Production & Transmission Plant** | PT&D | | | | | | | |
| General Plant | PGP | PT&D | | | | | | |
| **Total Plant in Service** | TPIS | | | | | | | |
| **Construction Work in Progress (CWIP)** | | | | | | | | |
| CWIP Production | CWIP1 | PPROD | | | | | | |
| CWIP Transmission | CWIP2 | PTRAN | | | | | | |
| CWIP Distribution Plant | CWIP3 | PDIST | | | | | | |
| CWIP General Plant | CWIP4 | PT&D | | | | | | |
| **Total Construction Work in Progress** | TCWIP | | | | | | | |
| **Total Utility Plant** | | | | | | | | |
| **Rate Base** | | | | | | | | |
| **Total Utility Plant** | TUP | | | | | | | |
| **Less: Acummulated Provision for Depreciation** | | | | | | | | |
| Production | ADEPREPA | PPROD | | | | | | |
| Transmission | ADEPRTP | PTRAN | | | | | | |
| Distribution | ADEPRD11 | PDIST | | | | | | |
| General & Common Plant | ADEPRD12 | PT&D | | | | | | |
| Intangible, Misc, and Other Plant | ADEPRGP | PT&D | | | | | | |
| Retirement Work In Progress | ADEPRRT | PT&D | | | | | | |
| Total Accumulated Depreciation | TADEPR | | | | | | | |
| **Net Utility Plant** | NTPLANT | | | | | | | |
| **Working Capital** | | | | | | | | |
| Cash Working Capital - Operation and Maintenance Expenses | CWC | OMLPP | | | | | | |
| Materials and Supplies | M&S | TPIS | -220183.19 | 207004.7 | 357212.07 | 240129.05 | -144241.07 | 2889566.56 |
| Fuel Stock | PREPAY | TPIS | 2552249.61 | 867432.81 | -287963.1 | -3463026.24 | -2018344.81 | -578882.38 |
| Total Working Capital | TWC | | | | | | | |
| **Net Rate Base** | RB | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Plant in Service** | | | |
| Intangible Plant | INTPLT | PT&D | |
| Production Plant | PPROD | F001 | |
| Transmission Plant | PTRAN | F002 | |
| Distribution Plant | PDIST | F003 | |
| **Total Production & Transmission Plant** | PT&D | | |
| General Plant | PGP | PT&D | |
| **Total Plant in Service** | TPIS | | |
| **Construction Work in Progress (CWIP)** | | | |
| CWIP Production | CWIP1 | PPROD | |
| CWIP Transmission | CWIP2 | PTRAN | |
| CWIP Distribution Plant | CWIP3 | PDIST | |
| CWIP General Plant | CWIP4 | PT&D | |
| **Total Construction Work in Progress** | TCWIP | | |
| **Total Utility Plant** | | | |
| **Rate Base** | | | |
| **Total Utility Plant** | TUP | | |
| **Less: Acummulated Provision for Depreciation** | | | |
| Production | ADEPREPA | PPROD | |
| Transmission | ADEPRTP | PTRAN | |
| Distribution | ADEPRD11 | PDIST | |
| General & Common Plant | ADEPRD12 | PT&D | |
| Intangible, Misc, and Other Plant | ADEPRGP | PT&D | |
| Retirement Work In Progress | ADEPRRT | PT&D | |
| Total Accumulated Depreciation | TADEPR | | |
| **Net Utility Plant** | NTPLANT | | |
| **Working Capital** | | | |
| Cash Working Capital - Operation and Maintenance Expenses | CWC | OMLPP | |
| Materials and Supplies | M&S | TPIS | -1008672.24 |
| Fuel Stock | PREPAY | TPIS | 1996813.82 |
| Total Working Capital | TWC | | |
| **Net Rate Base** | RB | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses** | | | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | OM500 | PROFIX | $ | 4,974,566 | 342962.62 | 1034901.09 | 358703.86 | 318491.34 | 384828.47 |
| 501 FUEL | OM501 | Energy | $ | 200,919,367 | 11957675.62 | 16736745.89 | 19103323.18 | 17630280.19 | 17173097.35 |
| 502 STEAM EXPENSES | OM502 | PROFIX | $ | 34,453,882 | 2424633.22 | 2490999.61 | 2647322.04 | 2676616.85 | 2911578.89 |
| 505 ELECTRIC EXPENSES | OM505 | PROFIX | $ | 5,730,122 | 399281.19 | 656713.94 | 477935.99 | 489102.92 | 443771.24 |
| 506 MISC. STEAM POWER EXPENSES | OM506 | PROFIX | $ | 7,451,302 | 837237.41 | 458663.32 | 531778.12 | 516078.68 | 646116.36 |
| 507 RENTS | OM507 | PROFIX | $ | - | | 0 | 0 | 0 | 0 |
| 509 ALLOWANCES | OM509 | Energy | $ | 429,682 | | 0 | 0 | 55382.46 | 42291.31 |
| Total Steam Power Operation Expenses | | | $ | 253,958,921 | $ 7,775 | $ 146,296 | $ 7,154 | $ 15,852 | $ 21,245 |
| **Steam Power Generation Maintenance Expenses** | | | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | OM510 | Energy | $ | 3,631,867 | 301562.96 | 282674.01 | 282136.07 | 286174.73 | 324812.85 |
| 511 MAINTENANCE OF STRUCTURES | OM511 | PROFIX | $ | 3,346,806 | -2396.3 | 561809.41 | 164027.98 | 219884.17 | 122851.74 |
| 512 MAINTENANCE OF BOILER PLANT | OM512 | Energy | $ | 30,113,309 | 2665049.9 | 2707987.08 | 1617573 | 1413359.02 | 2039706.29 |
| 513 MAINTENANCE OF ELECTRIC PLANT | OM513 | Energy | $ | 6,251,804 | 2443905.77 | 804364.44 | -26124.91 | 190619.56 | 167015.92 |
| 514 MAINTENANCE OF MISC STEAM PLANT | OM514 | PROFIX | $ | 877,364 | 136355.09 | 154030.5 | 71461.85 | 48046.95 | 35868.33 |
| Total Steam Power Generation Maintenance Expense | | | $ | 44,221,151 | $ 3,659 | $ 7,366 | $ 1,455 | $ 6,057 | $ 9,772 |
| Total Steam Power Generation Expense | | | $ | 298,180,072 | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses** | | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | OM500 | PROFIX | 338223.38 | 414283.22 | 372420.21 | 359404.38 | 369945.71 | 334708.35 |
| 501 FUEL | OM501 | Energy | 15868543.13 | 15412621.99 | 16949864.35 | 18643264.65 | 19588180.27 | 17004762.52 |
| 502 STEAM EXPENSES | OM502 | PROFIX | 2801318.34 | 3017168.8 | 3110448.48 | 3022221.22 | 3095094.21 | 3132173.1 |
| 505 ELECTRIC EXPENSES | OM505 | PROFIX | 430459.27 | 473960.9 | 440316.02 | 456264.08 | 479912.75 | 476352.39 |
| 506 MISC. STEAM POWER EXPENSES | OM506 | PROFIX | 557984.26 | 577686.56 | 640171.09 | 585642.46 | 806920.28 | 725866.29 |
| 507 RENTS | OM507 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 509 ALLOWANCES | OM509 | Energy | 33437.63 | 31618.94 | 46952.89 | 62169.21 | 49573.1 | 28256.05 |
| Total Steam Power Operation Expenses | | | $ 6,070 | $ 8,052 | $ 5,213 | $ 267,644 | $ 167,124 | $ 44,089 |
| **Steam Power Generation Maintenance Expenses** | | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | OM510 | Energy | 297530.92 | 289425 | 297802.77 | 281476.85 | 309430.59 | 294029.27 |
| 511 MAINTENANCE OF STRUCTURES | OM511 | PROFIX | 153063.03 | 309779.07 | 306987.02 | 458108.12 | 372678.29 | 488354.6 |
| 512 MAINTENANCE OF BOILER PLANT | OM512 | Energy | 1740181.45 | 2535024.61 | 2164789.64 | 2054585.86 | 2034329.79 | 2855272.84 |
| 513 MAINTENANCE OF ELECTRIC PLANT | OM513 | Energy | 313812.24 | 389518.49 | 251988.71 | 302199.64 | 422000.23 | 534239.62 |
| 514 MAINTENANCE OF MISC STEAM PLANT | OM514 | PROFIX | 61896.28 | 58285.06 | 85932.24 | 51800.09 | 89344.85 | 66090.33 |
| Total Steam Power Generation Maintenance Expense | | | $ (325) | $ 4,943 | $ 216,501 | $ 175,754 | $ 65,241 | $ 96,186 |
| Total Steam Power Generation Expense | | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Operation and Maintenance Expenses** | | | |
| **Steam Power Generation Operation Expenses** | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | OM500 | PROFIX | 345693.85 |
| 501 FUEL | OM501 | Energy | 14851007.4 |
| 502 STEAM EXPENSES | OM502 | PROFIX | 3124307.14 |
| 505 ELECTRIC EXPENSES | OM505 | PROFIX | 506051.44 |
| 506 MISC. STEAM POWER EXPENSES | OM506 | PROFIX | 567156.95 |
| 507 RENTS | OM507 | PROFIX | 0 |
| 509 ALLOWANCES | OM509 | Energy | 80000.79 |
| Total Steam Power Operation Expenses | | | $ 44,882 |
| **Steam Power Generation Maintenance Expenses** | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | OM510 | Energy | 384811.34 |
| 511 MAINTENANCE OF STRUCTURES | OM511 | PROFIX | 191658.45 |
| 512 MAINTENANCE OF BOILER PLANT | OM512 | Energy | 6285449.98 |
| 513 MAINTENANCE OF ELECTRIC PLANT | OM513 | Energy | 458264.77 |
| 514 MAINTENANCE OF MISC STEAM PLANT | OM514 | PROFIX | 18252.47 |
| Total Steam Power Generation Maintenance Expense | | | $ 38,478 |
| Total Steam Power Generation Expense | | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | OM546 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 547 FUEL | OM547 | Energy | $ | 706,789 | 7379.85 | 135814.53 | 4779.27 | 13479.11 | 18872.46 |
| 548 GENERATION EXPENSE | OM548 | PROFIX | $ | 34,608 | 394.54 | 10481.32 | 2375 | 2373 | 2373 |
| 549 MISC OTHER POWER GENERATION | OM549 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 550 RENTS | OM550 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Expenses | | | $ | 741,396 | $ (1) | $ (0) | $ 0 | $ 1 | $ 0 |
| **Other Power Generation Maintenance Expense** | | | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | OM551 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 552 MAINTENANCE OF STRUCTURES | OM552 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | OM553 | PROFIX | $ | 625,088 | 3658.66 | 7365.41 | 1454.85 | 6056.77 | 9772.16 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | OM554 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Maintenance Expense | | | $ | 625,088 | $ 0 | $ (0) | $ (0) | $ 0 | $ 0 |
| Total Other Power Generation Expense | | | $ | 1,366,485 | | | | | |
| Total Station Expense | | | $ | 299,546,557 | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | OM546 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 547 FUEL | OM547 | Energy | 3696.82 | 5679.30 | 2839.60 | 265271.41 | 164750.42 | 41716.70 |
| 548 GENERATION EXPENSE | OM548 | PROFIX | 2373 | 2373.00 | 2373.00 | 2373.00 | 2373.00 | 2373.00 |
| 549 MISC OTHER POWER GENERATION | OM549 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 550 RENTS | OM550 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Expenses | | | $ (0) | $ 1 | $ (0) | $ 0 | $ (0) | $ 0 |
| **Other Power Generation Maintenance Expense** | | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | OM551 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 552 MAINTENANCE OF STRUCTURES | OM552 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | OM553 | PROFIX | -322.62 | 4943.09 | 216501.24 | 175754.02 | 65240.65 | 96186.42 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | OM554 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Maintenance Expense | | | $ 2 | $ 0 | $ 1 | $ (0) | $ (1) | $ 0 |
| Total Other Power Generation Expense | | | | | | | | |
| Total Station Expense | | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | |
| **Other Power Generation Operation Expense** | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | OM546 | PROFIX | 0 |
| 547 FUEL | OM547 | Energy | 42509.14 |
| 548 GENERATION EXPENSE | OM548 | PROFIX | 2373.00 |
| 549 MISC OTHER POWER GENERATION | OM549 | PROFIX | 0 |
| 550 RENTS | OM550 | PROFIX | 0 |
| Total Other Power Generation Expenses | | | $ (0) |
| **Other Power Generation Maintenance Expense** | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | OM551 | PROFIX | 0 |
| 552 MAINTENANCE OF STRUCTURES | OM552 | PROFIX | 0 |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | OM553 | PROFIX | 38477.63 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | OM554 | PROFIX | 0 |
| Total Other Power Generation Maintenance Expense | | | $ (0) |
| [illegible] | | | |
| Total Station Expense | | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | | |
| **Other Power Supply Expenses** | | | | | | | | | |
| 555 PURCHASED POWER Energy | OM555 | OMPP | $ | 19,466,790 | 3,827,952.61 | 2,536,760.36 | 1,913,169.62 | 941,370.11 | 911,294.71 |
| 555 PURCHASED POWER Demand | OMD555 | OMPPD | $ | 4,210,045 | 350,837.07 | 350,837.07 | 350,837.07 | 350,837.07 | 350,837.07 |
| 555 PURCHASED POWER BREC Share of HMP&L Station Two | OMH555 | OMPPH | $ | 58,293,374 | 4,582,937.26 | 5,054,161.64 | 4,549,698.12 | 4,432,913.73 | 4,763,164.98 |
| 555 PURCHASED POWER OPTIONS | OMO555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 BROKERAGE FEES | OMB555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 MISO TRANSMISSION EXPENSES | OMM555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | OM556 | PROFIX | $ | 909,422 | 143177.05 | 161775.92 | 84110.82 | 66492.87 | 77558.07 |
| 557 OTHER EXPENSES | OM557 | PROFIX | $ | 20,575,465 | 2479520.29 | 2210820.92 | 1519858.99 | 1381956.22 | 1577347.72 |
| 558 DUPLICATE CHARGES | OM558 | Energy | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Supply Expenses | TPP | | $ | 103,455,096 | 11,384,424.28 | 10,314,355.91 | 8,417,674.62 | 7,173,570.00 | 7,680,202.55 |
| Total Electric Power Generation Expenses | | | $ | 403,001,653 | | | | | |
| **Transmission Expenses** | | | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | OM560 | LBTRAN | $ | 876,815 | 159722.72 | 99111.49 | 64131.05 | 56493.74 | 71626.61 |
| 561 LOAD DISPATCHING | OM561 | LBTRAN | $ | 1,454,938 | 245368.38 | 141741.21 | 113777.21 | 98967.65 | 113022.44 |
| 562 STATION EXPENSES | OM562 | PTRAN | $ | 1,163,408 | 138650.41 | 111166.28 | 70289.35 | 78900.11 | 96317.14 |
| 563 OVERHEAD LINE EXPENSES | OM563 | PTRAN | $ | 1,090,014 | 116902.84 | 72507.66 | 91764.75 | 90248.86 | 92136.75 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | OM565 | PTRAN | $ | 3,065,817 | 227372.33 | 270804.44 | 222495.76 | 313990.87 | 298157.74 |
| 566 MISC. TRANSMISSION EXPENSES | OM566 | PTRAN | $ | 475,381 | 82941.08 | 54676.78 | 40839.08 | 35322.18 | 39484.82 |
| 567 RENTS | OM567 | PTRAN | $ | 24,701 | 2058.43 | 2058.43 | 2058.43 | 2058.43 | 2058.43 |
| 568 MAINTENACE SUPERVISION AND ENG | OM568 | LBTRAN | $ | 647,227 | 120702.88 | 66051.02 | 48367.7 | 40149.83 | 53439.26 |
| 569 STRUCTURES | OM569 | PTRAN | $ | 26,913 | 36.88 | 6259.34 | 0 | 1874.02 | 59.12 |
| 570 MAINT OF STATION EQUIPMENT | OM570 | PTRAN | $ | 1,936,760 | 272171.89 | 208826.01 | 135405.37 | 165513.32 | 155839.56 |
| 571 MAINT OF OVERHEAD LINES | OM571 | PTRAN | $ | 2,876,462 | 318695.62 | 624358.63 | 20316.93 | 128651.35 | 134146 |
| 572 UNDERGROUND LINES | OM572 | PTRAN | $ | - | 0 | 0 | 0 | 0 | 0 |
| 573 MISC PLANT | OM573 | PTRAN | $ | 97,880 | 8341.27 | 4665 | 3732.37 | 5821.94 | 34823.78 |
| Total Transmission Expenses | | | $ | 13,736,318 | 1,692,964.73 | 1,662,226.29 | 813,178.00 | 1,017,992.30 | 1,091,111.65 |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | |
| **Other Power Supply Expenses** | | | | | | | | |
| 555 PURCHASED POWER Energy | OM555 | OMPP | 1,360,105.55 | 2,595,157.16 | 1,414,751.54 | 1,276,714.40 | 516,721.89 | 613,253.53 |
| 555 PURCHASED POWER Demand | OMD555 | OMPPD | 350,837.07 | 350,837.07 | 350,837.07 | 350,837.07 | 350,837.07 | 350,837.07 |
| 555 PURCHASED POWER BREC Share of HMP&L Station Two | OMH555 | OMPPH | 5,098,546.01 | 4,460,755.81 | 4,842,232.95 | 5,325,056.85 | 5,088,921.31 | 4,972,622.48 |
| 555 PURCHASED POWER OPTIONS | OMO555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 BROKERAGE FEES | OMB555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 MISO TRANSMISSION EXPENSES | OMM555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | OM556 | PROFIX | 0 | 92094.61 | 73384.96 | 71377.18 | 39951.63 | 51309.82 |
| 557 OTHER EXPENSES | OM557 | PROFIX | 1535653.17 | 1420108.84 | 1438109.81 | 1546376.13 | 1542523.95 | 2323941.19 |
| 558 DUPLICATE CHARGES | OM558 | Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Supply Expenses | TPP | | 8,345,141.80 | 8,918,953.49 | 8,119,316.33 | 8,570,361.63 | 7,538,955.85 | 8,311,964.09 |
| Total Electric Power Generation Expenses | | | | | | | | |
| **Transmission Expenses** | | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | OM560 | LBTRAN | 59387.59 | 61734.83 | 72275.43 | 57830.16 | 52970.2 | 70253.05 |
| 561 LOAD DISPATCHING | OM561 | LBTRAN | 89896.48 | 94173.59 | 104627.56 | 94297.49 | 86936.32 | 135835 |
| 562 STATION EXPENSES | OM562 | PTRAN | 84122.23 | 90931.03 | 103923.43 | 86043.52 | 116294.21 | 83898.29 |
| 563 OVERHEAD LINE EXPENSES | OM563 | PTRAN | 87522.07 | 87158.79 | 89203.39 | 89187.21 | 86736.29 | 88209.66 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | OM565 | PTRAN | 229091.63 | 251486.95 | 238169.64 | 253067.81 | 259149.57 | 237980.88 |
| 566 MISC. TRANSMISSION EXPENSES | OM566 | PTRAN | 28982.15 | 30160.95 | 44581.15 | 19944.19 | 35290.89 | 32930.62 |
| 567 RENTS | OM567 | PTRAN | 2058.43 | 2058.43 | 2058.43 | 2058.43 | 2058.43 | 2058.43 |
| 568 MAINTENACE SUPERVISION AND ENG | OM568 | LBTRAN | 44241.45 | 45590.11 | 51110.87 | 42324.47 | 40557.13 | 55824.53 |
| 569 STRUCTURES | OM569 | PTRAN | 80.04 | 577.95 | 1084.71 | 2771.42 | 1003.78 | 1896.87 |
| 570 MAINT OF STATION EQUIPMENT | OM570 | PTRAN | 124235.3 | 158259.64 | 153920.85 | 137834.03 | 134856.99 | 175088.1 |
| 571 MAINT OF OVERHEAD LINES | OM571 | PTRAN | 140543.65 | 122631.69 | 245673.12 | 136904.15 | 282898.22 | 547382.49 |
| 572 UNDERGROUND LINES | OM572 | PTRAN | 0 | 0 | 0 | 0 | 0 | 0 |
| 573 MISC PLANT | OM573 | PTRAN | 4923.69 | 6697.42 | 5370.15 | 3919.44 | 6630.08 | 5359.76 |
| Total Transmission Expenses | | | 895,084.71 | 951,461.38 | 1,111,998.73 | 926,182.32 | 1,105,382.11 | 1,436,717.68 |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | |
| **Other Power Supply Expenses** | | | |
| 555 PURCHASED POWER Energy | OM555 | OMPP | 1559538.19 |
| 555 PURCHASED POWER Demand | OMD555 | OMPPD | 350837.07 |
| 555 PURCHASED POWER BREC Share of HMP&L Station Two | OMH555 | OMPPH | 5,122,362.96 |
| 555 PURCHASED POWER OPTIONS | OMO555 | OMPP | 0 |
| 555 BROKERAGE FEES | OMB555 | OMPP | 0 |
| 555 MISO TRANSMISSION EXPENSES | OMM555 | OMPP | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | OM556 | PROFIX | 48189.16 |
| 557 OTHER EXPENSES | OM557 | PROFIX | 1599248 |
| 558 DUPLICATE CHARGES | OM558 | Energy | 0 |
| Total Other Power Supply Expenses | TPP | | 8,680,175.38 |
| Total Electric Power Generation Expenses | | | |
| **Transmission Expenses** | | | |
| 560 OPERATION SUPERVISION AND ENG | OM560 | LBTRAN | 51278.57 |
| 561 LOAD DISPATCHING | OM561 | LBTRAN | 136294.18 |
| 562 STATION EXPENSES | OM562 | PTRAN | 102872.03 |
| 563 OVERHEAD LINE EXPENSES | OM563 | PTRAN | 98436.13 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | OM565 | PTRAN | 264049.42 |
| 566 MISC. TRANSMISSION EXPENSES | OM566 | PTRAN | 30227.33 |
| 567 RENTS | OM567 | PTRAN | 2058.43 |
| 568 MAINTENACE SUPERVISION AND ENG | OM568 | LBTRAN | 38868.14 |
| 569 STRUCTURES | OM569 | PTRAN | 11269.17 |
| 570 MAINT OF STATION EQUIPMENT | OM570 | PTRAN | 114809.26 |
| 571 MAINT OF OVERHEAD LINES | OM571 | PTRAN | 174260.22 |
| 572 UNDERGROUND LINES | OM572 | PTRAN | 0 |
| 573 MISC PLANT | OM573 | PTRAN | 7595.34 |
| Total Transmission Expenses | | | 1,032,018.22 |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Distribution Operation Expense** | | | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | OM580 | LBDO | $ | - | 0 | 0 | 0 | 0 | 0 |
| 581 LOAD DISPATCHING | OM581 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 582 STATION EXPENSES | OM582 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 583 OVERHEAD LINE EXPENSES | OM583 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 584 UNDERGROUND LINE EXPENSES | OM584 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 585 STREET LIGHTING EXPENSE | OM585 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES | OM586 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | OM586x | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | OM587 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | OM588 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 588 MISC DISTR EXP -- MAPPIN | OM588x | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 589 RENTS | OM589 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Operation Expense | OMDO | | $ | - | | | | | |
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | | |
| **Distribution Maintenance Expense** | | | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | OM590 | LBDM | $ | - | 0 | 0 | 0 | 0 | 0 |
| 591 STRUCTURES | OM591 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 592 MAINTENANCE OF STATION EQUIPME | OM592 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 593 MAINTENANCE OF OVERHEAD LINES | OM593 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 594 MAINTENANCE OF UNDERGROUND LIN | OM594 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 595 MAINTENANCE OF LINE TRANSFORME | OM595 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | OM596 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 597 MAINTENANCE OF METERS | OM597 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 598 MISCELLANEOUS DISTRIBUTION EXPENSES | OM598 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Maintenance Expense | OMDM | | $ | - | | | | | |
| Total Distribution Operation and Maintenance Expenses | | | | - | | | | | |
| Transmission and Distribution Expenses | | | | 13,736,318 | | | | | |
| Production, Transmission and Distribution Expenses | OMSUB | | $ | 416,737,971 | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Distribution Operation Expense** | | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | OM580 | LBDO | 0 | 0 | 0 | 0 | 0 | 0 |
| 581 LOAD DISPATCHING | OM581 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 582 STATION EXPENSES | OM582 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 583 OVERHEAD LINE EXPENSES | OM583 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 584 UNDERGROUND LINE EXPENSES | OM584 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 585 STREET LIGHTING EXPENSE | OM585 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES | OM586 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | OM586x | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | OM587 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | OM588 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 588 MISC DISTR EXP – MAPPIN | OM588x | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 589 RENTS | OM589 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Operation Expense | OMDO | | | | | | | |
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | |
| **Distribution Maintenance Expense** | | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | OM590 | LBDM | 0 | 0 | 0 | 0 | 0 | 0 |
| 591 STRUCTURES | OM591 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 592 MAINTENANCE OF STATION EQUIPME | OM592 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 593 MAINTENANCE OF OVERHEAD LINES | OM593 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 594 MAINTENANCE OF UNDERGROUND LIN | OM594 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 595 MAINTENANCE OF LINE TRANSFORME | OM595 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | OM596 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 597 MAINTENANCE OF METERS | OM597 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 598 MISCELLANEOUS DISTRIBUTION EXPENSES | OM598 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Maintenance Expense | OMDM | | | | | | | |
| Total Distribution Operation and Maintenance Expenses | | | | | | | | |
| Transmission and Distribution Expenses | | | | | | | | |
| Production, Transmission and Distribution Expenses | OMSUB | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Distribution Operation Expense** | | | |
| 580 OPERATION SUPERVISION AND ENGI | OM580 | LBDO | 0 |
| 581 LOAD DISPATCHING | OM581 | PDIST | 0 |
| 582 STATION EXPENSES | OM582 | PDIST | 0 |
| 583 OVERHEAD LINE EXPENSES | OM583 | PDIST | 0 |
| 584 UNDERGROUND LINE EXPENSES | OM584 | PDIST | 0 |
| 585 STREET LIGHTING EXPENSE | OM585 | PDIST | 0 |
| 586 METER EXPENSES | OM586 | PDIST | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | OM586x | PDIST | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | OM587 | PDIST | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | OM588 | PDIST | 0 |
| 588 MISC DISTR EXP – MAPPIN | OM588x | PDIST | 0 |
| 589 RENTS | OM589 | PDIST | 0 |
| Total Distribution Operation Expense | OMDO | | |
| **Operation and Maintenance Expenses (Continued)** | | | |
| **Distribution Maintenance Expense** | | | |
| 590 MAINTENANCE SUPERVISION AND EN | OM590 | LBDM | 0 |
| 591 STRUCTURES | OM591 | PDIST | 0 |
| 592 MAINTENANCE OF STATION EQUIPME | OM592 | PDIST | 0 |
| 593 MAINTENANCE OF OVERHEAD LINES | OM593 | PDIST | 0 |
| 594 MAINTENANCE OF UNDERGROUND LIN | OM594 | PDIST | 0 |
| 595 MAINTENANCE OF LINE TRANSFORME | OM595 | PDIST | 0 |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | OM596 | PDIST | 0 |
| 597 MAINTENANCE OF METERS | OM597 | PDIST | 0 |
| 598 MISCELLANEOUS DISTRIBUTION EXPENSES | OM598 | PDIST | 0 |
| Total Distribution Maintenance Expense | OMDM | | |
| Total Distribution Operation and Maintenance Expenses | | | |
| Transmission and Distribution Expenses | | | |
| Production, Transmission and Distribution Expenses | OMSUB | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Customer Accounts Expense** | | | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | OM901 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 902 METER READING EXPENSES | OM902 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 903 RECORDS AND COLLECTION | OM903 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 904 UNCOLLECTIBLE ACCOUNTS | OM904 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 905 MISC CUST ACCOUNTS | OM903 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Customer Accounts Expense | OMCA | | $ | - | | | | | |
| **Customer Service Expense** | | | | | | | | | |
| 907 SUPERVISION | OM907 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 908 CUSTOMER ASSISTANCE EXPENSES | OM908 | TUP | $ | 591,192 | 104389.97 | 75645.08 | 40729.07 | 42316.45 | 53316.29 |
| 908 CUSTOMER ASSISTANCE EXP-INCENTIVES | OM908x | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 909 INFORMATIONAL AND INSTRUCTIONA | OM909 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 909 INFORM AND INSTRUC -LOAD MGMT | OM909x | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 910 MISCELLANEOUS CUSTOMER SERVICE | OM910 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 911 DEMONSTRATION AND SELLING EXP | OM911 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 912 DEMONSTRATION AND SELLING EXP | OM912 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 913 ADVERTISING EXPENSES | OM913 | TUP | $ | 488,103 | 103663.39 | 219971.2 | 7179.7 | 3679.68 | 21007.78 |
| 915 MDSE-JOBBING-CONTRACT | OM915 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 916 MISC SALES EXPENSE | OM916 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Customer Service Expense | OMCS | | $ | 1,079,295 | 208053.36 | 295616.28 | 47908.77 | 45996.13 | 74324.07 |
| Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service | OMSUB2 | | | 417,817,266 | | | | | |
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | | |
| **Administrative and General Expense** | | | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | OM920 | LBSUB9 | $ | 14,315,713 | 2092449.03 | 1522142.97 | 1300504.05 | 1313340.25 | 1495631.43 |
| 921 OFFICE SUPPLIES AND EXPENSES | OM921 | LBSUB9 | $ | 6,915,648 | 432853.99 | 1082881.21 | 447533.76 | 790015.22 | 520665.52 |
| 922 ADMINISTRATIVE EXPENSES TRANSFERRED | OM922 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 923 OUTSIDE SERVICES EMPLOYED | OM923 | LBSUB9 | $ | 3,954,189 | 337609.86 | 1175322.5 | 167190.31 | 217289.45 | 526048.51 |
| 924 PROPERTY INSURANCE | OM924 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 925 INJURIES AND DAMAGES - INSURAN | OM925 | LBSUB9 | $ | 179,889 | 13413.2 | 21072.48 | 15311.2 | 15178.2 | 25828.68 |
| 926 EMPLOYEE BENEFITS | OM926 | LBSUB9 | $ | 169,663 | 4383.08 | -2896.98 | 25050.87 | 3276.12 | 0 |
| 927 FRANCHISE REQUIREMENTS | OM927 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 928 REGULATORY COMMISSION FEES | OM928 | TUP | $ | 1,188,958 | 2785 | 925 | 0 | 0 | 1790.1 |
| 929 DUPLICATE CHARGES-CR | OM929 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 930 MISCELLANEOUS GENERAL EXPENSES | OM930 | LBSUB9 | $ | 1,686,131 | 68132.08 | 249532.88 | 81732.32 | 215359.96 | 139106.95 |
| 931 RENTS AND LEASES | OM931 | PGP | $ | 1,933 | 161.09 | 161.09 | 161.09 | 161.09 | 161.09 |
| 935 MAINTENANCE OF GENERAL PLANT | OM935 | PGP | $ | 208,156 | 23769.07 | 24452.06 | 14946.22 | 44645.76 | 14798.82 |
| Total Administrative and General Expense | OMAG | | $ | 28,620,280 | 2,975,556.40 | 4,073,593.21 | 2,052,429.82 | 2,599,266.05 | 2,724,031.10 |
| Total Operation and Maintenance Expenses | TOM | | $ | 446,437,546 | | | | | |
| Operation and Maintenance Expenses Less Purchase Power & Fuel | OMLPP | | $ | 224,914,919 | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Customer Accounts Expense** | | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | OM901 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 902 METER READING EXPENSES | OM902 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 903 RECORDS AND COLLECTION | OM903 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 904 UNCOLLECTIBLE ACCOUNTS | OM904 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 905 MISC CUST ACCOUNTS | OM903 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Customer Accounts Expense | OMCA | | | | | | | |
| **Customer Service Expense** | | | | | | | | |
| 907 SUPERVISION | OM907 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 908 CUSTOMER ASSISTANCE EXPENSES | OM908 | TUP | 42590.29 | 45548.65 | 47955.97 | 41989.91 | 36242.46 | 23856.1 |
| 908 CUSTOMER ASSISTANCE EXP-INCENTIVES | OM908x | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 909 INFORMATIONAL AND INSTRUCTIONA | OM909 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 909 INFORM AND INSTRUC -LOAD MGMT | OM909x | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 910 MISCELLANEOUS CUSTOMER SERVICE | OM910 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 911 DEMONSTRATION AND SELLING EXP | OM911 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 912 DEMONSTRATION AND SELLING EXP | OM912 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 913 ADVERTISING EXPENSES | OM913 | TUP | -36141.33 | 11695.6 | 18760.65 | 13630.34 | 24487.44 | 100169 |
| 915 MDSE-JOBBING-CONTRACT | OM915 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 916 MISC SALES EXPENSE | OM916 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Customer Service Expense | OMCS | | 6448.96 | 57244.25 | 66716.62 | 55620.25 | 60729.9 | 124025.1 |
| Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service | OMSUB2 | | | | | | | |
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | |
| **Administrative and General Expense** | | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | OM920 | LBSUB9 | 1326991.23 | 427833.15 | 1263415.19 | 446430.74 | 948956.12 | 1178332.32 |
| 921 OFFICE SUPPLIES AND EXPENSES | OM921 | LBSUB9 | 591943.78 | 481169.78 | 617503.76 | 673906.86 | 384307.2 | 494280.5 |
| 922 ADMINISTRATIVE EXPENSES TRANSFERRED | OM922 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 923 OUTSIDE SERVICES EMPLOYED | OM923 | LBSUB9 | 388800.48 | 188378.03 | 280346.99 | 85723.73 | 284467.92 | 205203.9 |
| 924 PROPERTY INSURANCE | OM924 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 925 INJURIES AND DAMAGES - INSURAN | OM925 | LBSUB9 | 14679.26 | 12401 | 12401 | 12401 | 12401 | 12401 |
| 926 EMPLOYEE BENEFITS | OM926 | LBSUB9 | 53705.24 | 8851.25 | 5962.88 | 6192.45 | 33341.38 | 6109.83 |
| 927 FRANCHISE REQUIREMENTS | OM927 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 928 REGULATORY COMMISSION FEES | OM928 | TUP | 1353.14 | 48087.75 | 665466.25 | 48046.08 | 139142.52 | 18419 |
| 929 DUPLICATE CHARGES-CR | OM929 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 930 MISCELLANEOUS GENERAL EXPENSES | OM930 | LBSUB9 | 94167.83 | 259652.47 | 119570.46 | 108391.43 | 155943.83 | 63658.14 |
| 931 RENTS AND LEASES | OM931 | PGP | 161.09 | 161.09 | 161.09 | 161.09 | 161.09 | 161.09 |
| 935 MAINTENANCE OF GENERAL PLANT | OM935 | PGP | 8698.33 | 7258.14 | 13445.04 | 8125.63 | 22399.01 | 9027.98 |
| Total Administrative and General Expense | OMAG | | 2,480,500.38 | 1,433,792.66 | 2,978,272.66 | 1,389,379.01 | 1,981,120.07 | 1,987,593.76 |
| Total Operation and Maintenance Expenses | TOM | | | | | | | |
| Operation and Maintenance Expenses Less Purchase Power & Fuel | OMLPP | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Customer Accounts Expense** | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | OM901 | F025 | 0 |
| 902 METER READING EXPENSES | OM902 | F025 | 0 |
| 903 RECORDS AND COLLECTION | OM903 | F025 | 0 |
| 904 UNCOLLECTIBLE ACCOUNTS | OM904 | F025 | 0 |
| 905 MISC CUST ACCOUNTS | OM903 | F025 | 0 |
| Total Customer Accounts Expense | OMCA | | |
| **Customer Service Expense** | | | |
| 907 SUPERVISION | OM907 | TUP | 0 |
| 908 CUSTOMER ASSISTANCE EXPENSES | OM908 | TUP | 36611.39 |
| 908 CUSTOMER ASSISTANCE EXP-INCENTIVES | OM908x | TUP | 0 |
| 909 INFORMATIONAL AND INSTRUCTIONA | OM909 | TUP | 0 |
| 909 INFORM AND INSTRUC -LOAD MGMT | OM909x | TUP | 0 |
| 910 MISCELLANEOUS CUSTOMER SERVICE | OM910 | TUP | 0 |
| 911 DEMONSTRATION AND SELLING EXP | OM911 | TUP | 0 |
| 912 DEMONSTRATION AND SELLING EXP | OM912 | TUP | 0 |
| 913 ADVERTISING EXPENSES | OM913 | TUP | 0 |
| 915 MDSE-JOBBING-CONTRACT | OM915 | TUP | 0 |
| 916 MISC SALES EXPENSE | OM916 | TUP | 0 |
| Total Customer Service Expense | OMCS | | 36611.39 |
| Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service | OMSUB2 | | |
| **Operation and Maintenance Expenses (Continued)** | | | |
| **Administrative and General Expense** | | | |
| 920 ADMIN. & GEN. SALARIES- | OM920 | LBSUB9 | 999686.96 |
| 921 OFFICE SUPPLIES AND EXPENSES | OM921 | LBSUB9 | 398586.21 |
| 922 ADMINISTRATIVE EXPENSES TRANSFERRED | OM922 | LBSUB9 | 0 |
| 923 OUTSIDE SERVICES EMPLOYED | OM923 | LBSUB9 | 97807.2 |
| 924 PROPERTY INSURANCE | OM924 | TUP | 0 |
| 925 INJURIES AND DAMAGES - INSURAN | OM925 | LBSUB9 | 12401 |
| 926 EMPLOYEE BENEFITS | OM926 | LBSUB9 | 25686.5 |
| 927 FRANCHISE REQUIREMENTS | OM927 | TUP | 0 |
| 928 REGULATORY COMMISSION FEES | OM928 | TUP | 262942.92 |
| 929 DUPLICATE CHARGES-CR | OM929 | LBSUB9 | 0 |
| 930 MISCELLANEOUS GENERAL EXPENSES | OM930 | LBSUB9 | 130882.85 |
| 931 RENTS AND LEASES | OM931 | PGP | 161.09 |
| 935 MAINTENANCE OF GENERAL PLANT | OM935 | PGP | 16590.29 |
| Total Administrative and General Expense | OMAG | | 1,944,745.02 |
| Total Operation and Maintenance Expenses | TOM | | |
| Operation and Maintenance Expenses Less Purchase Power & Fuel | OMLPP | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Labor Expenses** | | | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | LB500 | PROFIX | $ | 4,967,667 | 342832.39 | 1034681.8 | 357452.74 | 317350.15 | 384316.78 |
| 501 FUEL | LB501 | Energy | $ | 3,889,944 | 323255.71 | 364406.07 | 338654.53 | 313289.78 | 326385.9 |
| 502 STEAM EXPENSES | LB502 | PROFIX | $ | 9,023,322 | 657659.63 | 771924.79 | 681077.92 | 630021.61 | 688026.67 |
| 505 ELECTRIC EXPENSES | LB505 | PROFIX | $ | 4,523,897 | 357040.19 | 416235 | 378976.79 | 348125.67 | 369036.85 |
| 506 MISC. STEAM POWER EXPENSES | LB506 | PROFIX | $ | 940,518 | 52261.31 | 80829.64 | 70706.68 | 101840.85 | 81036.08 |
| 507 RENTS | LB507 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 509 ALLOWANCES | LB509 | Energy | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Steam Power Operation Expenses | LBSUB1 | | $ | 23,345,348 | 1066961.13 | 1268989.43 | 1130761.39 | 1079988.13 | 1138099.6 |
| **Steam Power Generation Maintenance Expenses** | | | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | LB510 | Energy | $ | 3,623,969 | 301562.96 | 282674.01 | 280925.01 | 285686.26 | 324812.85 |
| 511 MAINTENANCE OF STRUCTURES | LB511 | PROFIX | $ | 986,831 | 60839.92 | 78449.28 | 79549.6 | 75632 | 64969.97 |
| 512 MAINTENANCE OF BOILER PLANT | LB512 | Energy | $ | 8,700,235 | 613650.58 | 728746.59 | 804049.52 | 597501.69 | 694231.84 |
| 513 MAINTENANCE OF ELECTRIC PLANT | LB513 | Energy | $ | 1,595,642 | 209176.55 | 143092.64 | 90379.11 | 93612.16 | 119373.66 |
| 514 MAINTENANCE OF MISC STEAM PLANT | LB514 | PROFIX | $ | 200,886 | 16879.23 | 22485.07 | 12128 | 16408.41 | 14092.69 |
| Total Steam Power Generation Maintenance Expense | LBSUB2 | | $ | 15,107,564 | 1202109.24 | 1255447.59 | 1267031.24 | 1068840.52 | 1217481.01 |
| Total Steam Power Generation Expense | | | $ | 38,452,913 | 2269070.37 | 2524437.02 | 2397792.63 | 2148828.65 | 2355580.61 |
| **Labor Expenses (Continued)** | | | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | LB546 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 547 FUEL | LB547 | Energy | $ | - | 0 | 0 | 0 | 0 | 0 |
| 548 GENERATION EXPENSE | LB548 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 549 MISC OTHER POWER GENERATION | LB549 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 550 RENTS | LB550 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Expenses | LBSUB7 | | $ | - | | | | | |
| **Other Power Generation Maintenance Expense** | | | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | LB551 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 552 MAINTENANCE OF STRUCTURES | LB552 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | LB553 | PROFIX | $ | 89,555 | 682.21 | 4299.67 | 1026.96 | 2400.3 | 4848.64 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | LB554 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Maintenance Expense | LBSUB8 | | $ | 89,555 | | | | | |
| Total Other Power Generation Expense | | | $ | 89,555 | | | | | |
| Total Production Expense | LPREX | | $ | 38,542,468 | | | | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Labor Expenses** | | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | LB500 | PROFIX | 338156.02 | 414149.39 | 371014.23 | 359005.08 | 369873.15 | 334189.99 |
| 501 FUEL | LB501 | Energy | 309863.06 | 297596.67 | 304977.88 | 310355.07 | 339148.89 | 336547.05 |
| 502 STEAM EXPENSES | LB502 | PROFIX | 640194.64 | 1123637.4 | 744724.17 | 661984.49 | 702417.45 | 982572.63 |
| 505 ELECTRIC EXPENSES | LB505 | PROFIX | 342341.75 | 393006.64 | 354302.21 | 368561.14 | 384521.42 | 384533.54 |
| 506 MISC. STEAM POWER EXPENSES | LB506 | PROFIX | 63015.48 | 66970.66 | 87852.14 | 88369.17 | 86572.5 | 91267.67 |
| 507 RENTS | LB507 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 509 ALLOWANCES | LB509 | Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Steam Power Operation Expenses | LBSUB1 | | 1045551.87 | 1583614.7 | 1186878.52 | 1118914.8 | 1173511.37 | 1458373.84 |
| **Steam Power Generation Maintenance Expenses** | | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | LB510 | Energy | 297255.94 | 289425 | 296206.84 | 280281.91 | 307241.14 | 294029.27 |
| 511 MAINTENANCE OF STRUCTURES | LB511 | PROFIX | 50081.03 | 70791.44 | 106230.99 | 106856.88 | 116200.49 | 96973.59 |
| 512 MAINTENANCE OF BOILER PLANT | LB512 | Energy | 617716.63 | 961798.07 | 675983.16 | 535600.92 | 651081.61 | 924014.95 |
| 513 MAINTENANCE OF ELECTRIC PLANT | LB513 | Energy | 96940.39 | 142971.1 | 124922.34 | 132978.24 | 129288.01 | 126399.56 |
| 514 MAINTENANCE OF MISC STEAM PLANT | LB514 | PROFIX | 9843.3 | 16400.27 | 20426.8 | 23473.83 | 26283.4 | 15419.85 |
| Total Steam Power Generation Maintenance Expense | LBSUB2 | | 1071837.29 | 1481385.88 | 1223770.13 | 1079191.78 | 1230094.65 | 1456837.22 |
| Total Steam Power Generation Expense | | | 2117389.16 | 3065000.58 | 2410648.65 | 2198106.58 | 2403606.02 | 2915211.06 |
| **Labor Expenses (Continued)** | | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | LB546 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 547 FUEL | LB547 | Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| 548 GENERATION EXPENSE | LB548 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 549 MISC OTHER POWER GENERATION | LB549 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 550 RENTS | LB550 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Expenses | LBSUB7 | | | | | | | |
| **Other Power Generation Maintenance Expense** | | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | LB551 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 552 MAINTENANCE OF STRUCTURES | LB552 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | LB553 | PROFIX | 903.26 | 760.91 | 37267.71 | 11775.09 | 12921.35 | 10584.31 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | LB554 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Maintenance Expense | LBSUB8 | | | | | | | |
| Total Other Power Generation Expense | | | | | | | | |
| Total Production Expense | LPREX | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Labor Expenses** | | | |
| **Steam Power Generation Operation Expenses** | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | LB500 | PROFIX | 344645.64 |
| 501 FUEL | LB501 | Energy | 325463.54 |
| 502 STEAM EXPENSES | LB502 | PROFIX | 739080.82 |
| 505 ELECTRIC EXPENSES | LB505 | PROFIX | 427215.91 |
| 506 MISC. STEAM POWER EXPENSES | LB506 | PROFIX | 69795.43 |
| 507 RENTS | LB507 | PROFIX | 0 |
| 509 ALLOWANCES | LB509 | Energy | 0 |
| Total Steam Power Operation Expenses | LBSUB1 | | 1236092.16 |
| **Steam Power Generation Maintenance Expenses** | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | LB510 | Energy | 383868.11 |
| 511 MAINTENANCE OF STRUCTURES | LB511 | PROFIX | 80256.21 |
| 512 MAINTENANCE OF BOILER PLANT | LB512 | Energy | 895859.55 |
| 513 MAINTENANCE OF ELECTRIC PLANT | LB513 | Energy | 186508.29 |
| 514 MAINTENANCE OF MISC STEAM PLANT | LB514 | PROFIX | 7045.58 |
| Total Steam Power Generation Maintenance Expense | LBSUB2 | | 1553537.74 |
| Total Steam Power Generation Expense | | | 2642951.16 |
| **Labor Expenses (Continued)** | | | |
| **Other Power Generation Operation Expense** | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | LB546 | PROFIX | 0 |
| 547 FUEL | LB547 | Energy | 0 |
| 548 GENERATION EXPENSE | LB548 | PROFIX | 0 |
| 549 MISC OTHER POWER GENERATION | LB549 | PROFIX | 0 |
| 550 RENTS | LB550 | PROFIX | 0 |
| Total Other Power Generation Expenses | LBSUB7 | | |
| **Other Power Generation Maintenance Expense** | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | LB551 | PROFIX | |
| 552 MAINTENANCE OF STRUCTURES | LB552 | PROFIX | |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | LB553 | PROFIX | 2084.81 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | LB554 | PROFIX | |
| Total Other Power Generation Maintenance Expense | LBSUB8 | | |
| Total Other Power Generation Expense | | | |
| Total Production Expense | LPREX | | |

Big Rivers Electric Corporation
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| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | | |
| **Purchased Power** | | | | | | | | | |
| 555 PURCHASED POWER | LB555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 PURCHASED POWER Demand | LBD555 | OMPPD | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 PURCHASED POWER OPTIONS | LBO555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 BROKERAGE FEES | LBB555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 MISO TRANSMISSION EXPENSES | LBM555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | LB556 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 557 OTHER EXPENSES | LB557 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 558 DUPLICATE CHARGES | LB558 | Energy | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Purchased Power Labor | LBPP | | $ | - | | | | | |
| **Transmission Labor Expenses** | | | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | LB560 | PTRAN | $ | 835,977 | 155357.97 | 88621.66 | 61719.3 | 53192.77 | 69331.26 |
| 561 LOAD DISPATCHING | LB561 | PTRAN | $ | 1,304,969 | 240520.6 | 133245.05 | 93819.32 | 87693.64 | 104400.26 |
| 562 STATION EXPENSES | LB562 | PTRAN | $ | 598,382 | 102945.93 | 50883.95 | 33705.43 | 39512.69 | 54112.06 |
| 563 OVERHEAD LINE EXPENSES | LB563 | PTRAN | $ | 236,393 | 52690.64 | 20206.01 | 20032.96 | 18769.45 | 17519.18 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | LB565 | PTRAN | $ | - | 0 | 0 | 0 | 0 | 0 |
| 566 MISC. TRANSMISSION EXPENSES | LB566 | PTRAN | $ | 312,375 | 55300.19 | 33112.8 | 26544.3 | 26563.55 | 28599.72 |
| 567 RENTS | LB567 | PTRAN | $ | - | 0 | 0 | 0 | 0 | 0 |
| 568 MAINTENACE SUPERVISION AND ENG | LB568 | PTRAN | $ | 644,925 | 120270.89 | 65874.61 | 48314.25 | 39737.97 | 53182.86 |
| 569 MAINTENACE OF STRUCTURES | LB569 | PTRAN | $ | 318 | 36.88 | 59.34 | 0 | 0 | 59.12 |
| 570 MAINT OF STATION EQUIPMENT | LB570 | PTRAN | $ | 1,433,304 | 240458.8 | 137581.27 | 112331.02 | 103977.18 | 112839.1 |
| 571 MAINT OF OVERHEAD LINES | LB571 | PTRAN | $ | 1,067,766 | 187769.72 | 120250.23 | 62124.04 | 70835.46 | 82150.36 |
| 573 MAINT OF MISC. TRANSMISSION PLANT | LB573 | PTRAN | $ | 46,439 | 6906.42 | 2875.43 | 2872.93 | 4248.62 | 4851.27 |
| Total Transmission Labor Expenses | LBTRAN | | $ | 6,480,848 | 1162258.04 | 652710.35 | 461463.55 | 444531.33 | 527045.19 |
| **Distribution Operation Labor Expense** | | | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | LB580 | F023 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 581 LOAD DISPATCHING | LB581 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 582 STATION EXPENSES | LB582 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 583 OVERHEAD LINE EXPENSES | LB583 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 584 UNDERGROUND LINE EXPENSES | LB584 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 585 STREET LIGHTING EXPENSE | LB585 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES | LB586 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | LB586x | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | LB587 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | LB588 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 589 RENTS | LB589 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Operation Labor Expense | LBDO | | $ | - | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | |
| **Purchased Power** | | | | | | | | |
| 555 PURCHASED POWER | LB555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 PURCHASED POWER Demand | LBD555 | OMPPD | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 PURCHASED POWER OPTIONS | LBO555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 BROKERAGE FEES | LBB555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 MISO TRANSMISSION EXPENSES | LBM555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | LB556 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 557 OTHER EXPENSES | LB557 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 558 DUPLICATE CHARGES | LB558 | Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Purchased Power Labor | LBPP | | | | | | | |
| **Transmission Labor Expenses** | | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | LB560 | PTRAN | 57113.62 | 58908.5 | 68081.43 | 56191.8 | 51380.65 | 68130.77 |
| 561 LOAD DISPATCHING | LB561 | PTRAN | 79471.75 | 90840.85 | 104792.75 | 86864.08 | 84835.7 | 115440.78 |
| 562 STATION EXPENSES | LB562 | PTRAN | 43463.43 | 48316.48 | 56470.33 | 35035.32 | 46067.52 | 51613.79 |
| 563 OVERHEAD LINE EXPENSES | LB563 | PTRAN | 14223.62 | 16460.25 | 15132.13 | 14168.98 | 13692.1 | 15806.34 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | LB565 | PTRAN | 0 | 0 | 0 | 0 | 0 | 0 |
| 566 MISC. TRANSMISSION EXPENSES | LB566 | PTRAN | 21343.51 | 20102.2 | 25810.07 | 11252.29 | 17357.03 | 25204.78 |
| 567 RENTS | LB567 | PTRAN | 0 | 0 | 0 | 0 | 0 | 0 |
| 568 MAINTENACE SUPERVISION AND ENG | LB568 | PTRAN | 43994.75 | 45554.09 | 50783.31 | 42264.13 | 40489.73 | 55734.99 |
| 569 MAINTENACE OF STRUCTURES | LB569 | PTRAN | 26.22 | 0 | 24.61 | 26.14 | 26.21 | 0.65 |
| 570 MAINT OF STATION EQUIPMENT | LB570 | PTRAN | 98690.36 | 92937.1 | 116008.73 | 108080.33 | 93852.16 | 126204.48 |
| 571 MAINT OF OVERHEAD LINES | LB571 | PTRAN | 66143.16 | 68592.74 | 93608.24 | 76903.52 | 71073.25 | 95620.68 |
| 573 MAINT OF MISC. TRANSMISSION PLANT | LB573 | PTRAN | 4378.83 | 3303.42 | 3349.41 | 3196.71 | 3607.42 | 3592.3 |
| Total Transmission Labor Expenses | LBTRAN | | 428849.25 | 445015.63 | 534061.01 | 433983.3 | 422381.77 | 557349.56 |
| **Distribution Operation Labor Expense** | | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | LB580 | F023 | 0 | 0 | 0 | 0 | 0 | 0 |
| 581 LOAD DISPATCHING | LB581 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 582 STATION EXPENSES | LB582 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 583 OVERHEAD LINE EXPENSES | LB583 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 584 UNDERGROUND LINE EXPENSES | LB584 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 585 STREET LIGHTING EXPENSE | LB585 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES | LB586 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | LB586x | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | LB587 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | LB588 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 589 RENTS | LB589 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Operation Labor Expense | LBDO | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Labor Expenses (Continued)** | | | |
| **Purchased Power** | | | |
| 555 PURCHASED POWER | LB555 | OMPP | 0 |
| 555 PURCHASED POWER Demand | LBD555 | OMPPD | 0 |
| 555 PURCHASED POWER OPTIONS | LBO555 | OMPP | 0 |
| 555 BROKERAGE FEES | LBB555 | OMPP | 0 |
| 555 MISO TRANSMISSION EXPENSES | LBM555 | OMPP | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | LB556 | PROFIX | 0 |
| 557 OTHER EXPENSES | LB557 | PROFIX | 0 |
| 558 DUPLICATE CHARGES | LB558 | Energy | 0 |
| Total Purchased Power Labor | LBPP | | 0 |
| **Transmission Labor Expenses** | | | |
| 560 OPERATION SUPERVISION AND ENG | LB560 | PTRAN | 47946.89 |
| 561 LOAD DISPATCHING | LB561 | PTRAN | 83043.95 |
| 562 STATION EXPENSES | LB562 | PTRAN | 36255.02 |
| 563 OVERHEAD LINE EXPENSES | LB563 | PTRAN | 17691.07 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | LB565 | PTRAN | |
| 566 MISC. TRANSMISSION EXPENSES | LB566 | PTRAN | 21184.45 |
| 567 RENTS | LB567 | PTRAN | |
| 568 MAINTENACE SUPERVISION AND ENG | LB568 | PTRAN | 38723.49 |
| 569 MAINTENACE OF STRUCTURES | LB569 | PTRAN | 59.17 |
| 570 MAINT OF STATION EQUIPMENT | LB570 | PTRAN | 90343.75 |
| 571 MAINT OF OVERHEAD LINES | LB571 | PTRAN | 72694.7 |
| 573 MAINT OF MISC. TRANSMISSION PLANT | LB573 | PTRAN | 3256.6 |
| Total Transmission Labor Expenses | LBTRAN | | 205077.71 |
| **Distribution Operation Labor Expense** | | | |
| 580 OPERATION SUPERVISION AND ENGI | LB580 | F023 | 0 |
| 581 LOAD DISPATCHING | LB581 | PDIST | 0 |
| 582 STATION EXPENSES | LB582 | PDIST | 0 |
| 583 OVERHEAD LINE EXPENSES | LB583 | PDIST | 0 |
| 584 UNDERGROUND LINE EXPENSES | LB584 | PDIST | 0 |
| 585 STREET LIGHTING EXPENSE | LB585 | PDIST | 0 |
| 586 METER EXPENSES | LB586 | PDIST | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | LB586x | PDIST | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | LB587 | PDIST | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | LB588 | PDIST | 0 |
| 589 RENTS | LB589 | PDIST | 0 |
| Total Distribution Operation Labor Expense | LBDO | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | | |
| **Distribution Maintenance Labor Expense** | | | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | LB590 | F024 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 591 MAINTENANCE OF STRUCTURES | LB591 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 592 MAINTENANCE OF STATION EQUIPME | LB592 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 593 MAINTENANCE OF OVERHEAD LINES | LB593 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 594 MAINTENANCE OF UNDERGROUND LIN | LB594 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 595 MAINTENANCE OF LINE TRANSFORME | LB595 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | LB596 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 597 MAINTENANCE OF METERS | LB597 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 598 MAINTENANCE OF MISC DISTR PLANT | LB598 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Maintenance Labor Expense | LBDM | | $ | - | | | | | |
| Total Distribution Operation and Maintenance Labor Expenses | | PDIST | | - | | | | | |
| Transmission and Distribution Labor Expenses | | | | 6,480,848 | | | | | |
| Production, Transmission and Distribution Labor Expenses | LBSUB | | $ | 45,023,316 | | | | | |
| **Customer Accounts Expense** | | | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | LB901 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 902 METER READING EXPENSES | LB902 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 903 RECORDS AND COLLECTION | LB903 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 904 UNCOLLECTIBLE ACCOUNTS | LB904 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 905 MISC CUST ACCOUNTS | LB903 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Customer Accounts Labor Expense | LBCA | | $ | - | | | | | |
| **Customer Service Expense** | | | | | | | | | |
| 907 SUPERVISION | LB907 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 908 CUSTOMER ASSISTANCE EXPENSES | LB908 | TUP | $ | 544,608 | 98543.49 | 44838.51 | 39429.59 | 38666.03 | 49827.22 |
| 908 CUSTOMER ASSISTANCE EXP-LOAD MGMT | LB908x | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 909 INFORMATIONAL AND INSTRUCTIONA | LB909 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 909 INFORM AND INSTRUC -LOAD MGMT | LB909x | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 910 MISCELLANEOUS CUSTOMER SERVICE | LB910 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 911 DEMONSTRATION AND SELLING EXP | LB911 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 912 DEMONSTRATION AND SELLING EXP | LB912 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 913 WATER HEATER - HEAT PUMP PROGRAM | LB913 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 915 MDSE-JOBBING-CONTRACT | LB915 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 916 MISC SALES EXPENSE | LB916 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Customer Service Labor Expense | LBCS | | $ | 544,608 | 98543.49 | 44838.51 | 39429.59 | 38666.03 | 49827.22 |
| Sub-Total Labor Exp | LBSUB9 | | | 45,567,924 | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | |
| **Distribution Maintenance Labor Expense** | | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | LB590 | F024 | 0 | 0 | 0 | 0 | 0 | 0 |
| 591 MAINTENANCE OF STRUCTURES | LB591 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 592 MAINTENANCE OF STATION EQUIPME | LB592 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 593 MAINTENANCE OF OVERHEAD LINES | LB593 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 594 MAINTENANCE OF UNDERGROUND LIN | LB594 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 595 MAINTENANCE OF LINE TRANSFORME | LB595 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | LB596 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 597 MAINTENANCE OF METERS | LB597 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 598 MAINTENANCE OF MISC DISTR PLANT | LB598 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Maintenance Labor Expense | LBDM | | | | | | | |
| Total Distribution Operation and Maintenance Labor Expenses | | PDIST | | | | | | |
| Transmission and Distribution Labor Expenses | | | | | | | | |
| Production, Transmission and Distribution Labor Expenses | LBSUB | | | | | | | |
| **Customer Accounts Expense** | | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | LB901 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 902 METER READING EXPENSES | LB902 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 903 RECORDS AND COLLECTION | LB903 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 904 UNCOLLECTIBLE ACCOUNTS | LB904 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 905 MISC CUST ACCOUNTS | LB903 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Customer Accounts Labor Expense | LBCA | | | | | | | |
| **Customer Service Expense** | | | | | | | | |
| 907 SUPERVISION | LB907 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 908 CUSTOMER ASSISTANCE EXPENSES | LB908 | TUP | 37915.48 | 41556.72 | 44591.58 | 38345.68 | 32873.52 | 44118.04 |
| 908 CUSTOMER ASSISTANCE EXP-LOAD MGMT | LB908x | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 909 INFORMATIONAL AND INSTRUCTIONA | LB909 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 909 INFORM AND INSTRUC -LOAD MGMT | LB909x | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 910 MISCELLANEOUS CUSTOMER SERVICE | LB910 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 911 DEMONSTRATION AND SELLING EXP | LB911 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 912 DEMONSTRATION AND SELLING EXP | LB912 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 913 WATER HEATER - HEAT PUMP PROGRAM | LB913 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 915 MDSE-JOBBING-CONTRACT | LB915 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 916 MISC SALES EXPENSE | LB916 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Customer Service Labor Expense | LBCS | | 37915.48 | 41556.72 | 44591.58 | 38345.68 | 32873.52 | 44118.04 |
| Sub-Total Labor Exp | LBSUB9 | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Labor Expenses (Continued)** | | | |
| **Distribution Maintenance Labor Expense** | | | |
| 590 MAINTENANCE SUPERVISION AND EN | LB590 | F024 | |
| 591 MAINTENANCE OF STRUCTURES | LB591 | PDIST | |
| 592 MAINTENANCE OF STATION EQUIPME | LB592 | PDIST | |
| 593 MAINTENANCE OF OVERHEAD LINES | LB593 | PDIST | |
| 594 MAINTENANCE OF UNDERGROUND LIN | LB594 | PDIST | |
| 595 MAINTENANCE OF LINE TRANSFORME | LB595 | PDIST | |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | LB596 | PDIST | |
| 597 MAINTENANCE OF METERS | LB597 | PDIST | |
| 598 MAINTENANCE OF MISC DISTR PLANT | LB598 | PDIST | |
| Total Distribution Maintenance Labor Expense | LBDM | | |
| Total Distribution Operation and Maintenance Labor Expenses | | PDIST | |
| Transmission and Distribution Labor Expenses | | | |
| Production, Transmission and Distribution Labor Expenses | LBSUB | | |
| **Customer Accounts Expense** | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | LB901 | F025 | |
| 902 METER READING EXPENSES | LB902 | F025 | |
| 903 RECORDS AND COLLECTION | LB903 | F025 | |
| 904 UNCOLLECTIBLE ACCOUNTS | LB904 | F025 | |
| 905 MISC CUST ACCOUNTS | LB903 | F025 | |
| Total Customer Accounts Labor Expense | LBCA | | |
| **Customer Service Expense** | | | |
| 907 SUPERVISION | LB907 | TUP | |
| 908 CUSTOMER ASSISTANCE EXPENSES | LB908 | TUP | 33902.45 |
| 908 CUSTOMER ASSISTANCE EXP-LOAD MGMT | LB908x | TUP | |
| 909 INFORMATIONAL AND INSTRUCTIONA | LB909 | TUP | |
| 909 INFORM AND INSTRUC -LOAD MGMT | LB909x | TUP | |
| 910 MISCELLANEOUS CUSTOMER SERVICE | LB910 | TUP | |
| 911 DEMONSTRATION AND SELLING EXP | LB911 | TUP | |
| 912 DEMONSTRATION AND SELLING EXP | LB912 | TUP | |
| 913 WATER HEATER - HEAT PUMP PROGRAM | LB913 | TUP | |
| 915 MDSE-JOBBING-CONTRACT | LB915 | TUP | |
| 916 MISC SALES EXPENSE | LB916 | TUP | |
| Total Customer Service Labor Expense | LBCS | | 33902.45 |
| Sub-Total Labor Exp | LBSUB9 | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | | |
| **Administrative and General Expense** | | | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | LB920 | LBSUB9 | $ | 14,315,714 | 2092449.04 | 1522142.8 | 1300504.05 | 1313340.25 | 1495631.43 |
| 921 OFFICE SUPPLIES AND EXPENSES | LB921 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 922 ADMIN. EXPENSES TRANSFERRED - CREDIT | LB922 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 923 OUTSIDE SERVICES EMPLOYED | LB923 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 924 PROPERTY INSURANCE | LB924 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 925 INJURIES AND DAMAGES - INSURAN | LB925 | LBSUB9 | $ | 27,509 | 2777.2 | 3471.48 | 2777.2 | 2777.2 | 13427.68 |
| 926 EMPLOYEE BENEFITS | LB926 | LBSUB9 | $ | 17,136 | 2711 | -43974.67 | 0 | 0 | 0 |
| 928 REGULATORY COMMISSION FEES | LB928 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 929 DUPLICATE CHARGES-CR | LB929 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 930 MISCELLANEOUS GENERAL EXPENSES | LB930 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 931 RENTS AND LEASES | LB931 | PGP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 935 MAINTENANCE OF GENERAL PLANT | LB935 | PGP | $ | 74,927 | 14602.3 | 14130.42 | 6605.75 | 5191.93 | 4971.6 |
| Total Administrative and General Expense | LBAG | | $ | 14,435,286 | | | | | |
| Total Operation and Maintenance Expenses | TLB | | $ | 60,003,210 | | | | | |
| Operation and Maintenance Expenses Less Purchase Power | LBLPP | | $ | 60,003,210 | | | | | |
| **Other Expenses** | | | | | | | | | |
| **Depreciation Expenses** | | | | | | | | | |
| Production | DEPRDP2 | PPROD | $ | 28,815,395 | 2347440.74 | 2389099.7 | 2595994.55 | 2361961.48 | 2361968.56 |
| Transmission | DEPRDP3 | PTRAN | $ | 5,182,459 | 443546.44 | 533184.66 | 214261.5 | 442312.53 | 442305.66 |
| Transmission | DEPRDP4 | PTRAN | $ | - | | | | | |
| Distribution | DEPRDP5 | PDIST | $ | - | | | | | |
| General & Common Plant | DEPRDP6 | PGP | $ | 238,155 | 17050.71 | 19802.63 | 19799.44 | 19799.44 | 19766.55 |
| Other Plant | DEPROTH | TPIS | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Depreciation Expense | TDEPR | | $ | 34,236,009 | 2808037.89 | 2942086.99 | 2830055.49 | 2824073.45 | 2824040.77 |
| **Accretion Expense** | | | | | | | | | |
| Production | ACRTNP | F017 | $ | - | 0 | 0 | 0 | 0 | 0 |
| Transmission | ACRTNT | PTRAN | $ | - | 0 | 0 | 0 | 0 | 0 |
| Distribution | ACRTND | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Accretion Expense | TACRTN | | $ | - | | | | | |
| Property Taxes & Other | PTAX | TUP | $ | (94,563) | $ (379,997) | $ 87,636 | $ - | $ - | $ 910 |
| Amortization of Investment Tax Credit | OTAX | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| Other Expenses | OT | TUP | $ | (365,864) | $ (6,691) | $ (14,191) | $ (18,627) | $ (23,851) | $ (16,042) |
| Interest | INTLTD | TUP | $ | 47,622,710 | 4168487.53 | 4316793.16 | 4234968.72 | 3796291.74 | 4133482.27 |
| Other Deductions | DEDUCT | TUP | $ | 109,257 | 7611 | 15379 | 4539 | 6545 | 5640 |
| **Total Other Expenses** | TOE | | $ | 81,507,549 | $ 3,789,411 | $ 4,405,617 | $ 4,220,881 | $ 3,778,986 | $ 4,123,991 |
| **Total Cost of Service (O&M + Other Expenses)** | | | $ | 527,945,095 | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | |
| **Administrative and General Expense** | | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | LB920 | LBSUB9 | 1326991.23 | 427833.15 | 1263415.19 | 446430.74 | 948956.12 | 1178332.32 |
| 921 OFFICE SUPPLIES AND EXPENSES | LB921 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 922 ADMIN. EXPENSES TRANSFERRED - CREDIT | LB922 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 923 OUTSIDE SERVICES EMPLOYED | LB923 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 924 PROPERTY INSURANCE | LB924 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 925 INJURIES AND DAMAGES - INSURAN | LB925 | LBSUB9 | 2278.26 | 0 | 0 | 0 | 0 | 0 |
| 926 EMPLOYEE BENEFITS | LB926 | LBSUB9 | 23360 | 5840 | 5840 | 5840 | 5840 | 5840 |
| 928 REGULATORY COMMISSION FEES | LB928 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 929 DUPLICATE CHARGES-CR | LB929 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 930 MISCELLANEOUS GENERAL EXPENSES | LB930 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 931 RENTS AND LEASES | LB931 | PGP | 0 | 0 | 0 | 0 | 0 | 0 |
| 935 MAINTENANCE OF GENERAL PLANT | LB935 | PGP | 5560.19 | 2953.32 | 3794.54 | 2464 | 6700.24 | 5197.69 |
| Total Administrative and General Expense | LBAG | | | | | | | |
| Total Operation and Maintenance Expenses | TLB | | | | | | | |
| Operation and Maintenance Expenses Less Purchase Power | LBLPP | | | | | | | |
| **Other Expenses** | | | | | | | | |
| **Depreciation Expenses** | | | | | | | | |
| Production | DEPRDP2 | PPROD | 2361962.84 | 2422279.6 | 2384018.59 | 2354733.3 | 2368037.83 | 2494767.54 |
| Transmission | DEPRDP3 | PTRAN | 442357.04 | 442363.4 | 442363.15 | 442486.5 | 440016.44 | 450445.41 |
| Transmission | DEPRDP4 | PTRAN | | | | | | |
| Distribution | DEPRDP5 | PDIST | | | | | | |
| General & Common Plant | DEPRDP6 | PGP | 19733.28 | 21031.35 | 19852.73 | 20082.98 | 19987.32 | 21286.62 |
| Other Plant | DEPROTH | TPIS | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Depreciation Expense | TDEPR | | 2824053.16 | 2885674.35 | 2846234.47 | 2817302.78 | 2828041.59 | 2966499.57 |
| **Accretion Expense** | | | | | | | | |
| Production | ACRTNP | F017 | 0 | 0 | 0 | 0 | 0 | 0 |
| Transmission | ACRTNT | PTRAN | 0 | 0 | 0 | 0 | 0 | 0 |
| Distribution | ACRTND | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Accretion Expense | TACRTN | | | | | | | |
| Property Taxes & Other | PTAX | TUP | $ 65,000 | $ 2,342 | $ 65,000 | $ - | $ (429) | $ 65,000 |
| Amortization of Investment Tax Credit | OTAX | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Expenses | OT | TUP | $ (27,557) | $ (8,263) | $ (42,136) | $ (42,545) | $ (48,997) | $ (56,550) |
| Interest | INTLTD | TUP | 3848131.38 | 3699835.35 | 3741933.32 | 3942436.65 | 3958146.18 | 3830668.47 |
| Other Deductions | DEDUCT | TUP | -2109 | 4540 | 14599 | 10828 | 16243 | 12411 |
| **Total Other Expenses** | TOE | | $ 3,883,465 | $ 3,698,454 | $ 3,779,396 | $ 3,910,720 | $ 3,924,964 | $ 3,851,529 |
| **Total Cost of Service (O&M + Other Expenses)** | | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Labor Expenses (Continued)** | | | |
| **Administrative and General Expense** | | | |
| 920 ADMIN. & GEN. SALARIES- | LB920 | LBSUB9 | 999687.37 |
| 921 OFFICE SUPPLIES AND EXPENSES | LB921 | LBSUB9 | |
| 922 ADMIN. EXPENSES TRANSFERRED - CREDIT | LB922 | LBSUB9 | |
| 923 OUTSIDE SERVICES EMPLOYED | LB923 | LBSUB9 | |
| 924 PROPERTY INSURANCE | LB924 | TUP | |
| 925 INJURIES AND DAMAGES - INSURAN | LB925 | LBSUB9 | 0 |
| 926 EMPLOYEE BENEFITS | LB926 | LBSUB9 | 5840 |
| 928 REGULATORY COMMISSION FEES | LB928 | TUP | |
| 929 DUPLICATE CHARGES-CR | LB929 | LBSUB9 | |
| 930 MISCELLANEOUS GENERAL EXPENSES | LB930 | LBSUB9 | |
| 931 RENTS AND LEASES | LB931 | PGP | |
| 935 MAINTENANCE OF GENERAL PLANT | LB935 | PGP | 2754.81 |
| Total Administrative and General Expense | LBAG | | |
| Total Operation and Maintenance Expenses | TLB | | |
| Operation and Maintenance Expenses Less Purchase Power | LBLPP | | |
| **Other Expenses** | | | |
| **Depreciation Expenses** | | | |
| Production | DEPRDP2 | PPROD | 2373130.48 |
| Transmission | DEPRDP3 | PTRAN | 446815.89 |
| Transmission | DEPRDP4 | PTRAN | |
| Distribution | DEPRDP5 | PDIST | |
| General & Common Plant | DEPRDP6 | PGP | 19962.11 |
| Other Plant | DEPROTH | TPIS | 0 |
| Total Depreciation Expense | TDEPR | | 2839908.48 |
| **Accretion Expense** | | | |
| Production | ACRTNP | F017 | 0 |
| Transmission | ACRTNT | PTRAN | 0 |
| Distribution | ACRTND | PDIST | 0 |
| Total Accretion Expense | TACRTN | | |
| Property Taxes & Other | PTAX | TUP | $ (25) |
| Amortization of Investment Tax Credit | OTAX | TUP | 0 |
| Other Expenses | OT | TUP | $ (60,414) |
| Interest | INTLTD | TUP | 3951535 |
| Other Deductions | DEDUCT | TUP | 13031 |
| **Total Other Expenses** | TOE | | $ 3,904,127 |
| **Total Cost of Service (O&M + Other Expenses)** | | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|
| **Revenues** | | | | | | | | |
| Jackson Purchase | | | $ 31,526,082 | 2,047,421 | 2,967,876 | 3,236,562 | 2,630,578 | 2,282,284 |
| Kenergy | | | $ 56,579,648 | 3,789,093 | 5,385,841 | 5,977,907 | 4,990,050 | 4,209,222 |
| Meade | | | $ 22,828,970 | 1,551,653 | 2,374,865 | 2,690,998 | 2,281,167 | 1,830,442 |
| Large Industrial | | | $ 39,110,620 | 3,326,073 | 3,242,060 | 3,257,550 | 3,000,170 | 3,334,841 |
| Century Total | | | $ 150,725,511 | 14,123,587 | 13,900,845 | 12,327,658 | 10,978,277 | 13,026,782 |
| Alcan Total | | | $ 131,680,624 | 11,327,935 | 11,867,881 | 11,227,291 | 10,087,671 | 11,349,236 |
| | Total Rural | | $ 110,934,700 | $ 7,388,167 | $ 10,728,582 | $ 11,905,467 | $ 9,901,794 | $ 8,321,948 |
| | Total Industrial | | $ 39,110,620 | $ 8,666,818 | $ 11,002,766 | $ 11,926,456 | $ 10,271,387 | $ 9,374,506 |
| | Total Smelter | | $ 282,406,135 | $ 25,451,523 | $ 25,768,725 | $ 23,554,949 | $ 21,065,948 | $ 24,376,019 |
| | Total | | $ 432,451,455 | $ 36,165,762 | $ 39,739,368 | $ 38,717,967 | $ 33,967,912 | $ 36,032,808 |
| Century Invoiced | | | $ 149,837,373 | 12,898,686 | 13,350,197 | 12,412,617 | 10,978,277 | 13,026,782 |
| Alcan Invoiced | | | $ 131,911,075 | 10,982,583 | 11,672,836 | 11,353,440 | 10,087,671 | 11,349,236 |
| Century Adjustments | | | $ 888,139 | 1,224,902 | 550,648 | (84,959) | | |
| Alcan Adjustments | | | $ (230,451) | 345,352 | 195,044 | (126,150) | | |
| Off System Sales | | | $ 76,543,801 | $ 1,839,442 | $ 4,073,308 | $ 8,147,840 | $ 9,539,433 | $ 7,986,498 |
| Income from Leased Property Net | | | $ 149,673 | $ 149,673 | $ - | $ - | $ - | $ - |
| Other Operating Revenue & Income | | | $ 13,778,745 | $ 1,230,861 | $ 1,033,968 | $ 1,152,998 | $ 1,145,023 | $ 1,070,097 |
| OSS Vanable O&M | | | $ 46,035,981 | $ 1,471,622 | $ 2,691,212 | $ 4,162,194 | $ 5,284,841 | $ 5,083,040 |
| **Energy** | | | | | | | | |
| Jackson Purchase | | | 694,512,540 | 45,926,970 | 65,978,630 | 71,338,200 | 59,712,514 | 49,429,743 |
| Kenergy | | | 1,255,008,258 | 85,135,870 | 120,014,010 | 132,891,880 | 114,367,690 | 91,992,020 |
| Meade | | | 499,627,006 | 34,444,920 | 51,694,410 | 59,035,140 | 51,393,370 | 38,028,116 |
| Large Industrial | | | 928,887,170 | 78,192,702 | 74,359,872 | 75,056,282 | 70,510,685 | 78,126,590 |
| Century | | | 3,949,411,321 | 310,167,027 | 331,563,740 | 339,238,984 | 318,278,276 | 343,763,177 |
| Alcan | | | 3,163,910,039 | 257,031,413 | 268,912,646 | 270,478,213 | 245,969,029 | 270,738,402 |
| Total Rural | | | 2,449,147,804 | 165,507,760 | 237,687,050 | 263,265,220 | 225,473,574 | 179,449,879 |
| Total Industrial | | | 928,887,170 | 78,192,702 | 74,359,872 | 75,056,282 | 70,510,685 | 78,126,590 |
| Total Smelter | | | 7,113,321,360 | 567,198,440 | 600,476,386 | 609,717,197 | 564,247,305 | 614,501,579 |
| Total | | | 10,491,356,334 | 810,898,902 | 912,523,308 | 948,038,699 | 860,231,564 | 872,078,048 |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Revenues** | | | | | | | | |
| Jackson Purchase | | | 1,799,767 | 2,308,067 | 3,063,639 | 3,258,780 | 3,399,012 | 2,561,800 |
| Kenergy | | | 3,188,379 | 4,134,538 | 5,323,163 | 5,636,870 | 5,853,842 | 4,573,561 |
| Meade | | | 1,214,667 | 1,532,681 | 1,963,540 | 2,110,692 | 2,169,733 | 1,693,499 |
| Large Industrial | | | 3,161,352 | 3,245,699 | 3,234,324 | 3,234,990 | 3,373,185 | 3,344,243 |
| Century Total | | | 12,044,160 | 12,679,922 | 11,679,623 | 12,055,865 | 12,367,467 | 11,801,654 |
| Alcan Total | | | 10,471,146 | 11,169,007 | 10,543,631 | 10,857,129 | 10,839,072 | 10,177,927 |
| | Total Rural | | $ 6,202,813 | $ 7,975,287 | $ 10,350,341 | $ 11,006,341 | $ 11,422,586 | $ 8,828,859 |
| | Total Industrial | | $ 7,564,398 | $ 8,912,918 | $ 10,521,026 | $ 10,982,552 | $ 11,396,759 | $ 9,611,302 |
| | Total Smelter | | $ 22,515,306 | $ 23,848,930 | $ 22,223,254 | $ 22,912,994 | $ 23,206,539 | $ 21,979,581 |
| | Total | | $ 31,879,471 | $ 35,069,915 | $ 35,807,919 | $ 37,154,326 | $ 38,002,310 | $ 34,152,683 |
| Century Invoiced | | | 12,044,160 | 12,679,922 | 11,679,623 | 12,055,865 | 12,367,467 | 12,580,920 |
| Alcan Invoiced | | | 10,471,146 | 11,169,007 | 10,543,631 | 10,857,129 | 10,839,072 | 10,806,724 |
| Century Adjustments | | | | | | | | (779,265) |
| Alcan Adjustments | | | | | | | | (628,797) |
| Off System Sales | | | $ 5,678,794 | $ 6,341,556 | $ 7,049,362 | $ 7,908,927 | $ 8,630,309 | $ 5,166,061 |
| Income from Leased Property Net | | | $ - | $ - | $ - | $ - | $ - | $ - |
| Other Operating Revenue & Income | | | $ 1,140,133 | $ 1,143,171 | $ 1,284,686 | $ 1,142,016 | $ 1,145,336 | $ 1,142,234 |
| OSS Variable O&M | | | $ 3,852,774 | $ 3,932,574 | $ 3,863,529 | $ 4,155,945 | $ 4,803,709 | $ 3,568,984 |
| **Energy** | | | | | | | | |
| Jackson Purchase | | | 40,334,720 | 49,465,221 | 67,937,977 | 74,389,907 | 74,455,490 | 53,358,978 |
| Kenergy | | | 72,904,910 | 88,391,581 | 119,415,050 | 128,859,539 | 129,305,728 | 95,902,980 |
| Meade | | | 28,079,875 | 32,805,170 | 43,966,515 | 47,969,570 | 47,509,670 | 35,325,370 |
| Large Industrial | | | 78,086,611 | 79,512,076 | 79,858,265 | 78,927,327 | 82,005,334 | 79,182,043 |
| Century | | | 323,212,786 | 331,276,534 | 324,397,171 | 337,256,977 | 345,310,998 | 317,766,683 |
| Alcan | | | 260,668,275 | 268,579,997 | 259,859,800 | 268,729,560 | 268,160,608 | 257,328,832 |
| Total Rural | | | 141,319,505 | 170,661,972 | 231,319,542 | 251,219,016 | 251,270,888 | 184,587,328 |
| Total Industrial | | | 78,086,611 | 79,512,076 | 79,858,265 | 78,927,327 | 82,005,334 | 79,182,043 |
| Total Smelter | | | 583,881,061 | 599,856,531 | 584,256,971 | 605,986,537 | 613,471,606 | 575,095,515 |
| Total | | | 803,287,177 | 850,030,579 | 895,434,778 | 936,132,880 | 946,747,828 | 838,864,886 |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Revenues** | | | |
| Jackson Purchase | | | 1,970,297 |
| Kenergy | | | 3,517,183 |
| Meade | | | 1,415,034 |
| Large Industrial | | | 3,356,132 |
| Century Total | | | 13,739,670 |
| Alcan Total | | | 11,762,698 |
| | Total Rural | | $ 6,902,515 |
| | Total Industrial | | $ 8,288,350 |
| | Total Smelter | | $ 25,502,368 |
| | Total | | $ 35,761,015 |
| Century Invoiced | | | 13,762,856 |
| Alcan Invoiced | | | 11,778,599 |
| Century Adjustments | | | (23,186) |
| Alcan Adjustments | | | (15,901) |
| Off System Sales | | | 4,182,271 |
| Income from Leased Property Net | | | $ - |
| Other Operating Revenue & Income | | | $ 1,148,221 |
| OSS Variable O&M | | | $ 3,165,556 |
| **Energy** | | | |
| Jackson Purchase | | | 42,184,190 |
| Kenergy | | | 75,827,000 |
| Meade | | | 29,374,880 |
| Large Industrial | | | 75,069,383 |
| Century | | | 327,178,968 |
| Alcan | | | 267,453,264 |
| Total Rural | | | 147,386,070 |
| Total Industrial | | | 75,069,383 |
| Total Smelter | | | 594,632,232 |
| Total | | | 817,087,685 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Plant in Service** | | | | | | | |
| Intangible Plant | INTPLT | PT&D | $ 66,895 | 58,634 | - | - | 8,261 |
| Production Plant | PPROD | F001 | $ 1,686,796,955 | 1,686,796,955 | - | - | - |
| Transmission Plant | PTRAN | F002 | $ 237,659,206 | - | - | - | 237,659,206 |
| Distribution Plant | PDIST | F003 | $ - | - | - | - | - |
| **Total Production & Transmission Plant** | PT&D | | 1,924,456,160 | 1,686,796,955 | - | - | 237,659,206 |
| General Plant | PGP | PT&D | $ 18,511,051 | 16,225,043 | - | - | 2,286,008 |
| **Total Plant in Service** | TPIS | | $ 1,943,034,107 | $ 1,703,080,632 | $ - | $ - | $ 239,953,475 |
| **Construction Work in Progress (CWIP)** | | | | | | | |
| CWIP Production | CWIP1 | PPROD | $ 22,411,274 | 22,411,274 | - | - | - |
| CWIP Transmission | CWIP2 | PTRAN | $ 7,475,859 | - | - | - | 7,475,859 |
| CWIP Distribution Plant | CWIP3 | PDIST | $ - | - | - | - | - |
| CWIP General Plant | CWIP4 | PT&D | $ 16,915,005 | 14,826,100 | - | - | 2,088,905 |
| **Total Construction Work in Progress** | TCWIP | | $ 46,802,138 | $ 37,237,374 | $ - | $ - | $ 9,564,764 |
| **Total Utility Plant** | | | $ 1,989,836,245 | $ 1,740,318,006 | $ - | $ - | $ 249,518,239 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Rate Base | | | | | | | |
| **Total Utility Plant** | TUP | | $ 1,989,836,245 | $ 1,740,318,006 | $ - | $ - | $ 249,518,239 |
| Less: Acummulated Provision for Depreciation | | | | | | | |
| Production | ADEPREPA | PPROD | $ 790,847,523 | 790,847,523 | - | - | - |
| Transmission | ADEPRTP | PTRAN | $ 107,564,747 | - | - | - | 107,564,747 |
| Distribution | ADEPRD11 | PDIST | $ - | - | - | - | - |
| General & Common Plant | ADEPRD12 | PT&D | $ 6,300,770 | 5,522,661 | - | - | 778,109 |
| Intangible, Misc, and Other Plant | ADEPRGP | PT&D | $ - | - | - | - | - |
| Retirement Work In Progress | ADEPRRT | PT&D | $ - | - | - | - | - |
| Total Accumulated Depreciation | TADEPR | | $ 904,713,040 | $ 796,370,184 | $ - | $ - | $ 108,342,855 |
| Net Utility Plant | NTPLANT | | $ 1,085,123,206 | $ 943,947,822 | $ - | $ - | $ 141,175,384 |
| Working Capital | | | | | | | |
| Cash Working Capital - Operation and Maintenance Expenses | CWC | OMLPP | $ 28,114,365 | 13,900,247 | 11,969,243 | - | 2,244,875 |
| Materials and Supplies | M&S | TPIS | $ 22,777,820 | 19,964,891 | - | - | 2,812,929 |
| Fuel Stock | PREPAY | TPIS | $ 34,326,112 | 30,087,036 | - | - | 4,239,076 |
| Total Working Capital | TWC | | $ 85,218,297 | $ 63,952,174 | $ 11,969,243 | $ - | $ 9,296,880 |
| **Net Rate Base** | RB | | $ 1,170,341,502 | $ 1,007,899,995 | $ 11,969,243 | $ - | $ 150,472,264 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Operation and Maintenance Expenses | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | OM500 | PROFIX | $ 4,974,566 | 4,974,566 | - | - | - |
| 501 FUEL | OM501 | Energy | $ 200,919,367 | - | 200,919,367 | - | - |
| 502 STEAM EXPENSES | OM502 | PROFIX | $ 34,453,882 | 34,453,882 | - | - | - |
| 505 ELECTRIC EXPENSES | OM505 | PROFIX | $ 5,730,122 | 5,730,122 | - | - | - |
| 506 MISC. STEAM POWER EXPENSES | OM506 | PROFIX | $ 7,451,302 | 7,451,302 | - | - | - |
| 507 RENTS | OM507 | PROFIX | $ - | - | - | - | - |
| 509 ALLOWANCES | OM509 | Energy | $ 429,682 | - | 429,682 | - | - |
| Total Steam Power Operation Expenses | | | $ 253,958,921 | $ 52,609,872 | $ 201,349,049 | $ - | $ - |
| **Steam Power Generation Maintenance Expenses** | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | OM510 | Energy | $ 3,631,867 | - | 3,631,867 | - | - |
| 511 MAINTENANCE OF STRUCTURES | OM511 | PROFIX | $ 3,346,806 | 3,346,806 | - | - | - |
| 512 MAINTENANCE OF BOILER PLANT | OM512 | Energy | $ 30,113,309 | - | 30,113,309 | - | - |
| 513 MAINTENANCE OF ELECTRIC PLANT | OM513 | Energy | $ 6,251,804 | - | 6,251,804 | - | - |
| 514 MAINTENANCE OF MISC STEAM PLANT | OM514 | PROFIX | $ 877,364 | 877,364 | - | - | - |
| Total Steam Power Generation Maintenance Expense | | | $ 44,221,151 | $ 4,224,170 | $ 39,996,981 | $ - | $ - |
| Total Steam Power Generation Expense | | | $ 298,180,072 | $ 56,834,042 | $ 241,346,030 | $ - | $ - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | | Total System | | Production Demand | | Production Energy | | Steam Direct | | Transmission Demand |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Operation and Maintenance Expenses (Continued) | | | | | | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | OM546 | PROFIX | $ | - | | - | | - | | - | | - |
| 547 FUEL | OM547 | Energy | $ | 706,789 | | - | | 706,789 | | - | | - |
| 548 GENERATION EXPENSE | OM548 | PROFIX | $ | 34,608 | | 34,608 | | - | | - | | - |
| 549 MISC OTHER POWER GENERATION | OM549 | PROFIX | $ | - | | - | | - | | - | | - |
| 550 RENTS | OM550 | PROFIX | $ | - | | - | | - | | - | | - |
| Total Other Power Generation Expenses | | | $ | 741,396 | $ | 34,608 | $ | 706,789 | $ | - | $ | - |
| **Other Power Generation Maintenance Expense** | | | | | | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | OM551 | PROFIX | $ | - | | - | | - | | - | | - |
| 552 MAINTENANCE OF STRUCTURES | OM552 | PROFIX | $ | - | | - | | - | | - | | - |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | OM553 | PROFIX | $ | 625,088 | | 625,088 | | - | | - | | - |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | OM554 | PROFIX | $ | - | | - | | - | | - | | - |
| Total Other Power Generation Maintenance Expense | | | $ | 625,088 | $ | 625,088 | $ | - | $ | - | $ | - |
| Total Other Power Generation Expense | | | $ | 1,366,485 | $ | 659,696 | $ | 706,789 | $ | - | $ | - |
| Total Station Expense | | | $ | 299,546,557 | $ | 57,493,738 | $ | 242,052,819 | $ | - | $ | - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Operation and Maintenance Expenses (Continued) | | | | | | | |
| **Other Power Supply Expenses** | | | | | | | |
| 555 PURCHASED POWER Energy | OM555 | OMPP | $ 19,466,790 | - | 19,466,790 | - | - |
| 555 PURCHASED POWER Demand | OMD555 | OMPPD | $ 4,210,045 | 4,210,045 | - | - | - |
| 555 PURCHASED POWER BREC Share of HMP&L Station Two | OMH555 | OMPPH | $ 58,293,374 | 13,175,571 | 45,117,803 | - | - |
| 555 PURCHASED POWER OPTIONS | OMO555 | OMPP | $ - | - | - | - | - |
| 555 BROKERAGE FEES | OMB555 | OMPP | $ - | - | - | - | - |
| 555 MISO TRANSMISSION EXPENSES | OMM555 | OMPP | $ - | - | - | - | - |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | OM556 | PROFIX | $ 909,422 | 909,422 | - | - | - |
| 557 OTHER EXPENSES | OM557 | PROFIX | $ 20,575,465 | 20,575,465 | - | - | - |
| 558 DUPLICATE CHARGES | OM558 | Energy | $ - | - | - | - | - |
| Total Other Power Supply Expenses | TPP | | $ 103,455,096 | $ 38,870,503 | $ 64,584,593 | $ - | $ - |
| Total Electric Power Generation Expenses | | | $ 403,001,653 | $ 96,364,241 | $ 306,637,411 | $ - | $ - |
| **Transmission Expenses** | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | OM560 | LBTRAN | $ 876,815 | - | - | - | 876,815 |
| 561 LOAD DISPATCHING | OM561 | LBTRAN | $ 1,454,938 | - | - | - | 1,454,938 |
| 562 STATION EXPENSES | OM562 | PTRAN | $ 1,163,408 | - | - | - | 1,163,408 |
| 563 OVERHEAD LINE EXPENSES | OM563 | PTRAN | $ 1,090,014 | - | - | - | 1,090,014 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | OM565 | PTRAN | $ 3,065,817 | - | - | - | 3,065,817 |
| 566 MISC. TRANSMISSION EXPENSES | OM566 | PTRAN | $ 475,381 | - | - | - | 475,381 |
| 567 RENTS | OM567 | PTRAN | $ 24,701 | - | - | - | 24,701 |
| 568 MAINTENACE SUPERVISION AND ENG | OM568 | LBTRAN | $ 647,227 | - | - | - | 647,227 |
| 569 STRUCTURES | OM569 | PTRAN | $ 26,913 | - | - | - | 26,913 |
| 570 MAINT OF STATION EQUIPMENT | OM570 | PTRAN | $ 1,936,760 | - | - | - | 1,936,760 |
| 571 MAINT OF OVERHEAD LINES | OM571 | PTRAN | $ 2,876,462 | - | - | - | 2,876,462 |
| 572 UNDERGROUND LINES | OM572 | PTRAN | $ - | - | - | - | - |
| 573 MISC PLANT | OM573 | PTRAN | $ 97,880 | - | - | - | 97,880 |
| Total Transmission Expenses | | | $ 13,736,318 | $ - | $ - | $ - | $ 13,736,318 |
| **Distribution Operation Expense** | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | OM580 | LBDO | $ - | - | - | - | - |
| 581 LOAD DISPATCHING | OM581 | PDIST | $ - | - | - | - | - |
| 582 STATION EXPENSES | OM582 | PDIST | $ - | - | - | - | - |
| 583 OVERHEAD LINE EXPENSES | OM583 | PDIST | $ - | - | - | - | - |
| 584 UNDERGROUND LINE EXPENSES | OM584 | PDIST | $ - | - | - | - | - |
| 585 STREET LIGHTING EXPENSE | OM585 | PDIST | $ - | - | - | - | - |
| 586 METER EXPENSES | OM586 | PDIST | $ - | - | - | - | - |
| 586 METER EXPENSES - LOAD MANAGEMENT | OM586x | PDIST | $ - | - | - | - | - |
| 587 CUSTOMER INSTALLATIONS EXPENSE | OM587 | PDIST | $ - | - | - | - | - |
| 588 MISCELLANEOUS DISTRIBUTION EXP | OM588 | PDIST | $ - | - | - | - | - |
| 588 MISC DISTR EXP – MAPPIN | OM588x | PDIST | $ - | - | - | - | - |
| 589 RENTS | OM589 | PDIST | $ - | - | - | - | - |
| Total Distribution Operation Expense | OMDO | | $ - | $ - | $ - | $ - | $ - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | |
| **Distribution Maintenance Expense** | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | OM590 | LBDM | $ - | - | - | - | - |
| 591 STRUCTURES | OM591 | PDIST | $ - | - | - | - | - |
| 592 MAINTENANCE OF STATION EQUIPME | OM592 | PDIST | $ - | - | - | - | - |
| 593 MAINTENANCE OF OVERHEAD LINES | OM593 | PDIST | $ - | - | - | - | - |
| 594 MAINTENANCE OF UNDERGROUND LIN | OM594 | PDIST | $ - | - | - | - | - |
| 595 MAINTENANCE OF LINE TRANSFORME | OM595 | PDIST | $ - | - | - | - | - |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | OM596 | PDIST | $ - | - | - | - | - |
| 597 MAINTENANCE OF METERS | OM597 | PDIST | $ - | - | - | - | - |
| 598 MISCELLANEOUS DISTRIBUTION EXPENSES | OM598 | PDIST | $ - | - | - | - | - |
| Total Distribution Maintenance Expense | OMDM | | $ - | $ - | $ - | $ - | $ - |
| Total Distribution Operation and Maintenance Expenses | | | - | - | - | - | - |
| Transmission and Distribution Expenses | | | 13,736,318 | - | - | - | 13,736,318 |
| Production, Transmission and Distribution Expenses | OMSUB | | $ 416,737,971 | $ 96,364,241 | $ 306,637,411 | $ - | $ 13,736,318 |
| **Customer Accounts Expense** | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | OM901 | F025 | $ - | - | - | - | - |
| 902 METER READING EXPENSES | OM902 | F025 | $ - | - | - | - | - |
| 903 RECORDS AND COLLECTION | OM903 | F025 | $ - | - | - | - | - |
| 904 UNCOLLECTIBLE ACCOUNTS | OM904 | F025 | $ - | - | - | - | - |
| 905 MISC CUST ACCOUNTS | OM903 | F025 | $ - | - | - | - | - |
| Total Customer Accounts Expense | OMCA | | $ - | $ - | $ - | $ - | $ - |
| **Customer Service Expense** | | | | | | | |
| 907 SUPERVISION | OM907 | TUP | $ - | - | - | - | - |
| 908 CUSTOMER ASSISTANCE EXPENSES | OM908 | TUP | $ 591,192 | 517,058 | - | - | 74,133 |
| 908 CUSTOMER ASSISTANCE EXP-INCENTIVES | OM908x | TUP | $ - | - | - | - | - |
| 909 INFORMATIONAL AND INSTRUCTIONA | OM909 | TUP | $ - | - | - | - | - |
| 909 INFORM AND INSTRUC -LOAD MGMT | OM909x | TUP | $ - | - | - | - | - |
| 910 MISCELLANEOUS CUSTOMER SERVICE | OM910 | TUP | $ - | - | - | - | - |
| 911 DEMONSTRATION AND SELLING EXP | OM911 | TUP | $ - | - | - | - | - |
| 912 DEMONSTRATION AND SELLING EXP | OM912 | TUP | $ - | - | - | - | - |
| 913 ADVERTISING EXPENSES | OM913 | TUP | $ 488,103 | 426,897 | - | - | 61,206 |
| 915 MDSE-JOBBING-CONTRACT | OM915 | TUP | $ - | - | - | - | - |
| 916 MISC SALES EXPENSE | OM916 | TUP | $ - | - | - | - | - |
| Total Customer Service Expense | OMCS | | $ 1,079,295 | $ 943,955 | $ - | $ - | $ 135,340 |
| Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service | OMSUB2 | | 417,817,266 | 97,308,197 | 306,637,411 | - | 13,871,658 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Operation and Maintenance Expenses (Continued) | | | | | | | |
| **Administrative and General Expense** | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | OM920 | LBSUB9 | $ 14,315,713 | 6,663,061 | 5,595,161 | - | 2,057,491 |
| 921 OFFICE SUPPLIES AND EXPENSES | OM921 | LBSUB9 | $ 6,915,648 | 3,218,798 | 2,702,915 | - | 993,935 |
| 922 ADMINISTRATIVE EXPENSES TRANSFERRED | OM922 | LBSUB9 | $ - | - | - | - | - |
| 923 OUTSIDE SERVICES EMPLOYED | OM923 | LBSUB9 | $ 3,954,189 | 1,840,425 | 1,545,457 | - | 568,306 |
| 924 PROPERTY INSURANCE | OM924 | TUP | $ - | - | - | - | - |
| 925 INJURIES AND DAMAGES - INSURAN | OM925 | LBSUB9 | $ 179,889 | 83,727 | 70,308 | - | 25,854 |
| 926 EMPLOYEE BENEFITS | OM926 | LBSUB9 | $ 169,663 | 78,967 | 66,311 | - | 24,384 |
| 927 FRANCHISE REQUIREMENTS | OM927 | TUP | $ - | - | - | - | - |
| 928 REGULATORY COMMISSION FEES | OM928 | TUP | $ 1,188,958 | 1,039,867 | - | - | 149,091 |
| 929 DUPLICATE CHARGES-CR | OM929 | LBSUB9 | $ - | - | - | - | - |
| 930 MISCELLANEOUS GENERAL EXPENSES | OM930 | LBSUB9 | $ 1,686,131 | 784,788 | 659,008 | - | 242,335 |
| 931 RENTS AND LEASES | OM931 | PGP | $ 1,933 | 1,694 | - | - | 239 |
| 935 MAINTENANCE OF GENERAL PLANT | OM935 | PGP | $ 208,156 | 182,450 | - | - | 25,706 |
| Total Administrative and General Expense | OMAG | | $ 28,620,280 | $ 13,893,778 | $ 10,639,160 | $ - | $ 4,087,342 |
| Total Operation and Maintenance Expenses | TOM | | $ 446,437,546 | $ 111,201,975 | $ 317,276,572 | $ - | $ 17,959,000 |
| Operation and Maintenance Expenses Less Purchase Power & Fuel | OMLPP | | $ 224,914,919 | $ 111,201,975 | $ 95,753,945 | $ - | $ 17,959,000 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Labor Expenses** | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | LB500 | PROFIX | $ 4,967,667 | 4,967,667 | - | - | - |
| 501 FUEL | LB501 | Energy | $ 3,889,944 | - | 3,889,944 | - | - |
| 502 STEAM EXPENSES | LB502 | PROFIX | $ 9,023,322 | 9,023,322 | - | - | - |
| 505 ELECTRIC EXPENSES | LB505 | PROFIX | $ 4,523,897 | 4,523,897 | - | - | - |
| 506 MISC. STEAM POWER EXPENSES | LB506 | PROFIX | $ 940,518 | 940,518 | - | - | - |
| 507 RENTS | LB507 | PROFIX | $ - | - | - | - | - |
| 509 ALLOWANCES | LB509 | Energy | $ - | - | - | - | - |
| Total Steam Power Operation Expenses | LBSUB1 | | $ 23,345,348 | $ 19,455,404 | $ 3,889,944 | $ - | $ - |
| **Steam Power Generation Maintenance Expenses** | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | LB510 | Energy | $ 3,623,969 | - | 3,623,969 | - | - |
| 511 MAINTENANCE OF STRUCTURES | LB511 | PROFIX | $ 986,831 | 986,831 | - | - | - |
| 512 MAINTENANCE OF BOILER PLANT | LB512 | Energy | $ 8,700,235 | - | 8,700,235 | - | - |
| 513 MAINTENANCE OF ELECTRIC PLANT | LB513 | Energy | $ 1,595,642 | - | 1,595,642 | - | - |
| 514 MAINTENANCE OF MISC STEAM PLANT | LB514 | PROFIX | $ 200,886 | 200,886 | - | - | - |
| Total Steam Power Generation Maintenance Expense | LBSUB2 | | $ 15,107,564 | $ 1,187,718 | $ 13,919,846 | $ - | $ - |
| Total Steam Power Generation Expense | | | $ 38,452,913 | $ 20,643,122 | $ 17,809,791 | $ - | $ - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Labor Expenses (Continued) | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | LB546 | PROFIX | $ - | - | - | - | - |
| 547 FUEL | LB547 | Energy | $ - | - | - | - | - |
| 548 GENERATION EXPENSE | LB548 | PROFIX | $ - | - | - | - | - |
| 549 MISC OTHER POWER GENERATION | LB549 | PROFIX | $ - | - | - | - | - |
| 550 RENTS | LB550 | PROFIX | $ - | - | - | - | - |
| Total Other Power Generation Expenses | LBSUB7 | | $ - | $ - | $ - | $ - | $ - |
| **Other Power Generation Maintenance Expense** | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | LB551 | PROFIX | $ - | - | - | - | - |
| 552 MAINTENANCE OF STRUCTURES | LB552 | PROFIX | $ - | - | - | - | - |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | LB553 | PROFIX | $ 89,555 | 89,555 | - | - | - |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | LB554 | PROFIX | $ - | - | - | - | - |
| Total Other Power Generation Maintenance Expense | LBSUB8 | | $ 89,555 | $ 89,555 | $ - | $ - | $ - |
| Total Other Power Generation Expense | | | $ 89,555 | $ 89,555 | $ - | $ - | $ - |
| Total Production Expense | LPREX | | $ 38,542,468 | $ 20,732,677 | $ 17,809,791 | $ - | $ - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|---|
| Labor Expenses (Continued) | | | | | | | | |
| **Purchased Power** | | | | | | | | |
| 555 PURCHASED POWER Energy | LB555 | OMPP | $ | - | - | - | - | - |
| 555 PURCHASED POWER Demand | LBD555 | OMPPD | $ | - | - | - | - | - |
| 555 PURCHASED POWER OPTIONS | LBO555 | OMPP | $ | - | - | - | - | - |
| 555 BROKERAGE FEES | LBB555 | OMPP | $ | - | - | - | - | - |
| 555 MISO TRANSMISSION EXPENSES | LBM555 | OMPP | $ | - | - | - | - | - |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | LB556 | PROFIX | $ | - | - | - | - | - |
| 557 OTHER EXPENSES | LB557 | PROFIX | $ | - | - | - | - | - |
| 558 DUPLICATE CHARGES | LB558 | Energy | $ | - | - | - | - | - |
| Total Purchased Power Labor | LBPP | | $ | - | $ - | $ - | $ - | $ - |
| **Transmission Labor Expenses** | | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | LB560 | PTRAN | $ | 835,977 | - | - | - | 835,977 |
| 561 LOAD DISPATCHING | LB561 | PTRAN | $ | 1,304,969 | - | - | - | 1,304,969 |
| 562 STATION EXPENSES | LB562 | PTRAN | $ | 598,382 | - | - | - | 598,382 |
| 563 OVERHEAD LINE EXPENSES | LB563 | PTRAN | $ | 236,393 | - | - | - | 236,393 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | LB565 | PTRAN | $ | - | - | - | - | - |
| 566 MISC. TRANSMISSION EXPENSES | LB566 | PTRAN | $ | 312,375 | - | - | - | 312,375 |
| 567 RENTS | LB567 | PTRAN | $ | - | - | - | - | - |
| 568 MAINTENACE SUPERVISION AND ENG | LB568 | PTRAN | $ | 644,925 | - | - | - | 644,925 |
| 569 MAINTENACE OF STRUCTURES | LB569 | PTRAN | $ | 318 | - | - | - | 318 |
| 570 MAINT OF STATION EQUIPMENT | LB570 | PTRAN | $ | 1,433,304 | - | - | - | 1,433,304 |
| 571 MAINT OF OVERHEAD LINES | LB571 | PTRAN | $ | 1,067,766 | - | - | - | 1,067,766 |
| 573 MAINT OF MISC. TRANSMISSION PLANT | LB573 | PTRAN | $ | 46,439 | - | - | - | 46,439 |
| Total Transmission Labor Expenses | LBTRAN | | $ | 6,480,848 | $ - | $ - | $ - | $ 6,480,848 |
| **Distribution Operation Labor Expense** | | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | LB580 | F023 | $ | - | - | - | - | - |
| 581 LOAD DISPATCHING | LB581 | PDIST | $ | - | - | - | - | - |
| 582 STATION EXPENSES | LB582 | PDIST | $ | - | - | - | - | - |
| 583 OVERHEAD LINE EXPENSES | LB583 | PDIST | $ | - | - | - | - | - |
| 584 UNDERGROUND LINE EXPENSES | LB584 | PDIST | $ | - | - | - | - | - |
| 585 STREET LIGHTING EXPENSE | LB585 | PDIST | $ | - | - | - | - | - |
| 586 METER EXPENSES | LB586 | PDIST | $ | - | - | - | - | - |
| 586 METER EXPENSES - LOAD MANAGEMENT | LB586x | PDIST | $ | - | - | - | - | - |
| 587 CUSTOMER INSTALLATIONS EXPENSE | LB587 | PDIST | $ | - | - | - | - | - |
| 588 MISCELLANEOUS DISTRIBUTION EXP | LB588 | PDIST | $ | - | - | - | - | - |
| 589 RENTS | LB589 | PDIST | $ | - | - | - | - | - |
| Total Distribution Operation Labor Expense | LBDO | | $ | - | $ - | $ - | $ - | $ - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Labor Expenses (Continued) | | | | | | | |
| **Distribution Maintenance Labor Expense** | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | LB590 | F024 | $ - | - | - | - | - |
| 591 MAINTENANCE OF STRUCTURES | LB591 | PDIST | $ - | - | - | - | - |
| 592 MAINTENANCE OF STATION EQUIPME | LB592 | PDIST | $ - | - | - | - | - |
| 593 MAINTENANCE OF OVERHEAD LINES | LB593 | PDIST | $ - | - | - | - | - |
| 594 MAINTENANCE OF UNDERGROUND LIN | LB594 | PDIST | $ - | - | - | - | - |
| 595 MAINTENANCE OF LINE TRANSFORME | LB595 | PDIST | $ - | - | - | - | - |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | LB596 | PDIST | $ - | - | - | - | - |
| 597 MAINTENANCE OF METERS | LB597 | PDIST | $ - | - | - | - | - |
| 598 MAINTENANCE OF MISC DISTR PLANT | LB598 | PDIST | $ - | - | - | - | - |
| Total Distribution Maintenance Labor Expense | LBDM | | $ - | $ - | $ - | $ - | $ - |
| Total Distribution Operation and Maintenance Labor Expenses | | PDIST | - | - | - | - | - |
| Transmission and Distribution Labor Expenses | | | 6,480,848 | - | - | - | 6,480,848 |
| Production, Transmission and Distribution Labor Expenses | LBSUB | | $ 45,023,316 | $ 20,732,677 | $ 17,809,791 | $ - | $ 6,480,848 |
| **Customer Accounts Expense** | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | LB901 | F025 | $ - | - | - | - | - |
| 902 METER READING EXPENSES | LB902 | F025 | $ - | - | - | - | - |
| 903 RECORDS AND COLLECTION | LB903 | F025 | $ - | - | - | - | - |
| 904 UNCOLLECTIBLE ACCOUNTS | LB904 | F025 | $ - | - | - | - | - |
| 905 MISC CUST ACCOUNTS | LB903 | F025 | $ - | - | - | - | - |
| Total Customer Accounts Labor Expense | LBCA | | $ - | $ - | $ - | $ - | $ - |
| **Customer Service Expense** | | | | | | | |
| 907 SUPERVISION | LB907 | TUP | $ - | - | - | - | - |
| 908 CUSTOMER ASSISTANCE EXPENSES | LB908 | TUP | $ 544,608 | 476,316 | - | - | 68,292 |
| 908 CUSTOMER ASSISTANCE EXP-LOAD MGMT | LB908x | TUP | $ - | - | - | - | - |
| 909 INFORMATIONAL AND INSTRUCTIONA | LB909 | TUP | $ - | - | - | - | - |
| 909 INFORM AND INSTRUC -LOAD MGMT | LB909x | TUP | $ - | - | - | - | - |
| 910 MISCELLANEOUS CUSTOMER SERVICE | LB910 | TUP | $ - | - | - | - | - |
| 911 DEMONSTRATION AND SELLING EXP | LB911 | TUP | $ - | - | - | - | - |
| 912 DEMONSTRATION AND SELLING EXP | LB912 | TUP | $ - | - | - | - | - |
| 913 WATER HEATER - HEAT PUMP PROGRAM | LB913 | TUP | $ - | - | - | - | - |
| 915 MDSE-JOBBING-CONTRACT | LB915 | TUP | $ - | - | - | - | - |
| 916 MISC SALES EXPENSE | LB916 | TUP | $ - | - | - | - | - |
| Total Customer Service Labor Expense | LBCS | | $ 544,608 | $ 476,316 | $ - | $ - | $ 68,292 |
| Sub-Total Labor Exp | LBSUB9 | | 45,567,924 | 21,208,994 | 17,809,791 | - | 6,549,140 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Labor Expenses (Continued) | | | | | | | |
| **Administrative and General Expense** | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | LB920 | LBSUB9 | $ 14,315,714 | 6,663,061 | 5,595,161 | - | 2,057,491 |
| 921 OFFICE SUPPLIES AND EXPENSES | LB921 | LBSUB9 | $ - | - | - | - | - |
| 922 ADMIN. EXPENSES TRANSFERRED - CREDIT | LB922 | LBSUB9 | $ - | - | - | - | - |
| 923 OUTSIDE SERVICES EMPLOYED | LB923 | LBSUB9 | $ - | - | - | - | - |
| 924 PROPERTY INSURANCE | LB924 | TUP | $ - | - | - | - | - |
| 925 INJURIES AND DAMAGES - INSURAN | LB925 | LBSUB9 | $ 27,509 | 12,804 | 10,752 | - | 3,954 |
| 926 EMPLOYEE BENEFITS | LB926 | LBSUB9 | $ 17,136 | 7,976 | 6,698 | - | 2,463 |
| 928 REGULATORY COMMISSION FEES | LB928 | TUP | $ - | - | - | - | - |
| 929 DUPLICATE CHARGES-CR | LB929 | LBSUB9 | $ - | - | - | - | - |
| 930 MISCELLANEOUS GENERAL EXPENSES | LB930 | LBSUB9 | $ - | - | - | - | - |
| 931 RENTS AND LEASES | LB931 | PGP | $ - | - | - | - | - |
| 935 MAINTENANCE OF GENERAL PLANT | LB935 | PGP | $ 74,927 | 65,674 | - | - | 9,253 |
| Total Administrative and General Expense | LBAG | | $ 14,435,286 | $ 6,749,515 | $ 5,612,610 | $ - | $ 2,073,161 |
| Total Operation and Maintenance Expenses | TLB | | $ 60,003,210 | $ 27,958,509 | $ 23,422,401 | $ - | $ 8,622,301 |
| Operation and Maintenance Expenses Less Purchase Power | LBLPP | | $ 60,003,210 | $ 27,958,509 | $ 23,422,401 | $ - | $ 8,622,301 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Other Expenses | | | | | | | |
| **Depreciation Expenses** | | | | | | | |
| Production | DEPRDP2 | PPROD | $ 28,815,395 | 28,815,395 | - | - | - |
| Transmission | DEPRDP3 | PTRAN | $ 5,182,459 | - | - | - | 5,182,459 |
| Transmission | DEPRDP4 | PTRAN | $ - | - | - | - | - |
| Distribution | DEPRDP5 | PDIST | $ - | - | - | - | - |
| General & Common Plant | DEPRDP6 | PGP | $ 238,155 | 208,744 | - | - | 29,411 |
| Other Plant | DEPROTH | TPIS | $ - | - | - | - | - |
| Total Depreciation Expense | TDEPR | | $ 34,236,009 | 29,024,140 | - | - | 5,211,869 |
| **Accretion Expense** | | | | | | | |
| Production | ACRTNP | F017 | $ - | - | - | - | - |
| Transmission | ACRTNT | PTRAN | $ - | - | - | - | - |
| Distribution | ACRTND | PDIST | $ - | - | - | - | - |
| Total Accretion Expense | TACRTN | | $ - | $ - | $ - | $ - | $ - |
| Property Taxes & Other | PTAX | TUP | $ (94,563) | (82,705) | - | - | (11,858) |
| Amortization of Investment Tax Credit | OTAX | TUP | $ - | - | - | - | - |
| Other Expenses | OT | TUP | $ (365,864) | (319,986) | - | - | (45,878) |
| Interest | INTLTD | TUP | $ 47,622,710 | 41,650,995 | - | - | 5,971,715 |
| Other Deductions | DEDUCT | TUP | $ 109,257 | 95,557 | - | - | 13,700 |
| **Total Other Expenses** | TOE | | $ 81,507,549 | $ 70,368,000 | $ - | $ - | $ 11,139,549 |
| **Total Cost of Service (O&M + Other Expenses)** | | | $ 527,945,095 | $ 181,569,975 | $ 317,276,572 | $ - | $ 29,098,548 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Functional Vectors** | | | | | | | |
| Production Plant | F001 | | 1.000000 | 1.000000 | 0.000000 | 0.000000 | 0.000000 |
| Transmission Plant | F002 | | 1.000000 | 0.000000 | 0.000000 | 0.000000 | 1.000000 |
| Distribution Plant | F003 | | 1.000000 | 0.000000 | 0.000000 | 0.000000 | 1.000000 |
| Production Plant | F017 | | 1.000000 | 0.000000 | 1.000000 | 0.000000 | 0.000000 |
| Provar | PROVAR | | 1.000000 | 0.000000 | 1.000000 | 0.000000 | 0.000000 |
| PROFIX | PROFIX | | 1.000000 | 1.000000 | 0.000000 | 0.000000 | 0.000000 |
| Distribution Operation Labor | F023 | | - | - | - | - | - |
| Distribution Maintenance Labor | F024 | | - | - | - | - | - |
| Customer Accounts Expense | F025 | | 1.000000 | 0.000000 | 0.000000 | 0.000000 | 1.000000 |
| Customer Service Expense | F026 | | 1.000000 | 0.000000 | 0.000000 | 0.000000 | 1.000000 |
| Purchased Power Energy | OMPP | | 1.000000 | 0.000000 | 1.000000 | 0.000000 | 0.000000 |
| Purchased Power Demand | OMPPD | | 1.000000 | 1.000000 | 0.000000 | 0.000000 | 0.000000 |
| Purchased Power BREC Share of HMP&L Station Two | OMPPH | | 58,293,374 | 13,175,571 | 45,117,803 | 0.000000 | 0.000000 |
| Production Energy | Energy | | 1.000000 | 0.000000 | 1.000000 | 0.000000 | 0.000000 |
| **Internally Generated Functional Vectors** | | | | | | | |
| Total Prod, Trans, and Dist Plant | | PT&D | 1.000000 | 0.876506 | - | - | 0.123494 |
| Total Transmission Plant | | PTRAN | 1.000000 | - | - | - | 1.000000 |
| Operation and Maintenance Expenses Less Purchase Power | | OMLPP | 1.000000 | 0.494418 | 0.425734 | - | 0.079848 |
| Total Plant in Service | | TPIS | 1.000000 | 0.876506 | - | - | 0.123494 |
| Total Operation and Maintenance Expenses (Labor) | | TLB | 1.000000 | 0.465950 | 0.390352 | - | 0.143697 |
| Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service | | OMSUB2 | 1.000000 | 0.232897 | 0.733903 | - | 0.033200 |
| Total Steam Power Operation Expenses (Labor) | | LBSUB1 | 1.000000 | 0.833374 | 0.166626 | - | - |
| Total Steam Power Generation Maintenance Expense (Labor) | | LBSUB2 | 1.000000 | 0.078617 | 0.921383 | - | - |
| Total Transmission Labor Expenses | | LBTRAN | 1.000000 | - | - | - | 1.0000000 |
| Sub-Total Labor Exp | | LBSUB7 | 1.000000 | 0.465437 | 0.390841 | - | 0.143723 |
| Total General Plant | | PGP | 1.000000 | 0.876506 | - | - | 0.123494 |
| Total Production Plant | | PPROD | 1.000000 | 1.000000 | - | - | - |
| Total Intangible Plant | | INTPLT | 1.000000 | 0.876506 | - | - | 0.123494 |

**BIG RIVERS ELECTRIC CORPORATION**
**Cost of Service Study**
**Rate Schedule Allocation**
**12 Months Ended**
**October 2010**
**6 CP - Smelter TIER Adjustment - Revenues @ $1.95/mWh**

| Description | Ref | Name | Allocation Vector | Rurals | Large Industrials | Smelters | Total System |
|---|---|---|---|---|---|---|---|
| Cost of Service Summary -- Unadjusted | | | | | | | |
| **Operating Revenues** | | | | | | | |
| Sales to Members | | REVUC | R01 | $ 110,934,700 | $ 39,110,620 | $ 282,406,135 | $ 432,451,455 |
| Off System Sales Revenue | | | OSSALL | $ 12,751,365 | $ 4,563,381 | $ 59,229,055 | $ 76,543,801 |
| Income from Leased Property Net | | OTHREV | RBPLT | $ 49,919 | $ 12,329 | $ 87,424 | $ 149,673 |
| Other Operating Revenue & Income | | OTHREV | RBPLT | $ 4,595,526 | $ 1,135,019 | $ 8,048,200 | $ 13,778,745 |
| Total Operating Revenues | | TOR | | $ 128,331,510 | $ 44,821,350 | $ 349,770,815 | $ 522,923,675 |
| **Operating Expenses** | | | | | | | |
| Operation and Maintenance Expenses | | | | $ 120,514,880 | $ 39,518,059 | $ 286,404,608 | $ 446,437,546 |
| Depreciation and Amortization Expenses | | | | $ 11,430,505 | $ 2,820,170 | $ 19,985,334 | $ 34,236,009 |
| Property and Other Taxes | | | NPT | $ (31,650) | $ (7,782) | $ (55,131) | $ (94,563) |
| Total Operating Expenses | | TOE | | $ 131,913,735 | $ 42,330,446 | $ 306,334,811 | $ 480,578,992 |
| Utility Operating Margin | | | | $ (3,582,224) | $ 2,490,903 | $ 43,436,004 | $ 42,344,683 |
| **Non-Operating Items** | | | | | | | |
| Interest Income | | | RBPLT | $ - | $ - | $ - | $ - |
| Other Non-Operating Income | | | RBPLT | $ - | $ - | $ - | $ - |
| Other Credits | | | RBPLT | $ - | $ - | $ - | $ - |
| Interest on Long Term Debt | | | | $ - | $ - | $ - | $ - |
| Other Interest Expense | | | RBPLT | $ - | $ - | $ - | $ - |
| Other Deductions | | | RBPLT | $ - | $ - | $ - | $ - |
| Total Non-Operating Items | | | | $ - | $ - | $ - | $ - |
| Net Utility Operating Margin | | TOM | | $ (3,582,224) | $ 2,490,903 | $ 43,436,004 | $ 42,344,683 |
| Net Cost Rate Base | | | | $ 390,335,625 | $ 96,406,419 | $ 683,599,459 | $ 1,170,341,502 |

**BIG RIVERS ELECTRIC CORPORATION**
**Cost of Service Study**
**Rate Schedule Allocation**
**12 Months Ended**
**October 2010**
**6 CP - Smelter TIER Adjustment - Revenues @ $1.95/mWh**

| Description | Ref | Name | Allocation Vector | Rurals | Large Industrials | Smelters | Total System |
|---|---|---|---|---|---|---|---|
| Cost of Service Summary -- Pro-Forma | | | | | | | |
| **Operating Revenues** | | | | | | | |
| Total Operating Revenue | | | | $ 128,331,510 | $ 44,821,350 | $ 349,770,815 | $ 522,923,675 |
| Pro-Forma Adjustments: | | | | | | | |
| To annualize revenue for new industrial customer | 2.01 | | | $ - | $ 149,752 | $ - | $ 149,752 |
| To adjust mismatch in fuel cost recovery | 2.02 | FACREV | | $ (25,166,503) | $ (9,525,471) | $ (73,123,203) | $ (107,815,177) |
| To eliminate Environmental Surcharge revenues | 2.03 | ESREV | | $ (5,315,462) | $ (2,025,233) | $ (15,493,538) | $ (22,834,232) |
| To reflect temperature normalized sales volumes | 2.04 | | EnergyR | $ (421,610) | $ - | $ - | $ (421,610) |
| To eliminate Non-FAC PPA revenues | 2.05 | NFPR | | $ 2,757,108 | $ 1,045,800 | $ 7,785,109 | $ 11,588,017 |
| To eliminate WKEC Lease Expenses | 2.19 | | RBPLT | $ (49,919) | $ (12,329) | $ (87,424) | $ (149,673) |
| To eliminate RRI Domtar Cogen Backup revenues | 2.09 | | | $ - | $ (1,115,159) | $ - | $ (1,115,159) |
| To adjust for Smelter TIER Adjustment Charge | 2.22 | | | $ - | $ - | $ - | $ - |
| Total Pro-Forma Operating Revenue | | | | $ 100,135,124 | $ 33,338,709 | $ 268,851,759 | $ 402,325,592 |

**BIG RIVERS ELECTRIC CORPORATION**
**Cost of Service Study**
**Rate Schedule Allocation**
**12 Months Ended**
**October 2010**
**6 CP - Smelter TIER Adjustment - Revenues @ $1.95/mWh**

| Description | Ref | Name | Allocation Vector | Rurals | Large Industrials | Smelters | Total System |
|---|---|---|---|---|---|---|---|
| Cost of Service Summary -- Pro-Forma | | | | | | | |
| **Operating Expenses** | | | | | | | |
| Operation and Maintenance Expenses | | | | $ 120,514,880 | $ 39,518,059 | $ 286,404,608 | $ 446,437,546 |
| Depreciation and Amortization Expenses | | | | $ 11,430,505 | $ 2,820,170 | $ 19,985,334 | $ 34,236,009 |
| Property and Other Taxes | | | NPT | $ (31,650) | $ (7,782) | $ (55,131) | $ (94,563) |
| Adjustments to Operating Expenses: | | | | | | | |
| To annualize expenses for new industrial customer | 2.01 | | | $ - | $ 110,607 | $ - | $ 110,607 |
| To adjust mismatch in fuel cost recovery | 2.02 | | FACREV | $ (25,685,949) | $ (9,722,081) | $ (74,632,493) | $ (110,040,523) |
| To eliminate Environmental Surcharge expenses | 2.03 | | ESREV | $ (5,462,944) | $ (2,081,425) | $ (15,923,422) | $ (23,467,791) |
| To reflect weather normalized sales volumes | 2.04 | | EnergyR | $ (295,293) | $ - | $ - | $ (295,293) |
| To eliminate Non-FAC PPA expenses | 2.05 | | NFPR | $ 2,858,740 | $ 1,084,350 | $ 8,072,083 | $ 12,015,173 |
| To reflect annualized depreciation expenses | 2.06 | | PLT | $ 2,093,093 | $ 514,548 | $ 3,645,010 | $ 6,252,651 |
| To reflect increases in labor and labor-related costs | 2.07 | | LBPLT | $ 183,165 | $ 53,069 | $ 388,660 | $ 624,894 |
| To reflect current interest on construction (CWIP) | 2.08 | | PLT | $ 172,654 | $ 42,444 | $ 300,669 | $ 515,767 |
| To eliminate RRI Domtar Cogen Backup expenses | 2.09 | | | $ - | $ (2,086,416) | $ - | $ (2,086,416) |
| To reflect levelized production expenses | 2.10 | | CP | $ 1,916,312 | $ 463,846 | $ 3,280,520 | $ 5,660,678 |
| To reflect levelized production expenses | 2.11 | | CP | $ 923,161 | $ 223,452 | $ 1,580,352 | $ 2,726,965 |
| To reflect going forward Information Technology support services | 2.12 | | RBPLT | $ 97,453 | $ 24,069 | $ 170,671 | $ 292,194 |
| To reflect amortizaton of rate case expenses | 2.13 | | RBPLT | $ 93,960 | $ 23,206 | $ 164,553 | $ 281,719 |
| To reflect MISO related expenses | 2.14 | | 12CPTR | $ 1,667,501 | $ 459,102 | $ 3,288,398 | $ 5,415,000 |
| To annualize interest on long-term debt | 2.15 | | RBPLT | $ 23,483 | $ 5,800 | $ 41,125 | $ 70,408 |
| To reflect leased property income (Soaper Building Rent) | 2.16 | | LBPLT | $ (37,626) | $ (10,902) | $ (79,840) | $ (128,368) |
| To adjust for costs related to LEM Dispatch | 2.17 | | CP | $ (317,140) | $ (76,764) | $ (542,910) | $ (936,815) |
| To adjust for costs related to APM | 2.18 | | CP | $ 69,429 | $ 16,805 | $ 118,855 | $ 205,090 |
| To reflect going forward level of Outside Services | 2.25 | | EnergyNS | $ (725,000) | $ (275,000) | $ - | $ (1,000,000) |
| To eliminate costs for SFPC membership | 2.20 | | RBPLT | $ (60,293) | $ (14,891) | $ (105,591) | $ (180,775) |
| To adjust for MISO Case-related expenses | 2.21 | | 12CPTR | $ (237,459) | $ (65,378) | $ (468,281) | $ (771,118) |
| To reflect commitment to Energy Efficiency Programs | 2.26 | | EnergyNS | $ 725,000 | $ 275,000 | $ - | $ 1,000,000 |
| To eliminate promo advertising, lobbying, donation and econ dev | 2.23 | | R01 | $ (130,114) | $ (45,872) | $ (331,230) | $ (507,216) |
| To reflect going forward level of income taxes | 2.24 | | NTPLT | $ 61,251 | $ 15,070 | $ 106,763 | $ 183,084 |
| Total Expense Adjustments | | | | $ (22,066,615) | $ (11,067,360) | $ (70,926,109) | $ (104,060,084) |
| Total Operating Expenses | | TOE | | $ 109,847,120 | $ 31,263,086 | $ 235,408,702 | $ 376,518,908 |
| Utility Operating Margins -- Pro-Forma | | | | $ (9,711,995) | $ 2,075,623 | $ 33,443,057 | $ 25,806,684 |
| **Non-Operating Items** | | | | $ - | $ - | $ - | $ - |
| Total Non-Operating Items | | | | $ - | $ - | $ - | $ - |
| Net Utility Operating Margin | | | | $ (9,711,995) | $ 2,075,623 | $ 33,443,057 | $ 25,806,684 |
| **Net Cost Rate Base** | | | | $ 390,335,625 | $ 96,406,419 | $ 683,599,459 | $ 1,170,341,502 |
| **Return on Rate Base -- Utility Operating Margin Divided by Rate Base** | | | | **-2.49%** | **2.15%** | **4.89%** | **2.21%** |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Rate Schedule Allocation
12 Months Ended
October 2010
6 CP - Smelter TIER Adjustment - Revenues @ $1.95/mWh

| Description | Ref | Name | Allocation Vector | Rurals | Large Industrials | Smelters | Total System |
|---|---|---|---|---|---|---|---|
| Subsidies Paid and Received at Present Rates | | | | | | | |
| (subisidies received shown as positive value) | | | | | | | |
| Rate Base | | | | $ 390,335,625 | $ 96,406,419 | $ 683,599,459 | $ 1,170,341,502 |
| Operating Margins (present rates) | | | | $ (9,711,995) | $ 2,075,623 | $ 33,443,057 | $ 25,806,684 |
| Operating Margins at Equal Rate of Return | ROR | | 2.21% | $ 8,607,119 | $ 2,125,815 | $ 15,073,750 | $ 25,806,684 |
| Subsidies Paid and Received | | | | $ 18,319,114 | $ 50,193 | $ (18,369,307) | $ 0 |

**Big Rivers Electric Corporation**
Summary of Cost of Service Study
For the 12 Months Ended October 2010

**Rate of Return Summary**

***Unadjusted***

| Rate Schedule | | Utility Operating Margins | | Net Cost Rate Base | Rate of Return |
|---|---|---|---|---|---|
| Total Rural | $ | (9,711,995) | $ | 390,335,625 | -2.49% |
| Total Large Industrial | | 2,075,623 | | 96,406,419 | 2.15% |
| Total Smelter | | 33,443,057 | | 683,599,459 | 4.89% |
| Total | $ | 25,806,684 | $ | 1,170,341,502 | 2.21% |

***Adjusted for Proposed Rate Increase***

| Rate Schedule | | Utility Operating Margins | | Net Cost Rate Base | Rate of Return |
|---|---|---|---|---|---|
| Total Rural | $ | 4,460,008 | $ | 390,335,625 | 1.14% |
| Total Large Industrial | | 5,304,189 | | 96,406,419 | 5.50% |
| Total Smelter | | 55,996,452 | | 683,599,459 | 8.19% |
| Total | $ | 65,760,649 | $ | 1,170,341,502 | 5.62% |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Plant in Service** | | | | | | | | | |
| Intangible Plant | INTPLT | PT&D | $ | 66,895 | | | | | |
| Production Plant | PPROD | F001 | $ | 1,686,796,955 | | | | | |
| Transmission Plant | PTRAN | F002 | $ | 237,659,206 | | | | | |
| Distribution Plant | PDIST | F003 | $ | - | | | | | |
| **Total Production & Transmission Plant** | PT&D | | | 1,924,456,160 | | | | | |
| General Plant | PGP | PT&D | $ | 18,511,051 | | | | | |
| **Total Plant in Service** | TPIS | | $ | 1,943,034,107 | | | | | |
| **Construction Work in Progress (CWIP)** | | | | | | | | | |
| CWIP Production | CWIP1 | PPROD | $ | 22,411,274 | | | | | |
| CWIP Transmission | CWIP2 | PTRAN | $ | 7,475,859 | | | | | |
| CWIP Distribution Plant | CWIP3 | PDIST | $ | - | | | | | |
| CWIP General Plant | CWIP4 | PT&D | $ | 16,915,005 | | | | | |
| **Total Construction Work in Progress** | TCWIP | | $ | 46,802,138 | | | | | |
| **Total Utility Plant** | | | $ | 1,989,836,245 | | | | | |
| **Rate Base** | | | | | | | | | |
| **Total Utility Plant** | TUP | | $ | 1,989,836,245 | | | | | |
| **Less: Acummulated Provision for Depreciation** | | | | | | | | | |
| Production | ADEPREPA | PPROD | $ | 790,847,523 | | | | | |
| Transmission | ADEPRTP | PTRAN | $ | 107,564,747 | | | | | |
| Distribution | ADEPRD11 | PDIST | $ | - | | | | | |
| General & Common Plant | ADEPRD12 | PT&D | $ | 6,300,770 | | | | | |
| Intangible, Misc, and Other Plant | ADEPRGP | PT&D | $ | - | | | | | |
| Retirement Work In Progress | ADEPRRT | PT&D | $ | - | | | | | |
| Total Accumulated Depreciation | TADEPR | | $ | 904,713,040 | | | | | |
| **Net Utility Plant** | NTPLANT | | $ | 1,085,123,206 | | | | | |
| **Working Capital** | | | | | | | | | |
| Cash Working Capital - Operation and Maintenance Expenses | CWC | OMLPP | $ | 28,114,365 | | | | | |
| Materials and Supplies | M&S | TPIS | $ | 22,777,820 | 20327197.9 | 85340.04 | -68898.4 | 208485.44 | -95121.11 |
| Fuel Stock | PREPAY | TPIS | $ | 34,326,112 | 39158400.85 | -1328756.9 | -4130766.79 | -359777.13 | 1918732.52 |
| Total Working Capital | TWC | | $ | 85,218,297 | | | | | |
| **Net Rate Base** | RB | | $ | 1,170,341,502 | | | | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Plant in Service** | | | | | | | | |
| Intangible Plant | INTPLT | PT&D | | | | | | |
| Production Plant | PPROD | F001 | | | | | | |
| Transmission Plant | PTRAN | F002 | | | | | | |
| Distribution Plant | PDIST | F003 | | | | | | |
| **Total Production & Transmission Plant** | PT&D | | | | | | | |
| General Plant | PGP | PT&D | | | | | | |
| **Total Plant in Service** | TPIS | | | | | | | |
| **Construction Work in Progress (CWIP)** | | | | | | | | |
| CWIP Production | CWIP1 | PPROD | | | | | | |
| CWIP Transmission | CWIP2 | PTRAN | | | | | | |
| CWIP Distribution Plant | CWIP3 | PDIST | | | | | | |
| CWIP General Plant | CWIP4 | PT&D | | | | | | |
| **Total Construction Work in Progress** | TCWIP | | | | | | | |
| **Total Utility Plant** | | | | | | | | |
| **Rate Base** | | | | | | | | |
| **Total Utility Plant** | TUP | | | | | | | |
| **Less: Acummulated Provision for Depreciation** | | | | | | | | |
| Production | ADEPREPA | PPROD | | | | | | |
| Transmission | ADEPRTP | PTRAN | | | | | | |
| Distribution | ADEPRD11 | PDIST | | | | | | |
| General & Common Plant | ADEPRD12 | PT&D | | | | | | |
| Intangible, Misc, and Other Plant | ADEPRGP | PT&D | | | | | | |
| Retirement Work In Progress | ADEPRRT | PT&D | | | | | | |
| Total Accumulated Depreciation | TADEPR | | | | | | | |
| **Net Utility Plant** | NTPLANT | | | | | | | |
| **Working Capital** | | | | | | | | |
| Cash Working Capital - Operation and Maintenance Expenses | CWC | OMLPP | | | | | | |
| Materials and Supplies | M&S | TPIS | -220183.19 | 207004.7 | 357212.07 | 240129.05 | -144241.07 | 2889566.56 |
| Fuel Stock | PREPAY | TPIS | 2552249.61 | 867432.81 | -287963.1 | -3463026.24 | -2018344.81 | -578882.38 |
| Total Working Capital | TWC | | | | | | | |
| **Net Rate Base** | RB | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Plant in Service** | | | |
| Intangible Plant | INTPLT | PT&D | |
| Production Plant | PPROD | F001 | |
| Transmission Plant | PTRAN | F002 | |
| Distribution Plant | PDIST | F003 | |
| **Total Production & Transmission Plant** | PT&D | | |
| General Plant | PGP | PT&D | |
| **Total Plant in Service** | TPIS | | |
| **Construction Work in Progress (CWIP)** | | | |
| CWIP Production | CWIP1 | PPROD | |
| CWIP Transmission | CWIP2 | PTRAN | |
| CWIP Distribution Plant | CWIP3 | PDIST | |
| CWIP General Plant | CWIP4 | PT&D | |
| **Total Construction Work in Progress** | TCWIP | | |
| **Total Utility Plant** | | | |
| **Rate Base** | | | |
| **Total Utility Plant** | TUP | | |
| **Less: Acummulated Provision for Depreciation** | | | |
| Production | ADEPREPA | PPROD | |
| Transmission | ADEPRTP | PTRAN | |
| Distribution | ADEPRD11 | PDIST | |
| General & Common Plant | ADEPRD12 | PT&D | |
| Intangible, Misc, and Other Plant | ADEPRGP | PT&D | |
| Retirement Work In Progress | ADEPRRT | PT&D | |
| Total Accumulated Depreciation | TADEPR | | |
| **Net Utility Plant** | NTPLANT | | |
| **Working Capital** | | | |
| Cash Working Capital - Operation and Maintenance Expenses | CWC | OMLPP | |
| Materials and Supplies | M&S | TPIS | -1008672.24 |
| Fuel Stock | PREPAY | TPIS | 1996813.82 |
| Total Working Capital | TWC | | |
| **Net Rate Base** | RB | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses** | | | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | OM500 | PROFIX | $ | 4,974,566 | 342962.62 | 1034901.09 | 358703.86 | 318491.34 | 384828.47 |
| 501 FUEL | OM501 | Energy | $ | 200,919,367 | 11957675.62 | 16736745.89 | 19103323.18 | 17630280.19 | 17173097.35 |
| 502 STEAM EXPENSES | OM502 | PROFIX | $ | 34,453,882 | 2424633.22 | 2490999.61 | 2647322.04 | 2676616.85 | 2911578.89 |
| 505 ELECTRIC EXPENSES | OM505 | PROFIX | $ | 5,730,122 | 399281.19 | 656713.94 | 477935.99 | 489102.92 | 443771.24 |
| 506 MISC. STEAM POWER EXPENSES | OM506 | PROFIX | $ | 7,451,302 | 837237.41 | 458663.32 | 531778.12 | 516078.68 | 646116.36 |
| 507 RENTS | OM507 | PROFIX | $ | - | | 0 | 0 | 0 | 0 |
| 509 ALLOWANCES | OM509 | Energy | $ | 429,682 | | 0 | 0 | 55382.46 | 42291.31 |
| Total Steam Power Operation Expenses | | | $ | 253,958,921 | $ 7,775 | $ 146,296 | $ 7,154 | $ 15,852 | $ 21,245 |
| **Steam Power Generation Maintenance Expenses** | | | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | OM510 | Energy | $ | 3,631,867 | 301562.96 | 282674.01 | 282136.07 | 286174.73 | 324812.85 |
| 511 MAINTENANCE OF STRUCTURES | OM511 | PROFIX | $ | 3,346,806 | -2396.3 | 561809.41 | 164027.98 | 219884.17 | 122851.74 |
| 512 MAINTENANCE OF BOILER PLANT | OM512 | Energy | $ | 30,113,309 | 2665049.9 | 2707987.08 | 1617573 | 1413359.02 | 2039706.29 |
| 513 MAINTENANCE OF ELECTRIC PLANT | OM513 | Energy | $ | 6,251,804 | 2443905.77 | 804364.44 | -26124.91 | 190619.56 | 167015.92 |
| 514 MAINTENANCE OF MISC STEAM PLANT | OM514 | PROFIX | $ | 877,364 | 136355.09 | 154030.5 | 71461.85 | 48046.95 | 35868.33 |
| Total Steam Power Generation Maintenance Expense | | | $ | 44,221,151 | $ 3,659 | $ 7,366 | $ 1,455 | $ 6,057 | $ 9,772 |
| Total Steam Power Generation Expense | | | $ | 298,180,072 | | | | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses** | | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | OM500 | PROFIX | 338223.38 | 414283.22 | 372420.21 | 359404.38 | 369945.71 | 334708.35 |
| 501 FUEL | OM501 | Energy | 15868543.13 | 15412621.99 | 16949864.35 | 18643264.65 | 19588180.27 | 17004762.52 |
| 502 STEAM EXPENSES | OM502 | PROFIX | 2801318.34 | 3017168.8 | 3110448.48 | 3022221.22 | 3095094.21 | 3132173.1 |
| 505 ELECTRIC EXPENSES | OM505 | PROFIX | 430459.27 | 473960.9 | 440316.02 | 456264.08 | 479912.75 | 476352.39 |
| 506 MISC. STEAM POWER EXPENSES | OM506 | PROFIX | 557984.26 | 577686.56 | 640171.09 | 585642.46 | 806920.28 | 725866.29 |
| 507 RENTS | OM507 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 509 ALLOWANCES | OM509 | Energy | 33437.63 | 31618.94 | 46952.89 | 62169.21 | 49573.1 | 28256.05 |
| Total Steam Power Operation Expenses | | | $ 6,070 | $ 8,052 | $ 5,213 | $ 267,644 | $ 167,124 | $ 44,089 |
| **Steam Power Generation Maintenance Expenses** | | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | OM510 | Energy | 297530.92 | 289425 | 297802.77 | 281476.85 | 309430.59 | 294029.27 |
| 511 MAINTENANCE OF STRUCTURES | OM511 | PROFIX | 153063.03 | 309779.07 | 306987.02 | 458108.12 | 372678.29 | 488354.6 |
| 512 MAINTENANCE OF BOILER PLANT | OM512 | Energy | 1740181.45 | 2535024.61 | 2164789.64 | 2054585.86 | 2034329.79 | 2855272.84 |
| 513 MAINTENANCE OF ELECTRIC PLANT | OM513 | Energy | 313812.24 | 389518.49 | 251988.71 | 302199.64 | 422000.23 | 534239.62 |
| 514 MAINTENANCE OF MISC STEAM PLANT | OM514 | PROFIX | 61896.28 | 58285.06 | 85932.24 | 51800.09 | 89344.85 | 66090.33 |
| Total Steam Power Generation Maintenance Expense | | | $ (325) | $ 4,943 | $ 216,501 | $ 175,754 | $ 65,241 | $ 96,186 |
| Total Steam Power Generation Expense | | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Operation and Maintenance Expenses** | | | |
| **Steam Power Generation Operation Expenses** | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | OM500 | PROFIX | 345693.85 |
| 501 FUEL | OM501 | Energy | 14851007.4 |
| 502 STEAM EXPENSES | OM502 | PROFIX | 3124307.14 |
| 505 ELECTRIC EXPENSES | OM505 | PROFIX | 506051.44 |
| 506 MISC. STEAM POWER EXPENSES | OM506 | PROFIX | 567156.95 |
| 507 RENTS | OM507 | PROFIX | 0 |
| 509 ALLOWANCES | OM509 | Energy | 80000.79 |
| Total Steam Power Operation Expenses | | | $ 44,882 |
| **Steam Power Generation Maintenance Expenses** | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | OM510 | Energy | 384811.34 |
| 511 MAINTENANCE OF STRUCTURES | OM511 | PROFIX | 191658.45 |
| 512 MAINTENANCE OF BOILER PLANT | OM512 | Energy | 6285449.98 |
| 513 MAINTENANCE OF ELECTRIC PLANT | OM513 | Energy | 458264.77 |
| 514 MAINTENANCE OF MISC STEAM PLANT | OM514 | PROFIX | 18252.47 |
| Total Steam Power Generation Maintenance Expense | | | $ 38,478 |
| Total Steam Power Generation Expense | | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | OM546 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 547 FUEL | OM547 | Energy | $ | 706,789 | 7379.85 | 135814.53 | 4779.27 | 13479.11 | 18872.46 |
| 548 GENERATION EXPENSE | OM548 | PROFIX | $ | 34,608 | 394.54 | 10481.32 | 2375 | 2373 | 2373 |
| 549 MISC OTHER POWER GENERATION | OM549 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 550 RENTS | OM550 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Expenses | | | $ | 741,396 | $ (1) | $ (0) | $ 0 | $ 1 | $ 0 |
| **Other Power Generation Maintenance Expense** | | | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | OM551 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 552 MAINTENANCE OF STRUCTURES | OM552 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | OM553 | PROFIX | $ | 625,088 | 3658.66 | 7365.41 | 1454.85 | 6056.77 | 9772.16 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | OM554 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Maintenance Expense | | | $ | 625,088 | $ 0 | $ (0) | $ (0) | $ 0 | $ 0 |
| Total Other Power Generation Expense | | | $ | 1,366,485 | | | | | |
| Total Station Expense | | | $ | 299,546,557 | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | OM546 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 547 FUEL | OM547 | Energy | 3696.82 | 5679.30 | 2839.60 | 265271.41 | 164750.42 | 41716.70 |
| 548 GENERATION EXPENSE | OM548 | PROFIX | 2373 | 2373.00 | 2373.00 | 2373.00 | 2373.00 | 2373.00 |
| 549 MISC OTHER POWER GENERATION | OM549 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 550 RENTS | OM550 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Expenses | | | $ (0) | $ 1 | $ (0) | $ 0 | $ (0) | $ 0 |
| **Other Power Generation Maintenance Expense** | | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | OM551 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 552 MAINTENANCE OF STRUCTURES | OM552 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | OM553 | PROFIX | -322.62 | 4943.09 | 216501.24 | 175754.02 | 65240.65 | 96186.42 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | OM554 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Maintenance Expense | | | $ 2 | $ 0 | $ 1 | $ (0) | $ (1) | $ 0 |
| Total Other Power Generation Expense | | | | | | | | |
| Total Station Expense | | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | |
| **Other Power Generation Operation Expense** | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | OM546 | PROFIX | 0 |
| 547 FUEL | OM547 | Energy | 42509.14 |
| 548 GENERATION EXPENSE | OM548 | PROFIX | 2373.00 |
| 549 MISC OTHER POWER GENERATION | OM549 | PROFIX | 0 |
| 550 RENTS | OM550 | PROFIX | 0 |
| Total Other Power Generation Expenses | | | $ (0) |
| **Other Power Generation Maintenance Expense** | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | OM551 | PROFIX | 0 |
| 552 MAINTENANCE OF STRUCTURES | OM552 | PROFIX | 0 |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | OM553 | PROFIX | 38477.63 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | OM554 | PROFIX | 0 |
| Total Other Power Generation Maintenance Expense | | | $ (0) |
| Total Other Power Generation Expense | | | |
| Total Station Expense | | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | | |
| **Other Power Supply Expenses** | | | | | | | | | |
| 555 PURCHASED POWER Energy | OM555 | OMPP | $ | 19,466,790 | 3,827,952.61 | 2,536,760.36 | 1,913,169.62 | 941,370.11 | 911,294.71 |
| 555 PURCHASED POWER Demand | OMD555 | OMPPD | $ | 4,210,045 | 350,837.07 | 350,837.07 | 350,837.07 | 350,837.07 | 350,837.07 |
| 555 PURCHASED POWER BREC Share of HMP&L Station Two | OMH555 | OMPPH | $ | 58,293,374 | 4,582,937.26 | 5,054,161.64 | 4,549,698.12 | 4,432,913.73 | 4,763,164.98 |
| 555 PURCHASED POWER OPTIONS | OMO555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 BROKERAGE FEES | OMB555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 MISO TRANSMISSION EXPENSES | OMM555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | OM556 | PROFIX | $ | 909,422 | 143177.05 | 161775.92 | 84110.82 | 66492.87 | 77558.07 |
| 557 OTHER EXPENSES | OM557 | PROFIX | $ | 20,575,465 | 2479520.29 | 2210820.92 | 1519858.99 | 1381956.22 | 1577347.72 |
| 558 DUPLICATE CHARGES | OM558 | Energy | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Supply Expenses | TPP | | $ | 103,455,096 | 11,384,424.28 | 10,314,355.91 | 8,417,674.62 | 7,173,570.00 | 7,680,202.55 |
| Total Electric Power Generation Expenses | | | $ | 403,001,653 | | | | | |
| **Transmission Expenses** | | | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | OM560 | LBTRAN | $ | 876,815 | 159722.72 | 99111.49 | 64131.05 | 56493.74 | 71626.61 |
| 561 LOAD DISPATCHING | OM561 | LBTRAN | $ | 1,454,938 | 245368.38 | 141741.21 | 113777.21 | 98967.65 | 113022.44 |
| 562 STATION EXPENSES | OM562 | PTRAN | $ | 1,163,408 | 138650.41 | 111166.28 | 70289.35 | 78900.11 | 96317.14 |
| 563 OVERHEAD LINE EXPENSES | OM563 | PTRAN | $ | 1,090,014 | 116902.84 | 72507.66 | 91764.75 | 90248.86 | 92136.75 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | OM565 | PTRAN | $ | 3,065,817 | 227372.33 | 270804.44 | 222495.76 | 313990.87 | 298157.74 |
| 566 MISC. TRANSMISSION EXPENSES | OM566 | PTRAN | $ | 475,381 | 82941.08 | 54676.78 | 40839.08 | 35322.18 | 39484.82 |
| 567 RENTS | OM567 | PTRAN | $ | 24,701 | 2058.43 | 2058.43 | 2058.43 | 2058.43 | 2058.43 |
| 568 MAINTENACE SUPERVISION AND ENG | OM568 | LBTRAN | $ | 647,227 | 120702.88 | 66051.02 | 48367.7 | 40149.83 | 53439.26 |
| 569 STRUCTURES | OM569 | PTRAN | $ | 26,913 | 36.88 | 6259.34 | 0 | 1874.02 | 59.12 |
| 570 MAINT OF STATION EQUIPMENT | OM570 | PTRAN | $ | 1,936,760 | 272171.89 | 208826.01 | 135405.37 | 165513.32 | 155839.56 |
| 571 MAINT OF OVERHEAD LINES | OM571 | PTRAN | $ | 2,876,462 | 318695.62 | 624358.63 | 20316.93 | 128651.35 | 134146 |
| 572 UNDERGROUND LINES | OM572 | PTRAN | $ | - | 0 | 0 | 0 | 0 | 0 |
| 573 MISC PLANT | OM573 | PTRAN | $ | 97,880 | 8341.27 | 4665 | 3732.37 | 5821.94 | 34823.78 |
| Total Transmission Expenses | | | $ | 13,736,318 | 1,692,964.73 | 1,662,226.29 | 813,178.00 | 1,017,992.30 | 1,091,111.65 |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | |
| **Other Power Supply Expenses** | | | | | | | | |
| 555 PURCHASED POWER Energy | OM555 | OMPP | 1,360,105.55 | 2,595,157.16 | 1,414,751.54 | 1,276,714.40 | 516,721.89 | 613,253.53 |
| 555 PURCHASED POWER Demand | OMD555 | OMPPD | 350,837.07 | 350,837.07 | 350,837.07 | 350,837.07 | 350,837.07 | 350,837.07 |
| 555 PURCHASED POWER BREC Share of HMP&L Station Two | OMH555 | OMPPH | 5,098,546.01 | 4,460,755.81 | 4,842,232.95 | 5,325,056.85 | 5,088,921.31 | 4,972,622.48 |
| 555 PURCHASED POWER OPTIONS | OMO555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 BROKERAGE FEES | OMB555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 MISO TRANSMISSION EXPENSES | OMM555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | OM556 | PROFIX | 0 | 92094.61 | 73384.96 | 71377.18 | 39951.63 | 51309.82 |
| 557 OTHER EXPENSES | OM557 | PROFIX | 1535653.17 | 1420108.84 | 1438109.81 | 1546376.13 | 1542523.95 | 2323941.19 |
| 558 DUPLICATE CHARGES | OM558 | Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Supply Expenses | TPP | | 8,345,141.80 | 8,918,953.49 | 8,119,316.33 | 8,570,361.63 | 7,538,955.85 | 8,311,964.09 |
| Total Electric Power Generation Expenses | | | | | | | | |
| **Transmission Expenses** | | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | OM560 | LBTRAN | 59387.59 | 61734.83 | 72275.43 | 57830.16 | 52970.2 | 70253.05 |
| 561 LOAD DISPATCHING | OM561 | LBTRAN | 89896.48 | 94173.59 | 104627.56 | 94297.49 | 86936.32 | 135835 |
| 562 STATION EXPENSES | OM562 | PTRAN | 84122.23 | 90931.03 | 103923.43 | 86043.52 | 116294.21 | 83898.29 |
| 563 OVERHEAD LINE EXPENSES | OM563 | PTRAN | 87522.07 | 87158.79 | 89203.39 | 89187.21 | 86736.29 | 88209.66 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | OM565 | PTRAN | 229091.63 | 251486.95 | 238169.64 | 253067.81 | 259149.57 | 237980.88 |
| 566 MISC. TRANSMISSION EXPENSES | OM566 | PTRAN | 28982.15 | 30160.95 | 44581.15 | 19944.19 | 35290.89 | 32930.62 |
| 567 RENTS | OM567 | PTRAN | 2058.43 | 2058.43 | 2058.43 | 2058.43 | 2058.43 | 2058.43 |
| 568 MAINTENACE SUPERVISION AND ENG | OM568 | LBTRAN | 44241.45 | 45590.11 | 51110.87 | 42324.47 | 40557.13 | 55824.53 |
| 569 STRUCTURES | OM569 | PTRAN | 80.04 | 577.95 | 1084.71 | 2771.42 | 1003.78 | 1896.87 |
| 570 MAINT OF STATION EQUIPMENT | OM570 | PTRAN | 124235.3 | 158259.64 | 153920.85 | 137834.03 | 134856.99 | 175088.1 |
| 571 MAINT OF OVERHEAD LINES | OM571 | PTRAN | 140543.65 | 122631.69 | 245673.12 | 136904.15 | 282898.22 | 547382.49 |
| 572 UNDERGROUND LINES | OM572 | PTRAN | 0 | 0 | 0 | 0 | 0 | 0 |
| 573 MISC PLANT | OM573 | PTRAN | 4923.69 | 6697.42 | 5370.15 | 3919.44 | 6630.08 | 5359.76 |
| Total Transmission Expenses | | | 895,084.71 | 951,461.38 | 1,111,998.73 | 926,182.32 | 1,105,382.11 | 1,436,717.68 |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | |
| **Other Power Supply Expenses** | | | |
| 555 PURCHASED POWER Energy | OM555 | OMPP | 1559538.19 |
| 555 PURCHASED POWER Demand | OMD555 | OMPPD | 350837.07 |
| 555 PURCHASED POWER BREC Share of HMP&L Station Two | OMH555 | OMPPH | 5,122,362.96 |
| 555 PURCHASED POWER OPTIONS | OMO555 | OMPP | 0 |
| 555 BROKERAGE FEES | OMB555 | OMPP | 0 |
| 555 MISO TRANSMISSION EXPENSES | OMM555 | OMPP | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | OM556 | PROFIX | 48189.16 |
| 557 OTHER EXPENSES | OM557 | PROFIX | 1599248 |
| 558 DUPLICATE CHARGES | OM558 | Energy | 0 |
| Total Other Power Supply Expenses | TPP | | 8,680,175.38 |
| Total Electric Power Generation Expenses | | | |
| **Transmission Expenses** | | | |
| 560 OPERATION SUPERVISION AND ENG | OM560 | LBTRAN | 51278.57 |
| 561 LOAD DISPATCHING | OM561 | LBTRAN | 136294.18 |
| 562 STATION EXPENSES | OM562 | PTRAN | 102872.03 |
| 563 OVERHEAD LINE EXPENSES | OM563 | PTRAN | 98436.13 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | OM565 | PTRAN | 264049.42 |
| 566 MISC. TRANSMISSION EXPENSES | OM566 | PTRAN | 30227.33 |
| 567 RENTS | OM567 | PTRAN | 2058.43 |
| 568 MAINTENACE SUPERVISION AND ENG | OM568 | LBTRAN | 38868.14 |
| 569 STRUCTURES | OM569 | PTRAN | 11269.17 |
| 570 MAINT OF STATION EQUIPMENT | OM570 | PTRAN | 114809.26 |
| 571 MAINT OF OVERHEAD LINES | OM571 | PTRAN | 174260.22 |
| 572 UNDERGROUND LINES | OM572 | PTRAN | 0 |
| 573 MISC PLANT | OM573 | PTRAN | 7595.34 |
| Total Transmission Expenses | | | 1,032,018.22 |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Distribution Operation Expense** | | | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | OM580 | LBDO | $ | - | 0 | 0 | 0 | 0 | 0 |
| 581 LOAD DISPATCHING | OM581 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 582 STATION EXPENSES | OM582 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 583 OVERHEAD LINE EXPENSES | OM583 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 584 UNDERGROUND LINE EXPENSES | OM584 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 585 STREET LIGHTING EXPENSE | OM585 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES | OM586 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | OM586x | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | OM587 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | OM588 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 588 MISC DISTR EXP – MAPPIN | OM588x | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 589 RENTS | OM589 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Operation Expense | OMDO | | $ | - | | | | | |
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | | |
| **Distribution Maintenance Expense** | | | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | OM590 | LBDM | $ | - | 0 | 0 | 0 | 0 | 0 |
| 591 STRUCTURES | OM591 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 592 MAINTENANCE OF STATION EQUIPME | OM592 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 593 MAINTENANCE OF OVERHEAD LINES | OM593 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 594 MAINTENANCE OF UNDERGROUND LIN | OM594 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 595 MAINTENANCE OF LINE TRANSFORME | OM595 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | OM596 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 597 MAINTENANCE OF METERS | OM597 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 598 MISCELLANEOUS DISTRIBUTION EXPENSES | OM598 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Maintenance Expense | OMDM | | $ | - | | | | | |
| Total Distribution Operation and Maintenance Expenses | | | | - | | | | | |
| Transmission and Distribution Expenses | | | | 13,736,318 | | | | | |
| Production, Transmission and Distribution Expenses | OMSUB | | $ | 416,737,971 | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Distribution Operation Expense** | | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | OM580 | LBDO | 0 | 0 | 0 | 0 | 0 | 0 |
| 581 LOAD DISPATCHING | OM581 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 582 STATION EXPENSES | OM582 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 583 OVERHEAD LINE EXPENSES | OM583 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 584 UNDERGROUND LINE EXPENSES | OM584 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 585 STREET LIGHTING EXPENSE | OM585 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES | OM586 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | OM586x | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | OM587 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | OM588 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 588 MISC DISTR EXP – MAPPIN | OM588x | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 589 RENTS | OM589 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Operation Expense | OMDO | | | | | | | |
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | |
| **Distribution Maintenance Expense** | | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | OM590 | LBDM | 0 | 0 | 0 | 0 | 0 | 0 |
| 591 STRUCTURES | OM591 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 592 MAINTENANCE OF STATION EQUIPME | OM592 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 593 MAINTENANCE OF OVERHEAD LINES | OM593 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 594 MAINTENANCE OF UNDERGROUND LIN | OM594 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 595 MAINTENANCE OF LINE TRANSFORME | OM595 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | OM596 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 597 MAINTENANCE OF METERS | OM597 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 598 MISCELLANEOUS DISTRIBUTION EXPENSES | OM598 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Maintenance Expense | OMDM | | | | | | | |
| Total Distribution Operation and Maintenance Expenses | | | | | | | | |
| Transmission and Distribution Expenses | | | | | | | | |
| Production, Transmission and Distribution Expenses | OMSUB | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Distribution Operation Expense** | | | |
| 580 OPERATION SUPERVISION AND ENGI | OM580 | LBDO | 0 |
| 581 LOAD DISPATCHING | OM581 | PDIST | 0 |
| 582 STATION EXPENSES | OM582 | PDIST | 0 |
| 583 OVERHEAD LINE EXPENSES | OM583 | PDIST | 0 |
| 584 UNDERGROUND LINE EXPENSES | OM584 | PDIST | 0 |
| 585 STREET LIGHTING EXPENSE | OM585 | PDIST | 0 |
| 586 METER EXPENSES | OM586 | PDIST | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | OM586x | PDIST | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | OM587 | PDIST | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | OM588 | PDIST | 0 |
| 588 MISC DISTR EXP – MAPPIN | OM588x | PDIST | 0 |
| 589 RENTS | OM589 | PDIST | 0 |
| Total Distribution Operation Expense | OMDO | | |
| **Operation and Maintenance Expenses (Continued)** | | | |
| **Distribution Maintenance Expense** | | | |
| 590 MAINTENANCE SUPERVISION AND EN | OM590 | LBDM | 0 |
| 591 STRUCTURES | OM591 | PDIST | 0 |
| 592 MAINTENANCE OF STATION EQUIPME | OM592 | PDIST | 0 |
| 593 MAINTENANCE OF OVERHEAD LINES | OM593 | PDIST | 0 |
| 594 MAINTENANCE OF UNDERGROUND LIN | OM594 | PDIST | 0 |
| 595 MAINTENANCE OF LINE TRANSFORME | OM595 | PDIST | 0 |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | OM596 | PDIST | 0 |
| 597 MAINTENANCE OF METERS | OM597 | PDIST | 0 |
| 598 MISCELLANEOUS DISTRIBUTION EXPENSES | OM598 | PDIST | 0 |
| Total Distribution Maintenance Expense | OMDM | | |
| Total Distribution Operation and Maintenance Expenses | | | |
| Transmission and Distribution Expenses | | | |
| Production, Transmission and Distribution Expenses | OMSUB | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Customer Accounts Expense** | | | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | OM901 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 902 METER READING EXPENSES | OM902 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 903 RECORDS AND COLLECTION | OM903 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 904 UNCOLLECTIBLE ACCOUNTS | OM904 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 905 MISC CUST ACCOUNTS | OM903 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Customer Accounts Expense | OMCA | | $ | - | | | | | |
| **Customer Service Expense** | | | | | | | | | |
| 907 SUPERVISION | OM907 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 908 CUSTOMER ASSISTANCE EXPENSES | OM908 | TUP | $ | 591,192 | 104389.97 | 75645.08 | 40729.07 | 42316.45 | 53316.29 |
| 908 CUSTOMER ASSISTANCE EXP-INCENTIVES | OM908x | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 909 INFORMATIONAL AND INSTRUCTIONA | OM909 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 909 INFORM AND INSTRUC -LOAD MGMT | OM909x | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 910 MISCELLANEOUS CUSTOMER SERVICE | OM910 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 911 DEMONSTRATION AND SELLING EXP | OM911 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 912 DEMONSTRATION AND SELLING EXP | OM912 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 913 ADVERTISING EXPENSES | OM913 | TUP | $ | 488,103 | 103663.39 | 219971.2 | 7179.7 | 3679.68 | 21007.78 |
| 915 MDSE-JOBBING-CONTRACT | OM915 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 916 MISC SALES EXPENSE | OM916 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Customer Service Expense | OMCS | | $ | 1,079,295 | 208053.36 | 295616.28 | 47908.77 | 45996.13 | 74324.07 |
| Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service | OMSUB2 | | | 417,817,266 | | | | | |
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | | |
| **Administrative and General Expense** | | | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | OM920 | LBSUB9 | $ | 14,315,713 | 2092449.03 | 1522142.97 | 1300504.05 | 1313340.25 | 1495631.43 |
| 921 OFFICE SUPPLIES AND EXPENSES | OM921 | LBSUB9 | $ | 6,915,648 | 432853.99 | 1082881.21 | 447533.76 | 790015.22 | 520665.52 |
| 922 ADMINISTRATIVE EXPENSES TRANSFERRED | OM922 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 923 OUTSIDE SERVICES EMPLOYED | OM923 | LBSUB9 | $ | 3,954,189 | 337609.86 | 1175322.5 | 167190.31 | 217289.45 | 526048.51 |
| 924 PROPERTY INSURANCE | OM924 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 925 INJURIES AND DAMAGES - INSURAN | OM925 | LBSUB9 | $ | 179,889 | 13413.2 | 21072.48 | 15311.2 | 15178.2 | 25828.68 |
| 926 EMPLOYEE BENEFITS | OM926 | LBSUB9 | $ | 169,663 | 4383.08 | -2896.98 | 25050.87 | 3276.12 | 0 |
| 927 FRANCHISE REQUIREMENTS | OM927 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 928 REGULATORY COMMISSION FEES | OM928 | TUP | $ | 1,188,958 | 2785 | 925 | 0 | 0 | 1790.1 |
| 929 DUPLICATE CHARGES-CR | OM929 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 930 MISCELLANEOUS GENERAL EXPENSES | OM930 | LBSUB9 | $ | 1,686,131 | 68132.08 | 249532.88 | 81732.32 | 215359.96 | 139106.95 |
| 931 RENTS AND LEASES | OM931 | PGP | $ | 1,933 | 161.09 | 161.09 | 161.09 | 161.09 | 161.09 |
| 935 MAINTENANCE OF GENERAL PLANT | OM935 | PGP | $ | 208,156 | 23769.07 | 24452.06 | 14946.22 | 44645.76 | 14798.82 |
| Total Administrative and General Expense | OMAG | | $ | 28,620,280 | 2,975,556.40 | 4,073,593.21 | 2,052,429.82 | 2,599,266.05 | 2,724,031.10 |
| Total Operation and Maintenance Expenses | TOM | | $ | 446,437,546 | | | | | |
| Operation and Maintenance Expenses Less Purchase Power & Fuel | OMLPP | | $ | 224,914,919 | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Customer Accounts Expense** | | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | OM901 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 902 METER READING EXPENSES | OM902 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 903 RECORDS AND COLLECTION | OM903 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 904 UNCOLLECTIBLE ACCOUNTS | OM904 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 905 MISC CUST ACCOUNTS | OM903 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Customer Accounts Expense | OMCA | | | | | | | |
| **Customer Service Expense** | | | | | | | | |
| 907 SUPERVISION | OM907 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 908 CUSTOMER ASSISTANCE EXPENSES | OM908 | TUP | 42590.29 | 45548.65 | 47955.97 | 41989.91 | 36242.46 | 23856.1 |
| 908 CUSTOMER ASSISTANCE EXP-INCENTIVES | OM908x | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 909 INFORMATIONAL AND INSTRUCTIONA | OM909 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 909 INFORM AND INSTRUC -LOAD MGMT | OM909x | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 910 MISCELLANEOUS CUSTOMER SERVICE | OM910 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 911 DEMONSTRATION AND SELLING EXP | OM911 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 912 DEMONSTRATION AND SELLING EXP | OM912 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 913 ADVERTISING EXPENSES | OM913 | TUP | -36141.33 | 11695.6 | 18760.65 | 13630.34 | 24487.44 | 100169 |
| 915 MDSE-JOBBING-CONTRACT | OM915 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 916 MISC SALES EXPENSE | OM916 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Customer Service Expense | OMCS | | 6448.96 | 57244.25 | 66716.62 | 55620.25 | 60729.9 | 124025.1 |
| Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service | OMSUB2 | | | | | | | |
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | |
| **Administrative and General Expense** | | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | OM920 | LBSUB9 | 1326991.23 | 427833.15 | 1263415.19 | 446430.74 | 948956.12 | 1178332.32 |
| 921 OFFICE SUPPLIES AND EXPENSES | OM921 | LBSUB9 | 591943.78 | 481169.78 | 617503.76 | 673906.86 | 384307.2 | 494280.5 |
| 922 ADMINISTRATIVE EXPENSES TRANSFERRED | OM922 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 923 OUTSIDE SERVICES EMPLOYED | OM923 | LBSUB9 | 388800.48 | 188378.03 | 280346.99 | 85723.73 | 284467.92 | 205203.9 |
| 924 PROPERTY INSURANCE | OM924 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 925 INJURIES AND DAMAGES - INSURAN | OM925 | LBSUB9 | 14679.26 | 12401 | 12401 | 12401 | 12401 | 12401 |
| 926 EMPLOYEE BENEFITS | OM926 | LBSUB9 | 53705.24 | 8851.25 | 5962.88 | 6192.45 | 33341.38 | 6109.83 |
| 927 FRANCHISE REQUIREMENTS | OM927 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 928 REGULATORY COMMISSION FEES | OM928 | TUP | 1353.14 | 48087.75 | 665466.25 | 48046.08 | 139142.52 | 18419 |
| 929 DUPLICATE CHARGES-CR | OM929 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 930 MISCELLANEOUS GENERAL EXPENSES | OM930 | LBSUB9 | 94167.83 | 259652.47 | 119570.46 | 108391.43 | 155943.83 | 63658.14 |
| 931 RENTS AND LEASES | OM931 | PGP | 161.09 | 161.09 | 161.09 | 161.09 | 161.09 | 161.09 |
| 935 MAINTENANCE OF GENERAL PLANT | OM935 | PGP | 8698.33 | 7258.14 | 13445.04 | 8125.63 | 22399.01 | 9027.98 |
| Total Administrative and General Expense | OMAG | | 2,480,500.38 | 1,433,792.66 | 2,978,272.66 | 1,389,379.01 | 1,981,120.07 | 1,987,593.76 |
| Total Operation and Maintenance Expenses | TOM | | | | | | | |
| Operation and Maintenance Expenses Less Purchase Power & Fuel | OMLPP | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Customer Accounts Expense** | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | OM901 | F025 | 0 |
| 902 METER READING EXPENSES | OM902 | F025 | 0 |
| 903 RECORDS AND COLLECTION | OM903 | F025 | 0 |
| 904 UNCOLLECTIBLE ACCOUNTS | OM904 | F025 | 0 |
| 905 MISC CUST ACCOUNTS | OM903 | F025 | 0 |
| Total Customer Accounts Expense | OMCA | | |
| **Customer Service Expense** | | | |
| 907 SUPERVISION | OM907 | TUP | 0 |
| 908 CUSTOMER ASSISTANCE EXPENSES | OM908 | TUP | 36611.39 |
| 908 CUSTOMER ASSISTANCE EXP-INCENTIVES | OM908x | TUP | 0 |
| 909 INFORMATIONAL AND INSTRUCTIONA | OM909 | TUP | 0 |
| 909 INFORM AND INSTRUC -LOAD MGMT | OM909x | TUP | 0 |
| 910 MISCELLANEOUS CUSTOMER SERVICE | OM910 | TUP | 0 |
| 911 DEMONSTRATION AND SELLING EXP | OM911 | TUP | 0 |
| 912 DEMONSTRATION AND SELLING EXP | OM912 | TUP | 0 |
| 913 ADVERTISING EXPENSES | OM913 | TUP | 0 |
| 915 MDSE-JOBBING-CONTRACT | OM915 | TUP | 0 |
| 916 MISC SALES EXPENSE | OM916 | TUP | 0 |
| Total Customer Service Expense | OMCS | | 36611.39 |
| Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service | OMSUB2 | | |
| **Operation and Maintenance Expenses (Continued)** | | | |
| **Administrative and General Expense** | | | |
| 920 ADMIN. & GEN. SALARIES- | OM920 | LBSUB9 | 999686.96 |
| 921 OFFICE SUPPLIES AND EXPENSES | OM921 | LBSUB9 | 398586.21 |
| 922 ADMINISTRATIVE EXPENSES TRANSFERRED | OM922 | LBSUB9 | 0 |
| 923 OUTSIDE SERVICES EMPLOYED | OM923 | LBSUB9 | 97807.2 |
| 924 PROPERTY INSURANCE | OM924 | TUP | 0 |
| 925 INJURIES AND DAMAGES - INSURAN | OM925 | LBSUB9 | 12401 |
| 926 EMPLOYEE BENEFITS | OM926 | LBSUB9 | 25686.5 |
| 927 FRANCHISE REQUIREMENTS | OM927 | TUP | 0 |
| 928 REGULATORY COMMISSION FEES | OM928 | TUP | 262942.92 |
| 929 DUPLICATE CHARGES-CR | OM929 | LBSUB9 | 0 |
| 930 MISCELLANEOUS GENERAL EXPENSES | OM930 | LBSUB9 | 130882.85 |
| 931 RENTS AND LEASES | OM931 | PGP | 161.09 |
| 935 MAINTENANCE OF GENERAL PLANT | OM935 | PGP | 16590.29 |
| Total Administrative and General Expense | OMAG | | 1,944,745.02 |
| Total Operation and Maintenance Expenses | TOM | | |
| Operation and Maintenance Expenses Less Purchase Power & Fuel | OMLPP | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Labor Expenses** | | | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | LB500 | PROFIX | $ | 4,967,667 | 342832.39 | 1034681.8 | 357452.74 | 317350.15 | 384316.78 |
| 501 FUEL | LB501 | Energy | $ | 3,889,944 | 323255.71 | 364406.07 | 338654.53 | 313289.78 | 326385.9 |
| 502 STEAM EXPENSES | LB502 | PROFIX | $ | 9,023,322 | 657659.63 | 771924.79 | 681077.92 | 630021.61 | 688026.67 |
| 505 ELECTRIC EXPENSES | LB505 | PROFIX | $ | 4,523,897 | 357040.19 | 416235 | 378976.79 | 348125.67 | 369036.85 |
| 506 MISC. STEAM POWER EXPENSES | LB506 | PROFIX | $ | 940,518 | 52261.31 | 80829.64 | 70706.68 | 101840.85 | 81036.08 |
| 507 RENTS | LB507 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 509 ALLOWANCES | LB509 | Energy | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Steam Power Operation Expenses | LBSUB1 | | $ | 23,345,348 | 1066961.13 | 1268989.43 | 1130761.39 | 1079988.13 | 1138099.6 |
| **Steam Power Generation Maintenance Expenses** | | | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | LB510 | Energy | $ | 3,623,969 | 301562.96 | 282674.01 | 280925.01 | 285686.26 | 324812.85 |
| 511 MAINTENANCE OF STRUCTURES | LB511 | PROFIX | $ | 986,831 | 60839.92 | 78449.28 | 79549.6 | 75632 | 64969.97 |
| 512 MAINTENANCE OF BOILER PLANT | LB512 | Energy | $ | 8,700,235 | 613650.58 | 728746.59 | 804049.52 | 597501.69 | 694231.84 |
| 513 MAINTENANCE OF ELECTRIC PLANT | LB513 | Energy | $ | 1,595,642 | 209176.55 | 143092.64 | 90379.11 | 93612.16 | 119373.66 |
| 514 MAINTENANCE OF MISC STEAM PLANT | LB514 | PROFIX | $ | 200,886 | 16879.23 | 22485.07 | 12128 | 16408.41 | 14092.69 |
| Total Steam Power Generation Maintenance Expense | LBSUB2 | | $ | 15,107,564 | 1202109.24 | 1255447.59 | 1267031.24 | 1068840.52 | 1217481.01 |
| Total Steam Power Generation Expense | | | $ | 38,452,913 | 2269070.37 | 2524437.02 | 2397792.63 | 2148828.65 | 2355580.61 |
| **Labor Expenses (Continued)** | | | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | LB546 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 547 FUEL | LB547 | Energy | $ | - | 0 | 0 | 0 | 0 | 0 |
| 548 GENERATION EXPENSE | LB548 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 549 MISC OTHER POWER GENERATION | LB549 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 550 RENTS | LB550 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Expenses | LBSUB7 | | $ | - | | | | | |
| **Other Power Generation Maintenance Expense** | | | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | LB551 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 552 MAINTENANCE OF STRUCTURES | LB552 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | LB553 | PROFIX | $ | 89,555 | 682.21 | 4299.67 | 1026.96 | 2400.3 | 4848.64 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | LB554 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Maintenance Expense | LBSUB8 | | $ | 89,555 | | | | | |
| Total Other Power Generation Expense | | | $ | 89,555 | | | | | |
| Total Production Expense | LPREX | | $ | 38,542,468 | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Labor Expenses** | | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | LB500 | PROFIX | 338156.02 | 414149.39 | 371014.23 | 359005.08 | 369873.15 | 334189.99 |
| 501 FUEL | LB501 | Energy | 309863.06 | 297596.67 | 304977.88 | 310355.07 | 339148.89 | 336547.05 |
| 502 STEAM EXPENSES | LB502 | PROFIX | 640194.64 | 1123637.4 | 744724.17 | 661984.49 | 702417.45 | 982572.63 |
| 505 ELECTRIC EXPENSES | LB505 | PROFIX | 342341.75 | 393006.64 | 354302.21 | 368561.14 | 384521.42 | 384533.54 |
| 506 MISC. STEAM POWER EXPENSES | LB506 | PROFIX | 63015.48 | 66970.66 | 87852.14 | 88369.17 | 86572.5 | 91267.67 |
| 507 RENTS | LB507 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 509 ALLOWANCES | LB509 | Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Steam Power Operation Expenses | LBSUB1 | | 1045551.87 | 1583614.7 | 1186878.52 | 1118914.8 | 1173511.37 | 1458373.84 |
| **Steam Power Generation Maintenance Expenses** | | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | LB510 | Energy | 297255.94 | 289425 | 296206.84 | 280281.91 | 307241.14 | 294029.27 |
| 511 MAINTENANCE OF STRUCTURES | LB511 | PROFIX | 50081.03 | 70791.44 | 106230.99 | 106856.88 | 116200.49 | 96973.59 |
| 512 MAINTENANCE OF BOILER PLANT | LB512 | Energy | 617716.63 | 961798.07 | 675983.16 | 535600.92 | 651081.61 | 924014.95 |
| 513 MAINTENANCE OF ELECTRIC PLANT | LB513 | Energy | 96940.39 | 142971.1 | 124922.34 | 132978.24 | 129288.01 | 126399.56 |
| 514 MAINTENANCE OF MISC STEAM PLANT | LB514 | PROFIX | 9843.3 | 16400.27 | 20426.8 | 23473.83 | 26283.4 | 15419.85 |
| Total Steam Power Generation Maintenance Expense | LBSUB2 | | 1071837.29 | 1481385.88 | 1223770.13 | 1079191.78 | 1230094.65 | 1456837.22 |
| Total Steam Power Generation Expense | | | 2117389.16 | 3065000.58 | 2410648.65 | 2198106.58 | 2403606.02 | 2915211.06 |
| **Labor Expenses (Continued)** | | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | LB546 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 547 FUEL | LB547 | Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| 548 GENERATION EXPENSE | LB548 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 549 MISC OTHER POWER GENERATION | LB549 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 550 RENTS | LB550 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Expenses | LBSUB7 | | | | | | | |
| **Other Power Generation Maintenance Expense** | | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | LB551 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 552 MAINTENANCE OF STRUCTURES | LB552 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | LB553 | PROFIX | 903.26 | 760.91 | 37267.71 | 11775.09 | 12921.35 | 10584.31 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | LB554 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Maintenance Expense | LBSUB8 | | | | | | | |
| Total Other Power Generation Expense | | | | | | | | |
| Total Production Expense | LPREX | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| ***Labor Expenses*** | | | |
| **Steam Power Generation Operation Expenses** | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | LB500 | PROFIX | 344645.64 |
| 501 FUEL | LB501 | Energy | 325463.54 |
| 502 STEAM EXPENSES | LB502 | PROFIX | 739080.82 |
| 505 ELECTRIC EXPENSES | LB505 | PROFIX | 427215.91 |
| 506 MISC. STEAM POWER EXPENSES | LB506 | PROFIX | 69795.43 |
| 507 RENTS | LB507 | PROFIX | 0 |
| 509 ALLOWANCES | LB509 | Energy | 0 |
| Total Steam Power Operation Expenses | LBSUB1 | | 1236092.16 |
| **Steam Power Generation Maintenance Expenses** | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | LB510 | Energy | 383868.11 |
| 511 MAINTENANCE OF STRUCTURES | LB511 | PROFIX | 80256.21 |
| 512 MAINTENANCE OF BOILER PLANT | LB512 | Energy | 895859.55 |
| 513 MAINTENANCE OF ELECTRIC PLANT | LB513 | Energy | 186508.29 |
| 514 MAINTENANCE OF MISC STEAM PLANT | LB514 | PROFIX | 7045.58 |
| Total Steam Power Generation Maintenance Expense | LBSUB2 | | 1553537.74 |
| Total Steam Power Generation Expense | | | 2642951.16 |
| **Labor Expenses (Continued)** | | | |
| **Other Power Generation Operation Expense** | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | LB546 | PROFIX | 0 |
| 547 FUEL | LB547 | Energy | 0 |
| 548 GENERATION EXPENSE | LB548 | PROFIX | 0 |
| 549 MISC OTHER POWER GENERATION | LB549 | PROFIX | 0 |
| 550 RENTS | LB550 | PROFIX | 0 |
| Total Other Power Generation Expenses | LBSUB7 | | |
| **Other Power Generation Maintenance Expense** | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | LB551 | PROFIX | |
| 552 MAINTENANCE OF STRUCTURES | LB552 | PROFIX | |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | LB553 | PROFIX | 2084.81 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | LB554 | PROFIX | |
| Total Other Power Generation Maintenance Expense | LBSUB8 | | |
| Total Other Power Generation Expense | | | |
| Total Production Expense | LPREX | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | | |
| **Purchased Power** | | | | | | | | | |
| 555 PURCHASED POWER | LB555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 PURCHASED POWER Demand | LBD555 | OMPPD | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 PURCHASED POWER OPTIONS | LBO555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 BROKERAGE FEES | LBB555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 MISO TRANSMISSION EXPENSES | LBM555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | LB556 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 557 OTHER EXPENSES | LB557 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 558 DUPLICATE CHARGES | LB558 | Energy | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Purchased Power Labor | LBPP | | $ | - | | | | | |
| **Transmission Labor Expenses** | | | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | LB560 | PTRAN | $ | 835,977 | 155357.97 | 88621.66 | 61719.3 | 53192.77 | 69331.26 |
| 561 LOAD DISPATCHING | LB561 | PTRAN | $ | 1,304,969 | 240520.6 | 133245.05 | 93819.32 | 87693.64 | 104400.26 |
| 562 STATION EXPENSES | LB562 | PTRAN | $ | 598,382 | 102945.93 | 50883.95 | 33705.43 | 39512.69 | 54112.06 |
| 563 OVERHEAD LINE EXPENSES | LB563 | PTRAN | $ | 236,393 | 52690.64 | 20206.01 | 20032.96 | 18769.45 | 17519.18 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | LB565 | PTRAN | $ | - | 0 | 0 | 0 | 0 | 0 |
| 566 MISC. TRANSMISSION EXPENSES | LB566 | PTRAN | $ | 312,375 | 55300.19 | 33112.8 | 26544.3 | 26563.55 | 28599.72 |
| 567 RENTS | LB567 | PTRAN | $ | - | 0 | 0 | 0 | 0 | 0 |
| 568 MAINTENACE SUPERVISION AND ENG | LB568 | PTRAN | $ | 644,925 | 120270.89 | 65874.61 | 48314.25 | 39737.97 | 53182.86 |
| 569 MAINTENACE OF STRUCTURES | LB569 | PTRAN | $ | 318 | 36.88 | 59.34 | 0 | 0 | 59.12 |
| 570 MAINT OF STATION EQUIPMENT | LB570 | PTRAN | $ | 1,433,304 | 240458.8 | 137581.27 | 112331.02 | 103977.18 | 112839.1 |
| 571 MAINT OF OVERHEAD LINES | LB571 | PTRAN | $ | 1,067,766 | 187769.72 | 120250.23 | 62124.04 | 70835.46 | 82150.36 |
| 573 MAINT OF MISC. TRANSMISSION PLANT | LB573 | PTRAN | $ | 46,439 | 6906.42 | 2875.43 | 2872.93 | 4248.62 | 4851.27 |
| Total Transmission Labor Expenses | LBTRAN | | $ | 6,480,848 | 1162258.04 | 652710.35 | 461463.55 | 444531.33 | 527045.19 |
| **Distribution Operation Labor Expense** | | | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | LB580 | F023 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 581 LOAD DISPATCHING | LB581 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 582 STATION EXPENSES | LB582 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 583 OVERHEAD LINE EXPENSES | LB583 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 584 UNDERGROUND LINE EXPENSES | LB584 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 585 STREET LIGHTING EXPENSE | LB585 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES | LB586 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | LB586x | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | LB587 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | LB588 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 589 RENTS | LB589 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Operation Labor Expense | LBDO | | $ | - | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | |
| **Purchased Power** | | | | | | | | |
| 555 PURCHASED POWER | LB555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 PURCHASED POWER Demand | LBD555 | OMPPD | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 PURCHASED POWER OPTIONS | LBO555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 BROKERAGE FEES | LBB555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 MISO TRANSMISSION EXPENSES | LBM555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | LB556 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 557 OTHER EXPENSES | LB557 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 558 DUPLICATE CHARGES | LB558 | Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Purchased Power Labor | LBPP | | | | | | | |
| **Transmission Labor Expenses** | | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | LB560 | PTRAN | 57113.62 | 58908.5 | 68081.43 | 56191.8 | 51380.65 | 68130.77 |
| 561 LOAD DISPATCHING | LB561 | PTRAN | 79471.75 | 90840.85 | 104792.75 | 86864.08 | 84835.7 | 115440.78 |
| 562 STATION EXPENSES | LB562 | PTRAN | 43463.43 | 48316.48 | 56470.33 | 35035.32 | 46067.52 | 51613.79 |
| 563 OVERHEAD LINE EXPENSES | LB563 | PTRAN | 14223.62 | 16460.25 | 15132.13 | 14168.98 | 13692.1 | 15806.34 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | LB565 | PTRAN | 0 | 0 | 0 | 0 | 0 | 0 |
| 566 MISC. TRANSMISSION EXPENSES | LB566 | PTRAN | 21343.51 | 20102.2 | 25810.07 | 11252.29 | 17357.03 | 25204.78 |
| 567 RENTS | LB567 | PTRAN | 0 | 0 | 0 | 0 | 0 | 0 |
| 568 MAINTENACE SUPERVISION AND ENG | LB568 | PTRAN | 43994.75 | 45554.09 | 50783.31 | 42264.13 | 40489.73 | 55734.99 |
| 569 MAINTENACE OF STRUCTURES | LB569 | PTRAN | 26.22 | 0 | 24.61 | 26.14 | 26.21 | 0.65 |
| 570 MAINT OF STATION EQUIPMENT | LB570 | PTRAN | 98690.36 | 92937.1 | 116008.73 | 108080.33 | 93852.16 | 126204.48 |
| 571 MAINT OF OVERHEAD LINES | LB571 | PTRAN | 66143.16 | 68592.74 | 93608.24 | 76903.52 | 71073.25 | 95620.68 |
| 573 MAINT OF MISC. TRANSMISSION PLANT | LB573 | PTRAN | 4378.83 | 3303.42 | 3349.41 | 3196.71 | 3607.42 | 3592.3 |
| Total Transmission Labor Expenses | LBTRAN | | 428849.25 | 445015.63 | 534061.01 | 433983.3 | 422381.77 | 557349.56 |
| **Distribution Operation Labor Expense** | | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | LB580 | F023 | 0 | 0 | 0 | 0 | 0 | 0 |
| 581 LOAD DISPATCHING | LB581 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 582 STATION EXPENSES | LB582 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 583 OVERHEAD LINE EXPENSES | LB583 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 584 UNDERGROUND LINE EXPENSES | LB584 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 585 STREET LIGHTING EXPENSE | LB585 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES | LB586 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | LB586x | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | LB587 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | LB588 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 589 RENTS | LB589 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Operation Labor Expense | LBDO | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Labor Expenses (Continued)** | | | |
| **Purchased Power** | | | |
| 555 PURCHASED POWER | LB555 | OMPP | 0 |
| 555 PURCHASED POWER Demand | LBD555 | OMPPD | 0 |
| 555 PURCHASED POWER OPTIONS | LBO555 | OMPP | 0 |
| 555 BROKERAGE FEES | LBB555 | OMPP | 0 |
| 555 MISO TRANSMISSION EXPENSES | LBM555 | OMPP | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | LB556 | PROFIX | 0 |
| 557 OTHER EXPENSES | LB557 | PROFIX | 0 |
| 558 DUPLICATE CHARGES | LB558 | Energy | 0 |
| Total Purchased Power Labor | LBPP | | 0 |
| **Transmission Labor Expenses** | | | |
| 560 OPERATION SUPERVISION AND ENG | LB560 | PTRAN | 47946.89 |
| 561 LOAD DISPATCHING | LB561 | PTRAN | 83043.95 |
| 562 STATION EXPENSES | LB562 | PTRAN | 36255.02 |
| 563 OVERHEAD LINE EXPENSES | LB563 | PTRAN | 17691.07 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | LB565 | PTRAN | |
| 566 MISC. TRANSMISSION EXPENSES | LB566 | PTRAN | 21184.45 |
| 567 RENTS | LB567 | PTRAN | |
| 568 MAINTENACE SUPERVISION AND ENG | LB568 | PTRAN | 38723.49 |
| 569 MAINTENACE OF STRUCTURES | LB569 | PTRAN | 59.17 |
| 570 MAINT OF STATION EQUIPMENT | LB570 | PTRAN | 90343.75 |
| 571 MAINT OF OVERHEAD LINES | LB571 | PTRAN | 72694.7 |
| 573 MAINT OF MISC. TRANSMISSION PLANT | LB573 | PTRAN | 3256.6 |
| Total Transmission Labor Expenses | LBTRAN | | 205077.71 |
| **Distribution Operation Labor Expense** | | | |
| 580 OPERATION SUPERVISION AND ENGI | LB580 | F023 | 0 |
| 581 LOAD DISPATCHING | LB581 | PDIST | 0 |
| 582 STATION EXPENSES | LB582 | PDIST | 0 |
| 583 OVERHEAD LINE EXPENSES | LB583 | PDIST | 0 |
| 584 UNDERGROUND LINE EXPENSES | LB584 | PDIST | 0 |
| 585 STREET LIGHTING EXPENSE | LB585 | PDIST | 0 |
| 586 METER EXPENSES | LB586 | PDIST | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | LB586x | PDIST | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | LB587 | PDIST | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | LB588 | PDIST | 0 |
| 589 RENTS | LB589 | PDIST | 0 |
| Total Distribution Operation Labor Expense | LBDO | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| Labor Expenses (Continued) | | | | | | | | | |
| **Distribution Maintenance Labor Expense** | | | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | LB590 | F024 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 591 MAINTENANCE OF STRUCTURES | LB591 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 592 MAINTENANCE OF STATION EQUIPME | LB592 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 593 MAINTENANCE OF OVERHEAD LINES | LB593 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 594 MAINTENANCE OF UNDERGROUND LIN | LB594 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 595 MAINTENANCE OF LINE TRANSFORME | LB595 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | LB596 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 597 MAINTENANCE OF METERS | LB597 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 598 MAINTENANCE OF MISC DISTR PLANT | LB598 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Maintenance Labor Expense | LBDM | | $ | - | | | | | |
| Total Distribution Operation and Maintenance Labor Expenses | | PDIST | | - | | | | | |
| Transmission and Distribution Labor Expenses | | | | 6,480,848 | | | | | |
| Production, Transmission and Distribution Labor Expenses | LBSUB | | $ | 45,023,316 | | | | | |
| **Customer Accounts Expense** | | | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | LB901 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 902 METER READING EXPENSES | LB902 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 903 RECORDS AND COLLECTION | LB903 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 904 UNCOLLECTIBLE ACCOUNTS | LB904 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 905 MISC CUST ACCOUNTS | LB903 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Customer Accounts Labor Expense | LBCA | | $ | - | | | | | |
| **Customer Service Expense** | | | | | | | | | |
| 907 SUPERVISION | LB907 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 908 CUSTOMER ASSISTANCE EXPENSES | LB908 | TUP | $ | 544,608 | 98543.49 | 44838.51 | 39429.59 | 38666.03 | 49827.22 |
| 908 CUSTOMER ASSISTANCE EXP-LOAD MGMT | LB908x | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 909 INFORMATIONAL AND INSTRUCTIONA | LB909 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 909 INFORM AND INSTRUC -LOAD MGMT | LB909x | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 910 MISCELLANEOUS CUSTOMER SERVICE | LB910 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 911 DEMONSTRATION AND SELLING EXP | LB911 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 912 DEMONSTRATION AND SELLING EXP | LB912 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 913 WATER HEATER - HEAT PUMP PROGRAM | LB913 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 915 MDSE-JOBBING-CONTRACT | LB915 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 916 MISC SALES EXPENSE | LB916 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Customer Service Labor Expense | LBCS | | $ | 544,608 | 98543.49 | 44838.51 | 39429.59 | 38666.03 | 49827.22 |
| Sub-Total Labor Exp | LBSUB9 | | | 45,567,924 | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | |
| **Distribution Maintenance Labor Expense** | | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | LB590 | F024 | 0 | 0 | 0 | 0 | 0 | 0 |
| 591 MAINTENANCE OF STRUCTURES | LB591 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 592 MAINTENANCE OF STATION EQUIPME | LB592 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 593 MAINTENANCE OF OVERHEAD LINES | LB593 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 594 MAINTENANCE OF UNDERGROUND LIN | LB594 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 595 MAINTENANCE OF LINE TRANSFORME | LB595 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | LB596 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 597 MAINTENANCE OF METERS | LB597 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 598 MAINTENANCE OF MISC DISTR PLANT | LB598 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Maintenance Labor Expense | LBDM | | | | | | | |
| Total Distribution Operation and Maintenance Labor Expenses | | PDIST | | | | | | |
| Transmission and Distribution Labor Expenses | | | | | | | | |
| Production, Transmission and Distribution Labor Expenses | LBSUB | | | | | | | |
| **Customer Accounts Expense** | | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | LB901 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 902 METER READING EXPENSES | LB902 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 903 RECORDS AND COLLECTION | LB903 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 904 UNCOLLECTIBLE ACCOUNTS | LB904 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 905 MISC CUST ACCOUNTS | LB903 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Customer Accounts Labor Expense | LBCA | | | | | | | |
| **Customer Service Expense** | | | | | | | | |
| 907 SUPERVISION | LB907 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 908 CUSTOMER ASSISTANCE EXPENSES | LB908 | TUP | 37915.48 | 41556.72 | 44591.58 | 38345.68 | 32873.52 | 44118.04 |
| 908 CUSTOMER ASSISTANCE EXP-LOAD MGMT | LB908x | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 909 INFORMATIONAL AND INSTRUCTIONA | LB909 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 909 INFORM AND INSTRUC -LOAD MGMT | LB909x | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 910 MISCELLANEOUS CUSTOMER SERVICE | LB910 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 911 DEMONSTRATION AND SELLING EXP | LB911 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 912 DEMONSTRATION AND SELLING EXP | LB912 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 913 WATER HEATER - HEAT PUMP PROGRAM | LB913 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 915 MDSE-JOBBING-CONTRACT | LB915 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 916 MISC SALES EXPENSE | LB916 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Customer Service Labor Expense | LBCS | | 37915.48 | 41556.72 | 44591.58 | 38345.68 | 32873.52 | 44118.04 |
| Sub-Total Labor Exp | LBSUB9 | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Labor Expenses (Continued)** | | | |
| **Distribution Maintenance Labor Expense** | | | |
| 590 MAINTENANCE SUPERVISION AND EN | LB590 | F024 | |
| 591 MAINTENANCE OF STRUCTURES | LB591 | PDIST | |
| 592 MAINTENANCE OF STATION EQUIPME | LB592 | PDIST | |
| 593 MAINTENANCE OF OVERHEAD LINES | LB593 | PDIST | |
| 594 MAINTENANCE OF UNDERGROUND LIN | LB594 | PDIST | |
| 595 MAINTENANCE OF LINE TRANSFORME | LB595 | PDIST | |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | LB596 | PDIST | |
| 597 MAINTENANCE OF METERS | LB597 | PDIST | |
| 598 MAINTENANCE OF MISC DISTR PLANT | LB598 | PDIST | |
| Total Distribution Maintenance Labor Expense | LBDM | | |
| Total Distribution Operation and Maintenance Labor Expenses | | PDIST | |
| Transmission and Distribution Labor Expenses | | | |
| Production, Transmission and Distribution Labor Expenses | LBSUB | | |
| **Customer Accounts Expense** | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | LB901 | F025 | |
| 902 METER READING EXPENSES | LB902 | F025 | |
| 903 RECORDS AND COLLECTION | LB903 | F025 | |
| 904 UNCOLLECTIBLE ACCOUNTS | LB904 | F025 | |
| 905 MISC CUST ACCOUNTS | LB903 | F025 | |
| Total Customer Accounts Labor Expense | LBCA | | |
| **Customer Service Expense** | | | |
| 907 SUPERVISION | LB907 | TUP | |
| 908 CUSTOMER ASSISTANCE EXPENSES | LB908 | TUP | 33902.45 |
| 908 CUSTOMER ASSISTANCE EXP-LOAD MGMT | LB908x | TUP | |
| 909 INFORMATIONAL AND INSTRUCTIONA | LB909 | TUP | |
| 909 INFORM AND INSTRUC -LOAD MGMT | LB909x | TUP | |
| 910 MISCELLANEOUS CUSTOMER SERVICE | LB910 | TUP | |
| 911 DEMONSTRATION AND SELLING EXP | LB911 | TUP | |
| 912 DEMONSTRATION AND SELLING EXP | LB912 | TUP | |
| 913 WATER HEATER - HEAT PUMP PROGRAM | LB913 | TUP | |
| 915 MDSE-JOBBING-CONTRACT | LB915 | TUP | |
| 916 MISC SALES EXPENSE | LB916 | TUP | |
| Total Customer Service Labor Expense | LBCS | | 33902.45 |
| Sub-Total Labor Exp | LBSUB9 | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | | |
| **Administrative and General Expense** | | | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | LB920 | LBSUB9 | $ | 14,315,714 | 2092449.04 | 1522142.8 | 1300504.05 | 1313340.25 | 1495631.43 |
| 921 OFFICE SUPPLIES AND EXPENSES | LB921 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 922 ADMIN. EXPENSES TRANSFERRED - CREDIT | LB922 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 923 OUTSIDE SERVICES EMPLOYED | LB923 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 924 PROPERTY INSURANCE | LB924 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 925 INJURIES AND DAMAGES - INSURAN | LB925 | LBSUB9 | $ | 27,509 | 2777.2 | 3471.48 | 2777.2 | 2777.2 | 13427.68 |
| 926 EMPLOYEE BENEFITS | LB926 | LBSUB9 | $ | 17,136 | 2711 | -43974.67 | 0 | 0 | 0 |
| 928 REGULATORY COMMISSION FEES | LB928 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 929 DUPLICATE CHARGES-CR | LB929 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 930 MISCELLANEOUS GENERAL EXPENSES | LB930 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 931 RENTS AND LEASES | LB931 | PGP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 935 MAINTENANCE OF GENERAL PLANT | LB935 | PGP | $ | 74,927 | 14602.3 | 14130.42 | 6605.75 | 5191.93 | 4971.6 |
| Total Administrative and General Expense | LBAG | | $ | 14,435,286 | | | | | |
| Total Operation and Maintenance Expenses | TLB | | $ | 60,003,210 | | | | | |
| Operation and Maintenance Expenses Less Purchase Power | LBLPP | | $ | 60,003,210 | | | | | |
| **Other Expenses** | | | | | | | | | |
| **Depreciation Expenses** | | | | | | | | | |
| Production | DEPRDP2 | PPROD | $ | 28,815,395 | 2347440.74 | 2389099.7 | 2595994.55 | 2361961.48 | 2361968.56 |
| Transmission | DEPRDP3 | PTRAN | $ | 5,182,459 | 443546.44 | 533184.66 | 214261.5 | 442312.53 | 442305.66 |
| Transmission | DEPRDP4 | PTRAN | $ | - | | | | | |
| Distribution | DEPRDP5 | PDIST | $ | - | | | | | |
| General & Common Plant | DEPRDP6 | PGP | $ | 238,155 | 17050.71 | 19802.63 | 19799.44 | 19799.44 | 19766.55 |
| Other Plant | DEPROTH | TPIS | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Depreciation Expense | TDEPR | | $ | 34,236,009 | 2808037.89 | 2942086.99 | 2830055.49 | 2824073.45 | 2824040.77 |
| **Accretion Expense** | | | | | | | | | |
| Production | ACRTNP | F017 | $ | - | 0 | 0 | 0 | 0 | 0 |
| Transmission | ACRTNT | PTRAN | $ | - | 0 | 0 | 0 | 0 | 0 |
| Distribution | ACRTND | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Accretion Expense | TACRTN | | $ | - | | | | | |
| Property Taxes & Other | PTAX | TUP | $ | (94,563) | $ (379,997) | $ 87,636 | $ - | $ - | $ 910 |
| Amortization of Investment Tax Credit | OTAX | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| Other Expenses | OT | TUP | $ | (365,864) | $ (6,691) | $ (14,191) | $ (18,627) | $ (23,851) | $ (16,042) |
| Interest | INTLTD | TUP | $ | 47,622,710 | 4168487.53 | 4316793.16 | 4234968.72 | 3796291.74 | 4133482.27 |
| Other Deductions | DEDUCT | TUP | $ | 109,257 | 7611 | 15379 | 4539 | 6545 | 5640 |
| **Total Other Expenses** | TOE | | $ | 81,507,549 | $ 3,789,411 | $ 4,405,617 | $ 4,220,881 | $ 3,778,986 | $ 4,123,991 |
| **Total Cost of Service (O&M + Other Expenses)** | | | $ | 527,945,095 | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | |
| **Administrative and General Expense** | | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | LB920 | LBSUB9 | 1326991.23 | 427833.15 | 1263415.19 | 446430.74 | 948956.12 | 1178332.32 |
| 921 OFFICE SUPPLIES AND EXPENSES | LB921 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 922 ADMIN. EXPENSES TRANSFERRED - CREDIT | LB922 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 923 OUTSIDE SERVICES EMPLOYED | LB923 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 924 PROPERTY INSURANCE | LB924 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 925 INJURIES AND DAMAGES - INSURAN | LB925 | LBSUB9 | 2278.26 | 0 | 0 | 0 | 0 | 0 |
| 926 EMPLOYEE BENEFITS | LB926 | LBSUB9 | 23360 | 5840 | 5840 | 5840 | 5840 | 5840 |
| 928 REGULATORY COMMISSION FEES | LB928 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 929 DUPLICATE CHARGES-CR | LB929 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 930 MISCELLANEOUS GENERAL EXPENSES | LB930 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 931 RENTS AND LEASES | LB931 | PGP | 0 | 0 | 0 | 0 | 0 | 0 |
| 935 MAINTENANCE OF GENERAL PLANT | LB935 | PGP | 5560.19 | 2953.32 | 3794.54 | 2464 | 6700.24 | 5197.69 |
| Total Administrative and General Expense | LBAG | | | | | | | |
| Total Operation and Maintenance Expenses | TLB | | | | | | | |
| Operation and Maintenance Expenses Less Purchase Power | LBLPP | | | | | | | |
| **Other Expenses** | | | | | | | | |
| **Depreciation Expenses** | | | | | | | | |
| Production | DEPRDP2 | PPROD | 2361962.84 | 2422279.6 | 2384018.59 | 2354733.3 | 2368037.83 | 2494767.54 |
| Transmission | DEPRDP3 | PTRAN | 442357.04 | 442363.4 | 442363.15 | 442486.5 | 440016.44 | 450445.41 |
| Transmission | DEPRDP4 | PTRAN | | | | | | |
| Distribution | DEPRDP5 | PDIST | | | | | | |
| General & Common Plant | DEPRDP6 | PGP | 19733.28 | 21031.35 | 19852.73 | 20082.98 | 19987.32 | 21286.62 |
| Other Plant | DEPROTH | TPIS | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Depreciation Expense | TDEPR | | 2824053.16 | 2885674.35 | 2846234.47 | 2817302.78 | 2828041.59 | 2966499.57 |
| [illegible] | | | | | | | | |
| Production | ACRTNP | F017 | 0 | 0 | 0 | 0 | 0 | 0 |
| Transmission | ACRTNT | PTRAN | 0 | 0 | 0 | 0 | 0 | 0 |
| Distribution | ACRTND | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Accretion Expense | TACRTN | | | | | | | |
| Property Taxes & Other | PTAX | TUP | $ 65,000 | $ 2,342 | $ 65,000 | $ - | $ (429) | $ 65,000 |
| Amortization of Investment Tax Credit | OTAX | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Expenses | OT | TUP | $ (27,557) | $ (8,263) | $ (42,136) | $ (42,545) | $ (48,997) | $ (56,550) |
| Interest | INTLTD | TUP | 3848131.38 | 3699835.35 | 3741933.32 | 3942436.65 | 3958146.18 | 3830668.47 |
| Other Deductions | DEDUCT | TUP | -2109 | 4540 | 14599 | 10828 | 16243 | 12411 |
| **Total Other Expenses** | TOE | | $ 3,883,465 | $ 3,698,454 | $ 3,779,396 | $ 3,910,720 | $ 3,924,964 | $ 3,851,529 |
| **Total Cost of Service (O&M + Other Expenses)** | | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Labor Expenses (Continued)** | | | |
| **Administrative and General Expense** | | | |
| 920 ADMIN. & GEN. SALARIES- | LB920 | LBSUB9 | 999687.37 |
| 921 OFFICE SUPPLIES AND EXPENSES | LB921 | LBSUB9 | |
| 922 ADMIN. EXPENSES TRANSFERRED - CREDIT | LB922 | LBSUB9 | |
| 923 OUTSIDE SERVICES EMPLOYED | LB923 | LBSUB9 | |
| 924 PROPERTY INSURANCE | LB924 | TUP | |
| 925 INJURIES AND DAMAGES - INSURAN | LB925 | LBSUB9 | 0 |
| 926 EMPLOYEE BENEFITS | LB926 | LBSUB9 | 5840 |
| 928 REGULATORY COMMISSION FEES | LB928 | TUP | |
| 929 DUPLICATE CHARGES-CR | LB929 | LBSUB9 | |
| 930 MISCELLANEOUS GENERAL EXPENSES | LB930 | LBSUB9 | |
| 931 RENTS AND LEASES | LB931 | PGP | |
| 935 MAINTENANCE OF GENERAL PLANT | LB935 | PGP | 2754.81 |
| Total Administrative and General Expense | LBAG | | |
| Total Operation and Maintenance Expenses | TLB | | |
| Operation and Maintenance Expenses Less Purchase Power | LBLPP | | |
| **Other Expenses** | | | |
| **Depreciation Expenses** | | | |
| Production | DEPRDP2 | PPROD | 2373130.48 |
| Transmission | DEPRDP3 | PTRAN | 446815.89 |
| Transmission | DEPRDP4 | PTRAN | |
| Distribution | DEPRDP5 | PDIST | |
| General & Common Plant | DEPRDP6 | PGP | 19962.11 |
| Other Plant | DEPROTH | TPIS | 0 |
| Total Depreciation Expense | TDEPR | | 2839908.48 |
| **Accretion Expense** | | | |
| Production | ACRTNP | F017 | 0 |
| Transmission | ACRTNT | PTRAN | 0 |
| Distribution | ACRTND | PDIST | 0 |
| Total Accretion Expense | TACRTN | | |
| Property Taxes & Other | PTAX | TUP | $ (25) |
| Amortization of Investment Tax Credit | OTAX | TUP | 0 |
| Other Expenses | OT | TUP | $ (60,414) |
| Interest | INTLTD | TUP | 3951535 |
| Other Deductions | DEDUCT | TUP | 13031 |
| **Total Other Expenses** | TOE | | $ 3,904,127 |
| **Total Cost of Service (O&M + Other Expenses)** | | | |

| Description | Name | Functional Vector | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|
| **Revenues** | | | | | | | | |
| Jackson Purchase | | | $ 31,526,082 | 2,047,421 | 2,967,876 | 3,236,562 | 2,630,578 | 2,282,284 |
| Kenergy | | | $ 56,579,648 | 3,789,093 | 5,385,841 | 5,977,907 | 4,990,050 | 4,209,222 |
| Meade | | | $ 22,828,970 | 1,551,653 | 2,374,865 | 2,690,998 | 2,281,167 | 1,830,442 |
| Large Industrial | | | $ 39,110,620 | 3,326,073 | 3,242,060 | 3,257,550 | 3,000,170 | 3,334,841 |
| Century Total | | | $ 150,725,511 | 14,123,587 | 13,900,845 | 12,327,658 | 10,978,277 | 13,026,782 |
| Alcan Total | | | $ 131,680,624 | 11,327,935 | 11,867,881 | 11,227,291 | 10,087,671 | 11,349,236 |
| | Total Rural | | $ 110,934,700 | $ 7,388,167 | $ 10,728,582 | $ 11,905,467 | $ 9,901,794 | $ 8,321,948 |
| | Total Industrial | | $ 39,110,620 | $ 8,666,818 | $ 11,002,766 | $ 11,926,456 | $ 10,271,387 | $ 9,374,506 |
| | Total Smelter | | $ 282,406,135 | $ 25,451,523 | $ 25,768,725 | $ 23,554,949 | $ 21,065,948 | $ 24,376,019 |
| | Total | | $ 432,451,455 | $ 36,165,762 | $ 39,739,368 | $ 38,717,967 | $ 33,967,912 | $ 36,032,808 |
| Century Invoiced | | | $ 149,837,373 | 12,898,686 | 13,350,197 | 12,412,617 | 10,978,277 | 13,026,782 |
| Alcan Invoiced | | | $ 131,911,075 | 10,982,583 | 11,672,836 | 11,353,440 | 10,087,671 | 11,349,236 |
| Century Adjustments | | | $ 888,139 | 1,224,902 | 550,648 | (84,959) | | |
| Alcan Adjustments | | | $ (230,451) | 345,352 | 195,044 | (126,150) | | |
| Off System Sales | | | $ 76,543,801 | $ 1,839,442 | $ 4,073,308 | $ 8,147,840 | $ 9,539,433 | $ 7,986,498 |
| Income from Leased Property Net | | | $ 149,673 | $ 149,673 | $ - | $ - | $ - | $ - |
| Other Operating Revenue & Income | | | $ 13,778,745 | $ 1,230,861 | $ 1,033,968 | $ 1,152,998 | $ 1,145,023 | $ 1,070,097 |
| OSS Variable O&M | | | $ 46,035,981 | $ 1,471,622 | $ 2,691,212 | $ 4,162,194 | $ 5,284,841 | $ 5,083,040 |
| **Energy** | | | | | | | | |
| Jackson Purchase | | | 694,512,540 | 45,926,970 | 65,978,630 | 71,338,200 | 59,712,514 | 49,429,743 |
| Kenergy | | | 1,255,008,258 | 85,135,870 | 120,014,010 | 132,891,880 | 114,367,690 | 91,992,020 |
| Meade | | | 499,627,006 | 34,444,920 | 51,694,410 | 59,035,140 | 51,393,370 | 38,028,116 |
| Large Industrial | | | 928,887,170 | 78,192,702 | 74,359,872 | 75,056,282 | 70,510,685 | 78,126,590 |
| Century | | | 3,949,411,321 | 310,167,027 | 331,563,740 | 339,238,984 | 318,278,276 | 343,763,177 |
| Alcan | | | 3,163,910,039 | 257,031,413 | 268,912,646 | 270,478,213 | 245,969,029 | 270,738,402 |
| Total Rural | | | 2,449,147,804 | 165,507,760 | 237,687,050 | 263,265,220 | 225,473,574 | 179,449,879 |
| Total Industrial | | | 928,887,170 | 78,192,702 | 74,359,872 | 75,056,282 | 70,510,685 | 78,126,590 |
| Total Smelter | | | 7,113,321,360 | 567,198,440 | 600,476,386 | 609,717,197 | 564,247,305 | 614,501,579 |
| Total | | | 10,491,356,334 | 810,898,902 | 912,523,308 | 948,038,699 | 860,231,564 | 872,078,048 |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Revenues** | | | | | | | | |
| Jackson Purchase | | | 1,799,767 | 2,308,067 | 3,063,639 | 3,258,780 | 3,399,012 | 2,561,800 |
| Kenergy | | | 3,188,379 | 4,134,538 | 5,323,163 | 5,636,870 | 5,853,842 | 4,573,561 |
| Meade | | | 1,214,667 | 1,532,681 | 1,963,540 | 2,110,692 | 2,169,733 | 1,693,499 |
| Large Industrial | | | 3,161,352 | 3,245,699 | 3,234,324 | 3,234,990 | 3,373,185 | 3,344,243 |
| Century Total | | | 12,044,160 | 12,679,922 | 11,679,623 | 12,055,865 | 12,367,467 | 11,801,654 |
| Alcan Total | | | 10,471,146 | 11,169,007 | 10,543,631 | 10,857,129 | 10,839,072 | 10,177,927 |
| | Total Rural | | $ 6,202,813 | $ 7,975,287 | $ 10,350,341 | $ 11,006,341 | $ 11,422,586 | $ 8,828,859 |
| | Total Industrial | | $ 7,564,398 | $ 8,912,918 | $ 10,521,026 | $ 10,982,552 | $ 11,396,759 | $ 9,611,302 |
| | Total Smelter | | $ 22,515,306 | $ 23,848,930 | $ 22,223,254 | $ 22,912,994 | $ 23,206,539 | $ 21,979,581 |
| | Total | | $ 31,879,471 | $ 35,069,915 | $ 35,807,919 | $ 37,154,326 | $ 38,002,310 | $ 34,152,683 |
| Century Invoiced | | | 12,044,160 | 12,679,922 | 11,679,623 | 12,055,865 | 12,367,467 | 12,580,920 |
| Alcan Invoiced | | | 10,471,146 | 11,169,007 | 10,543,631 | 10,857,129 | 10,839,072 | 10,806,724 |
| Century Adjustments | | | | | | | | (779,265) |
| Alcan Adjustments | | | | | | | | (628,797) |
| Off System Sales | | | $ 5,678,794 | $ 6,341,556 | $ 7,049,362 | $ 7,908,927 | $ 8,630,309 | $ 5,166,061 |
| Income from Leased Property Net | | | $ - | $ - | $ - | $ - | $ - | $ - |
| Other Operating Revenue & Income | | | $ 1,140,133 | $ 1,143,171 | $ 1,284,686 | $ 1,142,016 | $ 1,145,336 | $ 1,142,234 |
| OSS Vanable O&M | | | $ 3,852,774 | $ 3,932,574 | $ 3,863,529 | $ 4,155,945 | $ 4,803,709 | $ 3,568,984 |
| **Energy** | | | | | | | | |
| Jackson Purchase | | | 40,334,720 | 49,465,221 | 67,937,977 | 74,389,907 | 74,455,490 | 53,358,978 |
| Kenergy | | | 72,904,910 | 88,391,581 | 119,415,050 | 128,859,539 | 129,305,728 | 95,902,980 |
| Meade | | | 28,079,875 | 32,805,170 | 43,966,515 | 47,969,570 | 47,509,670 | 35,325,370 |
| Large Industrial | | | 78,086,611 | 79,512,076 | 79,858,265 | 78,927,327 | 82,005,334 | 79,182,043 |
| Century | | | 323,212,786 | 331,276,534 | 324,397,171 | 337,256,977 | 345,310,998 | 317,766,683 |
| Alcan | | | 260,668,275 | 268,579,997 | 259,859,800 | 268,729,560 | 268,160,608 | 257,328,832 |
| Total Rural | | | 141,319,505 | 170,661,972 | 231,319,542 | 251,219,016 | 251,270,888 | 184,587,328 |
| Total Industrial | | | 78,086,611 | 79,512,076 | 79,858,265 | 78,927,327 | 82,005,334 | 79,182,043 |
| Total Smelter | | | 583,881,061 | 599,856,531 | 584,256,971 | 605,986,537 | 613,471,606 | 575,095,515 |
| Total | | | 803,287,177 | 850,030,579 | 895,434,778 | 936,132,880 | 946,747,828 | 838,864,886 |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Revenues** | | | |
| Jackson Purchase | | | 1,970,297 |
| Kenergy | | | 3,517,183 |
| Meade | | | 1,415,034 |
| Large Industrial | | | 3,356,132 |
| Century Total | | | 13,739,670 |
| Alcan Total | | | 11,762,698 |
| | Total Rural | | $ 6,902,515 |
| | Total Industrial | | $ 8,288,350 |
| | Total Smelter | | $ 25,502,368 |
| | Total | | $ 35,761,015 |
| Century Invoiced | | | 13,762,856 |
| Alcan Invoiced | | | 11,778,599 |
| Century Adjustments | | | (23,186) |
| Alcan Adjustments | | | (15,901) |
| Off System Sales | | | 4,182,271 |
| Income from Leased Property Net | | | $ - |
| Other Operating Revenue & Income | | | $ 1,148,221 |
| OSS Variable O&M | | | $ 3,165,556 |
| **Energy** | | | |
| Jackson Purchase | | | 42,184,190 |
| Kenergy | | | 75,827,000 |
| Meade | | | 29,374,880 |
| Large Industrial | | | 75,069,383 |
| Century | | | 327,178,968 |
| Alcan | | | 267,453,264 |
| Total Rural | | | 147,386,070 |
| Total Industrial | | | 75,069,383 |
| Total Smelter | | | 594,632,232 |
| Total | | | 817,087,685 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Plant in Service** | | | | | | | |
| Intangible Plant | INTPLT | PT&D | $ 66,895 | 58,634 | - | - | 8,261 |
| Production Plant | PPROD | F001 | $ 1,686,796,955 | 1,686,796,955 | - | - | - |
| Transmission Plant | PTRAN | F002 | $ 237,659,206 | - | - | - | 237,659,206 |
| Distribution Plant | PDIST | F003 | $ - | - | - | - | - |
| **Total Production & Transmission Plant** | PT&D | | 1,924,456,160 | 1,686,796,955 | - | - | 237,659,206 |
| General Plant | PGP | PT&D | $ 18,511,051 | 16,225,043 | - | - | 2,286,008 |
| **Total Plant in Service** | TPIS | | $ 1,943,034,107 | $ 1,703,080,632 | $ - | $ - | $ 239,953,475 |
| **Construction Work in Progress (CWIP)** | | | | | | | |
| CWIP Production | CWIP1 | PPROD | $ 22,411,274 | 22,411,274 | - | - | - |
| CWIP Transmission | CWIP2 | PTRAN | $ 7,475,859 | - | - | - | 7,475,859 |
| CWIP Distribution Plant | CWIP3 | PDIST | $ - | - | - | - | - |
| CWIP General Plant | CWIP4 | PT&D | $ 16,915,005 | 14,826,100 | - | - | 2,088,905 |
| **Total Construction Work in Progress** | TCWIP | | $ 46,802,138 | $ 37,237,374 | $ - | $ - | $ 9,564,764 |
| **Total Utility Plant** | | | $ 1,989,836,245 | $ 1,740,318,006 | $ - | $ - | $ 249,518,239 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Rate Base** | | | | | | | |
| **Total Utility Plant** | TUP | | $ 1,989,836,245 | $ 1,740,318,006 | $ - | $ - | $ 249,518,239 |
| **Less: Acummulated Provision for Depreciation** | | | | | | | |
| Production | ADEPREPA | PPROD | $ 790,847,523 | 790,847,523 | - | - | - |
| Transmission | ADEPRTP | PTRAN | $ 107,564,747 | - | - | - | 107,564,747 |
| Distribution | ADEPRD11 | PDIST | $ - | - | - | - | - |
| General & Common Plant | ADEPRD12 | PT&D | $ 6,300,770 | 5,522,661 | - | - | 778,109 |
| Intangible, Misc, and Other Plant | ADEPRGP | PT&D | $ - | - | - | - | - |
| Retirement Work In Progress | ADEPRRT | PT&D | $ - | - | - | - | - |
| Total Accumulated Depreciation | TADEPR | | $ 904,713,040 | $ 796,370,184 | $ - | $ - | $ 108,342,855 |
| **Net Utility Plant** | NTPLANT | | $ 1,085,123,206 | $ 943,947,822 | $ - | $ - | $ 141,175,384 |
| **Working Capital** | | | | | | | |
| Cash Working Capital - Operation and Maintenance Expenses | CWC | OMLPP | $ 28,114,365 | 13,900,247 | 11,969,243 | - | 2,244,875 |
| Materials and Supplies | M&S | TPIS | $ 22,777,820 | 19,964,891 | - | - | 2,812,929 |
| Fuel Stock | PREPAY | TPIS | $ 34,326,112 | 30,087,036 | - | - | 4,239,076 |
| Total Working Capital | TWC | | $ 85,218,297 | $ 63,952,174 | $ 11,969,243 | $ - | $ 9,296,880 |
| **Net Rate Base** | RB | | $ 1,170,341,502 | $ 1,007,899,995 | $ 11,969,243 | $ - | $ 150,472,264 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses** | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | OM500 | PROFIX | $ 4,974,566 | 4,974,566 | - | - | - |
| 501 FUEL | OM501 | Energy | $ 200,919,367 | - | 200,919,367 | - | - |
| 502 STEAM EXPENSES | OM502 | PROFIX | $ 34,453,882 | 34,453,882 | - | - | - |
| 505 ELECTRIC EXPENSES | OM505 | PROFIX | $ 5,730,122 | 5,730,122 | - | - | - |
| 506 MISC. STEAM POWER EXPENSES | OM506 | PROFIX | $ 7,451,302 | 7,451,302 | - | - | - |
| 507 RENTS | OM507 | PROFIX | $ - | - | - | - | - |
| 509 ALLOWANCES | OM509 | Energy | $ 429,682 | - | 429,682 | - | - |
| Total Steam Power Operation Expenses | | | $ 253,958,921 | $ 52,609,872 | $ 201,349,049 | $ - | $ - |
| **Steam Power Generation Maintenance Expenses** | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | OM510 | Energy | $ 3,631,867 | - | 3,631,867 | - | - |
| 511 MAINTENANCE OF STRUCTURES | OM511 | PROFIX | $ 3,346,806 | 3,346,806 | - | - | - |
| 512 MAINTENANCE OF BOILER PLANT | OM512 | Energy | $ 30,113,309 | - | 30,113,309 | - | - |
| 513 MAINTENANCE OF ELECTRIC PLANT | OM513 | Energy | $ 6,251,804 | - | 6,251,804 | - | - |
| 514 MAINTENANCE OF MISC STEAM PLANT | OM514 | PROFIX | $ 877,364 | 877,364 | - | - | - |
| Total Steam Power Generation Maintenance Expense | | | $ 44,221,151 | $ 4,224,170 | $ 39,996,981 | $ - | $ - |
| Total Steam Power Generation Expense | | | $ 298,180,072 | $ 56,834,042 | $ 241,346,030 | $ - | $ - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | OM546 | PROFIX | $ - | - | - | - | - |
| 547 FUEL | OM547 | Energy | $ 706,789 | - | 706,789 | - | - |
| 548 GENERATION EXPENSE | OM548 | PROFIX | $ 34,608 | 34,608 | - | - | - |
| 549 MISC OTHER POWER GENERATION | OM549 | PROFIX | $ - | - | - | - | - |
| 550 RENTS | OM550 | PROFIX | $ - | - | - | - | - |
| Total Other Power Generation Expenses | | | $ 741,396 | $ 34,608 | $ 706,789 | $ - | $ - |
| **Other Power Generation Maintenance Expense** | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | OM551 | PROFIX | $ - | - | - | - | - |
| 552 MAINTENANCE OF STRUCTURES | OM552 | PROFIX | $ - | - | - | - | - |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | OM553 | PROFIX | $ 625,088 | 625,088 | - | - | - |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | OM554 | PROFIX | $ - | - | - | - | - |
| Total Other Power Generation Maintenance Expense | | | $ 625,088 | $ 625,088 | $ - | $ - | $ - |
| Total Other Power Generation Expense | | | $ 1,366,485 | $ 659,696 | $ 706,789 | $ - | $ - |
| Total Station Expense | | | $ 299,546,557 | $ 57,493,738 | $ 242,052,819 | $ - | $ - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | |
| **Other Power Supply Expenses** | | | | | | | |
| 555 PURCHASED POWER Energy | OM555 | OMPP | $ 19,466,790 | - | 19,466,790 | - | - |
| 555 PURCHASED POWER Demand | OMD555 | OMPPD | $ 4,210,045 | 4,210,045 | - | - | - |
| 555 PURCHASED POWER BREC Share of HMP&L Station Two | OMH555 | OMPPH | $ 58,293,374 | 13,175,571 | 45,117,803 | - | - |
| 555 PURCHASED POWER OPTIONS | OMO555 | OMPP | $ - | - | - | - | - |
| 555 BROKERAGE FEES | OMB555 | OMPP | $ - | - | - | - | - |
| 555 MISO TRANSMISSION EXPENSES | OMM555 | OMPP | $ - | - | - | - | - |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | OM556 | PROFIX | $ 909,422 | 909,422 | - | - | - |
| 557 OTHER EXPENSES | OM557 | PROFIX | $ 20,575,465 | 20,575,465 | - | - | - |
| 558 DUPLICATE CHARGES | OM558 | Energy | $ - | - | - | - | - |
| Total Other Power Supply Expenses | TPP | | $ 103,455,096 | $ 38,870,503 | $ 64,584,593 | $ - | $ - |
| Total Electric Power Generation Expenses | | | $ 403,001,653 | $ 96,364,241 | $ 306,637,411 | $ - | $ - |
| **Transmission Expenses** | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | OM560 | LBTRAN | $ 876,815 | - | - | - | 876,815 |
| 561 LOAD DISPATCHING | OM561 | LBTRAN | $ 1,454,938 | - | - | - | 1,454,938 |
| 562 STATION EXPENSES | OM562 | PTRAN | $ 1,163,408 | - | - | - | 1,163,408 |
| 563 OVERHEAD LINE EXPENSES | OM563 | PTRAN | $ 1,090,014 | - | - | - | 1,090,014 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | OM565 | PTRAN | $ 3,065,817 | - | - | - | 3,065,817 |
| 566 MISC. TRANSMISSION EXPENSES | OM566 | PTRAN | $ 475,381 | - | - | - | 475,381 |
| 567 RENTS | OM567 | PTRAN | $ 24,701 | - | - | - | 24,701 |
| 568 MAINTENACE SUPERVISION AND ENG | OM568 | LBTRAN | $ 647,227 | - | - | - | 647,227 |
| 569 STRUCTURES | OM569 | PTRAN | $ 26,913 | - | - | - | 26,913 |
| 570 MAINT OF STATION EQUIPMENT | OM570 | PTRAN | $ 1,936,760 | - | - | - | 1,936,760 |
| 571 MAINT OF OVERHEAD LINES | OM571 | PTRAN | $ 2,876,462 | - | - | - | 2,876,462 |
| 572 UNDERGROUND LINES | OM572 | PTRAN | $ - | - | - | - | - |
| 573 MISC PLANT | OM573 | PTRAN | $ 97,880 | - | - | - | 97,880 |
| Total Transmission Expenses | | | $ 13,736,318 | $ - | $ - | $ - | $ 13,736,318 |
| **Distribution Operation Expense** | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | OM580 | LBDO | $ - | - | - | - | - |
| 581 LOAD DISPATCHING | OM581 | PDIST | $ - | - | - | - | - |
| 582 STATION EXPENSES | OM582 | PDIST | $ - | - | - | - | - |
| 583 OVERHEAD LINE EXPENSES | OM583 | PDIST | $ - | - | - | - | - |
| 584 UNDERGROUND LINE EXPENSES | OM584 | PDIST | $ - | - | - | - | - |
| 585 STREET LIGHTING EXPENSE | OM585 | PDIST | $ - | - | - | - | - |
| 586 METER EXPENSES | OM586 | PDIST | $ - | - | - | - | - |
| 586 METER EXPENSES - LOAD MANAGEMENT | OM586x | PDIST | $ - | - | - | - | - |
| 587 CUSTOMER INSTALLATIONS EXPENSE | OM587 | PDIST | $ - | - | - | - | - |
| 588 MISCELLANEOUS DISTRIBUTION EXP | OM588 | PDIST | $ - | - | - | - | - |
| 588 MISC DISTR EXP – MAPPIN | OM588x | PDIST | $ - | - | - | - | - |
| 589 RENTS | OM589 | PDIST | $ - | - | - | - | - |
| Total Distribution Operation Expense | OMDO | | $ - | $ - | $ - | $ - | $ - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | |
| **Distribution Maintenance Expense** | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | OM590 | LBDM | $ - | - | - | - | - |
| 591 STRUCTURES | OM591 | PDIST | $ - | - | - | - | - |
| 592 MAINTENANCE OF STATION EQUIPME | OM592 | PDIST | $ - | - | - | - | - |
| 593 MAINTENANCE OF OVERHEAD LINES | OM593 | PDIST | $ - | - | - | - | - |
| 594 MAINTENANCE OF UNDERGROUND LIN | OM594 | PDIST | $ - | - | - | - | - |
| 595 MAINTENANCE OF LINE TRANSFORME | OM595 | PDIST | $ - | - | - | - | - |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | OM596 | PDIST | $ - | - | - | - | - |
| 597 MAINTENANCE OF METERS | OM597 | PDIST | $ - | - | - | - | - |
| 598 MISCELLANEOUS DISTRIBUTION EXPENSES | OM598 | PDIST | $ - | - | - | - | - |
| Total Distribution Maintenance Expense | OMDM | | $ - | $ - | $ - | $ - | $ - |
| Total Distribution Operation and Maintenance Expenses | | | - | - | - | - | - |
| Transmission and Distribution Expenses | | | 13,736,318 | - | - | - | 13,736,318 |
| Production, Transmission and Distribution Expenses | OMSUB | | $ 416,737,971 | $ 96,364,241 | $ 306,637,411 | $ - | $ 13,736,318 |
| **Customer Accounts Expense** | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | OM901 | F025 | $ - | - | - | - | - |
| 902 METER READING EXPENSES | OM902 | F025 | $ - | - | - | - | - |
| 903 RECORDS AND COLLECTION | OM903 | F025 | $ - | - | - | - | - |
| 904 UNCOLLECTIBLE ACCOUNTS | OM904 | F025 | $ - | - | - | - | - |
| 905 MISC CUST ACCOUNTS | OM903 | F025 | $ - | - | - | - | - |
| Total Customer Accounts Expense | OMCA | | $ - | $ - | $ - | $ - | $ - |
| **Customer Service Expense** | | | | | | | |
| 907 SUPERVISION | OM907 | TUP | $ - | - | - | - | - |
| 908 CUSTOMER ASSISTANCE EXPENSES | OM908 | TUP | $ 591,192 | 517,058 | - | - | 74,133 |
| 908 CUSTOMER ASSISTANCE EXP-INCENTIVES | OM908x | TUP | $ - | - | - | - | - |
| 909 INFORMATIONAL AND INSTRUCTIONA | OM909 | TUP | $ - | - | - | - | - |
| 909 INFORM AND INSTRUC -LOAD MGMT | OM909x | TUP | $ - | - | - | - | - |
| 910 MISCELLANEOUS CUSTOMER SERVICE | OM910 | TUP | $ - | - | - | - | - |
| 911 DEMONSTRATION AND SELLING EXP | OM911 | TUP | $ - | - | - | - | - |
| 912 DEMONSTRATION AND SELLING EXP | OM912 | TUP | $ - | - | - | - | - |
| 913 ADVERTISING EXPENSES | OM913 | TUP | $ 488,103 | 426,897 | - | - | 61,206 |
| 915 MDSE-JOBBING-CONTRACT | OM915 | TUP | $ - | - | - | - | - |
| 916 MISC SALES EXPENSE | OM916 | TUP | $ - | - | - | - | - |
| Total Customer Service Expense | OMCS | | $ 1,079,295 | $ 943,955 | $ - | $ - | $ 135,340 |
| Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service | OMSUB2 | | 417,817,266 | 97,308,197 | 306,637,411 | - | 13,871,658 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | |
| **Administrative and General Expense** | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | OM920 | LBSUB9 | $ 14,315,713 | 6,663,061 | 5,595,161 | - | 2,057,491 |
| 921 OFFICE SUPPLIES AND EXPENSES | OM921 | LBSUB9 | $ 6,915,648 | 3,218,798 | 2,702,915 | - | 993,935 |
| 922 ADMINISTRATIVE EXPENSES TRANSFERRED | OM922 | LBSUB9 | $ - | - | - | - | - |
| 923 OUTSIDE SERVICES EMPLOYED | OM923 | LBSUB9 | $ 3,954,189 | 1,840,425 | 1,545,457 | - | 568,306 |
| 924 PROPERTY INSURANCE | OM924 | TUP | $ - | - | - | - | - |
| 925 INJURIES AND DAMAGES - INSURAN | OM925 | LBSUB9 | $ 179,889 | 83,727 | 70,308 | - | 25,854 |
| 926 EMPLOYEE BENEFITS | OM926 | LBSUB9 | $ 169,663 | 78,967 | 66,311 | - | 24,384 |
| 927 FRANCHISE REQUIREMENTS | OM927 | TUP | $ - | - | - | - | - |
| 928 REGULATORY COMMISSION FEES | OM928 | TUP | $ 1,188,958 | 1,039,867 | - | - | 149,091 |
| 929 DUPLICATE CHARGES-CR | OM929 | LBSUB9 | $ - | - | - | - | - |
| 930 MISCELLANEOUS GENERAL EXPENSES | OM930 | LBSUB9 | $ 1,686,131 | 784,788 | 659,008 | - | 242,335 |
| 931 RENTS AND LEASES | OM931 | PGP | $ 1,933 | 1,694 | - | - | 239 |
| 935 MAINTENANCE OF GENERAL PLANT | OM935 | PGP | $ 208,156 | 182,450 | - | - | 25,706 |
| Total Administrative and General Expense | OMAG | | $ 28,620,280 | $ 13,893,778 | $ 10,639,160 | $ - | $ 4,087,342 |
| Total Operation and Maintenance Expenses | TOM | | $ 446,437,546 | $ 111,201,975 | $ 317,276,572 | $ - | $ 17,959,000 |
| Operation and Maintenance Expenses Less Purchase Power & Fuel | OMLPP | | $ 224,914,919 | $ 111,201,975 | $ 95,753,945 | $ - | $ 17,959,000 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
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12 Months Ended
October 2010

| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Labor Expenses | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | LB500 | PROFIX | $ 4,967,667 | 4,967,667 | - | - | - |
| 501 FUEL | LB501 | Energy | $ 3,889,944 | - | 3,889,944 | - | - |
| 502 STEAM EXPENSES | LB502 | PROFIX | $ 9,023,322 | 9,023,322 | - | - | - |
| 505 ELECTRIC EXPENSES | LB505 | PROFIX | $ 4,523,897 | 4,523,897 | - | - | - |
| 506 MISC. STEAM POWER EXPENSES | LB506 | PROFIX | $ 940,518 | 940,518 | - | - | - |
| 507 RENTS | LB507 | PROFIX | $ - | - | - | - | - |
| 509 ALLOWANCES | LB509 | Energy | $ - | - | - | - | - |
| Total Steam Power Operation Expenses | LBSUB1 | | $ 23,345,348 | $ 19,455,404 | $ 3,889,944 | $ - | $ - |
| **Steam Power Generation Maintenance Expenses** | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | LB510 | Energy | $ 3,623,969 | - | 3,623,969 | - | - |
| 511 MAINTENANCE OF STRUCTURES | LB511 | PROFIX | $ 986,831 | 986,831 | - | - | - |
| 512 MAINTENANCE OF BOILER PLANT | LB512 | Energy | $ 8,700,235 | - | 8,700,235 | - | - |
| 513 MAINTENANCE OF ELECTRIC PLANT | LB513 | Energy | $ 1,595,642 | - | 1,595,642 | - | - |
| 514 MAINTENANCE OF MISC STEAM PLANT | LB514 | PROFIX | $ 200,886 | 200,886 | - | - | - |
| Total Steam Power Generation Maintenance Expense | LBSUB2 | | $ 15,107,564 | $ 1,187,718 | $ 13,919,846 | $ - | $ - |
| Total Steam Power Generation Expense | | | $ 38,452,913 | $ 20,643,122 | $ 17,809,791 | $ - | $ - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | | Total System | | Production Demand | | Production Energy | | Steam Direct | | Transmission Demand |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Labor Expenses (Continued) | | | | | | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | LB546 | PROFIX | $ | - | | - | | - | | - | | - |
| 547 FUEL | LB547 | Energy | $ | - | | - | | - | | - | | - |
| 548 GENERATION EXPENSE | LB548 | PROFIX | $ | - | | - | | - | | - | | - |
| 549 MISC OTHER POWER GENERATION | LB549 | PROFIX | $ | - | | - | | - | | - | | - |
| 550 RENTS | LB550 | PROFIX | $ | - | | - | | - | | - | | - |
| Total Other Power Generation Expenses | LBSUB7 | | $ | - | $ | - | $ | - | $ | - | $ | - |
| **Other Power Generation Maintenance Expense** | | | | | | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | LB551 | PROFIX | $ | - | | - | | - | | - | | - |
| 552 MAINTENANCE OF STRUCTURES | LB552 | PROFIX | $ | - | | - | | - | | - | | - |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | LB553 | PROFIX | $ | 89,555 | | 89,555 | | - | | - | | - |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | LB554 | PROFIX | $ | - | | - | | - | | - | | - |
| Total Other Power Generation Maintenance Expense | LBSUB8 | | $ | 89,555 | $ | 89,555 | $ | - | $ | - | $ | - |
| Total Other Power Generation Expense | | | $ | 89,555 | $ | 89,555 | $ | - | $ | - | $ | - |
| Total Production Expense | LPREX | | $ | 38,542,468 | $ | 20,732,677 | $ | 17,809,791 | $ | - | $ | - |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Functional Assignment and Classification

12 Months Ended
October 2010

| Description | Name | Functional Vector | | Total System | | Production Demand | | Production Energy | | Steam Direct | | Transmission Demand |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Labor Expenses (Continued) | | | | | | | | | | | | |
| **Purchased Power** | | | | | | | | | | | | |
| 555 PURCHASED POWER Energy | LB555 | OMPP | $ | - | | - | | - | | - | | - |
| 555 PURCHASED POWER Demand | LBD555 | OMPPD | $ | - | | - | | - | | - | | - |
| 555 PURCHASED POWER OPTIONS | LBO555 | OMPP | $ | - | | - | | - | | - | | - |
| 555 BROKERAGE FEES | LBB555 | OMPP | $ | - | | - | | - | | - | | - |
| 555 MISO TRANSMISSION EXPENSES | LBM555 | OMPP | $ | - | | - | | - | | - | | - |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | LB556 | PROFIX | $ | - | | - | | - | | - | | - |
| 557 OTHER EXPENSES | LB557 | PROFIX | $ | - | | - | | - | | - | | - |
| 558 DUPLICATE CHARGES | LB558 | Energy | $ | - | | - | | - | | - | | - |
| Total Purchased Power Labor | LBPP | | $ | - | $ | - | $ | - | $ | - | $ | - |
| **Transmission Labor Expenses** | | | | | | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | LB560 | PTRAN | $ | 835,977 | | - | | - | | - | | 835,977 |
| 561 LOAD DISPATCHING | LB561 | PTRAN | $ | 1,304,969 | | - | | - | | - | | 1,304,969 |
| 562 STATION EXPENSES | LB562 | PTRAN | $ | 598,382 | | - | | - | | - | | 598,382 |
| 563 OVERHEAD LINE EXPENSES | LB563 | PTRAN | $ | 236,393 | | - | | - | | - | | 236,393 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | LB565 | PTRAN | $ | - | | - | | - | | - | | - |
| 566 MISC. TRANSMISSION EXPENSES | LB566 | PTRAN | $ | 312,375 | | - | | - | | - | | 312,375 |
| 567 RENTS | LB567 | PTRAN | $ | - | | - | | - | | - | | - |
| 568 MAINTENACE SUPERVISION AND ENG | LB568 | PTRAN | $ | 644,925 | | - | | - | | - | | 644,925 |
| 569 MAINTENACE OF STRUCTURES | LB569 | PTRAN | $ | 318 | | - | | - | | - | | 318 |
| 570 MAINT OF STATION EQUIPMENT | LB570 | PTRAN | $ | 1,433,304 | | - | | - | | - | | 1,433,304 |
| 571 MAINT OF OVERHEAD LINES | LB571 | PTRAN | $ | 1,067,766 | | - | | - | | - | | 1,067,766 |
| 573 MAINT OF MISC. TRANSMISSION PLANT | LB573 | PTRAN | $ | 46,439 | | - | | - | | - | | 46,439 |
| Total Transmission Labor Expenses | LBTRAN | | $ | 6,480,848 | $ | - | $ | - | $ | - | $ | 6,480,848 |
| **Distribution Operation Labor Expense** | | | | | | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | LB580 | F023 | $ | - | | - | | - | | - | | - |
| 581 LOAD DISPATCHING | LB581 | PDIST | $ | - | | - | | - | | - | | - |
| 582 STATION EXPENSES | LB582 | PDIST | $ | - | | - | | - | | - | | - |
| 583 OVERHEAD LINE EXPENSES | LB583 | PDIST | $ | - | | - | | - | | - | | - |
| 584 UNDERGROUND LINE EXPENSES | LB584 | PDIST | $ | - | | - | | - | | - | | - |
| 585 STREET LIGHTING EXPENSE | LB585 | PDIST | $ | - | | - | | - | | - | | - |
| 586 METER EXPENSES | LB586 | PDIST | $ | - | | - | | - | | - | | - |
| 586 METER EXPENSES - LOAD MANAGEMENT | LB586x | PDIST | $ | - | | - | | - | | - | | - |
| 587 CUSTOMER INSTALLATIONS EXPENSE | LB587 | PDIST | $ | - | | - | | - | | - | | - |
| 588 MISCELLANEOUS DISTRIBUTION EXP | LB588 | PDIST | $ | - | | - | | - | | - | | - |
| 589 RENTS | LB589 | PDIST | $ | - | | - | | - | | - | | - |
| Total Distribution Operation Labor Expense | LBDO | | $ | - | $ | - | $ | - | $ | - | $ | - |

BIG RIVERS ELECTRIC CORPORATION
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12 Months Ended
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| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| Labor Expenses (Continued) | | | | | | | |
| **Distribution Maintenance Labor Expense** | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | LB590 | F024 | $ - | - | - | - | - |
| 591 MAINTENANCE OF STRUCTURES | LB591 | PDIST | $ - | - | - | - | - |
| 592 MAINTENANCE OF STATION EQUIPME | LB592 | PDIST | $ - | - | - | - | - |
| 593 MAINTENANCE OF OVERHEAD LINES | LB593 | PDIST | $ - | - | - | - | - |
| 594 MAINTENANCE OF UNDERGROUND LIN | LB594 | PDIST | $ - | - | - | - | - |
| 595 MAINTENANCE OF LINE TRANSFORME | LB595 | PDIST | $ - | - | - | - | - |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | LB596 | PDIST | $ - | - | - | - | - |
| 597 MAINTENANCE OF METERS | LB597 | PDIST | $ - | - | - | - | - |
| 598 MAINTENANCE OF MISC DISTR PLANT | LB598 | PDIST | $ - | - | - | - | - |
| Total Distribution Maintenance Labor Expense | LBDM | | $ - | $ - | $ - | $ - | $ - |
| Total Distribution Operation and Maintenance Labor Expenses | | PDIST | - | - | - | - | - |
| Transmission and Distribution Labor Expenses | | | 6,480,848 | - | - | - | 6,480,848 |
| Production, Transmission and Distribution Labor Expenses | LBSUB | | $ 45,023,316 | $ 20,732,677 | $ 17,809,791 | $ - | $ 6,480,848 |
| **Customer Accounts Expense** | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | LB901 | F025 | $ - | - | - | - | - |
| 902 METER READING EXPENSES | LB902 | F025 | $ - | - | - | - | - |
| 903 RECORDS AND COLLECTION | LB903 | F025 | $ - | - | - | - | - |
| 904 UNCOLLECTIBLE ACCOUNTS | LB904 | F025 | $ - | - | - | - | - |
| 905 MISC CUST ACCOUNTS | LB903 | F025 | $ - | - | - | - | - |
| Total Customer Accounts Labor Expense | LBCA | | $ - | $ - | $ - | $ - | $ - |
| **Customer Service Expense** | | | | | | | |
| 907 SUPERVISION | LB907 | TUP | $ - | - | - | - | - |
| 908 CUSTOMER ASSISTANCE EXPENSES | LB908 | TUP | $ 544,608 | 476,316 | - | - | 68,292 |
| 908 CUSTOMER ASSISTANCE EXP-LOAD MGMT | LB908x | TUP | $ - | - | - | - | - |
| 909 INFORMATIONAL AND INSTRUCTIONA | LB909 | TUP | $ - | - | - | - | - |
| 909 INFORM AND INSTRUC -LOAD MGMT | LB909x | TUP | $ - | - | - | - | - |
| 910 MISCELLANEOUS CUSTOMER SERVICE | LB910 | TUP | $ - | - | - | - | - |
| 911 DEMONSTRATION AND SELLING EXP | LB911 | TUP | $ - | - | - | - | - |
| 912 DEMONSTRATION AND SELLING EXP | LB912 | TUP | $ - | - | - | - | - |
| 913 WATER HEATER - HEAT PUMP PROGRAM | LB913 | TUP | $ - | - | - | - | - |
| 915 MDSE-JOBBING-CONTRACT | LB915 | TUP | $ - | - | - | - | - |
| 916 MISC SALES EXPENSE | LB916 | TUP | $ - | - | - | - | - |
| Total Customer Service Labor Expense | LBCS | | $ 544,608 | $ 476,316 | $ - | $ - | $ 68,292 |
| Sub-Total Labor Exp | LBSUB9 | | 45,567,924 | 21,208,994 | 17,809,791 | - | 6,549,140 |

BIG RIVERS ELECTRIC CORPORATION
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12 Months Ended
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| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | |
| **Administrative and General Expense** | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | LB920 | LBSUB9 | $ 14,315,714 | 6,663,061 | 5,595,161 | - | 2,057,491 |
| 921 OFFICE SUPPLIES AND EXPENSES | LB921 | LBSUB9 | $ - | - | - | - | - |
| 922 ADMIN. EXPENSES TRANSFERRED - CREDIT | LB922 | LBSUB9 | $ - | - | - | - | - |
| 923 OUTSIDE SERVICES EMPLOYED | LB923 | LBSUB9 | $ - | - | - | - | - |
| 924 PROPERTY INSURANCE | LB924 | TUP | $ - | - | - | - | - |
| 925 INJURIES AND DAMAGES - INSURAN | LB925 | LBSUB9 | $ 27,509 | 12,804 | 10,752 | - | 3,954 |
| 926 EMPLOYEE BENEFITS | LB926 | LBSUB9 | $ 17,136 | 7,976 | 6,698 | - | 2,463 |
| 928 REGULATORY COMMISSION FEES | LB928 | TUP | $ - | - | - | - | - |
| 929 DUPLICATE CHARGES-CR | LB929 | LBSUB9 | $ - | - | - | - | - |
| 930 MISCELLANEOUS GENERAL EXPENSES | LB930 | LBSUB9 | $ - | - | - | - | - |
| 931 RENTS AND LEASES | LB931 | PGP | $ - | - | - | - | - |
| 935 MAINTENANCE OF GENERAL PLANT | LB935 | PGP | $ 74,927 | 65,674 | - | - | 9,253 |
| Total Administrative and General Expense | LBAG | | $ 14,435,286 | $ 6,749,515 | $ 5,612,610 | $ - | $ 2,073,161 |
| Total Operation and Maintenance Expenses | TLB | | $ 60,003,210 | $ 27,958,509 | $ 23,422,401 | $ - | $ 8,622,301 |
| Operation and Maintenance Expenses Less Purchase Power | LBLPP | | $ 60,003,210 | $ 27,958,509 | $ 23,422,401 | $ - | $ 8,622,301 |

BIG RIVERS ELECTRIC CORPORATION
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12 Months Ended
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| Description | Name | Functional Vector | | Total System | | Production Demand | | Production Energy | | Steam Direct | | Transmission Demand |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Other Expenses** | | | | | | | | | | | | |
| **Depreciation Expenses** | | | | | | | | | | | | |
| Production | DEPRDP2 | PPROD | $ | 28,815,395 | | 28,815,395 | | - | | - | | - |
| Transmission | DEPRDP3 | PTRAN | $ | 5,182,459 | | - | | - | | - | | 5,182,459 |
| Transmission | DEPRDP4 | PTRAN | $ | - | | - | | - | | - | | - |
| Distribution | DEPRDP5 | PDIST | $ | - | | - | | - | | - | | - |
| General & Common Plant | DEPRDP6 | PGP | $ | 238,155 | | 208,744 | | - | | - | | 29,411 |
| Other Plant | DEPROTH | TPIS | $ | - | | - | | - | | - | | - |
| Total Depreciation Expense | TDEPR | | $ | 34,236,009 | | 29,024,140 | | - | | - | | 5,211,869 |
| **Accretion Expense** | | | | | | | | | | | | |
| Production | ACRTNP | F017 | $ | - | | - | | - | | - | | - |
| Transmission | ACRTNT | PTRAN | $ | - | | - | | - | | - | | - |
| Distribution | ACRTND | PDIST | $ | - | | - | | - | | - | | - |
| Total Accretion Expense | TACRTN | | $ | - | $ | - | $ | - | $ | - | $ | - |
| Property Taxes & Other | PTAX | TUP | $ | (94,563) | | (82,705) | | - | | - | | (11,858) |
| Amortization of Investment Tax Credit | OTAX | TUP | $ | - | | - | | - | | - | | - |
| Other Expenses | OT | TUP | $ | (365,864) | | (319,986) | | - | | - | | (45,878) |
| Interest | INTLTD | TUP | $ | 47,622,710 | | 41,650,995 | | - | | - | | 5,971,715 |
| Other Deductions | DEDUCT | TUP | $ | 109,257 | | 95,557 | | - | | - | | 13,700 |
| **Total Other Expenses** | TOE | | $ | 81,507,549 | $ | 70,368,000 | $ | - | $ | - | $ | 11,139,549 |
| **Total Cost of Service (O&M + Other Expenses)** | | | $ | 527,945,095 | $ | 181,569,975 | $ | 317,276,572 | $ | - | $ | 29,098,548 |

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12 Months Ended
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| Description | Name | Functional Vector | Total System | Production Demand | Production Energy | Steam Direct | Transmission Demand |
|---|---|---|---|---|---|---|---|
| **Functional Vectors** | | | | | | | |
| Production Plant | F001 | | 1.000000 | 1.000000 | 0.000000 | 0.000000 | 0.000000 |
| Transmission Plant | F002 | | 1.000000 | 0.000000 | 0.000000 | 0.000000 | 1.000000 |
| Distribution Plant | F003 | | 1.000000 | 0.000000 | 0.000000 | 0.000000 | 1.000000 |
| Production Plant | F017 | | 1.000000 | 0.000000 | 1.000000 | 0.000000 | 0.000000 |
| Provar | PROVAR | | 1.000000 | 0.000000 | 1.000000 | 0.000000 | 0.000000 |
| PROFIX | PROFIX | | - | 1.000000 | 0.000000 | 0.000000 | 0.000000 |
| Distribution Operation Labor | F023 | | - | - | - | - | - |
| Distribution Maintenance Labor | F024 | | - | - | - | - | - |
| Customer Accounts Expense | F025 | | 1.000000 | 0.000000 | 0.000000 | 0.000000 | 1.000000 |
| Customer Service Expense | F026 | | 1.000000 | 0.000000 | 0.000000 | 0.000000 | 1.000000 |
| Purchased Power Energy, | OMPP | | 1.000000 | 0.000000 | 1.000000 | 0.000000 | 0.000000 |
| Purchased Power Demand | OMPPD | | 1.000000 | 1.000000 | 0.000000 | 0.000000 | 0.000000 |
| Purchased Power BREC Share of HMP&L Station Two | OMPPH | | 58,293,374 | 13,175,571 | 45,117,803 | 0.000000 | 0.000000 |
| Production Energy | Energy | | 1.000000 | 0.000000 | 1.000000 | 0.000000 | 0.000000 |
| **Internally Generated Functional Vectors** | | | | | | | |
| Total Prod, Trans, and Dist Plant | | PT&D | 1.000000 | 0.876506 | - | - | 0.123494 |
| Total Transmission Plant | | PTRAN | 1.000000 | - | - | - | 1.000000 |
| Operation and Maintenance Expenses Less Purchase Power | | OMLPP | 1.000000 | 0.494418 | 0.425734 | - | 0.079848 |
| Total Plant in Service | | TPIS | 1.000000 | 0.876506 | - | - | 0.123494 |
| Total Operation and Maintenance Expenses (Labor) | | TLB | 1.000000 | 0.465950 | 0.390352 | - | 0.143697 |
| Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service | | OMSUB2 | 1.000000 | 0.232897 | 0.733903 | - | 0.033200 |
| Total Steam Power Operation Expenses (Labor) | | LBSUB1 | 1.000000 | 0.833374 | 0.166626 | - | - |
| Total Steam Power Generation Maintenance Expense (Labor) | | LBSUB2 | 1.000000 | 0.078617 | 0.921383 | - | - |
| Total Transmission Labor Expenses | | LBTRAN | 1.000000 | - | - | - | 1.0000000 |
| Sub-Total Labor Exp | | LBSUB7 | 1.000000 | 0.465437 | 0.390841 | - | 0.143723 |
| Total General Plant | | PGP | 1.000000 | 0.876506 | - | - | 0.123494 |
| Total Production Plant | | PPROD | 1.000000 | 1.000000 | - | - | - |
| Total Intangible Plant | | INTPLT | 1.000000 | 0.876506 | - | - | 0.123494 |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Rate Schedule Allocation
12 Months Ended
October 2010
12 CP - Smelter TIER Adjustment Revenues @ $1.95/mWh

| Description | Ref | Name | Allocation Vector | Rurals | Large Industrials | Smelters | Total System |
|---|---|---|---|---|---|---|---|
| **Cost of Service Summary -- Unadjusted** | | | | | | | |
| **Operating Revenues** | | | | | | | |
| Sales to Members | | REVUC | R01 | $ 110,934,700 | $ 39,110,620 | $ 282,406,135 | $ 432,451,455 |
| Off System Sales Revenue | | | OSSALL | $ 12,699,401 | $ 4,615,345 | $ 59,229,055 | $ 76,543,801 |
| Income from Leased Property Net | | OTHREV | RBPLT | $ 45,976 | $ 12,696 | $ 91,001 | $ 149,673 |
| Other Operating Revenue & Income | | OTHREV | RBPLT | $ 4,232,544 | $ 1,168,737 | $ 8,377,465 | $ 13,778,745 |
| Total Operating Revenues | | TOR | | $ 127,912,621 | $ 44,907,398 | $ 350,103,656 | $ 522,923,675 |
| **Operating Expenses** | | | | | | | |
| Operation and Maintenance Expenses | | | | $ 117,027,890 | $ 39,919,424 | $ 289,490,232 | $ 446,437,546 |
| Depreciation and Amortization Expenses | | | | $ 10,542,673 | $ 2,902,642 | $ 20,790,694 | $ 34,236,009 |
| Property and Other Taxes | | | NPT | $ (29,120) | $ (8,017) | $ (57,426) | $ (94,563) |
| Total Operating Expenses | | TOE | | $ 127,541,444 | $ 42,814,048 | $ 310,223,500 | $ 480,578,992 |
| Utility Operating Margin | | | | $ 371,177 | $ 2,093,350 | $ 39,880,156 | $ 42,344,683 |
| **Non-Operating Items** | | | | | | | |
| Interest Income | | | RBPLT | $ - | $ - | $ - | $ - |
| Other Non-Operating Income | | | RBPLT | $ - | $ - | $ - | $ - |
| Other Credits | | | RBPLT | $ - | $ - | $ - | $ - |
| Interest on Long Term Debt | | | | $ - | $ - | $ - | $ - |
| Other Interest Expense | | | RBPLT | $ - | $ - | $ - | $ - |
| Other Deductions | | | RBPLT | $ - | $ - | $ - | $ - |
| Total Non-Operating Items | | | | $ - | $ - | $ - | $ - |
| Net Utility Operating Margin | | TOM | | $ 371,177 | $ 2,093,350 | $ 39,880,156 | $ 42,344,683 |
| Net Cost Rate Base | | | | $ 359,504,551 | $ 99,270,357 | $ 711,566,594 | $ 1,170,341,502 |

**BIG RIVERS ELECTRIC CORPORATION**
**Cost of Service Study**
**Rate Schedule Allocation**
**12 Months Ended**
**October 2010**
**12 CP - Smelter TIER Adjustment Revenues @ $1.95/mWh**

| Description | Ref | Name | Allocation Vector | Rurals | Large Industrials | Smelters | Total System |
|---|---|---|---|---|---|---|---|
| Cost of Service Summary -- Pro-Forma | | | | | | | |
| **Operating Revenues** | | | | | | | |
| Total Operating Revenue | | | | $ 127,912,621 | $ 44,907,398 | $ 350,103,656 | $ 522,923,675 |
| Pro-Forma Adjustments: | | | | | | | |
| To annualize revenue for new industrial customer | 2.01 | | | $ - | $ 149,752 | $ - | $ 149,752 |
| To adjust mismatch in fuel cost recovery | 2.02 | FACREV | | $ (25,166,503) | $ (9,525,471) | $ (73,123,203) | $ (107,815,177) |
| To eliminate Environmental Surcharge revenues | 2.03 | ESREV | | $ (5,315,462) | $ (2,025,233) | $ (15,493,538) | $ (22,834,232) |
| To reflect temperature normalized sales volumes | 2.04 | | EnergyR | $ (421,610) | $ - | $ - | $ (421,610) |
| To eliminate Non-FAC PPA revenues | 2.05 | NFPR | | $ 2,757,108 | $ 1,045,800 | $ 7,785,109 | $ 11,588,017 |
| To eliminate WKEC Lease Expenses | 2.19 | | RBPLT | $ (45,976) | $ (12,696) | $ (91,001) | $ (149,673) |
| To eliminate RRI Domtar Cogen Backup revenues | 2.09 | | | $ - | $ (1,115,159) | $ - | $ (1,115,159) |
| To adjust for Smelter TIER Adjustment Charge | 2.22 | | | $ - | $ - | $ - | $ - |
| Total Pro-Forma Operating Revenue | | | | $ 99,720,178 | $ 33,424,391 | $ 269,181,024 | $ 402,325,592 |

**BIG RIVERS ELECTRIC CORPORATION**
**Cost of Service Study**
**Rate Schedule Allocation**
**12 Months Ended**
**October 2010**
**12 CP - Smelter TIER Adjustment Revenues @ $1.95/mWh**

| Description | Ref | Name | Allocation Vector | Rurals | Large Industrials | Smelters | Total System |
|---|---|---|---|---|---|---|---|
| **Cost of Service Summary – Pro-Forma** | | | | | | | |
| **Operating Expenses** | | | | | | | |
| Operation and Maintenance Expenses | | | | $ 117,027,890 | $ 39,919,424 | $ 289,490,232 | $ 446,437,546 |
| Depreciation and Amortization Expenses | | | | $ 10,542,673 | $ 2,902,642 | $ 20,790,694 | $ 34,236,009 |
| Property and Other Taxes | | | NPT | $ (29,120) | $ (8,017) | $ (57,426) | $ (94,563) |
| Adjustments to Operating Expenses: | | | | | | | |
| To annualize expenses for new industrial customer | 2.01 | | | $ - | $ 110,607 | $ - | $ 110,607 |
| To adjust mismatch in fuel cost recovery | 2.02 | | FACREV | $ (25,685,949) | $ (9,722,081) | $ (74,632,493) | $ (110,040,523) |
| To eliminate Environmental Surcharge expenses | 2.03 | | ESREV | $ (5,462,944) | $ (2,081,425) | $ (15,923,422) | $ (23,467,791) |
| To reflect weather normalized sales volumes | 2.04 | | EnergyR | $ (295,293) | $ - | $ - | $ (295,293) |
| To eliminate Non-FAC PPA expenses | 2.05 | | NFPR | $ 2,858,740 | $ 1,084,350 | $ 8,072,083 | $ 12,015,173 |
| To reflect annualized depreciation expenses | 2.06 | | PLT | $ 1,925,448 | $ 530,120 | $ 3,797,082 | $ 6,252,651 |
| To reflect increases in labor and labor-related costs | 2.07 | | LBPLT | $ 174,259 | $ 53,897 | $ 396,739 | $ 624,894 |
| To reflect current interest on construction (CWIP) | 2.08 | | PLT | $ 158,826 | $ 43,728 | $ 313,213 | $ 515,767 |
| To eliminate RRI Domtar Cogen Backup expenses | 2.09 | | | $ - | $ (2,086,416) | $ - | $ (2,086,416) |
| To reflect levelized production expenses | 2.10 | | CP | $ 1,743,155 | $ 479,931 | $ 3,437,592 | $ 5,660,678 |
| To reflect levelized production expenses | 2.11 | | CP | $ 839,745 | $ 231,201 | $ 1,656,019 | $ 2,726,965 |
| To reflect going forward Information Technology support services | 2.12 | | RBPLT | $ 89,756 | $ 24,784 | $ 177,654 | $ 292,194 |
| To reflect amortizaton of rate case expenses | 2.13 | | RBPLT | $ 86,538 | $ 23,896 | $ 171,285 | $ 281,719 |
| To reflect MISO related expenses | 2.14 | | 12CPTR | $ 1,667,501 | $ 459,102 | $ 3,288,398 | $ 5,415,000 |
| To annualize interest on long-term debt | 2.15 | | RBPLT | $ 21,628 | $ 5,972 | $ 42,808 | $ 70,408 |
| To reflect leased property income (Soaper Building Rent) | 2.16 | | LBPLT | $ (35,797) | $ (11,072) | $ (81,500) | $ (128,368) |
| To adjust for costs related to LEM Dispatch | 2.17 | | CP | $ (288,484) | $ (79,426) | $ (568,905) | $ (936,815) |
| To adjust for costs related to APM | 2.18 | | CP | $ 63,156 | $ 17,388 | $ 124,546 | $ 205,090 |
| To reflect going forward level.of Outside Services | 2.25 | | EnergyNS | $ (725,000) | $ (275,000) | $ - | $ (1,000,000) |
| To eliminate costs for SFPC membership | 2.20 | | RBPLT | $ (55,530) | $ (15,334) | $ (109,911) | $ (180,775) |
| To adjust for MISO Case-related expenses | 2.21 | | 12CPTR | $ (237,459) | $ (65,378) | $ (468,281) | $ (771,118) |
| To reflect commitment to Energy Efficiency Programs | 2.26 | | EnergyNS | $ 725,000 | $ 275,000 | $ - | $ 1,000,000 |
| To eliminate promo advertising, lobbying, donation and econ dev | 2.23 | | R01 | $ (130,114) | $ (45,872) | $ (331,230) | $ (507,216) |
| To reflect going forward level of income taxes | 2.24 | | NTPLT | $ 56,379 | $ 15,522 | $ 111,182 | $ 183,084 |
| Total Expense Adjustments | | | | $ (22,506,439) | $ (11,026,504) | $ (70,527,141) | $ (104,060,084) |
| | | | TOE | $ 105,035,005 | $ 31,787,544 | $ 239,696,360 | $ 376,518,908 |
| Total Operating Expenses | | | | $ (5,314,827) | $ 1,636,847 | $ 29,484,664 | $ 25,806,684 |
| Utility Operating Margins -- Pro-Forma | | | | $ - | $ - | $ - | $ - |
| | | | | $ - | $ - | $ - | $ - |
| **Non-Operating Items** | | | | | | | |
| Total Non-Operating Items | | | | $ (5,314,827) | $ 1,636,847 | $ 29,484,664 | $ 25,806,684 |
| Net Utility Operating Margin | | | | $ 359,504,551 | $ 99,270,357 | $ 711,566,594 | $ 1,170,341,502 |
| **Net Cost Rate Base** | | | | | | | |
| **Return on Rate Base – Utility Operating Margin Divided by Rate Base** | | | | -1.48% | 1.65% | 4.14% | 2.21% |

BIG RIVERS ELECTRIC CORPORATION
Cost of Service Study
Rate Schedule Allocation
12 Months Ended
October 2010
12 CP - Smelter TIER Adjustment Revenues @ $1.95/mWh

| Description | Ref | Name | Allocation Vector | Rurals | Large Industrials | Smelters | Total System |
|---|---|---|---|---|---|---|---|
| Subsidies Paid and Received at Present Rates | | | | | | | |
| (subisidies received shown as positive value) | | | | | | | |
| Rate Base | | | | $ 359,504,551 | $ 99,270,357 | $ 711,566,594 | $ 1,170,341,502 |
| Operating Margins (present rates) | | | | $ (5,314,827) | $ 1,636,847 | $ 29,484,664 | $ 25,806,684 |
| Operating Margins at Equal Rate of Return | ROR | | 2.21% | $ 7,927,276 | $ 2,188,967 | $ 15,690,441 | $ 25,806,684 |
| Subsidies Paid and Received | | | | $ 13,242,103 | $ 552,120 | $ (13,794,223) | $ 0 |

**Big Rivers Electric Corporation**
Summary of Cost of Service Study
For the 12 Months Ended October 2010

**Rate of Return Summary**

***Unadjusted***

| Rate Schedule | | Utility Operating Margins | | Net Cost Rate Base | Rate of Return |
|---|---|---|---|---|---|
| Total Rural | $ | (5,314,827) | $ | 359,504,551 | -1.48% |
| Total Large Industrial | | 1,636,847 | | 99,270,357 | 1.65% |
| Total Smelter | | 29,484,664 | | 711,566,594 | 4.14% |
| Total | $ | 25,806,684 | $ | 1,170,341,502 | 2.21% |

***Adjusted for Proposed Rate Increase***

| Rate Schedule | | Utility Operating Margins | | Net Cost Rate Base | Rate of Return |
|---|---|---|---|---|---|
| Total Rural | $ | 8,857,176 | $ | 359,504,551 | 2.46% |
| Total Large Industrial | | 4,865,413 | | 99,270,357 | 4.90% |
| Total Smelter | | 52,038,060 | | 711,566,594 | 7.31% |
| Total | $ | 65,760,649 | $ | 1,170,341,502 | 5.62% |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|
| **Plant in Service** | | | | | | | | |
| Intangible Plant | INTPLT | PT&D | $ 66,895 | | | | | |
| Production Plant | PPROD | F001 | $ 1,686,796,955 | | | | | |
| Transmission Plant | PTRAN | F002 | $ 237,659,206 | | | | | |
| Distribution Plant | PDIST | F003 | $ - | | | | | |
| **Total Production & Transmission Plant** | PT&D | | 1,924,456,160 | | | | | |
| General Plant | PGP | PT&D | $ 18,511,051 | | | | | |
| **Total Plant in Service** | TPIS | | $ 1,943,034,107 | | | | | |
| **Construction Work in Progress (CWIP)** | | | | | | | | |
| CWIP Production | CWIP1 | PPROD | $ 22,411,274 | | | | | |
| CWIP Transmission | CWIP2 | PTRAN | $ 7,475,859 | | | | | |
| CWIP Distribution Plant | CWIP3 | PDIST | $ - | | | | | |
| CWIP General Plant | CWIP4 | PT&D | $ 16,915,005 | | | | | |
| **Total Construction Work in Progress** | TCWIP | | $ 46,802,138 | | | | | |
| **Total Utility Plant** | | | $ 1,989,836,245 | | | | | |
| **Rate Base** | TUP | | $ 1,989,836,245 | | | | | |
| **Total Utility Plant** | | | $ 790,847,523 | | | | | |
| **Less: Acummulated Provision for Depreciation** | | | | | | | | |
| Production | ADEPREPA | PPROD | $ 107,564,747 | | | | | |
| Transmission | ADEPRTP | PTRAN | $ - | | | | | |
| Distribution | ADEPRD11 | PDIST | $ 6,300,770 | | | | | |
| General & Common Plant | ADEPRD12 | PT&D | $ - | | | | | |
| Intangible, Misc, and Other Plant | ADEPRGP | PT&D | $ - | | | | | |
| Retirement Work In Progress | ADEPRRT | PT&D | | | | | | |
| Total Accumulated Depreciation | TADEPR | | $ 904,713,040 | | | | | |
| **Net Utility Plant** | NTPLANT | | $ 1,085,123,206 | | | | | |
| **Working Capital** | | | | | | | | |
| Cash Working Capital - Operation and Maintenance Expenses | CWC | OMLPP | $ 28,114,365 | 20327197.9 | 85340.04 | -68898.4 | 208485.44 | -95121.11 |
| Materials and Supplies | M&S | TPIS | $ 22,777,820 | 39158400.85 | -1328756.9 | -4130766.79 | -359777.13 | 1918732.52 |
| Fuel Stock | PREPAY | TPIS | $ 34,326,112 | | | | | |
| Total Working Capital | TWC | | $ 85,218,297 | | | | | |
| **Net Rate Base** | RB | | $ 1,170,341,502 | | | | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Plant in Service** | | | | | | | | |
| Intangible Plant | INTPLT | PT&D | | | | | | |
| Production Plant | PPROD | F001 | | | | | | |
| Transmission Plant | PTRAN | F002 | | | | | | |
| Distribution Plant | PDIST | F003 | | | | | | |
| **Total Production & Transmission Plant** | PT&D | | | | | | | |
| General Plant | PGP | PT&D | | | | | | |
| **Total Plant in Service** | TPIS | | | | | | | |
| **Construction Work in Progress (CWIP)** | | | | | | | | |
| CWIP Production | CWIP1 | PPROD | | | | | | |
| CWIP Transmission | CWIP2 | PTRAN | | | | | | |
| CWIP Distribution Plant | CWIP3 | PDIST | | | | | | |
| CWIP General Plant | CWIP4 | PT&D | | | | | | |
| **Total Construction Work in Progress** | TCWIP | | | | | | | |
| **Total Utility Plant** | | | | | | | | |
| **Rate Base** | | | | | | | | |
| **Total Utility Plant** | TUP | | | | | | | |
| **Less: Acummulated Provision for Depreciation** | | | | | | | | |
| Production | ADEPREPA | PPROD | | | | | | |
| Transmission | ADEPRTP | PTRAN | | | | | | |
| Distribution | ADEPRD11 | PDIST | | | | | | |
| General & Common Plant | ADEPRD12 | PT&D | | | | | | |
| Intangible, Misc, and Other Plant | ADEPRGP | PT&D | | | | | | |
| Retirement Work In Progress | ADEPRRT | PT&D | | | | | | |
| Total Accumulated Depreciation | TADEPR | | | | | | | |
| **Net Utility Plant** | NTPLANT | | | | | | | |
| **Working Capital** | | | | | | | | |
| Cash Working Capital - Operation and Maintenance Expenses | CWC | OMLPP | | | | | | |
| Materials and Supplies | M&S | TPIS | -220183.19 | 207004.7 | 357212.07 | 240129.05 | -144241.07 | 2889566.56 |
| Fuel Stock | PREPAY | TPIS | 2552249.61 | 867432.81 | -287963.1 | -3463026.24 | -2018344.81 | -578882.38 |
| Total Working Capital | TWC | | | | | | | |
| **Net Rate Base** | RB | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Plant in Service** | | | |
| Intangible Plant | INTPLT | PT&D | |
| Production Plant | PPROD | F001 | |
| Transmission Plant | PTRAN | F002 | |
| Distribution Plant | PDIST | F003 | |
| **Total Production & Transmission Plant** | PT&D | | |
| General Plant | PGP | PT&D | |
| **Total Plant in Service** | TPIS | | |
| **Construction Work in Progress (CWIP)** | | | |
| CWIP Production | CWIP1 | PPROD | |
| CWIP Transmission | CWIP2 | PTRAN | |
| CWIP Distribution Plant | CWIP3 | PDIST | |
| CWIP General Plant | CWIP4 | PT&D | |
| **Total Construction Work in Progress** | TCWIP | | |
| **Total Utility Plant** | | | |
| **Rate Base** | | | |
| **Total Utility Plant** | TUP | | |
| **Less: Acummulated Provision for Depreciation** | | | |
| Production | ADEPREPA | PPROD | |
| Transmission | ADEPRTP | PTRAN | |
| Distribution | ADEPRD11 | PDIST | |
| General & Common Plant | ADEPRD12 | PT&D | |
| Intangible, Misc, and Other Plant | ADEPRGP | PT&D | |
| Retirement Work In Progress | ADEPRRT | PT&D | |
| Total Accumulated Depreciation | TADEPR | | |
| **Net Utility Plant** | NTPLANT | | |
| **Working Capital** | | | |
| Cash Working Capital - Operation and Maintenance Expenses | CWC | OMLPP | |
| Materials and Supplies | M&S | TPIS | -1008672.24 |
| Fuel Stock | PREPAY | TPIS | 1996813.82 |
| Total Working Capital | TWC | | |
| **Net Rate Base** | RB | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses** | | | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | OM500 | PROFIX | $ | 4,974,566 | 342962.62 | 1034901.09 | 358703.86 | 318491.34 | 384828.47 |
| 501 FUEL | OM501 | Energy | $ | 200,919,367 | 11957675.62 | 16736745.89 | 19103323.18 | 17630280.19 | 17173097.35 |
| 502 STEAM EXPENSES | OM502 | PROFIX | $ | 34,453,882 | 2424633.22 | 2490999.61 | 2647322.04 | 2676616.85 | 2911578.89 |
| 505 ELECTRIC EXPENSES | OM505 | PROFIX | $ | 5,730,122 | 399281.19 | 656713.94 | 477935.99 | 489102.92 | 443771.24 |
| 506 MISC. STEAM POWER EXPENSES | OM506 | PROFIX | $ | 7,451,302 | 837237.41 | 458663.32 | 531778.12 | 516078.68 | 646116.36 |
| 507 RENTS | OM507 | PROFIX | $ | - | | 0 | 0 | 0 | 0 |
| 509 ALLOWANCES | OM509 | Energy | $ | 429,682 | | 0 | 0 | 55382.46 | 42291.31 |
| Total Steam Power Operation Expenses | | | $ | 253,958,921 | $ 7,775 | $ 146,296 | $ 7,154 | $ 15,852 | $ 21,245 |
| **Steam Power Generation Maintenance Expenses** | | | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | OM510 | Energy | $ | 3,631,867 | 301562.96 | 282674.01 | 282136.07 | 286174.73 | 324812.85 |
| 511 MAINTENANCE OF STRUCTURES | OM511 | PROFIX | $ | 3,346,806 | -2396.3 | 561809.41 | 164027.98 | 219884.17 | 122851.74 |
| 512 MAINTENANCE OF BOILER PLANT | OM512 | Energy | $ | 30,113,309 | 2665049.9 | 2707987.08 | 1617573 | 1413359.02 | 2039706.29 |
| 513 MAINTENANCE OF ELECTRIC PLANT | OM513 | Energy | $ | 6,251,804 | 2443905.77 | 804364.44 | -26124.91 | 190619.56 | 167015.92 |
| 514 MAINTENANCE OF MISC STEAM PLANT | OM514 | PROFIX | $ | 877,364 | 136355.09 | 154030.5 | 71461.85 | 48046.95 | 35868.33 |
| Total Steam Power Generation Maintenance Expense | | | $ | 44,221,151 | $ 3,659 | $ 7,366 | $ 1,455 | $ 6,057 | $ 9,772 |
| Total Steam Power Generation Expense | | | $ | 298,180,072 | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses** | | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | OM500 | PROFIX | 338223.38 | 414283.22 | 372420.21 | 359404.38 | 369945.71 | 334708.35 |
| 501 FUEL | OM501 | Energy | 15868543.13 | 15412621.99 | 16949864.35 | 18643264.65 | 19588180.27 | 17004762.52 |
| 502 STEAM EXPENSES | OM502 | PROFIX | 2801318.34 | 3017168.8 | 3110448.48 | 3022221.22 | 3095094.21 | 3132173.1 |
| 505 ELECTRIC EXPENSES | OM505 | PROFIX | 430459.27 | 473960.9 | 440316.02 | 456264.08 | 479912.75 | 476352.39 |
| 506 MISC. STEAM POWER EXPENSES | OM506 | PROFIX | 557984.26 | 577686.56 | 640171.09 | 585642.46 | 806920.28 | 725866.29 |
| 507 RENTS | OM507 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 509 ALLOWANCES | OM509 | Energy | 33437.63 | 31618.94 | 46952.89 | 62169.21 | 49573.1 | 28256.05 |
| Total Steam Power Operation Expenses | | | $ 6,070 | $ 8,052 | $ 5,213 | $ 267,644 | $ 167,124 | $ 44,089 |
| **Steam Power Generation Maintenance Expenses** | | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | OM510 | Energy | 297530.92 | 289425 | 297802.77 | 281476.85 | 309430.59 | 294029.27 |
| 511 MAINTENANCE OF STRUCTURES | OM511 | PROFIX | 153063.03 | 309779.07 | 306987.02 | 458108.12 | 372678.29 | 488354.6 |
| 512 MAINTENANCE OF BOILER PLANT | OM512 | Energy | 1740181.45 | 2535024.61 | 2164789.64 | 2054585.86 | 2034329.79 | 2855272.84 |
| 513 MAINTENANCE OF ELECTRIC PLANT | OM513 | Energy | 313812.24 | 389518.49 | 251988.71 | 302199.64 | 422000.23 | 534239.62 |
| 514 MAINTENANCE OF MISC STEAM PLANT | OM514 | PROFIX | 61896.28 | 58285.06 | 85932.24 | 51800.09 | 89344.85 | 66090.33 |
| Total Steam Power Generation Maintenance Expense | | | $ (325) | $ 4,943 | $ 216,501 | $ 175,754 | $ 65,241 | $ 96,186 |
| Total Steam Power Generation Expense | | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Operation and Maintenance Expenses** | | | |
| **Steam Power Generation Operation Expenses** | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | OM500 | PROFIX | 345693.85 |
| 501 FUEL | OM501 | Energy | 14851007.4 |
| 502 STEAM EXPENSES | OM502 | PROFIX | 3124307.14 |
| 505 ELECTRIC EXPENSES | OM505 | PROFIX | 506051.44 |
| 506 MISC. STEAM POWER EXPENSES | OM506 | PROFIX | 567156.95 |
| 507 RENTS | OM507 | PROFIX | 0 |
| 509 ALLOWANCES | OM509 | Energy | 80000.79 |
| Total Steam Power Operation Expenses | | | $ 44,882 |
| **Steam Power Generation Maintenance Expenses** | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | OM510 | Energy | 384811.34 |
| 511 MAINTENANCE OF STRUCTURES | OM511 | PROFIX | 191658.45 |
| 512 MAINTENANCE OF BOILER PLANT | OM512 | Energy | 6285449.98 |
| 513 MAINTENANCE OF ELECTRIC PLANT | OM513 | Energy | 458264.77 |
| 514 MAINTENANCE OF MISC STEAM PLANT | OM514 | PROFIX | 18252.47 |
| Total Steam Power Generation Maintenance Expense | | | $ 38,478 |
| Total Steam Power Generation Expense | | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | OM546 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 547 FUEL | OM547 | Energy | $ | 706,789 | 7379.85 | 135814.53 | 4779.27 | 13479.11 | 18872.46 |
| 548 GENERATION EXPENSE | OM548 | PROFIX | $ | 34,608 | 394.54 | 10481.32 | 2375 | 2373 | 2373 |
| 549 MISC OTHER POWER GENERATION | OM549 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 550 RENTS | OM550 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Expenses | | | $ | 741,396 | $ (1) | $ (0) | $ 0 | $ 1 | $ 0 |
| **Other Power Generation Maintenance Expense** | | | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | OM551 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 552 MAINTENANCE OF STRUCTURES | OM552 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | OM553 | PROFIX | $ | 625,088 | 3658.66 | 7365.41 | 1454.85 | 6056.77 | 9772.16 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | OM554 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Maintenance Expense | | | $ | 625,088 | $ 0 | $ (0) | $ (0) | $ 0 | $ 0 |
| Total Other Power Generation Expense | | | $ | 1,366,485 | | | | | |
| Total Station Expense | | | $ | 299,546,557 | | | | | |

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | OM546 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 547 FUEL | OM547 | Energy | 3696.82 | 5679.30 | 2839.60 | 265271.41 | 164750.42 | 41716.70 |
| 548 GENERATION EXPENSE | OM548 | PROFIX | 2373 | 2373.00 | 2373.00 | 2373.00 | 2373.00 | 2373.00 |
| 549 MISC OTHER POWER GENERATION | OM549 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 550 RENTS | OM550 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Expenses | | | $ (0) | $ 1 | $ (0) | $ 0 | $ (0) | $ 0 |
| **Other Power Generation Maintenance Expense** | | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | OM551 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 552 MAINTENANCE OF STRUCTURES | OM552 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | OM553 | PROFIX | -322.62 | 4943.09 | 216501.24 | 175754.02 | 65240.65 | 96186.42 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | OM554 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Maintenance Expense | | | $ 2 | $ 0 | $ 1 | $ (0) | $ (1) | $ 0 |
| Total Other Power Generation Expense | | | | | | | | |
| Total Station Expense | | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | |
| **Other Power Generation Operation Expense** | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | OM546 | PROFIX | 0 |
| 547 FUEL | OM547 | Energy | 42509.14 |
| 548 GENERATION EXPENSE | OM548 | PROFIX | 2373.00 |
| 549 MISC OTHER POWER GENERATION | OM549 | PROFIX | 0 |
| 550 RENTS | OM550 | PROFIX | 0 |
| Total Other Power Generation Expenses | | | $ (0) |
| **Other Power Generation Maintenance Expense** | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | OM551 | PROFIX | 0 |
| 552 MAINTENANCE OF STRUCTURES | OM552 | PROFIX | 0 |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | OM553 | PROFIX | 38477.63 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | OM554 | PROFIX | 0 |
| Total Other Power Generation Maintenance Expense | | | $ (0) |
| Total Other Power Generation Expense | | | |
| Total Station Expense | | | |

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | | |
| **Other Power Supply Expenses** | | | | | | | | | |
| 555 PURCHASED POWER Energy | OM555 | OMPP | $ | 19,466,790 | 3,827,952.61 | 2,536,760.36 | 1,913,169.62 | 941,370.11 | 911,294.71 |
| 555 PURCHASED POWER Demand | OMD555 | OMPPD | $ | 4,210,045 | 350,837.07 | 350,837.07 | 350,837.07 | 350,837.07 | 350,837.07 |
| 555 PURCHASED POWER BREC Share of HMP&L Station Two | OMH555 | OMPPH | $ | 58,293,374 | 4,582,937.26 | 5,054,161.64 | 4,549,698.12 | 4,432,913.73 | 4,763,164.98 |
| 555 PURCHASED POWER OPTIONS | OMO555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 BROKERAGE FEES | OMB555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 MISO TRANSMISSION EXPENSES | OMM555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | OM556 | PROFIX | $ | 909,422 | 143177.05 | 161775.92 | 84110.82 | 66492.87 | 77558.07 |
| 557 OTHER EXPENSES | OM557 | PROFIX | $ | 20,575,465 | 2479520.29 | 2210820.92 | 1519858.99 | 1381956.22 | 1577347.72 |
| 558 DUPLICATE CHARGES | OM558 | Energy | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Supply Expenses | TPP | | $ | 103,455,096 | 11,384,424.28 | 10,314,355.91 | 8,417,674.62 | 7,173,570.00 | 7,680,202.55 |
| Total Electric Power Generation Expenses | | | $ | 403,001,653 | | | | | |
| **Transmission Expenses** | | | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | OM560 | LBTRAN | $ | 876,815 | 159722.72 | 99111.49 | 64131.05 | 56493.74 | 71626.61 |
| 561 LOAD DISPATCHING | OM561 | LBTRAN | $ | 1,454,938 | 245368.38 | 141741.21 | 113777.21 | 98967.65 | 113022.44 |
| 562 STATION EXPENSES | OM562 | PTRAN | $ | 1,163,408 | 138650.41 | 111166.28 | 70289.35 | 78900.11 | 96317.14 |
| 563 OVERHEAD LINE EXPENSES | OM563 | PTRAN | $ | 1,090,014 | 116902.84 | 72507.66 | 91764.75 | 90248.86 | 92136.75 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | OM565 | PTRAN | $ | 3,065,817 | 227372.33 | 270804.44 | 222495.76 | 313990.87 | 298157.74 |
| 566 MISC. TRANSMISSION EXPENSES | OM566 | PTRAN | $ | 475,381 | 82941.08 | 54676.78 | 40839.08 | 35322.18 | 39484.82 |
| 567 RENTS | OM567 | PTRAN | $ | 24,701 | 2058.43 | 2058.43 | 2058.43 | 2058.43 | 2058.43 |
| 568 MAINTENACE SUPERVISION AND ENG | OM568 | LBTRAN | $ | 647,227 | 120702.88 | 66051.02 | 48367.7 | 40149.83 | 53439.26 |
| 569 STRUCTURES | OM569 | PTRAN | $ | 26,913 | 36.88 | 6259.34 | 0 | 1874.02 | 59.12 |
| 570 MAINT OF STATION EQUIPMENT | OM570 | PTRAN | $ | 1,936,760 | 272171.89 | 208826.01 | 135405.37 | 165513.32 | 155839.56 |
| 571 MAINT OF OVERHEAD LINES | OM571 | PTRAN | $ | 2,876,462 | 318695.62 | 624358.63 | 20316.93 | 128651.35 | 134146 |
| 572 UNDERGROUND LINES | OM572 | PTRAN | $ | - | 0 | 0 | 0 | 0 | 0 |
| 573 MISC PLANT | OM573 | PTRAN | $ | 97,880 | 8341.27 | 4665 | 3732.37 | 5821.94 | 34823.78 |
| Total Transmission Expenses | | | $ | 13,736,318 | 1,692,964.73 | 1,662,226.29 | 813,178.00 | 1,017,992.30 | 1,091,111.65 |

Big Rivers Electric Corporation
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| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | |
| **Other Power Supply Expenses** | | | | | | | | |
| 555 PURCHASED POWER Energy | OM555 | OMPP | 1,360,105.55 | 2,595,157.16 | 1,414,751.54 | 1,276,714.40 | 516,721.89 | 613,253.53 |
| 555 PURCHASED POWER Demand | OMD555 | OMPPD | 350,837.07 | 350,837.07 | 350,837.07 | 350,837.07 | 350,837.07 | 350,837.07 |
| 555 PURCHASED POWER BREC Share of HMP&L Station Two | OMH555 | OMPPH | 5,098,546.01 | 4,460,755.81 | 4,842,232.95 | 5,325,056.85 | 5,088,921.31 | 4,972,622.48 |
| 555 PURCHASED POWER OPTIONS | OMO555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 BROKERAGE FEES | OMB555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 MISO TRANSMISSION EXPENSES | OMM555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | OM556 | PROFIX | 0 | 92094.61 | 73384.96 | 71377.18 | 39951.63 | 51309.82 |
| 557 OTHER EXPENSES | OM557 | PROFIX | 1535653.17 | 1420108.84 | 1438109.81 | 1546376.13 | 1542523.95 | 2323941.19 |
| 558 DUPLICATE CHARGES | OM558 | Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Supply Expenses | TPP | | 8,345,141.80 | 8,918,953.49 | 8,119,316.33 | 8,570,361.63 | 7,538,955.85 | 8,311,964.09 |
| Total Electric Power Generation Expenses | | | | | | | | |
| **Transmission Expenses** | | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | OM560 | LBTRAN | 59387.59 | 61734.83 | 72275.43 | 57830.16 | 52970.2 | 70253.05 |
| 561 LOAD DISPATCHING | OM561 | LBTRAN | 89896.48 | 94173.59 | 104627.56 | 94297.49 | 86936.32 | 135835 |
| 562 STATION EXPENSES | OM562 | PTRAN | 84122.23 | 90931.03 | 103923.43 | 86043.52 | 116294.21 | 83898.29 |
| 563 OVERHEAD LINE EXPENSES | OM563 | PTRAN | 87522.07 | 87158.79 | 89203.39 | 89187.21 | 86736.29 | 88209.66 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | OM565 | PTRAN | 229091.63 | 251486.95 | 238169.64 | 253067.81 | 259149.57 | 237980.88 |
| 566 MISC. TRANSMISSION EXPENSES | OM566 | PTRAN | 28982.15 | 30160.95 | 44581.15 | 19944.19 | 35290.89 | 32930.62 |
| 567 RENTS | OM567 | PTRAN | 2058.43 | 2058.43 | 2058.43 | 2058.43 | 2058.43 | 2058.43 |
| 568 MAINTENACE SUPERVISION AND ENG | OM568 | LBTRAN | 44241.45 | 45590.11 | 51110.87 | 42324.47 | 40557.13 | 55824.53 |
| 569 STRUCTURES | OM569 | PTRAN | 80.04 | 577.95 | 1084.71 | 2771.42 | 1003.78 | 1896.87 |
| 570 MAINT OF STATION EQUIPMENT | OM570 | PTRAN | 124235.3 | 158259.64 | 153920.85 | 137834.03 | 134856.99 | 175088.1 |
| 571 MAINT OF OVERHEAD LINES | OM571 | PTRAN | 140543.65 | 122631.69 | 245673.12 | 136904.15 | 282898.22 | 547382.49 |
| 572 UNDERGROUND LINES | OM572 | PTRAN | 0 | 0 | 0 | 0 | 0 | 0 |
| 573 MISC PLANT | OM573 | PTRAN | 4923.69 | 6697.42 | 5370.15 | 3919.44 | 6630.08 | 5359.76 |
| Total Transmission Expenses | | | 895,084.71 | 951,461.38 | 1,111,998.73 | 926,182.32 | 1,105,382.11 | 1,436,717.68 |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Operation and Maintenance Expenses (Continued)** | | | |
| **Other Power Supply Expenses** | | | |
| 555 PURCHASED POWER Energy | OM555 | OMPP | 1559538.19 |
| 555 PURCHASED POWER Demand | OMD555 | OMPPD | 350837.07 |
| 555 PURCHASED POWER BREC Share of HMP&L Station Two | OMH555 | OMPPH | 5,122,362.96 |
| 555 PURCHASED POWER OPTIONS | OMO555 | OMPP | 0 |
| 555 BROKERAGE FEES | OMB555 | OMPP | 0 |
| 555 MISO TRANSMISSION EXPENSES | OMM555 | OMPP | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | OM556 | PROFIX | 48189.16 |
| 557 OTHER EXPENSES | OM557 | PROFIX | 1599248 |
| 558 DUPLICATE CHARGES | OM558 | Energy | 0 |
| Total Other Power Supply Expenses | TPP | | 8,680,175.38 |
| Total Electric Power Generation Expenses | | | |
| **Transmission Expenses** | | | |
| 560 OPERATION SUPERVISION AND ENG | OM560 | LBTRAN | 51278.57 |
| 561 LOAD DISPATCHING | OM561 | LBTRAN | 136294.18 |
| 562 STATION EXPENSES | OM562 | PTRAN | 102872.03 |
| 563 OVERHEAD LINE EXPENSES | OM563 | PTRAN | 98436.13 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | OM565 | PTRAN | 264049.42 |
| 566 MISC. TRANSMISSION EXPENSES | OM566 | PTRAN | 30227.33 |
| 567 RENTS | OM567 | PTRAN | 2058.43 |
| 568 MAINTENACE SUPERVISION AND ENG | OM568 | LBTRAN | 38868.14 |
| 569 STRUCTURES | OM569 | PTRAN | 11269.17 |
| 570 MAINT OF STATION EQUIPMENT | OM570 | PTRAN | 114809.26 |
| 571 MAINT OF OVERHEAD LINES | OM571 | PTRAN | 174260.22 |
| 572 UNDERGROUND LINES | OM572 | PTRAN | 0 |
| 573 MISC PLANT | OM573 | PTRAN | 7595.34 |
| Total Transmission Expenses | | | 1,032,018.22 |

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| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Distribution Operation Expense** | | | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | OM580 | LBDO | $ | - | 0 | 0 | 0 | 0 | 0 |
| 581 LOAD DISPATCHING | OM581 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 582 STATION EXPENSES | OM582 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 583 OVERHEAD LINE EXPENSES | OM583 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 584 UNDERGROUND LINE EXPENSES | OM584 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 585 STREET LIGHTING EXPENSE | OM585 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES | OM586 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | OM586x | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | OM587 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | OM588 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 588 MISC DISTR EXP – MAPPIN | OM588x | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 589 RENTS | OM589 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Operation Expense | OMDO | | $ | - | | | | | |
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | | |
| **Distribution Maintenance Expense** | | | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | OM590 | LBDM | $ | - | 0 | 0 | 0 | 0 | 0 |
| 591 STRUCTURES | OM591 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 592 MAINTENANCE OF STATION EQUIPME | OM592 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 593 MAINTENANCE OF OVERHEAD LINES | OM593 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 594 MAINTENANCE OF UNDERGROUND LIN | OM594 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 595 MAINTENANCE OF LINE TRANSFORME | OM595 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | OM596 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 597 MAINTENANCE OF METERS | OM597 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 598 MISCELLANEOUS DISTRIBUTION EXPENSES | OM598 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Maintenance Expense | OMDM | | $ | - | | | | | |
| Total Distribution Operation and Maintenance Expenses | | | | - | | | | | |
| Transmission and Distribution Expenses | | | | 13,736,318 | | | | | |
| Production, Transmission and Distribution Expenses | OMSUB | | $ | 416,737,971 | | | | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Distribution Operation Expense** | | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | OM580 | LBDO | 0 | 0 | 0 | 0 | 0 | 0 |
| 581 LOAD DISPATCHING | OM581 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 582 STATION EXPENSES | OM582 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 583 OVERHEAD LINE EXPENSES | OM583 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 584 UNDERGROUND LINE EXPENSES | OM584 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 585 STREET LIGHTING EXPENSE | OM585 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES | OM586 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | OM586x | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | OM587 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | OM588 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 588 MISC DISTR EXP – MAPPIN | OM588x | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 589 RENTS | OM589 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Operation Expense | OMDO | | | | | | | |
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | |
| **Distribution Maintenance Expense** | | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | OM590 | LBDM | 0 | 0 | 0 | 0 | 0 | 0 |
| 591 STRUCTURES | OM591 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 592 MAINTENANCE OF STATION EQUIPME | OM592 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 593 MAINTENANCE OF OVERHEAD LINES | OM593 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 594 MAINTENANCE OF UNDERGROUND LIN | OM594 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 595 MAINTENANCE OF LINE TRANSFORME | OM595 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | OM596 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 597 MAINTENANCE OF METERS | OM597 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 598 MISCELLANEOUS DISTRIBUTION EXPENSES | OM598 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Maintenance Expense | OMDM | | | | | | | |
| Total Distribution Operation and Maintenance Expenses | | | | | | | | |
| Transmission and Distribution Expenses | | | | | | | | |
| Production, Transmission and Distribution Expenses | OMSUB | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Distribution Operation Expense** | | | 0 |
| 580 OPERATION SUPERVISION AND ENGI | OM580 | LBDO | 0 |
| 581 LOAD DISPATCHING | OM581 | PDIST | 0 |
| 582 STATION EXPENSES | OM582 | PDIST | 0 |
| 583 OVERHEAD LINE EXPENSES | OM583 | PDIST | 0 |
| 584 UNDERGROUND LINE EXPENSES | OM584 | PDIST | 0 |
| 585 STREET LIGHTING EXPENSE | OM585 | PDIST | 0 |
| 586 METER EXPENSES | OM586 | PDIST | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | OM586x | PDIST | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | OM587 | PDIST | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | OM588 | PDIST | 0 |
| 588 MISC DISTR EXP – MAPPIN | OM588x | PDIST | 0 |
| 589 RENTS | OM589 | PDIST | |
| Total Distribution Operation Expense | OMDO | | |
| **Operation and Maintenance Expenses (Continued)** | | | |
| **Distribution Maintenance Expense** | | | 0 |
| 590 MAINTENANCE SUPERVISION AND EN | OM590 | LBDM | 0 |
| 591 STRUCTURES | OM591 | PDIST | 0 |
| 592 MAINTENANCE OF STATION EQUIPME | OM592 | PDIST | 0 |
| 593 MAINTENANCE OF OVERHEAD LINES | OM593 | PDIST | 0 |
| 594 MAINTENANCE OF UNDERGROUND LIN | OM594 | PDIST | 0 |
| 595 MAINTENANCE OF LINE TRANSFORME | OM595 | PDIST | 0 |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | OM596 | PDIST | 0 |
| 597 MAINTENANCE OF METERS | OM597 | PDIST | 0 |
| 598 MISCELLANEOUS DISTRIBUTION EXPENSES | OM598 | PDIST | |
| Total Distribution Maintenance Expense | OMDM | | |
| Total Distribution Operation and Maintenance Expenses | | | |
| Transmission and Distribution Expenses | | | |
| Production, Transmission and Distribution Expenses | OMSUB | | |

Big Rivers Electric Corporation
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| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Customer Accounts Expense** | | | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | OM901 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 902 METER READING EXPENSES | OM902 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 903 RECORDS AND COLLECTION | OM903 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 904 UNCOLLECTIBLE ACCOUNTS | OM904 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 905 MISC CUST ACCOUNTS | OM903 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Customer Accounts Expense | OMCA | | $ | - | | | | | |
| **Customer Service Expense** | | | | | | | | | |
| 907 SUPERVISION | OM907 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 908 CUSTOMER ASSISTANCE EXPENSES | OM908 | TUP | $ | 591,192 | 104389.97 | 75645.08 | 40729.07 | 42316.45 | 53316.29 |
| 908 CUSTOMER ASSISTANCE EXP-INCENTIVES | OM908x | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 909 INFORMATIONAL AND INSTRUCTIONA | OM909 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 909 INFORM AND INSTRUC -LOAD MGMT | OM909x | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 910 MISCELLANEOUS CUSTOMER SERVICE | OM910 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 911 DEMONSTRATION AND SELLING EXP | OM911 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 912 DEMONSTRATION AND SELLING EXP | OM912 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 913 ADVERTISING EXPENSES | OM913 | TUP | $ | 488,103 | 103663.39 | 219971.2 | 7179.7 | 3679.68 | 21007.78 |
| 915 MDSE-JOBBING-CONTRACT | OM915 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 916 MISC SALES EXPENSE | OM916 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Customer Service Expense | OMCS | | $ | 1,079,295 | 208053.36 | 295616.28 | 47908.77 | 45996.13 | 74324.07 |
| Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service | OMSUB2 | | | 417,817,266 | | | | | |
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | | |
| **Administrative and General Expense** | | | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | OM920 | LBSUB9 | $ | 14,315,713 | 2092449.03 | 1522142.97 | 1300504.05 | 1313340.25 | 1495631.43 |
| 921 OFFICE SUPPLIES AND EXPENSES | OM921 | LBSUB9 | $ | 6,915,648 | 432853.99 | 1082881.21 | 447533.76 | 790015.22 | 520665.52 |
| 922 ADMINISTRATIVE EXPENSES TRANSFERRED | OM922 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 923 OUTSIDE SERVICES EMPLOYED | OM923 | LBSUB9 | $ | 3,954,189 | 337609.86 | 1175322.5 | 167190.31 | 217289.45 | 526048.51 |
| 924 PROPERTY INSURANCE | OM924 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 925 INJURIES AND DAMAGES - INSURAN | OM925 | LBSUB9 | $ | 179,889 | 13413.2 | 21072.48 | 15311.2 | 15178.2 | 25828.68 |
| 926 EMPLOYEE BENEFITS | OM926 | LBSUB9 | $ | 169,663 | 4383.08 | -2896.98 | 25050.87 | 3276.12 | 0 |
| 927 FRANCHISE REQUIREMENTS | OM927 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 928 REGULATORY COMMISSION FEES | OM928 | TUP | $ | 1,188,958 | 2785 | 925 | 0 | 0 | 1790.1 |
| 929 DUPLICATE CHARGES-CR | OM929 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 930 MISCELLANEOUS GENERAL EXPENSES | OM930 | LBSUB9 | $ | 1,686,131 | 68132.08 | 249532.88 | 81732.32 | 215359.96 | 139106.95 |
| 931 RENTS AND LEASES | OM931 | PGP | $ | 1,933 | 161.09 | 161.09 | 161.09 | 161.09 | 161.09 |
| 935 MAINTENANCE OF GENERAL PLANT | OM935 | PGP | $ | 208,156 | 23769.07 | 24452.06 | 14946.22 | 44645.76 | 14798.82 |
| Total Administrative and General Expense | OMAG | | $ | 28,620,280 | 2,975,556.40 | 4,073,593.21 | 2,052,429.82 | 2,599,266.05 | 2,724,031.10 |
| Total Operation and Maintenance Expenses | TOM | | $ | 446,437,546 | | | | | |
| Operation and Maintenance Expenses Less Purchase Power & Fuel | OMLPP | | $ | 224,914,919 | | | | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Customer Accounts Expense** | | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | OM901 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 902 METER READING EXPENSES | OM902 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 903 RECORDS AND COLLECTION | OM903 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 904 UNCOLLECTIBLE ACCOUNTS | OM904 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 905 MISC CUST ACCOUNTS | OM903 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Customer Accounts Expense | OMCA | | | | | | | |
| **Customer Service Expense** | | | | | | | | |
| 907 SUPERVISION | OM907 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 908 CUSTOMER ASSISTANCE EXPENSES | OM908 | TUP | 42590.29 | 45548.65 | 47955.97 | 41989.91 | 36242.46 | 23856.1 |
| 908 CUSTOMER ASSISTANCE EXP-INCENTIVES | OM908x | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 909 INFORMATIONAL AND INSTRUCTIONA | OM909 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 909 INFORM AND INSTRUC -LOAD MGMT | OM909x | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 910 MISCELLANEOUS CUSTOMER SERVICE | OM910 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 911 DEMONSTRATION AND SELLING EXP | OM911 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 912 DEMONSTRATION AND SELLING EXP | OM912 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 913 ADVERTISING EXPENSES | OM913 | TUP | -36141.33 | 11695.6 | 18760.65 | 13630.34 | 24487.44 | 100169 |
| 915 MDSE-JOBBING-CONTRACT | OM915 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 916 MISC SALES EXPENSE | OM916 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Customer Service Expense | OMCS | | 6448.96 | 57244.25 | 66716.62 | 55620.25 | 60729.9 | 124025.1 |
| Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service | OMSUB2 | | | | | | | |
| **Operation and Maintenance Expenses (Continued)** | | | | | | | | |
| **Administrative and General Expense** | | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | OM920 | LBSUB9 | 1326991.23 | 427833.15 | 1263415.19 | 446430.74 | 948956.12 | 1178332.32 |
| 921 OFFICE SUPPLIES AND EXPENSES | OM921 | LBSUB9 | 591943.78 | 481169.78 | 617503.76 | 673906.86 | 384307.2 | 494280.5 |
| 922 ADMINISTRATIVE EXPENSES TRANSFERRED | OM922 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 923 OUTSIDE SERVICES EMPLOYED | OM923 | LBSUB9 | 388800.48 | 188378.03 | 280346.99 | 85723.73 | 284467.92 | 205203.9 |
| 924 PROPERTY INSURANCE | OM924 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 925 INJURIES AND DAMAGES - INSURAN | OM925 | LBSUB9 | 14679.26 | 12401 | 12401 | 12401 | 12401 | 12401 |
| 926 EMPLOYEE BENEFITS | OM926 | LBSUB9 | 53705.24 | 8851.25 | 5962.88 | 6192.45 | 33341.38 | 6109.83 |
| 927 FRANCHISE REQUIREMENTS | OM927 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 928 REGULATORY COMMISSION FEES | OM928 | TUP | 1353.14 | 48087.75 | 665466.25 | 48046.08 | 139142.52 | 18419 |
| 929 DUPLICATE CHARGES-CR | OM929 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 930 MISCELLANEOUS GENERAL EXPENSES | OM930 | LBSUB9 | 94167.83 | 259652.47 | 119570.46 | 108391.43 | 155943.83 | 63658.14 |
| 931 RENTS AND LEASES | OM931 | PGP | 161.09 | 161.09 | 161.09 | 161.09 | 161.09 | 161.09 |
| 935 MAINTENANCE OF GENERAL PLANT | OM935 | PGP | 8698.33 | 7258.14 | 13445.04 | 8125.63 | 22399.01 | 9027.98 |
| Total Administrative and General Expense | OMAG | | 2,480,500.38 | 1,433,792.66 | 2,978,272.66 | 1,389,379.01 | 1,981,120.07 | 1,987,593.76 |
| Total Operation and Maintenance Expenses | TOM | | | | | | | |
| Operation and Maintenance Expenses Less Purchase Power & Fuel | OMLPP | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Customer Accounts Expense** | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | OM901 | F025 | 0 |
| 902 METER READING EXPENSES | OM902 | F025 | 0 |
| 903 RECORDS AND COLLECTION | OM903 | F025 | 0 |
| 904 UNCOLLECTIBLE ACCOUNTS | OM904 | F025 | 0 |
| 905 MISC CUST ACCOUNTS | OM903 | F025 | 0 |
| Total Customer Accounts Expense | OMCA | | |
| **Customer Service Expense** | | | |
| 907 SUPERVISION | OM907 | TUP | 0 |
| 908 CUSTOMER ASSISTANCE EXPENSES | OM908 | TUP | 36611.39 |
| 908 CUSTOMER ASSISTANCE EXP-INCENTIVES | OM908x | TUP | 0 |
| 909 INFORMATIONAL AND INSTRUCTIONA | OM909 | TUP | 0 |
| 909 INFORM AND INSTRUC -LOAD MGMT | OM909x | TUP | 0 |
| 910 MISCELLANEOUS CUSTOMER SERVICE | OM910 | TUP | 0 |
| 911 DEMONSTRATION AND SELLING EXP | OM911 | TUP | 0 |
| 912 DEMONSTRATION AND SELLING EXP | OM912 | TUP | 0 |
| 913 ADVERTISING EXPENSES | OM913 | TUP | 0 |
| 915 MDSE-JOBBING-CONTRACT | OM915 | TUP | 0 |
| 916 MISC SALES EXPENSE | OM916 | TUP | 0 |
| Total Customer Service Expense | OMCS | | 36611.39 |
| Sub-Total Prod, Trans, Dist, Cust Acct and Cust Service | OMSUB2 | | |
| **Operation and Maintenance Expenses (Continued)** | | | |
| **Administrative and General Expense** | | | |
| 920 ADMIN. & GEN. SALARIES- | OM920 | LBSUB9 | 999686.96 |
| 921 OFFICE SUPPLIES AND EXPENSES | OM921 | LBSUB9 | 398586.21 |
| 922 ADMINISTRATIVE EXPENSES TRANSFERRED | OM922 | LBSUB9 | 0 |
| 923 OUTSIDE SERVICES EMPLOYED | OM923 | LBSUB9 | 97807.2 |
| 924 PROPERTY INSURANCE | OM924 | TUP | 0 |
| 925 INJURIES AND DAMAGES - INSURAN | OM925 | LBSUB9 | 12401 |
| 926 EMPLOYEE BENEFITS | OM926 | LBSUB9 | 25686.5 |
| 927 FRANCHISE REQUIREMENTS | OM927 | TUP | 0 |
| 928 REGULATORY COMMISSION FEES | OM928 | TUP | 262942.92 |
| 929 DUPLICATE CHARGES-CR | OM929 | LBSUB9 | 0 |
| 930 MISCELLANEOUS GENERAL EXPENSES | OM930 | LBSUB9 | 130882.85 |
| 931 RENTS AND LEASES | OM931 | PGP | 161.09 |
| 935 MAINTENANCE OF GENERAL PLANT | OM935 | PGP | 16590.29 |
| Total Administrative and General Expense | OMAG | | 1,944,745.02 |
| Total Operation and Maintenance Expenses | TOM | | |
| Operation and Maintenance Expenses Less Purchase Power & Fuel | OMLPP | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Labor Expenses** | | | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | LB500 | PROFIX | $ | 4,967,667 | 342832.39 | 1034681.8 | 357452.74 | 317350.15 | 384316.78 |
| 501 FUEL | LB501 | Energy | $ | 3,889,944 | 323255.71 | 364406.07 | 338654.53 | 313289.78 | 326385.9 |
| 502 STEAM EXPENSES | LB502 | PROFIX | $ | 9,023,322 | 657659.63 | 771924.79 | 681077.92 | 630021.61 | 688026.67 |
| 505 ELECTRIC EXPENSES | LB505 | PROFIX | $ | 4,523,897 | 357040.19 | 416235 | 378976.79 | 348125.67 | 369036.85 |
| 506 MISC. STEAM POWER EXPENSES | LB506 | PROFIX | $ | 940,518 | 52261.31 | 80829.64 | 70706.68 | 101840.85 | 81036.08 |
| 507 RENTS | LB507 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 509 ALLOWANCES | LB509 | Energy | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Steam Power Operation Expenses | LBSUB1 | | $ | 23,345,348 | 1066961.13 | 1268989.43 | 1130761.39 | 1079988.13 | 1138099.6 |
| **Steam Power Generation Maintenance Expenses** | | | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | LB510 | Energy | $ | 3,623,969 | 301562.96 | 282674.01 | 280925.01 | 285686.26 | 324812.85 |
| 511 MAINTENANCE OF STRUCTURES | LB511 | PROFIX | $ | 986,831 | 60839.92 | 78449.28 | 79549.6 | 75632 | 64969.97 |
| 512 MAINTENANCE OF BOILER PLANT | LB512 | Energy | $ | 8,700,235 | 613650.58 | 728746.59 | 804049.52 | 597501.69 | 694231.84 |
| 513 MAINTENANCE OF ELECTRIC PLANT | LB513 | Energy | $ | 1,595,642 | 209176.55 | 143092.64 | 90379.11 | 93612.16 | 119373.66 |
| 514 MAINTENANCE OF MISC STEAM PLANT | LB514 | PROFIX | $ | 200,886 | 16879.23 | 22485.07 | 12128 | 16408.41 | 14092.69 |
| Total Steam Power Generation Maintenance Expense | LBSUB2 | | $ | 15,107,564 | 1202109.24 | 1255447.59 | 1267031.24 | 1068840.52 | 1217481.01 |
| Total Steam Power Generation Expense | | | $ | 38,452,913 | 2269070.37 | 2524437.02 | 2397792.63 | 2148828.65 | 2355580.61 |
| **Labor Expenses (Continued)** | | | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | LB546 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 547 FUEL | LB547 | Energy | $ | - | 0 | 0 | 0 | 0 | 0 |
| 548 GENERATION EXPENSE | LB548 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 549 MISC OTHER POWER GENERATION | LB549 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 550 RENTS | LB550 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Expenses | LBSUB7 | | $ | - | | | | | |
| **Other Power Generation Maintenance Expense** | | | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | LB551 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 552 MAINTENANCE OF STRUCTURES | LB552 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | LB553 | PROFIX | $ | 89,555 | 682.21 | 4299.67 | 1026.96 | 2400.3 | 4848.64 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | LB554 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Maintenance Expense | LBSUB8 | | $ | 89,555 | | | | | |
| Total Other Power Generation Expense | | | $ | 89,555 | | | | | |
| Total Production Expense | LPREX | | $ | 38,542,468 | | | | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Labor Expenses** | | | | | | | | |
| **Steam Power Generation Operation Expenses** | | | | | | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | LB500 | PROFIX | 338156.02 | 414149.39 | 371014.23 | 359005.08 | 369873.15 | 334189.99 |
| 501 FUEL | LB501 | Energy | 309863.06 | 297596.67 | 304977.88 | 310355.07 | 339148.89 | 336547.05 |
| 502 STEAM EXPENSES | LB502 | PROFIX | 640194.64 | 1123637.4 | 744724.17 | 661984.49 | 702417.45 | 982572.63 |
| 505 ELECTRIC EXPENSES | LB505 | PROFIX | 342341.75 | 393006.64 | 354302.21 | 368561.14 | 384521.42 | 384533.54 |
| 506 MISC. STEAM POWER EXPENSES | LB506 | PROFIX | 63015.48 | 66970.66 | 87852.14 | 88369.17 | 86572.5 | 91267.67 |
| 507 RENTS | LB507 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 509 ALLOWANCES | LB509 | Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Steam Power Operation Expenses | LBSUB1 | | 1045551.87 | 1583614.7 | 1186878.52 | 1118914.8 | 1173511.37 | 1458373.84 |
| **Steam Power Generation Maintenance Expenses** | | | | | | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | LB510 | Energy | 297255.94 | 289425 | 296206.84 | 280281.91 | 307241.14 | 294029.27 |
| 511 MAINTENANCE OF STRUCTURES | LB511 | PROFIX | 50081.03 | 70791.44 | 106230.99 | 106856.88 | 116200.49 | 96973.59 |
| 512 MAINTENANCE OF BOILER PLANT | LB512 | Energy | 617716.63 | 961798.07 | 675983.16 | 535600.92 | 651081.61 | 924014.95 |
| 513 MAINTENANCE OF ELECTRIC PLANT | LB513 | Energy | 96940.39 | 142971.1 | 124922.34 | 132978.24 | 129288.01 | 126399.56 |
| 514 MAINTENANCE OF MISC STEAM PLANT | LB514 | PROFIX | 9843.3 | 16400.27 | 20426.8 | 23473.83 | 26283.4 | 15419.85 |
| Total Steam Power Generation Maintenance Expense | LBSUB2 | | 1071837.29 | 1481385.88 | 1223770.13 | 1079191.78 | 1230094.65 | 1456837.22 |
| Total Steam Power Generation Expense | | | 2117389.16 | 3065000.58 | 2410648.65 | 2198106.58 | 2403606.02 | 2915211.06 |
| **Labor Expenses (Continued)** | | | | | | | | |
| **Other Power Generation Operation Expense** | | | | | | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | LB546 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 547 FUEL | LB547 | Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| 548 GENERATION EXPENSE | LB548 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 549 MISC OTHER POWER GENERATION | LB549 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 550 RENTS | LB550 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Expenses | LBSUB7 | | | | | | | |
| **Other Power Generation Maintenance Expense** | | | | | | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | LB551 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 552 MAINTENANCE OF STRUCTURES | LB552 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | LB553 | PROFIX | 903.26 | 760.91 | 37267.71 | 11775.09 | 12921.35 | 10584.31 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | LB554 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Other Power Generation Maintenance Expense | LBSUB8 | | | | | | | |
| Total Other Power Generation Expense | | | | | | | | |
| Total Production Expense | LPREX | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Labor Expenses** | | | |
| **Steam Power Generation Operation Expenses** | | | |
| 500 OPERATION SUPERVISION & ENGINEERING | LB500 | PROFIX | 344645.64 |
| 501 FUEL | LB501 | Energy | 325463.54 |
| 502 STEAM EXPENSES | LB502 | PROFIX | 739080.82 |
| 505 ELECTRIC EXPENSES | LB505 | PROFIX | 427215.91 |
| 506 MISC. STEAM POWER EXPENSES | LB506 | PROFIX | 69795.43 |
| 507 RENTS | LB507 | PROFIX | 0 |
| 509 ALLOWANCES | LB509 | Energy | 0 |
| Total Steam Power Operation Expenses | LBSUB1 | | 1236092.16 |
| **Steam Power Generation Maintenance Expenses** | | | |
| 510 MAINTENANCE SUPERVISION & ENGINEERING | LB510 | Energy | 383868.11 |
| 511 MAINTENANCE OF STRUCTURES | LB511 | PROFIX | 80256.21 |
| 512 MAINTENANCE OF BOILER PLANT | LB512 | Energy | 895859.55 |
| 513 MAINTENANCE OF ELECTRIC PLANT | LB513 | Energy | 186508.29 |
| 514 MAINTENANCE OF MISC STEAM PLANT | LB514 | PROFIX | 7045.58 |
| Total Steam Power Generation Maintenance Expense | LBSUB2 | | 1553537.74 |
| Total Steam Power Generation Expense | | | 2642951.16 |
| **Labor Expenses (Continued)** | | | |
| **Other Power Generation Operation Expense** | | | |
| 546 OPERATION SUPERVISION & ENGINEERING | LB546 | PROFIX | 0 |
| 547 FUEL | LB547 | Energy | 0 |
| 548 GENERATION EXPENSE | LB548 | PROFIX | 0 |
| 549 MISC OTHER POWER GENERATION | LB549 | PROFIX | 0 |
| 550 RENTS | LB550 | PROFIX | 0 |
| Total Other Power Generation Expenses | LBSUB7 | | |
| **Other Power Generation Maintenance Expense** | | | |
| 551 MAINTENANCE SUPERVISION & ENGINEERING | LB551 | PROFIX | |
| 552 MAINTENANCE OF STRUCTURES | LB552 | PROFIX | |
| 553 MAINTENANCE OF GENERATING & ELEC PLANT | LB553 | PROFIX | 2084.81 |
| 554 MAINTENANCE OF MISC OTHER POWER GEN PLT | LB554 | PROFIX | |
| Total Other Power Generation Maintenance Expense | LBSUB8 | | |
| Total Other Power Generation Expense | | | |
| Total Production Expense | LPREX | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | | |
| **Purchased Power** | | | | | | | | | |
| 555 PURCHASED POWER | LB555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 PURCHASED POWER Demand | LBD555 | OMPPD | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 PURCHASED POWER OPTIONS | LBO555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 BROKERAGE FEES | LBB555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 555 MISO TRANSMISSION EXPENSES | LBM555 | OMPP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | LB556 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 557 OTHER EXPENSES | LB557 | PROFIX | $ | - | 0 | 0 | 0 | 0 | 0 |
| 558 DUPLICATE CHARGES | LB558 | Energy | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Purchased Power Labor | LBPP | | $ | - | | | | | |
| **Transmission Labor Expenses** | | | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | LB560 | PTRAN | $ | 835,977 | 155357.97 | 88621.66 | 61719.3 | 53192.77 | 69331.26 |
| 561 LOAD DISPATCHING | LB561 | PTRAN | $ | 1,304,969 | 240520.6 | 133245.05 | 93819.32 | 87693.64 | 104400.26 |
| 562 STATION EXPENSES | LB562 | PTRAN | $ | 598,382 | 102945.93 | 50883.95 | 33705.43 | 39512.69 | 54112.06 |
| 563 OVERHEAD LINE EXPENSES | LB563 | PTRAN | $ | 236,393 | 52690.64 | 20206.01 | 20032.96 | 18769.45 | 17519.18 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | LB565 | PTRAN | $ | - | 0 | 0 | 0 | 0 | 0 |
| 566 MISC. TRANSMISSION EXPENSES | LB566 | PTRAN | $ | 312,375 | 55300.19 | 33112.8 | 26544.3 | 26563.55 | 28599.72 |
| 567 RENTS | LB567 | PTRAN | $ | - | 0 | 0 | 0 | 0 | 0 |
| 568 MAINTENACE SUPERVISION AND ENG | LB568 | PTRAN | $ | 644,925 | 120270.89 | 65874.61 | 48314.25 | 39737.97 | 53182.86 |
| 569 MAINTENACE OF STRUCTURES | LB569 | PTRAN | $ | 318 | 36.88 | 59.34 | 0 | 0 | 59.12 |
| 570 MAINT OF STATION EQUIPMENT | LB570 | PTRAN | $ | 1,433,304 | 240458.8 | 137581.27 | 112331.02 | 103977.18 | 112839.1 |
| 571 MAINT OF OVERHEAD LINES | LB571 | PTRAN | $ | 1,067,766 | 187769.72 | 120250.23 | 62124.04 | 70835.46 | 82150.36 |
| 573 MAINT OF MISC. TRANSMISSION PLANT | LB573 | PTRAN | $ | 46,439 | 6906.42 | 2875.43 | 2872.93 | 4248.62 | 4851.27 |
| Total Transmission Labor Expenses | LBTRAN | | $ | 6,480,848 | 1162258.04 | 652710.35 | 461463.55 | 444531.33 | 527045.19 |
| **Distribution Operation Labor Expense** | | | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | LB580 | F023 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 581 LOAD DISPATCHING | LB581 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 582 STATION EXPENSES | LB582 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 583 OVERHEAD LINE EXPENSES | LB583 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 584 UNDERGROUND LINE EXPENSES | LB584 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 585 STREET LIGHTING EXPENSE | LB585 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES | LB586 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | LB586x | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | LB587 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | LB588 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 589 RENTS | LB589 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Operation Labor Expense | LBDO | | $ | - | | | | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | |
| **Purchased Power** | | | | | | | | |
| 555 PURCHASED POWER | LB555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 PURCHASED POWER Demand | LBD555 | OMPPD | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 PURCHASED POWER OPTIONS | LBO555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 BROKERAGE FEES | LBB555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 555 MISO TRANSMISSION EXPENSES | LBM555 | OMPP | 0 | 0 | 0 | 0 | 0 | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | LB556 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 557 OTHER EXPENSES | LB557 | PROFIX | 0 | 0 | 0 | 0 | 0 | 0 |
| 558 DUPLICATE CHARGES | LB558 | Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Purchased Power Labor | LBPP | | | | | | | |
| **Transmission Labor Expenses** | | | | | | | | |
| 560 OPERATION SUPERVISION AND ENG | LB560 | PTRAN | 57113.62 | 58908.5 | 68081.43 | 56191.8 | 51380.65 | 68130.77 |
| 561 LOAD DISPATCHING | LB561 | PTRAN | 79471.75 | 90840.85 | 104792.75 | 86864.08 | 84835.7 | 115440.78 |
| 562 STATION EXPENSES | LB562 | PTRAN | 43463.43 | 48316.48 | 56470.33 | 35035.32 | 46067.52 | 51613.79 |
| 563 OVERHEAD LINE EXPENSES | LB563 | PTRAN | 14223.62 | 16460.25 | 15132.13 | 14168.98 | 13692.1 | 15806.34 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | LB565 | PTRAN | 0 | 0 | 0 | 0 | 0 | 0 |
| 566 MISC. TRANSMISSION EXPENSES | LB566 | PTRAN | 21343.51 | 20102.2 | 25810.07 | 11252.29 | 17357.03 | 25204.78 |
| 567 RENTS | LB567 | PTRAN | 0 | 0 | 0 | 0 | 0 | 0 |
| 568 MAINTENACE SUPERVISION AND ENG | LB568 | PTRAN | 43994.75 | 45554.09 | 50783.31 | 42264.13 | 40489.73 | 55734.99 |
| 569 MAINTENACE OF STRUCTURES | LB569 | PTRAN | 26.22 | 0 | 24.61 | 26.14 | 26.21 | 0.65 |
| 570 MAINT OF STATION EQUIPMENT | LB570 | PTRAN | 98690.36 | 92937.1 | 116008.73 | 108080.33 | 93852.16 | 126204.48 |
| 571 MAINT OF OVERHEAD LINES | LB571 | PTRAN | 66143.16 | 68592.74 | 93608.24 | 76903.52 | 71073.25 | 95620.68 |
| 573 MAINT OF MISC. TRANSMISSION PLANT | LB573 | PTRAN | 4378.83 | 3303.42 | 3349.41 | 3196.71 | 3607.42 | 3592.3 |
| Total Transmission Labor Expenses | LBTRAN | | 428849.25 | 445015.63 | 534061.01 | 433983.3 | 422381.77 | 557349.56 |
| **Distribution Operation Labor Expense** | | | | | | | | |
| 580 OPERATION SUPERVISION AND ENGI | LB580 | F023 | 0 | 0 | 0 | 0 | 0 | 0 |
| 581 LOAD DISPATCHING | LB581 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 582 STATION EXPENSES | LB582 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 583 OVERHEAD LINE EXPENSES | LB583 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 584 UNDERGROUND LINE EXPENSES | LB584 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 585 STREET LIGHTING EXPENSE | LB585 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES | LB586 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | LB586x | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | LB587 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | LB588 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 589 RENTS | LB589 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Operation Labor Expense | LBDO | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Labor Expenses (Continued)** | | | |
| **Purchased Power** | | | |
| 555 PURCHASED POWER | LB555 | OMPP | 0 |
| 555 PURCHASED POWER Demand | LBD555 | OMPPD | 0 |
| 555 PURCHASED POWER OPTIONS | LBO555 | OMPP | 0 |
| 555 BROKERAGE FEES | LBB555 | OMPP | 0 |
| 555 MISO TRANSMISSION EXPENSES | LBM555 | OMPP | 0 |
| 556 SYSTEM CONTROL AND LOAD DISPATCH | LB556 | PROFIX | 0 |
| 557 OTHER EXPENSES | LB557 | PROFIX | 0 |
| 558 DUPLICATE CHARGES | LB558 | Energy | |
| Total Purchased Power Labor | LBPP | | 0 |
| **Transmission Labor Expenses** | | | |
| 560 OPERATION SUPERVISION AND ENG | LB560 | PTRAN | 47946.89 |
| 561 LOAD DISPATCHING | LB561 | PTRAN | 83043.95 |
| 562 STATION EXPENSES | LB562 | PTRAN | 36255.02 |
| 563 OVERHEAD LINE EXPENSES | LB563 | PTRAN | 17691.07 |
| 565 TRANSMISSION OF ELECTRICITY BY OTHERS | LB565 | PTRAN | |
| 566 MISC. TRANSMISSION EXPENSES | LB566 | PTRAN | 21184.45 |
| 567 RENTS | LB567 | PTRAN | |
| 568 MAINTENACE SUPERVISION AND ENG | LB568 | PTRAN | 38723.49 |
| 569 MAINTENACE OF STRUCTURES | LB569 | PTRAN | 59.17 |
| 570 MAINT OF STATION EQUIPMENT | LB570 | PTRAN | 90343.75 |
| 571 MAINT OF OVERHEAD LINES | LB571 | PTRAN | 72694.7 |
| 573 MAINT OF MISC. TRANSMISSION PLANT | LB573 | PTRAN | 3256.6 |
| Total Transmission Labor Expenses | LBTRAN | | 205077.71 |
| **Distribution Operation Labor Expense** | | | |
| 580 OPERATION SUPERVISION AND ENGI | LB580 | F023 | 0 |
| 581 LOAD DISPATCHING | LB581 | PDIST | 0 |
| 582 STATION EXPENSES | LB582 | PDIST | 0 |
| 583 OVERHEAD LINE EXPENSES | LB583 | PDIST | 0 |
| 584 UNDERGROUND LINE EXPENSES | LB584 | PDIST | 0 |
| 585 STREET LIGHTING EXPENSE | LB585 | PDIST | 0 |
| 586 METER EXPENSES | LB586 | PDIST | 0 |
| 586 METER EXPENSES - LOAD MANAGEMENT | LB586x | PDIST | 0 |
| 587 CUSTOMER INSTALLATIONS EXPENSE | LB587 | PDIST | 0 |
| 588 MISCELLANEOUS DISTRIBUTION EXP | LB588 | PDIST | 0 |
| 589 RENTS | LB589 | PDIST | 0 |
| Total Distribution Operation Labor Expense | LBDO | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | | |
| **Distribution Maintenance Labor Expense** | | | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | LB590 | F024 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 591 MAINTENANCE OF STRUCTURES | LB591 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 592 MAINTENANCE OF STATION EQUIPME | LB592 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 593 MAINTENANCE OF OVERHEAD LINES | LB593 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 594 MAINTENANCE OF UNDERGROUND LIN | LB594 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 595 MAINTENANCE OF LINE TRANSFORME | LB595 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | LB596 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 597 MAINTENANCE OF METERS | LB597 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| 598 MAINTENANCE OF MISC DISTR PLANT | LB598 | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Maintenance Labor Expense | LBDM | | $ | - | | | | | |
| Total Distribution Operation and Maintenance Labor Expenses | | PDIST | | - | | | | | |
| Transmission and Distribution Labor Expenses | | | | 6,480,848 | | | | | |
| Production, Transmission and Distribution Labor Expenses | LBSUB | | $ | 45,023,316 | | | | | |
| **Customer Accounts Expense** | | | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | LB901 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 902 METER READING EXPENSES | LB902 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 903 RECORDS AND COLLECTION | LB903 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 904 UNCOLLECTIBLE ACCOUNTS | LB904 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 905 MISC CUST ACCOUNTS | LB903 | F025 | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Customer Accounts Labor Expense | LBCA | | $ | - | | | | | |
| **Customer Service Expense** | | | | | | | | | |
| 907 SUPERVISION | LB907 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 908 CUSTOMER ASSISTANCE EXPENSES | LB908 | TUP | $ | 544,608 | 98543.49 | 44838.51 | 39429.59 | 38666.03 | 49827.22 |
| 908 CUSTOMER ASSISTANCE EXP-LOAD MGMT | LB908x | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 909 INFORMATIONAL AND INSTRUCTIONA | LB909 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 909 INFORM AND INSTRUC -LOAD MGMT | LB909x | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 910 MISCELLANEOUS CUSTOMER SERVICE | LB910 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 911 DEMONSTRATION AND SELLING EXP | LB911 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 912 DEMONSTRATION AND SELLING EXP | LB912 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 913 WATER HEATER - HEAT PUMP PROGRAM | LB913 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 915 MDSE-JOBBING-CONTRACT | LB915 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 916 MISC SALES EXPENSE | LB916 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Customer Service Labor Expense | LBCS | | $ | 544,608 | 98543.49 | 44838.51 | 39429.59 | 38666.03 | 49827.22 |
| Sub-Total Labor Exp | LBSUB9 | | | 45,567,924 | | | | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | |
| **Distribution Maintenance Labor Expense** | | | | | | | | |
| 590 MAINTENANCE SUPERVISION AND EN | LB590 | F024 | 0 | 0 | 0 | 0 | 0 | 0 |
| 591 MAINTENANCE OF STRUCTURES | LB591 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 592 MAINTENANCE OF STATION EQUIPME | LB592 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 593 MAINTENANCE OF OVERHEAD LINES | LB593 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 594 MAINTENANCE OF UNDERGROUND LIN | LB594 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 595 MAINTENANCE OF LINE TRANSFORME | LB595 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | LB596 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 597 MAINTENANCE OF METERS | LB597 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| 598 MAINTENANCE OF MISC DISTR PLANT | LB598 | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Distribution Maintenance Labor Expense | LBDM | | | | | | | |
| Total Distribution Operation and Maintenance Labor Expenses | | PDIST | | | | | | |
| Transmission and Distribution Labor Expenses | | | | | | | | |
| Production, Transmission and Distribution Labor Expenses | LBSUB | | | | | | | |
| **Customer Accounts Expense** | | | | | | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | LB901 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 902 METER READING EXPENSES | LB902 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 903 RECORDS AND COLLECTION | LB903 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 904 UNCOLLECTIBLE ACCOUNTS | LB904 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| 905 MISC CUST ACCOUNTS | LB903 | F025 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Customer Accounts Labor Expense | LBCA | | | | | | | |
| **Customer Service Expense** | | | | | | | | |
| 907 SUPERVISION | LB907 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 908 CUSTOMER ASSISTANCE EXPENSES | LB908 | TUP | 37915.48 | 41556.72 | 44591.58 | 38345.68 | 32873.52 | 44118.04 |
| 908 CUSTOMER ASSISTANCE EXP-LOAD MGMT | LB908x | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 909 INFORMATIONAL AND INSTRUCTIONA | LB909 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 909 INFORM AND INSTRUC -LOAD MGMT | LB909x | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 910 MISCELLANEOUS CUSTOMER SERVICE | LB910 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 911 DEMONSTRATION AND SELLING EXP | LB911 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 912 DEMONSTRATION AND SELLING EXP | LB912 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 913 WATER HEATER - HEAT PUMP PROGRAM | LB913 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 915 MDSE-JOBBING-CONTRACT | LB915 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 916 MISC SALES EXPENSE | LB916 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Customer Service Labor Expense | LBCS | | 37915.48 | 41556.72 | 44591.58 | 38345.68 | 32873.52 | 44118.04 |
| Sub-Total Labor Exp | LBSUB9 | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Labor Expenses (Continued)** | | | |
| **Distribution Maintenance Labor Expense** | | | |
| 590 MAINTENANCE SUPERVISION AND EN | LB590 | F024 | |
| 591 MAINTENANCE OF STRUCTURES | LB591 | PDIST | |
| 592 MAINTENANCE OF STATION EQUIPME | LB592 | PDIST | |
| 593 MAINTENANCE OF OVERHEAD LINES | LB593 | PDIST | |
| 594 MAINTENANCE OF UNDERGROUND LIN | LB594 | PDIST | |
| 595 MAINTENANCE OF LINE TRANSFORME | LB595 | PDIST | |
| 596 MAINTENANCE OF ST LIGHTS & SIG SYSTEMS | LB596 | PDIST | |
| 597 MAINTENANCE OF METERS | LB597 | PDIST | |
| 598 MAINTENANCE OF MISC DISTR PLANT | LB598 | PDIST | |
| Total Distribution Maintenance Labor Expense | LBDM | | |
| Total Distribution Operation and Maintenance Labor Expenses | | PDIST | |
| Transmission and Distribution Labor Expenses | | | |
| Production, Transmission and Distribution Labor Expenses | LBSUB | | |
| **Customer Accounts Expense** | | | |
| 901 SUPERVISION/CUSTOMER ACCTS | LB901 | F025 | |
| 902 METER READING EXPENSES | LB902 | F025 | |
| 903 RECORDS AND COLLECTION | LB903 | F025 | |
| 904 UNCOLLECTIBLE ACCOUNTS | LB904 | F025 | |
| 905 MISC CUST ACCOUNTS | LB903 | F025 | |
| Total Customer Accounts Labor Expense | LBCA | | |
| **Customer Service Expense** | | | |
| 907 SUPERVISION | LB907 | TUP | |
| 908 CUSTOMER ASSISTANCE EXPENSES | LB908 | TUP | 33902.45 |
| 908 CUSTOMER ASSISTANCE EXP-LOAD MGMT | LB908x | TUP | |
| 909 INFORMATIONAL AND INSTRUCTIONA | LB909 | TUP | |
| 909 INFORM AND INSTRUC -LOAD MGMT | LB909x | TUP | |
| 910 MISCELLANEOUS CUSTOMER SERVICE | LB910 | TUP | |
| 911 DEMONSTRATION AND SELLING EXP | LB911 | TUP | |
| 912 DEMONSTRATION AND SELLING EXP | LB912 | TUP | |
| 913 WATER HEATER - HEAT PUMP PROGRAM | LB913 | TUP | |
| 915 MDSE-JOBBING-CONTRACT | LB915 | TUP | |
| 916 MISC SALES EXPENSE | LB916 | TUP | |
| Total Customer Service Labor Expense | LBCS | | 33902.45 |
| Sub-Total Labor Exp | LBSUB9 | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | | |
| **Administrative and General Expense** | | | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | LB920 | LBSUB9 | $ | 14,315,714 | 2092449.04 | 1522142.8 | 1300504.05 | 1313340.25 | 1495631.43 |
| 921 OFFICE SUPPLIES AND EXPENSES | LB921 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 922 ADMIN. EXPENSES TRANSFERRED - CREDIT | LB922 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 923 OUTSIDE SERVICES EMPLOYED | LB923 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 924 PROPERTY INSURANCE | LB924 | TUP | $ | 27,509 | 2777.2 | 3471.48 | 2777.2 | 2777.2 | 13427.68 |
| 925 INJURIES AND DAMAGES - INSURAN | LB925 | LBSUB9 | $ | 17,136 | 2711 | -43974.67 | 0 | 0 | 0 |
| 926 EMPLOYEE BENEFITS | LB926 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 928 REGULATORY COMMISSION FEES | LB928 | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| 929 DUPLICATE CHARGES-CR | LB929 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 930 MISCELLANEOUS GENERAL EXPENSES | LB930 | LBSUB9 | $ | - | 0 | 0 | 0 | 0 | 0 |
| 931 RENTS AND LEASES | LB931 | PGP | $ | 74,927 | 14602.3 | 14130.42 | 6605.75 | 5191.93 | 4971.6 |
| 935 MAINTENANCE OF GENERAL PLANT | LB935 | PGP | | | | | | | |
| Total Administrative and General Expense | LBAG | | $ | 14,435,286 | | | | | |
| Total Operation and Maintenance Expenses | TLB | | $ | 60,003,210 | | | | | |
| Operation and Maintenance Expenses Less Purchase Power | LBLPP | | $ | 60,003,210 | | | | | |
| **Other Expenses** | | | | | | | | | |
| **Depreciation Expenses** | | | | | | | | | |
| Production | DEPRDP2 | PPROD | $ | 28,815,395 | 2347440.74 | 2389099.7 | 2595994.55 | 2361961.48 | 2361968.56 |
| Transmission | DEPRDP3 | PTRAN | $ | 5,182,459 | 443546.44 | 533184.66 | 214261.5 | 442312.53 | 442305.66 |
| Transmission | DEPRDP4 | PTRAN | $ | - | | | | | |
| Distribution | DEPRDP5 | PDIST | $ | - | | | | | |
| General & Common Plant | DEPRDP6 | PGP | $ | 238,155 | 17050.71 | 19802.63 | 19799.44 | 19799.44 | 19766.55 |
| Other Plant | DEPROTH | TPIS | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Depreciation Expense | TDEPR | | $ | 34,236,009 | 2808037.89 | 2942086.99 | 2830055.49 | 2824073.45 | 2824040.77 |
| **Accretion Expense** | | | | | | | | | |
| Production | ACRTNP | F017 | $ | - | 0 | 0 | 0 | 0 | 0 |
| Transmission | ACRTNT | PTRAN | $ | - | 0 | 0 | 0 | 0 | 0 |
| Distribution | ACRTND | PDIST | $ | - | 0 | 0 | 0 | 0 | 0 |
| Total Accretion Expense | TACRTN | | $ | - | | | | | |
| Property Taxes & Other | PTAX | TUP | $ | (94,563) | $ (379,997) | $ 87,636 | $ - | $ - | $ 910 |
| Amortization of Investment Tax Credit | OTAX | TUP | $ | - | 0 | 0 | 0 | 0 | 0 |
| Other Expenses | OT | TUP | $ | (365,864) | $ (6,691) | $ (14,191) | $ (18,627) | $ (23,851) | $ (16,042) |
| Interest | INTLTD | TUP | $ | 47,622,710 | 4168487.53 | 4316793.16 | 4234968.72 | 3796291.74 | 4133482.27 |
| Other Deductions | DEDUCT | TUP | $ | 109,257 | 7611 | 15379 | 4539 | 6545 | 5640 |
| **Total Other Expenses** | TOE | | $ | 81,507,549 | $ 3,789,411 | $ 4,405,617 | $ 4,220,881 | $ 3,778,986 | $ 4,123,991 |
| **Total Cost of Service (O&M + Other Expenses)** | | | $ | 527,945,095 | | | | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Labor Expenses (Continued)** | | | | | | | | |
| **Administrative and General Expense** | | | | | | | | |
| 920 ADMIN. & GEN. SALARIES- | LB920 | LBSUB9 | 1326991.23 | 427833.15 | 1263415.19 | 446430.74 | 948956.12 | 1178332.32 |
| 921 OFFICE SUPPLIES AND EXPENSES | LB921 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 922 ADMIN. EXPENSES TRANSFERRED - CREDIT | LB922 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 923 OUTSIDE SERVICES EMPLOYED | LB923 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 924 PROPERTY INSURANCE | LB924 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 925 INJURIES AND DAMAGES - INSURAN | LB925 | LBSUB9 | 2278.26 | 0 | 0 | 0 | 0 | 0 |
| 926 EMPLOYEE BENEFITS | LB926 | LBSUB9 | 23360 | 5840 | 5840 | 5840 | 5840 | 5840 |
| 928 REGULATORY COMMISSION FEES | LB928 | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| 929 DUPLICATE CHARGES-CR | LB929 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 930 MISCELLANEOUS GENERAL EXPENSES | LB930 | LBSUB9 | 0 | 0 | 0 | 0 | 0 | 0 |
| 931 RENTS AND LEASES | LB931 | PGP | 0 | 0 | 0 | 0 | 0 | 0 |
| 935 MAINTENANCE OF GENERAL PLANT | LB935 | PGP | 5560.19 | 2953.32 | 3794.54 | 2464 | 6700.24 | 5197.69 |
| Total Administrative and General Expense | LBAG | | | | | | | |
| Total Operation and Maintenance Expenses | TLB | | | | | | | |
| Operation and Maintenance Expenses Less Purchase Power | LBLPP | | | | | | | |
| **Other Expenses** | | | | | | | | |
| **Depreciation Expenses** | | | | | | | | |
| Production | DEPRDP2 | PPROD | 2361962.84 | 2422279.6 | 2384018.59 | 2354733.3 | 2368037.83 | 2494767.54 |
| Transmission | DEPRDP3 | PTRAN | 442357.04 | 442363.4 | 442363.15 | 442486.5 | 440016.44 | 450445.41 |
| Transmission | DEPRDP4 | PTRAN | | | | | | |
| Distribution | DEPRDP5 | PDIST | | | | | | |
| General & Common Plant | DEPRDP6 | PGP | 19733.28 | 21031.35 | 19852.73 | 20082.98 | 19987.32 | 21286.62 |
| Other Plant | DEPROTH | TPIS | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Depreciation Expense | TDEPR | | 2824053.16 | 2885674.35 | 2846234.47 | 2817302.78 | 2828041.59 | 2966499.57 |
| **Accretion Expense** | | | | | | | | |
| Production | ACRTNP | F017 | 0 | 0 | 0 | 0 | 0 | 0 |
| Transmission | ACRTNT | PTRAN | 0 | 0 | 0 | 0 | 0 | 0 |
| Distribution | ACRTND | PDIST | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Accretion Expense | TACRTN | | | | | | | |
| Property Taxes & Other | PTAX | TUP | $ 65,000 | $ 2,342 | $ 65,000 | $ - | $ (429) | $ 65,000 |
| Amortization of Investment Tax Credit | OTAX | TUP | 0 | 0 | 0 | 0 | 0 | 0 |
| Other Expenses | OT | TUP | $ (27,557) | $ (8,263) | $ (42,136) | $ (42,545) | $ (48,997) | $ (56,550) |
| Interest | INTLTD | TUP | 3848131.38 | 3699835.35 | 3741933.32 | 3942436.65 | 3958146.18 | 3830668.47 |
| Other Deductions | DEDUCT | TUP | -2109 | 4540 | 14599 | 10828 | 16243 | 12411 |
| **Total Other Expenses** | TOE | | $ 3,883,465 | $ 3,698,454 | $ 3,779,396 | $ 3,910,720 | $ 3,924,964 | $ 3,851,529 |
| **Total Cost of Service (O&M + Other Expenses)** | | | | | | | | |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Labor Expenses (Continued)** | | | |
| **Administrative and General Expense** | | | |
| 920 ADMIN. & GEN. SALARIES- | LB920 | LBSUB9 | 999687.37 |
| 921 OFFICE SUPPLIES AND EXPENSES | LB921 | LBSUB9 | |
| 922 ADMIN. EXPENSES TRANSFERRED - CREDIT | LB922 | LBSUB9 | |
| 923 OUTSIDE SERVICES EMPLOYED | LB923 | LBSUB9 | |
| 924 PROPERTY INSURANCE | LB924 | TUP | |
| 925 INJURIES AND DAMAGES - INSURAN | LB925 | LBSUB9 | 0 |
| 926 EMPLOYEE BENEFITS | LB926 | LBSUB9 | 5840 |
| 928 REGULATORY COMMISSION FEES | LB928 | TUP | |
| 929 DUPLICATE CHARGES-CR | LB929 | LBSUB9 | |
| 930 MISCELLANEOUS GENERAL EXPENSES | LB930 | LBSUB9 | |
| 931 RENTS AND LEASES | LB931 | PGP | |
| 935 MAINTENANCE OF GENERAL PLANT | LB935 | PGP | 2754.81 |
| Total Administrative and General Expense | LBAG | | |
| Total Operation and Maintenance Expenses | TLB | | |
| Operation and Maintenance Expenses Less Purchase Power | LBLPP | | |
| **Other Expenses** | | | |
| **Depreciation Expenses** | | | |
| Production | DEPRDP2 | PPROD | 2373130.48 |
| Transmission | DEPRDP3 | PTRAN | 446815.89 |
| Transmission | DEPRDP4 | PTRAN | |
| Distribution | DEPRDP5 | PDIST | |
| General & Common Plant | DEPRDP6 | PGP | 19962.11 |
| Other Plant | DEPROTH | TPIS | 0 |
| Total Depreciation Expense | TDEPR | | 2839908.48 |
| **Accretion Expense** | | | |
| *Production* | ACRTNP | F017 | 0 |
| Transmission | ACRTNT | PTRAN | 0 |
| Distribution | ACRTND | PDIST | 0 |
| Total Accretion Expense | TACRTN | | |
| Property Taxes & Other | PTAX | TUP | $ (25) |
| Amortization of Investment Tax Credit | OTAX | TUP | 0 |
| Other Expenses | OT | TUP | $ (60,414) |
| Interest | INTLTD | TUP | 3951535 |
| Other Deductions | DEDUCT | TUP | 13031 |
| **Total Other Expenses** | TOE | | $ 3,904,127 |
| **Total Cost of Service (O&M + Other Expenses)** | | | |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | Total System | November 2009 | December 2009 | January 2010 | February 2010 | March 2010 |
|---|---|---|---|---|---|---|---|---|
| **Revenues** | | | | | | | | |
| Jackson Purchase | | | $ 31,526,082 | 2,047,421 | 2,967,876 | 3,236,562 | 2,630,578 | 2,282,284 |
| Kenergy | | | $ 56,579,648 | 3,789,093 | 5,385,841 | 5,977,907 | 4,990,050 | 4,209,222 |
| Meade | | | $ 22,828,970 | 1,551,653 | 2,374,865 | 2,690,998 | 2,281,167 | 1,830,442 |
| Large Industrial | | | $ 39,110,620 | 3,326,073 | 3,242,060 | 3,257,550 | 3,000,170 | 3,334,841 |
| Century Total | | | $ 150,725,511 | 14,123,587 | 13,900,845 | 12,327,658 | 10,978,277 | 13,026,782 |
| Alcan Total | | | $ 131,680,624 | 11,327,935 | 11,867,881 | 11,227,291 | 10,087,671 | 11,349,236 |
| | Total Rural | | $ 110,934,700 | $ 7,388,167 | $ 10,728,582 | $ 11,905,467 | $ 9,901,794 | $ 8,321,948 |
| | Total Industrial | | $ 39,110,620 | $ 8,666,818 | $ 11,002,766 | $ 11,926,456 | $ 10,271,387 | $ 9,374,506 |
| | Total Smelter | | $ 282,406,135 | $ 25,451,523 | $ 25,768,725 | $ 23,554,949 | $ 21,065,948 | $ 24,376,019 |
| | Total | | $ 432,451,455 | $ 36,165,762 | $ 39,739,368 | $ 38,717,967 | $ 33,967,912 | $ 36,032,808 |
| | | | $ 149,837,373 | 12,898,686 | 13,350,197 | 12,412,617 | 10,978,277 | 13,026,782 |
| Century Invoiced | | | $ 131,911,075 | 10,982,583 | 11,672,836 | 11,353,440 | 10,087,671 | 11,349,236 |
| Alcan Invoiced | | | $ 888,139 | 1,224,902 | 550,648 | (84,959) | | |
| Century Adjustments | | | $ (230,451) | 345,352 | 195,044 | (126,150) | | |
| Alcan Adjustments | | | | | | | | |
| Off System Sales | | | $ 76,543,801 | $ 1,839,442 | $ 4,073,308 | $ 8,147,840 | $ 9,539,433 | $ 7,986,498 |
| | | | $ 149,673 | $ 149,673 | $ - | $ - | $ - | $ - |
| Income from Leased Property Net | | | $ 13,778,745 | $ 1,230,861 | $ 1,033,968 | $ 1,152,998 | $ 1,145,023 | $ 1,070,097 |
| Other Operating Revenue & Income | | | | | | | | |
| OSS Variable O&M | | | $ 46,035,981 | $ 1,471,622 | $ 2,691,212 | $ 4,162,194 | $ 5,284,841 | $ 5,083,040 |
| **Energy** | | | | | | | | |
| Jackson Purchase | | | 694,512,540 | 45,926,970 | 65,978,630 | 71,338,200 | 59,712,514 | 49,429,743 |
| Kenergy | | | 1,255,008,258 | 85,135,870 | 120,014,010 | 132,891,880 | 114,367,690 | 91,992,020 |
| Meade | | | 499,627,006 | 34,444,920 | 51,694,410 | 59,035,140 | 51,393,370 | 38,028,116 |
| Large Industrial | | | 928,887,170 | 78,192,702 | 74,359,872 | 75,056,282 | 70,510,685 | 78,126,590 |
| Century | | | 3,949,411,321 | 310,167,027 | 331,563,740 | 339,238,984 | 318,278,276 | 343,763,177 |
| Alcan | | | 3,163,910,039 | 257,031,413 | 268,912,646 | 270,478,213 | 245,969,029 | 270,738,402 |
| | Total Rural | | 2,449,147,804 | 165,507,760 | 237,687,050 | 263,265,220 | 225,473,574 | 179,449,879 |
| | Total Industrial | | 928,887,170 | 78,192,702 | 74,359,872 | 75,056,282 | 70,510,685 | 78,126,590 |
| | Total Smelter | | 7,113,321,360 | 567,198,440 | 600,476,386 | 609,717,197 | 564,247,305 | 614,501,579 |
| | Total | | 10,491,356,334 | 810,898,902 | 912,523,308 | 948,038,699 | 860,231,564 | 872,078,048 |

Big Rivers Electric Corporation
Month by Month Accounts

| Description | Name | Functional Vector | April 2010 | May 2010 | June 2010 | July 2010 | August 2010 | September 2010 |
|---|---|---|---|---|---|---|---|---|
| **Revenues** | | | | | | | | |
| Jackson Purchase | | | 1,799,767 | 2,308,067 | 3,063,639 | 3,258,780 | 3,399,012 | 2,561,800 |
| Kenergy | | | 3,188,379 | 4,134,538 | 5,323,163 | 5,636,870 | 5,853,842 | 4,573,561 |
| Meade | | | 1,214,667 | 1,532,681 | 1,963,540 | 2,110,692 | 2,169,733 | 1,693,499 |
| Large Industrial | | | 3,161,352 | 3,245,699 | 3,234,324 | 3,234,990 | 3,373,185 | 3,344,243 |
| Century Total | | | 12,044,160 | 12,679,922 | 11,679,623 | 12,055,865 | 12,367,467 | 11,801,654 |
| Alcan Total | | | 10,471,146 | 11,169,007 | 10,543,631 | 10,857,129 | 10,839,072 | 10,177,927 |
| | Total Rural | | $ 6,202,813 | $ 7,975,287 | $ 10,350,341 | $ 11,006,341 | $ 11,422,586 | $ 8,828,859 |
| | Total Industrial | | $ 7,564,398 | $ 8,912,918 | $ 10,521,026 | $ 10,982,552 | $ 11,396,759 | $ 9,611,302 |
| | Total Smelter | | $ 22,515,306 | $ 23,848,930 | $ 22,223,254 | $ 22,912,994 | $ 23,206,539 | $ 21,979,581 |
| | Total | | $ 31,879,471 | $ 35,069,915 | $ 35,807,919 | $ 37,154,326 | $ 38,002,310 | $ 34,152,683 |
| Century Invoiced | | | 12,044,160 | 12,679,922 | 11,679,623 | 12,055,865 | 12,367,467 | 12,580,920 |
| Alcan Invoiced | | | 10,471,146 | 11,169,007 | 10,543,631 | 10,857,129 | 10,839,072 | 10,806,724 |
| Century Adjustments | | | | | | | | (779,265) |
| Alcan Adjustments | | | | | | | | (628,797) |
| Off System Sales | | | $ 5,678,794 | $ 6,341,556 | $ 7,049,362 | $ 7,908,927 | $ 8,630,309 | $ 5,166,061 |
| Income from Leased Property Net | | | $ - | $ - | $ - | $ - | $ - | $ - |
| Other Operating Revenue & Income | | | $ 1,140,133 | $ 1,143,171 | $ 1,284,686 | $ 1,142,016 | $ 1,145,336 | $ 1,142,234 |
| OSS Variable O&M | | | $ 3,852,774 | $ 3,932,574 | $ 3,863,529 | $ 4,155,945 | $ 4,803,709 | $ 3,568,984 |
| **Energy** | | | | | | | | |
| Jackson Purchase | | | 40,334,720 | 49,465,221 | 67,937,977 | 74,389,907 | 74,455,490 | 53,358,978 |
| Kenergy | | | 72,904,910 | 88,391,581 | 119,415,050 | 128,859,539 | 129,305,728 | 95,902,980 |
| Meade | | | 28,079,875 | 32,805,170 | 43,966,515 | 47,969,570 | 47,509,670 | 35,325,370 |
| Large Industrial | | | 78,086,611 | 79,512,076 | 79,858,265 | 78,927,327 | 82,005,334 | 79,182,043 |
| Century | | | 323,212,786 | 331,276,534 | 324,397,171 | 337,256,977 | 345,310,998 | 317,766,683 |
| Alcan | | | 260,668,275 | 268,579,997 | 259,859,800 | 268,729,560 | 268,160,608 | 257,328,832 |
| Total Rural - | | | 141,319,505 | 170,661,972 | 231,319,542 | 251,219,016 | 251,270,888 | 184,587,328 |
| Total Industrial | | | 78,086,611 | 79,512,076 | 79,858,265 | 78,927,327 | 82,005,334 | 79,182,043 |
| Total Smelter | | | 583,881,061 | 599,856,531 | 584,256,971 | 605,986,537 | 613,471,606 | 575,095,515 |
| Total | | | 803,287,177 | 850,030,579 | 895,434,778 | 936,132,880 | 946,747,828 | 838,864,886 |

| Description | Name | Functional Vector | October 2010 |
|---|---|---|---|
| **Revenues** | | | |
| Jackson Purchase | | | 1,970,297 |
| Kenergy | | | 3,517,183 |
| Meade | | | 1,415,034 |
| Large Industrial | | | 3,356,132 |
| Century Total | | | 13,739,670 |
| Alcan Total | | | 11,762,698 |
| | Total Rural | | $ 6,902,515 |
| | Total Industrial | | $ 8,288,350 |
| | Total Smelter | | $ 25,502,368 |
| | Total | | $ 35,761,015 |
| Century Invoiced | | | 13,762,856 |
| Alcan Invoiced | | | 11,778,599 |
| Century Adjustments | | | (23,186) |
| Alcan Adjustments | | | (15,901) |
| | | | 4,182,271 |
| Off System Sales | | | $ - |
| Income from Leased Property Net | | | $ 1,148,221 |
| Other Operating Revenue & Income | | | $ 3,165,556 |
| OSS Variable O&M | | | |
| **Energy** | | | |
| Jackson Purchase | | | 42,184,190 |
| Kenergy | | | 75,827,000 |
| Meade | | | 29,374,880 |
| Large Industrial | | | 75,069,383 |
| Century | | | 327,178,968 |
| Alcan | | | 267,453,264 |
| | | | 147,386,070 |
| Total Rural | | | 75,069,383 |
| Total Industrial | | | 594,632,232 |
| Total Smelter | | | 817,087,685 |
| Total | | | |

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF-25**
Refer to pages 4-5 of the Direct Testimony of Stephane Leblanc ("Leblanc Testimony"), and Mr. Fayne's exhibit HWF-1 and HWF-2. Mr. Leblanc states at page 4, lines 16-18, that due to the current relatively high market price for aluminum, "the Sebree smelter has positive margins from operations." Mr. Leblanc also states at page 5, lines 18-20, that, "during the last wave of U.S. smelter closures in 2009, most closed indefinitely because they were not in line with world average power costs.

a. What was the average price for electricity paid by the Sebree smelter in 2009?
b. Did the Sebree smelter have positive margins from operations in 2009 when aluminum prices were just over $1,300 per metric tonne?
c. Provide a schedule, similar to Exhibit HWF-1, that includes the name, owner, production and cost of electricity as of the time of closure for each of the U.S. smelters that closed in 2009.

**RESPONSE**

a. The average price for electricity paid by the Sebree smelter in 2009 prior to the unwind closing was $32.40/MWh. After the unwind closing, the average price of power for the remainder of 2009 was $43.60/MWh.

b. During periods in 2009 when the LME was just over $1,300, the Sebree smelter had negative margins from operations.

c. Mr. Leblanc's statement on page 5 of his Direct Testimony refers to four U.S. smelters that closed in 2009 (Massena East, Alcoa-IN, Ravenswood and Columbia Falls) and are based on press releases and industry publications reviewed at the time.

Witness: Henry W. Fayne
Stephane Leblanc

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of:**

| | | |
|---|---|---|
| **APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES** | ) ) ) | **CASE NO. 2011-00036** |

**KENTUCKY INDUSTRIAL UTILITY CUSTOMERS RESPONSE TO COMMISSION STAFF'S INITIAL INFORMATION REQUEST**
**PSC CASE NO. 2011-00036**
**June 22, 2011**

**Request STAFF-26**

Refer to the Leblanc Testimony at page 8, line 17-20.

a. Describe in detail each of the governmental and other actions that resulted in the recently announced U.S. smelter restarts.
b. Explain why Century Aluminum restarted its fifth potline without needing any governmental or other actions.
c. What was the approximate cost to Century Aluminum to restart its fifth potline?

**RESPONSE**

a. The four smelter restarts in 2009 were Ferndale, Wenatchee, Massena East and Ormet. The Bonneville Power Administration agreed to provide Ferndale and Wenatchee low-cost hydro power to preserve jobs. Similarly, the New York Power Authority approved a new contract which provides Massena East competitive-cost power primarily based on hydro generation. For Ormet, please refer to the 2010 incentive rate set forth in the Order described in Response to Staff 3b subsequent to which Ormet restarted its 5th and 6th lines in 2011.

b. Century Aluminum restarted its fifth potline without needing any governmental or other actions for several reasons:

i. The Hawesville smelter has a take-or-pay obligation to purchase the power required for the fifth potline.

ii. Restarting the fifth potline produces economies of scale that reduces the cost of production for the other four potlines.

iii. The price of the LME has increased currently to levels that support the restart under the conditions described above.

c. The cost to Century Aluminum to restart its fifth potline was approximately $6 million through the first quarter of 2011.

Witnesses: Henry W. Fayne
Stephane Leblanc