

# CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION – HENDERSON MUNICIPAL POWER & LIGHT MANAGEMENT’S DISCUSSION AND ANALYSIS

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## **Station Two – Future Expenditures, continued:**

to natural gas, relying on the power market, integrating a peaking unit, and various other options. Upon receiving the IRP report, HMP&L started the process of evaluating the various options, and immediately began working towards completing another, more detailed IRP. This second, more detailed IRP was completed in April 2018. The IRP suggested that energy and capacity market purchases, either through managed contracts or the open market, was the most economical option for HMP&L customers.

HMP&L gathered bids through a Request for Proposals (RFP) that was released in August 2018. This RFP was for energy and capacity beginning June 2019. The RFP requested proposals for an all-requirements type contract, as well as a managed portfolio option. On February 28, 2019, HMP&L awarded the bid to various suppliers for the following:

5 X 16 Winter Block	3 year	20 MW	Merrill Lynch
5 X 16 Summer Block	3 year	30 MW	BP
5 X 16 Annual Block	3 year	10 MW	BP

Station Two and Future Expenditures, continued:

7 X 24 Annual Block	5 year	30 MW	Merrill Lynch
7 X 24 Annual Block	10 year	30 MW	BP
Capacity ZRCs	5 year	100 MW	Constellation

On June 18, 2019, HMP&L presented another IRP refresh to the Utility Commission. This was to plan for future years once the current power supply arrangements expire. HMP&L is currently developing RFPs for future power supply needs.

## **Southeastern Power Administration (SEPA):**

The Southeastern Power Administration (SEPA) has contracted with HMP&L to provide HMP&L a total of 15,000 megawatt hours of hydroelectric power each year. The 15,000 megawatt hours represent approximately 2.5 percent of HMP&L’s annual megawatt hour requirements. HMP&L is restricted to not more than 10 megawatt hours during any one hour period. The hydroelectric power is provided from SEPA generation units on the Cumberland River System Project.

In the fall of 2006, SEPA informed all contract project participants that the Wolf Creek Dam near Jamestown, Kentucky, had been inspected and serious seepage problems existed in the earthen dam. The seepage problems at the dam date back to 1968 and the US Army Corps of Engineers implemented various repairs since that time; however, the seepage became critical to the safety of the Wolf Creek Dam and surrounding communities. In an effort to respond to these safety concerns and make the needed repairs to the dam, SEPA reduced and curtailed electric

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## **Southeastern Power Administration (SEPA), continued:**

service to the contract project participants. This reduction and curtailment of SEPA electric service began in early 2007. The dam repairs were completed during 2014 and the basin was allowed to fill to the necessary level of water. The SEPA Cumberland River Hydroelectric Power System is continuing to be restored to its pre-construction conditions.

## **Regulatory Compliance:**

The North American Electric Reliability Corporation (NERC) adopted new electric system reliability standards for all electric utilities in the United States. NERC adopted and began enforcement of the new standards beginning in June 2007. The new standards were approved by the Federal Energy Regulatory Commission (FERC). HMP&L is required to comply with the new reliability standards and incurs administrative expenses related to NERC compliance.

In November 2008, the Southeastern Electric Reliability Council (SERC) audited HMP&L for compliance with NERC Reliability Standards. Subsequent to the November audit, a number of formal and informal discussions took place between HMP&L and SERC. HMP&L and SERC reached an agreement concerning non-compliance issues identified during the audit; and a final settlement agreement was approved. In November 2010, HMP&L hired a Reliability Compliance Manager who is responsible for compliance with NERC Reliability Standards. SERC performed a compliance audit of HMP&L in March of 2014, evaluating the utility for compliance with 11 reliability requirements, as well as 3 infrastructure related items. This audit resulted in no findings, violations, or recommendations.

SERC completed an assessment of HMP&L in 2017 to identify areas of focus and level of effort needed to monitor compliance with selected NERC Reliability Standards. As a result, SERC identified that HMP&L posed low inherent risks to reliability of the Bulk Power System in each of seven risk factors evaluated, and determined that for the 2018 compliance oversight plan, all NERC Standards and Requirements applicable to HMP&L would be Self-Monitored.

In 2019, HMP&L joined the Midcontinent Independent System Operator (MISO) as a Transmission Owner and Market Participant. Effective March 1, 2019, due to MISO integration and termination of pre-existing contracts, HMP&L registered with NERC and SERC as a Balancing Authority and Transmission Planner in MISO, and entered into contract with a third party for necessary Transmission Operator and Local Balancing Authority services.

# **CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION – HENDERSON MUNICIPAL POWER & LIGHT MANAGEMENT’S DISCUSSION AND ANALYSIS**

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## **Transfers to the City of Henderson, Kentucky:**

In Fiscal Year 2018-2019, HMP&L’s cash transfer to the City was \$1,244,724. HMP&L has budgeted this same level of cash transfer to the City for Fiscal Year 2019-2020 and subsequent budget periods. HMP&L also paid the City \$665,667 for internal service fees and HMP&L provided the City free electric service valued at \$674,568 and free fiber services valued at \$168,120 for the 2018-2019 Fiscal Year. The annual cash transfer payments, internal service fees, and value of the free electric and fiber services represent 6.7% of gross electric revenue in Fiscal Year 2019.

Should additional information be needed inquiries can be directed to HMP&L at 100 Fifth Street, Henderson, Kentucky 42420. Contact via telephone at 270.826.2726.

**City of Henderson, Kentucky Utility Commission  
Statements of Net Position  
As of May 31, 2019 and 2018**

<u>Assets:</u>	<u>2019</u>	<u>2018</u>
<b><u>Current assets:</u></b>		
Cash and cash equivalents	\$ 12,390,092	\$ 10,886,004
Investments - unrestricted	13,152,433	11,802,770
Investments - restricted	2,518,824	2,358,385
Accounts receivable, net of allowance for uncollectibles	3,395,145	2,830,079
Accounts receivable, Station Two Operator	2,177,652	2,950,585
Accrued revenue	2,839,760	3,994,163
Inventory and supplies	4,675,758	9,021,192
Prepaid expenses	289,063	70,355
<b>Total current assets</b>	<b>41,438,727</b>	<b>43,913,533</b>
<b><u>Utility plant and equipment:</u></b>		
Utility plant, net of accumulated depreciation	<b>12,255,729</b>	<b>53,685,796</b>
<b><u>Other Assets</u></b>		
Asset retirement obligation, net of accumulated amortization	<b>449,395</b>	<b>547,445</b>
<b>Total Assets</b>	<b>54,143,851</b>	<b>98,146,774</b>
<b><u>Deferred outflows of resources:</u></b>		
Deferred outflows of resources	<b>2,528,013</b>	<b>2,329,422</b>
<b>Total assets and deferred outflows of resources</b>	<b>\$ 56,671,864</b>	<b>\$ 100,476,196</b>
<b><u>Liabilities:</u></b>		
<b><u>Current liabilities:</u></b>		
Accounts payable and accrued expenses	\$ 4,054,867	\$ 6,826,151
Accounts payable-Construction in progress Station Two	-	201,264
Current portion-bonds payable	670,000	650,000
Customer deposits	701,075	679,103
<b>Total current liabilities</b>	<b>5,425,942</b>	<b>8,356,518</b>
<b><u>Long-term liabilities:</u></b>		
Accrued compensated absences	280,235	267,413
Long-term portion bonds payable	10,090,000	10,760,000
Asset retirement obligation	1,369,055	1,327,136
Net pension liability	7,242,530	6,464,451
Net Other post-employment benefits liability	2,111,330	2,220,242
<b>Total long-term liabilities</b>	<b>21,093,150</b>	<b>21,039,242</b>
<b>Total liabilities</b>	<b>26,519,092</b>	<b>29,395,760</b>
<b><u>Deferred inflows of resources:</u></b>		
Deferred inflows of resources	<b>808,203</b>	<b>665,557</b>
<b><u>Net position:</u></b>		
Net investment in capital assets	1,495,729	42,275,796
Restricted per bond ordinance	2,518,824	2,358,385
Unrestricted	25,330,016	25,780,698
<b>Total net position</b>	<b>29,344,569</b>	<b>70,414,879</b>
<b>Total liabilities, deferred inflows of resources, and net position</b>	<b>\$ 56,671,864</b>	<b>\$ 100,476,196</b>

The accompanying notes are an integral part of these financial statements.

**City of Henderson, Kentucky Utility Commission**  
**Statements of Revenues, Expenses, and Changes in Net Position**  
**For the fiscal years ended May 31, 2019 and 2018**

<b><u>Operating revenues:</u></b>	<b><u>2019</u></b>	<b><u>2018</u></b>
Sale of electricity-Existing System	\$ 41,336,306	\$ 43,837,429
Sale of electricity-Station Two	8,277,707	18,461,405
Communication services	1,218,061	1,096,134
Other	563,670	469,366
<b>Total operating revenues</b>	<b><u>51,395,744</u></b>	<b><u>63,864,334</u></b>
<b><u>Operating expenses:</u></b>		
Production of electricity	33,267,139	44,403,951
Operating expenses	11,457,970	11,388,052
Depreciation	5,124,074	5,050,104
<b>Total operating expenses</b>	<b><u>49,849,183</u></b>	<b><u>60,842,107</u></b>
<b>Income from operations</b>	<b><u>1,546,561</u></b>	<b><u>3,022,227</u></b>
<b><u>Interest income (expense):</u></b>		
Investment income	459,955	196,266
Interest expense	(467,409)	(443,038)
<b>Total interest income (expense)</b>	<b><u>(7,454)</u></b>	<b><u>(246,772)</u></b>
<b>Income before non-operating items</b>	<b><u>1,539,107</u></b>	<b><u>2,775,455</u></b>
<b><u>Non-operating items:</u></b>		
Decommissioning Station Two	(40,522,005)	-
Station Two-Excess Energy Settlement	-	6,250,000
Transfers to the City of Henderson	(1,244,724)	(1,244,724)
Power furnished to the City of Henderson	(674,568)	(581,349)
Communication services provided to the City of Henderson and other local government agencies	(168,120)	(174,732)
<b>Total non-operating items</b>	<b><u>(42,609,417)</u></b>	<b><u>4,249,195</u></b>
Change in net position	(41,070,310)	7,024,650
Cumulative effect of change in accounting principle - adoption of Governmental Accounting Standards Board Statement No. 75	-	(1,600,373)
Prior period adjustment-asset retirement obligation	-	(261,069)
Net position, beginning of year	<u>70,414,879</u>	<u>65,251,671</u>
<b>Net position, end of year</b>	<b><u>\$ 29,344,569</u></b>	<b><u>\$ 70,414,879</u></b>

The accompanying notes are an integral part of these financial statements.

**City of Henderson, Kentucky Utility Commission  
Statements of Cash Flows  
For the fiscal years ended May 31, 2019 and 2018**

	<b>2019</b>	<b>2018</b>
<b><u>Cash flows from operating activities:</u></b>		
Receipts from customers	\$ 55,418,081	\$ 70,776,030
Payments to suppliers and vendors	(43,801,962)	(54,499,649)
Payments to employees	(4,627,149)	(4,627,000)
<b>Net cash provided by operating activities</b>	<b>6,988,970</b>	<b>11,649,381</b>
<b><u>Cash flows from non-capital financing activities:</u></b>		
Distributions to the City of Henderson	(1,244,724)	(1,244,724)
<b>Net cash used by non-capital financing activities</b>	<b>(1,244,724)</b>	<b>(1,244,724)</b>
<b><u>Cash flows from capital and related financing activities:</u></b>		
Acquisition and construction of capital assets	(2,072,642)	(2,072,772)
Principal payments on long-term debt	(650,000)	(630,000)
Interest payments on long-term debt	(467,409)	(443,038)
<b>Net cash used by capital and related financing activities</b>	<b>(3,190,051)</b>	<b>(3,145,810)</b>
<b><u>Cash flows from investing activities:</u></b>		
Proceeds from sale and maturities of investments	13,042,144	2,365,549
Investment income	370,905	222,326
Purchases of investment securities	(14,463,156)	(1,309,029)
<b>Net cash used by investing activities</b>	<b>(1,050,107)</b>	<b>1,278,846</b>
<b>Increase in cash and cash equivalents</b>	<b>1,504,088</b>	<b>8,537,693</b>
Cash and cash equivalents, beginning of year	10,886,004	2,348,311
<b>Cash and cash equivalents, end of year</b>	<b>\$ 12,390,092</b>	<b>\$ 10,886,004</b>

The accompanying notes are an integral part of these financial statements.

**City of Henderson, Kentucky Utility Commission**  
**Statements of Cash Flows – Reconciliation of Net Cash Provided by Operations**  
**For the fiscal years ended May 31, 2019 and 2018**

	<b>2019</b>	<b>2018</b>
<b><u>Operating activities:</u></b>		
Operating income	<b>\$ 1,546,561</b>	<b>\$ 3,022,227</b>
<b><u>Adjustments to reconcile operating income</u></b>		
<b><u>(loss) to net cash provided by operations:</u></b>		
Depreciation	5,124,074	5,050,104
Excess energy settlement proceeds	-	6,250,000
Power furnished to the City of Henderson	(674,568)	(581,349)
Communication services provided at no charge	(168,120)	(174,732)
Cumulative effect of change in accounting principle		(1,600,373)
Prior period adjustment	-	(261,069)
Other items	(519,784)	-
<b><u>Changes in operating assets and liabilities:</u></b>		
Accounts receivable	(565,066)	609,071
Due from Station Two Operator	772,933	(801,623)
Accrued revenue	1,154,403	(651,348)
Inventory and supplies	4,345,434	(2,273,552)
Prepaid expenses and other assets	(218,708)	12,216
Accounts payable and accrued expenses	(2,758,462)	1,706,569
Accounts payable-construction	(201,264)	(1,340,512)
Net pension liability and Other post employment benefits liability- deferred inflows and outflows	(1,010,404)	2,258,630
Asset retirement obligation	139,969	398,920
Customer deposits	21,972	26,202
	<b>\$ 6,988,970</b>	<b>\$ 11,649,381</b>
 <b>Net cash provided by operating activities</b>	<b>\$ 6,988,970</b>	<b>\$ 11,649,381</b>
 <b><u>Supplemental Information</u></b>		
<b><u>Non-cash activity:</u></b>		
Power furnished to the City of Henderson	\$ 674,568	\$ 581,349
Communication services provided at no charge	168,120	174,732

The accompanying notes are an integral part of these financial statements.

**1. Organization and Contracts:**

The City of Henderson Utility Commission is organized under the provisions of Section 96.530 of the Kentucky Revised Statutes to operate, manage, and control the Henderson Municipal Power & Light System. The members of the Utility Commission are appointed by the Mayor and are approved by the City Commissioners of the City of Henderson, Kentucky (City). The Mayor and the City Commission authorize all rates and bond issues of the Utility Commission. As a municipal entity, the Utility Commission is exempt from all federal and state income taxes. Certain real estate utilized by the Utility Commission is owned by the City of Henderson.

The Utility Commission operates the "Existing System" and pursuant to certain contracts and agreements described as follows, reserves power from "Station Two" which is owned by the Commission, and currently operated by Big Rivers Electric Corporation (Big Rivers), pursuant to various lease, assignment, and other agreements between the parties.

The Commission provides retail electric service to the residents of the City of Henderson within its service territory. The Commission also provided wholesale electricity to Big Rivers through July 18, 1998 and subsequently to an affiliate of LG&E Energy Corporation. LG&E was purchased by Powergen in 2000 and thereafter acquired by E.ON. Effective July 16, 2009, Big Rivers resumed its role as operator of Station Two as part of the "Unwind Transaction."

The Commission entered into certain contracts with Big Rivers relating to Station Two, as follows:

**A. Power Plant Construction and Operation Agreement:**

Under this agreement, Big Rivers agreed to furnish certain construction and start-up services for which it was paid out-of-pocket expenses plus overhead allowances and operate Station Two upon completion for which the Station Two Operator is paid reasonable expenditures allocable to the operation and maintenance of Station Two, as defined in the agreement. The original agreement was amended to include an option to extend through the useful operating life of Station Two. Big Rivers exercised this option in 1998.

**B. Power Sales Contract:**

Under this agreement, the Station Two Operator purchases all of the Station Two capacity in excess of the City of Henderson's requirements. Payments for capacity purchased by the Station Two Operator are made monthly based on the portion of Station Two capacity allocated to the Station Two Operator compared to the total monthly Station Two capacity costs as defined in the agreement. The original agreement was executed in 1970 and extended through 2023. During 1993, the agreement was amended to include an option to extend through the useful operating life of Station Two. Big Rivers exercised this option in 1998.

**C. Joint Facilities Agreement:**

This agreement provides for the continuing joint use by the Commission and Station Two Operator of certain auxiliary facilities presently owned and used by the Station Two Operator at its generating station and of auxiliary facilities provided by the Commission in connection with the construction of Station Two, which is located adjacent to the generating station and also operated by the Station Two Operator.



**1. Organization and Contracts, continued:**

Power sales to the Station Two Operator under the agreement amounted to \$8,277,707 and \$18,461,405 for the fiscal years ended May 31, 2019 and 2018, respectively.

In connection with the negotiations related to the funding and construction of the Flue Gas Desulfurization System (FGD System) Station Two various aforementioned contracts were amended effective May 31, 1993. Significant provisions of the amendments include:

- The total capacity of Station Two, a factor in determining various Station Two cost allocations, was reduced as a result of the power required to operate the FGD System.
- FGD System costs, up to the amount of proceeds from the sale of Emission Allowances, will be borne in the same proportion as the Emission Allowances are allocated. Additional FGD System costs will be borne in proportion to the new capacity allocation as determined by the contract amendments.
- The Commission will reimburse the Station Two Operator for certain allocated costs of the existing Big Rivers' FGD System to be jointly used by the Station Two Operator and Station Two based upon an allocation formula defined in the amendments.

Amounts charged by the Station Two Operator as reasonable expenditures allocable to the operation and maintenance of Station Two are subject to review and approval by the Commission. Differences, if any, between amounts originally charged as allocable by the Station Two Operator and amounts accepted by the Utility Commission are recorded when a final determination of such amounts is made. Operating revenues and expenses would be reduced by any amount subsequently determined not to be allocable to Station Two.

Station Two became commercially operable and construction was substantially completed during 1974, and was decommissioned February 1, 2019.

**2. Summary of Significant Accounting Policies:**

The Commission is a component unit of the City of Henderson, Kentucky (the primary government), due to its financial accountability to the City Commission.

The financial statements of the Commission have been prepared in conformity with generally accepted accounting principles (GAAP) as applied to government units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles.

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the fund's principal ongoing operations. The principal operating revenues of the Commission are charges to customers for electric and communications sales and service.

Operating expenses for the Commission include the cost of power and services, administrative expenses, and depreciation. All other revenues and expenses not meeting this definition are classified as non-operating items.

2. **Summary of Significant Accounting Policies, continued:**

**Statement of Net Position:**

The Statement of Net Position is designed to display the financial position of the Commission. The Commission's fund equity is reported as a net position, which is presented in three categories defined as follows:

- **Net investment in capital assets-** This component of net position consists of capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.
- **Restricted-** This component of net position consists of constraints placed on net position use through external constraints imposed by creditors through debt covenants.
- **Unrestricted-** This component of net position consists of the remainder of net position that does not meet the definition of restricted or invested in capital assets, net of related debt.

**Statement of Revenues, Expenses, and Changes in Net Position:**

The Statement of Revenues, Expenses, and Changes in Net Position is the operating statement for proprietary funds. Revenues are reported by major source. This statement distinguishes between operating and non-operating revenues and expenses, and presents a separate subtotal for operating revenues, operating expenses, and operating income. The more significant of the Commission's accounting policies are described below:

**A. Cash and Cash Equivalents:**

Cash and cash equivalents consist of certificates of deposit and repurchase agreements with an original maturity of three months or less from the date of purchase. The carrying amount of each of these instruments approximates fair value.

**B. Investment Securities:**

Investments are recorded at fair value based on quoted market prices. Any gains or losses are reflected in the statement of revenues, expenses, and changes in net assets in accordance with GASB No. 31, "Accounting and Reporting For Certain Investments and For Internal Investment Pools." Kentucky Revised Statute 66.480 limits the types of securities that a municipal entity may invest in to obligations of the United States Treasury and its agencies, certain Federal securities, repurchase agreements, commercial bank certificates of deposit, and the Commonwealth of Kentucky Investment Pool.

**2. Summary of Significant Accounting Policies, continued:**

**C. Accounts Receivable and Unbilled Revenue:**

The Commission has entered into an agreement with the City of Henderson to perform its billing and collection services. All monies due to the Utility Commission are collected and deposited in the City of Henderson’s Utility Clearing Fund and are remitted to the Utility Commission on a weekly basis. The amount included in accounts receivable due from the Utility Clearing Fund was \$2,801,854 and \$2,335,956 as of May 31, 2019 and 2018, respectively. The allowance for uncollectible amounts was \$0 and \$170,925 for the fiscal years ended May 31, 2019 and 2018.

**D. Inventory:**

The fuel and lime inventory is stated at cost using the first-in-first-out method. Materials and supplies are stated at the weighted average cost.

**E. Utility Plant and Equipment:**

The utility plant is carried at cost, which includes capitalized interest, aggregating \$15,342,300, which was capitalized during the period of construction. No interest was capitalized during the fiscal years ended May 31, 2019 and 2018. The Commission capitalizes all items in excess of \$1,000. The Commission’s policy for determining the useful lives of its utility plant and equipment is as follows:

Production plant and structures	33 ½	years
Transmission and distribution	25	years
Automotive equipment	6	years
Wireless internet equipment	5	years
Other equipment	10	years

**F. Use of Estimates:**

The preparation of financial statements in conformity with generally accepted accounting principles requires that management make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at May 31, 2019 and 2018, as well as revenues and expenses for the years then ended. Actual results could differ from the estimates and assumptions used.

**G. Compensated Absences:**

Employees of the Commission are entitled to paid vacations and sick-leave. The Commission’s policy is to recognize these costs when earned under the accrual method of accounting in accordance with GASB No.16 “Accounting for Compensated Absences.”

	<u>Beginning Balance</u>	<u>Additons</u>	<u>Reductions</u>	<u>Ending Balance</u>
Compensated Absences	\$ 476,074	\$ 101,390	\$ (38,045)	\$ 539,419
				\$ 259,184
				280,235
				<u>\$ 539,419</u>

**2. Summary of Significant Accounting Policies, continued:**

**H. Recent Accounting Pronouncements:**

The Commission implemented Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* and GASB Statement No. 82, *Pensions Issues* during the fiscal year ended May 31, 2018. The implementation of GASB Statements No. 75 and 82 resulted in a cumulative effect of change in accounting principle which reduced the net position of the Commission by \$1,600,373 for the year ended May 31, 2018. Additionally, the implementation resulted in the recording of related deferred outflows and inflows of resources related and OPEB liability.

**I. Pensions:**

In the component unit financial statements of the City of Henderson, Kentucky Utility Commission, retirement plans (pensions) are required to be recognized and disclosed using the accrual basis of accounting (Refer to Note 6).

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions and pension expense, information about the fiduciary net position of the County Employees' Retirement System (CERS), and additions to/deductions from CERS' fiduciary net position have been determined on the same basis as they are reported by CERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are recorded at fair value.

**J. Postemployment Benefits Other Than Pensions (OPEB):**

In the component unit financial statements of the City of Henderson, Kentucky Utility Commission, postemployment benefits other than pensions (OPEB) are required to be recognized and disclosed using the accrual basis of accounting (Refer to Note 6).

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the County Employees' Retirement System (CERS) and additions to/deductions from CERS' fiduciary net position have been determined on the same basis as they are reported by CERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

**K. Emission Allowances:**

The Commission does not record the value of emission allowances granted by the Environmental Protection Agency for sulfur dioxide and nitrous oxide on its financial statements as there is no cost basis in these allowances.

**L. Bond Issuance Costs:**

Premiums and discounts arising from bond issues are deferred and amortized using the straight-line method over the lives of the bond issues.

**City of Henderson, Kentucky Utility Commission**  
**Notes to the Financial Statements-May 31, 2019**

**3. Cash and Cash Equivalents:**

As of May 31, 2019 and 2018, the City of Henderson, Kentucky Utility Commission maintained deposits with several local financial institutions. Of the bank balance, all was insured by the Federal Deposit Insurance Corporation and any amounts in excess of FDIC coverage were secured by pledged United States Government securities.

**4. Investment Securities:**

Investments are included in the Statement of Net Position under the caption "Investments-restricted/unrestricted." A summary of investments held by the City of Henderson, Kentucky Utility Commission along with the scheduled maturities is presented below:

<u>Investment Type:</u>	<u>Fair Value</u>	<u>Less Than One Year</u>	<u>One to Five Years</u>	<u>Six to Ten Years</u>
<b>May 31, 2019</b>				
<b>Unrestricted Investments:</b>				
U.S. Agencies	\$ 6,842,047	\$ -	\$ 5,780,781	\$ 1,061,266
Certificate of Deposit and Money Markets	6,310,386	2,600,680	3,207,333	502,373
Total Unrestricted Investments	<u>\$ 13,152,433</u>	<u>\$ 2,600,680</u>	<u>\$ 8,988,114</u>	<u>\$ 1,563,639</u>
<b>Restricted Per Bond Ordinance:</b>				
Certificate of Deposit and Money Markets	\$ 2,518,824	\$ 2,518,824	\$ -	\$ -
Total Restricted Investments	<u>\$ 2,518,824</u>	<u>\$ 2,518,824</u>	<u>\$ -</u>	<u>\$ -</u>
<b>May 31, 2018</b>				
<b>Unrestricted Investments:</b>				
U.S. Treasury Bills	\$ 10,212,213	\$ 10,212,213	\$ -	\$ -
Certificate of Deposit and Money Markets	1,590,557	1,590,557	-	-
Total Unrestricted Investments	<u>\$ 11,802,770</u>	<u>\$ 11,802,770</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Restricted Per Bond Ordinance:</b>				
Certificate of Deposit and Money Markets	\$ 2,358,385	\$ 2,358,385	\$ -	\$ -
Total Restricted Investments	<u>\$ 2,358,385</u>	<u>\$ 2,358,385</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Restricted Assets consisted of the following:</b>				
		<b>2019</b>	<b>2018</b>	
MISO-Margin Call Collateral		\$ 185,112	\$ -	
Operation and Maintenance Reserve		600,000	600,000	
Debt Service Reserve		1,101,215	1,088,868	
Debt Service Sinking Fund		632,497	669,517	
Total restricted assets		<u>\$ 2,518,824</u>	<u>\$ 2,358,385</u>	

**4. Investment Securities, continued:**

**A. Interest Rate Risk:**

The City of Henderson, Kentucky Utility Commission has a formal investment policy that limits investment maturities as a means to manage its exposure to fair value losses resulting from increasing interest rates.

**B. Credit Risk:**

The City of Henderson, Kentucky Utility Commission limits its investments to those allowed by Kentucky Revised Statute 66.480. Kentucky Revised Statute 66.480 limits investments to U.S. Government Treasury and Agency securities, certificates of deposit, securities issued by a state or local government rated in one of the three highest categories by a nationally recognized credit agency.

**C. Custodial Credit Risk:**

Custodial credit risk is the risk that in the event of the failure of the counterparty, The City of Henderson, Kentucky Utility Commission will not be able to recover the value of its investments, or collateral securities that are in the possession of the outside party. All investments of the Commission, with the exception of certificates of deposit, consist of unregistered and uninsured securities held by the Commission's trustee in their trust department not in the name of the Commission.

**5. Utility Plant and Equipment:**

Utility plant and equipment consisted of the following as of May 31, 2019 and 2018:

<b><u>May 31, 2019</u></b>	<b><u>Beginning</u></b>			<b><u>Ending</u></b>
<b><u>Existing System:</u></b>	<b><u>Balance</u></b>	<b><u>Additions</u></b>	<b><u>Deletions</u></b>	<b><u>Balance</u></b>
Vehicles	\$ 2,394,793	\$ 74,430	\$ -	\$ 2,469,223
Transmission plant	8,752,502	533,201	-	9,285,703
Distribution plant	28,042,045	953,965	-	28,996,010
Land and land rights	1,288,551	43,968	(6,115)	1,326,404
Telecommunications, internet, and fiber optics	6,576,186	141,154	(200,898)	6,516,442
General plant	153,079	196,909	-	349,988
	<u>47,207,156</u>	<u>1,943,627</u>	<u>(207,013)</u>	<u>48,943,770</u>
Accumulated depreciation	<u>(35,974,715)</u>	<u>(1,044,279)</u>	<u>330,953</u>	<u>(36,688,041)</u>
Existing System total	<u>\$ 11,232,441</u>	<u>\$ 899,348</u>	<u>\$ 123,940</u>	<u>\$ 12,255,729</u>
<b><u>Station Two:</u></b>				
General plant	\$ 186,090,250	\$ 259,274	\$ (186,349,524)	\$ -
Accumulated depreciation	<u>(143,636,895)</u>	<u>(4,079,795)</u>	<u>147,716,690</u>	<u>-</u>
Station Two total	<u>\$ 42,453,355</u>	<u>\$ (3,820,521)</u>	<u>\$ (38,632,834)</u>	<u>\$ -</u>
Total utility, plant, and equipment, net	<u>\$ 53,685,796</u>			<u>\$ 12,255,729</u>

**5. Utility Plant and Equipment, continued:**

<b><u>May 31, 2018</u></b>	<b><u>Beginning</u></b>			<b><u>Ending</u></b>
<b><u>Existing System:</u></b>	<b><u>Balance</u></b>	<b><u>Additions</u></b>	<b><u>Deletions</u></b>	<b><u>Balance</u></b>
Vehicles	\$ 2,188,443	\$ 381,479	\$ (175,129)	\$ 2,394,793
Transmission plant	8,713,949	38,553	-	8,752,502
Distribution plant	27,485,333	556,712	-	28,042,045
Land and land rights	1,235,451	53,100	-	1,288,551
Telecommunications, internet, and fiber optics	6,096,984	479,881	(679)	6,576,186
General plant	54,350	98,729	-	153,079
	<u>45,774,510</u>	<u>1,608,454</u>	<u>(175,808)</u>	<u>47,207,156</u>
Accumulated depreciation	<u>(35,383,736)</u>	<u>(910,049)</u>	<u>319,070</u>	<u>(35,974,715)</u>
Existing System total	<u>\$ 10,390,774</u>	<u>\$ 698,405</u>	<u>\$ 143,262</u>	<u>\$ 11,232,441</u>
<b><u>Station Two:</u></b>				
General plant	\$ 185,769,194	\$ 321,056	\$ -	\$ 186,090,250
Accumulated depreciation	<u>(139,496,840)</u>	<u>(4,140,055)</u>	<u>-</u>	<u>(143,636,895)</u>
Station Two total	<u>\$ 46,272,354</u>	<u>\$(3,818,999)</u>	<u>\$ -</u>	<u>\$ 42,453,355</u>
Total utility, plant, and equipment, net	<u>\$ 56,663,128</u>			<u>\$ 53,685,796</u>

Depreciation expense for the fiscal years ended May 31, 2019 and 2018 was \$5,124,074 and \$5,050,104 respectively.

**6. Retirement Plans:**

**General Information about the Pension Plan**

*Plan description:* All eligible Commission employees participate in the County Employees' Retirement System (CERS), a cost-sharing, multiple-employer defined benefit plan administered by the Board of Trustees of Kentucky Retirement Systems. CERS consists of two plans – Non-Hazardous and Hazardous. Commission employees participate in the Non-Hazardous plan only. Kentucky Retirement Systems issues a publicly available financial report that includes financial statements and supplementary information for CERS. That report can be obtained at <https://kyret.ky.gov>.

*Benefits provided:* CERS provides retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Kentucky Revised Statute 61.645 assigns the authority to establish and amend benefit provisions to the Kentucky Retirement Systems Board of Trustees.

*Cost of Living Adjustment (COLA):* Prior to July 1, 2009, COLAs were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. After July 1, 2009, the COLAs were limited to 1.50%. No COLA has been granted since July 1, 2011.

**6. Retirement Plans, continued:**

*Contributions:* Tier 1 plan members, who began participating prior to September 1, 2008, are required to contribute 5% of their annual creditable compensation. These members are classified in the Tier 1 structure of benefits. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest.

Tier 2 plan members, who began participating on, or after, September 1, 2008, and before January 1, 2014, are required to contribute 6% of their annual creditable compensation, while 1% of these contributions are deposited to an account created for the payment of health insurance benefits under 25 USC Section 401(h) in the Pension Fund. These members are classified in the Tier 2 structure of benefits. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited.

Tier 3 plan members, who began participating on, or after, January 1, 2014, are required to contribute to the Cash Balance Plan. The Cash Balance Plan is known as a hybrid plan because it has characteristics of both a defined benefit plan and a defined contribution plan. Members in the plan contribute a set percentage of their salary each month to their own account. Members contribute 5% of their annual creditable compensation, and an additional 1% to the health insurance fund (401(h) account) which is not credited to the member's account and is not refundable. The employer contribution rate is set annually by the Kentucky Retirement System Board of Trustees based on an actuarial valuation. The employer contributes a set percentage of the member's salary. Each month, when employer contributions are received, an employer pay credit is deposited to the member's account. A member's account is credited with a 4% employer pay credit. The employer pay credit represents a portion of the employer contribution.

Interest is paid into the Tier 3 member's account. The account currently earns 4% interest credit on the member's account balance as of June 30 of the previous year. The member's account may be credited with additional interest if the system's five-year Geometric Average Net Investment Return (GANIR) exceeded 4%. If the member was actively employed and participating in the fiscal year, and if the system's GANIR for the previous five years exceeds 4%, then the member's account will be credited with 75% of the amount of the returns over 4% on the account balance as of June 30 of the previous year (Upside Sharing Interest). The Upside Sharing Interest is credited to both the member contribution balance and Employer Pay Credit Balance.

The Commission is required to contribute at an actuarially determined rate. As of May 31, 2019, the Commission's required contribution rate was 16.22% of annual covered payroll. The contribution requirements of plan members and the Commission are established and may be amended by the Kentucky Retirement Systems Board of Trustees. Contributions to CERS from the Commission were \$547,056 for the year ended May 31, 2019.



**Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions**

At May 31, 2019, the Commission reported a liability of \$7,242,530 for its proportionate share of the collective net pension liability. The collective net pension liability was measured as of June 30, 2018, and the total pension liability used to calculate the collective net pension liability was determined by an actuarial valuation as of June 30, 2017 and rolled-forward using generally accepted actuarial principles. The Commission's proportion of the collective net pension liability was based on a projection of the Commission's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. At June 30, 2018, the Commission's proportion was 0.118919%, which was an increase of 0.008478% from its proportion measured as of June 30, 2017.

For the year ended May 31, 2019, the Commission recognized pension expense of \$1,130,511. At May 31, 2019, the Commission reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between expected and actual experience	\$ 236,231	\$ 106,015
Changes of assumptions	707,806	-
Net difference between projected and actual investment earnings on pension plan investments	-	86,842
Changes in proportion and differences between Commission contributions and proportional share of contributions	292,603	214,816
Commission contributions subsequent to the measurement date	<u>547,056</u>	<u>-</u>
Total	<u>\$ 1,783,696</u>	<u>\$ 407,673</u>

Of the total amount reported as deferred outflows of resources related to pensions, \$547,056 resulting from Commission contributions subsequent to the measurement date and before the end of the fiscal year will be included as a reduction of the collective net pension liability in the year ended May 31, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in the Commission's pension expense as follows:

<b><u>Year ended May 31:</u></b>	<b><u>Amount</u></b>
2020	\$ 554,087
2021	343,115
2022	(29,364)
2023	(38,871)
2024	-
Thereafter	-

**6. Retirement Plans, continued:**

*Actuarial assumptions:* The total pension liability in the June 30, 2018 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.30%
Salary Increases	3.05%
Investment Rate of Return	6.25%

The mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females). For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back one year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back four years for males) is used for the period after disability retirement.

The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the period July 1, 2008 - June 30, 2013.

The long-term expected rate of return was determined by using a building-block method in which best-estimate ranges of expected future real rates of returns are developed for each asset class. The ranges are combined by weighting the expected future real rate of return by the target asset allocation percentage. The target allocation and best estimates of arithmetic real rate of return for each major asset class are summarized in the table below.

<b><u>Asset Class</u></b>	<b><u>Target Allocation</u></b>	<b><u>Long-Term Expected Real Rate of Return</u></b>
<b><u>U.S. Equity</u></b>	<b>17.50%</b>	
U.S. Large Cap	5.00%	4.50%
U.S. Mid Cap	6.00%	4.50%
U.S. Small Cap	6.50%	5.50%
<b><u>Non U.S. Equity</u></b>	<b>17.50%</b>	
International Developed	12.50%	6.50%
Emerging Markets	5.00%	7.25%
Global Bonds	4.00%	3.00%
<b><u>Credit Fixed</u></b>	<b>24.00%</b>	
Global IG Credit	2.00%	3.75%
High Yield	7.00%	5.50%
EMD	5.00%	6.00%
Illiquid Private	10.00%	8.50%
Private Equity	10.00%	6.50%
Real Estate	5.00%	9.00%
Absolute Return	10.00%	5.00%
Real Return	10.00%	7.00%
Cash	2.00%	1.50%
<b>Total</b>	<b>100.00%</b>	<b>6.09%</b>

**6. Retirement Plans, continued:**

*Discount rate:* The projection of cash flows used to determine the discount rate of 6.25% assumed that local employers would contribute the actuarially determined contribution rate of projected compensation over the remaining 25 year (closed) amortization period of the unfunded actuarial accrued liability. The discount rate determination does not use a municipal bond rate.

*Sensitivity of the Commission's proportionate share of the collective net pension liability to changes in the discount rate:* The following presents the Commission's proportionate share of the collective net pension liability calculated using the discount rate of 6.25%, as well as what the Commission's proportionate share of the collective net pension liability would be if it were calculated using a discount rate that is one percentage point lower (5.25%) or one percentage point higher (7.25%) than the current rate:

	<b>1.00% Decrease (5.25%)</b>	<b>Current Discount Rate (6.25%)</b>	<b>1.00% Increase (7.25%)</b>
Commission's proportionate share of the collective net pension liability as of May 31, 2018	\$ 9,117,595	\$ 7,242,530	\$ 5,671,553

*Pension plan fiduciary net position:* Detailed information about the pension plan's fiduciary net position is available in the separately issued Kentucky Retirement Systems financial report.

**Postemployment Benefits Other Than Pensions (OPEB)**

**General Information about the OPEB Plan**

*Plan description:* In addition to the pension benefits described above, Kentucky Retirement Systems provides postemployment healthcare benefits through the Kentucky Retirement Systems Insurance Fund (Insurance Fund). The Insurance Fund was established to provide hospital and medical insurance for those receiving benefits from the Kentucky Employees' Retirement System (KERS), the County Employees' Retirement System (CERS), and the State Police Retirement System (SPRS). Eligible non-Medicare retirees are covered by the Department of Employee Insurance (DEI) plans. Kentucky Retirement Systems submits the premium payments to DEI. The Board contracts with Humana to provide health care benefits to eligible Medicare retirees through a Medicare Advantage Plan.

*Benefits Provided:* The Insurance Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ended June 30, 2018 (the date of the latest available information), insurance premiums withheld from benefit payments for members of CERS were \$23.8 million and \$2.8 million for non-hazardous and hazardous employees, respectively. For the fiscal year ended June 30, 2017, insurance premiums withheld from benefit payments for members of CERS were \$22.9 million and \$2.7 million for non-hazardous and hazardous employees, respectively. The Insurance Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous employees killed in the line of duty.

**6. Retirement Plans, continued:**

The amount of contributions paid by the Insurance Fund is based on years of service. For employees participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are shown below:

<u>Years of Service</u>	<u>% Paid by Insurance Fund</u>
20 or more	100%
15 - 19	75%
10 - 14	50%
4 - 9	25%
Less than 4	0%

As a result of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits are calculated differently for those who began participating on or after July 1, 2003. Once employees reach a minimum vesting period of ten years, non-hazardous employees whose participation began on or after July 1, 2003 earn \$10 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on or after July 1, 2003 earn \$15 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives \$10 per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually, which is currently 1.5%, based upon Kentucky Revised Statutes. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692, and 78.852. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

*Contributions:* The Commission is required to contribute at an actuarially determined rate. As of May 31, 2019, the Commission's required contribution rate was 5.26% of annual covered payroll. The contribution requirements of plan members and the Commission are established and may be amended by the Kentucky Retirement Systems Board of Trustees. Contributions to the Insurance Fund from the Commission were \$177,405 for the year ended May 31, 2019, which does not include implicit subsidies reported in the amount of \$34,060. As described above, Tier 2 and Tier 3 employees contribute 1% of their annual creditable compensation to the Insurance Fund; Tier 1 employees are not required to contribute.

**OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB**

At May 31, 2019, the Commission reported a liability of \$2,111,330 for its proportionate share of the collective net OPEB liability. The collective net OPEB liability was measured as of June 30, 2018, and the total OPEB liability used to calculate the collective net OPEB liability was determined by an actuarial valuation as of June 30, 2017 and rolled-forward using generally accepted actuarial principles. The Commission's proportion of the collective net OPEB liability was based on a projection of the Commission's long-term share of contributions to the OPEB plan relative to the projected contributions of all participating employers, actuarially determined. At June 30, 2018, the Commission's proportion was 0.118919%, which was an increase of 0.008478% from its proportion measured as of June 30, 2017.

**6. Retirement Plans, continued:**

For the year ended May 31, 2019, the Commission recognized OPEB expense of \$207,172. At May 31, 2019, the Commission reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between expected and actual experience	\$ -	\$ 246,047
Changes of assumptions	421,664	4,878
Net difference between projected and actual investment earnings on pension plan investments	-	145,429
Changes in proportion and differences between Commission contributions and proportional share of contributions	111,188	4,176
Commission contributions subsequent to the measurement date	211,465	-
Total	<u>\$ 744,317</u>	<u>\$ 400,530</u>

Of the total amount reported as deferred outflows of resources related to OPEB, \$211,465 resulting from Commission contributions subsequent to the measurement date and before the end of the fiscal year will be included as a reduction of the collective net OPEB liability in the year ended May 31, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in the Commission's OPEB expense as follows:

<b><u>Year ended May 31:</u></b>	<b><u>Amount</u></b>
2020	\$ 27,518
2021	27,518
2022	27,518
2023	55,762
2024	1,610
Thereafter	(7,604)

*Actuarial assumptions:* The total pension liability in the June 30, 2018 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.30%
Payroll Growth	2.00%
Salary Increases	3.05, average
Investment Rate of Return	6.25%
Healthcare Trend Rates	
Pre-65	Initial trend starting at 7.00% at January 1, 2020, and gradually decreasing to an ultimate trend rate of 4.05% over a period of 32years.
Post-65	Initial trend starting at 5.00% at January 1, 2020, and gradually decreasing to an ultimate trend rate of 4.05% over a period of 10 years.

**6. Retirement Plans, continued:**

The mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females). For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back one year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back four years for males) is used for the period after disability retirement.

The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the period July 1, 2008 - June 30, 2013.

The long-term expected rate of return was determined by using a building-block method in which best-estimate ranges of expected future real rate of returns are developed for each asset class. The ranges are combined by weighting the expected future real rate of return by the target asset allocation percentage. The target allocation and best estimates or arithmetic real rate of return for each major asset class are summarized in the table below:

<b><u>Asset Class</u></b>	<b><u>Target Allocation</u></b>	<b><u>Long-Term Expected Real Rate of Return</u></b>
<b><u>U.S. Equity</u></b>	<b>17.50%</b>	
U.S. Large Cap	5.00%	4.50%
U.S. Mid Cap	6.00%	4.50%
U.S. Small Cap	6.50%	5.50%
<b><u>Non U.S. Equity</u></b>	<b>17.50%</b>	
International Developed	12.50%	6.50%
Emerging Markets	5.00%	7.25%
Global Bonds	4.00%	3.00%
<b><u>Credit Fixed</u></b>	<b>24.00%</b>	
Global IG Credit	2.00%	3.75%
High Yield	7.00%	5.50%
EMD	5.00%	6.00%
Illiquid Private	10.00%	8.50%
Private Equity	10.00%	6.50%
Real Estate	5.00%	9.00%
Absolute Return	10.00%	5.00%
Real Return	10.00%	7.00%
Cash	2.00%	1.50%
<b>Total</b>	<b>100%</b>	<b>6.09%</b>

The fully-insured premiums Kentucky Retirement Systems pays for the CERS Health Insurance Plan are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit

**6. Retirement Plans, continued:**

employer subsidy for the non-Medicare eligible retirees. GASB 75 requires that the liability associated with this implicit subsidy be included in the calculation of the total OPEB liability.

*Discount rate:* The projection of cash flows used to determine the discount rate of 5.85% assumed that local employers would contribute the actuarially determined contribution rate of projected compensation over the remaining 25 year (closed) amortization period of the unfunded actuarial accrued liability. The discount rate determination used an expected rate of return of 6.25%, and a municipal bond rate of 3.62%, as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2018. Current assets, future contributions, and investment earnings are projected to be sufficient to pay the projected benefit payments from the retirement system. However, the cost associated with the implicit employer subsidy was not included in the calculation of the system's actuarially determined contributions, and any cost associated with the implicit subsidy will not be paid out of the system's trusts. Therefore, the municipal bond rate was applied to future expected benefit payments associated with the implicit subsidy.

*Sensitivity of the Commission's proportionate share of the collective net OPEB liability to changes in the discount rate:* The following presents the Commission's proportionate share of the collective net OPEB liability calculated using the discount rate of 5.85%, as well as what the

Commission's proportionate share of the collective net OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (4.85%) or one percentage point higher (6.85%) than the current rate:

	<b>1.00% Decrease (4.85%)</b>	<b>Current Discount Rate (5.85%)</b>	<b>1.00% Increase (6.85%)</b>
Commission's proportionate share of the collective net OPEB liability as of June 30, 2018	<u>\$ 2,742,279</u>	<u>\$ 2,111,330</u>	<u>\$ 1,573,877</u>

*Sensitivity of the Commission's proportionate share of the collective net OPEB liability to changes in the healthcare cost trend rates:* The following presents the Commission's proportionate share of the collective net OPEB liability, as well as what the Commission's proportionate share of the collective net OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower or one percentage point higher than the current healthcare cost trend rates:

	<b>1.00% Decrease</b>	<b>Current Healthcare Cost Trend Rate</b>	<b>1.00% Increase</b>
Commission's proportionate share of the collective net OPEB liability as of June 30, 2018	<u>\$ 1,571,906</u>	<u>\$ 2,111,330</u>	<u>\$ 2,747,155</u>

*OPEB plan fiduciary net position:* Detailed information about the OPEB plan's fiduciary net position is available in the separately issued Kentucky Retirement Systems financial report.

**7. Accounts Payable and Accrued Expenses:**

Accounts payable and accrued expenses consisted of the following as of May 31, 2019 and 2018:

	<u>2019</u>	<u>2018</u>
Accounts payable and accrued expenses - Existing System	\$ 4,054,867	\$ 3,418,730
Accounts payable and accrued liabilities - Station Two	-	3,407,421
	<u>4,054,867</u>	<u>6,826,151</u>
Total	<u>\$ 4,054,867</u>	<u>\$ 6,826,151</u>

**8. Long-Term Debt – Revenue Bonds:**

During the fiscal year ended May 31, 2012, the City of Henderson, Kentucky Utility Commission issued revenue bonds for the purpose of financing capital improvements throughout its system through two revenue bond series, *Electric System Revenue Bonds, Series 2011A* in the amount of \$11,350,000, and *Electric System Revenue Bonds, Series 2011 B*, in the amount of \$3,670,000.

The bond ordinance requires that certain accounts for each issue be established and held by a trustee as follows:

**Debt Service Fund:**

A monthly transfer of 1/12 of principal and 1/6 of the interest due is required to be deposited in the Debt Service Fund.

**Debt Service Reserve Fund:**

A reserve account was established, so that as of any date of calculation, an amount equal to at least the highest amount of aggregate debt service, or an amount equal to 125% of the average aggregate debt service and an amount equal to 10% of the “proceeds” of the bonds with respect to all series is maintained by the Commission.

**Series 2011A:**

The Series 2011A bonds are secured by a pledge of the revenues of the City of Henderson, Kentucky Utility Commission. The Series 2011A Bonds are additionally secured by a debt service reserve and a non-foreclosable statutory mortgage lien on the System. The Series 2011A Bonds are also secured by a debt service reserve in an amount equal to the least of the maximum annual debt service on the Series 2011A Bonds. The proceeds from the sale of these bonds were used to retire the Bond Anticipation Note, Series 2008B in the amount of \$5,281,067, with the remaining proceeds to be used for capital improvements of the City’s electric transmission and distribution system, and at its Station Two generating station. Interest is due semi-annually on these obligations on December 1<sup>st</sup> and June 1<sup>st</sup> of each year.

It is the opinion from the City of Henderson, Kentucky Utility Commission’s bond counsel, that under existing laws, interest on the Series 2011A Bonds is not subject to income tax.



**8. Long-Term Debt – Revenue Bonds, continued:**

**Optional Redemption Series 2011A:**

The Series 2011A Bonds maturing on and after December 1, 2021, are subject to redemption by the City, at its option, before maturity on September 1, 2021, and on any date thereafter in whole or from time to time in part in any order of maturity (less than all of a single maturity to be selected by lot in such manner as the Trustee and Paying Agent may determine) at a redemption price equal to 100% of the principal amount thereof plus accrued interest to the redemption date.

**Series 2011B:**

The Series 2011B bonds are secured by a pledge of the revenues of the City of Henderson, Kentucky Utility Commission. The Series 2011B Bonds are additionally secured by a debt service reserve and a non-foreclosable statutory mortgage lien on the System. The Series 2011B Bonds are also secured by a debt service reserve in an amount equal to the least of the maximum annual debt service on the Series 2011B bonds. The proceeds from the sale of these bonds were used to retire the Bond Anticipation Note, Series 2008A and 2010A, in the amounts of \$3,500,000 and \$170,000, respectively. Interest is due semi-annually on these obligations on December 1<sup>st</sup> and June 1<sup>st</sup> of each year. It is the opinion from the City of Henderson, Kentucky Utility Commission's bond counsel, that under existing laws, interest on the Series 2011B bonds is not subject to income tax.

**Optional Redemption Series 2011B:**

The Series 2011B Bonds maturing on and after December 1, 2021, are subject to redemption by the Commission, at its option, before maturity on September 1, 2021, and on any date thereafter in whole or from time to time in part in any order of maturity (less than all of a single maturity to be selected by lot in such manner as the Trustee and Paying Agent may determine) at a redemption price equal to 100% of the principal amount thereof plus accrued interest to the redemption date.

A summary of the long-term debt of the Commission is as follows:

	<u>2019</u>	<u>2018</u>
City of Henderson, Kentucky Utility Commission Series 2011A Revenue Bonds, secured by pledge of system revenues and non-forecloseable statutory lien, maturing December 1, 2031, annual principal payments range from \$420,000 to \$725,000, interest rates range from 2.5% to 4.5%.	\$ 8,165,000	\$ 8,655,000
City of Henderson, Kentucky Utility Commission Series 2011B Revenue Bonds, secured by pledge of system revenues and non-forecloseable statutory lien, maturing December 1, 2031, annual principal payments range from \$150,000 to \$245,000, interest rates range from 2.5% to 4.5%.	<u>2,595,000</u>	<u>2,755,000</u>
Total long-term debt	\$ 10,760,000	\$ 11,410,000
Less current portion due	<u>(670,000)</u>	<u>(650,000)</u>
Long-term debt, net of current portion	<u>\$ 10,090,000</u>	<u>\$ 10,760,000</u>

**8. Long-Term Debt – Revenue Bonds, continued:**

Future maturities of long-term debt as of May 31, 2019 are as follows:

Fiscal Year:	Series 2011A			Series 2011B			Total Debt Service
	Principal	Interest	Total	Principal	Interest	Total	
2020	\$ 505,000	\$ 325,232	\$ 830,232	\$ 165,000	\$ 92,098	\$ 257,098	\$ 1,087,330
2021	520,000	310,081	830,081	170,000	88,138	258,138	1,088,219
2022	535,000	293,181	828,181	175,000	83,634	258,634	1,086,815
2023	555,000	274,991	829,991	175,000	78,603	253,603	1,083,594
2024	570,000	255,566	825,566	185,000	72,915	257,915	1,083,481
2025-2029	3,210,000	920,891	4,130,891	1,020,000	262,841	1,282,841	5,413,732
2030-2032	2,270,000	206,319	2,476,319	705,000	58,405	763,405	3,239,724
	<u>\$ 8,165,000</u>	<u>\$ 2,586,261</u>	<u>\$ 10,751,261</u>	<u>\$ 2,595,000</u>	<u>\$ 736,634</u>	<u>\$ 3,331,634</u>	<u>\$ 14,082,895</u>

The following is a summary of activity as it relates to long-term debt:

**May 31, 2019**

	Beginning Balance	Additions	Payments	Ending Balance	Due within One Year
Series 2011A	\$ 8,655,000	\$ -	\$ (490,000)	\$ 8,165,000	\$ 505,000
Series 2011B	2,755,000	-	(160,000)	2,595,000	165,000
Total Debt	11,410,000	-	(650,000)	10,760,000	670,000
Compensated absences	476,074	101,390	(38,045)	539,419	259,184
	<u>\$ 11,886,074</u>	<u>\$ 101,390</u>	<u>\$ (688,045)</u>	<u>\$ 11,299,419</u>	<u>\$ 929,184</u>

**May 31, 2018**

	Beginning Balance	Additions	Payments	Ending Balance	Due within One Year
Series 2011A	\$ 9,150,000	\$ -	\$ (495,000)	\$ 8,655,000	\$ 490,000
Series 2011B	2,890,000	-	(135,000)	2,755,000	160,000
Total Debt	12,040,000	-	(630,000)	11,410,000	650,000
Compensated absences	453,730	74,268	(51,924)	476,074	267,413
	<u>\$ 12,493,730</u>	<u>\$ 74,268</u>	<u>\$ (681,924)</u>	<u>\$ 11,886,074</u>	<u>\$ 917,413</u>

**9. Asset Retirement Obligation:**

The Commission is legally obligated to remove asbestos, lead paint, and other contaminants located at the Station Two facility. Accordingly, a liability has been established in accordance with SFAS No. 143 *Accounting for Asset Retirement Obligations*. During the fiscal year ended May 31, 2018, management became aware of an asset retirement obligation related to an ash pond located at the Station Two facility. The corresponding asset and liability was recorded in the financials resulting in a prior period adjustment to net position in the amount of \$261,069.

**9. Asset Retirement Obligation, continued:**

The following is a reconciliation of the aggregate asset retirement liability associated with the Commission's obligation to remove the contaminants:

	<b>Asset Retirement Obligation</b>
Balance as of June 1, 2018	\$ 1,327,136
Additional obligations incurred	-
Increase in present value of the obligation	41,919
Increase based on revised estimates of costs to dismantle and remove assets	-
Liabilities extinguished	-
Balance as of May 31, 2019	<u>\$ 1,369,055</u>

**10. Discounted Internet and Broadband Services:**

A summary of discounted internet and broadband services provided by the Commission to other governmental concerns for the fiscal years ending May 31, 2019 and 2018, respectively, is as follows:

<b><u>Governmental Organizations</u></b>	<b><u>2019</u></b>	<b><u>2018</u></b>
City of Henderson	\$ 132,120	\$ 138,732
Other organizations	36,000	36,000
	<u>\$ 168,120</u>	<u>\$ 174,732</u>

**11. Concentration of Sales:**

Three industrial customers of the Existing System accounted for sales in the amount of \$12.1 million (28% of Existing System sales), and \$15.4 million (30% of Existing System sales) for the fiscal years ended May 31, 2019 and 2018, respectively.

**12. Emission Allowances:**

Amendments to the Clean Air Act in 1990 established a system whereby emission allowances were created and allocated to generating units subject to Phase 1 of the emission restrictions. Station Two was allocated a total of 226,901 allowances through 1999 (one emission allowance represents the authorization to emit one ton of sulfur dioxide in a given year). The allowances are allocated between the Commission and the Station Two Operator based upon the Station Two capacity allocations. As of May 31, 2019 and 2018, there were remaining a total of 0 and 550 sulfur dioxide, nitrous oxide, and ozone emission allowances valued at \$0 and \$1,237, respectively.

**13. Related Party Transactions:**

The Commission incurred the following transactions with the City of Henderson, Kentucky for the fiscal years ended May 31, 2019 and 2018:

Paid the City \$665,667 and \$676,500 each year, respectively, for data processing and other services related to billings and collections.

Paid the City \$1,244,724 and \$1,244,724 each year, respectively, for payment in lieu of taxes.

Paid the City \$674,762 and \$603,032 for participation in the City of Henderson's self-insured employee health insurance plan for the fiscal years ended May 31, 2019 and 2018 respectively. Risk is minimized in this area by the purchase of re-insurance for amounts in excess of the \$125,000 stop loss limit. Charges are based on estimated amounts determined by the City of Henderson's insurance coordinator as necessary to fund claims as they become due and payable.

Provided the City of Henderson with power for the fiscal years ended May 31, 2019 and 2018 in the amount of \$674,568 and \$581,349 respectively. The City of Henderson was also provided significantly reduced communication service fees totaling approximately \$132,120 and \$138,732 for the fiscal years ended May 31, 2019 and 2018, respectively.

**14. Commitments and Contingencies:**

**A. Southeastern Power Administration:**

The Southeastern Power Administration (SEPA) has contracted with the Commission to provide it a total of 15,000 megawatt hours of hydroelectric power each year. The 15,000 megawatt hours represent approximately 2.5% of the Commission's annual megawatt hour requirements. Henderson Municipal Power & Light is restricted to not more than 10 megawatt hours during any hour, and not more than 2,640 megawatt hours during any month. During the fiscal years ended May 31, 2019 and 2018, the Commission purchased power on the spot market and from SEPA to supply the needs of its customers. Purchased power from these sources for the fiscal years ended May 31, 2019 and 2018 was \$589,584 and \$601,655, respectively.

**B. Regulatory Compliance:**

The North American Electric Reliability Corporation (NERC) adopted new electric system reliability standards for all electric utilities in the United States. NERC has adopted and began enforcement of the new standards effective June of 2007. The new standards have been approved by the Federal Energy Regulatory Commission (FERC). The Commission must comply with the new standards and will incur administrative expenses related to NERC compliance. Federal air quality and emission standards have become more stringent.

**C. Unwind Transaction – Station Two:**

In 1998, HMP&L, Big Rivers Electric Corporation, and Western Kentucky Energy Corporation entered into contracts for the operation of the HMP&L Station Two Power Plant and other Big Rivers Electric Corporation Generation Plants. On July 16, 2009, Big Rivers Electric Corporation and Western Kentucky Energy Corporation (E.ON) signed an agreement under which the original 1998 contracts are rescinded and operational control of the Station Two Power Plant returned to Big Rivers Electric Corporation.

**14. Commitments and Contingencies, continued:**

**D. Pending Litigation:**

On July 31, 2019, Big Rivers Electric Corporation filed an application with the Kentucky Public Service Commission for a declaratory judgment order addressing the parties' respective rights and obligations under the Station Two contracts following the retirement of the Station Two operating plant on February 1, 2019. The unresolved disputes included claims by the respective parties for amounts owed under the contracts, the parties respective share of decommissioning costs associated with the closure of the plant, the parties share of costs of maintaining Station Two waste and Big Rivers Green Station landfill and the utilization of city owned joint use facilities. Henderson Municipal Power and Light contest the Kentucky Public Service Commission's jurisdiction over contract related issues and is vigorously defending the pending litigation as well as all issues related to the decommissioning process following the closure of Station Two.

**E. Station Two -Decommissioning:**

The City of Henderson, Kentucky Utility Commission, d/b/a Henderson Municipal Power & Light, engaged an engineering consultant during fiscal year 2017-2018 to perform a study related to the continued viability of Station Two, and to determine the City of Henderson's future power needs. The study indicated that Station Two would require an immediate investment of \$50 million to meet maintenance and regulatory requirements. The Commission and Big Rivers Electric Corporation agreed to decommission the plant effective February 1, 2019 as it was determined it was more economical for the Commission to purchase its power needs on the open market rather than to continue to generate. The remaining investment of the Commission in Station Two was charged off as the contract reverts ownership of the facility to Big Rivers Electric Corporation at the point of decommissioning the facility. The net amount of the loss on decommissioning was \$40,552,005.

**15. Risk Management:**

The Commission is exposed to various risks of loss related to torts, theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Commission carries commercial insurance for these types of risk of loss, including workers' compensation. Settled claims from these risks have not exceeded commercial insurance coverage in any of the past five fiscal years.

**16. Amounts Due from Station Two Operator (Big Rivers Electric Corporation):**

As of the fiscal years ended May 31, 2019 and 2018, the amount Big Rivers Electric Corporation owed to the Commission, as part of the annual settlements, was \$2,177,652 and \$2,950,585, respectively.

**17. Excess Energy Settlement:**

During the fiscal year ended May 31, 2018, the Commission and Big Rivers Electric Corporation settled litigation related to the excess energy generated at Station Two. As a result of the settlement, Big Rivers paid the Commission \$6,250,000. During the fiscal year ended May 31, 2019, the Commission refunded \$2 million of the settlement to its customers through the fuel adjustment. An additional \$1 million of the settlement has been set aside in a separate account to provide annual assistance to low income customers having difficulty paying their utility bill.

**18. Subsequent Events:**

Subsequent events have been evaluated through September 23, 2019, the date these financial statements were available to be issued.

**City of Henderson, Kentucky Utility Commission  
Schedule of the Commission's Proportionate Share of the Collective Net Pension Liability  
County Employees' Retirement System Pension Plan  
As of the Measurement Date for the Last Five Years\***

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Commission's proportion of the collective net pension liability	0.118919%	0.110441%	0.121741%	0.125106%	0.123175%
Commission's proportionate share of the collective net pension liability	\$ 7,242,530	\$ 6,464,451	\$ 5,994,076	\$ 5,378,974	\$ 3,996,000
Commission's covered-employee payroll	\$ 3,036,915	\$ 2,759,054	\$ 2,946,675	\$ 2,940,925	\$ 2,838,142
Commission's proportionate share of the collective net pension liability as a percentage of its covered-employee payroll	238.48%	234.30%	203.42%	182.90%	140.80%
Plan fiduciary net position as a percentage of the total pension liability	53.54%	53.32%	55.50%	59.97%	66.80%

\*This table will present ten years of information as it becomes available.

**City of Henderson, Kentucky Utility Commission  
Schedule of the Commission's Contributions to the Pension Plan  
County Employees' Retirement System Pension Plan  
For the Last Five Fiscal Years\***

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Statutorily required contribution	\$ 547,056	\$ 439,750	\$ 384,888	\$ 365,977	\$ 374,968
Contributions in relation to the statutorily required contribution	<u>(547,056)</u>	<u>(439,750)</u>	<u>(384,888)</u>	<u>(365,977)</u>	<u>(374,968)</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Commission's covered-employee payroll	\$ 3,372,725	\$ 3,036,915	\$ 2,759,054	\$ 2,946,675	\$ 2,940,925
Contributions as a percentage of covered-employee payroll	16.22%	14.48%	13.95%	12.42%	12.75%

\*This table will present ten years of information as it becomes available.



**City of Henderson, Kentucky Utility Commission  
Schedule of the Commission's Proportionate Share of the Collective Net OPEB Liability  
County Employees' Retirement System OPEB Plan  
As of the Measurement Date for the Last Two Years\***

	<u>2018</u>	<u>2017</u>
Commission's proportion of the collective net OPEB liability	0.118919%	0.110441%
Commission's proportionate share of the collective net OPEB liability	\$ 2,111,330	\$ 2,220,242
Commission's covered-employee payroll	\$ 3,036,915	\$ 2,759,054
Commission's proportionate share of the collective net OPEB liability as a percentage of its covered-employee payroll	69.52%	80.47%
Plan fiduciary net position as a percentage of the total OPEB liability	57.62%	52.39%

\*This table will present ten years of information as it becomes available.

**City of Henderson, Kentucky Utility Commission  
Schedule of the Commission's Contributions to the OPEB Plan  
County Employees' Retirement System OPEB Plan  
For the Last Fiscal Two Years\***

	<u>2019</u>	<u>2018</u>
Statutorily required contribution	\$ 211,465	\$ 169,871
Contributions in relation to the statutorily required contribution	<u>(211,465)</u>	<u>(169,871)</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>
Commission's covered-employee payroll	\$ 3,372,725	\$ 3,036,915
Contributions as a percentage of covered-employee payroll	6.27%	5.59%

\*This table will present ten years of information as it becomes available.

**Pension Plan**

*Changes of benefit terms:* The following changes were by the General Assembly and reflected in the valuation performed as of June 30, 2014:

A cash balance plan was introduced for members whose participation date is on or after January 1, 2014.

*Changes of assumptions:* There have been no changes in actuarial assumptions since June 30, 2017. In the June 30, 2017 and 2015 actuarial valuations, the following changes in actuarial assumptions were made:

	<u>June 30, 2017</u>	<u>June 30, 2015</u>	<u>Prior Periods</u>
Inflation	2.30%	3.25%	3.50%
Salary Increases	3.05%	4.00%	4.50%
Investment Rate of Return	6.25%	7.50%	7.75%

In the June 30, 2015 actuarial valuation, the mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females). For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back one year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back four years for males) is used for the period after disability retirement.

For periods prior to the June 30, 2015 actuarial valuation, the rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward five years was used for the period after disability retirement.

**Other Postemployment Benefits Plan**

*Changes of benefit terms:* None.

*Changes of assumptions:* In the June 30, 2018 and 2017 actuarial valuations, the following changes in actuarial assumptions were made:

	<u>June 30, 2018</u>	<u>June 30, 2017</u>	<u>Prior Periods</u>
Inflation	2.30%	2.30%	3.25%
Payroll Growth	2.00%	2.00%	4.00%
Investment Rate of Return	6.25%	6.25%	7.70%
Single Discount Rate	5.85%	5.84%	6.89%

**City of Henderson, Kentucky Utility Commission  
Combining Statement of Net Position – By System  
As of May 31, 2019 and 2018**

	May 31, 2019				May 31, 2018			
<b>Assets:</b>	<b>Existing System</b>	<b>Station Two</b>	<b>Elimination</b>	<b>Total</b>	<b>Existing System</b>	<b>Station Two</b>	<b>Elimination</b>	<b>Total</b>
<b>Current assets:</b>								
Cash and cash equivalents	\$ 12,390,092	\$ -	\$ -	\$ 12,390,092	\$ 10,805,387	\$ 80,617	\$ -	\$ 10,886,004
Investments - unrestricted	13,152,433	-	-	13,152,433	11,802,770	-	-	11,802,770
Investments - restricted	2,518,824	-	-	2,518,824	2,358,385	-	-	2,358,385
Accounts receivable, net of allowance for uncollectibles	3,395,145	-	-	3,395,145	2,830,079	-	-	2,830,079
Accounts receivable-Station Two Operator	2,177,652	-	-	2,177,652	2,867,447	83,138	-	2,950,585
Accrued revenue	2,839,760	-	-	2,839,760	3,994,163	-	-	3,994,163
Inventory and supplies	4,675,758	-	-	4,675,758	5,785,290	3,235,902	-	9,021,192
Prepaid expenses	289,063	-	-	289,063	70,355	-	-	70,355
<b>Total current assets</b>	<b>41,438,727</b>	<b>-</b>	<b>-</b>	<b>41,438,727</b>	<b>40,513,876</b>	<b>3,399,657</b>	<b>-</b>	<b>43,913,533</b>
<b>Utility plant, net of accumulated depreciation:</b>	<b>12,255,729</b>	<b>-</b>	<b>-</b>	<b>12,255,729</b>	<b>11,232,441</b>	<b>42,453,355</b>	<b>-</b>	<b>53,685,796</b>
<b>Other assets:</b>								
Asset retirement obligation	449,395	-	-	449,395	547,445	-	-	547,445
Investment in Station Two	-	-	-	-	31,058,999	-	(31,058,999)	-
<b>Total assets</b>	<b>54,143,851</b>	<b>-</b>	<b>-</b>	<b>54,143,851</b>	<b>83,352,761</b>	<b>45,853,012</b>	<b>(31,058,999)</b>	<b>98,146,774</b>
<b>Deferred outflows of resources:</b>								
Deferred outflows of resources	2,528,013	-	-	2,528,013	2,329,422	-	-	2,329,422
<b>Total deferred outflows of resources</b>	<b>2,528,013</b>	<b>-</b>	<b>-</b>	<b>2,528,013</b>	<b>2,329,422</b>	<b>-</b>	<b>-</b>	<b>2,329,422</b>
<b>Total assets and deferred outflows of resources</b>	<b>\$ 56,671,864</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 56,671,864</b>	<b>\$ 85,682,183</b>	<b>\$ 45,853,012</b>	<b>\$(31,058,999)</b>	<b>\$ 100,476,196</b>

See Independent Auditor's Report

**City of Henderson, Kentucky Utility Commission  
Combining Statements of Net Position – By System  
As of May 31, 2019 and 2018**

	May 31, 2019				May 31, 2018			
	Existing System	Station Two	Elimination	Total	Existing System	Station Two	Elimination	Total
<b>Liabilities and net assets:</b>								
<b>Current liabilities:</b>								
Accounts payable and accrued expenses	\$ 4,054,867	-	\$ -	\$ 4,054,867	\$ 3,418,730	\$ 3,407,421	\$ -	\$ 6,826,151
Accounts payable-Construction in progress - Station Two	-	-	-	-	-	201,264	-	201,264
Current portion-bonds payable	670,000	-	-	670,000	650,000	-	-	650,000
Customer deposits	701,075	-	-	701,075	679,103	-	-	679,103
<b>Total current liabilities</b>	<b>5,425,942</b>	<b>-</b>	<b>-</b>	<b>5,425,942</b>	<b>4,747,833</b>	<b>3,608,685</b>	<b>-</b>	<b>8,356,518</b>
<b>Long-term liabilities:</b>								
Accrued compensated absences	280,235	-	-	280,235	267,413	-	-	267,413
Long- term portion of bonds payable	10,090,000	-	-	10,090,000	10,760,000	-	-	10,760,000
Asset retirement obligation	1,369,055	-	-	1,369,055	1,327,136	-	-	1,327,136
Net pension liability	7,242,530	-	-	7,242,530	6,464,451	-	-	6,464,451
Net Other post-employment benefits liability	2,111,330	-	-	2,111,330	2,220,242	-	-	2,220,242
<b>Total long-term liabilities</b>	<b>21,093,150</b>	<b>-</b>	<b>-</b>	<b>21,093,150</b>	<b>21,039,242</b>	<b>-</b>	<b>-</b>	<b>21,039,242</b>
<b>Total liabilities</b>	<b>26,519,092</b>	<b>-</b>	<b>-</b>	<b>26,519,092</b>	<b>25,787,075</b>	<b>3,608,685</b>	<b>-</b>	<b>29,395,760</b>
<b>Deferred inflows of resources:</b>								
Deferred inflows of resources	808,203	-	-	808,203	665,557	-	-	665,557
<b>Total deferred inflows of resources</b>	<b>808,203</b>	<b>-</b>	<b>-</b>	<b>808,203</b>	<b>665,557</b>	<b>-</b>	<b>-</b>	<b>665,557</b>
<b>Net position:</b>								
Net investment in capital assets	1,495,729	-	-	1,495,729	30,881,440	42,453,355	(31,058,999)	42,275,796
Restricted per bond ordinance	2,518,824	-	-	2,518,824	2,358,385	-	-	2,358,385
Unrestricted	25,330,016	-	-	25,330,016	25,989,726	(209,028)	-	25,780,698
<b>Total net position</b>	<b>29,344,569</b>	<b>-</b>	<b>-</b>	<b>29,344,569</b>	<b>59,229,551</b>	<b>42,244,327</b>	<b>(31,058,999)</b>	<b>70,414,879</b>
<b>Total liabilities, deferred inflows, and net position</b>	<b>\$ 56,671,864</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 56,671,864</b>	<b>\$ 85,682,183</b>	<b>\$ 45,853,012</b>	<b>\$(31,058,999)</b>	<b>\$ 100,476,196</b>

See Independent Auditor's Report

**City of Henderson, Kentucky Utility Commission**  
**Supplemental Schedule of Changes in Net Position – By System**  
**For the fiscal years ended May 31, 2019 and 2018**

	May 31, 2019				May 31, 2018			
	Existing System	Station	Elimination	Consolidated Total	Existing System	Station Two	Elimination	Consolidated Total
<b>Operating Revenues:</b>								
Sale of electricity	\$ 41,336,306	\$ 16,442,183	\$ (8,164,476)	\$ 49,614,013	\$ 43,837,429	\$ 30,601,846	\$(12,140,441)	\$ 62,298,834
Communication services	1,218,061	-	-	1,218,061	1,096,134	-	-	1,096,134
Other	563,670	-	-	563,670	469,366	-	-	469,366
<b>Total Operating Revenues</b>	<b>43,118,037</b>	<b>16,442,183</b>	<b>(8,164,476)</b>	<b>51,395,744</b>	<b>45,402,929</b>	<b>30,601,846</b>	<b>(12,140,441)</b>	<b>63,864,334</b>
<b>Operating Expenses:</b>								
Production of electricity	28,249,303	13,182,312	(8,164,476)	33,267,139	31,424,690	25,119,702	(12,140,441)	44,403,951
Operating, general and administrative	9,193,722	2,264,248	-	11,457,970	7,567,328	3,820,724	-	11,388,052
Depreciation	1,044,279	4,079,795	-	5,124,074	910,049	4,140,055	-	5,050,104
<b>Total Operating Expenses</b>	<b>38,487,304</b>	<b>19,526,355</b>	<b>(8,164,476)</b>	<b>49,849,183</b>	<b>39,902,067</b>	<b>33,080,481</b>	<b>(12,140,441)</b>	<b>60,842,107</b>
<b>Income (Loss) from Operations</b>	<b>4,630,733</b>	<b>(3,084,172)</b>	<b>-</b>	<b>1,546,561</b>	<b>5,500,862</b>	<b>(2,478,635)</b>	<b>-</b>	<b>3,022,227</b>
<b>Interest Income (Expense):</b>								
Other income (expense)	-	-	-	-	-	13	-	13
Investment income	459,955	-	-	459,955	196,117	136	-	196,253
Interest expense	(467,409)	-	-	(467,409)	(443,038)	-	-	(443,038)
<b>Total Interest Income (Expense)</b>	<b>(7,454)</b>	<b>-</b>	<b>-</b>	<b>(7,454)</b>	<b>(246,921)</b>	<b>149</b>	<b>-</b>	<b>(246,772)</b>
<b>Income (Loss) Before Transfers</b>	<b>4,623,279</b>	<b>(3,084,172)</b>	<b>-</b>	<b>1,539,107</b>	<b>5,253,941</b>	<b>(2,478,486)</b>	<b>-</b>	<b>2,775,455</b>
<b>Non-operating Items:</b>								
Decommissioning-Station Two	(32,420,849)	(39,160,155)	31,058,999	(40,522,005)	-	-	-	-
Excess Energy Settlement	-	-	-	-	6,250,000	-	-	6,250,000
Transfers to City of Henderson	(1,244,724)	-	-	(1,244,724)	(1,244,724)	-	-	(1,244,724)
Power furnished to City of Henderson	(674,568)	-	-	(674,568)	(581,349)	-	-	(581,349)
Communication services provided to the City of Henderson and local governmental agencies	(168,120)	-	-	(168,120)	(174,732)	-	-	(174,732)
<b>Total Non-operating Items</b>	<b>(34,508,261)</b>	<b>(39,160,155)</b>	<b>31,058,999</b>	<b>(42,609,417)</b>	<b>4,249,195</b>	<b>-</b>	<b>-</b>	<b>4,249,195</b>
<b>Increase (Decrease) in Net Position</b>	<b>(29,884,982)</b>	<b>(42,244,327)</b>	<b>31,058,999</b>	<b>(41,070,310)</b>	<b>9,503,136</b>	<b>(2,478,486)</b>	<b>-</b>	<b>7,024,650</b>
Cumulative effect of change in accounting principle - GASB 75 adoption	-	-	-	-	(1,600,373)	-	-	(1,600,373)
Prior period adjustment for Asset Retirement Obligation	-	-	-	-	(261,069)	-	-	(261,069)
Net Position, Beginning of Year	59,229,551	42,244,327	(31,058,999)	70,414,879	51,587,857	44,722,813	(31,058,999)	65,251,671
<b>Net Position, End of Year</b>	<b>\$ 29,344,569</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 29,344,569</b>	<b>\$ 59,229,551</b>	<b>\$ 42,244,327</b>	<b>\$(31,058,999)</b>	<b>\$ 70,414,879</b>

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**City of Henderson, Kentucky Utility Commission  
Supplemental Schedule of Changes in Net Position – By System  
For the fiscal years ended May 31, 2019 and 2018**

	<u>Existing System</u>	<u>Station Two</u>			<u>Eliminations *</u>	<u>Total Net Assets</u>
		<u>Utility Commission</u>	<u>Big Rivers</u>	<u>Total Station Two</u>		
Beginning balance, June 1, 2017	\$ 51,587,857	\$ 20,799,279	\$ 23,923,534	\$ 44,722,813	\$(31,058,999)	\$ 65,251,671
Change in net position	9,503,136	(592,512)	(1,885,974)	(2,478,486)	-	7,024,650
Prior period adjustment-asset retirement obligation	(261,069)	-	-	-	-	(261,069)
Cumulative effect of change in accounting principle - GASB 75 adoption	(1,600,373)	-	-	-	-	(1,600,373)
Balance May 31, 2018	\$ 59,229,551	\$ 20,206,767	\$ 22,037,560	\$ 42,244,327	\$(31,058,999)	\$ 70,414,879
Change in net position	\$ (29,884,982)	\$ (20,206,767)	\$ (22,037,560)	\$ (42,244,327)	\$ 31,058,999	\$ (41,070,310)
Balance May 31, 2019	<u>\$ 29,344,569</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 29,344,569</u>

\* Elimination of interest of Existing System in investment in the equity of Station Two.

<b>As shown on the Statement of Net Position</b>	<u>2019</u>	<u>2018</u>
Net Investment in Capital Assets	\$ 1,495,729	\$ 42,275,796
Restricted per bond ordinance	2,518,824	2,358,385
Unrestricted	<u>25,330,016</u>	<u>25,780,698</u>
Net position, end of year	<u>\$ 29,344,569</u>	<u>\$ 70,414,879</u>

See Independent Auditor's Report



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**Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards***

Members of the Board of Commissioners  
City of Henderson, Kentucky Utility Commission  
Henderson, Kentucky

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States of America, the financial statements of the City of Henderson, Kentucky Utility Commission as of and for the year ended May 31, 2019 and the related notes to the financial statements, which collectively comprise the Commission's basic financial statements and have issued our report thereon dated September 23, 2019.

**Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the City of Henderson, Kentucky Utility Commission's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the City of Henderson, Kentucky Utility Commission's internal control. Accordingly, we do not express an opinion on the effectiveness of the City of Henderson, Kentucky Utility Commission's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of the internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in the internal control that might be significant deficiencies, or material weaknesses. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

**Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the City of Henderson, Kentucky Utility Commission's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.



**Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this report is not suitable for any other purpose.

*Alexander Thompson Arnold PLLC*

Henderson, Kentucky  
September 23, 2019

**DRAFT SUBJECT TO REVISION**

**CITY OF HENDERSON, KENTUCKY UTILITY  
COMMISSION –HENDERSON MUNICIPAL  
POWER & LIGHT  
FINANCIAL STATEMENTS  
MAY 31, 2020 AND 2019**

**Case No: 2019-00269  
Attachment 1 to BREC 1-31  
HMPL Audits 2011-2019**

**CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION –  
HENDERSON MUNICIPAL POWER & LIGHT  
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## INDEPENDENT AUDITOR'S REPORT

To the Board of Commissioners  
City of Henderson, Kentucky Utility Commission  
Henderson, Kentucky

### **Report on the Financial Statements**

We have audited the accompanying financial statements of the City of Henderson, Kentucky Utility Commission (Commission), a component unit of the City of Henderson, Kentucky, as of and for the years ended May 31, 2020 and 2019, and the related notes to the financial statements, which collectively comprise the Commission's basic financial statements as listed in the table of contents.

### ***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### ***Auditor's Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### ***Opinion***

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Commission as of May 31, 2020 and 2019, and the changes in financial position and cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

### ***Emphasis of Matters***

As discussed in Note 2 to the financial statements during the year ended May 31, 2020, the Commission elected to adopt new accounting guidance, GASB Statement No. 83 *Certain Asset Retirement Obligations*. Our opinion is not modified with respect to this matter.

### ***Other Matters***

#### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management discussion and analysis on pages 3 through 12 and the schedules of the Commission's proportionate share of the collective net pension and OPEB liabilities, contributions to the pension and OPEB plans and the noted to the required supplementary information on pages 41 through 45 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### ***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated August [REDACTED] 2020 on our consideration of the City of Henderson, Kentucky Utility Commission's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City of Henderson, Kentucky Utility Commission's internal control over reporting and compliance.

*Alexander Thompson Arnold PLLC*

Henderson, Kentucky  
August [REDACTED], 2020

# **CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION – HENDERSON MUNICIPAL POWER & LIGHT MANAGEMENT’S DISCUSSION AND ANALYSIS**

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The City of Henderson, Kentucky Utility Commission (HMP&L) is in the business of providing electricity and fiber services for residential, commercial, and industrial customers within the incorporated territory of the City of Henderson, Kentucky. The Commission also provides electricity and fiber services to customers in a few areas outside of the incorporated territory of Henderson. The following discussion and analysis of HMP&L’s financial performance provides an overview of the Utility’s financial activities for fiscal year ended May 31, 2020.

## **Overview of the Financial Statements:**

This annual financial report consists of three parts: 1) Financial Section, 2) Other Supplemental Information, and 3) Other reporting required by *Governmental Auditing Standards*. The Financial Statements also include notes that explain some of the information in the financial statements in more detail. The statements are followed by a section of supplemental information that further explains and supports the information in the basic financial statements. The Supplemental schedules present the financial position and results of operations for the Existing System and Station Two. The Consolidated Financial Statements report information about HMP&L using accounting methods similar to those used by private sector companies, except for the reporting of contributions in aid of construction, equity capital, and retained earnings. Refer to the Summary of Significant Accounting Policies in the footnotes to the Financial Statements relating to the adoption of Statement No. 34 of the Governmental Accounting Standard Board (GASB 34).

The Statement of Net Position, successor to the Balance Sheet, includes all of the Utility’s assets, liabilities, and deferred outflows/inflows of resources and provides information about the nature and amounts of investments in resources (assets) and the obligations of HMP&L (liabilities). It also provides the basis for evaluating the capital structure and assessing the liquidity and financial flexibility of HMP&L.

All of the current audit year’s revenues and expenses are accounted for in the Statement of Revenues, Expenses, and Changes in Net Position, successor to the Income Statement. This statement measures the success of the Utility’s operations over the past year and can be used to determine whether the Utility has successfully recovered all of its costs through the sale of electricity, fiber, and other charges, has earned a reasonable return, and maintained a sound financial position.

The final required financial statement is the Statement of Cash Flows. The primary purpose of this statement is to provide information about the Utility’s cash receipts, cash payments, and net changes in cash resulting from operations, investing, and financing activities. It also provides information on the sources and uses of cash and the changes in cash balances during the year.

**CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION –  
HENDERSON MUNICIPAL POWER & LIGHT  
MANAGEMENT’S DISCUSSION AND ANALYSIS**

---

**Financial Statements:**

- HMP&L’s total assets and deferred outflow of resources increased from \$56,671,864 at May 31, 2019 to \$66,324,571 at May 31, 2020. This increase is primarily attributable to an increase in operating income as well as an increase in the amount due from Big Rivers Electric Corporation.
- Operating revenues for HMP&L decreased by \$6,056,635, or 12%, from \$51,395,744 to \$45,339,109. The decrease in operating revenues was primarily due to the decrease in electricity sold to Big Rivers Electric Corporation from Station Two. Fiber and voice revenue increased by \$206,640.

	<u>2020</u>	<u>2019</u>	<u>Change</u>	<u>Percentage Change</u>
Sale of electricity-Station One	\$ 41,222	\$ 41,504	\$ (282)	-0.7%
Sale of electricity-Station Two	-	8,278	(8,278)	100%
Settlement-Big Rivers Electric	2,392	-	2,392	100%
Internet service	1,256	1,049	207	19.7%
Other	469	564	(95)	-16.8%
Total operating revenues	<u>\$ 45,339</u>	<u>\$ 51,395</u>	<u>\$ (6,056)</u>	<u>-11.8%</u>

Note: All amounts presented in thousands -000's omitted.

- Operating expenses for HMP&L decreased by approximately \$12,507,949 or 25%. The decrease was primarily due to savings related to the change in power supply from the coal-fired generating plan to market purchases and bilateral agreements. The following table represents the changes in the expenses for the fiscal years ended May 31, 2020 and 2019:

	<u>2020</u>	<u>2019</u>	<u>Change</u>	<u>Percentage Change</u>
Production of electricity	\$ 25,560	\$ 33,267	\$ (7,707)	-23.2%
Other operating expenses	10,762	11,458	(696)	-6.1%
Depreciation	1,019	5,124	(4,105)	-80.1%
Total operating expenses	<u>\$ 37,341</u>	<u>\$ 49,849</u>	<u>\$ (12,508)</u>	<u>-25.1%</u>

Note: All amounts presented in thousands -000's omitted.

**CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION –  
HENDERSON MUNICIPAL POWER & LIGHT  
MANAGEMENT’S DISCUSSION AND ANALYSIS**

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**Financial Statements, continued:**

**Statement of Net Position:**

Net position of the Existing System increased from \$29,344,569 for the fiscal year ended May 31, 2019, to \$36,628,281 while net position increased by \$7,283,712 in the fiscal year ended May 31, 2020. \$919,660 of the increase in net position was due to the cumulative effect of the adoption of GASB No. 83 *Certain Asset Retirement Obligations*.

Investment securities increased by \$7,060,512 for the fiscal year ended May 31, 2020. This increase is primarily due to shifting cash to investments as well as the increase in net operating income generated for the fiscal year ended May 31, 2020.

Cash and cash equivalents decreased by \$2,849,196 for the fiscal year ended May 31, 2020, versus an increase of \$1,854,705 compared to the previous fiscal year ended. All assets related to the ownership and operation of Station Two have been removed due to decommissioning which occurred February 1, 2019.

A summary of the assets and deferred outflows of the Commission for the previous three years is as follows:

Note: All amounts presented in thousands -000's omitted.

<b><u>Assets:</u></b>	<b><u>2020</u></b>	<b><u>2019</u></b>	<b><u>2018</u></b>
Cash and cash equivalents	\$ 9,541	\$ 12,390	\$ 10,886
Investment securities	20,429	13,152	11,803
Restricted investment securities	2,273	2,519	2,358
Accounts receivable	2,550	3,395	2,830
Accounts receivable-Station Two Operator	7,593	2,178	2,952
Accrued revenue	2,726	2,840	3,994
Inventories	1,338	4,676	9,021
Prepaid expenses	109	289	70
Total current assets	<u>46,559</u>	<u>41,439</u>	<u>43,914</u>
Utility plant and equipment	13,247	12,256	53,686
Asset retirement obligation	-	449	547
Total assets	<u>13,247</u>	<u>12,705</u>	<u>54,233</u>
Deferred outflow of resources	6,519	2,528	2,329
Total assets and deferred outflows of resources	<u>\$ 66,325</u>	<u>\$ 56,672</u>	<u>\$ 100,476</u>



**CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION –  
HENDERSON MUNICIPAL POWER & LIGHT  
MANAGEMENT’S DISCUSSION AND ANALYSIS**

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**Statement of Net Position, continued:**

Current liabilities decreased by \$718,387 compared to Fiscal Year 2019.

A summary of the liabilities and deferred inflows of the Statement of Net Position is as follows:

<b><u>Liabilities</u></b>	<b><u>2020</u></b>	<b><u>2019</u></b>	<b><u>2018</u></b>
Accounts payable	\$ 3,300	\$ 4,055	\$ 6,826
Accounts payable-construction	-	-	201
Current portion bonds payable	690	670	650
Customer deposits	717	701	679
Total current liabilities	4,707	5,426	8,356
Compensated absences	297	280	267
Asset retirement obligation	2,889	1,369	1,327
Net pension liability	9,186	7,243	6,464
Other post employment benefits	2,196	2,111	2,220
Long-term bonds payable	9,400	10,090	10,760
Total liabilities	28,675	26,519	29,394
Deferred inflows	1,021	808	90
Total liabilities and deferred inflows	<u>\$ 29,696</u>	<u>\$ 27,327</u>	<u>\$ 29,484</u>

**Statement of Revenues, Expenses, and Changes in Net Position:**

Operating revenues for HMP&L decreased by \$6,056,635 over that of the previous year. Sales for HMP&L Station Two decreased by \$8,277,707. Operating expenses decreased by \$12,507,949. This was due to decommissioning of Station Two.

Income from operations after interest expense and interest income, was \$8,420,810. For the fiscal year ended, transfers were made to the City of Henderson in the amount of \$1,244,724, the value of power furnished to the City of Henderson at no charge was \$643,914, and the value of communication services provided to the City of Henderson and other governmental agencies at no charge, was \$168,120. Additionally, a cumulative effect of the adoption of GASB No. 83 resulted in a cumulative effect adjustment of \$919,660 for a total increase in net position of \$7,283,712.

**CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION –  
HENDERSON MUNICIPAL POWER & LIGHT  
MANAGEMENT’S DISCUSSION AND ANALYSIS**

---

**Statement of Revenues, Expenses, and Changes in Net Position, continued:**

A summary of the changes in net position is presented below for the fiscal years ended May 31, 2018 to May 31, 2020.

	<u>2020</u>	<u>2019</u>	<u>2018</u>
Income (loss) before transfers	\$ 8,421	\$ 1,539	\$ 2,775
<u>Non-operating items:</u>			
Decommissioning Station Two	-	(40,522)	-
Station Two-Excess Energy Settlement	-	-	6,250
Transfer to City of Henderson	(1,244)	(1,244)	(1,244)
Communication services provided to the City of Henderson and other governmental agencies	(168)	(168)	(175)
Power furnished to the City of Henderson	(643)	(675)	(581)
Cumulative effect of change in accounting principles	920	-	(1,862)
Change in net position	<u>\$ 7,286</u>	<u>\$ (41,070)</u>	<u>\$ 5,163</u>

Note: All amounts presented in thousands -000's omitted.

**Statement of Cash Flows:**

Cash generated from operating activities increased by \$649,885 compared to the level from Fiscal Year 2019.

Cash Flows from non-capital financing activities is comprised of the funds transferred to the City of Henderson. For the fiscal year ended May 31, 2020, \$1.24 million was transferred.

Cash used by capital and related financing activities was \$3.1 million.

Cash used by investing activities was \$6.1 million.

Cash and cash equivalents for the year, which consist primarily of checking and money market accounts of HMP&L, decreased by \$2,849,196.

**CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION –  
HENDERSON MUNICIPAL POWER & LIGHT  
MANAGEMENT’S DISCUSSION AND ANALYSIS**

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**Statement of Cash Flows, continued:**

The following is an abbreviated analysis of cash flows of HMP&L for the fiscal years ended May 31, 2018 to 2020:

<b><u>Cash Flow Summary</u></b>	<b><u>2020</u></b>	<b><u>2019</u></b>	<b><u>2018</u></b>
Net cash generated by operations	\$ 7,638	\$ 7,119	\$ 11,649
Cash transferred to the City of Henderson	(1,245)	(1,245)	(1,245)
Net cash used by capital and related financing	(3,140)	(3,319)	(3,146)
Provided (used) by investing activities	(6,102)	(1,050)	1,279
Increase (decrease) in cash	(2,849)	1,505	8,537
Cash and cash equivalents, beginning of year	12,390	10,885	2,348
Cash and cash equivalents, end of year	<u>\$ 9,541</u>	<u>\$ 12,390</u>	<u>\$ 10,885</u>

Note: All amounts presented in thousands -000's omitted.

The following is a summary of cash and investment balances as of May 31, 2018 to 2020:

	<b><u>2020</u></b>	<b><u>2019</u></b>	<b><u>2018</u></b>
Cash and cash equivalents	\$ 9,541	\$ 12,390	\$ 10,885
Investments	20,429	13,152	11,803
Restricted investments	2,273	2,518	2,358
	<u>\$ 32,243</u>	<u>\$ 28,060</u>	<u>\$ 25,046</u>

Note: All amounts presented in thousands -000's omitted.

**Debt Administration:**

HMP&L entered into two Bond Anticipation Notes with Fifth Third Bank on December 22, 2008- a non-taxable series 2008A in the amount of \$3,500,000, and a taxable series 2008B in the amount of \$9,000,000. The series 2008A was used for capital improvements to the City’s retail electric system. The taxable series 2008B was used to make capital improvements to the City’s Station Two generating plant. HMP&L entered into an additional Bond Anticipation Note with Fifth Third Bank on March 25, 2010- a non-taxable series 2010A in the amount of \$1,500,000. This note was repaid at the same time as the series 2008A note. In September of 2012 HMP&L issued Revenue Bonds in the amount of \$15,020,000 and retired all outstanding Bond Anticipation Notes. The outstanding debt of the Commission was \$10,090,000 as of May 31, 2020.

# **CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION – HENDERSON MUNICIPAL POWER & LIGHT MANAGEMENT’S DISCUSSION AND ANALYSIS**

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## **Debt Administration, continued:**

On January 29, 2009, the City Commission approved an Ordinance increasing electric rates by 3.855% for all customer rate classifications. The purpose of the rate increase was to provide additional revenue to make the principal and interest payments on the short-term Bond Anticipation Notes and the long-term Bonds issued to replace the Bond Anticipation Notes. HMP&L set up a separate Bond Payment Account and, as of May 31, 2019, HMP&L had accrued \$1,505,979 for future principal and interest payments for the Bonds.

## **System Improvements and Replacement of Capital Assets:**

During the period of June 1, 2019, through May 31, 2020, HMP&L made a number of improvements to the electric and fiber facilities and replaced certain assets. The improvements to the facilities and asset replacements increased service reliability and extended the useful-life of certain existing assets.

During the 2019-2020 Fiscal Year, HMP&L made \$2,109,195 in capital improvements and replacements.

## **Electric Rates – Current and Future Increases:**

In April of 2019, HMP&L conducted a cost of service analysis with the assistance of consultants from GDS Associates. Since Station Two was being decommissioned and the power supply source was changing, HMP&L needed to restructure its rate schedules. This resulted in a revenue neutral rate restructuring that analyzed each customer class separately to ensure the same revenue level would be achieved for each class. The fuel adjustment was combined with the base rates and a new power cost adjustment (PCA) based on the fiscal year 2020 budget, was developed. The PCA captures the increase or decrease in power costs for each month. The new rate structure better matches the current power supply arrangements of HMP&L.

In April of 2020, the Henderson City Commission approved a rate reduction for HMP&L customers. In adjusting the PCA for the new budget year, it was determined that base power rates needed to be reduced to reflect the changes in power costs and to better align with the Fiscal Year 2021 budget.

In addition to the decrease in base rates, a new set of rates was developed to anticipate the increase in distributed generation projects of HMP&L customers. The rates contain a higher fixed charge to ensure HMP&L is compensated for all fixed charges, and the base power cost is the same base power cost rate found in the PCA that will either be charged or credited to the customers based on the metered amount of usage for the month (either positive or negative).

# CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION – HENDERSON MUNICIPAL POWER & LIGHT MANAGEMENT’S DISCUSSION AND ANALYSIS

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## **Employee Development:**

HMP&L’s workforce has a large number of employees nearing retirement age- both management and lead line workers. In order to prepare for this, HMP&L has begun hiring more line workers under the Apprenticeship Program. This program allows line workers who have completed line worker school and/or have on the job training to join HMP&L.

Upon hire, the apprentice line workers progress in a structured program- from Apprentice Line Worker I to Apprentice Line Worker IV (depending on experience and knowledge), and then subsequently to Journey Line Worker and potentially Crew Leader. Having this program allows HMP&L to plan for the future, as well as make sure all employees are progressing in a safe manner.

## **Station Two and Future Expenditures:**

Big Rivers and HMP&L were involved in litigation concerning HMP&L’s claim for damages concerning surplus energy sales related to Station Two. This civil action involved a claim by HMP&L to recover monetary damages from Big Rivers Electric Corporation because of HMP&L’s inability to schedule its excess energy. An offer to settle all claims past, present and future, was accepted by the parties, and the \$6.25 million settlement was received on January 5, 2018. The City of Henderson, Kentucky Utility Commission decided to give back \$2 million to its customers through the Fuel Adjustment, establish a Low-Income Relief Fund of \$1 million, place \$1.625 million into an investment account, and place \$1.625 million into unrestricted reserves.

HMP&L decommissioned Station Two during Fiscal Year 2019. To arrive at this decision, a preliminary Integrated Resource Plan (IRP) was finalized in July 2017 and presented to the Utility Commission. The IRP considered various options, such as continuing to run the two units as coal and complying with all environmental requirements, converting one or both units to natural gas, relying on the power market, integrating a peaking unit, and various other options. Upon receiving the IRP report, HMP&L started the process of evaluating the various options, and immediately began working towards completing another, more detailed IRP. This second, more detailed IRP was completed in April 2018. The IRP suggested that energy and capacity market purchases, either through managed contracts or the open market, was the most economical option for HMP&L customers.

HMP&L gathered bids through a Request for Proposals (RFP) that was released in August 2018. This RFP was for energy and capacity beginning June 2019. The RFP requested proposals for an all-requirements type contract, as well as a managed portfolio option. On February 28, 2019, HMP&L awarded the bid to various suppliers for the following:

5 X 16 Winter Block	3 year	20 MW	Merrill Lynch
5 X 16 Summer Block	3 year	30 MW	BP
5 X 16 Annual Block	3 year	10 MW	BP
7 X 24 Annual Block	5 year	30 MW	Merrill Lynch
7 X 24 Annual Block	10 year	30 MW	BP
Capacity ZRCs	5 year	100 MW	Constellation

# **CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION – HENDERSON MUNICIPAL POWER & LIGHT MANAGEMENT’S DISCUSSION AND ANALYSIS**

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## **Station Two and Future Expenditures, continued:**

On June 18, 2019, HMP&L presented another IRP refresh to the Utility Commission. This was to plan for future years once the current power supply arrangements expire. The IRP indicated that a solar PPA would align with future power requirements of HMP&L customers, and would allow HMP&L to secure low-cost, renewable energy in its portfolio. As such, an RFP was issued for a solar PPA, and in June of 2020, HMP&L signed a purchased power agreement (PPA) for solar power from Community Energy Solar. This will allow HMP&L to receive 50MW of power from a renewable energy source for 20 years.

HMP&L will continue to monitor its power supply source and perform external studies as needed.

## **Southeastern Power Administration (SEPA):**

The Southeastern Power Administration (SEPA) has contracted with HMP&L to provide HMP&L a total of 15,000 megawatt hours of hydroelectric power each year. The 15,000 megawatt hours represent approximately 2.5 percent of HMP&L’s annual megawatt hour requirements. HMP&L is restricted to not more than 10 megawatt hours during any one-hour period. The hydroelectric power is provided from SEPA generation units on the Cumberland River System Project.

In the fall of 2006, SEPA informed all contract project participants that the Wolf Creek Dam near Jamestown, Kentucky, had been inspected and serious seepage problems existed in the earthen dam. The seepage problems at the dam date back to 1968 and the US Army Corps of Engineers implemented various repairs since that time; however, the seepage became critical to the safety of the Wolf Creek Dam and surrounding communities. In an effort to respond to these safety concerns and make the needed repairs to the dam, SEPA reduced and curtailed electric service to the contract project participants. This reduction and curtailment of SEPA electric service began in early 2007. The dam repairs were completed during 2014 and the basin was allowed to fill to the necessary level of water.

The SEPA Cumberland River Hydroelectric Power System is continuing to be restored to its pre-construction conditions.

## **Regulatory Compliance:**

The North American Electric Reliability Corporation (NERC) adopted new electric system reliability standards for all electric utilities in the United States. NERC adopted and began enforcement of the new standards beginning in June 2007. The new standards were approved by the Federal Energy Regulatory Commission (FERC). HMP&L is required to comply with the new reliability standards and incurs administrative expenses related to NERC compliance.

# **CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION – HENDERSON MUNICIPAL POWER & LIGHT MANAGEMENT’S DISCUSSION AND ANALYSIS**

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## **Regulatory Compliance, continued:**

In November 2008, the Southeastern Electric Reliability Council (SERC) audited HMP&L for compliance with NERC Reliability Standards. Subsequent to the November audit, a number of formal and informal discussions took place between HMP&L and SERC. HMP&L and SERC reached an agreement concerning non-compliance issues identified during the audit; and a final settlement agreement was approved. In November 2010, HMP&L hired a Reliability Compliance Manager who is responsible for compliance with NERC Reliability Standards. SERC performed a compliance audit of HMP&L in March of 2014, evaluating the utility for compliance with 11 reliability requirements, as well as 3 infrastructure related items. This audit resulted in no findings, violations, or recommendations.

SERC completed an assessment of HMP&L in 2017 to identify areas of focus and level of effort needed to monitor compliance with selected NERC Reliability Standards. As a result, SERC identified that HMP&L posed low inherent risks to reliability of the Bulk Power System in each of seven risk factors evaluated, and determined that for the 2018 compliance oversight plan, all NERC Standards and Requirements applicable to HMP&L would be Self-Monitored. In July of 2020, HMP&L was notified by SERC that the Guided Self-Certification Validation for compliance with PRC-005-06 during the 2019 calendar year verified evidence demonstrated compliance with the standards and requirements.

In 2019, HMP&L joined the Midcontinent Independent System Operator (MISO) as a Transmission Owner and Market Participant. Effective March 1, 2019, due to MISO integration and termination of pre-existing contracts, HMP&L registered with NERC and SERC as a Balancing Authority and Transmission Planner in MISO, and entered into contract with a third party for necessary Transmission Operator and Local Balancing Authority services.

## **Transfers to the City of Henderson, Kentucky:**

In Fiscal Year 2018-2019, HMP&L’s cash transfer to the City was \$1,244,724. HMP&L has budgeted this same level of cash transfer to the City for Fiscal Year 2019-2020 and subsequent budget periods. HMP&L also paid the City \$665,667 for internal service fees and HMP&L provided the City free electric service valued at \$674,568 and free fiber services valued at \$168,120 for the 2018-2019 Fiscal Year. The annual cash transfer payments, internal service fees, and value of the free electric and fiber services represent 6.7% of gross electric revenue in Fiscal Year 2019.

Should additional information be needed inquiries can be directed to HMP&L at 100 Fifth Street, Henderson, Kentucky 42420. Contact via telephone at 270.826.2726.

**City of Henderson, Kentucky Utility Commission**  
**Statements of Net Position**  
**As of May 31, 2020 and 2019**

<u>Assets:</u>	<u>2020</u>	<u>2019</u>
<b><u>Current assets:</u></b>		
Cash and cash equivalents	\$ 9,540,896	\$ 12,390,092
Investments - unrestricted	20,428,603	13,152,433
Investments - restricted	2,273,166	2,518,824
Accounts receivable, net of allowance for uncollectibles	2,550,370	3,395,145
Accounts receivable, Station Two Operator	7,593,320	2,177,652
Accrued revenue	2,726,155	2,839,760
Inventory and supplies	1,338,098	4,675,758
Prepaid expenses	108,642	289,063
<b>Total current assets</b>	<b><u>46,559,250</u></b>	<b><u>41,438,727</u></b>
<b><u>Utility plant and equipment:</u></b>		
Utility plant, net of accumulated depreciation	<b><u>13,246,575</u></b>	<b><u>12,255,729</u></b>
<b><u>Other Assets</u></b>		
Asset retirement obligation, net of accumulated amortization	-	<b><u>449,395</u></b>
<b>Total Assets</b>	<b><u>59,805,825</u></b>	<b><u>54,143,851</u></b>
<b><u>Deferred outflows of resources:</u></b>		
Deferred outflows of resources-Asset retirement obligation	2,888,704	-
Deferred outflows of resources-Net pension liability and OPEB	3,630,042	<b><u>2,528,013</u></b>
<b>Total Deferred outflows of resources</b>	<b><u>6,518,746</u></b>	<b><u>2,528,013</u></b>
<b>Total assets and deferred outflows of resources</b>	<b><u>\$ 66,324,571</u></b>	<b><u>\$ 56,671,864</u></b>
<b><u>Liabilities:</u></b>		
<b><u>Current liabilities:</u></b>		
Accounts payable and accrued expenses	\$ 3,299,807	\$ 4,054,867
Current portion-bonds payable	690,000	670,000
Customer deposits	717,748	701,075
<b>Total current liabilities</b>	<b><u>4,707,555</u></b>	<b><u>5,425,942</u></b>
<b><u>Long-term liabilities:</u></b>		
Accrued compensated absences	296,433	280,235
Long-term portion bonds payable	9,400,000	10,090,000
Asset retirement obligation	2,888,704	1,369,055
Net pension liability	9,186,141	7,242,530
Net Other post-employment benefits liability	2,196,297	2,111,330
<b>Total long-term liabilities</b>	<b><u>23,967,575</u></b>	<b><u>21,093,150</u></b>
<b>Total liabilities</b>	<b><u>28,675,130</u></b>	<b><u>26,519,092</u></b>
<b><u>Deferred inflows of resources:</u></b>		
Deferred inflows of resources -Net pension liability and OPEB	<b><u>1,021,160</u></b>	<b><u>808,203</u></b>
<b><u>Net position:</u></b>		
Net investment in capital assets	3,156,575	1,495,729
Restricted per bond ordinance	1,583,166	1,848,824
Unrestricted	31,888,540	26,000,016
<b>Total net position</b>	<b><u>36,628,281</u></b>	<b><u>29,344,569</u></b>
<b>Total liabilities, deferred inflows of resources, and net position</b>	<b><u>\$ 66,324,571</u></b>	<b><u>\$ 56,671,864</u></b>

The accompanying notes are an integral part of these financial statements.



**City of Henderson, Kentucky Utility Commission**  
**Statements of Revenues, Expenses, and Changes in Net Position**  
**For the fiscal years ended May 31, 2020 and 2019**

<b><u>Operating revenues:</u></b>	<b><u>2020</u></b>	<b><u>2019</u></b>
Sale of electricity-Existing System	\$ 41,221,674	\$ 41,504,426
Sale of electricity-Station Two	-	8,277,707
Settlement-Big Rivers Electric Corporation	-	-
Communication services	1,256,581	1,049,941
Other	2,860,854	563,670
<b>Total operating revenues</b>	<b><u>45,339,109</u></b>	<b><u>51,395,744</u></b>
<b><u>Operating expenses:</u></b>		
Production of electricity	25,559,823	33,267,139
Operating expenses	10,761,563	11,457,970
Depreciation	1,019,848	5,124,074
<b>Total operating expenses</b>	<b><u>37,341,234</u></b>	<b><u>49,849,183</u></b>
<b>Income from operations</b>	<b><u>7,997,875</u></b>	<b><u>1,546,561</u></b>
<b><u>Interest income (expense):</u></b>		
Investment income	865,061	459,955
Interest expense	(442,126)	(467,409)
<b>Total interest income (expense)</b>	<b><u>422,935</u></b>	<b><u>(7,454)</u></b>
<b>Income before non-operating items</b>	<b><u>8,420,810</u></b>	<b><u>1,539,107</u></b>
<b><u>Non-operating items:</u></b>		
Decommissioning Station Two	-	(40,522,005)
Transfers to the City of Henderson	(1,244,724)	(1,244,724)
Power furnished to the City of Henderson	(643,914)	(674,568)
Communication services provided to the City of Henderson and other local government agencies	(168,120)	(168,120)
<b>Total non-operating items</b>	<b><u>(2,056,758)</u></b>	<b><u>(42,609,417)</u></b>
Change in net position	6,364,052	(41,070,310)
Cumulative effect of change in accounting principle adoption of GASB No. 83 <i>Certain Asset Retirement Obligations</i>	919,660	-
Net position, beginning of year	29,344,569	70,414,879
<b>Net position, end of year</b>	<b><u>\$ 36,628,281</u></b>	<b><u>\$ 29,344,569</u></b>

The accompanying notes are an integral part of these financial statements.

**City of Henderson, Kentucky Utility Commission**  
**Statements of Cash Flows**  
**For the fiscal years ended May 31, 2020 and 2019**

	<b>2020</b>	<b>2019</b>
<b><u>Cash flows from operating activities:</u></b>		
Receipts from customers	\$ 40,069,787	\$ 55,418,081
Payments to suppliers and vendors	(26,884,648)	(43,801,962)
Payments to employees	(5,546,284)	(4,627,149)
<b>Net cash provided by operating activities</b>	<b>7,638,855</b>	<b>6,988,970</b>
<b><u>Cash flows from non-capital financing activities:</u></b>		
Distributions to the City of Henderson	(1,244,724)	(1,244,724)
<b>Net cash used by non-capital financing activities</b>	<b>(1,244,724)</b>	<b>(1,244,724)</b>
<b><u>Cash flows from capital and related financing activities:</u></b>		
Acquisition and construction of capital assets	(2,019,195)	(2,072,642)
Principal payments on long-term debt	(670,000)	(650,000)
Interest payments on long-term debt	(451,681)	(467,409)
<b>Net cash used by capital and related financing activities</b>	<b>(3,140,876)</b>	<b>(3,190,051)</b>
<b><u>Cash flows from investing activities:</u></b>		
Proceeds from sale and maturities of investments	2,692,627	13,042,144
Investment income	538,645	370,905
Purchases of investment securities	(9,333,723)	(14,463,156)
<b>Net cash used by investing activities</b>	<b>(6,102,451)</b>	<b>(1,050,107)</b>
<b>Increase in cash and cash equivalents</b>	<b>(2,849,196)</b>	<b>1,504,088</b>
Cash and cash equivalents, beginning of year	12,390,092	10,886,004
<b>Cash and cash equivalents, end of year</b>	<b>\$ 9,540,896</b>	<b>\$ 12,390,092</b>

The accompanying notes are an integral part of these financial statements.

**City of Henderson, Kentucky Utility Commission**  
**Statements of Cash Flows – Reconciliation of Net Cash Provided by Operations**  
**For the fiscal years ended May 31, 2020 and 2019**

	<b>2020</b>	<b>2019</b>
<b><u>Operating activities:</u></b>		
Operating income	<b>\$ 7,997,875</b>	<b>\$ 1,546,561</b>
<b><u>Adjustments to reconcile operating income (loss) to net cash provided by operations:</u></b>		
Depreciation and amortization	1,019,848	5,124,074
Power furnished to the City of Henderson	(643,914)	(674,568)
Communication services provided at no charge	(168,120)	(168,120)
Cumulative effect of change in accounting principle	919,660	-
Other items	(44,944)	-
Station Two Decommissioning	-	(2,143,410)
<b><u>Changes in operating assets and liabilities:</u></b>		
Accounts receivable	844,775	(565,066)
Due from Station Two Operator	(5,415,668)	772,933
Accrued revenue	113,605	1,154,403
Inventory and supplies	3,337,660	4,345,434
Prepaid expenses and other assets	180,421	(218,708)
Asset retirement obligation	449,395	98,050
Deferred Outflows	(3,990,733)	(198,591)
Accounts payable and accrued expenses	(738,862)	(2,959,726)
Customer deposits	16,673	21,972
Net pension liability and Other post employment benefits liability	2,028,578	669,167
Asset retirement obligation	1,519,649	41,919
Deferred Inflows	212,957	142,646
	<b>\$ 7,638,855</b>	<b>\$ 6,988,970</b>
<b><u>Supplemental Information</u></b>		
<b><u>Non-cash activity:</u></b>		
Power furnished to the City of Henderson	\$ 643,914	\$ 674,568
Communication services provided at no charge	168,120	168,120

The accompanying notes are an integral part of these financial statements.

**1. Organization:**

The City of Henderson Utility Commission is organized under the provisions of Section 96.530 of the Kentucky Revised Statutes to operate, manage, and control the Henderson Municipal Power & Light System. The members of the Utility Commission are appointed by the Mayor and are approved by the City Commissioners of the City of Henderson, Kentucky (City). The Mayor and the City Commission authorize all rates and bond issues of the Utility Commission. As a municipal entity, the Utility Commission is exempt from all federal and state income taxes. Certain real estate utilized by the Utility Commission is owned by the City of Henderson. The Commission is responsible for the acquisition, and distribution of electric power to its service area which included the incorporated area of the City of Henderson, Kentucky.

The Utility Commission joined the Midcontinent Independent System Operator (MISO) in February of 2019, and is currently a Market Participant (MP), Local Balancing Authority (LBA), Transmission Operator (TOP) and Transmission Owner (TO). The Utility Commission currently does not own any generation facilities, power is purchased utilizing Power Purchase Agreements (PPAs), the MISO Energy Market, and SEPA Hydro Power. The PPAs that are currently in place vary in megawatt size and duration and allows for summer and winter peak amounts. While the power portfolio is designed to cover the entire needs of the utility, any surplus energy is sold into the MISO market.

A monthly Transmission Expense is paid to MISO for transmission services, and Transmission Revenue is received from MISO for being a Transmission Owner in the MISO system. A wheeling fee is paid to Big Rivers Electric Corporation for the SEPA Power. The LBA and TOP services are contracted to a third-party to allow the Utility Commission to follow all applicable standards.

In June 2020, a Solar PPA was negotiated with Community Energy Solar. This will allow the Utility Commission to receive power from a 50 MW solar facility in Henderson County for a term of 20 years. Capacity is currently purchased in the amount of 100 MW through a PPA. The remaining capacity needs are purchased from the MISO market. This amount will be reduced once the Solar facility is online.

The Commission was previously in a joint venture with Big Rivers Electric Corporation to operate its Station Two generation facility which was decommissioned during the fiscal year ended May 31, 2019. Power sales to Big Rivers Electric Corporation under the agreement amounted to \$0 and \$8,277,707 for the fiscal years ended 2020 and 2019, respectively. Station Two became commercially operable and construction was substantially completed during 1974, and was decommissioned February 1, 2019, and is no longer in operation.

**2. Summary of Significant Accounting Policies:**

The Commission is a component unit of the City of Henderson, Kentucky (the primary government), due to its financial accountability to the City Commission.

The financial statements of the Commission have been prepared in conformity with generally accepted accounting principles (GAAP) as applied to government units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles.

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the fund's principal ongoing operations. The principal operating revenues of the Commission are charges to customers for electric and communications sales and service.

**2. Summary of Significant Accounting Policies, continued:**

Operating expenses for the Commission include the cost of power and services, administrative expenses, and depreciation. All other revenues and expenses not meeting this definition are classified as non-operating items.

**Statement of Net Position:**

The Statement of Net Position is designed to display the financial position of the Commission. The Commission's fund equity is reported as a net position, which is presented in three categories defined as follows:

- **Net investment in capital assets-** This component of net position consists of capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.
- **Restricted-** This component of net position consists of constraints placed on net position use through external constraints imposed by creditors through debt covenants.
- **Unrestricted-** This component of net position consists of the remainder of net position that does not meet the definition of restricted or invested in capital assets, net of related debt.

**Statement of Revenues, Expenses, and Changes in Net Position:**

The Statement of Revenues, Expenses, and Changes in Net Position is the operating statement for proprietary funds. Revenues are reported by major source. This statement distinguishes between operating and non-operating revenues and expenses, and presents a separate subtotal for operating revenues, operating expenses, and operating income. The more significant of the Commission's accounting policies are described below:

**A. Cash and Cash Equivalents:**

Cash and cash equivalents consist of certificates of deposit and repurchase agreements with an original maturity of three months or less from the date of purchase. The carrying amount of each of these instruments approximates fair value.

**B. Investment Securities:**

Investments are recorded at fair value based on quoted market prices. Any gains or losses are reflected in the statement of revenues, expenses, and changes in net assets in accordance with GASB No. 31, "Accounting and Reporting for Certain Investments and For Internal Investment Pools." Kentucky Revised Statute 66.480 limits the types of securities that a municipal entity may invest in obligations of the United States Treasury and its agencies, certain Federal securities, repurchase agreements, commercial bank certificates of deposit, and the Commonwealth of Kentucky Investment Pool.

**2. Summary of Significant Accounting Policies, continued:**

**C. Accounts Receivable, Unbilled Revenue, and Electric Operating Revenues:**

The Commission has entered into an agreement with the City of Henderson to perform its billing and collection services. All monies due to the Utility Commission are collected and deposited in the City of Henderson's Utility Clearing Fund and are remitted to the Utility Commission on a weekly basis. Electric revenues are billed on the basis of monthly cycle bills and are recorded as revenue as the electricity is delivered. The Commission records an estimate for unbilled revenues earned from the dates its retail customers were last billed to the end of the month. Unbilled revenue as of May 31, 2020 and 2019 was \$2,726,155 and \$2,839,760, respectively.

The amount included in accounts receivable due from the Utility Clearing Fund was \$2,550,370 and \$3,395,145 as of May 31, 2019 and 2018, respectively. The allowance for uncollectible amounts was \$0 and \$170,925 for the fiscal years ended May 31, 2020 and 2019.

**D. Inventory:**

Materials and supplies inventories are stated at the weighted average cost.

**E. Utility Plant and Equipment:**

No interest was capitalized during the fiscal years ended 2020 and 2019. The Commission capitalizes all items in excess of \$1,000. The Commission's policy for determining the useful lives of its utility plant and equipment is as follows:

Production plant and structures	33 ½	years
Transmission and distribution	25	years
Automotive equipment	6	years
Wireless internet equipment	5	years
Other equipment	10	years

**F. Purchased Power Expenses:**

All of the Commission's power needs are provided through PPA's. Expenses from such agreements, along with associated transmission costs paid to other utilities, are charged to production of electricity expense on the Statement of Revenues, Expenses and Changes in Net Position in the period the power is delivered. Contract termination payments, and adjustments to prior billings are included in production of electricity expense once the payments or adjustments can be reasonably estimated. Purchased power costs for the fiscal year ended May 31, 2020 and 2019 was \$19,634,540 and \$12,798,810, respectively.

**2. Summary of Significant Accounting Policies, continued:**

**G. Compensated Absences:**

Employees of the Commission are entitled to paid vacations and sick-leave. The Commission's policy is to recognize these costs when earned under the accrual method of accounting in accordance with GASB No.16 "Accounting for Compensated Absences."

	<u>Beginning Balance</u>	<u>Additons</u>	<u>Reductions</u>	<u>Ending Balance</u>
Compensated Absences	\$ 539,419	\$ 88,942	\$ (35,494)	\$ 592,867

Current portion (included in accounts payable and accrued expenses)	\$ 296,434
Long-term portion	296,433
	<u>\$ 592,867</u>

**H. Pensions:**

In the component unit financial statements of the City of Henderson, Kentucky Utility Commission, retirement plans (pensions) are required to be recognized and disclosed using the accrual basis of accounting (Refer to Note 7).

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions and pension expense, information about the fiduciary net position of the County Employees' Retirement System (CERS), and additions to/deductions from CERS' fiduciary net position have been determined on the same basis as they are reported by CERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are recorded at fair value.

**I. Postemployment Benefits Other Than Pensions (OPEB):**

In the component unit financial statements of the City of Henderson, Kentucky Utility Commission, postemployment benefits other than pensions (OPEB) are required to be recognized and disclosed using the accrual basis of accounting (Refer to Note 6).

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the County Employees' Retirement System (CERS) and additions to/deductions from CERS' fiduciary net position have been determined on the same basis as they are reported by CERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

**J. Emission Allowances:**

The Commission does not record the value of emission allowances granted by the Environmental Protection Agency for sulfur dioxide and nitrous oxide on its financial statements as there is no cost basis in these allowances.

**2. Summary of Significant Accounting Policies, continued:**

**K. Bond Issuance Costs:**

Premiums and discounts arising from bond issues are deferred and amortized using the straight-line method over the lives of the bond issues.

**L. Use of Estimates:**

The preparation of financial statements in conformity with generally accepted accounting principles requires that management make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at May 31, 2020 and 2019, as well as revenues and expenses for the years then ended. Actual results could differ from the estimates and assumptions used.

**M. Change in Accounting Principle-Asset Retirement Obligation-GASB No. 83:**

During the fiscal year ended, the Commission adopted GASB No. 83 *Certain Asset Retirement Obligations*. The objective of GASB No. 83 is to provide financial statement users with information about asset retirement obligations. The Commission previously followed guidance of the FASB for accounting for asset retirement obligations.

An asset retirement obligation (ARO) is a legally enforceable liability associated with the retirement of a tangible capital asset. A governmental entity that has a legal obligation to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance of this statement. GASB No. 83 establishes the criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for its ARO. Recognition of a liability occurs when the liability is both incurred and can be reasonably estimated. The determination of when the liability is incurred should be based on the occurrence of external laws, regulations, contracts, or court judgments., together with the occurrence of an internal event that obligations the government to perform the asset retirement activities. GASB No. 83 requires the measurement of the ARO be based on the probability weighted best estimate of the current value of outlays expected to be incurred, and adjusted for inflation, at least annually. It requires a government to evaluate all relevant factors at least annually to determine whether the effects of one or more of the factors are expected to significantly change the estimated outlays. GASB No. 83 also requires disclosures of descriptive information about the nature of a government's ARO including methods and assumptions used for the estimates of the liabilities, the estimated remaining useful life of the associated tangible capital assets, how any funding assurance requirements are being met, and the amount of any assets restricted for payment of the ARO. If a liability for an ARO has been incurred by a government but is not yet recognized because it is not reasonably estimable, the government should disclose the reasons therefore.

The cumulative effect of the adoption of this pronouncement was to increase net position by \$919,660 for the fiscal year ended May 31, 2020.



**2. Summary of Significant Accounting Policies, continued:**

**N. Reclassifications:**

Certain amounts have been reclassified from the prior year to conform to the current year presentation.

**3. Cash and Cash Equivalents:**

As of May 31, 2020 and 2019, the City of Henderson, Kentucky Utility Commission maintained deposits with several local financial institutions. Of the bank balance, all was insured by the Federal Deposit Insurance Corporation and any amounts in excess of FDIC coverage were secured by pledged United States Government securities.

**4. Investment Securities:**

Investments are included in the Statement of Net Position under the caption "Investments-restricted/unrestricted." A summary of investments held by the City of Henderson, Kentucky Utility Commission along with the scheduled maturities is presented below:

<u>Investment Type:</u>	<u>Fair Value</u>	<u>Less Than One Year</u>	<u>One to Five Years</u>	<u>Six to Ten Years</u>
<b><u>May 31, 2020</u></b>				
<b><u>Unrestricted Investments:</u></b>				
U.S. Agencies	\$ 11,868,216	\$ -	\$ 277,048	\$ 11,591,168
U.S Short Term Treasuries	508,908	508,908	-	-
Certificate of Deposit and Money Markets	8,051,479	502,602	6,532,686	1,016,191
Total Unrestricted Investments	<u>\$ 20,428,603</u>	<u>\$ 1,011,510</u>	<u>\$ 6,809,734</u>	<u>\$ 12,607,359</u>
<b><u>Restricted Per Bond Ordinance:</u></b>				
U.S Short Term Treasuries	\$ 2,268,166	\$ 2,268,166	\$ -	\$ -
Certificate of Deposit and Money Markets	5,000	-	5,000	-
Total Restricted Investments	<u>\$ 2,273,166</u>	<u>\$ -</u>	<u>\$ 5,000</u>	<u>\$ -</u>
<b><u>May 31, 2019</u></b>				
<b><u>Unrestricted Investments:</u></b>				
U.S. Treasury Bills	\$ 6,842,047	\$ -	\$ 5,780,781	\$ 1,061,266
Certificate of Deposit and Money Markets	6,310,386	2,600,680	3,207,333	502,373
Total Unrestricted Investments	<u>\$ 13,152,433</u>	<u>\$ 2,600,680</u>	<u>\$ 8,988,114</u>	<u>\$ 1,563,639</u>
<b><u>Restricted Per Bond Ordinance:</u></b>				
Certificate of Deposit and Money Markets	\$ 2,518,824	\$ 2,518,824	\$ -	\$ -
Total Restricted Investments	<u>\$ 2,518,824</u>	<u>\$ 2,518,824</u>	<u>\$ -</u>	<u>\$ -</u>

4. **Investment Securities, continued:**

<b><u>Restricted Assets consisted of the following:</u></b>	<b>2019</b>	<b>2018</b>
MISO-Margin Call Collateral	\$ 5,000	\$ 185,112
Operation and Maintenance Reserve	500,000	600,000
Debt Service Reserve	1,088,892	1,101,215
Debt Service Sinking Fund	679,274	632,497
Total restricted assets	<u>\$ 2,273,166</u>	<u>\$ 2,518,824</u>

**A. Interest Rate Risk:**

The City of Henderson, Kentucky Utility Commission has a formal investment policy that limits investment maturities as a means to manage its exposure to fair value losses resulting from increasing interest rates.

**B. Credit Risk:**

The City of Henderson, Kentucky Utility Commission limits its investments to those allowed by Kentucky Revised Statute 66.480. Kentucky Revised Statute 66.480 limits investments to U.S. Government Treasury and Agency securities, certificates of deposit, securities issued by a state or local government rated in one of the three highest categories by a nationally recognized credit agency.

**C. Custodial Credit Risk:**

Custodial credit risk is the risk that in the event of the failure of the counterparty, The City of Henderson, Kentucky Utility Commission will not be able to recover the value of its investments, or collateral securities that are in the possession of the outside party. All investments of the Commission, with the exception of certificates of deposit, consist of unregistered and uninsured securities held by the Commission's trustee in their trust department not in the name of the Commission.

5. **Fair Value Measurement**

GASB No. 72 *Fair Value Measurement and Application* defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price). The Commission utilizes market data or assumptions that market participants would use in pricing the asset or liability, including assumptions about risk and the risks inherent in the inputs to the valuation technique.

GASB No. 72 establishes a fair value hierarchy that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted market prices in active markets for identical assets of liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy defined by GASB No. 72 are as follows:

- Level 1 -Inputs are quoted market prices in active markets for identical assets or liabilities.
- Level 2 - Inputs other than quoted market prices included in Level I that are observable for an asset or liability, either directly or indirectly.
- Level 3- inputs are unobservable inputs that reflect the Commission's own assumptions about factors that market participants would use in pricing the asset or liability.

5 **Fair Value Measurement, Continued**

**City of Henderson, Kentucky Utility Commission**  
**Notes to the Financial Statements-May 31, 2020 and 2019**

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The valuation methods of the fair value measurements are as follows:

- U.S. Treasury Obligations- a market value approach is used based on institutional bond quotes.
- U.S. Agency Obligations- a market-based approach which considers yield, price of comparable securities, coupon rate, maturity, credit quality, and dealer provided prices.
- Certificates of Deposit- a market value approach is used which considers maturities and interest rates.

The following table identifies the level with the fair value hierarchy that the Commission's financial assets were accounted for on a recurring basis as of May 31, 2020 and 2019:

	<b>Fair value as of May 31, 2020</b>			
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
Investments including cash equivalents:				
Money Markets	\$ -	\$ 5,000	\$ -	\$ 5,000
Certificates of Deposit	-	8,051,479	-	8,051,479
U.S. Treasury Obligations	2,777,074	-	-	2,777,074
U.S. Agency Obligations	-	11,868,216	-	11,868,216
	<u>\$ 2,777,074</u>	<u>\$ 19,924,695</u>	<u>\$ -</u>	<u>\$ 22,701,769</u>

	<b>Fair value as of May 31, 2019</b>			
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
Investments including cash equivalents:				
Money Markets	\$ -	\$ -	\$ -	\$ -
Certificates of Deposit	-	8,829,210	-	8,829,210
U.S. Treasury Obligations	6,842,047	-	-	6,842,047
U.S. Agency Obligations	-	-	-	-
	<u>\$ 6,842,047</u>	<u>\$ 8,829,210</u>	<u>\$ -</u>	<u>\$ 15,671,257</u>

**City of Henderson, Kentucky Utility Commission**  
**Notes to the Financial Statements-May 31, 2020 and 2019**

**5. Utility Plant and Equipment:**

Utility plant and equipment consisted of the following as of May 31, 2020 and 2019:

<b><u>May 31, 2020</u></b>	<b><u>Beginning</u></b>	<b><u>Additions</u></b>	<b><u>Deletions</u></b>	<b><u>Ending</u></b>
<b><u>Existing System:</u></b>	<b><u>Balance</u></b>			<b><u>Balance</u></b>
Vehicles	\$ 2,469,223	\$ 781,708	\$ (73,051)	\$ 3,177,880
Transmission plant	9,228,819	118,141	-	9,346,960
Distribution plant	29,166,450	761,414	-	29,927,864
Land and land rights	1,288,289	-	-	1,288,289
Telecommunications, internet, and fiber optics	6,402,596	357,932	-	6,760,528
General plant	388,393	-	-	388,393
	<u>48,943,770</u>	<u>2,019,195</u>	<u>(73,051)</u>	<u>50,889,914</u>
Accumulated depreciation	<u>(36,688,041)</u>	<u>(1,032,481)</u>	<u>77,183</u>	<u>(37,643,339)</u>
Existing System total	<u>\$ 12,255,729</u>	<u>\$ 986,714</u>	<u>\$ 4,132</u>	<u>\$ 13,246,575</u>

<b><u>May 31, 2019</u></b>	<b><u>Beginning</u></b>	<b><u>Additions</u></b>	<b><u>Deletions</u></b>	<b><u>Ending</u></b>
<b><u>Existing System:</u></b>	<b><u>Balance</u></b>			<b><u>Balance</u></b>
Vehicles	\$ 2,394,793	\$ 74,430	\$ -	\$ 2,469,223
Transmission plant	8,695,618	533,201	-	9,228,819
Distribution plant	28,212,485	953,965	-	29,166,450
Land and land rights	1,250,436	43,968	(6,115)	1,288,289
Telecommunications, internet, and fiber optics	6,462,340	141,154	(200,898)	6,402,596
General plant	191,484	196,909	-	388,393
	<u>47,207,156</u>	<u>1,943,627</u>	<u>(207,013)</u>	<u>48,943,770</u>
Accumulated depreciation	<u>(35,974,715)</u>	<u>(1,044,279)</u>	<u>330,953</u>	<u>(36,688,041)</u>
Existing System total	<u>\$ 11,232,441</u>	<u>\$ 899,348</u>	<u>\$ 123,940</u>	<u>\$ 12,255,729</u>

<b><u>Station Two:</u></b>				
General plant	\$ 186,090,250	\$ 259,274	\$ (186,349,524)	\$ -
Accumulated depreciation	<u>(143,636,895)</u>	<u>(4,079,795)</u>	<u>147,716,690</u>	<u>-</u>
Station Two total	<u>\$ 42,453,355</u>	<u>\$ (3,820,521)</u>	<u>\$ (38,632,834)</u>	<u>\$ -</u>
Total utility, plant, and equipment, net	<u>\$ 53,685,796</u>			<u>\$ 12,255,729</u>

**6. Utility Plant and Equipment, continued:**

Depreciation expense for the fiscal years ended May 31, 2020 and 2019 was \$1,019,848 and \$5,124,074 respectively.

**7. Retirement Plans:**

**General Information about the Pension Plan**

*Plan description:* All eligible Commission employees participate in the County Employees' Retirement System (CERS), a cost-sharing, multiple-employer defined benefit plan administered by the Board of Trustees of Kentucky Retirement Systems. CERS consists of two plans – Non-Hazardous and Hazardous. Commission employees participate in the Non-Hazardous plan only. Kentucky Retirement Systems issues a publicly available financial report that includes financial statements and supplementary information for CERS. That report can be obtained at <https://kyret.ky.gov>.

*Benefits provided:* CERS provides retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Kentucky Revised Statute 61.645 assigns the authority to establish and amend benefit provisions to the Kentucky Retirement Systems Board of Trustees.

*Cost of Living Adjustment (COLA):* Prior to July 1, 2009, COLAs were provided annually equal to the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year, not to exceed 5% in any plan year. After July 1, 2009, the COLAs were limited to 1.50%. No COLA has been granted since July 1, 2011.

*Contributions:* Tier 1 plan members, who began participating prior to September 1, 2008, are required to contribute 5% of their annual creditable compensation. These members are classified in the Tier 1 structure of benefits. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest.

Tier 2 plan members, who began participating on, or after, September 1, 2008, and before January 1, 2014, are required to contribute 6% of their annual creditable compensation, while 1% of these contributions are deposited to an account created for the payment of health insurance benefits under 25 USC Section 401(h) in the Pension Fund. These members are classified in the Tier 2 structure of benefits. Interest is paid each June 30 on members' accounts at a rate of 2.5%. If a member terminates employment and applies to take a refund, the member is entitled to a full refund of contributions and interest; however, the 1% contribution to the 401(h) account is non-refundable and is forfeited.

Tier 3 plan members, who began participating on, or after, January 1, 2014, are required to contribute to the Cash Balance Plan. The Cash Balance Plan is known as a hybrid plan because it has characteristics of both a defined benefit plan and a defined contribution plan. Members in the plan contribute a set percentage of their salary each month to their own account. Members contribute 5% of their annual creditable compensation, and an additional 1% to the health insurance fund (401(h) account) which is not credited to the member's account and is not refundable. The employer contribution rate is set annually by the Kentucky Retirement System Board of Trustees based on an actuarial valuation. The employer contributes a set percentage of the member's salary. Each month, when employer contributions are received, an employer pay credit is deposited to the member's account. A member's account is credited with a 4% employer pay credit. The employer pay credit represents a portion of the employer contribution.

**6. Retirement Plans, continued:**

Interest is paid into the Tier 3 member's account. The account currently earns 4% interest credit on the member's account balance as of June 30 of the previous year. The member's account may be credited with additional interest if the system's five-year Geometric Average Net Investment Return (GANIR) exceeded 4%. If the member was actively employed and participating in the fiscal year, and if the system's GANIR for the previous five years exceeds 4%, then the member's account will be credited with 75% of the amount of the returns over 4% on the account balance as of June 30 of the previous year (Upside Sharing Interest). The Upside Sharing Interest is credited to both the member contribution balance and Employer Pay Credit Balance.

The Commission is required to contribute at an actuarially determined rate. As of May 31, 2020, the Commission's required contribution rate was 19.30% of annual covered payroll. The contribution requirements of plan members and the Commission are established and may be amended by the Kentucky Retirement Systems Board of Trustees. Contributions to CERS from the Commission were \$702,190 for the year ended May 31, 2020.

**Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions**

At May 31, 2020, the Commission reported a liability of \$9,186,141 for its proportionate share of the collective net pension liability. The collective net pension liability was measured as of June 30, 2019, and the total pension liability used to calculate the collective net pension liability was determined by an actuarial valuation as of June 30, 2018 and rolled-forward using generally accepted actuarial principles. The Commission's proportion of the collective net pension liability was based on a projection of the Commission's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. At June 30, 2019, the Commission's proportion was 0.130614%, which was an increase of 0.011695% from its proportion measured as of June 30, 2018.

For the year ended May 31, 2020, the Commission recognized pension expense of \$1,769,986. At May 31, 2020, the Commission reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between expected and actual experience	\$ 234,550	\$ 38,814
Changes of assumptions	929,742	-
Net difference between projected and actual investment earnings on pension plan investments	-	148,084
Changes in proportion and differences between Commission contributions and proportional share of contributions	638,746	66,492
Commission contributions subsequent to the measurement date	702,190	-
Total	<u>\$ 2,505,228</u>	<u>\$ 253,390</u>

**7. Retirement Plans, continued:**

Of the total amount reported as deferred outflows of resources related to pensions, Commission contributions subsequent to the measurement date and before the end of the fiscal year will be included as a reduction of the collective net pension liability in the year ended May 31, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in the Commission's pension expense as follows:

<u>Year ended May 31:</u>	<u>Amount</u>
2021	\$ 888,977
2022	479,645
2023	170,520
2024	10,506
2025	-
Thereafter	-

*Actuarial assumptions:* The Kentucky Retirement Systems Board of Trustees adopted new actuarial assumptions since June 30, 2018. These assumptions are documented in the report titled "Kentucky Retirement Systems 2018 Actuarial Experience Study for the Period Ending June 30, 2018". The total pension liability as of June 30, 2019, was determined using the following updated assumptions:

Inflation	2.30%
Payroll Growth Rate	2.00%
Salary Increases	3.30% to 10.30%, varies by service
Investment Rate of Return	6.25%

The mortality table used for active members was a PUB-2010 General Mortality table, for the Non-Hazardous System, and PUB-2010 Public Safety Mortality table for the Hazardous System, projected with the ultimate rates from the MP-2014 improvement scale using a base year of 2010. The mortality table used for healthy retired members was a system-specific mortality table based on mortality experience from 2013-2018, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2019. The mortality table used for the disabled members was PUB-2010 Disable Mortality table, with a 4-year set-forward for both male and female rates, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2010.

The long-term expected rate of return was determined by using a building-block method in which best-estimate ranges of expected future real rates of returns are developed for each asset class. The ranges are combined by weighting the expected future real rate of return by the target asset allocation percentage.

**7. Retirement Plans, continued:**

The target allocation and best estimates of arithmetic real rate of return for each major asset class are summarized in the table below. The current long-term inflation assumption is 2.30% per annum.

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Long-Term Expected Real Rate of Return</b>
<b>Growth</b>	<b>62.50%</b>	
U.S. Equity	18.75%	4.30%
Non-U.S. Equity	18.75%	4.80%
Private Equity	10.00%	6.65%
Specialty Credit/High Yield	15.00%	2.60%
<b>Liquidity</b>	<b>14.50%</b>	
Core Bonds	13.50%	1.35%
Cash	1.00%	0.20%
<b>Diversifying Strategies</b>	<b>23.00%</b>	
Real Estate	5.00%	4.85%
Opportunistic	3.00%	2.97%
Real Return	15.00%	4.10%
<b>Total</b>	<b>100.00%</b>	<b>3.89%</b>

*Discount rate:* The projection of cash flows used to determine the discount rate of 6.25% assumed that the funds receive the required employer contributions each future year, as determined by the current funding policy established in statute as last amended by House Bill 362 (passed in 2018). The discount rate determination does not use a municipal bond rate.

*Sensitivity of the Commission's proportionate share of the collective net pension liability to changes in the discount rate:* The following presents the Commission's proportionate share of the collective net pension liability calculated using the discount rate of 6.25%, as well as what the Commission's proportionate share of the collective net pension liability would be if it were calculated using a discount rate that is one percentage point lower (5.25%) or one percentage point higher (7.25%) than the current rate:

	<b>1.00% Decrease (5.25%)</b>	<b>Current Discount Rate (6.25%)</b>	<b>1.00% Increase (7.25%)</b>
Commission's proportionate share of the collective net pension liability as of June 30, 2019	\$ 11,489,257	\$ 9,186,141	\$ 7,266,516

*Pension plan fiduciary net position:* Detailed information about the pension plan's fiduciary net position is available in the separately issued Kentucky Retirement Systems financial report.

**Postemployment Benefits Other Than Pensions (OPEB)**

**General Information about the OPEB Plan**

*Plan description:* In addition to the pension benefits described above, Kentucky Retirement Systems provides postemployment healthcare benefits through the Kentucky Retirement Systems Insurance Fund (Insurance Fund), a cost-sharing, multiple-employer defined benefit plan administered by the Board of Trustees of Kentucky Retirement Systems. The Insurance Fund was established to provide hospital and medical insurance for those receiving benefits from the Kentucky Employees' Retirement System (KERS), the County Employees' Retirement



**7.Retirement Plans, continued:**

System (CERS), and the State Police Retirement System (SPRS). Eligible non-Medicare retirees are covered by the Department of Employee Insurance (DEI) plans. Kentucky Retirement Systems submits the premium payments to DEI. The Board contracts with Humana to provide health care benefits to eligible Medicare retirees through a Medicare Advantage Plan.

*Benefits Provided:* The Insurance Fund pays a prescribed contribution for whole or partial payment of required premiums to purchase hospital and medical insurance. For the fiscal year ended June 30, 2019 (the date of the latest available information), insurance premiums withheld from benefit payments for members of CERS were \$24.3 million and \$2.8 million for non-hazardous and hazardous employees, respectively. For the fiscal year ended June 30, 2018, insurance premiums withheld from benefit payments for members of CERS were \$23.8 million and \$2.8 million for non-hazardous and hazardous employees, respectively. The Insurance Fund pays the same proportion of hospital and medical insurance premiums for the spouse and dependents of retired hazardous employees killed in the line of duty.

The amount of contributions paid by the Insurance Fund is based on years of service. For employees participating prior to July 1, 2003, years of service and respective percentages of the maximum contribution are shown below:

<u>Years of Service</u>	<u>% Paid by Insurance Fund</u>
20 or more	100%
15 - 19	75%
10 - 14	50%
4 - 9	25%
Less than 4	0%

As a result of House Bill 290 (2004 Kentucky General Assembly), medical insurance benefits are calculated differently for those who began participating on or after July 1, 2003. Once employees reach a minimum vesting period of ten years, non-hazardous employees whose participation began on or after July 1, 2003 earn \$10 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Hazardous employees whose participation began on or after July 1, 2003 earn \$15 per month for insurance benefits at retirement for every year of earned service without regard to a maximum dollar amount. Upon death of a hazardous employee, the employee's spouse receives \$10 per month for insurance benefits for each year of the deceased employee's earned hazardous service. This dollar amount is subject to adjustment annually, which is currently 1.5%, based upon Kentucky Revised Statutes. This benefit is not protected under the inviolable contract provisions of Kentucky Revised Statute 16.652, 61.692, and 78.852. The Kentucky General Assembly reserves the right to suspend or reduce this benefit if, in its judgment, the welfare of the Commonwealth so demands.

*Contributions:* The Commission is required to contribute at an actuarially determined rate. As of May 31, 2020, the Commission's required contribution rate was 4.76% of annual covered payroll. The contribution requirements of plan members and the Commission are established and may be amended by the Kentucky Retirement Systems Board of Trustees. Contributions to the Insurance Fund from the Commission were \$173,183 for the year ended May 31, 2020, which does not include implicit subsidies reported in the amount of \$47,158. As described above, Tier 2 and Tier 3 employees contribute 1% of their annual creditable compensation to the Insurance Fund; Tier 1 employees are not required to contribute.

**7. Retirement Plans, continued:**

**OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB**

At May 31, 2020, the Commission reported a liability of \$2,196,297 for its proportionate share of the collective net OPEB liability. The collective net OPEB liability was measured as of June 30, 2019, and the total OPEB liability used to calculate the collective net OPEB liability was determined by an actuarial valuation as of June 30, 2018 and rolled-forward using generally accepted actuarial principles. The Commission's proportion of the collective net OPEB liability was based on a projection of the Commission's long-term share of contributions to the OPEB plan relative to the projected contributions of all participating employers, actuarially determined. At June 30, 2019, the Commission's proportion was 0.130580%, which was an increase of 0.011664% from its proportion measured as of June 30, 2018.

For the year ended May 31, 2020, the Commission recognized OPEB expense of \$244,893. At May 31, 2020, the Commission reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between expected and actual experience	\$ -	\$ 662,674
Changes of assumptions	649,905	4,346
Net difference between projected and actual investment earnings on pension plan investments	-	97,550
Changes in proportion and differences between Commission contributions and proportional share of contributions	254,568	3,200
Implicit subsidy	47,158	-
Commission contributions subsequent to the measurement date	173,183	-
Total	<u>\$ 1,124,814</u>	<u>\$ 767,770</u>

**7. Retirement Plans, continued:**

Of the total amount reported as deferred outflows of resources related to OPEB, the implicit subsidy and Commission contributions subsequent to the measurement date and before the end of the fiscal year will be included as a reduction of the collective net OPEB liability in the year ended May 31, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in the Commission's OPEB expense as follows:

<u>Year ended May 31:</u>	<u>Amount</u>
2021	\$ 34,849
2022	34,849
2023	65,864
2024	6,330
2025	(5,992)
Thereafter	803

*Actuarial assumptions:* The Kentucky Retirement Systems Board of Trustees adopted new actuarial assumptions since June 30, 2018. These assumptions are documented in the report titled "Kentucky Retirement Systems 2018 Actuarial Experience Study for the Period Ending June 20, 2018". The total OPEB liability as of June 30, 2019, was determined using the following updated assumptions:

Inflation	2.30%
Payroll Growth	2.00%
Salary Increases	3.30% to 10.30%, varies by service
Investment Rate of Return	6.25%
Healthcare Trend Rates	
Pre-65	Initial trend starting at 7.00% at January 1, 2020, and gradually decreasing to an ultimate trend rate of 4.05% over a period of 12 years.
Post-65	Initial trend starting at 5.00% at January 1, 2020, and gradually decreasing to an ultimate trend rate of 4.05% over a period of 10 years.

The mortality table used for active members was a PUB-2010 General Mortality table, for the Non-Hazardous System, and PUB-2010 Public Safety Mortality table for the Hazardous System, projected with the ultimate rates from the MP-2014 improvement scale using a base year of 2010. The mortality table used for healthy retired members was a system-specific mortality table based on mortality experience from 2013-2018, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2019. The mortality table used for the disabled members was PUB-2010 Disable Mortality table, with a 4-year set-forward for both male and female rates, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2010.

7. Retirement Plans, continued:

The long-term expected rate of return was determined by using a building-block method in which best-estimate ranges of expected future real rate of returns are developed for each asset class. The ranges are combined by weighting the expected future real rate of return by the target asset allocation percentage. The target allocation and best estimates or arithmetic real rate of return for each major asset class are summarized in the table below. The current long-term inflation assumption is 2.30% per annum.

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
<b>Growth</b>	<b>62.50%</b>	
U.S. Equity	18.75%	4.30%
Non-U.S. Equity	18.75%	4.80%
Private Equity	10.00%	6.65%
Specialty Credit/High Yield	15.00%	2.60%
<b>Liquidity</b>	<b>14.50%</b>	
Core Bonds	13.50%	1.35%
Cash	1.00%	0.20%
<b>Diversifying Strategies</b>	<b>23.00%</b>	
Real Estate	5.00%	4.85%
Opportunistic	3.00%	2.97%
Real Return	15.00%	4.10%
<b>Total</b>	<b>100.00%</b>	<b>3.89%</b>

The fully-insured premiums Kentucky Retirement Systems pays for the CERS Health Insurance Plan are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit employer subsidy for the non-Medicare eligible retirees. GASB 75 requires that the liability associated with this implicit subsidy be included in the calculation of the total OPEB liability.

*Discount rate:* The projection of cash flows used to determine the discount rate of 5.68% assumed that local employers would contribute the actuarially determined contribution rate of projected compensation over the remaining 24-year (closed) amortization period of the unfunded actuarial accrued liability. The discount rate determination used an expected rate of return of 6.25%, and a municipal bond rate of 3.13%, as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 28, 2019. Current assets, future contributions, and investment earnings are projected to be sufficient to pay the projected benefit payments from the retirement system. However, the cost associated with the implicit employer subsidy was not included in the calculation of the system's actuarially determined contributions, and any cost associated with the implicit subsidy will not be paid out of the system's trusts. Therefore, the municipal bond rate was applied to future expected benefit payments associated with the implicit subsidy.

**7. Retirement Plans, continued:**

*Sensitivity of the Commission's proportionate share of the collective net OPEB liability to changes in the discount rate:* The following presents the Commission's proportionate share of the collective net OPEB liability calculated using the discount rate of 5.68%, as well as what the Commission's proportionate share of the collective net OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (4.68%) or one percentage point higher (6.68%) than the current rate:

	<u>1.00% Decrease (4.68%)</u>	<u>Current Discount Rate (5.68%)</u>	<u>1.00% Increase (6.68%)</u>
Commission's proportionate share of the collective net OPEB liability as of June, 2019	\$ 2,942,134	\$ 2,196,297	\$ 1,581,776

*Sensitivity of the Commission's proportionate share of the collective net OPEB liability to changes in the healthcare cost trend rates:* The following presents the Commission's proportionate share of the collective net OPEB liability, as well as what the Commission's proportionate share of the collective net OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower or one percentage point higher than the current healthcare cost trend rates:

	<u>1.00% Decrease</u>	<u>Current Healthcare Cost Trend Rate</u>	<u>1.00% Increase</u>
Commission's proportionate share of the collective net OPEB liability as of June 30, 2019	\$ 1,633,397	\$ 2,196,297	\$ 2,878,879

*OPEB plan fiduciary net position:* Detailed information about the OPEB plan's fiduciary net position is available in the separately issued Kentucky Retirement Systems financial report.

**8. Long-Term Debt – Revenue Bonds:**

During the fiscal year ended May 31, 2012, the City of Henderson, Kentucky Utility Commission issued revenue bonds for the purpose of financing capital improvements throughout its system through two revenue bond series, *Electric System Revenue Bonds, Series 2011A* in the amount of \$11,350,000, and *Electric System Revenue Bonds, Series 2011 B*, in the amount of \$3,670,000.

The bond ordinance requires that certain accounts for each issue be established and held by a trustee as follows:

**Debt Service Fund:**

A monthly transfer of 1/12 of principal and 1/6 of the interest due is required to be deposited in the Debt Service Fund.

**Debt Service Reserve Fund:**

A reserve account was established, so that as of any date of calculation, an amount equal to at least the highest amount of aggregate debt service, or an amount equal to 125% of the average aggregate debt service and an amount equal to 10% of the "proceeds" of the bonds with respect to all series is maintained by the Commission.

**8. Long-Term Debt – Revenue Bonds, continued:**

**Series 2011A:**

The Series 2011A bonds are secured by a pledge of the revenues of the City of Henderson, Kentucky Utility Commission. The Series 2011A Bonds are additionally secured by a debt service reserve and a non-foreclosable statutory mortgage lien on the System. The Series 2011A Bonds are also secured by a debt service reserve in an amount equal to the least of the maximum annual debt service on the Series 2011A Bonds. The proceeds from the sale of these bonds were used to retire the Bond Anticipation Note, Series 2008B in the amount of \$5,281,067, with the remaining proceeds to be used for capital improvements of the City's electric transmission and distribution system, and at its Station Two generating station. Interest is due semi-annually on these obligations on December 1<sup>st</sup> and June 1<sup>st</sup> of each year.

It is the opinion from the City of Henderson, Kentucky Utility Commission's bond counsel, that under existing laws, interest on the Series 2011A Bonds is not subject to income tax.

**Optional Redemption Series 2011A:**

The Series 2011A Bonds maturing on and after December 1, 2021, are subject to redemption by the City, at its option, before maturity on September 1, 2021, and on any date thereafter in whole or from time to time in part in any order of maturity (less than all of a single maturity to be selected by lot in such manner as the Trustee and Paying Agent may determine) at a redemption price equal to 100% of the principal amount thereof plus accrued interest to the redemption date.

**Series 2011B:**

The Series 2011B bonds are secured by a pledge of the revenues of the City of Henderson, Kentucky Utility Commission. The Series 2011B Bonds are additionally secured by a debt service reserve and a non-foreclosable statutory mortgage lien on the System. The Series 2011B Bonds are also secured by a debt service reserve in an amount equal to the least of the maximum annual debt service on the Series 2011B bonds. The proceeds from the sale of these bonds were used to retire the Bond Anticipation Note, Series 2008A and 2010A, in the amounts of \$3,500,000 and \$170,000, respectively. Interest is due semi-annually on these obligations on December 1<sup>st</sup> and June 1<sup>st</sup> of each year. It is the opinion from the City of Henderson, Kentucky Utility

Commission's bond counsel, that under existing laws, interest on the Series 2011B bonds is not subject to income tax.

**Optional Redemption Series 2011B:**

The Series 2011B Bonds maturing on and after December 1, 2021, are subject to redemption by the Commission, at its option, before maturity on September 1, 2021, and on any date thereafter in whole or from time to time in part in any order of maturity (less than all of a single maturity to be selected by lot in such manner as the Trustee and Paying Agent may determine) at a redemption price equal to 100% of the principal amount thereof plus accrued interest to the redemption date.

**City of Henderson, Kentucky Utility Commission**  
**Notes to the Financial Statements-May 31, 2020 and 2019**

**8. Long-Term Debt – Revenue Bonds, continued:**

A summary of the long-term debt of the Commission is as follows:

	<u>2019</u>	<u>2018</u>
City of Henderson, Kentucky Utility Commission Series 2011A Revenue Bonds, secured by pledge of system revenues and non-forecloseable statutory lien, maturing December 1, 2031, annual principal payments range from \$420,000 to \$725,000, interest rates range from 2.5% to 4.5%.	\$ 7,660,000	\$ 8,165,000
City of Henderson, Kentucky Utility Commission Series 2011B Revenue Bonds, secured by pledge of system revenues and non-forecloseable statutory lien, maturing December 1, 2031, annual principal payments range from \$150,000 to \$245,000, interest rates range from 2.5% to 4.5%.	<u>2,430,000</u>	<u>2,595,000</u>
Total long-term debt	\$ 10,090,000	\$ 10,760,000
Less current portion due	<u>(690,000)</u>	<u>(670,000)</u>
Long-term debt, net of current portion	<u><u>\$ 9,400,000</u></u>	<u><u>\$ 10,090,000</u></u>

Future maturities of long-term debt as of May 31, 2020 are as follows:

Fiscal Year:	Series 2011A			Series 2011B			Total
	Principal	Interest	Total	Principal	Interest	Total	Debt Service
2021	\$ 520,000	\$ 310,081	\$ 830,081	\$ 170,000	\$ 88,138	\$ 258,138	\$ 1,088,219
2022	535,000	293,181	828,181	175,000	83,634	258,634	1,086,815
2023	555,000	274,991	829,991	175,000	78,603	253,603	1,083,594
2024	570,000	255,566	825,566	185,000	72,915	257,915	1,083,481
2025	595,000	234,191	829,191	190,000	66,903	256,903	1,086,094
2026-2030	3,340,000	787,943	4,127,943	1,055,000	224,620	1,279,620	5,407,563
2031-2032	1,545,000	105,075	1,650,075	480,000	29,725	509,725	2,159,800
	<u>\$ 7,660,000</u>	<u>\$ 2,261,028</u>	<u>\$ 9,921,028</u>	<u>\$ 2,430,000</u>	<u>\$ 644,538</u>	<u>\$ 3,074,538</u>	<u>\$ 12,995,566</u>

**8.Long-Term Debt – Revenue Bonds, continued:**

The following is a summary of activity as it relates to long-term debt:

	<u>May 31, 2020</u>				
	<u>Beginning Balance</u>	<u>Additions</u>	<u>Payments</u>	<u>Ending Balance</u>	<u>Due within One Year</u>
Series 2011A	\$ 8,165,000	\$ -	\$ (505,000)	\$ 7,660,000	\$ 505,000
Series 2011B	2,595,000	-	(165,000)	2,430,000	165,000
Total Debt	10,760,000	-	(670,000)	10,090,000	670,000
Compensated absences	539,419	88,942	(35,494)	592,867	296,434
	<u>\$ 11,299,419</u>	<u>\$ 88,942</u>	<u>\$ (705,494)</u>	<u>\$ 10,682,867</u>	<u>\$ 966,434</u>
	<u>May 31, 2019</u>				
Series 2011A	\$ 8,655,000	\$ -	\$ (490,000)	\$ 8,165,000	\$ 505,000
Series 2011B	2,755,000	-	(160,000)	2,595,000	165,000
Total Debt	11,410,000	-	(650,000)	10,760,000	670,000
Compensated absences	476,074	101,390	(38,045)	539,419	259,184
	<u>\$ 11,886,074</u>	<u>\$ 101,390</u>	<u>\$ (688,045)</u>	<u>\$ 11,299,419</u>	<u>\$ 929,184</u>

**9. Asset Retirement Obligation:**

These financial statements reflect the Commission’s current estimate of its obligation for the cost of remediation of the ash pond, removal asbestos and lead paint located at the Station Two facility. The Commission is legally obligated to remove the contaminants located at the Station Two facility. Previously, the obligation was accounted for in accordance with SFAS No. 143 *Accounting for Asset Retirement Obligations*. Effective June 1, 2019, the Commission elected to adopt GASB No. 83 *Certain Asset Retirement Obligations*. The Commission has certain contractual obligations related to the Station Two Facility which became the property of Big Rivers Electric Corporation at February 1, 2019 when the plant was de-commissioned and the joint venture terminated. The Commission’s share of the total liability based on average megawatt splits for each year of operation is 18.87%.

The following is a reconciliation of the aggregate asset retirement liability associated with the Commission’s obligation to remove the contaminants:

	<u>Asset Retirement Obligation</u>
Balance as of June 1, 2019	\$ 1,369,055
Additional obligations incurred	-
Increase based on revised estimates of costs to dismantle and remove assets based on most recent engineering study	1,519,649
Liabilities extinguished	-
Balance as of May 31, 2020	<u>\$ 2,888,704</u>



**10. Discounted Internet and Broadband Services:**

A summary of discounted internet and broadband services provided by the Commission to other governmental concerns for the fiscal years ending May 31, 2020 and 2019, respectively, is as follows:

<b><u>Governmental Organizations</u></b>	<b><u>2020</u></b>	<b><u>2019</u></b>
City of Henderson	\$ 132,120	\$ 132,120
Other organizations	36,000	36,000
	<b><u>\$ 168,120</u></b>	<b><u>\$ 168,120</u></b>

**11. Concentration of Sales:**

Three industrial customers of the Existing System accounted for sales in the amount of \$15.9 million (38% of total power sales), and \$12.1 million (28% of Station One sales) for the fiscal years ended May 31, 2020 and 2019, respectively.

**12. Related Party Transactions:**

The Commission incurred the following transactions with the City of Henderson, Kentucky for the fiscal years ended May 31, 2020 and 2019:

Paid the City \$687,833 and \$665,667 each year, respectively, for data processing and other services related to billings and collections.

Paid the City \$1,244,724 and \$1,244,724 each year, respectively, for payment in lieu of taxes.

Paid the City \$731,316 and \$674,762 for participation in the City of Henderson's self-insured employee health insurance plan for the fiscal years ended May 31, 2020 and 2019 respectively. Risk is minimized in this area by the purchase of re-insurance for amounts in excess of the \$125,000 stop loss limit. Charges are based on estimated amounts determined by the City of Henderson's insurance coordinator as necessary to fund claims as they become due and payable.

Provided the City of Henderson with power for the fiscal years ended May 31, 2020 and 2019 in the amount of \$643,914 and \$674,568 respectively. The City of Henderson was also provided significantly reduced communication service fees totaling approximately \$132,120 and \$132,120 for the fiscal years ended May 31, 2020 and 2019, respectively.

**13. Commitments and Contingencies:**

**A. Southeastern Power Administration:**

The Southeastern Power Administration (SEPA) has contracted with the Commission to provide it a total of 15,000 megawatt hours of hydroelectric power each year. The 15,000 mega-watt hours represent approximately 2.5% of the Commission's annual megawatt hour requirements. Henderson Municipal Power & Light is restricted to not more than 10 megawatt hours during any hour, and not more than 2,640 megawatt hours during any month. During the fiscal years ended May 31, 2020 and 2019, the Commission purchased power on the spot market and from SEPA to supply the needs of its customers. Purchased power from these sources for the fiscal years ended May 31, 2020 and 2019 was \$615,775 and \$589,584, respectively.

**B. Regulatory Compliance:**

The North American Electric Reliability Corporation (NERC) adopted new electric system reliability standards for all electric utilities in the United States. NERC has adopted and began enforcement of the new standards effective June of 2007. The new standards have been approved by the Federal Energy Regulatory Commission (FERC). The Commission must comply with the new standards and will incur administrative expenses related to NERC compliance. Federal air quality and emission standards have become more stringent.

**C. Pending Litigation:**

On July 31, 2019, Big Rivers Electric Corporation filed an application with the Kentucky Public Service Commission for a declaratory judgment order addressing the parties' respective rights and obligations under the Station Two contracts following the retirement of the Station Two operating plant on February 1, 2019. The unresolved disputes included claims by the respective parties for amounts owed under the contracts, the parties respective share of decommissioning costs associated with the closure of the plant, the parties share of costs of maintaining Station Two waste and Big Rivers Green Station landfill and the utilization of city owned joint use facilities. Henderson Municipal Power and Light contest the Kentucky Public Service Commission's jurisdiction over contract related issues and is vigorously defending the pending litigation as well as all issues related to the decommissioning process following the closure of Station Two.

**D. Station Two -Decommissioning:**

The City of Henderson, Kentucky Utility Commission, d/b/a Henderson Municipal Power & Light, engaged an engineering consultant during fiscal year 2017-2018 to perform a study related to the continued viability of Station Two, and to determine the City of Henderson's future power needs. The study indicated that Station Two would require an immediate investment of \$50 million to meet maintenance and regulatory requirements. The Commission and Big Rivers Electric Corporation agreed to decommission the plant effective February 1, 2019 as it was determined it was more economical for the Commission to purchase its power needs on the open market rather than to continue to generate. The remaining investment of the Commission in Station Two was charged off as the contract reverts ownership of the facility to Big Rivers Electric Corporation at the point the facility is decommissioned. The net amount of the loss incurred by the Commission upon decommissioning was \$40,552,005.

**15. Risk Management:**

The Commission is exposed to various risks of loss related to torts, theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Commission carries commercial insurance for these types of risk of loss, including workers' compensation. Settled claims from these risks have not exceeded commercial insurance coverage in any of the past five fiscal years.

**16. Amounts Due from Station Two Operator -Big Rivers Electric Corporation:**

As of the fiscal years ended May 31, 2020 and 2019, the amount Big Rivers Electric Corporation owed to the Commission, as part of the annual settlements, was \$7,593,320 and \$2,177,652, respectively. The amount for the fiscal year ended May 31, 2020 includes amounts due for fuel and lime inventory in the amount of \$3,500,219 which reverted to Big Rivers Electric Corporation at the cessation of operations as well as other charges the Commission has determined to be in violation of the contract during the tenure of the joint venture.

**17. Subsequent Events:**

Subsequent events have been evaluated through August [REDACTED], 2020, the date these financial statements were available to be issued.

**a. COVID-19:**

On March 11, 2020 the World Health Organization declared the coronavirus (COVID-19) a global pandemic and recommended containment and mitigation measures world-wide. Management of the Commission cannot reasonably estimate the length or severity of this pandemic, or the extent to which the disruption may materially impact the Commission's financial condition. Management of the Commission estimates lost revenue from the period March 1, 2020 to May 31, 2020 to be approximately \$884,000.

**b. Solar Purchased Power Agreement:**

On June [REDACTED], 2020, the Commission entered into a purchased power agreement with Community Energy Solar based in Radnor, Pennsylvania who will be constructing solar farm in Henderson County, Kentucky starting in January of 2023. The Commission committed to purchasing power over a term of twenty years. Management of the Commission estimates that the solar site will provide 15% of the Utility's power needs.

**City of Henderson, Kentucky Utility Commission  
Schedule of the Commission's Proportionate Share of the Collective Net Pension Liability  
County Employees' Retirement System Pension Plan  
As of the Measurement Date for the Last Ten Years\***

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Commission's proportion of the collective net pension liability	0.130614%	0.118919%	0.110441%	0.121741%	0.125106%	0.123175%
Commission's proportionate share of the collective net pension liability	\$ 9,186,141	\$ 7,242,530	\$ 6,464,451	\$ 5,994,076	\$ 5,378,974	\$ 3,996,000
Commission's covered-employee payroll	\$ 3,372,725	\$ 3,036,915	\$ 2,759,054	\$ 2,946,675	\$ 2,940,925	\$ 2,838,142
Commission's proportionate share of the collective net pension liability as a percentage of its covered-employee payroll	272.37%	238.48%	234.30%	203.42%	182.90%	140.80%
Plan fiduciary net position as a percentage of the total pension liability	50.45%	53.54%	53.32%	55.50%	59.97%	66.80%

\*This table will present ten years of information as it becomes available.

**City of Henderson, Kentucky Utility Commission  
Schedule of the Commission's Contributions to the Pension Plan  
County Employees' Retirement System Pension Plan  
For the Last Ten Fiscal Years\***

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Statutorily required contribution	\$ 702,190	\$ 547,056	\$ 439,750	\$ 384,888	\$ 365,977	\$ 374,968
Contributions in relation to the statutorily required contribution	<u>(702,190)</u>	<u>(547,056)</u>	<u>(439,750)</u>	<u>(384,888)</u>	<u>(365,977)</u>	<u>(374,968)</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Commission's covered-employee payroll	\$ 3,638,290	\$ 3,372,725	\$ 3,036,915	\$ 2,759,054	\$ 2,946,675	\$ 2,940,925
Contributions as a percentage of covered-employee payroll	19.30%	16.22%	14.48%	13.95%	12.42%	12.75%

\*This table will present ten years of information as it becomes available.

**City of Henderson, Kentucky Utility Commission  
Schedule of the Commission's Proportionate Share of the Collective Net OPEB Liability  
County Employees' Retirement System OPEB Plan  
As of the Measurement Date for the Last Ten Years\***

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Commission's proportion of the collective net OPEB liability	0.130580%	0.118916%	0.110441%
Commission's proportionate share of the collective net OPEB liability	\$ 2,196,297	\$ 2,111,330	\$ 2,220,242
Commission's covered-employee payroll	\$ 3,372,725	\$ 3,036,915	\$ 2,759,054
Commission's proportionate share of the collective net OPEB liability as a percentage of its covered-employee payroll	65.12%	69.52%	80.47%
Plan fiduciary net position as a percentage of the total OPEB liability	60.44%	57.62%	52.39%

\*This table will present ten years of information as it becomes available.

**City of Henderson, Kentucky Utility Commission  
Schedule of the Commission's Contributions to the OPEB Plan  
County Employees' Retirement System OPEB Plan  
For the Last Fiscal Ten Years\***

	<u>2020</u>	<u>2019</u>	<u>2018</u>
Statutorily required contribution	\$ 173,183	\$ 177,405	\$ 142,736
Contributions in relation to the statutorily required contribution	<u>(173,183)</u>	<u>(177,405)</u>	<u>(142,736)</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Commission's covered-employee payroll	\$ 3,638,290	\$ 3,372,725	\$ 3,036,915
Contributions as a percentage of covered-employee payroll	4.76%	5.26%	4.70%

\*This table will present ten years of information as it becomes available.

**Pension Plan**

*Changes of benefit terms:* During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. Benefits paid to the spouses of deceased members have been increased from 25% of the member’s final pay rate to 75% of the member’s average pay. If the member does not have a surviving spouse, benefits paid to surviving dependent children have been increased from 10% of member’s final pay to 50% of average pay for one child, 65% over average pay for two children, of 75% of average pay for three children. The Total Pension Liability beginning June 30, 2018 is determined using these updated benefit provisions.

*Changes of assumptions:* In the June 30, 2019, 2017 and 2015 actuarial valuations, the following changes in actuarial assumptions were made:

	<u>June 30, 2019</u>	<u>June 30, 2017</u>	<u>June 30, 2015</u>	<u>June 30, 2014</u>
Inflation	2.30%	2.30%	3.25%	3.50%
Payroll Growth	2.00%	0.75%	0.75%	1.00%
Salary Increases	3.30% to 10.30%	3.05%	4.00%	4.50%
Investment Rate of Return	6.25%	6.25%	7.50%	7.75%

In the June 30, 2019 actuarial valuation, the mortality table used for active members was a PUB-2010 General Mortality table, for the Non-Hazardous System, and PUB-2010 Public Safety Mortality table for the Hazardous System, projected with the ultimate rates from the MP-2014 improvement scale using a base year of 2010. The mortality table used for healthy retired members was a system-specific mortality table based on mortality experience from 2013-2018, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2019. The mortality table used for the disabled members was PUB-2010 Disable Mortality table, with a 4-year set-forward for both male and female rates, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2010.

Beginning with the June 30, 2015 actuarial valuation, the mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females). For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back one year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back four years for males) is used for the period after disability retirement.

For periods prior to the June 30, 2015 actuarial valuation, the rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward five years was used for the period after disability retirement.



**Other Postemployment Benefits Plan**

*Changes of benefit terms:* During the 2018 legislative session, House Bill 185 was enacted, which updated the benefit provisions for active members who die in the line of duty. The system shall now pay 100% of the insurance premium for spouses and children of all active members who die in the line of duty. The Total OPEB Liability beginning June 30, 2018 is determined using these updated benefit provisions.

*Changes of assumptions:* In the June 30, 2019 actuarial valuation, the following changes in actuarial assumptions were made:

	<u>June 30, 2019</u>	<u>June 30, 2017</u>
Inflation	2.30%	2.30%
Payroll Growth	2.00%	0.75%
Salary Increases	3.30% to 10.30%	3.05%
Investment Rate of Return	6.25%	6.25%

In the June 30, 2019 actuarial valuation, the mortality table used for active members was a PUB-2010 General Mortality table, for the Non-Hazardous System, and PUB-2010 Public Safety Mortality table for the Hazardous System, projected with the ultimate rates from the MP-2014 improvement scale using a base year of 2010. The mortality table used for healthy retired members was a system-specific mortality table based on mortality experience from 2013-2018, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2019. The mortality table used for the disabled members was PUB-2010 Disable Mortality table, with a 4-year set-forward for both male and female rates, projected with the ultimate rates from the MP-2014 mortality improvement scale using a base year of 2010.

Beginning with the June 30, 2017 actuarial valuation, the mortality table used for active members is RP-2000 Combined Mortality Table projected with Scale BB to 2013 (multiplied by 50% for males and 30% for females). For healthy retired members and beneficiaries, the mortality table used is the RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back one year for females). For disabled members, the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back four years for males) is used for the period after disability retirement.



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**Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards**

Members of the Board of Commissioners  
City of Henderson, Kentucky Utility Commission  
Henderson, Kentucky

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States of America, the financial statements of the City of Henderson, Kentucky Utility Commission as of and for the year ended May 31, 2020 and the related notes to the financial statements, which collectively comprise the Commission's basic financial statements and have issued our report thereon dated August [REDACTED], 2020.

**Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the City of Henderson, Kentucky Utility Commission's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the City of Henderson, Kentucky Utility Commission's internal control. Accordingly, we do not express an opinion on the effectiveness of the City of Henderson, Kentucky Utility Commission's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of the internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in the internal control that might be significant deficiencies, or material weaknesses. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

**Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the City of Henderson, Kentucky Utility Commission's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

**Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this report is not suitable for any other purpose.

*Alexander Thompson Arnold PLLC*

Henderson, Kentucky  
August [REDACTED], 2020

1 **Item 32) Please provide any and all Annual Reports prepared or issued for HMP&L**  
2 **and for the City of Henderson for each year during the period 2009-2019.**

3 **Response)** See response to Item 31.

4 **Witness) Barbara Moll**

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1 **Item 33) Please provide any and all published rating agency reports for HMP&L and**  
2 **for the City of Henderson during the period 2009-2019.**

3 **Response) See attached.**

4 **Witness) Barbara Moll**

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## CREDIT OPINION

3 February 2016

### New Issue

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## Henderson (City of) KY

New Issue - Moody's assigns Aa3 to Henderson, KY's \$10M Ser. 2016 A and B GOs

### Summary Rating Rationale

Moody's Investors Service has assigned a Aa3 rating to the City of Henderson, KY's \$1.7 million General Obligation Bonds, Series 2016A and \$8.3 million General Obligation Refunding Bonds, Series 2016B. We maintain a Aa3 rating on the city's outstanding general obligation (GO) bonds.

The Aa3 rating reflects city's stable tax base and below average resident wealth levels; strong General Fund reserves and healthy liquidity; moderate reliance on economically sensitive payroll taxes and utility system in-lieu of tax payments; and manageable debt profile after considerable support from the water and sewer utility.

### Credit Strengths

- » Strong fiscal management
- » Stable financial position, strong reserves and healthy liquidity
- » Stable tax base

### Credit Challenges

- » Below average socioeconomic profile
- » Moderate exposure to economically sensitive payroll and net profits taxes

### Rating Outlook

Moody's does not usually assign outlooks to local government credits with this amount of debt outstanding.

### Factors that Could Lead to an Upgrade

- » Significant tax base expansion
- » Continued trend of operating surpluses yielding significantly improved operating reserves

### Factors that Could Lead to a Downgrade

- » Material reduction of utility system's support of annual GO debt service
- » Tax base contraction, weakened wealth levels or increased unemployment

- » Substantial erosion of operating reserves or liquidity
- » Elevation of unfunded pension burden

## Key Indicators

Exhibit 1

Henderson (City of) KY	2011	2012	2013	2014	2015
<b>Economy/Tax Base</b>					
Total Full Value (\$000)	\$ 1,345,085	\$ 1,376,868	\$ 1,386,298	\$ 1,407,800	\$ 1,416,398
Full Value Per Capita	\$ 47,028	\$ 47,928	\$ 48,160	\$ 48,907	\$ 49,010
Median Family Income (% of US Median)	73.3%	74.2%	73.9%	73.9%	73.9%
<b>Finances</b>					
Operating Revenue (\$000)	\$ 24,241	\$ 24,544	\$ 25,421	\$ 25,845	\$ 26,220
Fund Balance as a % of Revenues	23.9%	31.1%	37.4%	42.0%	41.3%
Cash Balance as a % of Revenues	37.5%	39.3%	50.7%	51.9%	42.0%
<b>Debt/Pensions</b>					
Net Direct Debt (\$000)	\$ 6,502	\$ 8,157	\$ 7,598	\$ 6,904	\$ 6,360
Net Direct Debt / Operating Revenues (x)	0.3x	0.3x	0.3x	0.3x	0.2x
Net Direct Debt / Full Value (%)	0.5%	0.6%	0.5%	0.5%	0.4%
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	N/A	2.1x	2.2x	2.5x	2.3x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	N/A	3.8%	4.1%	4.6%	4.2%

Source: Moody's Investors Service, audited financial statements

## Recent Developments

Recent developments are incorporated in the Detailed Rating Considerations.

## Detailed Rating Considerations

### Economy and Tax Base: Stable Tax Base, Below Average Socioeconomic Profile

Modest new development and market appreciation of existing property suggest that the city's \$1.4 billion tax base will remain stable over the next several years. Located along the Ohio River 10 miles south of Evansville, IN (sewage revenue debt A1 stable) in Henderson County, KY (Aa3 negative) the city's tax base and local economy are supported by agriculture and manufacturing. Full values has grown an average 1.3% annually over the last five years, including a 1.3% increase in fiscal 2016. Management expects new residential development, expansion of several automotive component manufacturers, and growing operations of two regional healthcare systems to support modest growth of the city's tax base in the near term. Top property taxpayers, including account for a modest 6.3% of fiscal 2015 full values. Wealth levels are below average with median family income levels equivalent to 73.9% of the US, according to American Community Survey data. The city's population of 28,900 residents has remained relatively stable over the last few census periods, including a 5.1% increase from 2000 to 2010. The city's full value per capita is below average for the rating category at \$49,688. Since 2010, the city's labor force declined 0.8% annually to 13,888 individuals as of 2013. The city's unemployment rate of 4.6%, as of November, remained below the state and national unemployment rates (both 4.8%). The mining sector accounted for a small 0.7% of Henderson County's total employment in 2013 indicating the city's limited indirect exposure to coal mining relative to adjacent areas, like Union County, where mining accounted for 20.3% of total employment in 2013.

### Financial Operations and Reserves: Strong Fiscal Management, Conservative Budgeting Provide Strong Reserves and Liquidity

Strong fiscal management and conservative budgeting contribute to the city's stable financial position, including strong reserves and healthy liquidity. Despite a modest \$45,000 reduction of General Fund reserves in fiscal 2015 for capital expenditures, the city's total

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General Fund balance remained healthy at \$10.8 million or a strong 40.7% of revenues bolstered by three-year period of surplus financial operations from fiscal 2012 to fiscal 2014. The city's major sources of operating revenues include taxes (31.3% of 2015 General Fund revenues), payroll and net profits taxes (20.2%), insurance premiums taxes (17.9%), and payments-in-lieu-of-taxes and utility system transfers (11.5%). The city's strong reserves relative to its peers are a key consideration for the current rating assignment because they mitigate its moderate exposure to economically sensitive payroll and net profits tax revenues, as well as fluctuations from in-lieu of tax payments (PILOTs) and utility system transfers.

As noted in July 2015 report, the fiscal 2016 budget reflects a \$1 million to \$2 million use of reserves for capital projects. We expect the draw to be significantly less at year-end given management's conservative budgeting assumptions and ability to close budget gaps demonstrated in recent fiscal years. If realized, a \$1 million draw on General Fund reserves would decrease the city's total General Fund balance to \$9.8 million, which would represent a still healthy 36.9% of fiscal 2015 revenues. Future reviews will focus on the city's ability to maintain a level of reserves sufficient to balance its exposure to economically sensitive revenues.

#### LIQUIDITY

General Fund liquidity will remain healthy in the near term. Despite an 18% decline from the prior year due in part to cash-funded capital spending, liquidity in the General Fund remained healthy at \$10.9 million and 41.3% of revenues as of the close of Fiscal 2015. The Operating Fund (consisting of the General Fund and Debt Service Fund) reported \$11 million in net cash and investments at year-end, representing a healthy 42% of Operating Fund revenues. Management indicates a portion of the city's General Fund cash and liquidity will be restored with proceeds from the Series 2016A bonds.

#### Debt and Pensions: Utility System Support of GO Debt Yields Manageable Debt Profile

At 3.7% of 2016 full value, the city's debt profile is above average for the rating category. However, after adjusting for the utility system's support of \$35 million of GO debt, the city's adjusted net direct debt burden decreases to a manageable 1.2%. The city's debt burdens will remain manageable in the near term given management's limited plans for additional borrowing and continued water and sewer system support of annual GO debt service. Substantial deterioration of the water and sewer system's financial condition, resulting in less than sum sufficient coverage of GO debt service could lead to downward pressure on the rating.

#### DEBT STRUCTURE

All of the city's outstanding debt is fixed rate and amortizes over the long term. Amortization is slow with 61.2% of principal retired in 10 years compared to 85.7% for similarly rated US cities.

#### DEBT-RELATED DERIVATIVES

The city is not party to any derivative agreements.

#### PENSIONS AND OPEB

The city's adjusted net pension liability (ANPL) will remain above average, but is unlikely to pressure the city's operating budget in the near term. The city participates in the Kentucky County Employees' Retirement System (CERS) and also reports two closed single-employer pension plans (Civil Service Plan and Police and Fire Pension Plan). Employee contributions were included in the city's reported contributions to CERS in the audited financial statements for fiscal 2010 to fiscal 2014. However, after excluding employee contributions, the city's ANPL is still above average. Under our methodology for adjusting reported pension data, the city's three-year average ANPL was \$60 million at year-end 2015, which represents 4.2% of 2016 full value and 2.3 times fiscal 2015 Operating Fund revenues.

In 2015, the city contributed \$3.8 million or 14.6% of Operating Fund expenditures to the three plans. Total fixed costs, which consist of pension contributions and debt service, were \$7 million and 26.4% Operating Fund expenditures. Further increases in the city's total fixed costs or its ANPL could put downward pressure on the rating.

Moody's ANPL reflects certain adjustments we make to improve comparability of reported pension liabilities. The adjustments are not intended to replace the district's reported contribution information, or the reported liability information of the statewide cost-sharing plans, but to improve comparability with other rated entities. For more information on Moody's insights on employee pensions and the related credit impact on companies, government, and other entities across the globe, please visit Moody's on Pensions at [www.moodys.com/pensions](http://www.moodys.com/pensions).



## Management and Governance

Kentucky cities have an institutional framework score of "Aa," or strong. Property and occupational license taxes, the primary revenue sources, are highly predictable. Cities have moderate revenue-raising ability and can increase property taxes by 4% annually up to a cap. Cities with populations of 15,000 and above also have a property tax cap of 15 mills. Cities with population of 1,000 or higher have the power to levy an occupational license tax. The tax rate is unlimited for cities with populations up to 300,000 and capped at 1.25% for larger cities. Expenditures are highly predictable and cities have a moderate ability to reduce them given a limited presence of unions and moderate fixed costs.

The city is governed by a board of commissioners, comprised of a Mayor, elected to a four-year term and four commissioners elected to two-year terms. The city has informal target reserve equivalent to three months of operating expenditures.

## Legal Security

The bonds are general obligations of the city. The full faith, credit and taxing power of the city is irrevocably pledged to the payment of principal and interest on the bonds when due.

## Use of Proceeds

Proceeds from Series 2016A bonds will fund various capital improvements throughout the city. The 2016B bonds will refund certain maturities of the city's outstanding GO bonds for debt service savings.

## Obligor Profile

The City of Henderson is located on the Ohio River 10 miles south of Evansville, IN and is the county seat of Henderson County. The city had a population of 28,900 residents in 2015, according to US Census Bureau data.

## Methodology

The principal methodology used in this rating was US Local Government General Obligation Debt published in January 2014. Please see the Ratings Methodologies page on [www.moody.com](http://www.moody.com) for a copy of this methodology.

## Ratings

Exhibit 2

### HENDERSON (CITY OF) KY

Issue	Rating
General Obligation Bonds, Series 2016A (Bank Qualified)	Aa3
Rating Type	Underlying LT
Sale Amount	\$1,685,000
Expected Sale Date	02/09/2016
Rating Description	General Obligation
General Obligation Refunding Bonds, Series 2016B (Bank Qualified)	Aa3
Rating Type	Underlying LT
Sale Amount	\$8,315,000
Expected Sale Date	02/09/2016
Rating Description	General Obligation

Source: Moody's Investors Service

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REPORT NUMBER 1014105

# MOODY'S

## INVESTORS SERVICE

### **Announcement of Periodic Review: Moody's announces completion of a periodic review of ratings of Henderson Municipal Power & Light, KY**

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17 Feb 2020

New York, February 17, 2020 -- Moody's Investors Service ("Moody's") has completed a periodic review of the ratings of Henderson Municipal Power & Light, KY and other ratings that are associated with the same analytical unit. The review was conducted through a portfolio review in which Moody's reassessed the appropriateness of the ratings in the context of the relevant principal methodology(ies), recent developments, and a comparison of the financial and operating profile to similarly rated peers. The review did not involve a rating committee. Since 1 January 2019, Moody's practice has been to issue a press release following each periodic review to announce its completion.

This publication does not announce a credit rating action and is not an indication of whether or not a credit rating action is likely in the near future. Credit ratings and outlook/review status cannot be changed in a portfolio review and hence are not impacted by this announcement. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moody's.com](http://www.moody's.com) for the most updated credit rating action information and rating history.

Key rating considerations are summarized below.

The Henderson Municipal Power & Light, KY (HMPL) Baa1 electric system revenue bond rating reflects its improving financial performance, including stronger debt service coverage being driven by cost management and four rate increases that were phased in during fiscal years 2016-17. The rating also considers changes made to HMPL's generation supply after ceasing operations at the 312 megawatt (MW) Station Two Generating Plant effective January 31, 2019. During the first half of 2019, HMPL relied on short-term power purchase agreements (PPAs) before transitioning to longer-term PPAs effective June 1, 2019. HMPL's supply strategy eliminates credit risk previously attributed to a concentrated dependence on one-coal-fired plant to not only meet customers' demand but to also sell a substantial portion of the energy and capacity from Station Two to one off-taker, Big Rivers Electric Corporation, KY, a Henderson, KY based electric generation and transmission cooperative. That said, the supply strategy introduces exposure to future market supply and price risks and increases the importance of maintaining good liquidity. HMPL may also consider construction of a natural gas fired generation plant as part of its longer-term resource planning process, including the likely need for new debt financing of that investment.

This document summarizes Moody's view as of the publication date and will not be updated until the next periodic review announcement, which will incorporate material changes in credit circumstances (if any) during the intervening period.

The principal methodology used for this review was US Public Power Electric Utilities with Generation Ownership Exposure Methodology published in August 2019. Please see the Rating Methodologies page on [www.moody's.com](http://www.moody's.com) for a copy of this methodology.

This announcement applies only to EU rated and EU endorsed ratings. Non EU rated and non EU endorsed ratings may be referenced above to the extent necessary, if they are part of the same analytical unit.

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CREDIT OPINION

10 December 2019

Rate this Research

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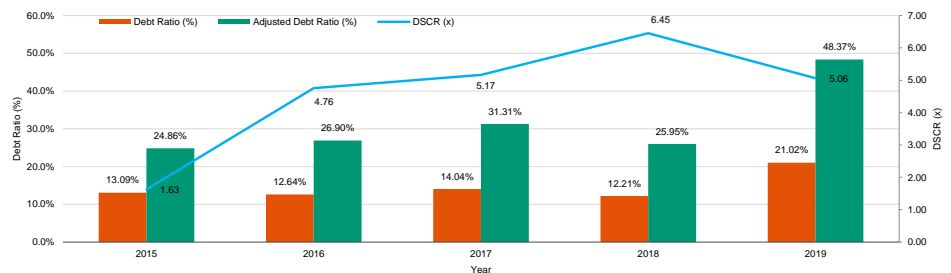
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# Henderson Municipal Power & Light, KY

## Update to credit analysis

Henderson Municipal Power & Light's (HMPL; Baa1 stable) credit profile reflects the improving trend in its financial performance which began several years ago, with a stronger debt service coverage ratio (DSCR) being driven by cost management and a series of four rate increases that were phased in during fiscal years 2016-2017. The credit profile also takes into account significant changes made to HMPL's generation supply since it ceased operations at the 312 megawatt (MW) Station Two Generating Plant effective January 31, 2019. During the first half of 2019, HMPL initially was substantially more so dependent on short-term power purchase agreements (PPAs), which served as a bridge to its longer-term PPAs that became effective June 1, 2019. The supply strategy eliminates HMPL's prior credit risk previously attributed to a concentrated dependence on one-coal-fired plant to not only meet customers' demand but to also sell a substantial portion of the energy and capacity from Station Two to one off-taker, [Big Rivers Electric Corporation, KY](#) (BREC, Ba1 positive), a Henderson, KY based electric generation and transmission cooperative. That said, the supply strategy introduces exposure to future market supply and price risks and increases the importance of maintaining good liquidity. HMPL may also consider construction of a natural gas fired generation plant as part of its longer-term resource planning process, including the likely need for new debt financing of that investment.

Exhibit 1  
HMPL benefits from strong coverage and manageable leverage



Source: Henderson Municipal Power & Light and Moody's Investors Service

### Credit strengths

- » Strengthening trend of DSCR and liquidity since 2016
- » A revenue neutral rate redesign and creation of a power cost adjustment mechanism to support timely adjustment of monthly power costs and better match recently arranged power supply contracts
- » Competitive rates below the KY state average

Case No. 2019-00269  
Attachment 1 to BREC 1-33

- » Manageable leverage as measured by HMPL's 48.4% adjusted debt ratio for FYE 2019

### Credit challenges

- » Single generation asset risk has evolved into high exposure to future market supply and price risk with the shift to being entirely dependent on PPAs and some market purchases since June 1, 2019
- » High percentage of load concentrated in commercial and industrial sectors
- » Small size, scale and scope of operations

### Rating outlook

The stable rating outlook acknowledges HMPL's sustainably stronger DSCR because of a series of 5% rate increases which became effective during fiscal years 2016-17, with prospects for annual inflation-indexed rate adjustments on an as-needed basis. The stable rating outlook also reflects the reduction in exposure to concentration of sales to BREC and incorporates our assumption that HMPL can effectively manage its potential exposure to market risks since it has become entirely dependent on power purchase agreements (PPAs) and some market purchases with the termination of the operating agreement with BREC in early 2019.

### Factors that could lead to an upgrade

- » Sustaining current levels of strong DSCR and adjusted debt ratio following the transition to being solely reliant on PPAs and some market purchases
- » Improving liquidity to a level where average days liquidity on hand comfortably exceeds 150 days on a sustained basis as liquidity becomes increasingly important with exposure to market price volatility

### Factors that could lead to a downgrade

- » If the transition to significant reliance on PPAs, supplemented by some market purchases, meets with unexpected difficulties
- » If HMPL's adjusted days cash on hand declines below 90 days and/or DSCR falls significantly below current levels on a sustained basis
- » If cash flows decline due to loss of loads to serve commercial and industrial customers

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## Key indicators

Exhibit 2

### HMPL has maintained low leverage and strong coverage metrics

	2015	2016	2017	2018	2019
Total Sales (mWh)	633,063	581,008	588,044	621,711	602,813
Debt Outstanding (\$000)	13,270	12,660	12,040	11,410	10,760
Debt Ratio (%)	13.1	12.6	14.0	12.2	21.0
Adjusted Debt Ratio (%)	24.9	26.9	31.3	26.0	48.4
Adjusted Days Liquidity on Hand (incl. Bank Lines) (days)	100	95	97	154	216
Adjusted Debt Service Coverage (x) (Post Transfers/PILOTS - All Debt)	1.63	4.76	5.17	6.45	5.06

Source: Henderson Municipal Power & Light and Moody's Investors Service

## Profile

HMPL is a city-owned electric system that serves about 12,000 customers in [Henderson \(City of\) KY](#) (Aa3 No Outlook), the substantial majority of which are in the residential class.

## Detailed credit considerations

### Revenue Generating Base

#### Concentration risk from single plant, fuel source, as well as customer concentration has transitioned to potentially significant future market supply and price risks under PPAs

Effective January 31, 2019, HMPL made a decision to decommission the competitively challenged 312 megawatt (MW) coal-fired Station Two Generating Plant and with that decision terminated its longstanding operating agreement with BREC relating to that plant. To meet its needs for replacement of its supply resources, HMPL initially entered into short-term power purchase agreements (PPAs), which served as a bridge to its longer-term PPAs that were awarded through a request for proposals (RFPs) bidding process on February 28, 2019 and became effective June 1, 2019 (see exhibit 3 below for details of those PPAs). HMPL can supplement its PPA supplies with market purchases as needed.

Exhibit 3

### Power Purchase Agreements HMPL has entered into

	Length	Size	Supplier
5 x 16 Winter Block	3 year	20 MW	Merrill Lynch
5 x 16 Summer Block	3 year	30 MW	BP
5 x 16 Annual Block	3 year	10 MW	BP
7 x 24 Annual Block	5 year	30 MW	Merrill Lynch
7 x 24 Annual Block	10 year	30 MW	BP
Capacity ZRCs	5 year	100 MW	Constellation

Source: Henderson Municipal Power & Light and Moody's Investors Service

In mid-June 2019 HMPL took additional steps with respect to its integrated resource planning process to consider possible plans for future years once its existing PPAs expire. These plans could include RFPs, but may also consider construction of a natural gas fired generation plant. The latter possible scenario, if it materializes, would likely introduce a longer term credit risk including the need for new debt financing of that investment.

### Concentration of sales to three large industrial customers remains a credit risk

Even as the historical concentration of sales to BREC have ended with decommissioning of the Station Two plant and no longer weighs on HMPL's credit profile, the utility remains challenged by significant exposure to potential volatility in its cash flow associated with electricity sales to commercial and industrial customers. Over the last several fiscal years, the top three industrial customers constituted close to 30% of existing system revenues. Thus, HMPL's revenues and cash flow will still be exposed to year-over-year volatility if capacity payments from loads served for these large commercial and industrial customers significantly decline.

### Operational and Financial Performance

#### Cost management and rate increases are supporting notable improvement in financial performance

HMPL's financial performance for fiscal years ended May 31, 2017-19 have benefitted from a credit positive rate strategy carried out during fiscal years 2016-17, especially since the strategy started from a strong competitive position. See exhibit 4 below, which highlights HMPL's strategy that included a series of 5% rate increases implemented (20% in aggregate over two years) and other cost control strategies. These strategies far outweighed any periodic effects of lower sales volumes attributed to weather and customer usage efficiency steps. HMPL also has approval, effective since January 1, 2017, to consider implementing inflation-indexed rate adjustments on an annual basis. The first inflation-based increase that took effect on January 1, 2017 was about 1.6%, with no adjustment made for 2018 or 2019. With new rate schedules that were adopted beginning June 1, 2019, HMPL's inflation-based increases (if any) go into effect June 1 instead of January 1. This change was made to align with the utility's fiscal year which closes May 31. However, the inflation-based adjustment still follows the same rule as before and it is on an as-needed basis. The rate schedule has been updated to include this language.

Exhibit 4

#### Rate increases HMPL phased in during fiscal years 2016-17

	Effective Date	Adjustment Percent Increase
First Adjustment	July 1, 2015	5%
Second Adjustment	November 1, 2015	5%
Third Adjustment	May 1, 2016	5%
Fourth Adjustment	November 1, 2016	5%
Inflation Adjustment	Beginning January 1, 2017 and each January 1, 2018-19; Beginning June 1, 2019 adjustments now made on as needed basis each June 1	CPI*

\*Consumer Price Index (CPI) – Adjustments will be made in accordance with the percentage changes in the US Department of Labor Consumer Price Index (CPI-U).

Source: Henderson Municipal Power & Light and Moody's Investors Service

HMPL's adjusted DSCR has exceeded 4.0x since 2016 and averaged 5.6x for fiscal years 2017-19. These levels of coverage represent significant strengthening compared to 1.6x for fiscal year 2015 and 2.5x for fiscal year 2014. When calculating the DSCR for HMPL we include transfers to the City as part of the operating expenses. Such transfers by HMPL have been manageable for a utility of its size, representing, on average, just over 3% of revenues for the past several years and there are no signs of any material change to the level of transfers forthcoming. We expect that HMPL can sustain a strong adjusted DSCR, especially considering the flexibility to adjust for inflationary cost pressures should they arise.

According to the latest available data from the EIA as of 2018, even after sizable rate increases implemented, HMPL's rates on a system wide basis were about 15% below the state average.

### LIQUIDITY

Careful attention to liquidity is an integral part of HMPL's strategy and is an increasingly important credit consideration since the utility has become solely dependent on PPAs and some market purchases. The utility's days cash on hand for FYE 2019 was 216 days compared to 154 days and 97 days at FYE 2018 and 2017, respectively. The steadily increasing days cash on hand over the last three fiscal years reflects consistent increases to unrestricted investments and cash accounts relative to a declining trend of operating expenses during the three-year period, especially so during 2019 when the Station Two plant ceased operations. The three year average for adjusted days cash on hand of 156 days does not include any benefit from external bank credit facilities and places the metric within the lower third of the 150-250 days range for the "Aa" category scoring under the sector's methodology. In terms of actual unrestricted cash and discretionary funds, the balance for FYE 2019 was about \$26.1 million, which is more than twice the FYE 2019

total outstanding debt of \$10.76 million. The utility also has a power cost adjustment mechanism that allows for automatic monthly pass-through adjustments based on any unexpected increase or decrease in power costs, thus avoiding calls on liquidity to address variable costs not already incorporated in the existing rate level.

### Debt and Other Liabilities

HMPL periodically issues revenue bonds to finance its capital programs, including maintenance of its electric system assets. HMPL's total long-term debt at FYE 2019 was \$10.76 million of fixed rate level-amortizing long-term bonds, comprised of series 2011A and 2011B. The final maturity date for each of the amortizing Series A and Series B bonds is December 1, 2031. The bonds are secured by a pledge of the revenues of HMPL's Retail System. The bonds are also secured by a statutory mortgage lien on the System and a debt service reserve in an amount equal to the lesser of the standard three-pronged test: (i) the maximum annual debt service, (ii) 125% of the average annual debt service; or (iii) 10% of the proceeds of the bonds.

### DEBT STRUCTURE

HMPL currently relies solely on fixed-rate, long-term debt financing. It is our understanding that HMPL has no plans for incremental debt in the next 12 to 18 months, and currently has no immediate plans for any major maintenance or upgrades as its supply strategy has shifted to dependence entirely on PPAs and some market purchases to meet customers' demands for power over the next several years. While the current prices for power are likely to benefit HMPL's power supply costs as it has shed the credit risks previously associated with the extensive reliance on a competitively challenged coal-fired generation asset, an exclusive dependence on PPAs supplemented by some market purchases carries its own credit challenges because of potential exposure to market supply and price volatility.

While there was no new debt issued in fiscal 2019, HMPL's decision to decommission the Station Two plant resulted in a more than \$40 million decline in utility plant and equipment recorded on the statement of net position, resulting in an increase in the debt ratio at FYE 2019 to 21.0% compared to 12.2% at FYE 2018. With no immediate plans for new debt issuance and the amortizing structure of the existing bonds, HMPL's debt ratio is likely to remain near the 20% level or better over the next few years. See below in the Pensions and OPEB section for additional considerations relating to HMPL's adjusted debt ratio.

### DEBT-RELATED DERIVATIVES

None

### PENSIONS AND OPEB

All employees participate in the County Employees Retirement System, which is a multi-employer defined benefit retirement plan sponsored by the City of Henderson and administered by the Commonwealth of KY. Depending on the date of hire, employees contribute 5% or 6% of their gross salary to the plan and HMPL also contributes a percentage of the employee's gross salary to the plan as determined annually by the Kentucky General Assembly. For FYE 2019, contributions amounted to \$547,056 or 16.22% as compared to \$439,750 or 14.48% for fiscal 2018.

Moody's adjusted net pension liability (ANPL) for HMPL as of fiscal 2019 is approximately \$11.5 million, compared to its reported net pension liability of about \$7.2 million. Under our adjustments, unfunded pension liabilities increase HMPL's debt ratio from 21.0% as of FYE 2019 to an adjusted debt ratio of around 48.4%. Although considerably higher than the adjusted debt ratio of about 26% at FYE 2018, the three-year average adjusted debt ratio for FYE 2017-19 of 35.2% is at the stronger end of the "Aa" category range of 35%-60% under the sector's Methodology.

We adjust the reported pension liabilities of entities that report under governmental accounting standards, to enhance comparability across rated issuers. Under governmental pension accounting, liabilities are discounted using the assumed rate of investment return on plan assets. Under our standard adjustments, we value liabilities completely independent of asset composition or return expectation, using a market based discount rate for high quality taxable bonds as a proxy for the risk of pension benefits.

### Management and Governance

The City of Henderson Utility Commission is a component unit of the City of Henderson, Kentucky and is organized under the provisions of Section 96.530 of the Kentucky revised statutes to operate, manage, and control HMPL. The Mayor appoints the members of the Utility Commission, subject to approval by the City Commissioners of the City of Henderson, Kentucky. HMPL benefits

from rate autonomy since the Mayor and the City Commission authorize all rates and bond issues of the Utility Commission. HMPL, as a municipal entity, is not subject to any federal and state income taxes.

### Other Considerations: Mapping to the Scorecard

Moody's evaluates HMPL's credit quality relative to the US Public Power Utilities with Generation Ownership Exposure Methodology. As depicted below, HMPL's scorecard-indicated outcome is A3, one notch higher than the Baa1 rating for HMPL's revenue bonds. The differential incorporates the risks and challenges surrounding recent changes to HMPL's generation supply. Such changes to become entirely dependent on PPAs and some market purchases introduce potential exposure to future market supply and price risks that replace HMPL's prior exposure to sales and customer concentration risk relating to prior arrangements with BREC.

The scorecard is a reference tool that can be used to approximate credit profiles in the US Public Power Electric Utility Industry in most cases. However, the scorecard is a summary that does not include every credit consideration. Please see US Public Power Electric Utilities with Generation Ownership Exposure Methodology published in August 2019 for more information about the limitations inherent to scorecards.

Exhibit 5

#### US Public Power Electric Utilities with Generation Ownership Exposure

Factor	Subfactor	Score	Metric
1. Cost Recovery Framework Within Service Territory		A	
2. Willingness and Ability to Recover Costs with Sound Financial Metrics		A	
3. Generation and Power Procurement Risk Exposure		B	
4. Competitiveness	Rate Competitiveness	A	
5. Financial Strength and Liquidity	a) Adjusted days liquidity on hand (3-year avg) (days)	Aa	156
	b) Adjusted Debt ratio (3-year avg) (%)	Aa	35.2%
	c) Adjusted Debt Service Coverage (3-year avg) (x)	Aaa	5.56
<b>Preliminary Scorecard Indicated Outcome from Grid factors 1-5</b>		<b>A2</b>	
		<b>Notch</b>	
6. Operational Considerations		0	
7. Debt Structure and Reserves		0	
8. Revenue Stability and Diversity		-1	
<b>Scorecard Indicated Outcome:</b>		<b>A3</b>	

Source: Moody's Investors Service

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14 August 2018

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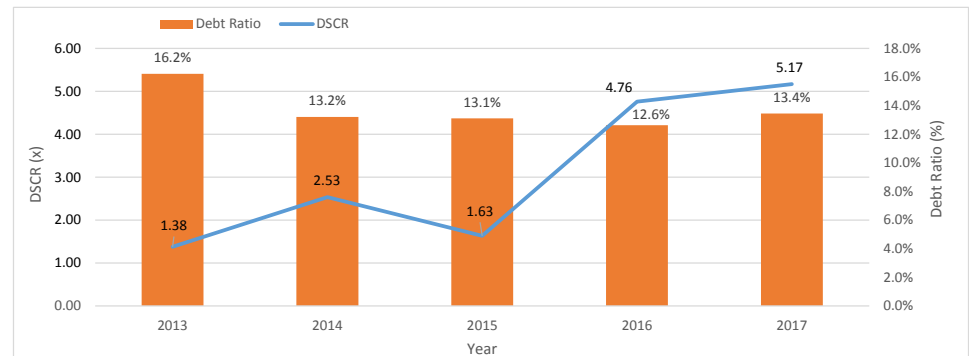
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# Henderson Municipal Power & Light, KY

## Update to credit analysis following rating upgrade

The Henderson Municipal Power & Light, KY (HMPL; Baa1 stable) credit profile reflects HMPL's sustainably stronger debt service coverage ratio (DSCR) owing to four rate increases during fiscal years 2016-17. The rate increases and prospects of future annual inflation-indexed rate adjustments each January should keep the DSCR at the currently strong level. The credit profile also benefits from autonomous rate-setting, automatic fuel cost adjustments, competitive rates, and good liquidity particularly when compared to the level of outstanding debt. HMPL's credit quality continues to be constrained by a concentration of dependence on a single competitively challenged coal-fired generation asset and impending significant changes to HMPL's generation supply as a longstanding operating agreement with Big Rivers Electric Corp. (BREC) relating to the Station Two coal-fired plant is likely to terminate by May 31, 2019. Such a scenario would replace HMPL's exposure to sales and customer concentration risk relating to BREC with potentially significant exposure to market supply risks.

Exhibit 1  
**HMPL has seen increasing coverage in recent years as leverage remains low**



Source: Henderson Municipal Power & Light and Moody's Investors Service

### Credit strengths

- » Base rate increases during fiscal years 2016-17 to support financial performance and a strong DSCR
- » Automatic fuel cost adjustment mechanism to support timely recovery of variable costs
- » Competitive rates below the KY state average
- » Low leverage as measured by HMPL's 13.4% debt ratio for fiscal 2017

**Case No. 2019-00269**  
**Attachment 1 to BREC 1-33**

- » Above average liquidity relative to total debt outstanding

### Credit challenges

- » Single generation asset risk is likely to evolve into high market risk by May 31, 2019 with prospects of a shift to substantial dependence on purchased power
- » High percentage of load concentrated in commercial and industrial sectors
- » Lingering significant dependence on competitively challenged coal-based generation for the balance of fiscal year 2019
- » Credit challenges for largest customer, BREC, representing approximately 61% of Station two's electric capacity and over 30% of total revenues for the past several years

### Rating outlook

The stable rating outlook acknowledges HMPL's sustainably stronger DSCR thanks to a series of 5% rate increases which became effective in July and November of 2015 and in May and November of 2016, followed by prospects for annual inflation-indexed rate adjustments each January 1 which began with calendar year 2017. The stable rating outlook also reflects the impending reduction in exposure to concentration of sales to BREC and incorporates our assumption that HMPL can effectively manage its potential exposure to market risks as it transitions to significant dependence on purchased power in the near term once the operating agreement with BREC is terminated.

### Factors that could lead to an upgrade

- » Achieving smooth transition to reliance on purchased power while sustaining current levels of strong debt service coverage and low debt leverage
- » Improving liquidity to level of in excess of 110 days as liquidity becomes increasingly important with exposure to market price volatility

### Factors that could lead to a downgrade

- » If the impending transition to significant reliance on purchased power meets with unexpected difficulties
- » If HMPL's adjusted days cash on hand declines below 90 days and/or DSCR falls significantly below current levels on a sustained basis
- » If cash flows decline due to loss of loads for commercial and industrial customers

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moody's.com](http://www.moody's.com) for the most updated credit rating action information and rating history.



## Key indicators

Exhibit 2

HMPL has maintained low leverage and strong coverage metrics

### HENDERSON MUNICIPAL POWER & LIGHT, KY

	2013	2014	2015	2016	2017
Total Sales (mWh)	641,606	632,806	633,063	581,008	588,044
Debt Outstanding (\$'000)	14,450	13,865	13,270	12,660	12,040
Debt Ratio (%)	16.2	13.2	13.1	12.6	13.4
Adjusted Days Liquidity on Hand (incl. Bank Lines)(days)	112	125	99	94	94
Adjusted Debt Service Coverage (x) (Post Transfers/PILOTs - All Debt)	1.38	2.53	1.63	4.76	5.17

Source: Henderson Municipal Power & Light and Moody's Investors Service

## Recent Developments

### HMPL's supply risk profile is evolving as BREC plans to terminate Station Two operating agreement

During 2018 BREC initiated regulatory proceedings seeking approval to terminate its longstanding operating agreement with HMPL relating to the Station Two coal-fired plant. Meanwhile, HMPL has accepted BREC's offer to continue honoring the operating agreement with a desire to terminate by May 31, 2019 at the latest. We understand that HMPL is undertaking a request for proposals process to identify options for either entering into contractual arrangements to purchase its full capacity and energy requirements or alternatively to undertake a managed portfolio approach including purchased capacity and energy contracts to be supplemented by short-term or spot power purchases. If HMPL is successful in finding adequate replacement resources to meet its full requirements through these initiatives prior to May 31, 2019, then BREC and HMPL would likely agree to terminate the operating agreement sooner. HMPL's potential stranded investment in the Station Two asset is estimated at \$47 million which compares to HMPL's latest net fixed assets of about \$56.7 million at fiscal year ended May 31, 2017.

## Profile

HMPL is a city-owned electric system that serves close to 12,000 customers in the City of Henderson, Kentucky (General Obligation Bonds rated Aa3), with about 86% of the customers in the residential class. The City of Henderson is located along the Ohio River, 10 miles south of Evansville, Indiana. The largest industry sectors that drive the local economy are manufacturing, retail trade and local government with 72.5% of HMPL revenues coming from commercial and industrial customers. The region produces a substantial amount of aluminum. Henderson County has a population of just over 46,000 and resident wealth levels are below average as evidenced by a median family income level equivalent to about 70% of the US level. The city's April 2018 unemployment rate was 3.6% (2nd quartile).

## Detailed credit considerations

### Revenue Generating Base

#### Concentration risk from single plant, fuel source, as well as customer concentration likely to prevail through most of fiscal year 2019

Pending the outcome of strategies relating to the operating and other contractual agreements between HMPL and BREC described in the Recent Developments section above, virtually 100% of the utility's generation will continue to come from one coal-fired plant, the 312 megawatts (MW) Station Two generating station (Station Two), which was placed into service in the early 1970's. Station Two represents single asset operating risk, is competitively challenged under current market conditions and faces uncertain future costs to comply with any new regulations to curb carbon emissions. Station Two also poses sales concentration risks for HMPL owing to the fact that a substantial portion of the energy and capacity from Station Two is sold to one off-taker, BREC, a Henderson, Kentucky-based electric G&T cooperative. The plant is owned by the city of Henderson but operated by BREC. Under the Operating Agreement, each party separately pays the variable costs of its fuel and re-agents. BREC pays the remaining costs of operating and maintaining

Station Two and is reimbursed by HMPL for its share of those costs. Under the agreement, BREC prepares an annual budget each year which, upon the approval by HMPL's Commissioners, governs billings and payments for that contract year. The parties then "true-up" the variances between the budgeted and actual amounts after the annual audit of accounts for each contract year. Additionally, as Station Two is HMPL's only source of generation, HMPL is exposed not only to single plant risk but also related operator risk given the speculative grade credit quality of the operator, BREC.

Under the power sales contract with BREC, HMPL provides the cooperative, every year, with its five years' advance written notice of the capacity it reserves out of the Station Two's total capacity, and BREC, in turn, takes the remaining capacity. HMPL has been taking about 37% (115 MWs) of the total capacity, and has the right to increase or decrease its share by 5 MWs annually (the maximum incremental capacity HMPL is entitled to change each year under the power sales contract), in order to meet its peak summer demand. HMPL has been keeping its reserve capacity at 115 MW which is in line with its historical system peak demand. Under the power sales contract, BREC is responsible to pay HMPL for its allocated capacity on a "take-or-pay" basis, where the price BREC pays is based on the total cost of purchasing, acquiring, constructing, operating, maintaining, renewing and expanding Station Two, and where the "capacity costs" are fixed and do not vary with the energy generated because the cost of fuel and re-agent used by each party in the energy generated by Station Two are paid separately by the two entities.

HMPL's sales to BREC have exceeded 30% of its total revenues during the past several fiscal years and we expect that this level will be relatively constant for fiscal year 2019. While the concentration and dependence on this one customer has been highlighted as a credit weakness for HMPL, the risk will be replaced by increased exposure to market prices as HMPL's supply strategies shift once the agreements with BREC are terminated.

#### **Concentration of sales to three large remaining customers remains a credit risk**

Even as concentration of sales to BREC will likely no longer weigh on HMPL's credit profile, the utility will remain challenged by significant exposure to potential volatility in its cash flow associated with electricity sales to commercial and industrial customers.

Over the last several fiscal years, the top three customers constituted about 30% of existing system revenues which exclude the revenues from BREC. Thus, HMPL's revenues and cash flow will still be exposed to year-over-year volatility if capacity payments from loads served for these large commercial and industrial customers significantly decline.

Since Station Two is its only source of generation, HMPL faces credit risk due to its exposure to costs of complying with existing or future regulations to address carbon emissions. Station Two has equipment for SO<sub>x</sub> and NO<sub>x</sub> control but may face additional costs to comply with future carbon related regulations. HMPL's low leverage and competitive rates profile provide a reasonable amount of flexibility to absorb some new debt financing if necessary to fund environmental mitigation investments and ensure compliance with future regulations. That said, Station Two is a relatively old asset and the utility previously chose to shut down Station One because of the high costs of complying with environmental regulations.

#### **BREC is coping well with credit challenges**

BREC has been making good progress towards replacing the roughly two-thirds of its annual energy sales, just under 60% of its system demand and in excess of 60% of its annual revenues previously derived from the contracts it had with two aluminum smelters. The aluminum smelters terminated their contracts in August 2013 and January 2014, respectively. Although Big Rivers now benefits from less exposure to customer and sales concentration with two previously volatile sources of revenue, it faces risks resulting from a sizable exposure to excess owned coal-fired generation capacity and an increasing regulatory asset balance. The progress in addressing the excess capacity is attributable to both supply-side and demand-side strategies, as well as reducing staff and controlling other expenses where feasible without compromising reliability of service.

As noted above, BREC and HMPL have several agreements dating as far back as 1970, including an operating and a power sales agreement with respect to Station Two. Although BREC remains the operator of the power plant and faces some credit challenges, HMPL has accepted BREC's offer to fulfill its contract obligations until May 31, 2019 at the latest. That said, we expect the contractual relationships between the two entities to terminate no later than the end of HMPL's fiscal year ending May 31, 2019. [See Big Rivers Electric Corporation: Credit Opinion dated July 27, 2018 for further details.](#)

## Operational and Financial Performance

### Notable improvement in financial performance for HMPL owing to cost management and rate increases

Overall, we view HMPL's recent rate strategy to be credit positive, especially since the strategy started from a strong competitive position. HMPL's financial performance for fiscal years 2016-17 reflects significant improvement owing to a series of 5% rate increases implemented and other cost control strategies, which far outweighed any periodic effects of lower sales volumes owing to weather and customer usage efficiency steps. For example, HMPL's adjusted DSCR improved to 5.2x in fiscal year 2017 compared to 4.7x in FY 2016. These levels of coverage represent significant strengthening compared to 1.6x for fiscal 2015 and 2.5x for fiscal 2014. When calculating the DSCR for HMPL we include transfers to the City as part of the operating expenses. Such transfers by HMPL have been manageable for a utility of its size, representing, on average, just over 3% of revenues for the past several years and there are no signs of any material change to the level of transfers forthcoming.

We expect the strong adjusted DSCR of fiscal years 2016-17 to be sustained when the audit for FY 2018 is completed as HMPL's financial performance continues to benefit from the aggregate 20% rate increase that was implemented during fiscal years 2016-17 and from approvals to consider implementing inflation-indexed rate adjustments on an annual basis beginning January 1, 2017. The first inflation-based increase that took effect on January 1, 2017 was ~1.6%, with no adjustment made for 2018.

According to the latest available data from the EIA (as of 2016), even after sizable rate increases implemented HMPL's rates on a system wide basis were about 22% below the state average. However, the measured rate does not factor in the full annualized effects of the last 5% rate increase, which may diminish some of the sizable margin of advantage between HMPL and other electricity providers in Kentucky.

### LIQUIDITY

Days cash on hand for fiscal 2017 was 94 days compared to 94 days and 99 days in fiscal 2016 and 2015, respectively, reflecting consistent balancing of unrestricted investments and cash accounts relative to operating expenses during the three-year period. The three year average for adjusted days cash on hand of 96 days does not include any benefit from external bank credit facilities and places the metric within the lower third of the "A" range under the Rating methodology. In terms of actual unrestricted cash and discretionary funds, the balance for fiscal 2017 was about \$15.4 million, which is significant relative to fiscal 2017 total outstanding debt of \$12.04 million. The utility also has a power cost adjustment mechanism that allows for any unexpected increase in fuel or purchased power costs to pass-through automatically, thus avoiding calls on liquidity to address variable costs not already incorporated in the existing rate level.

### Debt and Other Liabilities

HMPL periodically issues revenue bonds to finance its capital programs, including maintenance of its electric system assets. HMPL's total long-term debt at fiscal 2017 was \$12.04 million of fixed rate level-amortizing long-term bonds, comprised of series 2011A and 2011B. The final maturity date of each of the amortizing Series A and Series B bonds is December 1, 2031. The bonds are secured by a pledge of a fixed portion of the gross income and revenues of HMPL's Retail System, and Station Two generating station. The bonds are also secured by a statutory mortgage lien on the System and a debt service reserve in an amount equal to the lesser of the standard three-pronged test: (i) the maximum annual debt service, (ii) 125% of the average annual debt service; or (iii) 10% of the proceeds of the bonds.

### DEBT STRUCTURE

HMPL currently relies solely on fixed-rate, long-term debt financing to match the long-lived nature of its assets. It is our understanding that HMPL has no plans for incremental debt in the next 12 to 18 months, and currently has no definite plans for any major maintenance or upgrades as its supply strategy is likely to shift to substantial dependence on power purchases to meet customers' demands for power when the operating agreement with BREC terminates. While current market prices for power are likely to benefit HMPL's power supply costs as it sheds the credit risks tied to extensive reliance on a competitively challenged coal-fired generation asset, an exclusive dependence on power purchases carries its own credit challenges owing to potential market price volatility.

Given no new debt issued in fiscal 2017 and no plans for incremental debt in the near future, we anticipate that HMPL's debt ratio will remain strong (e.g., averaged 13.0% during fiscal years 2015-17) and stood at about 13.4% at fiscal 2017.

**DEBT-RELATED DERIVATIVES**

None

**PENSIONS AND OPEB**

All employees participate in the County Employees Retirement System, which is a multi-employer defined benefit retirement plan sponsored by the City of Henderson and administered by the Commonwealth of KY. Depending on the date of hire, employees contribute 5% or 6% of their gross salary to the plan and HMPL also contributes a percentage of the employee's gross salary to the plan as determined annually by the Kentucky General Assembly. For fiscal May 31, 2017, contributions amounted to \$384,888 or 13.95% as compared to \$365,977 or 12.42% for fiscal 2016.

Moody's adjusted net pension liability (ANPL) for HMPL as of fiscal 2017 is approximately \$12.7 million, compared to its reported net pension liability of almost \$6.0 million. Under our adjustments, unfunded pension liabilities increase HMPL's debt ratio from 13.4% as of fiscal 2017 to an adjusted debt ratio of around 30.8%. Although considerably higher, the adjusted ratio is still well within the Aaa category for this metric under our Rating Methodology owing to HMPL's modest debt level currently outstanding.

Moody's adjusts the reported pension liabilities of entities that report under governmental accounting standards, to enhance comparability across rated issuers. Under governmental pension accounting, liabilities are discounted using the assumed rate of investment return on plan assets. Under our standard adjustments, we value liabilities completely independent of asset composition or return expectation, using a market based discount rate for high quality taxable bonds as a proxy for the risk of pension benefits.

**Management and Governance**

The City of Henderson Utility Commission is a component unit of the City of Henderson, Kentucky and is organized under the provisions of Section 96.530 of the Kentucky revised statutes to operate, manage, and control HMPL. The Mayor appoints the members of the Utility Commission, subject to approval by the City Commissioners of the City of Henderson, Kentucky. HMPL benefits from rate autonomy since the Mayor and the City Commission authorize all rates and bond issues of the Utility Commission. HMPL, as a municipal entity, is not subject to any federal and state income taxes.

**Other Considerations: Mapping to the Grid**

Moody's evaluates HMPL's credit quality relative to the U.S. Public Power Utilities with Generation Ownership exposure rating methodology. As depicted below, HMPL's grid indicated rating after notching is A3, one notch higher than the Baa1 rating for HMPL's revenue bonds, incorporating the fact that for most of fiscal 2019 there will be lingering multi-dimensional concentrated reliance on BREC, a speculative grade G&T cooperative, which for now remains HMPL's largest customer and the plant operator of HMPL's only generating asset. The notching differential also incorporates uncertainties surrounding impending changes to HMPL's generation supply. Such changes are likely to introduce exposure to market supply risks and replace HMPL's current exposure to sales and customer concentration risk relating to existing arrangements with BREC.

The grid is a reference tool that can be used to approximate credit profiles in the U.S. Public Power Electric Utility Industry in most cases. However, the grid is a summary that does not include every rating consideration. Please see U.S. Public Power Electric Utilities with Generation Ownership Exposure Rating Methodology for more information about the limitations inherent to grids.

Exhibit 3

## US Public Power Electric Utilities with Generation Ownership Exposure

Factor	Subfactor	Score	Metric
1. Cost Recovery Framework Within Service Territory		A	
2. Willingness and Ability to Recover Costs with Sound Financial Metrics		A	
3. Generation and Power Procurement Risk Exposure		B	
4. Competitiveness	Rate Competitiveness	A	
5. Financial Strength and Liquidity	a) Adjusted days liquidity on hand (3-year avg) (days)	A	96
	b) Debt ratio (3-year avg) (%)	Aaa	13%
	c) Adjusted Debt Service Coverage or Fixed Obligation Charge Coverage (3-year avg) (x)	Aaa	3.85x
<b>Preliminary Grid Indicated rating from Grid factors 1-5</b>		<b>A2</b>	
		<b>Notch</b>	
6. Operational Considerations		0	
7. Debt Structure and Reserves		0	
8. Revenue Stability and Diversity		-1	
<b>Grid Indicated Rating:</b>		<b>A3</b>	

Source: Moody's Investors Service

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**Rating Action: Moody's revises Henderson Municipal Power & Light (KY) outlook to positive; affirms revenue bonds at Baa2**

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Global Credit Research - 22 Sep 2017

New York, September 22, 2017 -- Summary Rating Rationale

Moody's Investors Service affirmed the Baa2 rating of approximately \$12.7 million of Henderson Municipal Power & Light, KY (HMPL) Electric System Revenue Bonds, 2011 A&B. Concurrently, Moody's revised the HMPL rating outlook to positive from stable.

The rating action for HMPL reflects the strengthening of its debt service coverage ratio (DSCR) achieved over fiscal years 2016-17 owing in large part to the successful implementation of four rate Increases, three of which were phased in during fiscal year ended May 31, 2016 and the fourth effective in the second quarter of fiscal 2017 (i.e., November 2016). These rate increases together with annual inflation-indexed rate adjustments each January, including a 1.6% increase effective January 1, 2017, should help sustain the DSCR at the strengthened level. The HMPL credit also benefits from the continued progress on load loss mitigation strategies being achieved by Big Rivers Electric Corp. (BREC, Ba2 positive), HMPL's largest customer and operator of its sole power plant. Notwithstanding BREC's progress, HMPL's credit is still constrained by a concentration of sales to the non-investment-grade rated electric generation and transmission (G&T) cooperative. Moreover, HMPL still faces the ongoing credit challenge of managing its single generation asset risk and controlling costs associated with an aging coal-fired plant. The utility's autonomous rate-setting ability, automatic fuel cost adjustment mechanism, competitive rates charged to end-use customers, and good liquidity relative to its outstanding debt are all credit positive characteristics which help balance out HMPL's credit risk profile.

**Rating Outlook**

The positive outlook reflects the City Council's approval of four 5% rate increases (July 2015, November 2015, May 2016 and November 2016) followed by annual inflation-indexed rate adjustments each January 1 effective with calendar year 2017, which bodes well for sustaining the noticeably stronger debt service coverage achieved for fiscal 2016-17. The positive rating outlook also reflects the positive direction of BREC's credit quality, which was recently revised to positive from stable outlook owing to its successful load concentration mitigation strategies and the expectation of improved financial metrics as new contracts for selling energy and capacity begin in 2018.

**Factors that Could Lead to an Upgrade**

If BREC's credit quality improves.

If HMPL's DSCR can be sustained at the recently strengthened levels

**Factors that Could Lead to a Downgrade**

If BREC's credit quality unexpectedly declines materially

If HMPL's adjusted days cash on hand declines below 90 days and/or DSCR falls significantly below current levels on a sustained basis

If cash flows decline due to loss of loads for commercial and industrial customers

**Legal Security**

The bonds are secured by a pledge of a fixed portion of the gross income and revenues of HMPL's Retail System, and Station Two generating station. The bonds are also secured by a statutory mortgage lien on the System and a debt service reserve in an amount equal to the lesser of the standard three-pronged test (i.e., (i) the maximum annual debt service, (ii) 125% of the average annual debt service; or (iii) 10% of the proceeds of the bonds.



## Use of Proceeds

N/A

## Obligor Profile

HMPL is a city-owned electric system that serves close to 12,000 customers in the City of Henderson, Kentucky (General Obligation Bonds rated Aa3), with about 86% of the customers in the residential class. The City of Henderson is located along the Ohio River, 10 miles south of Evansville, Indiana. Given the Ohio River's relatively inexpensive cost of distribution, the local economy is largely driven by agriculture, manufacturing and metal processing. The region produces a substantial amount of aluminum. Henderson County has a population of about 46,500 and resident wealth levels are below average as evidenced by a median family income level equivalent to about 70% of the US level. The city's November 2016 unemployment rate was 4.0% (2nd quartile).

## Methodology

The principal methodology used in this rating was US Public Power Electric Utilities With Generation Ownership Exposure published in March 2016. Please see the Rating Methodologies page on [www.moodys.com](http://www.moodys.com) for a copy of this methodology.

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**Rating Update: Moody's revises Henderson Municipal Power & Light (KY) outlook to stable; affirms revenue bonds at Baa2**

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Global Credit Research - 03 Jun 2015

**Approximately \$13.9 million of debt securities affected**

HENDERSON MUNICIPAL POWER & LIGHT, KY  
Electric Distribution and Generation  
KY

NEW YORK, June 03, 2015 --Moody's Investors Service today revised the rating outlook for Henderson Municipal Power & Light (KY) (HMPL) to stable from negative and concurrently affirmed the Baa2 rating of approximately \$13.9 million of HMPL's outstanding electric system revenue bonds

SUMMARY RATING RATIONALE

The rating action reflects the May 12, 2015 approval by the City Council of a series of rate increases to be phased in over the July 2015-November 2016 period which should help sustain the debt service coverage ratio (DSCR) at improved levels going forward. The rating action also reflects the good progress on load loss mitigation strategies being achieved by Big Rivers Electric Corp's (BREC, Ba2/stable), HMPL's largest customer and operator of its sole power plant. The rating action also considers HMPL's ongoing management of its single generation asset risk and maintenance costs associated with an aging plant not yet fully adapted for environmental requirements. The utility's autonomous rate-setting ability, automatic fuel cost adjustment mechanism, extremely competitive rates charged to end-use customers, and good liquidity relative to its outstanding debt are all additional credit positive characteristics of HMPL's credit risk profile.

OUTLOOK

The stable outlook reflects City Council approval for a steady stream of four 5% rate increases over the next 18 months, which bodes well for sustaining improved credit metrics going forward. The stable rating outlook also reflects the improved profile for BREC following reasonably supportive rate case decisions which, among other factors, led to our revision of BREC's rating outlook to stable from negative.

WHAT COULD MAKE THE RATING GO UP

In light of the concentration of exposure to BREC, prospects for the rating to be upgraded are constrained by BREC's credit quality. However, the rating could be upgraded over the intermediate term if the recently approved rate increases occur as planned over the next 18 months and result in stronger DSCR for a sustained period of time. The rating could also be upgraded if BREC's rating level improves.

WHAT COULD MAKE THE RATING GO DOWN

The rating could be revised downward if HMPL's DSCR and/or adjusted days cash on hand fall below current levels on a sustained basis; if cash flows decline due to loss of loads for commercial and industrial customers, if the proposed rate increases envisioned over the next 18 months are not implemented as approved, or if BREC's credit quality declines materially.

STRENGTHS

- Autonomous rate setting authority and planned series of rate increases
- Automatic fuel cost adjustment mechanism
- Competitive rates that are currently well below the state's average
- Low leverage as measured by HMPL's 13% debt ratio at FYE 2014
- Good liquidity relative to total debt outstanding

## CHALLENGES

- Single asset risk
- Heavy commercial and industrial load
- Significant dependence on coal-based generation with exposure to future costs of complying with EPA proposed regulations
- Credit challenges for largest customer representing approximately 63% of Station Two's electricity capacity and close to 40% of total revenues

## RECENT DEVELOPMENTS

Recent developments are incorporated in the Detailed Rating Rationale

## DETAILED RATING RATIONALE

### REVENUE GENERATING BASE: CONCENTRATION RISK FROM SINGLE PLANT, FUEL SOURCE, AS WELL AS CUSTOMER CONCENTRATION

Virtually 100% of the utility's generation comes from one coal-fired plant; namely the 312 MW Station Two generating station (Station Two), which was placed into service in the early 1970's. This single asset risk, coupled with significant carbon-exposure in the face of expected CO2 regulations, is further complicated by the fact that a substantial portion of the energy and capacity from Station Two is sold to one off-taker, BREC, a Henderson, Kentucky-based electric generation and transmission (G&T) cooperative.

The plant is owned by the city of Henderson but operated by BREC. Under the Operating Agreement, each party separately pays the variable costs of its fuel and re-agents. BREC pays the remaining costs of operating and maintaining Station Two and is reimbursed by HMPL for its share of those costs. Under the agreement, BREC prepares an annual budget each year which, upon the approval by HMPL's Commissioners, governs billings and payments for that contract year. The parties, then, "true-up" the variances between the budgeted and actual amounts after the annual audit of accounts for each contract year. Additionally, as Station Two is HMPL's only source of generation, HMPL is exposed to both single plant risk but also related operator risk given the speculative grade nature of BREC, the operator.

Under the Power Sales Contract with BREC, HMPL provides the cooperative, every year, with its five years' advance written notice of capacity it reserves out of the Station Two's total capacity, and BREC, in turn, takes the remaining capacity. Currently, HMPL takes about 37% (115MW) of the total capacity, and has the right to increase or decrease its share by 5 MWs annually (the maximum incremental capacity HMPL is entitled to change each year under the Power Sales Contract), in order to meet its peak summer demand. Under this contract, BREC is responsible to pay HMPL for its allocated capacity on a "take-or-pay" basis, where the price BREC pays is based on the total cost of purchasing, acquiring, constructing, operating, maintaining, renewing and expanding Station Two, and where the "capacity costs" are fixed and do not vary with the energy generated because the cost of fuel and re-agent used by each party in the energy generated by Station Two are paid separately by the two entities.

HMPL's sales to BREC represented approximately 37% of its total revenues in FY 2014 compared to almost 40% in FY 2013. We consider the concentration and dependence on this one customer to be a credit weakness for HMPL. Furthermore, HMPL's rating reflects significant exposure to potential volatility in its cash flow associated with electricity sales to commercial and industrial customers. Over the last several fiscal years, the top three customers constituted about 28% of total revenues excluding the revenues from BREC. Since approximately 65% of HMPL's total revenues come from four customers, HMPL's revenues and cash flow are exposed to year-over-year volatility, in the event that capacity payments from BREC or loads served for these large commercial and industrial customers decline.

Since Station Two is its only source of generation, HMPL faces credit risk due to its exposure to future costs of compliance with EPA proposed regulations intended to address carbon emissions. Currently, Station Two is not fully equipped to comply with such proposed regulations, although it does have equipment for SOx and NOx control. In Moody's view, HMPL's current low leverage and competitive rates profile provide a reasonable amount of flexibility to absorb some new debt financing if necessary to fund environmental mitigation investments and ensure compliance with future regulations. That said, we also note that Station Two is a relatively old asset and that the utility previously chose to shut down Station One because of the high costs of complying with

environmental regulations.

## LARGEST CUSTOMER IS COPING WITH CREDIT CHALLENGES

BREC is facing credit challenges while it implements load concentration mitigation plans following significant load loss since two aluminum smelters being served by BREC's largest member owner, Kenergy Corp., terminated their respective power purchase contracts, in the first instance effective August 20, 2013 and the second effective January 31, 2014. That said, BREC is benefitting from significant rate increases approved by the Kentucky Public Service Commission (KPSC) during 2013 and 2014 and other mitigation steps to compensate for the load loss and to maintain viable financial performance. Please see Issuer Comment: Big Rivers Electric Corporation - Credit Opinion dated August 5, 2014 for further details.

As noted above, BREC and HMPL have several agreements dating as far back as 1970, including an operating and a power sales agreement with respect to Station Two. Although BREC remains the operator of the power plant and faces some credit challenges, HMPL does not anticipate any immediate impact to their operation as long as BREC is able to successfully operate the plant and fulfill its obligations under the power sales agreement.

## FINANCIAL OPERATIONS AND POSITION: COST MANAGEMENT AND RATE INCREASES SHOULD SUPPORT FINANCIAL PERFORMANCE

HMPL's financial performance improved in FY 2014 as reduced operating and maintenance costs exclusive of depreciation and amortization costs were more than sufficient to offset lower operating revenues due to reduced sales to customers. As such, we calculate that HMPL's DSCR improved to 2.53 times for FY 2014, compared to 1.38 times for FY 2013. When looking at DSCR for HMPL we include transfers to the City as part of the operating expenses. Such transfers by HMPL have been manageable for a utility of its size, representing just over 3% of revenues on average for the past several years and we do not anticipate any material change in the future. Historically, HMPL's DSCR had been declining for several years, as operating expense growth outpacing revenue growth owing primarily to higher maintenance costs associated with an older plant and limited demand growth as well as current rates not fully incorporating, debt amortization costs which began during the second half of FY 2013).

Going forward, we expect HMPL's DSCR will be supported by the implementation of rate increases (i.e. about 5% each at four separate intervals effective July 1, 2015; November 1, 2015; May 1, 2016; and November 1, 2016). Beyond the aggregate 20% rate increase that would occur over that time frame, HMPL now also has approval to implement inflation-indexed rate adjustments on an annual basis beginning January 1, 2017. Overall, we view HMPL's rate strategy to be credit positive and a key factor in the revised stable outlook, especially considering its strong competitive starting point, with rates on a system wide basis about 24% below the state average, according to latest data available from the EIA.

### Liquidity

Days cash on hand as of FY 2014 was 125 days compared to 112 days and 116 days in FY 2013 and 2012, respectively. The three year average for adjusted days cash on hand of 118 days does not include any benefit from external bank credit facilities and places that metric at about the midpoint of the "A" range under the Rating Methodology. In terms of actual unrestricted cash and discretionary funds, the balance at FY 2014 was about \$19.2 million, which is material relative to total outstanding debt of \$13.9 million. Further, HMPL has long-term coal contracts which should continue to support competitive costs for its customers' power supplies. The utility also has a power cost adjustment mechanism that allows for increased fuel or purchased power costs to pass-through automatically, thus avoiding calls on liquidity to address variable costs not already incorporated in the existing rate level.

## DEBT AND OTHER LIABILITIES

HMPL periodically issues revenue bonds to finance its capital programs, including maintenance of its electric system assets. HMPL's total long-term debt at fiscal year-end May 31, 2014 was \$13.865 million of fixed rate amortizing long-term bonds, comprised of two series (e.g. series 2011A and 2011B).

### Debt Structure

HMPL currently relies solely on fixed-rate, long-term debt financing to match the long-lived nature of its assets.

According to management, HMPL has no plans for additional debt in the next 12 to 18 months, and at this time has no definite plans for any major maintenance or upgrades to comply with new environmental regulations at Station

Two Plant. Moody's views negatively the strong reliance on an aging coal power plant which may require significant and costly upgrades. HMPL's credit quality could be negatively affected depending on the manner in which such capital requirements are financed, should they materialize. Given no plans for additional debt in the near future, HMPL's debt ratio should not change in any material way (e.g., averaged 15.3% during fiscal years 2012-2014) and stood at about 13% at FYE May 31, 2014.

#### Debt-Related Derivatives

None

#### Pensions and OPEB

All employees participate in the County Employees Retirement System, which is a multi-employer defined benefit retirement plan sponsored by the City of Henderson and administered by the Commonwealth of KY. Depending on the date of hire, employees contribute 5% or 6% of their gross salary to the plan and HMPL also contributes a percentage of the employee's gross salary to the plan as determined annually by the Kentucky General Assembly. For fiscal year ended May 31, 2014, contributions amounted to \$536,125 or 18.89% as compared to \$539,503 or 19.55% in fiscal year ended May 31, 2013.

#### MANAGEMENT AND GOVERNANCE

The City of Henderson Utility Commission is a component unit of the City of Henderson, Kentucky and is organized under the provisions of Section 96.530 of the Kentucky revised statutes to operate, manage, and control HMPL. The Mayor appoints the members of the Utility Commission, subject to approval by the City Commissioners of the City of Henderson, Kentucky. HMPL benefits from rate autonomy since the Mayor and the City Commission authorize all rates and bond issues of the Utility Commission. HMPL, as a municipal entity, is not subject to any federal and state income taxes.

#### KEY STATISTICS

##### DEBT OUTSTANDING (as of May 31, 2014)

Electric System Revenue Bonds Series 2011 A - \$10.495 million

Electric System Revenue Bonds Series 2011 B - \$3.370 million

- Adjusted days liquidity: (2014) 125 days; (2013) 112 days; (2012) 116 days)

- Debt ratio: (2014) 13%; (2013) 16.2%; (2012) 16.7%

- Adjusted Debt Service Coverage: (2014) 2.53 times; (2013) 1.38 times; (2012) 6.76 times

#### OBLIGOR PROFILE

HMPL is a city-owned electric system that serves close to 12,000 customers in the City of Henderson, Kentucky (General Obligation Bonds rated Aa3), with about 85% of the customers in the residential class. The City of Henderson is located along the Ohio River, 10 miles south of Evansville, Indiana (General Obligation Bonds rated A1/STA). Given the Ohio River's relatively inexpensive cost of distribution, the local economy is largely driven by agriculture, manufacturing and metal processing. The region produces a substantial amount of aluminum.

The city's population as of the 2010 U.S. Census totaled 28,757 residents, which reflects a 5.1% increase from the previous census period. Resident wealth levels are below average as evidenced by a median family income level equivalent to 74.2% of the US average. The city's June 2014 unemployment rate of 6.7% was average relative to state (7.4%) and national (6.3%) unemployment rates for the same time. Property taxpayer concentration is limited, as top taxpayers accounted for a modest 5.9% of fiscal 2014 values.

#### LEGAL SECURITY

The bonds are secured by a pledge of a fixed portion of the gross income and revenues of HMPL's Retail System, and Station Two generating station. The bonds are also secured by a statutory mortgage lien on the System and a debt service reserve in an amount equal to the lesser of the standard three-pronged test (i.e., (i) the maximum annual debt service, (ii) 125% of the average annual debt service; or (iii) 10% of the proceeds of the bonds.

USE OF PROCEEDS: Not applicable

## OTHER CONSIDERATIONS: Mapping to the Grid

Moody's evaluates HMPL under the U.S. Public Power Electric Utilities with Generation Ownership Exposure Rating Methodology, and HMPL's grid indicated rating under the below depicted grid is Baa1 one notch higher than the Baa2 rating for HMPL's revenue bonds, incorporating in large part the multi-dimensioned concentrated reliance on BREC, a speculative grade G&T cooperative, who is HMPL's largest customer and the plant operator on HMPL's only generating asset.

The grid is a reference tool that can be used to approximate credit profiles in the U.S. Public Power Electric Utility Industry in most cases. However, the grid is a summary that does not include every rating consideration. Please see U.S. Public Power Electric Utilities with Generation Ownership Exposure Rating Methodology for more information about the limitations inherent to grids.

## RATING METHODOLOGY: U.S. Public Power Electric Utilities with Generation Ownership Exposure

Factor 1: Cost Recovery Framework Within Service Territory - A

Factor 2: Willingness to Recover Costs With Sound Financial Metrics - Baa

Factor 3: Management of Generation Risk - Ba

Factor 4: Competitiveness - Aa (24% below the state average on a system basis)

Factor 5a: Financial Strength - Adjusted days liquidity on hand - A(3-year average is 118 days)

Factor 5b: Financial Strength - Debt Ratio - Aaa (3-year average is 15.3%)

Factor 5c: Financial Strength - Adjusted Debt Service Coverage - A (2-year average is 1.95 times)

Grid Indicated rating (prior to notching): A3

Other Notching Factors:

-0.5 (customer concentration)

-0.5 (weak off-taker and operator credit quality)

Grid Indicated rating (after notching): Baa1

Key Contact: Barbara Moll, Comptroller (270) 631-0639

The principal methodology used in this rating was U.S. Public Power Electric Utilities with Generation Ownership Exposure published in November 2011. Please see the Credit Policy page on [www.moody.com](http://www.moody.com) for a copy of this methodology.

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## CREDIT OPINION

9 August 2016

Update

Rate this Research >>

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## Henderson Municipal Power & Light, KY

Moody's maintains Baa2 on Henderson Municipal Power & Light, (KY) Electric System Revenue Bonds; Outlook Stable

### Summary Rating Rationale

Moody's Investors Service maintains a Baa2 rating on Henderson Municipal Power & Light, KY (HMPL) Electric System Revenue Bonds. The outlook is stable.

The Baa2 rating reflects the successful implementation of three previously planned rate increases which were phased in during FY ended May 31, 2016, with one more approved for FY 2017 (i.e., effective November 2016), which together with annual inflation-indexed rate increases beginning January 1, 2017 should help sustain the debt service coverage ratio (DSCR) at increased levels for FY 2016 and going forward. The rating also incorporates the continued progress on load loss mitigation strategies being achieved by Big Rivers Electric Corp's (BREC, Ba2, stable), HMPL's largest customer and operator of its sole power plant. Notwithstanding BREC's progress, HMPL's rating is constrained by a concentration of sales to the non-investment-grade rated electric generation and transmission cooperative. Moreover, the rating also considers HMPL's ongoing challenge of managing its single generation asset risk and controlling costs associated with an aging plant not yet fully adapted for environmental requirements. The utility's autonomous rate-setting ability, automatic fuel cost adjustment mechanism, competitive rates charged to end-use customers, and good liquidity relative to its outstanding debt are all credit positive characteristics which help balance out HMPL's credit risk profile.

### Credit Strengths

- » Utilization of autonomous rate setting authority to implement a series of rate increases to be completed by the end of 2016 and followed by annual inflation-indexed rate adjustments effective January 1, 2017
- » Automatic fuel cost adjustment mechanism to support timely recovery of variable costs
- » Competitive rates that are below the state's average
- » Low leverage as measured by HMPL's 13% debt ratio in FY 2015
- » Adequate liquidity relative to total debt outstanding

### Credit Challenges

- » Single generation asset risk
- » High percentage of load concentrated in commercial and industrial sectors

**Case No. 2019-00269**  
**Attachment 1 to BREC 1-33**

- » Significant dependence on coal-based generation with exposure to future costs of complying with EPA proposed regulations
- » Credit challenges for largest customer, BREC, representing approximately 61% of Station Two's electricity capacity and close to 40% of total revenues

## Rating Outlook

The stable outlook reflects City Council approval of four 5% rate increases (July 2015, November 2015, May 2016, November 2016) and annual inflation-indexed rate adjustments beginning January 1, 2017, which bodes well for supporting stronger credit metrics going forward. The stable rating outlook also reflects the stable rating outlook for BREC following supportive rate case decisions, and the cooperative's success in selling its excess capacity under short and medium-term arrangements, while also contracting for long-term sales scheduled to begin in 2018 and 2019.

## Factors that Could Lead to an Upgrade

- » If BREC's credit quality improves
- » If, in the intermediate term, the aforementioned rate increases result in a stronger debt service coverage ratio (DSCR) on a sustained basis

## Factors that Could Lead to a Downgrade

- » If BREC's credit quality declines materially
- » If HMPL's DSCR and/or adjusted days cash on hand fall below current levels on a sustained basis
- » If cash flows decline due to loss of loads for commercial and industrial customers

## Key Indicators

Exhibit 1

Henderson Municipal Power & Light, KY					
	2011	2012	2013	2014	2015
Debt Outstanding (\$'000)	7,976	15,020	14,450	13,865	13,270
Debt Ratio (%)	9.2	16.7	16.2	13.0	13.0
Total Days Cash on Hand (days)	148	116	112	125	99
Adjusted Days Liquidity on Hand (incl. Bank Lines)(days)	148	116	112	125	99
Adjusted Debt Service Coverage (x) (Post Transfers/PILOTS - All Debt)	14.67	6.76	1.38	2.53	1.63
Fixed Obligation Charge Coverage (if applicable)(x)	14.67	6.76	1.38	2.53	1.63

Source: Moody's Investors Service

## Recent Developments

Although management indicates that the effects of weather and customer usage efficiency steps are resulting in lower sales volumes, operating revenues for the eleven months ending April 30, 2016 (representing unaudited results for the first eleven months of FY 2016) increased 4% as a result of the rate increases implemented throughout the period. Operating expenses over the same period remained flat. Moody's expects that HMPL will have a positive margin for FY 2016 before governmental transfers and decrease its net loss after governmental transfers by 50%. These results demonstrate the positive effects the phased-in rate increases are already having on HMPL's financial performance. The already implemented rate increases, the one still planned for November 2016, and flexibility to adjust rates annually under an inflation-indexed approach beginning January 1, 2017 are expected to support stronger financial metrics going forward.

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After ten years as HMPL's General Manager (GM), Gary Quick, announced his plans to retire earlier this year. Although the original plan called for the retirement to take effect on July 1, 2016, the effective date has been extended until the end of 2016 to allow HMPL more time to complete its ongoing search process to hire a successor to the GM position.

## Detailed Rating Considerations

### REVENUE GENERATING BASE

#### CONCENTRATION RISK FROM SINGLE PLANT, FUEL SOURCE, AS WELL AS CUSTOMER CONCENTRATION

Virtually 100% of the utility's generation comes from one coal-fired plant, the 312 MW Station Two generating station (Station Two), which was placed into service in the early 1970's. This single asset risk, coupled with significant carbon-exposure while awaiting the outcome of the pending Supreme Court stay of the Clean Power Plan (CPP), is further complicated by the fact that a substantial portion of the energy and capacity from Station Two is sold to one off-taker, BREC, a Henderson, Kentucky-based electric generation and transmission (G&T) cooperative.

The plant is owned by the city of Henderson but operated by BREC. Under the Operating Agreement, each party separately pays the variable costs of its fuel and re-agents. BREC pays the remaining costs of operating and maintaining Station Two and is reimbursed by HMPL for its share of those costs. Under the agreement, BREC prepares an annual budget each year which, upon the approval by HMPL's Commissioners, governs billings and payments for that contract year. The parties then "true-up" the variances between the budgeted and actual amounts after the annual audit of accounts for each contract year. Additionally, as Station Two is HMPL's only source of generation, HMPL is exposed not only to single plant risk but also related operator risk given the speculative grade credit quality of the operator, BREC.

Under the Power Sales Contract with BREC, HMPL provides the cooperative, every year, with its five years' advance written notice of capacity it reserves out of the Station Two's total capacity, and BREC, in turn, takes the remaining capacity. Currently, HMPL takes about 37% (115 MW) of the total capacity, and has the right to increase or decrease its share by 5 MW annually (the maximum incremental capacity HMPL is entitled to change each year under the Power Sales Contract), in order to meet its peak summer demand. Under this contract, BREC is responsible to pay HMPL for its allocated capacity on a "take-or-pay" basis, where the price BREC pays is based on the total cost of purchasing, acquiring, constructing, operating, maintaining, renewing and expanding Station Two, and where the "capacity costs" are fixed and do not vary with the energy generated because the cost of fuel and re-agent used by each party in the energy generated by Station Two are paid separately by the two entities.

HMPL's sales to BREC represented approximately 38% of its total revenues in FY 2015 compared to 37% in FY 2014. We consider the concentration and dependence on this one customer to be a credit weakness for HMPL. Furthermore, HMPL's rating reflects significant exposure to potential volatility in its cash flow associated with electricity sales to commercial and industrial customers. Over the last several fiscal years, the top three customers constituted about 31% of total revenues excluding the revenues from BREC. Since approximately two-thirds of HMPL's total revenues come from four customers, HMPL's revenues and cash flow are exposed to year-over-year volatility, in the event that capacity payments from BREC or loads served for these large commercial and industrial customers decline.

Since Station Two is its only source of generation, HMPL faces credit risk due to its exposure to future costs of compliance with EPA existing and/or future regulations intended to address carbon emissions. Currently, Station Two is not fully equipped to comply with such proposed regulations under the CPP, although it does have equipment for SO<sub>x</sub> and NO<sub>x</sub> control. In Moody's view, HMPL's current low leverage and competitive rates profile provide a reasonable amount of flexibility to absorb some new debt financing if necessary to fund environmental mitigation investments and ensure compliance with future regulations. That said, we also note that Station Two is a relatively old asset and that the utility previously chose to shut down Station One because of the high costs of complying with environmental regulations.

#### LARGEST CUSTOMER IS COPING WITH CREDIT CHALLENGES

BREC is facing credit challenges while it implements load mitigation plans following significant load loss since two aluminum smelters being served by BREC's largest member owner, Kenergy Corp., terminated their respective power purchase contracts, in the first instance effective August 20, 2013 and the second effective January 31, 2014. That said, BREC is benefitting from significant rate increases approved by the Kentucky Public Service Commission (KPSC) during 2013 and 2014 and other mitigation steps to

compensate for the load loss and to maintain viable financial performance. Please see Big Rivers Electric Corporation: Credit Opinion dated August 8, 2016 for further details.

As noted above, BREC and HMPL have several agreements dating as far back as 1970, including an operating and a power sales agreement with respect to Station Two. Although BREC remains the operator of the power plant and faces some credit challenges, HMPL does not anticipate any immediate impact to their operation as long as BREC is able to successfully operate the plant and fulfill its obligations under the power sales agreement.

## FINANCIAL OPERATIONS AND POSITION

### COST MANAGEMENT AND RATE INCREASES SHOULD SUPPORT FINANCIAL PERFORMANCE

HMPL's financial position weakened slightly in FY 2015 as operating expenses excluding depreciation grew 2.3% to \$62.4 million from \$61.1 million in FY 2014, outpacing operating revenue growth which increased 0.6% to \$61.1 million, compared to \$60.8 million in the previous fiscal year. As such, we calculate that HMPL's DSCR declined to 1.63x for FY 2015, compared to 2.53x for FY 2014. When calculating the DSCR for HMPL we include transfers to the City as part of the operating expenses. Such transfers by HMPL have been manageable for a utility of its size, representing just over 3% of revenues on average for the past several years and we do not anticipate any material change in the future.

We do not consider the dip in HMPL's DSCR for FY 2015 to be an undue credit risk because we expect HMPL's DSCR will show a rebound in FY 2016, owing to the implementation of three rate increases which were phased in (i.e. about 5% each at three separate intervals that became effective July 1, 2015; November 1, 2015; May 1, 2016). We expect the stronger levels to be sustainable because one more approximate 5% rate increase has been approved to be effective November 1, 2016. Moreover, HMPL's future financial performance will not only benefit from the aggregate 20% rate increase, but also from approvals to implement inflation-indexed rate adjustments on an annual basis beginning January 1, 2017. Overall, we view HMPL's rate strategy to be credit positive, especially since the strategy started from a strong competitive position. According to the latest available data from the EIA, HMPL's rates on a system wide basis were about 31% below the state average. However, the measured rate does not factor in the recently implemented 20% aggregate rate increases, undoubtedly diminishing some of the previously sizable margin of advantage between HMPL and other electricity providers in Kentucky.

### LIQUIDITY

Days cash on hand as of FY 2015 was 99 days compared to 125 days and 112 days in FY 2014 and 2013, respectively. The three year average for adjusted days cash on hand of 112 days does not include any benefit from external bank credit facilities and places that metric within the lower half of the "A" range under the Rating Methodology. The decrease in liquidity for FY 2015 is primarily due to an increase in operating expenses of approximately \$1 million and a \$900,000 increase in capex compared to the previous fiscal year. In terms of actual unrestricted cash and discretionary funds, the balance at FYE 2015 was about \$15.6 million, which is material relative to FYE 2015 total outstanding debt of \$13.2 million. Further, HMPL has long-term coal contracts which should continue to support competitive costs for its customers' power supplies. The utility also has a power cost adjustment mechanism that allows for increased fuel or purchased power costs to pass-through automatically, thus avoiding calls on liquidity to address variable costs not already incorporated in the existing rate level.

### DEBT AND OTHER LIABILITIES

HMPL periodically issues revenue bonds to finance its capital programs, including maintenance of its electric system assets. HMPL's total long-term debt at FYE May 31, 2015 was \$13.3 million of fixed rate amortizing long-term bonds, comprised of two series (e.g. series 2011A and 2011B). The final maturity date of each of the amortizing Series A and Series B bonds is December 1, 2031.

### DEBT STRUCTURE

HMPL currently relies solely on fixed-rate, long-term debt financing to match the long-lived nature of its assets.

According to management, HMPL has no plans for additional debt in the next 12 to 18 months, and at this time has no definite plans for any major maintenance or upgrades to comply with new environmental regulations at Station Two Plant. Moody's views negatively the strong reliance on an aging coal power plant which may require significant and costly upgrades. HMPL's credit quality could be negatively affected depending on the manner in which such capital requirements are financed, should they materialize. Given no plans

for additional debt in the near future, HMPL's debt ratio should not change in any material way (e.g., averaged 14.1% during fiscal years 2013-2015) and stood at about 13% at FYE May 31, 2015.

#### DEBT-RELATED DERIVATIVES

None

#### PENSIONS AND OPEB

All employees participate in the County Employees Retirement System, which is a multi-employer defined benefit retirement plan sponsored by the City of Henderson and administered by the Commonwealth of KY. Depending on the date of hire, employees contribute 5% or 6% of their gross salary to the plan and HMPL also contributes a percentage of the employee's gross salary to the plan as determined annually by the Kentucky General Assembly. For FYE May 31, 2015, contributions amounted to \$519,661 or 17.67% as compared to \$536,125 or 18.89% in FYE May 31, 2014.

#### MANAGEMENT AND GOVERNANCE

The City of Henderson Utility Commission is a component unit of the City of Henderson, Kentucky and is organized under the provisions of Section 96.530 of the Kentucky revised statutes to operate, manage, and control HMPL. The Mayor appoints the members of the Utility Commission, subject to approval by the City Commissioners of the City of Henderson, Kentucky. HMPL benefits from rate autonomy since the Mayor and the City Commission authorize all rates and bond issues of the Utility Commission. HMPL, as a municipal entity, is not subject to any federal and state income taxes.

#### Legal Security

The bonds are secured by a pledge of a fixed portion of the gross income and revenues of HMPL's Retail System, and Station Two generating station. The bonds are also secured by a statutory mortgage lien on the System and a debt service reserve in an amount equal to the lesser of the standard three-pronged test (i.e., (i) the maximum annual debt service, (ii) 125% of the average annual debt service; or (iii) 10% of the proceeds of the bonds.

#### Use of Proceeds

N/A

#### Obligor Profile

HMPL is a city-owned electric system that serves close to 12,000 customers in the City of Henderson, Kentucky (General Obligation Bonds rated Aa3), with about 85% of the customers in the residential class. The City of Henderson is located along the Ohio River, 10 miles south of Evansville, Indiana (General Obligation Bonds rated A1/STA). Given the Ohio River's relatively inexpensive cost of distribution, the local economy is largely driven by agriculture, manufacturing and metal processing. The region produces a substantial amount of aluminum.

The city's population as of the 2010 U.S. Census totaled 28,757 residents, which reflects a 5.1% increase from the previous census period. Resident wealth levels are below average as evidenced by a median family income level equivalent to 72.2% of the US average. The city's April 2016 unemployment rate of 4.8% was average relative to state (4.6%) and national (4.7%) unemployment rates for the same time. Property taxpayer concentration is limited, as top taxpayers accounted for a modest 5.9% of fiscal 2014 values.

#### Methodology

##### OTHER CONSIDERATIONS: MAPPING TO THE GRID

Moody's evaluates HMPL under the U.S. Public Power Electric Utilities with Generation Ownership Exposure Rating Methodology. HMPL's grid indicated rating after notching under the below depicted grid is Baa1, one notch higher than the Baa2 rating for HMPL's revenue bonds, incorporating in large part the multi-dimensional concentrated reliance on BREC, a speculative grade G&T cooperative, which is HMPL's largest customer and the plant operator of HMPL's only generating asset.

The grid is a reference tool that can be used to approximate credit profiles in the U.S. Public Power Electric Utility Industry in most cases. However, the grid is a summary that does not include every rating consideration. Please see U.S. Public Power Electric Utilities with Generation Ownership Exposure Rating Methodology for more information about the limitations inherent to grids.



Exhibit 2

**US Public Power Electric Utilities With Generation Ownership Exposure**

Factor	Subfactor/Description	Weight	Score	Metric
1. Cost Recovery Framework Within Service Territory	Monopoly with unregulated rate setting. Service area characteristics-GO rating. Customer base stability	25%	A	
2. Willingness and Ability to Recover Costs with Sound Financial Metrics	Rate Setting Record. Timeliness of recovery. Political Risk. Local Government Supportiveness. General fund transfer policy	25%	Baa	
3. Generation and Power Procurement Risk Exposure	Diversity of Supply. Reliability and cost of supply & distribution	10%	Ba	
4. Competitiveness	Rate Competitiveness (compared to state average)	10%	Aa	
5. Financial Strength	a) Adjusted days liquidity on hand (3-year avg) (days)	10%	A	112
	b) Debt ratio (3-year avg) (%)	10%	Aaa	14%
	c) Adjusted Debt Service Coverage or Fixed Obligation Charge Coverage (3-year avg) (x)	10%	A	1.85x
<b>Grid Indicated Rating Before Notching</b>			<b>A3</b>	
Additional Factors			Notch	
6. Operational Considerations	Construction risk, whether the utility is a vital service provider		0	
7. Debt Structure and Reserves	Debt service reserves, special borrowing arrangements and debt structure		0	
8. Revenue Stability and Diversity	Exposure to wholesale power markets, customer concentration, diversity from combined utility operations		-1	
<b>Grid Indicated Rating After Notching:</b>			<b>Baa1</b>	

Source: Moody's Investors Service

**RATINGS****ELECTRIC SYSTEM REVENUE BONDS SERIES 2011A**

Rating	Baa2
Outlook	stable

**ELECTRIC SYSTEM REVENUE BONDS SERIES 2011B**

Rating	Baa2
Outlook	stable

Source: Moody's Investors Service

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REPORT NUMBER 1027779

## CREDIT OPINION

22 September 2017

Update

Rate this Research >>

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## Henderson Municipal Power & Light, KY

Update - Moody's revises Henderson Municipal Power & Light (KY) outlook to positive; affirms revenue bonds at Baa2

### Summary Rating Rationale

Moody's Investors Service affirmed the Baa2 rating of approximately \$12.7 million of Henderson Municipal Power & Light, KY (HMPL) Electric System Revenue Bonds, 2011 A&B. Concurrently, Moody's revised the HMPL rating outlook to positive from stable.

The rating action for HMPL reflects the strengthening of its debt service coverage ratio (DSCR) achieved over fiscal years 2016-17 owing in large part to the successful implementation of four rate Increases, three of which were phased in during fiscal year ended May 31, 2016 and the fourth effective in the second quarter of fiscal 2017 (i.e., November 2016). These rate increases together with annual inflation-indexed rate adjustments each January, including a 1.6% increase effective January 1, 2017, should help sustain the DSCR at the strengthened level. The HMPL credit also benefits from the continued progress on load loss mitigation strategies being achieved by [Big Rivers Electric Corp.](#) (BREC, Ba2 positive), HMPL's largest customer and operator of its sole power plant. Notwithstanding BREC's progress, HMPL's credit is still constrained by a concentration of sales to the non-investment-grade rated electric generation and transmission (G&T) cooperative. Moreover, HMPL still faces the ongoing credit challenge of managing its single generation asset risk and controlling costs associated with an aging coal-fired plant. The utility's autonomous rate-setting ability, automatic fuel cost adjustment mechanism, competitive rates charged to end-use customers, and good liquidity relative to its outstanding debt are all credit positive characteristics which help balance out HMPL's credit risk profile.

### Credit Strengths

- » Use of autonomous rate setting authority during fiscal years 2016-17, now followed by annual inflation-indexed rate adjustments to be implemented effective each January 1
- » Automatic fuel cost adjustment mechanism to support timely recovery of variable costs
- » Historically competitive rates below the KY state average
- » Low leverage as measured by HMPL's 12.6% debt ratio for fiscal 2016
- » Adequate liquidity relative to total debt outstanding

### Credit Challenges

- » Single generation asset risk
- » High percentage of load concentrated in commercial and industrial sectors

**Case No. 2019-00269**  
**Attachment 1 to BREC 1-33**

- » Significant dependence on coal-based generation with exposure to costs of complying with any future carbon regulations
- » Credit challenges for largest customer, BREC, representing approximately 61% of Station two's electric capacity and over 30% of total revenues for the past several years

## Rating Outlook

The positive outlook reflects the City Council's approval of four 5% rate increases (July 2015, November 2015, May 2016 and November 2016) followed by annual inflation-indexed rate adjustments each January 1 effective with calendar year 2017, which bodes well for sustaining the noticeably stronger debt service coverage achieved for fiscal 2016-17. The positive rating outlook also reflects the positive direction of BREC's credit quality, which was recently revised to positive from stable outlook owing to its successful load concentration mitigation strategies and the expectation of improved financial metrics as new contracts for selling energy and capacity begin in 2018.

## Factors that Could Lead to an Upgrade

- » If BREC's credit quality improves.
- » If HMPL's DSCR can be sustained at the recently strengthened levels

## Factors that Could Lead to a Downgrade

- » If BREC's credit quality unexpectedly declines materially
- » If HMPL's adjusted days cash on hand declines below 90 days and/or DSCR falls significantly below current levels on a sustained basis
- » If cash flows decline due to loss of loads for commercial and industrial customers

## Key indicators

Exhibit 1

### Henderson Municipal Power & Light, KY

	2012	2013	2014	2015	2016
Total Sales (mWh)	587,701	641,606	632,806	633,063	581,008
Debt Outstanding (\$'000)	15,020	14,450	13,865	13,270	12,660
Debt Ratio (%)	16.7	16.2	13.2	13.1	12.6
Adjusted Days Liquidity on Hand (incl. Bank Lines)(days)	116	112	125	99	94
Fixed Obligation Charge Coverage (if applicable)(x)	6.76	1.38	2.53	1.63	4.76

Source: Moody's Investors Service

## Recent Developments

Recent Developments are incorporated into the Detailed Rating Considerations

## Detailed Rating Considerations

### Revenue Generating Base

CONCENTRATION RISK FROM SINGLE PLANT, FUEL SOURCE, AS WELL AS CUSTOMER CONCENTRATION

Virtually 100% of the utility's generation comes from one coal-fired plant, the 312 megawatts (MWs) Station Two generating station (Station Two), which was placed into service in the early 1970's. This single asset risk, coupled with the risk of uncertain future costs

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to comply with any new regulations to curb carbon emissions, is further complicated by the fact that a substantial portion of the energy and capacity from Station Two is sold to one off-taker, BREC, a Henderson, Kentucky-based electric G&T cooperative. The plant is owned by the city of Henderson but operated by BREC. Under the Operating Agreement, each party separately pays the variable costs of its fuel and re-agents. BREC pays the remaining costs of operating and maintaining Station Two and is reimbursed by HMPL for its share of those costs. Under the agreement, BREC prepares an annual budget each year which, upon the approval by HMPL's Commissioners, governs billings and payments for that contract year. The parties then "true-up" the variances between the budgeted and actual amounts after the annual audit of accounts for each contract year. Additionally, as Station Two is HMPL's only source of generation, HMPL is exposed not only to single plant risk but also related operator risk given the speculative grade credit quality of the operator, BREC. Under the power sales contract with BREC, HMPL provides the cooperative, every year, with its five years' advance written notice of the capacity it reserves out of the Station Two's total capacity, and BREC, in turn, takes the remaining capacity. HMPL has been taking about 37% (115 MWs) of the total capacity, and has the right to increase or decrease its share by 5 MWs annually (the maximum incremental capacity HMPL is entitled to change each year under the power sales contract), in order to meet its peak summer demand. We anticipate that HMPL will keep its reserve capacity at 115 MWs which is in line with its current historical system peak demand. Under the power sales contract, BREC is responsible to pay HMPL for its allocated capacity on a "take-or-pay" basis, where the price BREC pays is based on the total cost of purchasing, acquiring, constructing, operating, maintaining, renewing and expanding Station Two, and where the "capacity costs" are fixed and do not vary with the energy generated because the cost of fuel and re-agent used by each party in the energy generated by Station Two are paid separately by the two entities.

HMPL's sales to BREC have exceeded 30% of its total revenues during the past several fiscal years and we do not anticipate any material change to this level of sales concentration to one entity. We consider the concentration and dependence on this one customer to be a credit weakness for HMPL. Furthermore, HMPL's credit profile reflects significant exposure to potential volatility in its cash flow associated with electricity sales to commercial and industrial customers.

Over the last several fiscal years, the top three customers constituted about 30% of existing system revenues which exclude the revenues from BREC. Since close to two-thirds of HMPL's total revenues come from four customers, HMPL's revenues and cash flow are exposed to year-over-year volatility if capacity payments from BREC or loads served for these large commercial and industrial customers significantly decline.

Since Station Two is its only source of generation, HMPL faces credit risk due to its exposure to costs of complying with existing and/or future regulations to address carbon emissions. Station Two has equipment for SOx and NOx control but may face additional costs to comply with future carbon related regulations. HMPL's low leverage and competitive rates profile provide a reasonable amount of flexibility to absorb some new debt financing if necessary to fund environmental mitigation investments and ensure compliance with future regulations. That said, Station Two is a relatively old asset and the utility previously chose to shut down Station One because of the high costs of complying with environmental regulations.

#### LARGEST CUSTOMER IS COPING WITH CREDIT CHALLENGES

BREC is facing credit challenges while it implements load mitigation plans following significant load loss since two aluminum smelters being served by BREC's largest member owner, Kenergy Corp., terminated their respective power purchase contracts, in the first instance effective August 20, 2013 and the second effective January 31, 2014. That said, BREC is benefitting from significant rate increases approved by the Kentucky Public Service Commission (KPSC) during 2013 and 2014 and other mitigation steps to compensate for the load loss and to maintain viable financial performance. Please see [Big Rivers Electric Corporation: Credit Opinion](#) dated August 17, 2017 for further details.

As noted above, BREC and HMPL have several agreements dating as far back as 1970, including an operating and a power sales agreement with respect to Station Two. Although BREC remains the operator of the power plant and faces some credit challenges, HMPL does not anticipate any immediate impact to its operation as long as BREC is able to successfully operate the plant and fulfill its obligations under the power sales agreement.

#### Operational and Financial Performance

##### COST MANAGEMENT AND RATE INCREASES ARE SUPPORTING FINANCIAL PERFORMANCE

Beginning in FY 2016, HMPL's financial performance has been benefitting from the series of 5% rate increases implemented and reduced operating costs incurred with the operation of Station Two, which are far outweighing the effects of lower sales volumes owing to weather and customer usage efficiency steps. As such, HMPL's adjusted DSCR significantly improved to 4.7x compared to 1.6x for fiscal 2015 and 2.5x for fiscal 2014. When calculating the DSCR for HMPL we include transfers to the City as part of the operating expenses. Such transfers by HMPL have been manageable for a utility of its size, representing just over 3% of revenues on average for the past several years and we do not anticipate any significant change.

We expect the strong adjusted DSCR to be sustained when the audit for FY 2017 is completed because another 5% rate increase became effective November 1, 2016. Moreover, HMPL's future financial performance will not only benefit from the aggregate 20% rate increase that was implemented during fiscal years 2016-17, but also from approvals to implement inflation-indexed rate adjustments on an annual basis beginning January 1, 2017. The first inflation-based increase that took effect on January 1, 2017 was ~1.6%. Overall, we view HMPL's rate strategy to be credit positive, especially since the strategy started from a strong competitive position. According to the latest available data from the EIA (as of 2015), HMPL's rates on a system wide basis were about 25% below the state average. However, the measured rate does not factor in the full effects of recently implemented 20% aggregate rate increases, which undoubtedly diminishes some of the previously sizable margin of advantage between HMPL and other electricity providers in Kentucky .

#### **LIQUIDITY**

Days cash on hand for fiscal 2016 was 94 days compared to 99 days and 125 days in fiscal 2015 and 2014, respectively, reflecting reduced balances in unrestricted investments and cash accounts partially offset by reduced operating expenses in fiscal 2016. The three year average for adjusted days cash on hand of 106 days does not include any benefit from external bank credit facilities and places that metric within the lower third of the "A" range under the Rating Methodology. In terms of actual unrestricted cash and discretionary funds, the balance for fiscal 2016 was about \$13.7 million, which is significant relative to fiscal 2016 total outstanding debt of \$12.7 million. Further, HMPL has long-term coal contracts which should continue to support competitive costs for its customers' power supplies. The utility also has a power cost adjustment mechanism that allows for increased fuel or purchased power costs to pass-through automatically, thus avoiding calls on liquidity to address variable costs not already incorporated in the existing rate level.

#### **Debt and Other Liabilities**

HMPL periodically issues revenue bonds to finance its capital programs, including maintenance of its electric system assets. HMPL's total long-term debt at fiscal 2016 was \$12.7 million of fixed rate level-amortizing long-term bonds, comprised of two series (e.g. series 2011A and 2011B). The final maturity date of each of the amortizing Series A and Series B bonds is December 1, 2031.

#### **DEBT STRUCTURE**

HMPL currently relies solely on fixed-rate, long-term debt financing to match the long-lived nature of its assets. According to management, HMPL has no plans for additional debt in the next 12 to 18 months, and currently has no definite plans for any major maintenance or upgrades to comply with the potential for new environmental regulations at the Station Two plant. Moody's views negatively the strong reliance on an aging coal power plant which may require significant and costly upgrades. HMPL's credit quality could be negatively affected depending on the size of such capital spending and the manner in which such capital requirements are financed, should they materialize. Given no new debt issued in fiscal 2017 and no plans for additional debt in the near future, we anticipate that HMPL's debt ratio will remain strong (e.g., averaged 13.0% during fiscal years 2014-16) and stood at about 12.6% at fiscal 2016.

#### **DEBT-RELATED DERIVATIVES**

None

#### **PENSIONS AND OPEB**

All employees participate in the County Employees Retirement System, which is a multi-employer defined benefit retirement plan sponsored by the City of Henderson and administered by the Commonwealth of KY. Depending on the date of hire, employees contribute 5% or 6% of their gross salary to the plan and HMPL also contributes a percentage of the employee's gross salary to the plan as determined annually by the Kentucky General Assembly. For fiscal May 31, 2016, contributions amounted to \$365,977 or 12.42% as compared to \$519,661 or 17.67% for fiscal 2015.

Moody's adjusted net pension liability (ANPL) for HMPL as of fiscal 2016 is approximately \$10.5 million, compared to its reported net pension liability of almost \$5.4 million. Under our adjustments, unfunded pension liabilities increase HMPL's debt ratio from 12.6% as of fiscal 2016 to an adjusted debt ratio of around 26.8%. Although considerably higher, the adjusted ratio is still well within the Aaa category for this metric under our Rating Methodology given HMPL's modest debt level currently outstanding.

Moody's adjusts the reported pension liabilities of entities that report under governmental accounting standards, to enhance comparability across rated issuers. Under governmental pension accounting, liabilities are discounted using the assumed rate of investment return on plan assets. Under our standard adjustments, we value liabilities completely independent of asset composition or return expectation, using a market based discount rate for high quality taxable bonds as a proxy for the risk of pension benefits.

### Management and Governance

The City of Henderson Utility Commission is a component unit of the City of Henderson, Kentucky and is organized under the provisions of Section 96.530 of the Kentucky revised statutes to operate, manage, and control HMPL. The Mayor appoints the members of the Utility Commission, subject to approval by the City Commissioners of the City of Henderson, Kentucky. HMPL benefits from rate autonomy since the Mayor and the City Commission authorize all rates and bond issues of the Utility Commission. HMPL, as a municipal entity, is not subject to any federal and state income taxes.

### Legal Security

The bonds are secured by a pledge of a fixed portion of the gross income and revenues of HMPL's Retail System, and Station Two generating station. The bonds are also secured by a statutory mortgage lien on the System and a debt service reserve in an amount equal to the lesser of the standard three-pronged test (i.e., (i) the maximum annual debt service, (ii) 125% of the average annual debt service; or (iii) 10% of the proceeds of the bonds.

### Use of Proceeds

N/A

### Obligor Profile

HMPL is a city-owned electric system that serves close to 12,000 customers in the City of Henderson, Kentucky (General Obligation Bonds rated Aa3), with about 86% of the customers in the residential class. The City of Henderson is located along the Ohio River, 10 miles south of Evansville, Indiana. Given the Ohio River's relatively inexpensive cost of distribution, the local economy is largely driven by agriculture, manufacturing and metal processing. The region produces a substantial amount of aluminum. Henderson County has a population of about 46,500 and resident wealth levels are below average as evidenced by a median family income level equivalent to about 70% of the US level. The city's November 2016 unemployment rate was 4.0% (2nd quartile).

### Methodology

The principal methodology used in this rating was US Public Power Electric Utilities With Generation Ownership Exposure published in March 2016. Please see the Rating Methodologies page on [www.moody.com](http://www.moody.com) for a copy of this methodology.

### Other Considerations: Mapping to the Grid

HMPL's grid indicated rating after notching under the below depicted grid is A3, two notches higher than the Baa2 rating for HMPL's revenue bonds, incorporating in large part the multi-dimensional concentrated reliance on BREC, a speculative grade G&T cooperative, which is HMPL's largest customer and the plant operator of HMPL's only generating asset. The notching differential is supported by the positive outlook owing to the improving in BREC's credit quality and HMPL's credit quality, all of which is tempered by the concentration in fuel source generation, which will remain a chronic overhang for HMPL.

The grid is a reference tool that can be used to approximate credit profiles in the U.S. Public Power Electric Utility Industry in most cases. However, the grid is a summary that does not include every rating consideration. Please see U.S. Public Power Electric Utilities with Generation Ownership Exposure Rating Methodology for more information about the limitations inherent to grids.

Exhibit 2

U.S. Public Power Electric Utilities with Generation Ownership Exposure Rating Methodology  
FY 2016

Factor	Subfactor	Score	Metric
1. Cost Recovery Framework Within Service Territory		A	
2. Willingness and Ability to Recover Costs with Sound Financial Metrics		A	
3. Generation and Power Procurement Risk Exposure		B	
4. Competitiveness	Rate Competitiveness	A	
5. Financial Strength and Liquidity	a) Adjusted days liquidity on hand (3-year avg) (days)	A	106
	b) Debt ratio (3-year avg) (%)	Aaa	13%
	c) Adjusted Debt Service Coverage or Fixed Obligation Charge Coverage (3-year avg) (x)	Aaa	2.97
<b>Preliminary Grid Indicated rating from Grid factors 1-5</b>		<b>A2</b>	
<b>Notching Factors</b>		<b>Notch</b>	
6. Operational Considerations		0	
7. Debt Structure and Reserves		0	
8. Revenue Stability and Diversity		-1	
<b>Grid Indicated Rating:</b>		<b>A3</b>	

Source: Moody's Investors Service



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**New Issue: Moody's assigns Aa3 to Henderson's, KY Ser. 2015 GOs**

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Global Credit Research - 28 Jul 2015

**Affirms Aa3 on the city's previously issued debt**

HENDERSON (CITY OF) KY  
Cities (including Towns, Villages and Townships)  
KY

**Moody's Rating**

<b>ISSUE</b>	<b>RATING</b>
General Obligation Bonds, Series 2015A	Aa3
<b>Sale Amount</b>	\$8,000,000
<b>Expected Sale Date</b>	07/28/15
<b>Rating Description</b>	General Obligation
General Obligation Refunding Bonds, Series 2015B	Aa3
<b>Sale Amount</b>	\$1,900,000
<b>Expected Sale Date</b>	07/28/15
<b>Rating Description</b>	General Obligation
General Obligation Refunding Bonds, Series 2015C	Aa3
<b>Sale Amount</b>	\$1,720,000
<b>Expected Sale Date</b>	07/28/15
<b>Rating Description</b>	General Obligation

**Moody's Outlook** NOO

NEW YORK, July 28, 2015 --Moody's Investors Service has assigned a Aa3 rating to the City of Henderson's, KY \$8 million General Obligation Bonds, Series 2015A; \$1.9 million General Obligation Refunding Bonds, Series 2015B; and \$1.7 million General Obligation Refunding Bonds, Series 2015C. Concurrently, we have affirmed the Aa3 rating on the city's \$41.6 million of outstanding general obligation unlimited tax (GOULT) bonds. Post-sale, the city will have \$53.2 million of outstanding GO debt.

**SUMMARY RATING RATIONALE**

The Aa3 rating reflects the City of Henderson's stable tax base and below average resident wealth levels; strong General Fund reserves and healthy liquidity; reliance on economically sensitive payroll taxes and utility system in-lieu of tax payments for operations; an elevated debt profile, including above average debt and pension burdens.

**OUTLOOK**

Outlooks are usually not assigned to local government credits with this amount of debt outstanding.

**WHAT COULD MAKE THE RATING GO UP**

- Significant tax base expansion and materially improved resident wealth levels
- Substantial reduction of the city's pension burden
- Continued trend of operating surpluses yielding significantly improved operating reserves

## WHAT COULD MAKE THE RATING GO DOWN

- A reduction of water and sewer system support of annual GO debt service
- Continued elevation of the city's pension burden
- Weakened economic conditions leading to a reduction of full values or a decline of the city's primary operating revenues
- Substantial erosion of the city's operating reserves or weakened liquidity

## STRENGTHS

- Strong operating history, solid reserve levels and healthy liquidity
- Stable tax base
- Conservative management and budget practices

## CHALLENGES

- Significant reliance on in-lieu of tax payments from the city's utility systems and economically sensitive payroll taxes fund operating expenditures
- Above average pension burden
- Below average wealth levels

## RECENT DEVELOPMENTS

Recent developments are incorporated in the Detailed Rating Rationale.

## DETAILED RATING RATIONALE

### ECONOMY AND TAX BASE: STABLE, MATURE TAX BASE IN EVANSVILLE, IN METRO AREA SUPPORTED BY AGRICULTURE AND MANUFACTURING; BELOW AVERAGE RESIDENT WEALTH LEVELS

The city's average-sized tax base of \$1.4 billion will remain stable throughout the next year given several new developments and market appreciation of existing property. Located along the Ohio River and 10 miles south of Evansville, IN (revenue A1 stable), the tax base and local economy is supported by agriculture and manufacturing. Full values grew an average 1.0% annually over the last five years, including a 0.6% increase in fiscal 2015. Management expects new residential development, expansion of several automotive component manufacturers, and growing operations of two regional healthcare systems will support modest growth of the city's tax base in the near term. Top property taxpayers account for a modest 6.3% of fiscal 2015 full values. Resident wealth levels are below average with median family income levels equivalent to 74.2% of the nation. The city's population of 28,757 residents has remained relatively stable over the last few census periods, including a 5.1% increase from 2000 to 2010. The city's full value per capita is below average for the rating category at \$49,254. Since 2010, the city's labor force declined 0.8% annually to 13,888 individuals in 2013; the city's unemployment rate of 4.3%, as of April, remained below the state (4.8%) and the nation (5.1%) for the same period.

### FINANCIAL OPERATIONS AND RESERVES: CONSERVATIVE MANAGEMENT YIELDS FAVORABLE OPERATING HISTORY; STRONG RESERVES AND HEALTHY LIQUIDITY MITIGATE EXPOSURE TO ECONOMICALLY SENSITIVE REVENUES

Conservative management and budgeting practices are expected to continue providing stable financial operations and strong operating reserve levels in excess of the city's informal target of three months of operating expenditures in the next year. Operating surpluses in four of the last five fiscal years yield a favorable operating history score of 1.06 times and improved the city's General Fund balance from \$7 million at fiscal year-end 2010 to \$10.8 million at fiscal year-end 2014 and a very strong 41.8% of General Fund revenues (including transfers in). Of the \$10.8 million total General Fund balance, \$2.7 million is committed for capital projects and the combined unassigned and assigned balances were \$8 million and a still healthy 31% of revenues. The city's above average operating reserves are a key consideration for the current rating assignment because they mitigate inherent

volatility from economically sensitive payroll and net profits tax revenues, as well as fluctuations from in-lieu of tax payments (PILOTs) and transfers from utility systems. In 2014, these revenues accounted for a combined 32% of total General Fund revenues (20% from payroll and net profits taxes; 12% from PILOTs and transfers from the utility systems). Despite a declining labor force, modest growth of payroll and net profits tax revenues alongside limited increases of General Fund expenditures support the trend of surplus General Fund operations; on average, payroll and net profits taxes increased 3% annually to \$5.2 million in fiscal 2014.

Fiscal 2015 unaudited results indicate flat to modest growth of General Fund reserves. The fiscal 2016 budget is structurally imbalanced and reflects a \$3.8 million reduction of General Fund reserves. The budget assumes all vacancies are filled at the highest pay grade, as well as several capital projects. Although the city has historically adopted a structurally imbalanced budget and achieved balanced operations by year-end, management expects a \$1 million to \$2 million reduction of reserves by year-end 2016. If realized, a \$2 million deficit will yield a total General Fund balance of \$8.8 million and 33.5% of fiscal 2015 projected General Fund revenues. Future reviews will focus on the city's ability to maintain a level of reserves that are in-line with the current rating category and sufficiently offsets its exposure to economically sensitive revenues.

#### Liquidity

The city's liquidity is expected to remain healthy in the next year. At year-end 2014, the General Fund reported net cash and investments of \$13.3 million and a very healthy 51.5% of revenues. The city's operating fund (consisting of the General Fund and Debt Service Fund) reported net cash and investments of \$13.4 million and a healthy 51.9% of total operating revenues.

#### DEBT AND PENSIONS: DEBT AND PENSION BURDENS TO REMAIN ELEVATED DESPITE UTILITY SYSTEM SUPPORT OF GO DEBT AND CLOSED SINGLE EMPLOYER PENSION PLANS

At 1.5% of full values, the city's elevated direct debt burden for the rating category will remain elevated for the next few years given below average principal amortization and modest tax base growth expectations. Post-sale, the city will have \$53.2 million of outstanding GO debt of which \$32.4 million is supported by the city's water and sewer system and reflected in the aforementioned direct debt burden. Management indicates potential issuance of additional GO debt in the next year or two for a new fire station.

#### Debt Structure

All of the city's outstanding debt is fixed rate and amortizes over the long term. Principal payout is slow compared to the median for the rating category; 58.1% of the city's outstanding debt is retired within 10 years compared to 84.9% for similarly rated US cities.

#### Debt-Related Derivatives

The city does not have any derivative agreements.

#### Pensions and OPEB

The city's adjusted net pension liability (ANPL) of \$85.3 million in fiscal 2014 is expected to remain above average in the near term; however, annual pension costs are not expected to pressure the city's operating budget in the next year. The city participates in two closed single-employer pension plans (a Civil Service Plan and a Police and Fire Pension Plan), as well as the Kentucky County Employees' Retirement System (CERS). The city's adjusted net pension liability (ANPL), under Moody's methodology for adjusting reported pension data, increased 17.1% from the prior year to \$85.3 million in fiscal 2014. The city's three-year average ANPL through 2014 was \$81.4 million and 3.15 times fiscal 2014 operating revenues (consisting of the General Fund and Debt Service Fund).

The increased ANPL from fiscal 2013 to 2014 is attributed to a reduction of the amortization period of the Police and Fire Pension Plan to 15 years; the closed single-employer plans accounted for 7% of the city's total ANPL. The city's contributions to the plans exceeded their respective actuarially determined required contributions in each of the last three fiscal years. The share of the KY CERS' pension liability allocated to the city increased 14.8% to \$79 million in 2014 (93% of the city's total ANPL); contributions to the cost-sharing plan are actuarially determined and the city made the annual required contribution to the KY CERS in each of the last three fiscal years. In 2014, the city's contributions to the three plans was \$4.9 million and 20% of total operating expenditures; total fixed costs (pension contributions and debt service) were \$7.9 million and an sizable 32.2% of total operating expenditures. Further increases of the city's total fixed costs or its ANPL could place downward pressure on the rating.

Moody's ANPL reflects certain adjustments we make to improve comparability of reported pension liabilities. The adjustments are not intended to replace the district's reported contribution information, or the reported liability information of the statewide cost-sharing plans, but to improve comparability with other rated entities. For more information on Moody's insights on employee pensions and the related credit impact on companies, government, and other entities across the globe, please visit Moody's on Pensions at [www.moodys.com/pensions](http://www.moodys.com/pensions).

#### MANAGEMENT AND GOVERNANCE: STRONG MANAGEMENT AND CONSERVATIVE BUDGETING PRACTICES TO PROVIDE CONTINUED OPERATING STABILITY

The city's strong management practices will provide continued operating stability in the next year. Kentucky cities have an institutional framework score of "Aa" or strong. Cities have notable revenue raising and expenditure reducing flexibility. Operating revenues primarily consist of property taxes and occupational license taxes, including local income taxes and business net profits taxes. Although property tax rates are constrained by a constitutional cap based on population, cities typically have ample taxing margin under the cap. A statutory framework allows cities and counties to increase their annual property tax levy up to 4% without voter approval or risk of voter recall. Revenue predictability is moderate and reflects the economically sensitive occupational license taxes. Operating expenditures consist of predictable fixed costs related to personnel, capital expenditures, and debt service. Expenditure reduction flexibility is moderate because cities typically provide a broader scope of essential or mandated services than counties and some cities have collective bargaining units.

The City of Henderson is governed by a Board of Commissioners, comprised of a Mayor, elected to a four-year term and four commissioners elected to two-year terms. The city has informal target reserve equivalent to three months of operating expenditures.

#### KEY STATISTICS

Full Value, Fiscal 2015: \$1.4 billion

Full Value Per Capita, Fiscal 2015: \$49,254

Median Family Income as % of US Median (2012 American Community Survey): 74.2%

Operating Fund Balance as % of Revenues, Fiscal 2014: 42.04%

5-Year Dollar Change in Fund Balance as % of Revenues: 23.88%

Cash Balance as % of Revenues, Fiscal 2014: 51.91%

5-Year Dollar Change in Cash Balance as % of Revenues: 24.85%

Institutional Framework: "Aa"

5-Year Average Operating Revenues / Operating Expenditures: 1.06x

Net Direct Debt as % of Full Value: 1.48%

Net Direct Debt / Operating Revenues: 0.81x

3-Year Average ANPL as % of Full Value: 5.75%

3-Year Average ANPL / Operating Revenues: 3.15x

#### OBLIGOR PROFILE

The City of Henderson is located 10 miles south of Evansville, IN (revenue A1 stable) and is the county seat of Henderson County, KY (Aa3). The city had a population of 28,757 residents as of the 2010 US Census.

#### LEGAL SECURITY

The bonds are general obligations of the city and the full faith, credit and taxing power of the city is irrevocably pledged to the payment of principal and interest on the bonds when due and secured by the city's ability to levy an annual tax sufficient to pay principal and interest on the bonds when due and payable.

#### USE OF PROCEEDS

Proceeds from the Series 2015A bonds will fund various capital improvements throughout the city. The Series 2015B and Series 2015C bonds will refund two outstanding loans of the water and sewer system with the Kentucky Infrastructure Authority and Kentucky Area Development District for debt service savings.

#### PRINCIPAL METHODOLOGY

The principal methodology used in the underlying rating was US Local Government General Obligation Debt published in January 2014. Please see the Credit Policy page on [www.moodys.com](http://www.moodys.com) for a copy of this methodology.

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## ISSUER COMMENT

29 June 2018

### RATING

#### General Obligation (or GO Related) <sup>1</sup>

Aa3 No Outlook

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## City of Henderson, KY

### Annual Comment on Henderson

#### Issuer Profile

The City of Henderson is the county seat of Henderson County, located in northwestern Kentucky, bounded by the Ohio River and the Indiana state line to the west. The city is approximately 85 miles northwest of Bowling Green and 105 miles southwest of Louisville. The county has a population of 46,362 and a moderate population density of 105 people per square mile. The county's median family income is \$54,974 (3rd quartile) and the April 2018 unemployment rate was 3.6% (2nd quartile) <sup>2</sup>. The largest industry sectors that drive the local economy are manufacturing, retail trade, and local government.

#### Credit Overview

Henderson's credit position is very healthy, and its Aa3 rating is equivalent to the US cities median of Aa3. The key credit factors include a robust financial position, a small debt burden, a somewhat inflated pension liability, an adequate tax base, but a somewhat weak wealth and income profile.

**Finances:** Henderson has a very strong financial position, which is favorable when compared to the assigned rating of Aa3. Cash balance as a percent of operating revenues (52.8%) exceeds the US median, and remained flat from 2013 to 2017. Furthermore, the city's fund balance as a percent of operating revenues (35.4%) is on par with the US median.

**Debt and Pensions:** The debt burden of Henderson is light and is slightly favorable with respect to its Aa3 rating position. Net direct debt to full value (1.2%) approximates the US median, and stayed the same between 2013 and 2017. However, the city has a somewhat elevated pension liability and is weak in relation to the assigned rating of Aa3. Moody's-adjusted net pension liability to operating revenues (2.0x) is unfavorably above the US median.

**Economy and Tax Base:** The economy and tax base of Henderson are solid, but the factor is weak with respect to its Aa3 rating. Full value (\$1.5 billion) is consistent with the US median, and rose between 2013 and 2017. Also, full value per capita (\$51,653) is significantly below other the US median. Lastly, median family income is a mere 68.6% of the US level.

**Management and Governance:** Kentucky cities have an Institutional Framework score <sup>3</sup> of Aa, which is high compared to the nation. Institutional Framework scores measure a sector's legal ability to increase revenues and decrease expenditures. Property and occupational license taxes, the primary revenue sources, are highly predictable. cities have moderate revenue-raising ability and can increase property taxes by 4% annually. cities with populations of 15,000 and above also have a property tax cap of 15 mills. cities with population of 1,000 or higher have the power to levy an occupational license tax. The tax

rate is unlimited for cities with populations up to 300,000 and capped at 1.25% for larger cities. Unpredictable revenue fluctuations tend to be minor, or under 5% annually. Across the sector, fixed and mandated costs are generally less than 25% of expenditures. Kentucky is a Right to Work state, providing significant expenditure-cutting ability. Unpredictable expenditure fluctuations tend to be moderate, between 5-10% annually.

### **Sector Trends - Kentucky Cities**

We expect most of Kentucky's cities will experience modest, but stable economic growth over the next couple of years. Continued tax base expansion through ongoing development and state and local efforts to attract new industries will continue to benefit cities. Employment growth has improved with notable gains in manufacturing and healthcare. Improving property tax revenues will support stable financial operations in the near term as the highly affordable housing market is healthy and has seen prices rising. Some statewide challenges remain as mining jobs continue to decline, and the coal industry faces regulations and competition from domestic natural gas.

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## EXHIBIT 1

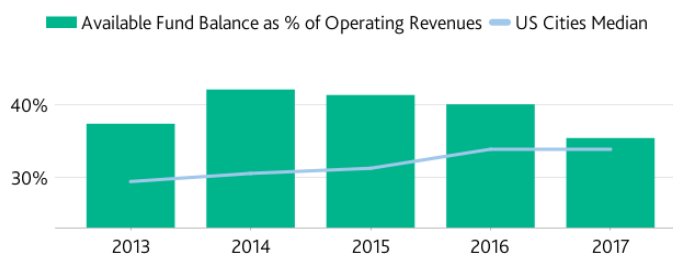
## Key Indicators 4.5 Henderson

	2013	2014	2015	2016	2017	US Median	Credit Trend
<b>Economy / Tax Base</b>							
Total Full Value	\$1,386M	\$1,407M	\$1,416M	\$1,435M	\$1,489M	\$1,867M	Improved
Full Value Per Capita	\$48,160	\$48,814	\$49,029	\$49,720	\$51,653	\$89,200	Improved
Median Family Income (% of US Median)	74%	72%	70%	69%	69%	113%	Weakened
<b>Finances</b>							
Available Fund Balance as % of Operating Revenues	37.4%	42.0%	41.3%	40.0%	35.4%	33.9%	Stable
Net Cash Balance as % of Operating Revenues	50.7%	51.9%	42.0%	56.7%	52.8%	36.9%	Stable
<b>Debt / Pensions</b>							
Net Direct Debt / Full Value	1.2%	0.5%	0.4%	1.1%	1.2%	1.1%	Stable
Net Direct Debt / Operating Revenues	0.68x	0.27x	0.24x	0.53x	0.57x	0.88x	Stable
Moody's-adjusted Net Pension Liability (3-yr average) to Full Value	N/A	4.4%	4.0%	4.1%	N/A	1.8%	Stable
Moody's-adjusted Net Pension Liability (3-yr average) to Operating Revenues	N/A	2.37x	2.16x	2.04x	N/A	1.51x	Stable
	2013	2014	2015	2016	2017	US Median	
<b>Debt and Financial Data</b>							
Population	28,785	28,840	28,889	28,870	28,841	N/A	
Available Fund Balance (\$000s)	\$9,500	\$10,864	\$10,825	\$11,501	\$10,846	\$7,419	
Net Cash Balance (\$000s)	\$12,894	\$13,417	\$11,015	\$16,307	\$16,153	\$8,404	
Operating Revenues (\$000s)	\$25,421	\$25,845	\$26,220	\$28,738	\$30,617	\$21,930	
Net Direct Debt (\$000s)	\$17,167	\$6,904	\$6,359	\$15,308	\$17,459	\$18,580	
Moody's Adjusted Net Pension Liability (3-yr average) (\$000s)	N/A	\$61,320	\$56,701	\$58,730	N/A	\$32,507	

Source: Moody's Investors Service

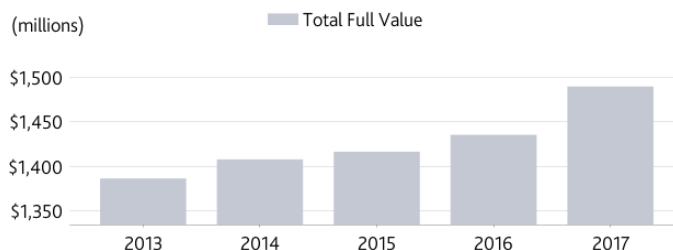
## EXHIBIT 2

## Available fund balance as a percent of operating revenues remained stable from 2013 to 2017



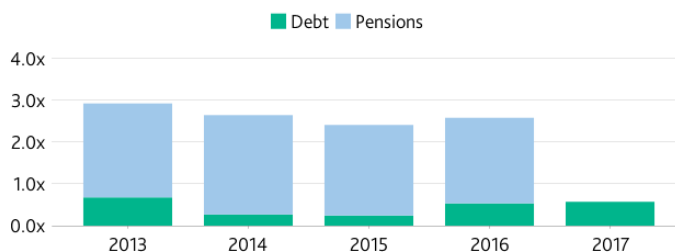
Source: Issuer financial statements; Moody's Investors Service

Exhibit 3

**Full value of the property tax base increased from 2013 to 2017**

Source: Issuer financial statements; Government data sources; Offering statements; Moody's Investors Service

EXHIBIT 4

**Moody's-adjusted net pension liability to operating revenues was stable overall from 2013 to 2016**

Source: Issuer financial statements; Government data sources; Offering statements; Moody's Investors Service

**Endnotes**

- The rating referenced in this report is the issuer's General Obligation (GO) rating or its highest public rating that is GO-related. A GO bond is generally backed by the full faith and credit pledge and total taxing power of the issuer. GO-related securities include general obligation limited tax, annual appropriation, lease revenue, non-ad valorem, and moral obligation debt. The referenced ratings reflect the government's underlying credit quality without regard to state guarantees, enhancement programs or bond insurance.
  - The demographic data presented, including population, population density, per capita personal income and unemployment rate are derived from the most recently available US government databases. Population, population density and per capita personal income come from the American Community Survey while the unemployment rate comes from the Bureau of Labor Statistics.
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- The institutional framework score assesses a municipality's legal ability to match revenues with expenditures based on its constitutionally and legislatively conferred powers and responsibilities. See [US Local Government General Obligation Debt \(December 2016\)](#) methodology report for more details.
  - For definitions of the metrics in the Key Indicators Table, [US Local Government General Obligation Methodology and Scorecard User Guide \(July 2014\)](#). Metrics represented as N/A indicate the data were not available at the time of publication.
  - The medians come from our most recently published local government medians report, [Medians - Property values key to stability, but pension burdens remain a challenge \(March 2018\)](#) which is available on Moodys.com. The medians presented here are based on the key metrics outlined in Moody's GO methodology and the associated scorecard.

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## ISSUER COMMENT

11 March 2019

### RATING

#### General Obligation (or GO Related) <sup>1</sup>

Aa3 No Outlook

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# City of Henderson, KY

## Annual Comment on Henderson

### Issuer Profile

The City of Henderson is the county seat of Henderson County, located in northwestern Kentucky, bounded by the Ohio River and the Indiana state line to the west. The city is approximately 85 miles northwest of Bowling Green and 105 miles southwest of Louisville. The county has a population of 46,252 and a moderate population density of 105 people per square mile. The county's median family income is \$56,053 (3rd quartile) and the December 2018 unemployment rate was 3.5% (2nd quartile) <sup>2</sup>. The largest industry sectors that drive the local economy are manufacturing, retail trade, and local government.

### Credit Overview

The credit position for Henderson is good. Its Aa3 rating is level with the median rating of Aa3 for cities nationwide. Key credit factors include a very healthy financial position, a small debt burden, a somewhat inflated pension liability, a sizable tax base, but a somewhat weak wealth and income profile.

**Finances:** Henderson has a robust financial position, which is a strength in relation to the assigned rating of Aa3. The city's cash balance as a percent of operating revenues (51.4%) exceeds the US median, and remained stable between 2014 and 2018. Additionally, the fund balance as a percent of operating revenues (34.1%) approximates the US median.

**Debt and Pensions:** The debt burden of Henderson is manageable and is a credit strength in relation to its Aa3 rating. The net direct debt to full value (0.8%) is slightly below the US median, but increased modestly from 2014 to 2018. Notably, the city has a somewhat inflated pension liability and is unfavorable with respect to the assigned rating of Aa3. The Moody's-adjusted net pension liability to operating revenues (2.0x) is unfavorably above the US median.

**Economy and Tax Base:** The economy and tax base of the city are satisfactory, though they are relatively weak in comparison to its Aa3 rating. The full value (\$2 billion) is consistent with the US median, and grew between 2014 and 2018. Additionally, Henderson's full value per capita (\$67,771) is roughly equivalent to the US median and the median family income equals a low 69.4% of the US level.

**Management and Governance:** Kentucky cities have an Institutional Framework score <sup>3</sup> of Aa, which is high compared to the nation. Institutional Framework scores measure a sector's legal ability to increase revenues and decrease expenditures. Property and occupational license taxes, the primary revenue sources, are highly predictable. cities have moderate revenue-raising ability and can increase property taxes by 4% annually. cities with populations of 15,000 and above also have a property tax cap of 15 mills. cities with



population of 1,000 or higher have the power to levy an occupational license tax. The tax rate is unlimited for cities with populations up to 300,000 and capped at 1.25% for larger cities. Unpredictable revenue fluctuations tend to be minor, or under 5% annually. Across the sector, fixed and mandated costs are generally less than 25% of expenditures. Kentucky is a Right to Work state, providing significant expenditure-cutting ability. Unpredictable expenditure fluctuations tend to be moderate, between 5-10% annually.

### **Sector Trends - Kentucky Cities**

Kentucky cities will continue to experience modest economic growth overall, supported by notable gains in manufacturing, healthcare, and professional and business services industries. Growth in real property values and employment is matching or outpacing the nation in metro areas. This will have a positive effect on occupational license taxes and property taxes, the two largest sources of income for cities. However, rural areas will continue to face challenges as mining jobs continue to decline, and the coal industry faces regulations and competition from domestic natural gas. Additionally, pension contribution rates are expected to increase over the near-term, which will not be a significant credit pressure.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moodys.com](http://www.moodys.com) for the most updated credit rating action information and rating history.

## EXHIBIT 1

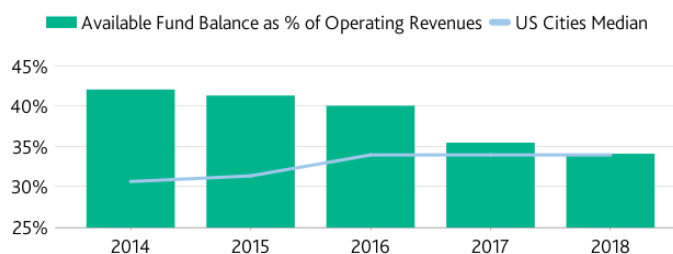
Key Indicators [4](#) [5](#) Henderson

	2014	2015	2016	2017	2018	US Median	Credit Trend
<b>Economy / Tax Base</b>							
Total Full Value	\$1,844M	\$1,865M	\$1,906M	\$1,933M	\$1,972M	\$1,867M	Improved
Full Value Per Capita	\$63,942	\$64,572	\$66,044	\$67,003	\$67,771	\$89,200	Improved
Median Family Income (% of US Median)	72%	70%	69%	69%	69%	113%	Stable
<b>Finances</b>							
Available Fund Balance as % of Operating Revenues	42.0%	41.3%	40.0%	35.4%	34.1%	33.9%	Weakened
Net Cash Balance as % of Operating Revenues	51.9%	42.0%	56.7%	52.8%	51.4%	36.9%	Stable
<b>Debt / Pensions</b>							
Net Direct Debt / Full Value	0.4%	0.3%	0.8%	0.9%	0.8%	1.1%	Stable
Net Direct Debt / Operating Revenues	0.27x	0.24x	0.53x	0.57x	0.56x	0.88x	Stable
Moody's-adjusted Net Pension Liability (3-yr average) to Full Value	3.3%	3.0%	3.1%	N/A	N/A	1.8%	Stable
Moody's-adjusted Net Pension Liability (3-yr average) to Operating Revenues	2.37x	2.16x	2.04x	N/A	N/A	1.51x	Stable
	2014	2015	2016	2017	2018	US Median	
<b>Debt and Financial Data</b>							
Population	28,840	28,889	28,870	28,859	29,108	N/A	
Available Fund Balance (\$000s)	\$10,864	\$10,825	\$11,501	\$10,846	\$10,165	\$7,419	
Net Cash Balance (\$000s)	\$13,417	\$11,015	\$16,307	\$16,153	\$15,334	\$8,404	
Operating Revenues (\$000s)	\$25,845	\$26,220	\$28,738	\$30,617	\$29,848	\$21,930	
Net Direct Debt (\$000s)	\$6,904	\$6,359	\$15,308	\$17,459	\$16,648	\$18,580	
Moody's Adjusted Net Pension Liability (3-yr average) (\$000s)	\$61,320	\$56,701	\$58,730	N/A	N/A	\$32,507	

Source: Moody's Investors Service

## EXHIBIT 2

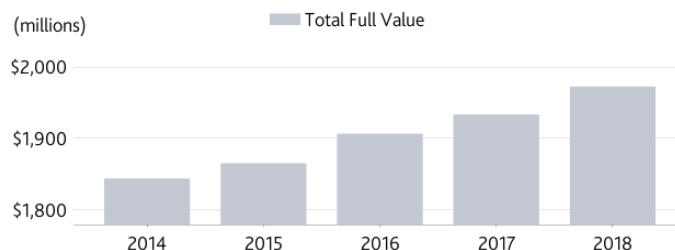
## Available fund balance as a percent of operating revenues decreased from 2014 to 2018



Source: Issuer financial statements; Moody's Investors Service

## EXHIBIT 3

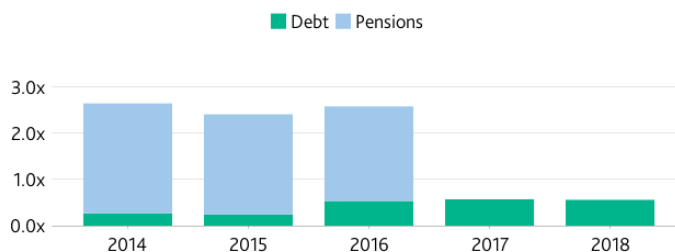
## Full value of the property tax base increased from 2014 to 2018



Source: Issuer financial statements; Government data sources; Offering statements; Moody's Investors Service

## EXHIBIT 4

## Moody's-adjusted net pension liability to operating revenues remained stable from 2014 to 2016



Source: Issuer financial statements; Government data sources; Offering statements; Moody's Investors Service

## Endnotes

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## ISSUER COMMENT

4 October 2019

### RATING

#### Revenue <sup>1</sup>

A1	No Outlook
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# City of Henderson, KY Water & Sewer Enterprise

## Annual Comment on Henderson Water & Sewer

### Issuer Profile

Henderson Water & Sewer provides water and wastewater service to a portion of Henderson County, Kentucky. The county as a whole has a population of 46,252 and a moderate population density of 105 people per square mile. The county's median family income is \$56,053 (3rd quartile) and the July 2019 unemployment rate was 4.4% (3rd quartile) <sup>2</sup>. The system's water is treated in its two treatment plants. The City collects and transports wastewater to two of its treatment plants for purification.

### Credit Overview

Henderson Water & Sewer's credit position is solid, though its A1 rating is slightly weaker than the median rating of Aa3 for US water and wastewater systems. The key credit factors include a moderate system size, a manageable debt profile, thin liquidity, ample debt service coverage, and a below-average income service area.

**System Characteristics:** The system profile of Henderson Water & Sewer is weak and is unfavorable with respect to the assigned rating of A1. The system size, measured as operating and maintenance expenses (\$14 million), is comparable to the US median. However, the median family income equals a below average 69.4% of the US level.

**Financial Strength:** The financial position of Henderson Water & Sewer is moderate in relation to its A1 rating. The debt to operating revenues (1.7x) is on par with the US median and has fallen between 2014 and 2018. Additionally, the days cash on hand (169 days) is sufficient but below that of other Moody's-rated water and wastewater systems nationwide. Lastly, the system's coverage of annual debt service by net revenues (2.2x) is good but lower than the US median.

**Legal Provisions:** Legal provisions, which typically include a rate covenant requiring a minimum of 1.0x coverage of debt service, are adequate for this sector.

### Sector Trends - Kentucky Water and Sewer

Water and sewer systems in Kentucky tend to be slightly older than average and need consistent maintenance, however financial metrics are generally on par with than US medians. Median debt service coverage of 2.0 times is on par with the nation and median liquidity is adequate but slightly below the nation at 235 days cash on hand. Median leverage is lower than the national median with debt to operating revenues of 1.6 times. Water in Kentucky is abundant, and few water utilities face supply constraints. Most utilities require local or state approval for rate increases.

## EXHIBIT 1

## Key Indicators 3.4 Henderson Water &amp; Sewer

Credit Metrics	2014	2015	2016	2017	2018	US Median	Credit Trend
Annual Debt Service Coverage (x)	2.02x	1.55x	1.45x	1.71x	2.18x	2.30x	Stable
Days Cash on Hand (Days)	334	409	235	183	169	440	Weakened
Debt to Operating Revenues (x)	2.0x	2.4x	2.2x	2.0x	1.7x	1.9x	Stable
Median Family Income (% of US Median)	72%	70%	69%	69%	69%	91%	Stable
Remaining Useful Life of Capital Assets (Years)	25	24	26	23	23	27	Stable

Debt and Financial Data (\$000s)	2014	2015	2016	2017	2018	US Median
Net Funded Debt	\$35,665	\$41,652	\$39,497	\$37,286	\$35,032	\$47,783
Total Revenues	\$17,825	\$17,662	\$18,280	\$19,176	\$20,915	\$29,141
Operating and Maintenance Expenses	\$12,152	\$12,094	\$13,080	\$13,644	\$14,041	\$16,759
Net Revenues	\$5,673	\$5,567	\$5,200	\$5,533	\$6,874	\$12,262
Debt Service	\$2,808	\$3,588	\$3,595	\$3,243	\$3,151	\$5,182

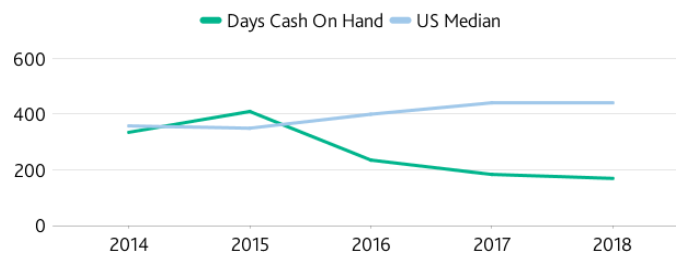
  

Governance/Legal Provisions	Score
Rate Management	Aa
Regulatory Compliance and Capital Planning	A
Rate Covenant	Ba
Debt Service Reserve Requirement	Aa

Source: Moody's Investors Service

## EXHIBIT 2

## Days cash on hand has decreased from 2014 to 2018

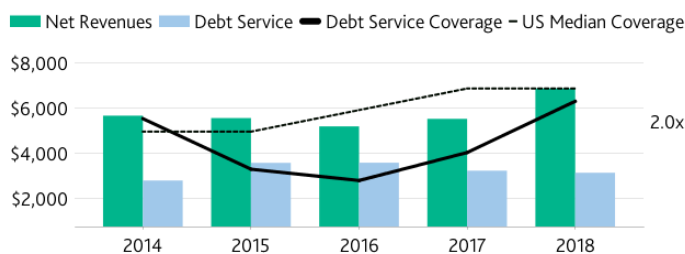


Source: Moody's Investors Service

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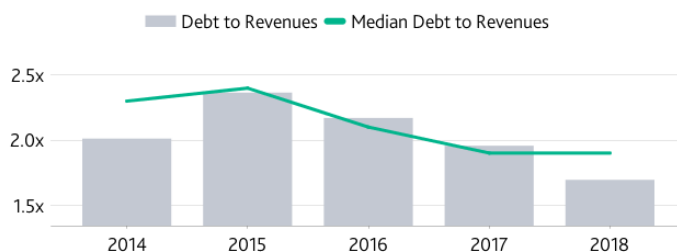
## Debt service coverage was stable from 2014 to 2018



Source: Moody's Investors Service

## EXHIBIT 4

## Debt to operating revenues was stable from 2014 to 2018



Source: Moody's Investors Service

## Endnotes

- 1 The rating referenced in this report is the rating of the senior most lien on the relevant pledged revenues. Some utilities have bonds separately secured by distinct revenue sources. For these utilities, the rating referenced in this report is the senior most rating only on the relevant revenue pledge (e.g., water); the utility could have a higher rating on a different type of revenue bond (e.g., sewer).
- 2 The demographic data presented, including population, population density, per capita personal income and unemployment rate are derived from the most recently available US government databases. Population, population density and per capita personal income come from the American Community Survey while the unemployment rate comes from the Bureau of Labor Statistics.

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- 3 Moody's calculations of various statistics can be different than calculations reported in audited financial statements or offering documents. Moody's makes standard adjustments to reported financial data, to facilitate comparisons across issuers. For definitions of the metrics in the Key Indicators Table, see our [US Municipal Utility Revenue Debt](#) methodology.
- 4 The medians come from our most recently published report, [Medians - Solid financial metrics, ability to raise rates underpin stable sector](#).



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## ISSUER COMMENT

25 September 2018

### RATING

#### Revenue <sup>1</sup>

A1 No Outlook

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## City of Henderson

### Annual Comment on Henderson Water & Sewer

#### Issuer Profile

Henderson Water & Sewer provides water and wastewater service to portions of Henderson County, which has a population of 46,362 and a moderate population density of 105 people per square mile. The county's median family income is \$54,974 (3rd quartile) and the May 2018 unemployment rate was 3.9% (3rd quartile) <sup>2</sup>. The water is collected and treated at two treatment plants. The city collects and transports wastewater to two of treatment plants for purification.

#### Credit Overview

Henderson Water & Sewer has a sound credit position, and its A1 rating is slightly under the US water and wastewater systems median of Aa3. The key credit factors include a modestly sized system size, an exceptionally low debt profile, healthy liquidity, a favorable debt service coverage, but a below-average income service area.

**System Characteristics:** The system profile of Henderson Water & Sewer is weak and is unfavorable relative to the A1 rating assigned. System size, measured as operating and maintenance expenses (\$13.6 million), is aligned with the US median. Additionally, median family income equates to 68.6% of the US level.

**Financial Strength:** The financial position of Henderson Water & Sewer is healthy and is strong when compared to its A1 rating. The debt to operating revenues (2.0x) is consistent with the US median, and it has increased from 2013 to 2017. Furthermore, both the days cash on hand (183 days) and the coverage of the annual debt service by net revenues (1.7x) are good but below other water and wastewater systems nationwide.

**Legal Provisions:** Legal provisions, which typically include a rate covenant requiring a minimum of 1.0x coverage of debt service, are adequate for this sector.

#### Sector Trends - Kentucky Water and Sewer

Water and sewer systems in Kentucky tend to be slightly older than average and need consistent maintenance. Financial metrics are generally on par with than US medians. Median debt service coverage (1.9 times) is on par with the median, and of Aa-caliber quality. Median liquidity (306 days cash) is of Aaa-caliber quality but is below the US median of 420 days. Utilities have lower debt to operating revenues (1.6 times) than the US median. Water in Kentucky is abundant, and few water utilities face supply constraints. Most utilities require local or state approval for rate increases.

## EXHIBIT 1

## Key Indicators 3.4 Henderson Water &amp; Sewer

Credit Metrics	2013	2014	2015	2016	2017	US Median	Credit Trend
Annual Debt Service Coverage (x)	2.00x	2.02x	1.55x	1.45x	1.71x	2.10x	Stable
Days Cash on Hand (Days)	146	334	409	235	183	399	Improved
Debt to Operating Revenues (x)	1.6x	2.0x	2.4x	2.2x	2.0x	2.1x	Stable
Median Family Income (% of US Median)	74%	72%	70%	69%	69%	91%	Weakened
Remaining Useful Life of Capital Assets (Years)	28	25	24	26	23	27	Weakened

Debt and Financial Data (\$000s)	2013	2014	2015	2016	2017	US Median
Net Funded Debt	\$27,798	\$35,665	\$41,617	\$39,497	\$37,286	\$50,840
Total Revenues	\$17,137	\$17,825	\$17,662	\$18,280	\$19,176	\$28,306
Operating and Maintenance Expenses	\$11,522	\$12,152	\$12,094	\$13,080	\$13,644	\$15,859
Net Revenues	\$5,615	\$5,673	\$5,567	\$5,200	\$5,533	\$11,890
Debt Service	\$2,810	\$2,808	\$3,588	\$3,595	\$3,243	\$5,160

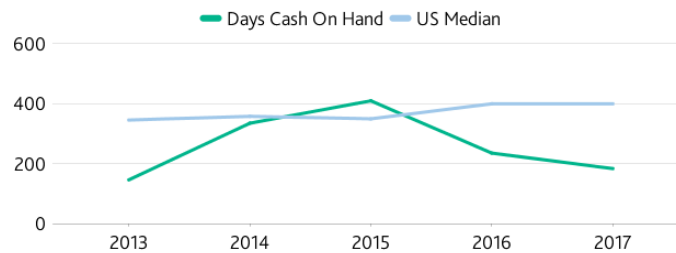
  

Governance/Legal Provisions	Score
Rate Management	Aa
Regulatory Compliance and Capital Planning	A
Rate Covenant	Ba
Debt Service Reserve Requirement	Aa

Source: Moody's Investors Service

## EXHIBIT 2

## Days cash on hand has increased from 2013 to 2017

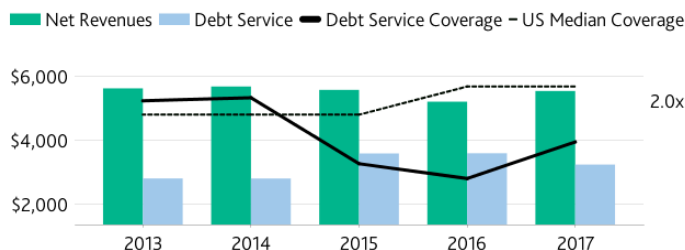


Source: Moody's Investors Service

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## EXHIBIT 3

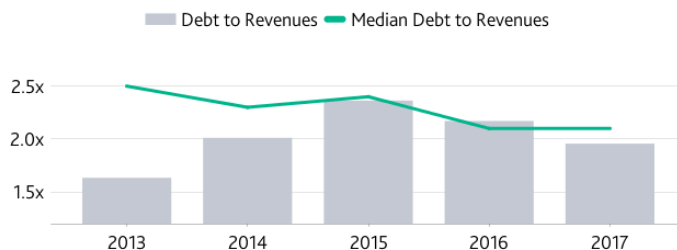
## Debt service coverage decreased from 2013 to 2017



Source: Moody's Investors Service

## EXHIBIT 4

## Debt to operating revenues increased from 2013 to 2017



Source: Moody's Investors Service

## Endnotes

- The rating referenced in this report is the rating of the senior most lien on the relevant pledged revenues. Some utilities have bonds separately secured by distinct revenue sources. For these utilities, the rating referenced in this report is the senior most rating only on the relevant revenue pledge (e.g., water); the utility could have a higher rating on a different type of revenue bond (e.g., sewer).
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  - The medians come from our most recently published report, [Medians - Solid financial metrics, ability to raise rates underpin stable sector](#).

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1 **Item 34) Identify the year-end cash and temporary investment balance for HMP&L**  
2 **and for the City of Henderson for each year 2015-2019.**

3 **Response)** See response to Item 31.

4 **Witness) Barbara Moll**

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1 **Item 35) Please provide all notes, correspondence, and other Documents relating to**  
2 **the 1993 Amendments to the Station Two Contracts or to the negotiations relating to the**  
3 **1993 Amendments to the Station Two Contracts.**

4 **Response)** Henderson is not in possession of the requested documents.

5 **Witness) Chris Heimgartner**

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1 **Item 36) Regarding Station Two O&M Fund expenses:**

2 **a. Provide a list of all vendors and the amounts charged, for each month during**  
3 **the period June 2015-January 2019.**

4 **b. Provide a copy of any and all invoices, by month, for the period June 2015-**  
5 **January 2019.**

6 **Response)** See attached documentation as maintained by Henderson, compiled on the basis  
7 of figures supplied by Big Rivers, and routinely forwarded to Big Rivers.

8 **Witness) Barbara Moll**

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1 **Item 37) Please identify the amount and/or timing of any reserve, payable, liability, or**  
2 **footnote recognition of asbestos remediation, disposal, maintenance, or any other**  
3 **obligation relating to Station Two or any joint use facility during the period 2010-2020.**

4 **Response)** Under Governmental Accounting Standards Board (GASB) standards, Henderson  
5 recorded an ARO for Station Two asset recovery liability. These amounts, which are believed to  
6 have been supplied by Big Rivers, have since been adjusted and are currently \$338,108  
7 (asbestos) and \$42,663 (lead-paint) respectively.

8 **Witness) Barbara Moll**

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1 **Item 38) Did Henderson record an Asset Retirement Obligation (ARO) in its**  
2 **accounting books and records relating to Station Two or the Station Two ash pond or any**  
3 **other joint use facility? If so, provide any and all assumptions and supporting calculations**  
4 **including, where applicable, Excel files with Excel formulas and links intact. If not, why**  
5 **did Henderson not record the ARO in accordance with Generally Accepted Accounting**  
6 **Principles?**

7 **Response)** Under Governmental Accounting Standards Board (GASB) standards, Henderson  
8 recorded an ARO for the ash pond based upon the ARO schedules and Burns McDonnell  
9 “Reid/HMP&L Station – CCR Pond Closure Evaluation” document, both of which Big Rivers  
10 supplied to HMP&L.

11 **Witness) Barbara Moll**

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# Reid/HMP&L Station - CCR Pond Closure Evaluation



**Big Rivers Electric Corporation**

**Project No. 114088**

**Rev. B  
September 2019**

**Case No. 2019-00269  
Attachment 1 to BREC 1-38  
Pages 34**



# **Reid/HMP&L Station - CCR Pond Closure Evaluation**

Prepared for

**Big Rivers Electric Corporation**

**Robards, Kentucky**

Rev. B

September 2019

Prepared by

**Burns & McDonnell Engineering Company, Inc.**

**Kansas City, Missouri**

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## INDEX AND CERTIFICATION

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#### Certification

I hereby certify, as a Professional Engineer in the Commonwealth of Kentucky, the information in this document was assembled under my direct supervisory control. This report is not intended or represented to be suitable for reuse by the Big Rivers Electric Corporation or others without specific verification or adaptation by the Engineer.

\_\_\_\_\_  
Kira E. Wylam, P.E. (License No. 30195)

Date: \_\_\_\_\_

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#### Certification

I hereby certify, as a Professional Engineer in the Commonwealth of Kentucky, that the information in this document was assembled under my direct supervisory control. This report is not intended or represented to be suitable for reuse by Big Rivers Electric Corporation or others without specific verification or adaptation by the Engineer.

\_\_\_\_\_  
Nathan Textor (Kentucky License No. 29730)

Date: \_\_\_\_\_



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## LIST OF ABBREVIATIONS

<u>Abbreviation</u>	<u>Term/Phrase/Name</u>
BREC	Big Rivers Electric Corporation
CCR	Coal Combustion Residual
CCR Rule	Coal Combustion Residual Rule
cm/sec	centimeters per second
CPT	Cone Penetrometer Test
CRR	Cyclic Resistance Ratio
CSR	Cyclic Stress Ratio
CQA	Construction Quality Assurance
EPA	Environmental Protection Agency
KAR	Kentucky Administrative Regulations
KDOW	Kentucky Division of Water
KEEC	Kentucky Energy and Environment Cabinet
KPDES	Kentucky Pollutant Discharge Elimination System
OTD	One-Time Discharge
RCRA	Resource Conservation and Recovery Act
TSS	Total Suspended Solids
U.S.C.	United States Code

## 1.0 INTRODUCTION

Burns & McDonnell was retained by Big Rivers Electric Corporation (BREC) to perform an evaluation of the closure of the combustion residual (CCR) pond for the Reid/HMP&L unit at Sebree Station. The Reid/HMP&L units have not produced electricity since February 1, 2019; therefore, in accordance with the federal CCR Rule, BREC is required to close the Reid/HMP&L CCR pond, which will be referred to herein as “Ash Pond”. According to the federal CCR Rule, the Ash Pond will need to be closed within five years of initiating closure, or by April 17, 2024. This study seeks to develop scope and cost estimate for the closure of the existing Ash Pond at Sebree Station.

Burns & McDonnell investigated a closure-in-place option for the Ash Pond. The investigation consists of a summary of the closure in-place method, as well as a construction phasing plan, contracting plan, cost estimate, and project schedule. Throughout detailed design, unforeseen circumstances may require some of the details from the plan presented herein to change; however, this report provides definition for the overall project scope.

## 2.0 POND CLOSURE PLAN

### 2.1 Pond Description

The Ash Pond was in operation for approximately 40 years, during which it received predominantly sluiced bottom ash that was generated from the Reid/HMP&L units at Sebree Station. The Ash Pond is approximately 24 acres in surface area and is partially incised with a berm above grade on the south, east and west sides. The Ash Pond does not have a constructed pond liner and water is currently impounded in a portion of the pond approximately eight acres in size.

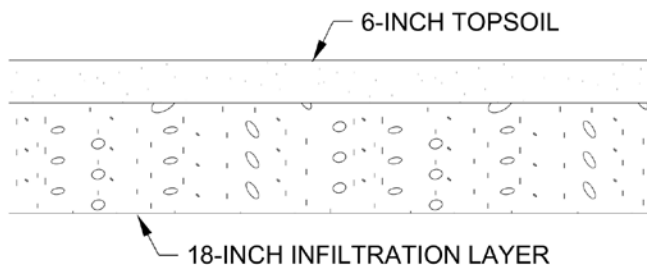
The closed pond surface will be sloped to the southwest to a ditch that will be drained via a culvert or an opening in the existing berm. Post-closure, existing Kentucky Pollutant Discharge Elimination System (KPDES) Outfall #004 will be closed, and the runoff will be conveyed to a newly constructed ditch that will eventually drain to existing Outfall #001.

### 2.2 Closure Cover System

On April 17, 2015, the Environmental Protection Agency (EPA) issued the final version of the federal CCR Rule to regulate the disposal of CCR materials generated at coal-fired units. The rule is administered as part of the Resource Conservation and Recovery Act (RCRA, 42 United States Code [U.S.C.] §6901 et seq.), using the Subtitle D approach.

The Reid/HMP&L Ash Pond is subject to the CCR Rule as well as the Kentucky Administrative Regulations (KAR). At the time this report was written, the Kentucky Energy and Environment Cabinet (KEEC) indicated "...Kentucky regulations designate coal ash ponds as permits-by-rule as long as they are in compliance with a KPDES permit from the Division of Water". For purposes of this report, Burns & McDonnell has assumed the Ash Pond will be capped in place with a cover system as outlined in the CCR Rule. The prescribed cover system for unlined impoundments consists of 18 inches of clay infiltration layer and 6 inches of topsoil that is capable of sustaining vegetation. A typical section of this proposed cover system is shown in Figure 2-1.

Figure 2-1: Typical Cover System



The permeability of the infiltration layer is to be less than or equal to the permeability of any bottom liner system or natural subsoils present per the CCR Rule, or no greater than  $1 \times 10^{-5}$  centimeters per second (cm/sec), whichever is less. The existing subgrade materials at the Reid/HMP&L Ash Pond have permeabilities higher than  $1 \times 10^{-5}$  cm/sec, so the 18-inch infiltration layer permeabilities as defined in the construction documents will need to match these values. This will be determined and verified when a borrow source is selected for the infiltration layer. For purposes of cost estimating in this report, the infiltration layer was assumed to have a permeability of approximately  $1 \times 10^{-5}$  cm/sec.

### 3.0 DESIGN CONSIDERATIONS

#### 3.1 Geotechnical Seismic and Stability Evaluations

Based on the closure-in-place closure method to be utilized, the Ash Pond will be subjected to long-term conditions including seismic events. Additionally, since the CCR is impounded by built-up soil embankments, slope stability of these embankments is also a concern. The seismic hazards and conditions were evaluated as part of this closure evaluation. These evaluations included dynamic soil response analyses, liquefaction evaluations and slope stability calculations. Based on these evaluations, the Ash Pond is considered stable for long-term conditions. This section includes a general overview of the evaluations that were completed.

##### 3.1.1 Geotechnical Investigation

To perform the required geotechnical evaluations, geotechnical data was required. An investigation was conducted that included drilling borings, pushing cone penetrometer test (CPT) soundings, and measuring soil shear wave velocities using the downhole method. This investigation was performed by S&ME, Inc. in the summer of 2019.

Borings were performed along the embankment crest and toe to provide information on subsurface materials and obtain samples for laboratory testing. Laboratory testing included Atterberg limits, grain size determinations and consolidated undrained with pore pressure measurements triaxial tests. This information was mainly used for slope stability evaluations.

CPT soundings were performed along the embankment toe to provide information on subsurface materials. CPT soundings were used mainly for the liquefaction evaluations as they are the most informative investigative technique for this evaluation. They were also considered in the slope stability evaluations.

Shear wave velocity measurements were made using the downhole method. The downhole method involves imparting a shear wave to the soil at the ground surface and measuring the time it takes to reach a CPT instrument capable of detecting shear waves. This is performed to multiple depths to compile a shear wave profile. Shear wave velocities were used for the dynamic soil response analysis.

One important consideration for a closure-in-place method is the permeability of the underlying materials, either liner or natural subgrade soils. As noted, there is no liner so only the natural subgrade soils need to be considered. Results of the investigation indicated the pond appears to be underlain by clay. Laboratory testing of the natural subgrade soils was performed as part of previous investigations provided by BREC.



Hydraulic conductivity was also correlated from CPT sounding data. Laboratory testing of natural subgrade soils indicated hydraulic conductivities between  $4.4 \times 10^{-8}$  and  $1.0 \times 10^{-9}$  cm/sec. CPT sounding correlated permeability values varied between approximately  $3.0 \times 10^{-5}$  and  $3.0 \times 10^{-7}$  cm/sec. These permeability values should be considered when determining cover system requirements during final design.

### 3.1.2 Dynamic Soil Response

The Reid/HMP&L site is in close proximity to both the New Madrid and Wabash faults. These faults are both capable of high magnitude earthquakes that can cause significant ground accelerations at the Ash Pond during a design seismic event. To understand the response of the soils underlying the Ash Pond during a design seismic event, a dynamic soil response analysis was performed.

The first step of the soil sample analysis is to determine the rock acceleration at the Reid/HMP&L site using a probabilistic hazard analysis. To do this, the computer program EZ-FRISK was utilized. EZ-FRISK incorporates seismic sources, their characteristics (probability of occurrence, magnitude, fault type, depth) and the distance to the site to determine a rock acceleration at the site based on a specified risk level. The risk level is generally defined by a probability of occurrence. For long-term structures such as landfills, a probability of occurrence of two percent (%) in 50 years is generally used. This probability of occurrence was utilized for this analysis.

EZ-FRISK used known seismic source data, seismic source characteristics and attenuation relationships for the Central United States to determine the rock acceleration at the Reid/HMP&L site. This acceleration is defined by what is termed a response spectrum. The response spectrum shows the distribution of accelerations to seismic wave periods and can be used to define the seismic load of a seismic event. This response spectrum is termed the target response spectrum for this analysis.

While the target response spectrum defines the seismic load at the site, it cannot be used as direct input into a dynamic soil response analysis. Instead, time history records are needed. These include characteristics such as acceleration, velocity and displacement versus time. For this analysis, actual time history records measured in the Central and Eastern United States were considered. However, based on the relatively small number of actual time history records, specifically with large magnitude seismic events, synthetic time histories were also considered. Each time history record considered has its own response spectrum. Since the time history records need to match the target response spectrum at the site, the time history records had to be spectrally matched using the computer program EZ-FRISK.

Spectral matching involves matching the time history record response spectrum to the target response spectrum in the frequency domain. This allows a high-quality match between the final time history record response spectrum and the target response spectrum. After EZ-FRISK matches the time history record response spectrum, the time history record including acceleration, velocity and displacement with time is then transformed using a Fourier Transform. The final time history record was then reviewed to confirm the appropriateness. Ten time history records were matched and used for the dynamic soil response.

The response of soil to seismic shaking is controlled by soil type, shear strength and shear wave velocity. A review of the information from borings, CPT soundings and downhole shear wave measurements was done for the Ash Pond. Based on this review, multiple soil design profiles were determined.

The computer program Deepsoil v7 was utilized to perform the dynamic soil response analysis. Using the spectrally matched time history records, the responses of the soil columns were calculated. The final dynamic soil response for the Ash Pond was based on the design profile that provided the highest accelerations for the average of the ten time history records used for the modeling. Calculations were performed using a nonlinear approach which best models the response of soil during a seismic event.

The most pertinent information to the overall evaluation obtained from the dynamic soil response analysis is the peak ground acceleration and the maximum stress ratio profile. Peak ground acceleration is utilized for modeling the stability of the embankment during a design seismic event. The maximum stress ratio profile is directly related to the liquefaction evaluation of the site. These pieces of information were incorporated into subsequent analysis.

### **3.1.3 Liquefaction**

Liquefaction is the phenomenon where seismic shaking leads to an increase in pore pressures of a soil, decreasing the effective stress and subsequently decreasing shear strength. For significant seismic shaking, a near total loss of effective stress and shear strength occurs. Saturated sands are the most susceptible material to liquefaction. Effects of liquefaction include vertical settlement, horizontal spreading and slope failure caused by strength loss.

To evaluate liquefaction an understanding of the seismic load and resistance of the soils at a site is needed. The seismic load is defined by the cyclic stress ratio (CSR) and the resistance is defined by the cyclic resistance ratio (CRR). CSR was determined based on the maximum stress ratio profile calculated during the dynamic soil response analysis. CRR was determined based on the Robertson (2009) semi-empirical method using CPT sounding data.

Liquefaction calculations were performed using the computer program CLiq. Calculations were performed for each CPT sounding. Only minor layers of liquefaction are estimated to occur during a design seismic event at the Ash Pond. The effects of liquefaction include vertical settlement/horizontal spreading and loss of strength leading to slope failure. For vertical settlement/horizontal spreading, all layers estimated to liquefy, including relatively thin layers, were considered. No significant layers (minimum thickness of three feet) are estimated so no liquefiable layers were considered in the slope stability evaluations.

Vertical settlement is estimated to vary between 0 and 1 inch with an average of 0.5 inch. Horizontal spreading is estimated to vary between 0.5 and 20 inches with an average of nine inches. Based on these estimated values, release of CCR because of settlement or spreading is not expected during a design seismic event though some repair of the embankment and cover system will likely be required after a design seismic event.

### **3.1.4 Slope Stability**

Since CCR will be impounded by built-up embankments, slope stability needs to be evaluated for conditions that will be encountered over a long period of time. These conditions include long-term steady state and seismic.

Long-term steady state conditions correspond to the current conditions of the embankment. All soils are modeled with drained, effective stress shear strength parameters and groundwater is modeled using average conditions. It should be noted based on the age of the embankments no excess pore pressures related to construction loading are present. Therefore, no end of construction condition is to be evaluated.

Seismic conditions correspond to the embankment during a design seismic event. There are two main ways to evaluate seismic stability. The first is to simply apply a horizontal load associated with an acceleration, such as the peak ground acceleration, to the entire embankment. An earthquake has a distribution of accelerations with magnitudes and directions that vary with time. A large majority of the accelerations experienced at the ground surface are either smaller than the peak ground acceleration or directed towards the embankment, away from the direction of slope failure. Thus assuming the peak ground acceleration as a constant load in a direction away from the embankment is a conservative approach.

There is also an approach by Makdisi and Seed which more accurately models the acceleration within the embankment and uses methods to estimate movement, if any, of the embankment during a seismic event. This type of analysis is known as a decoupled permanent-displacement analysis. Instead of providing a

factor of safety as is generally done for slope stability evaluations, this method calculates a range of displacements that are estimated to occur during a design seismic event.

For this evaluation, the first approach was initially used as it is more conservative. This indicated a factor of safety below 1.0. Therefore, calculations using the Makdisi and Seed approach were made. Based on the relatively quick loading, total stress shear strengths are used for this analysis.

Minimum factors of safety vary for each condition analyzed. A review of recommended values included in the CCR Rule and United States Army Corps of Engineers' documentation were made. Based on this review, the minimum factors of safety for each condition are as listed below:

- Long-term steady state: 1.8.

As noted, for seismic stability, a range of displacements were calculated instead of a stability factor of safety.

Slope stability calculations were performed using the computer program UTexas 4. Calculations were performed on a critical section for the Ash Pond. This section was chosen based on embankment characteristics and subsurface materials. Based on these calculations, the embankment meets the minimum required slope stability factors of safety for long-term steady state and rapid drawdown conditions. For seismic conditions estimated displacements vary between 4 and 14 inches during a design seismic event. These displacements are considered acceptable and the embankment is considered stable.

Based on the closure-in-place closure method to be utilized, the Ash Pond will be subjected to long-term conditions including seismic events. Additionally, since the CCR is impounded by built-up soil embankments, slope stability of these embankments was evaluated. Based on the evaluations presented above, the Ash Pond is considered stable for long-term conditions.

### **3.2 Permitting**

Burns & McDonnell anticipates permitting will play a role in the closure of the Reid/HMP&L Ash Pond. Appendix C contains a permitting matrix that provides an overview of the potential permitting requirements. Below is a more detailed discussion on the permitting requirements pertaining to the act of closing the Ash Pond.

### 3.3 Dewatering

At the start of closure construction, the Contractor shall begin lowering the water elevation in the Ash Pond. This may be done by discharging continuously out the existing Outfall 004, which ultimately drains into Outfall 001, per the site’s Kentucky Pollutant Discharge Elimination System (KPDES) permit. The latest KPDES permit for the station was issued on June 15, 2018, and has requirements for Acute Whole Effluent Toxicity when discharging due to dewatering purposes. The KPDES permit constituent limits for Outfall 001 are shown in Table 3-1.

**Table 3-1: Sebree Station KPDES Permit Summary**

Outfall ID	Description	Reported Flow (MGD)		Treatment	Permit Discharge Limits		
		Monthly Avg	Daily Max		Characteristic	Monthly Avg	Daily Max
001	Reid Ash Pond Discharge	Report	Report	Sedimentation and Neutralization	Total Suspended Solids	30.0 mg/l	99.7 mg/l
					Oil & Grease	15.0 mg/l	20.0 mg/l
					pH	6.0 (min)	9.0 (max)
					Chronic Whole Effluent Toxicity (WET)	N/A	2.35
					Acute WET (When Dewatering Only) *	N/A	1.00
					Total Recoverable Antimony	0.562	Report
					Total Recoverable Arsenic	0.135	0.306
					Total Recoverable Beryllium	0.401	Report
					Total Recoverable Cadmium	Report	0.005
					Total Recoverable Chromium	10.033	Report
					Total Recoverable Copper	0.017	0.028
					Total Recoverable Lead	0.008	0.028
					Total Recoverable Mercury	0.000046	0.0013
					Total Recoverable Nickel	0.096	0.867
					Total Recoverable Selenium	0.0045	Report
					Total Recoverable Silver	Report	0.015
Total Recoverable Thallium	0.00042	Report					
Total Recoverable Zinc	0.222	0.222					

\* Two (2) discrete grab samples shall be collected 12 hours apart. The facility is not required to perform an Acute WET test is a Chronic WET was performed during that month. NODI Code 9 “Conditional Monitoring-Not Required This Period” can be used on the DMR for Acute WET during those months.

While it is anticipated the existing pond water quality would meet the KPDES permit discharge limitations, construction activities will disrupt the Total Suspended Solids (TSS) levels, shifting the discharges out of compliance. It is unlikely the water will be adequately be treated during construction through only temporary detention in the existing ponds.

If the pollutant concentrations in the Ash Pond water exceed the discharge limitations of the KPDES permit, the pond water will need to be treated for those specific pollutants whose concentrations exceed

the water quality limits and then discharge the treated water through the permitted outfalls, or the untreated water may be pumped to a holding tank for off-site disposal at a treatment facility.

Another option the KDOW allows for is the authorized discharge of polluted waters through their One-Time Discharge (OTD) program. This program does not require a KDPEs permit revision. Examples of potential OTDs as indicated by the KDOW include maintenance or repair of systems, hydrostatic tests of pipelines or of field-built, above-ground tanks, farm pond drainage, construction excavation de-watering, oil and gas pit close out, and fire system testing. An OTD request authorization may be obtained by BREC prior to the release of water out an existing outfall. Restrictions, limitations and requirements of the OTD permit are site specific, but in general, the discharge must meet the requirements set forth in 401 KAR 10:031 (Surface Water Standards) and should have no adverse effect on the environment. If needed, it is expected BREC would be able to receive OTD during dewatering of the Ash Pond as it has been allowed on similar pond closures elsewhere in Kentucky.

Once dewatering of the free water is completed, the dewatering of the CCR material may take place using a long-reach backhoe to create alternating piles the length of the pond, with channels in-between to accumulate the water draining from the CCR. A pump will likely be needed to remove surface water that cannot be removed with the in-place discharge system. Burns & McDonnell has assumed a temporary water treatment system will be rented for a total of four months during the closure of the Ash Pond, for a cost of approximately \$4 million.

## 4.0 CONSTRUCTION CONSIDERATIONS

### 4.1 Construction Sequencing

For purposes of this study it is recommended that the Ash Pond closure project takes place in the following sequence:

- Dewatering of free water in the Ash Pond
- Dewatering of ash material in the Ash Pond
- Grading of CCR material in the Ash Pond
- Installation of cover system over prepared ash subgrade in the Ash Pond

CCR grading quantities were developed using topographical and bathymetric survey data completed by Associated Engineering in March 2019. A proposed, final site grading plan showing the final post-closure surface is included in Appendix A. It is assumed approximately 118,000 cubic yards of ash material will have to be relocated within the Ash Pond in order to obtain final grade elevations.

Water discharged during dewatering activities will need to meet the discharge limits of the current KPDES permit which is discussed in Section 3.2. Prior to and concurrent to dewatering, grading activities will begin. Such activities include excavating and moving CCR material from its current location for dewatering purposes and re-consolidation in the same or a different area. This leaves the finished CCR subgrade in a condition that should not pond, but instead drain stormwater off of its surface.

Once the CCR material is consolidated, a cover system, as described in Section 2.2 will be installed over the Ash Pond. For purposes of this report, the cross slope of the top of the final cover system has been assumed to be between 1.3 and 1.5 percent. The interior drainage channels have been assumed to have a slope of 1.1 percent.

### 4.2 Contracting Plan

The contracting plan developed for this project is for a single engineering contract to develop specifications, plans, Construction Quality Assurance (CQA) Plan and provide Contract Administration support and a single civil construction contract to execute the project based on the engineered plan drawings, specifications and CQA Plan. The civil contractor will execute the earthwork, ash material dewatering and treatment, ash consolidation, and capping system placement. The contractor may subcontract and coordinate specialty items of the work scope such as, but not limited to clearing and grubbing, dewatering and water treatment, and erosion control.

Burns & McDonnell recommends the civil contract be contracted as a lump sum agreement with adjustment unit pricing. The basis for payment would be per actual installed quantities as determined by in-place surveys. The contractor would perform work to the grades indicated and if more or less CCR material is present than expected, the contract price would be adjusted using the established contract unit prices.



## 5.0 PRELIMINARY PROJECT SCHEDULE

### 5.1 General

Under the CCR Rule, the closure of the Ash Pond at the Reid/HMP&L Station is required to be completed in five years. As indicated in the Notification of Intent to Close the Reid/HMP&L Station II Surface Impoundment document which was posted on BREC's public CCR website on May 17, 2019, the Ash Pond closure must be completed by April 17, 2024. The anticipated closure timeline, including permitting and engineering, is estimated to be completed in a little over two years. For purposes of this study, the start date of the final permitting and engineering activities was assumed to be September 2019.

The schedule includes approximately five months for detailed engineering design and a little over three months for the bid process. Once the final engineering design has been completed and submitted to the Kentucky Division of Waste Management, the division has 180 days to review the pre-permit application documentation. The permit review process should not exceed 365 days. A Level 1 schedule is included in Appendix B, which includes activities from engineering design to project completion.

Key construction activity dates depicted in the schedule are for a single construction crew, working 10-hour workdays for five days a week. The work could be completed on a shorter construction schedule if the contractor uses more than one crew or longer hours and 6 working days a week. The schedule does not include activities such as jurisdictional water delineations, endangered species studies, or other permitting which may be required and could increase the permitting and design support phase of the project.

The overall construction schedule reflects the volume of CCR material being graded and consolidated on-site. The estimated daily grading production rate of moving wet CCR material around within the pond is 3,500 cubic yards, assuming the use of two excavators and eight haul trucks. This estimate is based on other CCR unit closure projects Burns & McDonnell has been involved in.

## 6.0 COST ESTIMATE

The estimated cost for the closure of the Reid/HMP&L Ash Pond is summarized in Appendix D. The following outlines the basis for this cost estimate.

### 6.1 Cost Estimate Basis

The following methodology was used in the development of the project cost estimate.

- Estimate is based on the scope assumptions described in this report. Estimate quantities were developed based on the scope and issued to potential bidders for budgetary pricing.
- Construction costs were estimated from 2019 budgetary bids that were provided by local civil contractors. The bidders' unit pricing was averaged to determine a total project price.
- Project indirects were estimated based on Burns & McDonnell's experience. Percent allocations for indirects are as follows:
  - Construction Management – 5%
  - Engineering – 5%
  - Escalation – 3%
  - Owner's Costs – 5%
  - Project Definition and Estimate Contingency – 15%
- Cost estimate is based on 2019 dollars but escalated 3% per year for 2 years to estimate costs during construction.
- This estimate assumes that suitable volumes of topsoil and fill material will be available within five miles of Sebree Station for use at the Reid/HMP&L Ash Pond closure.
- The following major scope items are excluded from the estimated cost:
  - Costs for environmental studies and remediation.

### 6.2 Cash Flow

A preliminary cash flow has been prepared as in presented in Appendix D. The cash flow is based on the cost estimate in Appendix D and the schedule in Appendix B. The bid items presented in the cost estimate have been distributed as follows in the cash flow.

**Table 6-1: Cash Flow Basis**

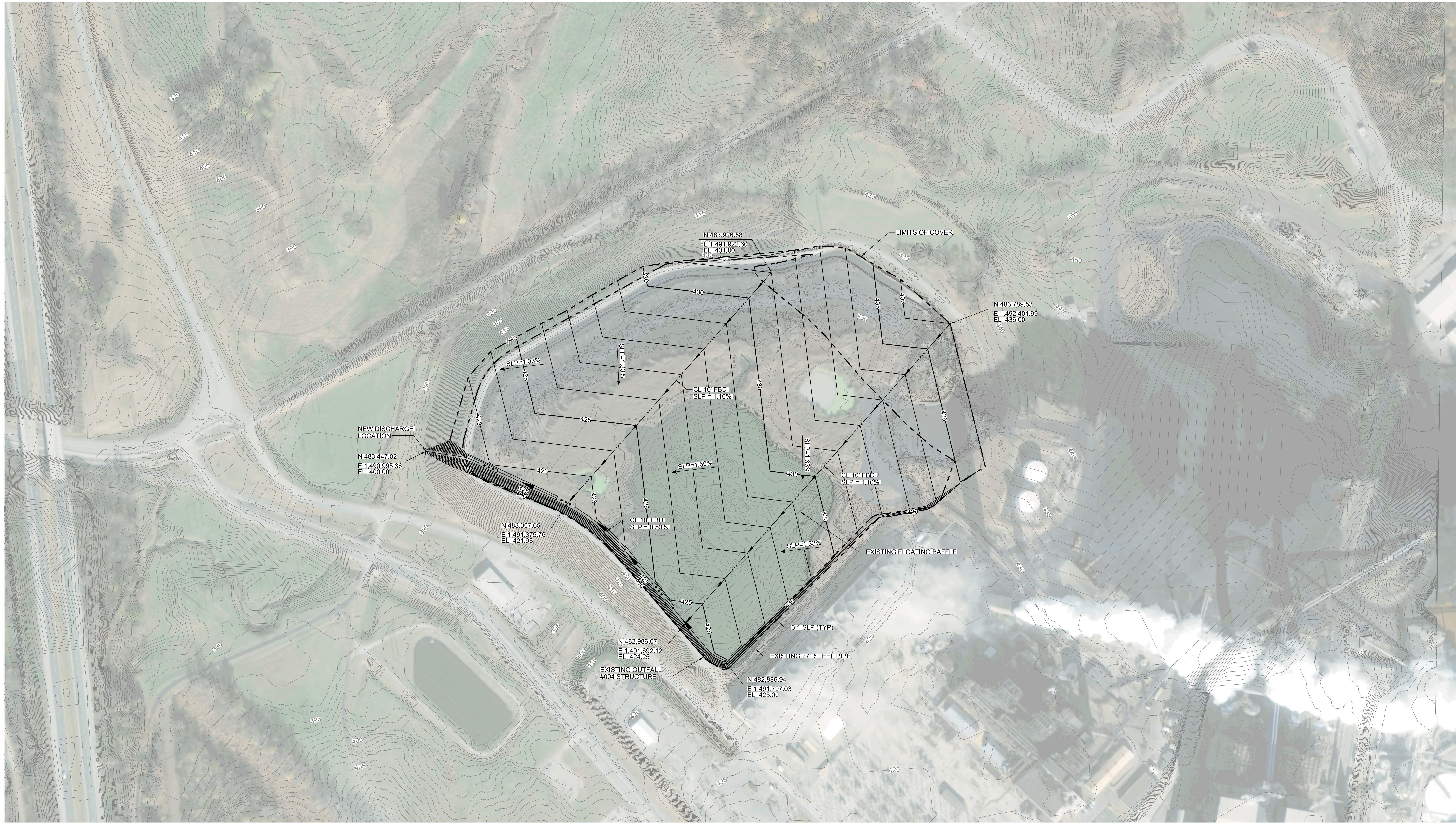
<b>Construction Activities</b>	<b>Start</b>	<b>End</b>
Mobilization/Demobilization	3/31/2021	3/12/2021
Dewatering and Water Treatment	3/22/2021	7/9/2021
Clearing and Grubbing Existing Vegetation and Trees	3/15/2021	3/19/2021
Pond Solids Cut to Fill	3/22/2021	6/11/2021
Demolition 27" Steel Pipe	3/15/2021	3/19/2021
Demolition Floating Baffle Curtain	3/15/2021	3/19/2021
Erosion Control Installation and Maintenance	3/31/2021	11/12/2021
Misc (Borrow Area, Survey, etc)	3/3/2021	11/12/2021
Subgrade Finish Grading and Preparation	6/14/2021	7/9/2021
18" Protective Cover (Haul from Offsite Borrow Site)	7/12/2021	9/10/2021
Topsoil - 6" Depth from Offsite	9/13/2021	10/8/2021
Seeding	10/11/2021	10/29/2021
Quality Assurance/Quality Control	3/22/2021	10/8/2021
Construction Management (5%)	3/3/2021	11/12/2021
Engineering (5%)	9/27/2019	2/28/2020
Escalation (3% for 2 years)	3/3/2021	11/12/2021
Project estimate and scope contingency (15%)	3/3/2021	11/12/2021
Owner cost (10%)	9/7/2019	11/12/2021

All costs are distributed evenly between the dates above except for engineering which is distributed to start slowly and be heaviest during the middle of the timeline.

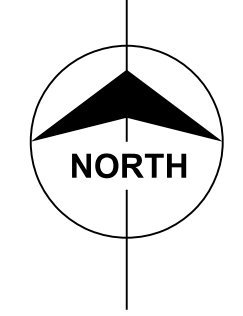
### **6.3 Limitations and Qualifications**

Estimates and projections prepared by Burns & McDonnell relating to schedule, performance, and construction costs are based on our experience, qualifications and judgment as a professional consultant in the coal-fired power plant industry. Since Burns & McDonnell has no control over weather, cost and availability of labor, material and equipment, labor productivity, construction contractor’s procedures and methods, unavoidable delays, construction contractor’s method of determining prices, economic conditions, government regulations and laws (including interpretation thereof), competitive bidding and market conditions or other factors affecting such estimates or projections, Burns & McDonnell does not guarantee that actual rates, costs, performance, schedules, etc., will not vary from the estimates and projections prepared by Burns & McDonnell.

**APPENDIX A – SITE PLAN**



Scale For Microfitting  
Inches



0 100' 200'  
SCALE IN FEET

**PRELIMINARY - NOT FOR CONSTRUCTION**

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no.	date	by	ckd	description	no.	date	by	ckd	description
2	08/09/19	KEW	MDB	ISSUED FOR REPORT					
1	05/17/19	KEW	MDB	ISSUED FOR REV 1					
0	04/30/19	KEW	MDB	INITIAL ISSUE					

**BURNS & MCDONNELL**  
 9400 WARD PARKWAY  
 KANSAS CITY, MO 64114  
 816-333-9400

designed: K. WYLAM  
 detailed: S. NICHOLS

**Big Rivers**  
 ELECTRIC CORPORATION

Your Touchstone Energy® Cooperative

REID/HMP&L STATION  
 HENDERSON COUNTY, KENTUCKY

ASH POND	
project	contract
114088	
drawing	rev.
<b>SKC005</b>	<b>2</b>
sheet	of
file 114088SKC005.DGN	sheets

## **APPENDIX B – CLOSURE SCHEDULE**



## **APPENDIX C – PERMITTING MATRIX**



Big Rivers Electric Corporation  
Sebree Station  
CCR Compliance Permit Matrix

Item No.	Permit/Clearance	Regulatory Agency	Details	When Required	Anticipated Agency Review Time	Associated Fees	Comments
<b>Federal</b>							
1	Clean Water Act - Section 404 Permit	U.S. Army Corps of Engineers, Louisville District	Required to dredge or place fill in a jurisdictional water, including wetlands  Nationwide Permit: Less than or equal to 0.5 acre of wetland or stream impacts Individual Permit: Greater than 0.5 acre of wetland or stream impacts	Prior to construction	45 to 60 days for a Nationwide Permit 6 to 12 months for an Individual Permit	No application or mitigation fees	A wetland delineation will be required to determine the extent of wetland and stream impacts associated with site construction. If the project qualifies for a Nationwide Permit 39 (Commercial and Institutional Developments), a pre-construction notification would be required.
2	Section 7 Threatened and Endangered Species Consultation and Clearance	U.S. Fish & Wildlife Service (FWS), Ecological Services	If the project will potentially impact protected species or their respective habitat, or if a Section 404 and/or NPDES permit is required, then the FWS must be contacted. The FWS will determine the level of effort needed for the project to proceed (e.g., habitat assessment, species surveys, avian impact studies, etc.).	Prior to construction	30 days for initial response, additional 30 days for determination of field survey results (if required)	No fees	<b>Formal consultation likely not required if construction will take place in an already developed area and no Section 404 Permit is required.</b>
3	Migratory Bird Treaty Act / Bald and Golden Eagle Protection Act Compliance	U.S. Fish & Wildlife Service (FWS), Ecological Services	Required when construction or operation of a proposed facility could impact migratory birds, their nests, and especially threatened or endangered species	Prior to construction	30 days for data request, 30 days for report review	No fees	<b>Formal consultation likely not required if construction will take place in an already developed area and no Section 404 Permit is required.</b>
4	Notice of Proposed Construction	Federal Aviation Administration (FAA)	Required for the construction of structures 200 feet tall or within the distance to height ratio from the nearest point of a FAA airport runway. Notifying the FAA includes completing Form 7460-1 for all required structures and providing a site layout map depicting structure locations.  Also required for construction equipment reaching heights over 200 feet.	Prior to construction	45+ days	No fees	<b>Likely not required unless construction equipment will reach heights over 200 feet.</b>
5	Spill Prevention, Control, and Countermeasure Plan Amendment	U.S. Environmental Protection Agency (EPA)	An amendment to the facility's SPCC Plan will be required to address changes to operation or site layout/drainage.	Prior to operation	Not required to submit the SPCC Plan to the EPA for review, unless requested.	No fees	
<b>State - Kentucky</b>							
6	Certificate of Public Convenience and Necessity (CPCN)	Kentucky Public Service Commission	Required for the construction of electric generating facilities	Prior to construction	120 days after the submission of a complete application	Project specific	<b>A CPCN is not likely required for the pond closures unless the Public Service Commission has a project cost or rate recovery threshold.</b>
7	Environmental Assessment (EA) or Environmental Impact Statement (EIS)	Kentucky Public Service Commission	Facility modifications to meet CCR requirements may trigger an EA or EIS if the project will request financing from the USDA Rural Utilities Service (RUS).	Prior to construction	6 to 9 months	No filing fees	<b>Because this project is environmentally beneficial and will reduce future risks to water quality, it is unlikely that the RUS would require an EIS.</b>
8	Groundwater Protection Plan	Kentucky Department of Environmental Protection Division of Water	If the facility has a Groundwater Protection Plan (GPP), as required by 401 KAR 5.037, it should be updated based on site changes and prior to the installation of groundwater monitoring wells.  If the facility currently does not have a GPP, one may be required prior to groundwater monitoring well installation.	Prior to construction	Agency review of the GPP is optional unless required by a KYDEP inspector or the GPP Program. Must retain onsite records.	No fees.	<b>The project site is not located in a Wellhead Protection Area.</b>

Big Rivers Electric Corporation  
 Sebree Station  
 CCR Compliance Permit Matrix

Item No.	Permit/Clearance	Regulatory Agency	Details	When Required	Anticipated Agency Review Time	Associated Fees	Comments
9	Permit to Construct Across or Along a Stream and/or Section 401 Water Quality Certification (WQC)	Kentucky Department of Environmental Protection Division of Water	In addition to authorizing stream crossings, this permit also provides Section 401 WQC and floodplain construction approval. The purpose of the WQC is to confirm that the discharge of fill materials (Section 404 Permit) will be in compliance with the State's applicable water quality standards.	Prior to construction	20 business days	No fees	Assumes automatic Water Quality Certification authorization through the Corps' Nationwide Program. The permit application must be reviewed and signed by the local county floodplain coordinator(s) prior to submitting the application to the State.  <b>The project site is located in the Ohio River floodplain.</b>
10	One-Time/Temporary Discharge Request for Off-Permit Authorization	Kentucky Department of Environmental Protection Division of Water	Required for temporary discharges of wastewater outside of permitted discharges. May be used for pond dewatering.	Prior to testing	30 days	No fees	
11	General Permit for Stormwater Discharges Associated with Construction Activities	Kentucky Department of Environmental Protection Division of Water	Required for all stormwater discharges from construction activities which will disturb 1 or more total acres of land. The General Permit requires the development of a Stormwater Pollution Prevention Plan (SWPPP) prior to submitting a Notice of Intent for permit coverage.	Prior to construction	7 days	No fees	The permit also authorizes the discharge of construction dewatering waters if managed through the use of appropriate best management practices.
12	KPDES Operational Discharge Permit Modification	Kentucky Department of Environmental Protection Division of Water	The facility will be required to modify its existing KPDES Operational Discharge Permit (KY0001937) to address operational and water quality changes related to the discharge of wastewaters.	Prior to operation	180 days prior to operational changes	\$7,000	If the existing permit requires an operational Stormwater Pollution Prevention Plan (SWPPP), this plan must be updated to address operational changes/modified stormwater flows.
13	National Historic Preservation Act – Section 106 Clearance	Kentucky Heritage Council - State Historic Preservation Office (SHPO)	Under Section 106 of the National Historic Preservation Act, Federal agencies must work with the State Historic Preservation Office to address historic preservation issues when planning projects or issuing funds or permits that may affect historic properties and archaeological resources listed in or determined eligible for the National Register of Historic Places.	Prior to construction	45 Days	\$40 for Preliminary Site Check through SHPO database	<b>Formal consultation likely not required if construction will take place in an already developed area and no Section 404 Permit is required.</b>
14	Threatened & Endangered Species Clearance (State)	Kentucky Department of Fish and Wildlife Resources, Kentucky State Nature Preserves Commission, and Kentucky Division of Forestry	Required when a proposed project may impact State-listed species or when a project lies within an area of known occurrence of listed species or the habitat of a listed species	Prior to construction	30 days for initial response, additional 30 days for determination of field survey results (if required)	No fees	<b>Formal consultation likely not required if construction will take place in an already developed area and no Section 404 Permit is required.</b>

**APPENDIX D – COST ESTIMATE**

Construction Activities	Qty	Unit	2019 Cost
<b>Cap in Place - Ash Pond</b>			
Mobilization/Demobilization	1	LS	\$410,000
Dewatering and Water Treatment	1	LS	\$4,000,000
Clearing and Grubbing Existing Vegetation and Trees	1	LS	\$440,000
Pond Solids Cut to Fill	117,751	CY	\$1,010,000
Demolition 27" Steel Pipe	338	LF	\$30,000
Demolition Floating Baffle Curtain	560	LF	\$10,000
Erosion Control Installation and Maintenance	1	LS	\$390,000
Misc (Borrow Area, Survey, etc)	1	LS	\$340,000
Subgrade Finish Grading and Preparation	1,043,517	SF	\$370,000
18" Protective Cover (Haul from Offsite Borrow Site)	57,973	CY	\$1,190,000
Topsoil - 6" Depth from Offsite	19,324	CY	\$500,000
Seeding	24	AC	\$120,000
Quality Assurance/Quality Control	24	AC	\$290,000
Tariff 232			\$10,000
<b>Direct Cost Subtotal</b>			<b>\$9,110,000</b>
Survey			\$8,000
Geotechnical Investigation			\$48,000
Construction Management (5%)			\$456,000
Engineering (5%)			\$456,000
Escalation (3% for 2 years)			\$930,000
<b>Total Direct and Indirect Cost</b>			<b>\$11,008,000</b>
Project estimate and scope contingency (15%)			\$1,651,200
<b>Total Project Cost</b>			<b>\$12,659,200</b>
Owner cost (5%)			\$633,000
<b>Total Project Cost Incl. Owner Cost</b>			<b>\$13,292,200</b>

**BREC Reid/HMPL Station, Closure In-Place**

**Project Cash Flow**

<b>Date</b>	<b>Incremental</b>	<b>Cumulative</b>	<b>Incremental %</b>	<b>Cumulative %</b>	<b>Millions</b>
Aug-19	-	-	0.0%	0.0%	-
Sep-19	53,991	53,991	0.4%	0.4%	0.05
Oct-19	106,898	160,889	0.8%	1.2%	0.16
Nov-19	137,444	298,333	1.0%	2.2%	0.30
Dec-19	137,444	435,778	1.0%	3.3%	0.44
Jan-20	106,898	542,676	0.8%	4.1%	0.54
Feb-20	53,991	596,667	0.4%	4.5%	0.60
Mar-20	23,444	620,111	0.2%	4.7%	0.62
Apr-20	23,444	643,556	0.2%	4.8%	0.64
May-20	23,444	667,000	0.2%	5.0%	0.67
Jun-20	23,444	690,444	0.2%	5.2%	0.69
Jul-20	23,444	713,889	0.2%	5.4%	0.71
Aug-20	23,444	737,333	0.2%	5.5%	0.74
Sep-20	23,444	760,778	0.2%	5.7%	0.76
Oct-20	23,444	784,222	0.2%	5.9%	0.78
Nov-20	23,444	807,667	0.2%	6.1%	0.81
Dec-20	23,444	831,111	0.2%	6.3%	0.83
Jan-21	23,444	854,556	0.2%	6.4%	0.85
Feb-21	23,444	878,000	0.2%	6.6%	0.88
Mar-21	2,477,883	3,355,883	18.6%	25.2%	3.36
Apr-21	1,531,883	4,887,767	11.5%	36.8%	4.89
May-21	1,531,883	6,419,650	11.5%	48.3%	6.42
Jun-21	1,716,883	8,136,533	12.9%	61.2%	8.14
Jul-21	1,861,050	9,997,583	14.0%	75.2%	10.00
Aug-21	876,050	10,873,633	6.6%	81.8%	10.87
Sep-21	1,126,050	11,999,683	8.5%	90.3%	12.00
Oct-21	849,383	12,849,067	6.4%	96.7%	12.85
Nov-21	443,133	13,292,200	3.3%	100.0%	13.29



CREATE AMAZING.

Burns & McDonnell World Headquarters  
9400 Ward Parkway  
Kansas City, MO 64114  
O 816-333-9400  
F 816-333-3690  
[www.burnsmcd.com](http://www.burnsmcd.com)

1 **Item 39) Identify any and all bonds, liens, debt, or obligations of Henderson that refer**  
2 **to, or encumber, the assets, revenues, or other intangible or tangible aspects of Station**

3 **Two. If no such bonds, debt or other obligations currently exist:**

4 **a. Identify the last bond issuance that contained such provision; and**

5 **b. Identify the date on which the last bond issuance was released.**

6 **Response)** See Henderson’s response to Item 11 of the Commission Staff’s First Request for  
7 Information to Henderson.

8 **Witness) Barbara Moll**

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- 1 **Item 40) Regarding Henderson’s 2011A Bonds and 2011B Bonds:**
- 2 a. **Provide a copy of the bond offering documents for each series of bonds.**
- 3 b. **Provide a copy of the annual Continuing Disclosure Reports for the years**
- 4 **2015, 2016, 2017, 2018, 2019, and 2020, for each of the bonds.**
- 5 c. **What is the current status of each series of bonds and what amount is**
- 6 **currently outstanding?**
- 7 d. **Provide any and all communications, correspondence, and other Documents**
- 8 **regarding the retirement, prepayment, or repayment of each series of bonds.**
- 9 **Response)** a. See attached Series 2011A & 2011B Official Statements. Henderson
- 10 previously provided these documents to Big Rivers in response to an Open Records Request in
- 11 August 2018.
- 12 b. The requested documents are not in Henderson’s possession, but are on
- 13 file with the Municipal Securities Rulemaking Board.
- 14 c. See Henderson’s response to Item 11 of the Commission Staff’s First
- 15 Request for Information to Henderson.
- 16 d. Not applicable. **Witness) Barbara Moll**



# OFFICIAL STATEMENT

Dated August 16, 2011

**New Issue  
Not Bank Qualified**

**RATING: “A3” Moody’s  
(see “Rating” herein)**

*In the opinion of Bond Counsel, subject to the conditions set forth in “TAX MATTERS” herein, interest on the Series 2011A Bonds is excluded from gross income for federal and Kentucky income tax purposes and is not an item of tax preference for purposes of computing the federal alternative minimum tax. Bond Counsel is further of the opinion that the Series 2011A Bonds are exempt from ad valorem taxation by the Commonwealth of Kentucky and its political subdivisions.*

**\$11,350,000**

## **CITY OF HENDERSON, KENTUCKY ELECTRIC SYSTEM REVENUE BONDS, SERIES 2011A**

**Dated: Date of Delivery**

**Due: December 1, as described on the following page**

The above identified bonds (the “Series 2011A Bonds”) of the City of Henderson, Kentucky (the “City”), are described as to principal maturities, interest rates and certain other information on the inside cover page of this Official Statement. The Series 2011A Bonds are special and limited obligations of the City payable solely from the revenues of the City’s electric generating and distribution system and other funds specifically pledged for that purpose and do not constitute an indebtedness of the City within the meaning of the statutes or the Constitution of the Commonwealth of Kentucky or a pledge of the full faith and credit of the City.

The Series 2011A Bonds will be initially issued in book-entry form only and registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York (“DTC”). DTC will act as securities depository for the Series 2011A Bonds. Purchasers will not receive certificates representing their ownership interest in the Series 2011A Bonds. Accordingly, principal and interest on the Series 2011A Bonds will be paid by U.S. Bank National Association, Louisville, Kentucky, as Trustee and Paying Agent, directly to DTC or Cede & Co., its nominee. DTC will in turn remit such principal or interest to the Direct Participants (as defined herein) for subsequent distribution to the Beneficial Owners (as defined herein) of the Series 2011A Bonds. The Series 2011A Bonds will be issuable in denominations of \$5,000 or any integral multiples thereof, fully registered as to both principal and interest. The Series 2011A Bonds will mature on the respective dates shown on the following page.

The Series 2011A Bonds due December 1, 2021 and thereafter are callable in any order and on any date on or after September 1, 2021, at 100% of the principal amount thereof plus accrued interest to the redemption date as more fully described herein.

The Series 2011A Bonds are offered, subject to prior sale, when, as and if issued by the City, subject to prior approval of legality by Stoll Keenon Ogden PLLC, Louisville, Kentucky, Bond Counsel. Certain legal matters will be passed upon for the City by its City Attorney, Joseph E. Ternes, Jr., Henderson, Kentucky. Certain legal matters will be passed upon for the City’s Utility Commission by its Counsel, King, Deep and Branaman, Henderson, Kentucky. Delivery of the Series 2011A Bonds at DTC in New York is expected on or about September 7, 2011.

**BAIRD**

**Case No. 2019-00269  
Attachment 1 to BREC 1-40  
Pages 196**

**\$11,350,000**  
**CITY OF HENDERSON, KENTUCKY**  
**ELECTRIC SYSTEM REVENUE BONDS, SERIES 2011A**

(First interest payment due December 1, 2011)

The Series 2011A Bonds will mature on the following dates:

\$9,805,000 Serial Bonds

<u>Date</u>	<u>Amount</u>	<u>Interest Rate</u>	<u>Price</u>	<u>Yield</u>	<u>CUSIP# 425097<sup>†</sup></u>
December 1, 2012	\$420,000	2.500%	101.957%	0.900%	AA0
December 1, 2013	435,000	2.500	102.743	1.250	AB8
December 1, 2014	445,000	2.500	103.303	1.450	AC6
December 1, 2015	455,000	2.500	103.460	1.650	AD4
December 1, 2016	465,000	2.500	102.471	2.000	AE2
December 1, 2017	475,000	2.500	100.863	2.350	AF9
December 1, 2018	490,000	3.000	101.956	2.700	AG7
December 1, 2019	505,000	3.000	100.000	3.000	AH5
December 1, 2020	520,000	3.250	100.000	3.250	AJ1
December 1, 2021	535,000	3.400	100.000	3.400	AK8
December 1, 2022	555,000	3.500	99.078	3.600	AL6
December 1, 2023	570,000	3.750	99.510	3.800	AM4
December 1, 2024	595,000	4.000	100.000	4.000	AN2
December 1, 2025	615,000	4.000	98.394	4.150	AP7
December 1, 2026	640,000	4.125	98.603	4.250	AQ5
December 1, 2027	665,000	4.250	98.838	4.350	AR3
December 1, 2028	695,000	4.300	98.202	4.450	AS1
December 1, 2029	725,000	4.375	97.841	4.550	AT9

\$1,545,000 Term Bond

<u>Year</u>	<u>Amount</u>	<u>Interest Rate</u>	<u>Price</u>	<u>Yield</u>	<u>CUSIP# 425097<sup>†</sup></u>
2031	\$1,545,000	4.500%	97.400%	4.700%	AU6

(No accrued interest)

<sup>†</sup> CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein are provided by CUSIP Global Services, managed by Standard & Poor's Financial Services LLC on behalf of The American Bankers Association. These data are not intended to create a database and do not serve in any way as a substitute for the CUSIP Services. None of the City, the Utility Commission or the Underwriter is responsible for the selection or correctness of the CUSIP numbers set forth herein.

**CITY OF HENDERSON, KENTUCKY**

Board of Commissioners

Steve Austin, Mayor  
Mike Farmer, Commissioner  
Robert M. Mills, Commissioner  
Robert N. Pruitt, Commissioner  
Alan C. Taylor, Commissioner

Other Officials

Russell R. Sights, City Manager  
Carolyn Williams, City Clerk  
Robert J. Gunter, Finance Director  
Joseph E. Ternes, Jr., City Attorney

**CITY UTILITY COMMISSION  
(HENDERSON MUNICIPAL POWER & LIGHT)**

Members and Officers

Dr. William L. Smith, Chairman  
Gregory A. Risch, Vice Chairman  
Ronald Jenkins, Secretary  
Joel Hopper, Commissioner  
Michael J. Vickers, Commissioner

Management

Gary Quick, General Manager  
Mark Powers, Comptroller  
Wayne Thompson, Director of Power Production  
Steve Smith, Manager Transmission & Distribution

**INDEPENDENT AUDITOR**

Neel, Crafton & Phillips, LLP

**COUNSEL TO CITY UTILITY COMMISSION**

King, Deep and Branaman  
Henderson, Kentucky

**BOND COUNSEL**

Stoll Keenon Ogden PLLC  
Louisville, Kentucky

**FINANCIAL ADVISOR**

J.J.B. Hilliard, W.L. Lyons, LLC  
Louisville, Kentucky

This Official Statement does not constitute an offer to sell the Series 2011A Bonds in any jurisdiction to any person to whom it is unlawful to make such offer in such jurisdiction. No dealer, salesman or any other person has been authorized to give any information or make any representation, other than those contained herein, in connection with the offering of the Series 2011A Bonds, and if given or made, such information or representation must not be relied upon. Neither the delivery of this Official Statement nor the sale of any Series 2011A Bonds implies that there has been no change in the matters described herein since the date hereof.

All quotations from and summaries and explanations of provisions of laws and documents herein do not purport to be complete, and reference is made to such laws and documents for full and complete statements of their provisions. The information in this Official Statement has been obtained from sources which are considered reliable and which are customarily relied upon in preparation of similar official statements, but such information is not guaranteed as to accuracy or completeness.

The Series 2011A Bonds will not be registered under the Securities Act of 1933, as amended, or any state securities laws and will not be listed on any stock or other securities exchange, and neither the Securities and Exchange Commission nor any federal, state, municipal or other governmental agency will pass upon the accuracy, completeness or adequacy of this Official Statement.

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REFERENCE TO DOCUMENTS .....	50
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**\$11,350,000**  
**CITY OF HENDERSON, KENTUCKY**  
**ELECTRIC SYSTEM REVENUE BONDS, SERIES 2011A**

**INTRODUCTORY STATEMENT**

This Official Statement of the City of Henderson, Kentucky (the “City”), sets forth certain information with respect to the City’s Electric System Revenue Bonds, Series 2011A, dated the date of original issuance and delivery, to be issued in the aggregate principal amount of \$11,350,000 (the “Series 2011A Bonds”).

The proceeds from the sale of the Series 2011A Bonds, after paying costs of issuance, will be used (a) to pay and discharge the City’s Bond Anticipation Note, Taxable Series 2008B, currently outstanding in the principal amount of \$5,281,067 (the “2008B Note”), (b) to pay a portion of the remaining costs of acquisition, construction and installation of capital improvements and additions to the City’s retail electric transmission and distribution system (the “Retail System”) and the City’s Station Two generating station on the Green River in Henderson County (“Station Two” and, together with the Retail System, the “System”) and (c) to fund a debt service reserve for the Series 2011A Bonds, all as described under the heading “PURPOSES.” The 2008B Note financed the City’s contractual share of the initial costs of the acquisition, construction and installation of certain capital improvements and additions to Station Two.

The City is a city and political subdivision of the Commonwealth of Kentucky situated in Henderson County, Kentucky. The Series 2011A Bonds will be issued under authority of Sections 96.520, 96.530 and 96.370 through 96.510 of the Kentucky Revised Statutes, as amended, and the Ordinances, as defined and described under the heading “THE ORDINANCES.” The City operates the System through its Utility Commission (the “Utility Commission”), which the City created on June 1, 1949 pursuant to Section 96.530 of the Kentucky Revised Statutes to operate, manage, equip and maintain the System. The Utility Commission operates the System under the name Henderson Municipal Power & Light.

Big Rivers Electric Corporation (“Big Rivers”) is a generation and transmission rural electric cooperative corporation. In addition to owning and operating four of its own generating stations, Big Rivers operates Station Two for the City and purchases all of the power and energy produced by Station Two that is not reserved by the Utility Commission. See the heading “BIG RIVERS ELECTRIC CORPORATION” and APPENDIX F – “GENERAL INFORMATION AND DATA – BIG RIVERS ELECTRIC CORPORATION” for additional information regarding Big Rivers and the heading “CONTRACTUAL ARRANGEMENTS WITH BIG RIVERS” for information regarding Big Rivers’ management and operation of Station Two.

The Series 2011A Bonds are not general obligations of the City but are special and limited obligations of the City payable solely from and secured by a pledge of a fixed portion of the gross income and revenues of the System. The Series 2011A Bonds are additionally secured by a debt service reserve and a nonforeclosable statutory mortgage lien on the System. The security for the Series 2011A Bonds is described in greater detail under the heading “AUTHORITY AND SECURITY.”

Before the issuance of the Series 2011A Bonds, the Utility Commission, on behalf of the City, will execute a Continuing Disclosure Certificate regarding its obligation to make continuing annual disclosure of certain financial and operating information and disclosure of certain events which might occur, all as described under the heading “CONTINUING DISCLOSURE UNDERTAKINGS – The Utility Commission.” On June 1, 2010, Big Rivers entered into a Continuing Disclosure Agreement with U.S. Bank National Association, as trustee, in connection with the issuance of the County of Ohio, Kentucky Pollution Control Refunding Revenue Bonds, Series 2010A (Big Rivers Electric Corporation Project) whereby Big Rivers agreed to make continuing annual disclosure of certain financial and operating information and disclosure of certain events which might occur, all as described under the heading “CONTINUING DISCLOSURE UNDERTAKINGS – Big Rivers” and APPENDIX F – “GENERAL INFORMATION AND DATA – BIG RIVERS ELECTRIC CORPORATION – Continuing Disclosure.” The Utility Commission and Big Rivers’ continuing disclosure obligations are collectively referred to herein as the “Continuing Disclosure Undertakings.”

The Series 2011A Bonds will be initially issued only in book-entry form in the name of Cede & Co., a nominee of The Depository Trust Company (“DTC”), as securities depository. No physical delivery of the Series 2011A Bonds will be made to purchasers. SO LONG AS CEDE & CO., AS NOMINEE OF DTC, IS THE REGISTERED OWNER, REFERENCES TO BONDHOLDERS OR REGISTERED HOLDERS OR OWNERS SHALL MEAN CEDE & CO., AND SHALL NOT MEAN THE BENEFICIAL OWNERS OF THE SERIES 2011A BONDS. SEE “THE SERIES 2011A BONDS – Book-Entry-Only System.”

The City expects to sell its Electric System Revenue Bonds, Series 2011B (the “Series 2011B Bonds”), in the approximate principal amount of \$3,670,000, no earlier than September 1, 2011, for the purpose of paying and discharging additional bond anticipation notes that were issued to finance capital improvements to the Retail System. The Series 2011B Bonds will, when issued, rank on a parity with the Series 2011A Bonds, when issued.

Following are brief descriptions of the City, the Utility Commission, Big Rivers, the Series 2011A Bonds, the Ordinances, the Continuing Disclosure Undertakings, the contractual arrangements between the Utility Commission and Big Rivers, the purposes of the issuance of the Series 2011A Bonds and other information and data, together with the Appendices, containing among other things financial and other information with respect to the Utility Commission and Big Rivers. All descriptions contained herein of the Series 2011A Bonds, the Ordinances, the Continuing Disclosure Undertakings and the contractual arrangements between the Utility Commission and Big Rivers do not purport to be comprehensive or definitive and are qualified in their entirety by reference to such documents, all of which are available for inspection at the office of the Utility Commission.

## **THE SERIES 2011A BONDS**

### **General**

The Series 2011A Bonds will be dated the date of original issuance and delivery, will be issued in the principal amount of \$11,350,000, in fully registered form and in denominations of \$5,000 or any integral multiple thereof, and will mature as to principal on each December 1 and

will bear interest as set forth on the inside cover page of this Official Statement, subject to mandatory sinking fund redemption and possible optional redemption as hereinafter provided. Interest will be computed on the basis of a year of 360 days consisting of twelve 30-day months.

Interest accruing on the Series 2011A Bonds will be payable semiannually on June 1 and December 1 of each year (commencing December 1, 2011) from the later of the date of original issuance and delivery or the most recent interest payment date (June 1 and December 1) to which interest has been paid or duly provided for. The interest installment on each Series 2011A Bond will be paid to the person who is the registered holder thereof as of the close of business on the Record Date for such interest installment, which Record Date shall be the 15th day (whether or not a business day) of the calendar month next preceding such interest payment date. Payment of interest shall be made by check mailed to the person who is the registered holder on the applicable Record Date at the address of such holder as it appears on the books of the Trustee and Paying Agent, U.S. Bank National Association, Louisville, Kentucky (the “Trustee” and the “Paying Agent,” respectively, sometimes referred to jointly as the “Trustee and Paying Agent”). Principal shall be paid when due upon delivery of the Series 2011A Bond for payment at the designated office of the Trustee and Paying Agent. If the date for making any payment in respect of the Series 2011A Bonds is not a business day for the Trustee and Paying Agent, such payment may be made or act performed or right exercised on the next succeeding business day with the same force and effect as if done on the date stipulated in the Series 2011A Bonds and no interest shall accrue for the period after such stipulated date.

See “THE SERIES 2011A BONDS – Book-Entry-Only System” below regarding payment of principal and interest to the Beneficial Owners while the Series 2011A Bonds are in the Book-Entry-Only System. See APPENDIX A – “DEBT SERVICE REQUIREMENTS ON SERIES 2011A BONDS, ESTIMATED DEBT SERVICE REQUIREMENTS ON SERIES 2011B BONDS AND DEBT OUTSTANDING OF THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION,” for the City’s estimated annual debt service requirements for the Series 2011A Bonds and the Series 2011B Bonds.

### **Book-Entry-Only System**

Only beneficial interests will be available to purchasers through a book-entry-only system maintained by DTC (the “Book-Entry-Only System”). The following discussion will not apply to the Series 2011A Bonds if they are issued in physical form after any discontinuance of the Book-Entry-Only System.

DTC will act as securities depository for the Series 2011A Bonds upon their initial issuance. The Series 2011A Bonds will be registered in the name of Cede & Co. (DTC’s partnership nominee). The Series 2011A Bonds will be originally issued as one fully-registered Series 2011A Bond for each maturity, in the aggregate principal amount of the issue, and will be deposited with DTC.

DTC is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code, and a “clearing agency” registered pursuant to the provisions of Section 17A

of the Securities Exchange Act of 1934. DTC holds bonds that its participants (the “Direct Participants”) deposit with DTC. DTC also facilitates the settlement among Direct Participants of bond transactions, such as transfers and pledges, in deposited bonds through electronic computerized book-entry changes in Direct Participants’ accounts, thereby eliminating the need for physical movement of bond certificates. Direct Participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is owned by a number of its Direct Participants and by the New York Stock Exchange, Inc., the American Stock Exchange, Inc., and the National Association of Securities Dealers, Inc. Access to the DTC system is also available to others such as securities brokers and dealers, banks and trust companies that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly (“Indirect Participants”). Direct Participants and Indirect Participants are collectively referred to as “Participants.” The Rules applicable to DTC and its Participants are on file with the Securities and Exchange Commission.

Purchases of Series 2011A Bonds under the Book-Entry-Only System must be made by or through Direct Participants, which will receive a credit for the Series 2011A Bonds on DTC’s records. The ownership interest of each actual purchaser of each Series 2011A Bond (“Beneficial Owner”) is in turn to be recorded on the Direct and Indirect Participant’s records. Beneficial Owners will not receive written confirmation from DTC of their purchases, but Beneficial Owners are expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 2011A Bonds are to be accomplished by entries made on the books of Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interest in Series 2011A Bonds, except in the event that use of the Book-Entry-Only System for the Series 2011A Bonds is discontinued.

To facilitate subsequent transfers, all Series 2011A Bonds deposited by Participants with DTC are registered in the name of DTC’s partnership nominee, Cede & Co. The deposit of Series 2011A Bonds with DTC and their registration in the name of Cede & Co. effect no change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2011A Bonds; DTC’s records reflect only the identity of the Direct Participants to whose accounts such Series 2011A Bonds are credited, which may or may not be the Beneficial Owners. The Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Redemption notices shall be sent to Cede & Co. If less than all of the Series 2011A Bonds of a maturity are being redeemed, DTC’s practice is to determine by lot the amount of the interest of each Direct Participant in the maturity to be redeemed.

Neither DTC nor Cede & Co. will consent or vote with respect to Series 2011A Bonds. Under its usual procedures, DTC mails an Omnibus Proxy to the City as soon as possible after

the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Series 2011A Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal and interest payments on the Series 2011A Bonds will be made to DTC. DTC's practice is to credit Direct Participants' accounts on the payable date in accordance with their respective holdings shown on DTC's records unless DTC has reason to believe that it will not receive payment on the payable date. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with bonds held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Trustee and Paying Agent or the Commission, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to DTC is the responsibility of the Trustee and Paying Agent, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

The foregoing information concerning DTC and DTC's book-entry system has been obtained from DTC and contains statements that are believed to describe accurately DTC, the method of effecting book-entry transfers of securities distributed through DTC and certain related matters, but the City takes no responsibility for the accuracy of such statements.

THE CITY AND THE TRUSTEE AND PAYING AGENT WILL HAVE NO RESPONSIBILITY OR OBLIGATION TO ANY DIRECT PARTICIPANT, INDIRECT PARTICIPANT OR ANY BENEFICIAL OWNER OR ANY OTHER PERSON NOT SHOWN ON THE REGISTRATION BOOKS OF THE TRUSTEE AND PAYING AGENT AS BEING A REGISTERED OWNER WITH RESPECT TO: (1) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY DIRECT PARTICIPANT OR INDIRECT PARTICIPANT; (2) THE PAYMENT OF ANY AMOUNT DUE BY DTC TO ANY DIRECT PARTICIPANT OR BY ANY DIRECT PARTICIPANT OR INDIRECT PARTICIPANT TO ANY BENEFICIAL OWNER IN RESPECT OF THE PRINCIPAL AMOUNT OR REDEMPTION PRICE OF OR INTEREST ON THE SERIES 2011A BONDS; (3) THE DELIVERY OF ANY NOTICE BY DTC TO ANY DIRECT PARTICIPANT OR BY ANY DIRECT PARTICIPANT OR INDIRECT PARTICIPANT TO ANY BENEFICIAL OWNER WHICH IS REQUIRED OR PERMITTED TO BE GIVEN TO REGISTERED OWNERS UNDER THE TERMS OF THE ORDINANCES; (4) THE SELECTION OF THE BENEFICIAL OWNERS TO RECEIVE PAYMENT IN THE EVENT OF ANY PARTIAL REDEMPTION OF THE SERIES 2011A BONDS; OR (5) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC AS REGISTERED OWNER.

The Securities Depository may discontinue providing its services with respect to the Series 2011A Bonds at any time by giving 30 days' notice to the City and the Trustee and Paying Agent and discharging its responsibilities with respect thereto under applicable law. If no successor Securities Depository is appointed in accordance with the Ordinances, or if the City decides to discontinue the Book-Entry-Only System, Series 2011A Bond certificates shall be printed and delivered to and registered in the name of the Beneficial Owners.

In the event that the Book-Entry-Only System is discontinued, a Bondholder may transfer or exchange Series 2011A Bonds in accordance with the Ordinances. The Trustee and Paying Agent may require a Bondholder, among other things, to furnish appropriate endorsements and transfer documents and to pay any taxes and fees required by law or permitted by the Ordinances. The Trustee and Paying Agent shall not be required to transfer or exchange any Series 2011A Bond (a) during any period beginning five (5) days before the selection by the Trustee and Paying Agent of Series 2011A Bonds to be redeemed before maturity and ending on the date of mailing of notice of any such redemption or (b) if such Series 2011A Bond has been selected or called for redemption in whole or in part.

**Mandatory Sinking Fund Redemption**

The Series 2011A Bond maturing on December 1 of the year 2031 is a Term Bond subject to mandatory sinking fund redemption in part, at the selection of the Trustee by lot, as follows:

\$1,545,000 Term Bond Maturing December 1, 2031

<u>Mandatory Sinking Fund</u> <u>Installment Due December 1</u>	<u>Amount of Installment</u>
2030	\$755,000
2031 (maturity)	790,000

**Optional Redemption**

The Series 2011A Bonds maturing on and after December 1, 2021, are subject to redemption by the City, at its option, before maturity on September 1, 2021, and on any date thereafter in whole or from time to time in part in any order of maturity (less than all of a single maturity to be selected by lot in such manner as the Trustee and Paying Agent may determine) at a redemption price equal to 100% of the principal amount thereof plus accrued interest to the redemption date.

**Other Redemption Provisions**

The Trustee and Paying Agent will cause notice of the call for any redemption, identifying the Series 2011A Bonds or portions thereof (\$5,000 or any integral multiple thereof) to be redeemed, to be sent by first-class mail not less than thirty (30) days nor more than sixty (60) days before the date fixed for redemption to the registered holder of each Series 2011A Bond to be redeemed at the address shown on the registration books. Failure to give such notice by mailing or any defect therein in respect of any Series 2011A Bond shall not affect the validity of any proceedings for the redemption of any other Series 2011A Bond. Any notice mailed as provided above shall be conclusively presumed to have been duly given, irrespective of whether the registered holder receives the notice.

Notice of redemption having been given as provided in the Ordinances, the Series 2011A Bonds or portions thereof designated for redemption shall become due and payable on the date fixed for redemption and, unless the City defaults in the payment of the principal thereof, such

Series 2011A Bonds or portions thereof shall cease to bear interest from and after the date fixed for redemption whether or not such Series 2011A Bonds are presented and surrendered for payment on such date. If any Series 2011A Bond or portion thereof called for redemption is not so paid upon presentation and surrender thereof for redemption, such Series 2011A Bond or portion thereof shall continue to bear interest at the rate set forth thereon until paid or until due provision is made for the payment of same.

See “THE SERIES 2011A BONDS – Book-Entry-Only System” regarding redemption notices and related matters while the Series 2011A Bonds are in the Book-Entry-Only System.

### **PURPOSES**

Proceeds of the Series 2011A Bonds, after paying costs of issuance of the Series 2011A Bonds, will be used:

- (a) to pay and discharge, along with other funds of the Utility Commission, the 2008B Note, the proceeds of which were used to pay a portion of the costs of the City’s contractual portion of capital improvements to Station Two, including without limitation, improvements to its boiler, ash system, cooling tower, electrical systems, mechanical systems, building and roof, heating and cooling system and environmental upgrades, replacements and facilities, and including engineering, consulting and project management, all as determined by the Utility Commission (“Project B”)\*; and
- (b) to pay a portion of the remaining costs of Project B and to pay a portion of the costs of the acquisition, construction and installation of additions and improvements to the Retail System, including without limitation, substation upgrades, new transformers, switchgear and related equipment, transmission line replacements and related electric distribution facilities, and including engineering, consulting and project management (“Project A”); and
- (c) to fund a debt service reserve for the Series 2011A Bonds.

The City also intends to sell its Series 2011B Bonds no less than fifteen days following the sale of the Series 2011A Bonds. The proceeds of the Series 2011B Bonds will be used to pay and discharge the City’s Bond Anticipation Note, Series 2008A, currently outstanding in the principal amount of \$3,500,000 (the “2008A Note”) and the City’s Bond Anticipation Note, Series 2010A, currently outstanding in the principal amount of \$170,000 (the “2010A Note”), the proceeds of which were used to pay a portion of the costs of Project B.

The estimated sources and uses of funds for the Series 2011A Bonds and the Series 2011B Bonds are shown in the following schedule:

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\* Under a contractual arrangement with Big Rivers (see “THE SYSTEM – Station Two” herein), the costs of improvements to Station Two are incurred by Big Rivers, which bills the Utility Commission for a percentage of such costs (currently 35.26%) based on the City’s reserved net capacity of Station Two. Proceeds of the Bonds are used to pay a portion of the City’s share of the costs of the Station Two improvements.

Sources of Funds

	Series 2011A <u>Bonds</u>	(Estimated) Series 2011B <u>Bonds</u>
Par Amount	\$11,350,000	\$3,670,000
Utility Commission Funds	<u>229,527</u>	<u>414,999</u>
Total Sources of Funds	<u>\$11,579,527</u>	<u>\$4,084,999</u>

Uses of Funds

	Series 2011A <u>Bonds</u>	(Estimated) Series 2011B <u>Bonds</u>
Payment of 2008A Note and 2010A Note, including accrued interest (Project A)	\$ 0	\$3,696,152
Payment of 2008B Note, including accrued interest (Project B)	5,310,594	0
Deposit to Construction Fund	5,051,964	0
Fund Debt Service Reserve Fund	831,806	262,485
Underwriter's Discount	227,000	73,400
Bond Issuance and Miscellaneous Costs	<u>158,163</u>	<u>52,962</u>
Total Uses of Funds	<u>\$11,579,527</u>	<u>\$4,084,999</u>

The Utility Commission anticipates that bond proceeds used to fund Project A and Project B will be substantially expended by September 1, 2013.

**AUTHORITY AND SECURITY**

The Series 2011A Bonds are being issued under authority of the laws of the Commonwealth of Kentucky, particularly Sections 96.520, 96.530 and 96.370 through 96.510 of the Kentucky Revised Statutes (the "Act"), and pursuant to the Ordinances adopted by the City.

The Series 2011A Bonds are not general obligations of the City but are special and limited obligations of the City payable solely from and secured by a pledge of a fixed portion of the gross revenues of the System. Revenues will comprise all revenues, income, rents and receipts derived by the Utility Commission on behalf of the City from the ownership and operation of the System, including all net payments to be made to the Utility Commission on



behalf of the City pursuant to a power sales contract (the “Power Sales Contract”) between the City and Big Rivers for the sale by the City to Big Rivers of Station Two capacity and energy in excess of the capacity and energy reserved by the City. The Power Sales Contract is hereinafter described in greater detail under the heading “CONTRACTUAL ARRANGEMENTS WITH BIG RIVERS – The Power Sales Contract.”

The Series 2011A Bonds are also secured by a debt service reserve in an amount equal to the least of the maximum annual debt service on the Series 2011A Bonds, 125% of the average annual debt service on the Series 2011A Bonds or 10% of the proceeds of the Series 2011A Bonds. In addition, as provided in the Ordinances and the Act, the Series 2011A Bonds are secured by a nonforeclosable statutory mortgage lien on the System.

The City may issue Additional Bonds on a parity with the Series 2011A Bonds and the Series 2011B Bonds (to be issued later) pursuant to the Ordinances for the purpose of paying the costs of Additional Projects. Before Additional Bonds may be issued, certain certificates described in the Ordinances must be delivered demonstrating that Net System Revenues calculated as provided in the Ordinances will not be less than 120% of the Maximum Annual Principal and Interest Requirement on all parity bonds to be outstanding immediately after the issuance of the proposed Additional Bonds. Refunding Bonds may also be issued. The definitions of and requirements regarding the issuance of Additional Bonds and Refunding Bonds and the definitions of Additional Projects, Net System Revenues and Maximum Annual Principal and Interest Requirement are discussed in greater detail under the headings “THE ORDINANCES – Additional Bonds” and “THE ORDINANCES – Refunding Bonds.”

Reference is made to the Ordinances and to the Act for a description of the pledge and covenants securing the Series 2011A Bonds, the nature, extent, manner and enforcement of such pledge and the rights and remedies of the holders of the Series 2011A Bonds with respect thereto.

## **THE CITY**

### **General**

The City of Henderson, Kentucky, is the county seat of Henderson County, is situated on the Ohio River in western Kentucky and has a population (according to the year 2009 estimated census) of 27,952. Its administrative offices are located in the Municipal Center, 222 1st Street, Henderson, Kentucky 42420.

The City is organized under the city manager plan, one of the alternative forms of city government established under Kentucky laws. Under the city manager plan, the City is governed by a Mayor, who is elected by the voters of the City for a term of four years, and four legislative body members known as City Commissioners, who are elected at-large by the voters of the City for terms of two years each. The Mayor and the City Commissioners together comprise the Board of Commissioners of the City, in which is vested all legislative and executive authority of the City. The Mayor presides at and may vote at all meetings of the Board of Commissioners. The Mayor is recognized as the head of the City government but has no regular administrative

duties. The Board of Commissioners designates one of the City Commissioners to serve as Mayor Pro-Tem in the absence or disability of the Mayor.

The Board of Commissioners establishes by ordinance all appointive offices within the City government and the duties and responsibility of those offices and establishes rules and regulations for the public health, safety and welfare. The Board of Commissioners by ordinance establishes an annual City budget and appropriates funds for the operation of the City government.

The Board of Commissioners appoints a City Manager by a majority vote of all its members. The City Manager is the chief administrative officer of the City and exercises all executive powers and duties delegated to him by ordinance and statute. The City Manager enforces City ordinances and all applicable state statutes. The Board of Commissioners appoints the director, or chief executive, of each City administrative department, upon recommendation of the City Manager.

The City operates the System through its Utility Commission. See the information provided under the headings “THE UTILITY COMMISSION” and “THE SYSTEM” for more information.

### **City Officials**

The incumbent Mayor and City Commissioners are identified below:

<u>Name</u>	<u>Title</u>	<u>Occupation</u>
Steve Austin	Mayor	Retired
Mike Farmer	Commissioner	Small Business Owner
Robert M. Mills	Commissioner	Small Business Owner
Robert N. Pruitt	Commissioner	Self-Employed
Alan C. Taylor	Commissioner	Small Business Owner

Certain other City officials are: City Manager – Russell R. Sights; Finance Director – Robert J. Gunter; City Attorney – Joseph E. Ternes, Jr.; and City Clerk – Carolyn Williams.

See APPENDIX B – “DEMOGRAPHIC AND ECONOMIC DATA FOR THE CITY OF HENDERSON, KENTUCKY” for a general description of the Henderson area.

### **THE UTILITY COMMISSION**

The City operates the System through its Utility Commission. The City created the Utility Commission in 1949 pursuant to Section 96.530 of the Kentucky Revised Statutes to operate, manage, equip and maintain the System. The Utility Commission was also vested with the same authority with respect to Station Two when it was constructed and placed into service during the early 1970s.

The Utility Commission, which operates the System under the name Henderson Municipal Power and Light, constitutes a public body politic and corporate pursuant to Kentucky law and is governed by five Commissioners. The City’s Mayor appoints each Commissioner

with the approval of the City’s Board of Commissioners. The Commissioners serve three year terms with no more than two Commissioners and officers holding concurrent terms of office. The Utility Commission’s current Commissioners and officers are:

<u>Name</u>	<u>Title</u>	<u>Occupation</u>
Dr. William L. Smith	Chairman	Dentist
Gregory A. Risch	Vice Chairman	Vice President and Chief Accounting Officer - Accuride Corporation
Ronald Jenkins	Secretary	Retired / Former Editor of <i>The Gleaner</i>
Joel Hopper	Commissioner	President, Brenntag Mid-South, Inc.
Michael J. Vickers	Commissioner	Project Engineer II, Bernardin, Lochmueller, and Associates

Certain other officials of the Utility Commission are General Manager – Gary Quick; Power Production Director – Wayne Thompson; Manager Transmission and Distribution – Steve Smith; Comptroller – Mark Powers; and General Counsel – H. Randall Redding.

Following are brief resumes of the management personnel of the Utility Commission:

*Gary Quick, General Manager.* Mr. Quick has been the General Manager of the Utility Commission since January 2006. Before accepting his current position, Mr. Quick was the Electric Utility Director for the City of Jacksonville Beach, Florida. He has also held the position of General Manager for Macon Municipal Utilities in Missouri and District Manager for Missouri Power & Light Company. Mr. Quick has a B.S. degree in Business Administration with a concentration in Management and a Master’s Degree in Accounting. Mr. Quick has over 40 years of management experience in the electric utility industry.

*Wayne Thompson, Power Production Director.* Mr. Thompson has been employed with the Utility Commission since November 1999. He currently serves as Power Production Director, a position he has held since June 2005. Before this promotion, Mr. Thompson served as the Utility Commission’s Station One Plant Superintendent. He held the position of Superintendent of Maintenance at Big Rivers Electric Corporation in Henderson from January 1984 to February 1999. Mr. Thompson was employed as a Mechanical Maintenance Supervisor at Sierra Pacific Power Company in Sierra, Nevada, from January 1981 to January 1984. He also held the position of Maintenance Foreman at Illinois Power Company in Decatur, Illinois, from September 1970 to January 1981. Mr. Thompson studied Automotive Technology at Bailey Technical Institute. He has over 41 years of maintenance and management experience in the electric utility industry.

*Steve Smith, Manager Transmission and Distribution.* Mr. Smith began his career with the Utility Commission in April 1977 as an apprentice line worker and later advanced to the

position of journey line worker. Mr. Smith has over 34 years of experience with the Utility Commission and he was instrumental in the construction and conversion of its distribution system from 2,400kV to 13,800kV. Mr. Smith also worked on the transmission system which operates at 69,000kV and 161,000kV. He has been a Project Coordinator for distribution, transmission, and substation maintenance and construction projects for the Utility Commission and has also supervised the installation of new fiber optic facilities in various areas of Henderson County. In February 2008, Mr. Smith was promoted to Manager of the Transmission and Distribution Department. His intimate knowledge of the Utility Commission's electric generation, transmission, and distribution facilities provides exceptional service reliability for customers during normal operations and emergency events.

*Mark Powers, Comptroller.* Mark Powers has been the Comptroller of the Utility Commission since March 2006. Previous to that, Mr. Powers was Chief Control Officer for The Nexus Group, a long distance communications company, located in Evansville, Indiana. During his time with The Nexus Group he also held the positions of Chief Information Officer and Vice President of Management Information Systems. Mr. Powers is a Certified Public Accountant and has a B.S. in Accounting from the University of Southern Indiana.

In addition to operating, managing, equipping and maintaining the System, the Utility Commission determines the user charges and rates and financing needs of the System, subject to the approval and adoption of the City's Board of Commissioners. Pursuant to Kentucky law the Utility is not regulated by the Kentucky Public Service Commission (the "KPSC") and the KPSC has no rate setting authority with respect to the City or the Utility Commission. The Utility Commission has contracted with Big Rivers to manage and operate Station Two pursuant to the Operation Agreement described under the heading "CONTRACTUAL ARRANGEMENTS WITH BIG RIVERS – The Operation Agreement."

The Utility Commission also provides internet and broadband services to local governmental, educational, and religious organizations at a discounted rate.

Summaries of the Utility Commission's unaudited financial statements for the fiscal year ended May 31, 2011 and audited financial statements for the fiscal years ended May 31, 2006 through 2010 and the Utility Commission's audited financial statements and management's discussion and analysis for the years ended May 31, 2010 and 2009 are attached hereto as APPENDIX D – "SUMMARIES OF UNAUDITED STATEMENTS OF NET ASSETS, REVENUES, EXPENSES AND CHANGES IN NET ASSETS FOR THE FISCAL YEAR ENDED MAY 31, 2011 AND AUDITED STATEMENTS OF NET ASSETS, REVENUES, EXPENSES AND CHANGES IN NET ASSETS FOR THE FISCAL YEARS ENDED MAY 31, 2006 THROUGH 2010 FOR THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION" and APPENDIX E – "REPORT ON AUDITED FINANCIAL STATEMENTS FOR THE FISCAL YEARS ENDED MAY 31, 2010 AND 2009 FOR THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION," respectively. In the future, the Utility Commission will file annual information with EMMA, the Nationally Recognized Municipal Services Information Repository, as described under the heading "CONTINUING DISCLOSURE UNDERTAKINGS – The Utility Commission." Such information will also be available by contacting the Utility Commission at 100 Fifth Street, Henderson, Kentucky 42420 or by telephone at (270) 826-2726.

## **THE SYSTEM**

### **General**

The City has owned and operated its electric light and power system since 1897. In terms of annual kilowatt hours sold, the System is the fourth largest municipally-owned electric distribution system in Kentucky.

The Act empowers the City, through the Utility Commission, to erect, maintain and operate electric light, heat and power plants, with extensions and necessary appurtenances, within or without the City's corporate limits. If the City at any time has excess capacity and energy, the Act specifically permits the City to sell the excess capacity and energy to a utility in Kentucky regulated by the KPSC, to a city-owned utility established pursuant to KRS Chapter 96, or to a utility for consumption outside Kentucky.

As a City owned-utility, the Utility Commission is exempt from regulation by the KPSC.

### **The Retail System**

#### *General*

The City owns and the Utility Commission operates an electric utility system, including generating, transmission and distribution facilities, which serves at retail the City and its inhabitants. The City's retail electric transmission and distribution system, together with all additions, expansions and improvements thereto and renewals and replacements thereof, other than Station Two, is referred to in this Official Statement as the "Retail System."

The Utility Commission's Retail System consists of approximately 11,922 total customers. Approximately 10,299 or 86%, are residential customers, approximately 1,623, or 14%, are small and large commercial customers, according to the Utility Commission's customer classification system.

The City has one subtransmission substation between its 69kv and the 161kv system of Big Rivers Electric Corporation. The City has six 13.8kv to 69kv substations with 3 of these having ties to the Big Rivers Electric 69kv system. The City's subtransmission substation has 100,000 kva of transformation and a total in excess of 162,000 kva of transformation at its six 13.8kv to 69kv substations. Based on an 85% power factor, the Utility Commission has the ability to provide in excess of 138,000 kw to its customers.

#### *Electric Load History*

The following table shows the actual non-coincident peak demand and energy requirements for the Retail System for the five fiscal year period of 2007 through 2011 as prepared by the Utility Commission, based on the actual sales data.

<u>Calendar Year</u>	<u>Peak Demand Megawatts (MW)</u>	<u>System Electric Energy Requirements* Megawatt Hours</u>
2007	125	644,000
2008	119	657,000
2009	111	602,000
2010	117	577,000
2011	Unavailable	615,000

\* Total megawatt hours delivered by generators to the Retail System. Retail System sales are approximately 2% less than these amounts because of transmission and distribution losses.

Peak demand and energy requirements vary from year to year because of various factors, including weather and customer demand.

Because of its location on the Ohio River with its abundance of low cost barge and other water transportation, the substantial fuel reserves of the West Kentucky coal field in which the City is situated and the large areas of undeveloped land around the City, the City expects the System to experience average growth rates in the future.

#### *Fiscal History*

Total revenues and total expenses of the System for the Utility Commission's fiscal years ending May 31, 2006 through May 31, 2011 are summarized below. The summary was created using the Utility Commission's Unaudited Statements of Net Assets, Revenues, Expenses and Changes in Net Assets for the Fiscal Year Ended May 31, 2011 and the Utility Commission's Audited Statements of Net Assets, Revenues, Expenses and Changes in Net Assets for the Fiscal Years Ended May 31, 2006 through 2010. For additional information, see APPENDIX D – "SUMMARIES OF UNAUDITED STATEMENTS OF NET ASSETS, REVENUES, EXPENSES AND CHANGES IN NET ASSETS FOR THE FISCAL YEAR ENDED MAY 31, 2011 AND AUDITED STATEMENTS OF NET ASSETS, REVENUES, EXPENSES AND CHANGES IN NET ASSETS FOR THE FISCAL YEARS ENDED MAY 31, 2006 THROUGH 2010 FOR THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION" and APPENDIX E – "REPORT ON AUDITED FINANCIAL STATEMENTS FOR THE FISCAL YEARS ENDED MAY 31, 2010 AND 2009 FOR THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION."

	<u>Fiscal Years Ending May 31</u>					
	<u>Unaudited</u>	<u>Audited</u>				
	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>
Electric Sales Revenues	\$56,360,545	\$51,866,924	\$54,532,882	\$55,219,380	\$41,589,277	\$47,226,418
Other Revenues	<u>2,219,349</u>	<u>1,498,755</u>	<u>2,042,403</u>	<u>1,719,026</u>	<u>1,389,223</u>	<u>858,667</u>
Total Revenues	58,579,894	53,365,679	56,575,285	56,938,406	42,978,500	48,085,085
Total Expenses including						
Depreciation	(58,145,460)	(56,935,597)	(58,024,244)	(59,937,958)	(44,001,527)	(43,135,083)
Extraordinary Items*	-	<u>17,378,818</u>	-	-	-	-
Excess Revenue over Expenses	<u>\$434,434</u>	<u>\$13,808,900</u>	<u>\$(1,448,959)</u>	<u>\$(2,999,552)</u>	<u>\$(1,023,027)</u>	<u>\$4,950,002</u>

\*Represents funds received by the Utility Commission from Western Kentucky Energy Corp. pursuant to the "Unwind" described in APPENDIX F, "GENERAL INFORMATION AND DATA - BIG RIVERS ELECTRIC CORPORATION"

### *Projected Electric Load*

On the basis of the City's historic load growth and the expectations for its population and area growth, the following projection of the City's electric load and retail revenue has been prepared by the Utility Commission. The projected load growth of the Retail System is illustrated in the following table.

<u>Fiscal Year</u>	<u>Peak Demand, MW</u>	<u>Percent Growth</u>	<u>Energy Requirements (kwh)</u>	<u>Percent Growth</u>
2012	119.00	-	644,904,439	-
2013	121.00	1.65%	655,564,017	1.63%
2014	122.00	0.82%	660,937,492	0.81%
2015	123.00	0.81%	666,310,968	0.81%
2016	124.00	0.81%	671,684,443	0.80%
2017	125.00	0.80%	677,057,919	0.79%
2018	127.00	1.57%	687,720,248	1.55%
2019	128.00	0.78%	693,093,063	0.78%
2020	129.00	0.78%	698,465,877	0.77%
2021	131.00	1.53%	709,129,478	1.50%

**Note:** Table does not reflect capacity and energy allocations to Big Rivers under the Power Sales Contract described herein.

The changes in the Retail System's demand and energy requirements from year to year reflect the net effects of population growth and economic growth experienced by the Utility Commission's customers, incremental and detrimental load impacts, and the relative effects of actual weather conditions that vary from typical or normal conditions.

The current economic recession has impacted the Utility Commission's kilowatt hour sales. The decline in the Utility Commission's sales began in December 2008 and leveled off in the summer of 2010. As the depressed economy continues, the Utility Commission anticipates

static kilowatt hour sales. However, based upon monthly sales data after June 1, 2010, it appears the material decline in gross sales has stabilized and sales now appear to be increasing due to seasonal weather fluctuations.

In addition, APPENDIX B – “DEMOGRAPHIC AND ECONOMIC DATA FOR THE CITY OF HENDERSON, KENTUCKY” provides general demographic and economic data regarding the areas in which the City provides its services. The Utility Commission’s audited financial statements and management’s discussion and analysis for the years ended May 31, 2010 and 2009 and unaudited financial statements for the fiscal year ended May 31, 2011 are attached hereto as APPENDIX E – “REPORT ON AUDITED FINANCIAL STATEMENTS FOR THE FISCAL YEARS ENDED MAY 31, 2010 AND 2009 FOR THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION” and APPENDIX D – “SUMMARIES OF UNAUDITED STATEMENTS OF NET ASSETS, REVENUES, EXPENSES AND CHANGES IN NET ASSETS FOR THE FISCAL YEAR ENDED MAY 31, 2011 AND AUDITED STATEMENTS OF NET ASSETS, REVENUES, EXPENSES AND CHANGES IN NET ASSETS FOR THE FISCAL YEARS ENDED MAY 31, 2006 THROUGH 2010 FOR THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION,” respectively.

### **Station One**

The Utility Commission previously owned and operated a coal fired generating station located on the Green River in downtown Henderson, Kentucky (“Station One”). Station One was an active generating station until December 31, 2008 when it was shut down by the Utility Commission due to the increased cost associated with Station One satisfying increasing federal and state regulations for air emissions. Increasing maintenance costs and increasing coal costs also led to the closure. Since its closure, Station One has remained vacant. To date, neither the Utility Commission nor the City has determined how or whether to dispose of Station One’s operating assets.

### **Station Two**

#### *Description*

The City owns Station Two, a coal-fired generating station located on the Green River in Henderson County. The City constructed Station Two in the early 1970s and the facility became operational in 1973. Station Two’s net rated capacity is 312 MW.

Big Rivers currently operates Station Two on behalf of the City. In addition to operating Station Two, Big Rivers also owns and operates the adjacent Robert A. Reid generating station (the “Reid Station”). The two facilities share certain joint facilities and operating personnel. For a discussion of such joint facilities, see the subheading “Joint Facilities” below and “CONTRACTUAL ARRANGEMENTS WITH BIG RIVERS – The Joint Facilities Agreement.” In addition to operating Station Two, Big Rivers also purchases a portion of Station Two’s generating capacity from the City.

The City and Big Rivers have entered into a collection of related agreements governing Big River’s operation of Station Two, the allocation of Station Two’s capacity between the City and Big Rivers, the purchase by Big Rivers of its allocated capacity, the allocation of the general



and administrative expenses associated with Station Two and the parties' joint use of certain shared facilities (such agreements are hereinafter defined under the heading "CONTRACTUAL ARRANGEMENTS WITH BIG RIVERS" as the "Agreements").

The Agreements provide the City the right to reserve a stated amount of Station Two's capacity for use by the Utility Commission in the operation of the Retail System. Big Rivers is entitled to take the remaining unreserved capacity of Station Two for its own use. The City has currently reserved 35.26% of Station Two's net rated capacity for its own use. Big Rivers is allocated the remaining 64.74% of Station Two's capacity for its own use. The City and Big Rivers' allocation of Station Two's capacity from 2004 through 2010 is detailed in APPENDIX C – "GENERAL OPERATING INFORMATION FOR THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION."

The price paid by Big Rivers for its allocated capacity from Station Two is based upon the allocated total cost of purchasing, acquiring, constructing, operating, maintaining, renewing and expanding Station Two. The Agreements are not designed to generate a profit for the City or Big Rivers, but rather for both parties to break even on a cash flow basis with respect to the operation of Station Two. The price paid for Station Two's "capacity costs" are fixed and do not vary with the energy generated by Station Two because the cost of fuel and reagent used by each party in the generation of Station Two's electric energy are paid separately by the Utility Commission and Big Rivers.

Under the Agreements, responsibility for financing improvements to Station Two is allocated between the City (through the Utility Commission) and Big Rivers on the basis of the respective parties' reservation and allocation of the net rated capacity of Station Two. The Series 2011A Bonds are being issued by the City, in part, to finance the City's contractual share of the costs of improvements to Station Two.

#### *Joint Facilities*

The City and Big Rivers jointly use each other's common facilities such as barge unloading and coal handling systems. Their joint use is governed by a joint facilities agreement dated August 1, 1970 (the "Joint Facilities Agreement"). The City has retained title to its property that is subject to the Joint Facilities Agreement as has Big Rivers. The Joint Facilities Agreement provides that the City and Big Rivers each have the contractual right to use each other's facilities that are subject to the Agreement so long as either party operates or maintains a generating station in connection with the Agreement.

The City and Big Rivers share the costs of operating, maintaining, repairing, renewing, replacing and improving the joint use facilities in accordance with the Joint Facilities Agreement and the Operation Agreement, hereinafter described. The parties allocate such costs based on their share of each joint use facility's capacity as related to the sum of the total capacity of Station Two and the Reid Station.

Big Rivers' obligations under the Joint Facilities Agreement are Big Rivers' general obligations. The obligations of the City under the Joint Facilities Agreement are solely the System's obligations, including the Retail System, Station Two and such other additions,

extensions or related facilities as the City may own or operate from time to time. No obligation of the City under the Joint Facilities Agreement constitutes or shall constitute a general obligation of the City.

Additional information regarding the Joint Facilities Agreement appears under the heading “CONTRACTUAL ARRANGEMENTS WITH BIG RIVERS – The Joint Facilities Agreement.”

*Estimated Cost of Power*

The City’s average cost per net kilowatt-hour of generation from Station Two is based on the annual cost of operation and is presented in the following table. These costs of power are based upon operation of Station Two at a maximum of 85% availability factor which Station Two has successfully operated over a period of time, taking into account necessary shutdowns for maintenance of equipment. The cost of power has been broken down into fixed costs, which under the Power Sales Contract are divided by the City and Big Rivers in proportion to Station Two’s capacity currently reserved to the City and allocated to Big Rivers, and fuel costs, which relate directly to the number of kilowatt hours taken by the City and Big Rivers.

City’s Cost of Power

<u>Fiscal Year</u>	<u>Fixed Cost</u>	<u>Fixed Costs Cents/kwh</u>	<u>Fuel Cost</u>	<u>Fuel Costs Cents/kwh</u>	<u>Total Cost</u>	<u>Total Costs Cents/kwh</u>	<u>KWH Sold</u>
2010	\$7,446,180	\$0.0129	\$12,864,549	\$0.0223	\$20,310,729	\$0.0352	577,557,821
2009	\$6,173,893	\$0.0103	\$12,994,353	\$0.0216	\$19,168,246	\$0.0318	602,132,838
2008	\$6,564,513	\$0.0100	\$15,599,009	\$0.0237	\$22,163,522	\$0.0337	657,468,447
2007	\$5,070,180	\$0.0079	\$14,123,757	\$0.0219	\$19,193,937	\$0.0298	644,907,439
2006	\$6,556,007	\$0.0098	\$14,509,197	\$0.0217	\$21,065,204	\$0.0316	667,384,848

*Fuel Source*

Station Two is located in the West Kentucky-Southern Illinois coal field giving it easy access to an abundant sources of fossil fuel. The City purchases coal for Station Two under a multi-year supply agreement.

*Pollution Control*

Station Two is equipped with electrostatic precipitators on the boilers for the removal of fly ash dust and a 350-foot stack provides adequate dispersion of the remaining particulate matter and sulfur dioxide gas to meet the air pollution standards for Kentucky metropolitan areas. By use of cooling towers, Station Two does not contribute to thermal pollution of the Green River. Water wastes from demineralizing equipment are also neutralized before disposal. The Utility Commission has also added a selective catalytic reduction system for nitrous oxide and a flue gas desulfurization system to Station Two within the last 20 years.

## **Rate Increase**

On January 29, 2009, the Board of Commissioners of the City approved an Ordinance increasing electric rates by 3.855% for all of the Utility Commission's customer rate classifications. The purpose of the rate increase was to provide additional revenue to make the principal and interest payments on the 2008A Note, the 2008B Note, the 2010A Note, the Series 2011A Bonds and the Series 2011B Bonds.

## **RISK FACTORS AFFECTING THE ELECTRIC UTILITY INDUSTRY AND THE UTILITY COMMISSION**

### **General**

The electric utility industry has become increasingly competitive due to wholesale and retail market developments and regulatory changes. Electric utilities are subject to changing federal, state and local statutory and regulatory requirements regarding the licensing and location of facilities, safety and security, air and water quality, land use and environmental factors. Other factors also affect the operations and financial condition of electric utilities, including (i) compliance with changing environmental, safety, licensing, regulatory and statutory requirements; (ii) changes resulting from conservation and demand-side management programs; (iii) changes resulting from new national energy policies, including potential implementation of smart grid technologies and greater use of renewable energy resources; (iv) increased competition resulting from utility mergers and acquisitions; and (v) self-generation by large industrial and commercial customers.

### **Retail Energy Market Issues**

The City's enabling statute, KRS 96.520, allows it to establish, erect, maintain and operate an electric power plant and necessary extensions within or without the corporate limits of the City for the purpose of supplying the City and its inhabitants with electric light, heat and power. Pursuant to KRS 278.018, the KPSC has established certified territories for retail electric suppliers and each such supplier has the exclusive right to furnish retail electric service to all electric consuming facilities located within its certified territory. The KPSC has no rate setting authority with respect to the City or the Utility Commission.

### **Wholesale Energy Market Issues**

On August 8, 2005, the United States Congress passed the Energy Policy Act of 2005 (the "Energy Policy Act"). One of the Energy Policy Act's most significant provisions repealed the Public Utility Holding Company Act (the "PUHCA"), which had been in effect since 1935. The impact of the repeal of the PUHCA was partially offset by an enhancement of the Federal Energy Regulatory Commission's merger review authority for holding companies and generation-only mergers, as well as additional market transparency and manipulation rules.

### **Environmental, Safety and Health Issues**

The Utility Commission's operations are subject to continuing environmental, health and safety regulations. Federal, state and local standards and procedures regulating the

environmental impact of the Utility Commission's generation and transmission facilities can change through continuing legislative, regulatory and judicial action. Consequently, there is no assurance that the Utility Commission's electric generating units and transmission facilities will remain subject to the regulations currently in effect or will always be able to obtain required permits in the future. An electric utility that cannot comply with environmental, health or safety standards may be forced to reduce its operating levels or shutdown its noncompliant electric generating units and transmission facilities.

The Clean Air Interstate Rule ("CAIR") promulgated by the United States Environmental Protection Agency (the "EPA") in 2005 was appealed and remanded to the EPA in 2008. The original CAIR targeted the reduction of sulfur dioxide beginning in 2010. While the original CAIR remains in effect, EPA issued a proposed "Transport Rule" on July 6, 2010. The proposed Transport Rule requires that by 2014, power plant sulfur dioxide emissions would decline by 71% over 2005 levels and power plant nitric oxide and nitrogen dioxide emissions would drop by 52%. Public hearings were held on the Transport Rule during August and September 2010, and its final form remains unknown.

The EPA's Clean Air Mercury Rule (the "CAMR"), which would have required the reduction of mercury emissions in 2010 has been vacated by the United States Court of Appeals for the District of Columbia Circuit. On March 16, 2011, the EPA issued a proposed rule establishing air toxics emissions standards for power plants, consistent with the court's opinion regarding the CAMR. The new standards would limit the amount of mercury, acid gases and non-mercury toxic pollutants that are released by coal-fired power plants. The proposed rule would provide parties four years to comply with the new standards, if adopted. Public hearings regarding the proposed rule were held in three cities during May 2011. The period for submitting comments for the proposed rule ended on July 5, 2011. The EPA has publicly indicated that it intends to adopt a final rule by November 16, 2011.

In recent years, there has been growing concern in the scientific community and among the public about global warming. The United States Congress has introduced a number of legislative proposals to address the issue. The City expects the debate on this issue to continue, but cannot predict what, if any, proposals may become law, or when.

The EPA has taken steps to regulate greenhouse gas emissions under existing law. In 2009, the EPA issued a final "endangerment finding," in which it declared that the weight of scientific evidence requires a finding that six identified greenhouse gases – carbon dioxide, methane, nitrous oxide, hydroflouorocarbons, perfluorocarbons, and sulfur hexafluoride – cause global warming, and that global warming endangers public health and welfare. The final rule for the "endangerment finding" was published in the Federal Register on December 15, 2009. As a result of this finding, the EPA is authorized to issue regulations limiting carbon dioxide emissions from, among other things, stationary sources such as electric generating facilities, under the federal Clean Air Act. In May 2010, EPA finalized the greenhouse gas "Tailoring Rule," which states that greenhouse gas emissions will be regulated from large stationary sources including electric generating facilities based on specified threshold levels of the tons per year of greenhouse gases emitted, using a unit known as the carbon dioxide equivalent, or CO<sub>2</sub>e. Large sources with the potential to emit in excess of the applicability threshold will be subject to the major source permitting requirements under the Clean Air Act. Permits would be required in

order to construct, modify and operate facilities exceeding the emissions threshold. Examples of such permitting requirements include, but are not limited to, the application of Best Available Control Technology (known as “BACT”) for greenhouse gas emissions, and monitoring, reporting, and recordkeeping for greenhouse gases.

On September 22, 2009, the EPA issued the final rule for mandatory monitoring and annual reporting of greenhouse gas emissions from various categories of facilities including fossil fuel suppliers, industrial gas suppliers, direct greenhouse gas emitters (such as electric generating facilities and industrial processes), and manufacturers of heavy-duty and off-road vehicles and engines. This rule does not require controls or limits on emissions, but required data collection beginning January 1, 2010, and the EPA has recently proposed that the first annual reports for calendar years 2010, 2011 and 2012 be due March 31, 2014. Such data collection and reporting lays the foundation for controlling and reducing greenhouse gas in the future, whether by way of the EPA regulations under existing Clean Air Act authority or under a new climate change federal law.

The Clean Air Act requires that the EPA establish National Ambient Air Quality Standards (“NAAQS”) for certain air pollutants. When a NAAQS has been established, each state must identify areas within its boundaries that do not meet the standard (known as “non-attainment areas”) and develop regulatory measures to reduce or control the emissions of that air pollutant in order to meet the standard and become an “attainment area.” For example, on January 7, 2010, the EPA released a draft rule proposing stricter NAAQS for ground-level ozone, the main component of smog. The EPA plans to issue the final standards and then follow an aggressive implementation schedule that could require states to meet the new NAAQS as early as 2014. If this proposed rule becomes final, many air pollution sources including power plants, industrial facilities, and motor vehicles will likely face stricter emission standards.

## **Severe Weather**

The Utility Commission’s operations are subject to potential damage by severe weather. On September 14, 2008, the remnants of Hurricane Ike hit the Henderson area with 75 mph winds. Falling trees and tree limbs caused extensive damage to the Utility Commission’s facilities and equipment throughout its service area. A large number of customers were without power initially and total service restoration was completed within a couple of days. As a result of the storm related damage, the Utility Commission requested and received \$103,249 in assistance from the Federal Emergency Management Agency (“FEMA”).

On January 27, 2009, a major ice storm struck Kentucky, including the Henderson area. The weight of the large amount of ice caused major damage to the Utility Commission’s transmission and distribution facilities. Initially, more than 80% of all customers were without power. Outside contract line crews were hired to help repair damages and restore service. Service to all of the Utility Commission’s customers was restored within seven days. As a result of the storm related damage, the Utility Commission requested \$932,207 in storm related FEMA assistance. In July 2009, the Utility Commission received \$856,354 from FEMA.

## **Purchases of Capacity from the Southeastern Power Administration**

The Utility Commission has contracted with the Southeastern Power Administration (the “SEPA”) for the SEPA to provide the Utility Commission up to 18,000 MWh of hydroelectric capacity annually. The 18,000 MWh represents approximately 3% of the Utility Commission’s annual MWh requirements. The SEPA provides the capacity using its generating stations located on the Cumberland River, which are part of the SEPA’s Cumberland System. One of the generating stations providing such capacity is the Wolf Creek Dam near Jamestown, Kentucky and located on the Cumberland River.

In the fall of 2006, the SEPA notified the Utility Commission that the U.S. Army Corp of Engineers had inspected the Wolf Creek Dam and identified serious seepage problems. Although seepage problems had existed with respect to the Dam since the late 1960s, the problem had become severe enough to impact the safety of the Dam and its surrounding communities. Consequently, the U.S. Army Corp of Engineers began making the needed repairs to the Dam and SEPA reduced the capacity available to the Utility Commission under the parties’ contract beginning in 2007.

The Utility Commission has responded to the decreased capacity by budgeting for the purchase of more expensive capacity from other parties to offset the loss of capacity from the SEPA. This alternative arrangement will continue until 2013, when the repairs to Wolf Creek Dam are expected to be completed.

## **Pension Obligations**

All full-time employees of the Utility Commission belong to the state operated cost-sharing multiple-employer pension plan, the County Employees Retirement System (“CERS”). All employees participate in the non-hazardous duty benefits offer under CERS.

CERS is a defined benefit plan created by the Kentucky General Assembly. CERS provides retirement and disability benefits, annual cost of living adjustments, and death benefits to plan members and beneficiaries. Benefits fully vest upon reaching five years of service and are established by state statute. Benefits of CERS members are calculated on the basis of age, final average salary, and service credit. CERS also provides survivor, disability and health care coverage. Authority to establish and amend benefits is provided by Kentucky Revised Statutes Section 61.645.

CERS issued a stand-alone financial report, which may be obtained from the Kentucky Retirement System, 1260 Louisville Road, Frankfort, Kentucky, 40601, or by telephone at (502) 564-4646.

Kentucky Revised Statutes provide statutory authority for employee and employer contributions. The Utility Commission and its employees have contributed 100% of the required contributions for the fiscal year ended May 31, 2011. Contribution rates for the fiscal year ended May 31, 2011 for individuals who became employees of the Utility Commission before September 1, 2008 were as follows:

	<u>Employee</u>	<u>Employer</u>
Nonhazardous	5.00%	16.16%

The employees' contribution rates for individuals who became employees of the Utility Commission on or after September 1, 2008 were 1.0% higher than the rates above.

The Utility Commission's contributions for the fiscal years ending May 31 were as follows:

<u>Year</u>	<u>Total</u>
2010	\$420,197
2009	435,888
2008	477,299

The Utility Commission is obligated to make future contributions to CERS for the benefit of its employees. Future contribution rates may change given changes in benefits or the value of investments held by CERS. Please visit the following website <http://kyret.ky.gov/> for further details regarding CERS.

CERS also provides post-retirement health care coverage and contributions towards the costs of such coverage to the Utility Commission's employees who satisfy certain eligibility requirements. A portion of each employer and employee's contribution to CERS is set aside for the funding of post-retirement health care. The Kentucky Revised Statutes provide statutory authority requiring public employees to fund post-retirement health care through their contributions to CERS.

### **Customer Concentration**

#### *Sale of Electricity to Big Rivers*

As discussed under the heading "THE SYSTEM – Station Two," the City reserves a portion of Station Two's net rated capacity for the City's own use. Since 2006, the City's reserved portion has increased from 30.4% to 35.26%. The City's actual usage of electricity taken from Station Two during those same years has ranged from 27.2% to 32.2%. Big Rivers has purchased all of the remaining electricity generated by Station Two pursuant to the Agreements. Thus, a single customer has purchased 68% to 74% of the electricity generated by Station Two since 2006. See APPENDIX C – "GENERAL OPERATING INFORMATION FOR THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION" for more information regarding the City and Big River's allocation and use of Station Two's generating capacity.

The revenues generated by the City's sales of electricity to Big Rivers have comprised the following percentages of the Utility Commission's total revenues for the applicable fiscal years:

	<u>Unaudited</u>			<u>Audited</u>		
	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>
Sale of Electricity from Station Two	\$24,488,791	\$22,271,304	\$25,200,799	\$23,343,688	\$11,875,800	\$17,897,689
All other revenues	<u>34,091,103</u>	<u>31,094,375</u>	<u>31,374,486</u>	<u>33,594,718</u>	<u>31,102,700</u>	<u>30,187,396</u>
Total	<u>\$58,579,894</u>	<u>\$53,365,679</u>	<u>\$56,575,285</u>	<u>\$56,938,406</u>	<u>\$42,978,500</u>	<u>\$48,085,085</u>
	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>
Sale of Electricity from Station Two to Big Rivers	41.80%	41.73%	44.54%	41.00%	27.63%	37.22%
All other revenues	<u>58.20%</u>	<u>58.27%</u>	<u>55.46%</u>	<u>59.00%</u>	<u>72.37%</u>	<u>62.78%</u>
Total	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>

The above table demonstrates that a substantial portion of the Utility Commission's revenues have resulted from the Utility Commission's sale of electric power to Big Rivers pursuant to the Agreements. The Agreements provide that Big Rivers will continue to purchase electricity generated by Station Two from the Utility Commission throughout the operating life of Station Two. Nevertheless, if Big Rivers were unable to continue to purchase the unreserved portion of electricity generated by Station Two, the Utility Commission's revenues and cash flow could be adversely affected until a new purchaser or purchasers were found.

#### *Sale of Electricity to Customers of the Retail System*

A small number of the Utility Commission's commercial customers account for a substantial portion of the Utility Commission's revenue generated by its sale of electricity through the Retail System. In 2010, sales to the Utility Commission's top ten customers accounted for approximately 41.96% of the revenue generated by sales through the Retail System. For more information, see APPENDIX C – "GENERAL OPERATING INFORMATION FOR THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION." Accordingly, changes in demand and usage among a small number of the Utility Commission's retail customers could have a significant impact on its operating revenues.

### **BIG RIVERS ELECTRIC CORPORATION**

#### **General**

Big Rivers is an electric generation and transmission rural electric cooperative corporation. It was organized as a not-for-profit rural electric cooperative under the laws of Kentucky in 1961 to enable its members to pool their resources and provide for the power and transmission needs of their combined service territories. Big Rivers currently operates as a taxable cooperative. It provides wholesale electric service to its three members under a number of wholesale power contracts which, in the aggregate, supply the total wholesale power requirements of the members except for the exceptions discussed in APPENDIX F – "GENERAL INFORMATION AND DATA – BIG RIVERS ELECTRIC CORPORATION."

Big Rivers owns 1,444 net MW of electric generating facilities and approximately 1,265 miles of transmission lines and 22 substations.



In addition to the electric generation and transmission facilities Big Rivers owns, it also operates Station Two in accordance with the Operation Agreement defined and described under the heading “CONTRACTUAL ARRANGEMENTS WITH BIG RIVERS – The Operation Agreement.” Big Rivers also purchases all the capacity and energy from Station Two not reserved by the Utility Commission in accordance with the Power Sales Contract between the City and Big Rivers described under the heading “CONTRACTUAL ARRANGEMENTS WITH BIG RIVERS – The Power Sales Contract.”

For more information regarding Big Rivers, see APPENDIX F – “GENERAL INFORMATION AND DATA – BIG RIVERS ELECTRIC CORPORATION” and APPENDIX G – “ANNUAL REPORT OF BIG RIVERS ELECTRIC CORPORATION FOR THE FISCAL YEAR ENDED DECEMBER 31, 2010, WITH ACCOMPANYING AUDITED FINANCIAL STATEMENTS FOR THE FISCAL YEARS ENDED DECEMBER 31, 2010 AND 2009.”

## **CONTRACTUAL ARRANGEMENTS WITH BIG RIVERS**

### **Overview**

The City owns Station Two. Big Rivers operates Station Two for the benefit of the City. The relationship of the City, the Utility Commission and Big Rivers with respect to Station Two is governed by a collection of related agreements (each, an “Agreement” and together, the “Agreements”). The Agreements were originally executed in the early 1970s when Station Two was being constructed and have governed the parties’ relationship since. The Agreements have been amended several times since the 1970s. The terms and effects of the amendments are discussed below. Although Big Rivers’ obligations were assigned to a third party for a period of time as described under APPENDIX F – “GENERAL INFORMATION AND DATA – BIG RIVERS ELECTRIC CORPORATION,” the Agreements were assigned back to Big Rivers in July 2009.

The Agreements between the City and Big Rivers are composed of a Power Plant Construction and Operation Agreement dated August 1, 1970 (the “Operation Agreement”), a Power Sales Contract dated August 1, 1970 (the “Power Sales Contract”), a Station Two G & A Allocation Agreement dated July 16, 2009 (the “G & A Agreement”), a Joint Facilities Agreement dated August 1, 1970 (the “Joint Facilities Agreement”), a System Reserves Agreement dated January 1, 1974 (the “System Reserves Agreement”), an Agreement for Transmission and Transformation Capacity dated as of April 11, 1975 (the “Agreement for Transmission and Transformation Capacity”) and a Spare Transformer Agreement dated July 11, 1972 (the “Spare Transformer Agreement”). An overview of the key terms of each Agreement, as amended by the parties in 1993, 1998 and 2005, is presented below. The Agreements are not designed to generate a profit for the City or Big Rivers, but rather for both parties to break even on a cash flow basis with respect to the operation of Station Two.

### **The Operation Agreement**

The Operation Agreement required Big Rivers to assist the City in the development and construction of Station Two. Upon completion of construction, the Operation Agreement required Big Rivers to assume responsibility for Station Two’s operation and maintenance.

While Big Rivers continues to operate Station Two, the Operation Agreement provides that the City, as the owner of Station Two, has retained ultimate control of the facility.

Big Rivers is responsible under the Operation Agreement for operating Station Two in an efficient and economical manner. Its duties include, but are not limited to, providing all of Station Two's operating personnel, materials, supplies and technical services and repairing and replacing equipment.

The Operation Agreement has been amended several times since 1970. The amendments provided for the addition of a selective catalytic reduction system for nitrous oxide to Station Two as well as a flue gas desulfurization system. The amendments also provided that the Operation Agreement will terminate once both of Station Two's generating units have ceased operations.

Each party separately pays the variable costs of its fuel and reagents used in Station Two. Big Rivers pays the remaining costs of operating and maintaining Station Two and is reimbursed by the City for its share of those costs. The parties allocate their shared costs based on the City's reserved portion of Station Two's net rated capacity; "net rated capacity" being the "total continuous net send out capability of all generating units" of Station Two. In essence, the net rated capacity is Station Two's name plate capacity less the amount of energy consumed in running Station Two. The energy consumed in running Station Two is referred to as "auxiliary power" and the costs of the auxiliary power are also divided between the City and Big Rivers in proportion to their respective shares of Station Two's net rated capacity.

Big Rivers' share is the net rated capacity remaining after subtracting the City's reserved capacity from Station Two's total net rated capacity. The Power Sales Agreement calls for Big Rivers to pay its share of the capacity charges in proportion to Station Two's "surplus capacity." Big Rivers pays capacity charges, consisting of its share of the total costs of ownership, operation and maintenance of, and renewals and replacements to, Station Two, except for fuels and reagents for which each party pays separately according to its use.

The Operation Agreement requires the City to notify Big Rivers annually of its projected reservation of Station Two's net rated capacity (the generating capacity remaining after subtracting the electricity used to operate Station Two). Currently, the City has reserved 35.26% of Station Two's net rated capacity and therefore pays 35.26% of Station Two's operating and maintenance costs. The remaining 64.74% of those costs are paid for by Big Rivers. Accordingly, the City's current obligation to pay Station Two's operation and maintenance costs under the Operation Agreement is reduced by the capacity charges paid by Big Rivers under the Power Sales Contract, resulting in each party paying operation, maintenance and replacement costs in proportion to its share of Station Two's net rated capacity.

The Operation Agreement requires Big Rivers to prepare an annual budget before the commencement of each contract year which, upon approval by the Utility Commission, governs billings and payments for that contract year. The parties then adjust the related payments from budgeted to actual amounts after the annual audit of accounts for each contract year. If at any time Big Rivers fails to provide, on a best efforts basis, continuous and economical operation of

Station Two, the City has the right under the Operation Agreement to immediately take over the complete operation and maintenance of Station Two.

### **The Power Sales Contract**

The Power Sales Contract provides that the City and the Utility Commission have the primary use of the total net rated capacity and energy produced by either or both generating units of Station Two for purposes of providing electricity to residential, commercial and industrial customers within and adjacent to the City's corporate boundaries.

The Power Sales Contract requires Big Rivers to purchase all of the capacity and energy produced by Station Two that is not reserved by the City and the Utility Commission. Each year the City provides Big Rivers with five years' advance written notice of the capacity it reserves under the Power Sales Contract and each year the City has the right to increase or decrease its reservation by 5 megawatts. Big Rivers must pay the City for its allocated capacity whether Station Two is inoperable or its operation is interrupted, suspended or interfered with in whole or in part for any cause whatsoever. The price Big Rivers pays for such allocated capacity is based upon the total cost of purchasing, acquiring, constructing, operating, maintaining, renewing and expanding Station Two. The price paid for the "capacity costs" are fixed and do not vary with the energy generated by Station Two because the cost of fuel and reagent used by each party in the generation of Station Two's electric energy are paid separately by the Utility Commission and Big Rivers. The Power Sales Contract permits Big Rivers to offset the cost of the allocated capacity assigned to Big Rivers against the monthly payments due to the City under the Operation Agreement.

The Power Sales Contract prohibits the City from (i) selling Station Two's generating capacity to a third party, except to dispose of any surplus capacity resulting from the City's good faith over-estimate of the City's needs or (ii) adding any individual commercial or industrial customers in excess of 30 MW to its Retail System, if such action would require the withdrawal of additional capacity from Station Two.

The Power Sales Contract has been amended several times since 1970. Many of the amendments address the same issues involved in the amendments to the Operation Agreement, namely, lengthening the term of the Power Sales Contract and addressing the addition of the selective catalytic reduction system and flue gas desulfurization system.

The Power Sales Contract provides that, to the extent the City does not schedule or take the full amount of energy associated with its reserved capacity from Station Two under certain conditions, Big Rivers may take and utilize all such energy for a price of \$1.50 per MWh plus the cost of all fuel, reagent and sludge disposal costs associated with such energy. Whether Big Rivers has the contractual right to take the City's energy "not scheduled or taken" is currently the subject of litigation in the Henderson, Kentucky Circuit Court. See the heading "LITIGATION – The Utility Commission" for more information.

### **The G & A Agreement**

Given that Big Rivers operates several generating facilities, it is necessary to allocate its expenses incurred with respect to Station Two and its own facilities between Big River's and the

City. Provisions in the other Agreements provide that costs directly allocable to Station Two are allocated only to Station Two. In contrast, operating costs allocable to Station Two and another Big Rivers' facility, such as the Reid Station, are allocated between the two facilities based on each generating station's total capacity as related to the sum of such total capacities. In comparison, the G & A Agreement requires Big Rivers to allocate specific categories of general and administrative overhead, such as labor costs, based on specific percentages set forth within the G & A Agreement and its exhibits. The City allocates its G & A expenses directly to Station Two on a percentage basis.

### **The Joint Facilities Agreement**

Given that Station Two and the Reid Station are located adjacent to each other, it is economical for them to share certain auxiliary facilities that can be jointly operated to achieve cost savings for both parties. For example, Station Two and the Reid Station share a common control room, coal handling facilities and barge unloading facilities. Consequently, the City and Big Rivers entered into the Joint Facilities Agreement to identify these facilities and to govern their use. The Joint Facilities Agreement provides that both the City and Big Rivers can use such joint use facilities so long as they are needed by either the Reid Station or Station Two. Moreover, the term of the Agreement will continue so long as Station Two or the Reid Station is served by a joint use facility. The parties allocate such costs based on their share of each joint use facility's capacity as related to the sum of the total capacity of Station Two and the Reid Station.

### **The System Reserves Agreement**

The City and Big Rivers entered into the System Reserves Agreement to ensure that each of them would reserve sufficient capacity within their own electric systems so as to not overburden each other by regularly requesting assistance when their own capacity is below current system load. To that end, the System Reserves Agreement originally required the City and Big Rivers to maintain reserve capacity on their respective electric systems in an amount equal to their peak system loads plus an additional 15%. In 1998, the parties amended the System Reserves Agreement to require the parties to maintain reserves in an amount required by any applicable regulatory or governmental agency, any regional transmission authority, reliability council or like organization. Absent such a requirement, the City and Big Rivers have no contractual obligation pursuant to the amended System Reserves Agreement to maintain system reserves.

The System Reserves Agreement obligates Big Rivers to provide standby capacity to the City and the Utility Commission on a best efforts basis, utilizing Big Rivers' surplus energy from its other generating units, or energy purchased by Big Rivers from third parties, for use by the Utility Commission to prevent an outage on the System.

The Systems Reserve Agreement, as amended, will terminate 90 days after Big Rivers' allocation of capacity from Station Two is reduced to zero.

## **Other Agreements**

The Utility Commission and Big Rivers are also parties to the Agreement for Transmission and Transformation Capacity, which provides for the Utility Commission's participation in a transmission line constructed by Big Rivers to serve as a back-up transmission line from Station Two to the Retail System. The Utility Commission and Big Rivers are also parties to a Spare Transformer Agreement providing for the joint acquisition and operation of a moveable rail car power transformer.

## **THE ORDINANCES**

The City has adopted an ordinance providing for the issuance of multiple series of revenue bonds for the benefit of the System (the "Basic Bond Ordinance") and a supplemental ordinance supplementing the Basic Bond Ordinance and authorizing the issuance of the Series 2011A Bonds (the "Series 2011A Ordinance" and, together with the Basic Bond Ordinance, the "Ordinances"). The following paragraphs under this general heading contain excerpts from and summaries and descriptions of certain provisions of the Ordinances, which are on file in the office of the City Clerk and reference to which is made for a complete description of their terms.

### **Certain Definitions**

The following are definitions in summary form of certain terms contained in the Ordinances and used herein:

*Accrued Aggregate Debt Service:* As of any date of calculation, an amount equal to the sum of the amounts of accrued Debt Service with respect to all Series, calculating the accrued Debt Service with respect to each Series at an amount equal to the sum of (i) interest on the Bonds of such Series accrued and unpaid and to accrue to the end of the then current calendar month, and (ii) Principal Installments due and unpaid and that portion of the Principal Installment for such Series next due which would have accrued (if deemed to accrue in the manner set forth in the definition of Debt Service) to the end of such calendar month.

*Additional Project:* One or more major renewals or replacements of the System, or major additions or improvements thereto, or any expansion of the System by the construction, acquisition or installation of additional generating, transmission, transformation or distribution facilities or facilities related thereto.

*Aggregate Debt Service:* For any fiscal year shall mean, as of any date of calculation, the sum of the amounts of Debt Service for such year with respect to all Series.

*Annual Budget:* The Utility Commission's annual budget, as amended or supplemented, adopted or in effect for a particular fiscal year as provided for by the Basic Bond Ordinance.

*Bond or Bonds:* Any bond or bonds, as the case may be, authenticated and delivered under and pursuant to the Basic Bond Ordinance.

*Cost of Construction:* With respect to the System, the City's costs of physical construction, costs of acquisition of real or personal property or interests therein, and costs

incidental to such construction or acquisition, including costs of acquisition and construction of access roads and rail facilities, the costs of any indemnity and surety bonds and premiums on insurance during construction, engineering expenses, legal fees and expenses, cost of audits, fees and expenses of the fiduciaries and costs of training, testing, financing, administrative and general overhead and keeping accounts and making reports, amounts required or permitted by the Ordinances to be paid as interest during construction, cost of machinery, equipment and supplies, payments to Big Rivers for construction assistance and other services provided and costs incurred for Station Two, and any other costs properly attributable to such construction or acquisition, and shall include reimbursement to the City for any such items of Cost of Construction theretofore paid by or on behalf of the City and payment of any interim financing obligations incurred by the City for the foregoing purposes.

*Debt Reserve Requirement:* As of any date of calculation, an amount equal to the least of (i) the highest amount of Aggregate Debt Service, (ii) an amount equal to 125% of the average Aggregate Debt Service and (iii) an amount equal to 10% of the “proceeds” of the Bonds with respect to all Series within the meaning of Section 148(d) of the Code (as defined below).

*Debt Service:* For any period, as of any date of calculation and with respect to any Series, an amount equal to the sum of (i) interest accruing during such period on Bonds of such Series, except to the extent that such interest is to be paid from deposits (including investment income thereon) in the Debt Service Fund made from Bond proceeds, and (ii) that portion of each Principal Installment for such Series which would accrue during such period if such Principal Installment were deemed to accrue daily in equal amounts from the next preceding Principal Installment due date for such Series (or, if there shall be no such preceding Principal Installment due date, from a date one year preceding the due date of such Principal Installment). Such interest and Principal Installments for such Series shall be calculated on the assumption that no Bonds of such Series outstanding at the date of calculation will cease to be Outstanding except by reason of the payment of each Principal Installment on the due date thereof.

*Investment Securities:* Any of the following securities, if and to the extent the same are at the time legal for investment of City funds, which securities shall not be subject to redemption before their maturity:

- (1) Obligations of the United States and of its agencies and instrumentalities, including obligations subject to repurchase agreements, if delivery of these obligations subject to repurchase agreements is taken either directly or through an authorized custodian, which investments may be accomplished through repurchase agreements reached with sources including, but not limited to, national or state banks chartered in Kentucky;
- (2) Obligations and contracts for future delivery or purchase of obligations backed by the full faith and credit of the United States or a United States government agency, including but not limited to: (i) United States Treasury; (ii) Export-Import Bank of the United States; (iii) Government National Mortgage Corporation; and (iv) Merchant Marine;

- (3) Obligations of any corporation of the United States government, including but not limited to: (i) Federal Home Loan Mortgage Corporation; (ii) Federal Farm Credit Banks; (iii) Bank for Cooperatives; (iv) Federal Intermediate Credit Banks; (v) Federal Land Banks; (vi) Federal Home Loan Banks; (vii) Federal National Mortgage Association; and (viii) Tennessee Valley Authority;
- (4) Certificates of deposit issued by or other interest bearing accounts of any bank or savings and loan institution, including the Trustee or any of its affiliates, which are insured by the Federal Deposit Insurance Corporation or similar entity or which are collateralized, to the extent uninsured, by any obligations, including surety bonds, permitted by Section 41.240(4) of the Kentucky Revised Statutes;
- (5) Uncollateralized certificates of deposit, time deposits, trust accounts, trust deposits and demand deposits, including interest bearing money market accounts, of any bank or savings and loan institution, including the Trustee or any of its affiliates, rated in one of the three highest categories by a Rating Agency;
- (6) Bankers' acceptances for banks, including the Trustee or any of its affiliates, rated in one of the three highest categories by a Rating Agency;
- (7) Commercial paper rated in the highest category by a Rating Agency, including commercial paper issued by the Trustee or any of its affiliates, if so rated;
- (8) Bonds or certificates of indebtedness of the Commonwealth of Kentucky and of its agencies and instrumentalities;
- (9) Securities issued by a state or local government, or any instrumentality or agency thereof, in the United States, and rated in one of the three highest categories by a Rating Agency; and
- (10) Shares of mutual funds, each of which shall have the following characteristics:
  - (A) The mutual fund shall be an open-end diversified investment company registered under the Federal Investment Company Act of 1940, as amended;
  - (B) The management company of the investment company shall have been in operation for at least five years;
  - (C) All of the securities in the mutual fund shall be investments in any one or more of the investments described in (1) through (10) above; and
  - (D) The mutual funds may include, without limitation, any mutual fund for which the Trustee or any of its affiliates serves as investment manager, administrator, shareholder servicing agent, and/or custodian or subcustodian, notwithstanding that (1) the Trustee or any of its affiliates receives fees from such funds for services rendered, (2) the Trustee or any of its affiliates charges and collects fees for services rendered pursuant to

the Ordinance, which fees are separate from the fees received from such funds, and (3) services performed for such funds and pursuant to this Ordinance may at times duplicate those provided to such funds by the Trustee or its affiliates;

- (11) Investment agreements with any financial institution the long-term debt, claims and paying ability or financial program strength of which is rated no lower than the second highest category (without regard to gradations within such category) by at least one Rating Agency; provided that if the investment agreement is guaranteed by a third party, then the above rating requirement will apply to the guarantor only; and
- (12) Such other investments as may be authorized by law, including without limitation those authorized KRS 66.480.

*Maximum Annual Principal and Interest Requirement:* As of any date of calculation, with respect to the Bonds of a Series, an amount equal to the greatest amount of Debt Service with respect to such Series for the current or any future fiscal year.

*Net System Revenues:* With respect to any period, the System Revenues for such period remaining after deducting the Operating Expenses for the System for such period.

*Operating Expenses:* With respect to the System, shall mean the City's expenses for operation, maintenance, repairs, ordinary replacement and ordinary reconstruction, including payments for items of operating expenses the payment of which is not immediately required, and shall include, without limiting the generality of the foregoing, administrative and engineering expenses, legal and financial advisory expenses, required payments to pension, retirement, health and hospitalization funds, insurance premiums, any taxes or payments in lieu of taxes, and any other current expenses or obligations required to be paid by the City under the provisions of the Ordinances or by law, all to the extent properly allocable to the System, and the fees and expenses of the Fiduciaries. Operating Expenses shall not include any costs or expenses for new construction or any allowance for depreciation.

*Principal Installment:* As of any date of calculation and with respect to any Series, so long as any Bonds thereof are outstanding, (i) the principal amount of Bonds of such Series due on a certain future date for which no sinking fund installments have been established, or (ii) the unsatisfied balance of any sinking fund installments due on a certain future date for Bonds of such Series, plus the amount of the sinking fund redemption premiums, if any, which would be applicable upon redemption of such Bonds on such future date in a principal amount equal to said unsatisfied balance of such sinking fund installments, or (iii) if such future dates coincide as to different Bonds of such Series, the sum of such principal amount of Bonds and of such unsatisfied balance of sinking fund installments due on such future date plus such applicable redemption premiums, if any.

*Series:* All of the Bonds authenticated and delivered on original issuance in a simultaneous transaction, and any Bonds thereafter authenticated and delivered in lieu of or in



substitution for such Bonds, regardless of variations in maturity, interest rate, sinking fund installments, or other provisions.

*System Revenues:* (i) all revenues, income, rents and receipts derived by the City from the ownership and operation of the System, including without limitation all payments received by the Utility Commission pursuant to the reconciliation of revenues and expenses between the Utility Commission and Big Rivers pursuant to the Agreements, (ii) interest received on any moneys or securities (other than in the Construction Fund) held pursuant to the Ordinance and paid into the Revenues, Operation and Maintenance Fund, and (iii) the proceeds of any insurance covering business interruption loss relating to the System.

*(Basic Bond Ordinance, Section 1.01)*

### **Pledge of Revenues and Funds**

The payment of principal and redemption price of and interest on all bonds issued pursuant to the Ordinances is secured by (i) System Revenues, and (ii) Funds and Accounts established by the Ordinances, including any investments thereof. All of the Bonds are additionally secured by a nonforeclosable statutory mortgage lien on the System as provided and authorized by Sections 96.400 and 96.520 of the Kentucky Revised Statutes.

*(Basic Bond Ordinance, Sections 5.01-1 and -3)*

### **Additional Bonds**

One or more series of additional bonds (“Additional Bonds”) may be issued for the purpose of (i) paying the Cost of Construction of the Project or the costs of any Additional Project.

The issuance of Additional Bonds is conditioned upon the satisfaction of either of the two following requirements:

- (i) The Net System Revenues for the fiscal year preceding the year in which such Additional Bonds are to be issued were at least 120% of the Maximum Annual Principal and Interest Requirement with respect to all of the Bonds and any other bonds issued pursuant to the Basic Bond Ordinance which are then outstanding and the Additional Bonds then proposed to be issued. Such showing of Net System Revenues for such preceding fiscal year may be extracted from the report of the auditors and represented by a certificate of an authorized Officer of the Utility Commission filed with the Trustee.
- (ii) A statement is filed with the Trustee by (i) an independent certified public accountant or firm of certified public accountants not in the regular employ of the City or the Utility Commission on a monthly salary basis or (b) an independent professional engineer or firm or firms of professional engineers not in the employ of the City or the Utility Commission on a monthly salary basis and of recognized excellent expertise and reputation in the field of electrical engineering and licensed in Kentucky, reciting the opinion based upon necessary investigation that

the Net System Revenues for twelve (12) consecutive months out of the eighteen (18) months preceding the issuance of such Additional Bonds (with adjustments as hereinafter provided) were equal to at least 120% of the Maximum Annual Principal and Interest Requirement with respect to the Bonds and any other bonds issued pursuant to the Basic Bond Ordinance and then outstanding and the proposed Additional Bonds. The Net System Revenues may be adjusted for the purpose of the foregoing computations to reflect any revision in the schedule of rates or charges being imposed at the time of the issuance of any such Additional Bonds, and also to reflect any increase in such Net System Revenues by reason of the extensions, additions and improvements to the System the cost of which (in whole or in part) is to be paid through the issuance of such Additional Bonds; but such latter adjustments shall only be made if contracts for the immediate construction or acquisition of such extensions, additions and improvements have been or will be entered into before the issuance of such Additional Bonds. All such adjustments to reflect any revision of rates and charges or an increase in Net System Revenues by reason of extensions, additions and improvements to the System as aforesaid shall be based upon written certification by (a) an independent professional engineer or firm of professional engineers not in the employ of the City or the Utility Commission on a monthly salary basis and of recognized excellent expertise and reputation in the field of electrical engineering and licensed in Kentucky or (b) an independent certified public accountant or firm of certified public accountants not in the employ of the City or the Utility Commission on a monthly salary basis.

Notwithstanding the foregoing, the Basic Bond Ordinance provides for the issuance by the City of its Series 2011B Bonds in a par amount not to exceed \$3,670,000 as parity bonds entitled to the same security as the Series 2011A Bonds without the prior satisfaction of the preceding requirements. Nevertheless, the following additional requirements and conditions governing the issuance of Additional Bonds will also be satisfied with respect to the City's issuance of the Series 2011B Bonds:

- (i) The interest payment dates for all such Additional Bonds shall be semiannually on June 1 and December 1 of each year, and the principal maturities thereof shall be on December 1 of the year in which any such principal is scheduled to become due;
- (ii) The Additional Bonds shall be understood to mean bonds payable from the income and revenues of the System on a parity with the Bonds, and shall not be deemed to include or prohibit the issuance of other obligations the security and source of payment of which is subordinate and subject to the priority of the Debt Service Fund and the Debt Service Reserve Fund for account of the Bonds and any outstanding Additional Bonds; and
- (iii) The proceeds, including accrued interest, if any, of the Additional Bonds of each Series shall be applied simultaneously with the delivery of such Additional Bonds, as follows:

- (a) There shall be deposited in the Debt Service Fund an amount equal to the accrued interest, if any, on the Additional Bonds to the date of such delivery, and such additional amount as may be provided in the supplemental ordinance authorizing the Additional Bonds;
- (b) There shall be deposited in the Debt Service Reserve Fund the amount necessary to make the balance of such Fund equal the Debt Reserve Requirement;
- (c) There shall be paid any credit enhancement charges and the costs of issuance of the Additional Bonds; and
- (d) The remaining balance shall be deposited in the appropriate account in the Construction Fund.

*(Basic Bond Ordinance, Section 2.04)*

### **Refunding Bonds**

One or more Series of Bonds (“Refunding Bonds”) may be issued to refund all outstanding Bonds of one or more Series. Issuance of Refunding Bonds is conditioned upon the deposit of an amount in the Debt Service Reserve Fund so that the balance in such Fund shall equal the Debt Reserve Requirement.

*(Basic Bond Ordinance, Section 2.05)*

### **Rate Covenant**

The City covenants in the Ordinances that it will at all times charge and collect fees and other charges for electric power and energy from the System so that System Revenues will be at least sufficient to provide funds in each year for the payment of obligations of the City under the Ordinances, including the payment of Debt Service on any Bonds authenticated and delivered under and pursuant to the Basic Bond Ordinance.

*(Basic Bond Ordinance, Section 7.09)*

### **Allocation of System Revenues**

The Basic Bond Ordinance establishes the following Funds for the application of System Revenues:

<u>Fund</u>	<u>Held By</u>
Revenues, Operation and Maintenance Fund	Utility Commission
Debt Service Fund	Trustee
Debt Service Reserve Fund	Trustee
Renewals and Replacements Fund, consisting of a Retail System Account and a Station Two Account	Utility Commission
General Reserve Fund	Utility Commission

After authentication and delivery of the Bonds, certain funds held by the Utility Commission for the System are to be deposited promptly into the appropriate corresponding Funds under the Basic Bond Ordinance.

All System Revenues are to be deposited promptly in the Revenues, Operation and Maintenance Fund. The Utility Commission shall pay out amounts in the Revenues, Operation and Maintenance Fund from time to time for reasonable and necessary Operating Expenses with respect to the System; provided that no such payments of Operating Expenses shall be made which would cause the balance of the Revenues, Operation and Maintenance Fund to fall below the amount of the next required deposit to the Debt Service Fund under subsection 1 below. In addition, amounts in the Revenues, Operation and Maintenance Fund are to be deposited monthly in the following Funds:

1. To the Debt Service Fund, an amount required so that the balance in the Debt Service Fund shall equal the Accrued Aggregate Debt Service.
2. To the Debt Service Reserve Fund, an amount required so that the balance in the Debt Service Reserve Fund shall equal the Debt Reserve Requirement. So long as the amount in the Debt Service Reserve Fund shall be sufficient to pay in full all outstanding Bonds, no deposits shall be required to be made into the Debt Service Reserve Fund.

The Trustee and Paying Agent shall pay from the Debt Service Fund the amounts required for the (i) payment of interest of and Principal Installments on the Bonds when due, and (ii) payment of the redemption price and accrued interest on the redemption of Bonds, and the purchase price and accrued interest on the purchase of Bonds, through application of moneys accumulated in the Debt Service Fund with respect to any sinking fund installment or otherwise accumulated in the Debt Service Fund.

Amounts in the Debt Service Reserve Fund are to be applied to make up any deficiency in the Debt Service Fund. The Basic Bond Ordinance provides that as a condition to the issuance of the Series 2011A Bonds, the Series 2011B Bonds and each series of Additional Bonds or Refunding Bonds there shall be deposited in the Debt Service Reserve Account the amount, if any, necessary so that the amount in such account equals the Debt Reserve Requirement immediately after the issuance of such Series of Bonds. Whenever moneys on deposit in the Debt Service Reserve Fund shall exceed the Debt Reserve Requirement, the excess shall be paid

to the Debt Service Fund and applied as a credit against any payments to the Debt Service Fund next due from the Revenue, Operation and Maintenance Fund.

Whenever the amount in the Debt Service Reserve Fund, together with the amount in the Debt Service Fund, is sufficient to pay in full all outstanding Bonds in accordance with their terms, the funds on deposit in the Debt Service Reserve Fund shall be transferred to the Debt Service Fund and no further deposits shall be required to be made into the Debt Service Reserve Fund.

System Revenues remaining in the Revenues, Operation and Maintenance Fund after making the above required deposits are to be applied as follows:

1. To the Retail System Account in the Renewals and Replacements Fund a sum equal to one-twelfth (1/12) (or such greater fraction if the period is less than twelve months as may be appropriate) of the annual requirements of the Account as set forth in the Annual Budget for the then current fiscal year; provided that the amounts to be deposited in the Account may be increased upon the recommendation of the General Manager of the Utility Commission.

The Retail System Account in the Renewals and Replacements Fund shall be applied to the cost of major renewals or replacements with respect to the Retail System to the extent necessary to keep the Retail System in good operating condition. Amounts in the Account may also be applied to extraordinary operation and maintenance costs and contingencies, including the prevention or correction of any unusual loss or damage with respect to the Retail System, all to the extent not provided for in the then current Annual Budget. No payments shall be made from the Account if and to the extent that the proceeds of insurance or other moneys recoverable as the result of damage, if any, to the Retail System are available to pay such costs;

2. To the Station Two Account in the Renewals and Replacements Fund a sum equal to the amount necessary, if any, to make the balance of the Account equal or exceed the amount of reserve required by the Power Sales Contract.

The Station Two Account in the Renewals and Replacements Fund shall be applied to the cost of major renewals or replacements with respect to Station Two to the extent necessary to keep Station Two in good operating condition. No payments shall be made from the Account if and to the extent that the proceeds of insurance or other moneys recoverable as the result of damage, if any, to Station Two are available to pay such costs. With the concurrence of the General Manager of the Utility Commission, any balance of moneys and securities in the Station Two Account, in excess of the required minimum balance therefor, and not needed for any of the purposes of the Account, may be paid by the Utility Commission into the General Reserve Fund; and

3. System Revenues remaining in the Revenues, Operation and Maintenance Fund after making the above required deposits shall be deposited to the General

Reserve Fund to the extent such System Revenues exceed the Utility Commission's budgeted Operating Expenses for the immediately succeeding two calendar months.

Amounts deposited in the General Reserve Fund shall be held subject to the following restrictions and used for the following purposes:

- (a) If amounts held in the Revenues, Operations and Maintenance Fund are insufficient to pay the current Operating Expenses of the Utility Commission, the Utility Commission shall transfer amounts from the General Reserve Fund to the Revenues, Operations and Maintenance Fund from time to time in amounts necessary to pay such Operating Expenses. For this purpose, the Utility Commission shall maintain a minimum balance in the General Reserve Fund of \$500,000; and whenever the balance of the General Reserve Fund falls below \$500,000, the Utility Commission shall restore the General Reserve Fund to such minimum balance from System Revenues available after (i) funding the next required deposit to the Debt Service Fund and (ii) providing for the accumulation in the Revenues, Operation and Maintenance Fund an amount equal to the Utility Commission's budgeted Operating Expenses for the immediately succeeding two calendar months.
- (b) The Utility Commission may hold amounts in the General Reserve Fund that are required for the purpose of purchasing or redeeming Bonds. Amounts held for such purposes shall be applied as soon as practicable.
- (c) Any additional amounts held in the General Reserve Fund shall be held, applied and administered by the Utility Commission for the purposes of meeting its needs or obligations, including without limitation, an additional reserve to pay Operating Expenses, and taking other actions in accordance with applicable law.

*(Basic Bond Ordinance, Sections 5.02 and 5.04-5.15; First Supplemental Ordinance, Section 7)*

### **Construction Fund**

The Basic Bond Ordinance establishes a Construction Fund, to be held by the Utility Commission, and establishes within such Fund a separate account for the Project and for each Additional Project which is to be paid for from the Construction Fund. The proceeds of the Series 2011A Bonds remaining after a deposit into the Debt Service Reserve Fund of an amount necessary to meet the Debt Reserve Requirement shall be deposited in the 2011A Project Account in the Construction Fund.

The City shall pay into each separate account established for Additional Projects the proceeds of subsequent Series of Bonds, to the extent not required to make the required deposit, if any, in the Debt Service Reserve Fund. Amounts in each separate account established for each

Additional Project shall be applied to the purposes specified in the supplemental ordinance creating such subsequent Series.

To the extent that other moneys are not available therefor, amounts in the Construction Fund shall be applied to the payment of principal of and interest on the Bonds when due.

The Utility Commission is required to file a certificate signed by the General Manager of the Commission with respect to payment to be made from the Construction Fund for payment of the Cost of Construction of the Project or the cost of any Additional Project, and any payment for work, materials, equipment or supplies for such purpose shall be conditioned upon such a certificate stating that an obligation in a stated amount has been incurred and that it is a proper charge, is in a reasonable amount, has not been paid, and was incurred for work actually performed.

Amounts in the Construction Fund shall be invested in Investment Securities maturing in such amounts and at such times as may be necessary to provide funds when needed to pay the Cost of Construction to which such moneys are applicable.

Upon completion of the Project or any Additional Project, any amount remaining in the separate account established therefor not required to complete payment of the Cost of Construction shall be deposited in the Debt Service Reserve Fund to the extent necessary to meet the Debt Reserve Requirement, and the balance in the case of the Project shall be deposited into the General Reserve Fund for the purchase or redemption of the Bonds issued for the Project and any balance in the case of an Additional Project shall be applied as provided in the supplemental ordinance authorizing Bonds for such Additional Project.

*(Basic Bond Ordinance, Sections 2.03 and 5.03-5.06)*

### **Investment of Certain Funds and Accounts**

The Ordinances provide that certain Funds and Accounts held thereunder may, and in the case of the Construction Fund, the Debt Service Fund and the Debt Service Reserve Fund shall, be invested to the fullest extent practicable in Investment Securities. The Ordinances provide that such investments shall mature not later than such times as shall be necessary to provide moneys when needed for payments from such Funds and Accounts.

Net interest earned on any moneys or investments in the Debt Service Reserve Fund shall be paid into the Debt Service Fund. Net interest earned on any moneys or investments in the Construction Fund shall remain in the Construction Fund. Net interest earned on any moneys or investments in the remaining Funds and Accounts held under the Ordinances shall remain in such Funds or Accounts unless otherwise provided in the Ordinances or in a supplemental ordinance.

Amounts in the Revenues, Operation and Maintenance Fund may be invested at any time as directed by the Utility Commission.

*(Basic Bond Ordinance, Section 6.03)*

## **Encumbrances; Disposition of Properties**

The City will not issue bonds or other evidences of indebtedness payable out of or secured by a pledge of the revenues or of the moneys, securities or funds held or set aside under the Ordinances, nor will it create any lien or charge thereon, except with respect to evidences of indebtedness (i) payable out of moneys in the Construction Fund as part of the cost of the Project or the cost of any Additional Project, or (ii) payable out of, or secured by a pledge of, revenues to be derived after the discharge of the pledge of the revenues in the Ordinances.

The City will not sell, mortgage, or otherwise dispose of or encumber any part of the System, except property or facilities which are no longer useful, provided that if the original cost of the subject property exceeded \$500,000, the General Manager of the Utility Commission shall certify its eligibility for disposition.

The City will not lease or make contracts or grant licenses for the operation or use of, or grant easements with respect to any part of the System, which would (i) impede or restrict the operation by the City of such facilities or (ii) reduce the payments under the Power Sales Contract (except as permitted therein) or impair or adversely affect the rights of the City thereunder or the rights or security of the holders of the bonds or any Additional Bonds or Refunding Bonds. If the original cost of the subject property exceeded \$500,000, the General Manager of the Utility Commission shall first certify that the action of the City with respect thereto does not result in a breach of the above mentioned conditions. Any payments to the City in connection with any such transaction shall constitute System Revenues.

*(Basic Bond Ordinance, Section 7.06)*

## **Annual Budget**

Not less than 10 days before the beginning of each fiscal year thereafter, the City shall file with the Trustee an annual budget for the ensuing fiscal year (or the balance of the current year in the case of the first such budget) which shall set forth in reasonable detail the estimated revenues and expenditures attributable to Station Two and the Retail System for such year and which shall include appropriations for Debt Service on all Series of Bonds issued pursuant to the Basic Bond Ordinance and for the estimated Operating Expenses and requirements of the Renewals and Replacements Fund for the Retail System for such year. Expenditures attributable to Station Two for such year shall include capacity costs as defined in the Power Sales Contract and the Operating Expenses therefor shall be based on the operating budget presented by Big Rivers pursuant to the Operation Agreement. The City may at any time adopt an amended annual budget for the remainder of the then current fiscal year. Each such amended annual budget shall also be filed promptly with the Trustee.

*(Basic Bond Ordinance, Section 7.07)*

## **Power Sales Contract; Amendment**

The City shall collect and forthwith deposit in the Revenues, Operation and Maintenance Fund all amounts payable pursuant to the Power Sales Contract and shall enforce the provisions thereof and duly perform its covenants and agreements thereunder. The City will not consent or



agree to or permit any rescission of or amendment to or otherwise take any action under or in connection with the Power Sales Contract (except as provided therein) or which will in any manner impair or adversely affect the rights of the City thereunder or the rights or security of the bondholders under the Ordinances.

*(Basic Bond Ordinance, Section 7.10)*

## **Insurance**

The City shall at all times maintain or cause to be maintained with respect to the System any insurance reasonably necessary or advisable to protect the interests of the City and the bondholders or which may be required by the Power Sales Contract. Any such insurance shall be in the form of policies or contracts for insurance with insurers of good standing and shall provide coverage for the City and Big Rivers to the extent that risk of loss shall be imposed on each of them by virtue of ownership, operation, maintenance or control of Station Two. In addition, the City shall at all times keep the properties of the Retail System which are of an insurable nature and of the character usually insured by those operating properties similar to the properties of the City insured against loss or damage by fire and from other causes customarily insured against and in such relative amounts as are usually insured against. The City shall also at all times maintain adequate insurance or reserves against loss or damage from such hazards and risks to the person and property of others as are usually insured or reserved against by those operating properties similar to the properties of the Retail System.

*(Basic Bond Ordinance, Sections 7.11 and 7.17)*

## **Reports**

The City shall keep proper and separate books of record and account relating to Station Two and the Retail System, respectively, and the funds and accounts established by the Ordinances which, together with all power contracts and all other books and papers of the City relating thereto, shall be available to inspection of the Trustee and the holders of at least 5% in principal amount of the Bonds outstanding. The City shall file annually with the Trustee an annual report, accompanied by an accountant's certificate, relating to Station Two and the Retail System, respectively, and containing a statement of Net Assets at the end of the fiscal year, a statement of Revenues, Expenses and Changes in Net Assets relating to Station Two and the Retail System, respectively, for such fiscal year, and a statement of receipts and disbursements with respect to the funds and accounts established by the Ordinances, and a statement as to the existence of any default under the provisions of the Ordinances.

*(Basic Bond Ordinance, Section 7.13)*

## **Remedies**

"Events of Default" specified in the Basic Bond Ordinance include (i) failure to pay principal or redemption price of any Bonds when due; (ii) failure for 30 days to pay an interest installment or the unsatisfied balance of any sinking fund installment thereon when due; (iii) failure for 60 days to make the required monthly payments from System Revenues into the Debt Service Fund or the Debt Service Reserve Fund; (iv) failure to perform or observe any of the

covenants, agreements and conditions contained in the Ordinances with respect to payments under and amendment of the Power Sales Contract; and (v) failure for 60 days after written notice thereof in the performance or observance of any other covenants, agreements or conditions. Upon the happening of such Event of Default, the Trustee or the holders of not less than 25% in principal amount of the outstanding Bonds may declare the principal and accrued interest on such Bonds due and payable (subject to a rescission of such declaration upon the curing of such Event of Default).

Upon the occurrence of an Event of Default, which shall not have been remedied, the City shall, if demanded by the Trustee, (i) account as a trustee of an express trust, for all System Revenues, moneys, securities and funds pledged under the Ordinances, (ii) pay over to the Trustee on demand all assets held in any fund or account under the Ordinances and, as received, all System Revenues, which the Trustee shall apply, after the payment of certain expenses, first to payment of the interest and principal and redemption price then due on the Bonds, (iii) appoint a receiver of the properties of the System for the purpose of operating the System and collecting and applying all revenues arising therefrom, subject to the rights of Big Rivers under the Operation Agreement, the Joint Facilities Agreement and the Power Sales Contract and (iv) surrender possession of the business and property of the System to the Trustee for the purpose of operation of the System and collecting and applying the revenues received therefrom, subject to the rights of Big Rivers under the Operation Agreement, the Joint Facilities Agreement and the Power Sales Contract.

If an Event of Default shall have occurred and not be remedied the Trustee may or, on the request of holders of not less than 25% in principal amount of Outstanding Bonds, shall take such steps by a suit or suits in equity or at law, whether for the specific performance of any covenants of the Ordinances or in aid of the enforcement of any other legal or equitable right as the Trustee shall deem most effectual to enforce any of its rights or to perform any of its duties under the Ordinances.

The holders of not less than a majority in principal amount of Bonds then outstanding may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercise any trust or power conferred upon the Trustee (subject to the Trustee's right to decline to follow such direction upon advice of counsel as to the unlawfulness thereof or upon its good faith determination that such action would involve the Trustee in personal liability or would be unjustly prejudicial to bondholders not parties to such direction).

In case an Event of Default shall occur (which shall not have been cured) the Trustee will be required to use the degree of care of a prudent man in the conduct of his affairs.

No bondholder shall have any right to institute any suit, action or proceeding for the enforcement of any provision of the Ordinances or the execution of any trust under the Ordinances or for any remedy under the Ordinances unless such bondholder shall have previously given the Trustee written notice of the Event of Default, and the holders of at least 25% in principal amount of the Bonds then outstanding shall have filed a written request with the Trustee and shall have afforded the Trustee a reasonable opportunity to exercise its powers or instituted such action, suit or proceeding, and unless there shall have been offered to the Trustee adequate security and indemnity against its costs, expenses and liability to be incurred and the

Trustee shall have refused to comply with such request within 60 days. Nothing in the Ordinances or the Bonds affects or impairs the City's obligations to pay the Bonds and interest thereon when due or the right of any bondholder to enforce such payment and to enforce the statutory mortgage lien securing the Bonds.

*(Basic Bond Ordinance, Sections 8.01-8.11 and 9.03)*

### **Supplemental Bond Ordinances**

Any of the provisions of the Basic Bond Ordinance may be amended by the City, by a supplemental ordinance, upon the consent of the holders of at least two-thirds in principal amount in each case of (i) all outstanding Bonds, (ii) if less than all of the outstanding Bonds are affected, the Bonds of each such affected Series, and (iii) if the amendment changes the terms of any sinking fund installment, the Bonds of the Series and maturity for which such sinking fund installment was established; excluding, in each case, from such consent, and from the outstanding Bonds, (a) the Bonds of any specified Series and maturity, if such amendment by its terms will not take effect so long as any of such Bonds remain outstanding, and (b) any Bonds owned or held by or for the account of the City; provided that any such amendment shall not permit a change in the terms of redemption price or interest without the consent of the affected holder, or reduce the percentages of consents required for a further amendment.

The City may adopt (without the consent of any holders of the Bonds) supplemental ordinances (i) to authorize Additional Bonds; (ii) to add to the restrictions contained in the Ordinances; (iii) to add to the covenants of the City contained in, or surrender any rights reserved to or conferred upon it by the Ordinances; (iv) to confirm any pledge under such Ordinances of System Revenues or other moneys; (v) to change from a fiscal year accounting period to a different fiscal year accounting period; (vi) otherwise to modify any of the provisions of such Ordinances (but no such other modification may be effective while any of the Bonds of any Series theretofore issued are outstanding); or (vii) to cure any ambiguity or to correct any defect in such Ordinances (provided that the Trustee shall consent thereto).

*(Basic Bond Ordinance, Sections 10.01-10.04; First Supplemental Ordinance, Section 2)*

### **Defeasance**

All outstanding Bonds of a Series shall before the maturity or redemption date thereof be deemed to have been paid and shall cease to be entitled to any lien, benefit or security under the Ordinances if the following conditions are met: (i) in the case of Bonds to be redeemed, the City shall have given to the Trustee irrevocable instructions to mail the notice of redemption therefor, (ii) there shall have been deposited with the Trustee in trust either moneys in an amount which shall be sufficient, or Investment Securities the principal of and interest on which, when due, will provide moneys which, together with any moneys also deposited, shall be sufficient to pay when due the principal or redemption price, if applicable, and interest due or to become due on such Bonds, and (iii) in the event such Bonds are not subject to redemption within the next succeeding 90 days, the City shall have given the Trustee irrevocable instructions to mail, as soon as practicable, a notice to the holders of such Bonds that the above deposit has been made with the Trustee and that such Bonds are deemed to be paid and stating the maturity or redemption date

upon which moneys are to be available to pay the principal or redemption price, if applicable, of such Bonds.

*(Basic Bond Ordinance, Section 12.01-02)*

## **Holidays**

If the date for making any payment or the last date for performance of any act or the exercising of any right, as provided in the Ordinances, is not a business day for the Trustee and Paying Agent, such payment may be made or act performed or right exercised on the next succeeding business day with the same force and effect as if done on the nominal date provided in the Ordinances and no interest shall accrue for the period after such nominal date.

*(Basic Bond Ordinance, Section 12.9)*

## **TAX MATTERS**

### **General**

It is the opinion of Bond Counsel, Stoll Keenon Ogden PLLC, Louisville, Kentucky, assuming the correctness and accuracy of certain representations and warranties of the City made in connection with the issuance of the Series 2011A Bonds, that under existing laws interest on the Series 2011A Bonds (i) is excluded from gross income for federal and Kentucky income tax purposes and (ii) is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations; provided, however, it should be noted that with respect to corporations (as defined for federal income tax purposes), interest on the Series 2011A Bonds is taken into account in determining adjusted current earnings for the purpose of computing the alternative minimum tax imposed on such corporations. The opinions set forth in the first sentence of this paragraph are subject to the conditions, among others (as set out in APPENDIX H – “FORM OF BOND COUNSEL OPINION,” to which reference is made), that the representations and warranties of the City referred to above are accurate and that the City complies with all requirements of the United States Internal Revenue Code of 1986, as amended (the “Code”), that must be satisfied after the issuance of the Series 2011A Bonds in order that interest thereon be, or continue to be, excluded from gross income for federal income tax purposes. The City has covenanted to comply with all such requirements. Failure to comply with certain of such requirements, or a determination that certain of such representations and warranties are inaccurate, could cause the interest on the Series 2011A Bonds to be included in gross income retroactive to the date of issuance of the Series 2011A Bonds. Bond Counsel expresses no opinion regarding other federal and Kentucky income tax consequences arising with respect to the Series 2011A Bonds. Reference is made to the forms of opinion of Bond Counsel contained in APPENDIX H – “FORM OF BOND COUNSEL OPINION” to this Official Statement.

Prospective purchasers of the Series 2011A Bonds should be aware that:

- (i) With respect to insurance companies subject to the tax imposed by Section 831 of the Code, Section 832(b)(5)(B)(i) reduces the deduction for loss reserves by 15% of the sum of certain items, including interest on the Series 2011A Bonds.

- (ii) Interest on the Series 2011A Bonds earned by certain foreign corporations doing business in the United States could be subject to a branch profits tax imposed by Section 884 of the Code.
- (iii) Passive investment income, including interest on the Series 2011A Bonds, may be subject to federal income taxation under Section 1375 of the Code for Subchapter S corporations that have Subchapter C earnings and profits at the close of the taxable year if greater than 25% of the gross receipts of such Subchapter S corporation is passive investment income.
- (iv) Section 86 of the Code requires recipients of certain Social Security and certain Railroad Retirement benefits to take into account, in determining gross income, receipts or accruals of interest on the Series 2011A Bonds.

Bond Counsel is further of the opinion that the Series 2011A Bonds are exempt from *ad valorem* taxation by the Commonwealth of Kentucky and its political subdivisions.

### **Original Issue Discount**

The Series 2011A Bonds that bear an interest rate that is lower than their yield, as shown on the inside cover page hereof (the “Discount Bonds”), have been offered and sold to the public at an original issue discount (“OID”). OID is the excess of the stated redemption price at maturity (original principal amount) over the “issue price” of each Discount Bond. The issue price of a Discount Bond is the initial offering price to the public (other than the bond houses, brokers or similar persons acting in the capacity of underwriters or wholesalers) at which a substantial amount of the Discount Bonds of the same maturity are sold pursuant to that offering. For federal income tax purposes, OID accrues to the owner of the Discount Bond over the period to maturity based on the constant interest rate method, compounded semiannually. With respect to a purchase of a Discount Bond at its issue price in the initial offering, the portion of OID that accrued during the period that the purchase owns the Discount Bond (i) is interest excludable from that purchaser’s gross income for federal income tax purposes to the same extent and subject to the same considerations discussed above as to other interest on the Series 2011A Bonds, and (ii) is added to that purchaser’s tax basis for the purposes of determining gain or loss on the maturity, redemption, prior sale or other disposition of that Discount Bond.

Owners of any Discount Bonds should consult their own tax advisors with respect to the determination for federal income tax purposes of the amount of OID properly accruable each year with respect to such Discount Bonds, other federal tax consequences of owning Discount Bonds and the treatment of OID for state and local tax purposes.

### **Original Issue Premium**

The Series 2011A Bonds that bear an interest rate that is greater than the yield, as shown on the inside cover page hereof (the “Premium Bonds”), have an initial public offering price that is greater than the amount payable at maturity with respect to such Bonds. The difference between (a) the amount payable at maturity of the Premium Bonds and (b) the initial offering price to the public (excluding bond houses, brokers or similar persons acting in the capacity of underwriter or wholesalers) at which a substantial amount of the Premium Bonds of such

maturities are sold, will constitute “original issue premium” (“OIP”). Under certain circumstances, as a result of the tax cost reduction requirements of the Code relating to the amortization of bond premium, the owner of a Premium Bond may realize a taxable gain upon its disposition even though the Premium Bond is sold or redeemed for an amount not greater than the owner’s original acquisition cost.

Owners of Premium Bonds should consult their own tax advisors with respect to the determination for federal income tax purposes of the amount of OIP properly accruable each year and the treatment of OIP for state and local tax purposes.

### **Private Letter Ruling Regarding Government Use of Station Two**

The City has received a Private Letter Ruling from the Internal Revenue Service dated March 31, 2011, which provides in essence that (i) the City may treat the output from the net rated capacity of Station Two reserved for the City’s use under the Power Sales Contract, reduced by Big Rivers’ purchases of any of the City’s output not scheduled or taken as provided in the Power Sales Contract from such reserved capacity and any other private business use of such output, as the government use portion of Station Two; and (ii) the Operation Agreement is an arrangement that is not treated as a management contract that results in private business use under applicable regulations.

## **LITIGATION**

### **The City**

There is no controversy or litigation of any nature now pending or threatened restraining or enjoining the issuance, sale, execution or delivery of the Series 2011A Bonds, or in any way contesting or affecting the validity of the Series 2011A Bonds or any proceedings of the City taken with respect to the issuance or sale thereof, or the pledge or application of any moneys or security provided for the payment of the Series 2011A Bonds or the due existence or powers of the City.

### **The Utility Commission**

There is no controversy or litigation of any nature now pending or threatened restraining or enjoining the issuance, sale, execution or delivery of the Series 2011A Bonds, or in any way contesting or affecting the validity of the Series 2011A Bonds or any proceedings of the Utility Commission taken with respect to the issuance or sale thereof, or the pledge or application of any moneys or security provided for the payment of the Series 2011A Bonds or the due existence or powers of the Utility Commission.

With reference to the Power Sales Contract, Big Rivers, the City and the Utility Commission are currently parties to a dispute concerning certain rights related to the City’s Station Two reserved capacity and related energy. Specifically, the suit involves whether Big Rivers has the contractual right to take the City’s energy “not scheduled or taken” under the Power Sales Contract. The dispute was placed in formal arbitration by the Circuit Court of Henderson County, Kentucky, and the hearing is scheduled for November 2011. In the event the

City and the Utility Commission do not prevail in the arbitration, there will not be a material adverse impact on the existing financial status of the Utility Commission and the City.

The Utility Commission is also a party to litigation in the Henderson County Circuit Court in which the Utility Commission has requested the Circuit Court to issue a declaratory judgment that the Utility Commission may separately consider repair and maintenance projects performed at Station Two with regard to the Commonwealth of Kentucky's prevailing wage law. It has been the past practice of the Commonwealth's Labor Cabinet to view all simultaneous repair and maintenance projects performed at Station Two as one project for purposes of meeting the thresholds of the prevailing wage law. The Utility Commission seeks to consider each such project separately. If the Utility Commission is successful it will incur cost savings associated with future repair and maintenance projects. If unsuccessful, there will be no negative financial impact on the Utility Commission.

## **LEGAL MATTERS**

Certain legal matters incident to the authorization and validity of the Series 2011A Bonds will be the subject of approving opinions of Stoll Keenon Ogden PLLC, Louisville, Kentucky, Bond Counsel, which will be available at the time of delivery of the Series 2011A Bonds. The proposed form of such opinion is contained in APPENDIX H – "FORM OF BOND COUNSEL OPINION" to this Official Statement. Certain legal matters relating to the legality of the proceedings of the City and the absence of any litigation which might affect the validity of the Series 2011A Bonds or the proceedings of the City with respect thereto will be passed upon for the City by its City Attorney, Joseph E. Ternes, Jr., Henderson, Kentucky. Certain legal matters relating to the legality of the proceedings of the Utility Commission and the absence of any litigation which might affect the validity of the Series 2011A Bonds or the proceedings of the Utility Commission with respect thereto will be passed upon for the Utility Commission by its Counsel, King, Deep and Branaman, Henderson, Kentucky.

The information contained in this Official Statement under the headings "INTRODUCTORY STATEMENT," "AUTHORITY AND SECURITY," "THE SERIES 2011A BONDS," "THE ORDINANCES," "TAX MATTERS" and "CONTINUING DISCLOSURE UNDERTAKINGS" has been reviewed by Bond Counsel to determine that such information conforms in substance to the proceedings and laws relating to the issuance of the Series 2011A Bonds that are summarized in such information (see "Reference to Documents" hereinafter); but Bond Counsel has not undertaken to review the accuracy or completeness of statements and data otherwise contained in this Official Statement, including APPENDICES A through G, and expresses no opinion thereon and assumes no responsibility in connection therewith.

## **CONTINUING DISCLOSURE UNDERTAKINGS**

### **The Utility Commission**

The Utility Commission, on behalf of the City, will agree in a Continuing Disclosure Certificate, dated as of the date of issuance of the Series 2011A Bonds (the "Continuing Disclosure Certificate"), to provide or to cause to be provided, in accordance with the

requirements of Rule 15c2-12, as amended, and official interpretations thereof (the “Rule”) promulgated by the Securities and Exchange Commission, the following:

- (a) (i) with the Municipal Securities Rulemaking Board (the “MSRB”), or any successor thereto for purposes of the Rule, through the continuing disclosure service portal provided by the MSRB’s Electronic Municipal Market Access (“EMMA”) system as described in 1934 Act Release No. 59062, or any similar system that is acceptable to the Securities and Exchange Commission, and (b) with the appropriate state information depository (“SID”), if any, for the Commonwealth of Kentucky as designated by the Securities and Exchange Commission in accordance with the Rule, certain annual financial information and operating data, generally consistent with the financial information and operating data contained in APPENDIX C – “GENERAL OPERATING INFORMATION FOR THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION” hereof, together with audited financial statements. Such information is expected to be available on or before December 31 of each year for the fiscal year ending on the preceding May 31 and will be made available, in addition to EMMA and the SID, if any, to each holder of Series 2011A Bonds who makes written request for such information; provided that audited financial statements, if not available on December 31, will be filed when available.

The audited financial statements and other financial statements will be prepared in accordance with (a) generally accepted accounting principles (GAAP) as applied to governmental enterprise funds, as described in the notes to the Utility Commission’s audited financial statements appearing in APPENDIX E – “REPORT ON AUDITED FINANCIAL STATEMENTS FOR THE FISCAL YEARS ENDED MAY 31, 2010 AND 2009 FOR THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION” hereof and (b) the standards of the Governmental Accounting Standards Board. Reference is made to the notes to the Utility Commission’s audited financial statements for a detailed description of the accounting principles pursuant to which the Utility Commission’s financial statements will be prepared.

- (b) with the MSRB through EMMA and the SID, if any, notice of the occurrence of any of the following events with respect to the Series 2011A Bonds in a timely manner not in excess of ten business days after the occurrence of such event: (i) principal and interest payment delinquencies, (ii) non-payment related defaults, if material, (iii) unscheduled draws on debt service reserves reflecting financial difficulties, (iv) unscheduled draws on credit enhancements reflecting financial difficulties, (v) substitution of credit or liquidity providers, or their failure to perform, (vi) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Series 2011A Bonds, or other material events affecting the tax status of the Series 2011A Bonds, (vii) modifications to rights of holders of Series 2011A Bonds, if material, (viii) Bond calls, if material, and tender offers, (ix) defeasances, (x) release, substitution or sale of property securing repayment of the



Series 2011A Bonds, if material, (xi) rating changes, (xii) bankruptcy, insolvency, receivership or similar event of the Utility Commission, (xiii) the consummation of a merger, consolidation, or acquisition involving the Utility Commission or the sale of all or substantially all of the assets of the Utility Commission, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material, and (xiv) appointment of a successor or additional trustee or the change of a trustee, if material.

The Utility Commission may from time to time choose to file notice of the occurrence of certain other events, in addition to those listed above, if, in the judgment of the Utility Commission, any such other event is material with respect to the Series 2011A Bonds, but the Utility Commission does not undertake to commit to file any such notice of the occurrence of any event except those events listed above.

- (c) in a timely manner, with the MSRB through EMMA and the SID, if any, notice of a failure by the Utility Commission to file the required financial information on or before the date specified in the Continuing Disclosure Certificate for such Series.

The Utility Commission reserves the right to modify from time to time the specific types of information provided or the format of the presentation of such information, to the extent necessary or appropriate in the judgment of the Utility Commission; provided that the Utility Commission agrees that any such modification will be done in a manner consistent with the Rule. All documents provided to the MSRB in accordance with the Rule shall be accompanied by identifying information as prescribed by the MSRB. The Utility Commission reserves the right to terminate its obligation to provide annual financial information and notices of material events as set forth above, if and when the Utility Commission no longer remains an obligated person with respect to the Series 2011A Bonds within the meaning of the Rule. The Utility Commission acknowledges that its undertaking pursuant to the Rule described under this heading is intended to be for the benefit of the holders (including beneficial owners) of the Series 2011A Bonds and shall be enforceable by any holder of the Series 2011A Bonds; provided that a Bondholder's right to enforce the provisions of this undertaking shall be limited to a right to obtain specific performance of the Utility Commission's obligations pursuant to the provisions of this undertaking, and any failure by the Utility Commission to comply with the provisions of this undertaking shall not be an event of default with respect to the Series 2011A Bonds under the Ordinances.

The Utility Commission has not failed to comply in all material respects with its previous undertakings under the Rule to file annual reports.

Purchase of the Series 2011A Bonds shall be conditioned upon the receipt by the initial purchaser of the Series 2011A Bonds, at or before the delivery of the Series 2011A Bonds, of evidence that the Utility Commission has made the continuing disclosure undertaking described above, in the form of the Continuing Disclosure Certificate, for the benefit of the holders of the Series 2011A Bonds.

## **Big Rivers**

On June 1, 2010, Big Rivers entered into a Continuing Disclosure Agreement with U.S. Bank National Association, as trustee, in connection with Big Rivers' County of Ohio, Kentucky Pollution Control Refunding Revenue Bonds, Series 2010A (Big Rivers Electric Corporation Project) whereby Big Rivers agreed to make continuing annual disclosure of certain financial and operating information and disclosure of certain events which might occur, all as described in APPENDIX F – "GENERAL INFORMATION AND DATA – BIG RIVERS ELECTRIC CORPORATION – Continuing Disclosure."

### **RATING**

The Series 2011A Bonds have been assigned a rating of "A3" by Moody's Investors Service, Inc. (the "Rating Agency"). An explanation of the significance of such rating may be obtained from the Rating Agency. The City and the Utility Commission have furnished the Rating Agency with certain information and materials relating to the Series 2011A Bonds, the City and the Utility Commission which have not been included in this Official Statement. Such rating reflects only the views of the Rating Agency at the time such rating is issued and is not a recommendation to buy, sell or hold the Series 2011A Bonds. The rating is subject to change or withdrawal by the Rating Agency at any time and any such change or withdrawal may affect the market price or marketability of the Series 2011A Bonds.

### **UNDERWRITING**

The Series 2011A Bonds were purchased (pending delivery on or about September 7, 2011) at a competitive sale held on August 16, 2011, by Robert W. Baird & Co., Inc., as underwriter, at a purchase price of \$11,123,000.00, representing 98.00% of par value.

### **FINANCIAL ADVISOR**

J.J.B. Hilliard, W.L. Lyons, LLC, Louisville, Kentucky is acting as Financial Advisor to the City in connection with the issuance of the Series 2011A Bonds and will receive a fee, payable from Bond proceeds, for its services as Financial Advisor.

### **REFERENCE TO DOCUMENTS**

All foregoing summaries and descriptions of provisions set forth in the Ordinances, the Series 2011A Bonds, the Continuing Disclosure Undertakings and related documents, and all references to other documents and materials not purported to be quoted in full, are brief outlines of certain provisions of such documents, reference to which documents is hereby made and copies of which will be furnished by the City upon written request.

### **MISCELLANEOUS**

Neither this Official Statement nor any statement which may have been made orally or in writing is to be construed as a contract with the holders of any of the Series 2011A Bonds.



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## **APPENDICES**

- APPENDIX A – DEBT SERVICE REQUIREMENTS ON SERIES 2011A BONDS, ESTIMATED DEBT SERVICE REQUIREMENTS ON SERIES 2011B BONDS AND DEBT OUTSTANDING OF THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION**
- APPENDIX B – DEMOGRAPHIC AND ECONOMIC DATA OF THE CITY OF HENDERSON, KENTUCKY**
- APPENDIX C – GENERAL OPERATING INFORMATION FOR THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION**
- APPENDIX D – SUMMARIES OF UNAUDITED STATEMENTS OF NET ASSETS, REVENUES, EXPENSES AND CHANGES IN NET ASSETS FOR THE FISCAL YEAR ENDED MAY 31, 2011 AND AUDITED STATEMENTS OF NET ASSETS, REVENUES, EXPENSES AND CHANGES IN NET ASSETS FOR THE FISCAL YEARS ENDED MAY 31, 2006 THROUGH 2010 FOR THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION**
- APPENDIX E – REPORT ON AUDITED FINANCIAL STATEMENTS FOR THE FISCAL YEARS ENDED MAY 31, 2010 AND 2009 FOR THE CITY OF HENDERSON, KENTUCKY UTILITY COMMISSION**
- APPENDIX F – GENERAL INFORMATION AND DATA - BIG RIVERS ELECTRIC CORPORATION**
- APPENDIX G – ANNUAL REPORT OF BIG RIVERS ELECTRIC CORPORATION FOR THE FISCAL YEAR ENDED DECEMBER 31, 2010, WITH ACCOMPANYING AUDITED FINANCIAL STATEMENTS FOR THE FISCAL YEARS ENDED DECEMBER 31, 2010 AND 2009**
- APPENDIX H – FORM OF BOND COUNSEL OPINION**

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**APPENDIX A**

**CITY OF HENDERSON, KENTUCKY  
ELECTRIC SYSTEM REVENUE BONDS, SERIES 2011A**

**DEBT SERVICE REQUIREMENTS ON SERIES 2011A BONDS,  
ESTIMATED DEBT SERVICE REQUIREMENTS ON SERIES 2011B BONDS  
AND DEBT OUTSTANDING OF THE CITY OF HENDERSON,  
KENTUCKY UTILITY COMMISSION**

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City of Henderson, Kentucky  
Electric System Revenue Bonds  
Series 2011A&B

**DEBT SERVICE REQUIREMENTS ON SERIES 2011A BONDS AND ESTIMATED DEBT SERVICE REQUIREMENTS ON SERIES 2011B BONDS**

Date	Series 2011A			Series 2011B			Combined			Fiscal Total
	Principal	Interest	Total P+I	Principal	Interest	Total P+I	Principal	Interest	Total P+I	
12/01/2011	-	\$95,038.13	\$95,038.13	-	\$20,500.89	\$20,500.89	-	\$115,539.02	\$115,539.02	\$115,539.02
6/01/2012	-	203,653.13	203,653.13	-	57,658.75	57,658.75	-	261,311.88	261,311.88	
12/01/2012	\$420,000.00	203,653.13	623,653.13	\$145,000.00	57,658.75	202,658.75	\$565,000.00	261,311.88	826,311.88	1,087,623.76
6/01/2013	-	198,403.13	198,403.13	-	57,006.25	57,006.25	-	255,409.38	255,409.38	
12/01/2013	435,000.00	198,403.13	633,403.13	145,000.00	57,006.25	202,006.25	580,000.00	255,409.38	835,409.38	1,090,818.76
6/01/2014	-	192,965.63	192,965.63	-	56,136.25	56,136.25	-	249,101.88	249,101.88	
12/01/2014	445,000.00	192,965.63	637,965.63	150,000.00	56,136.25	206,136.25	595,000.00	249,101.88	844,101.88	1,093,203.76
6/01/2015	-	187,403.13	187,403.13	-	55,086.25	55,086.25	-	242,489.38	242,489.38	
12/01/2015	455,000.00	187,403.13	642,403.13	150,000.00	55,086.25	205,086.25	605,000.00	242,489.38	847,489.38	1,089,978.76
6/01/2016	-	181,715.63	181,715.63	-	53,773.75	53,773.75	-	235,489.38	235,489.38	
12/01/2016	465,000.00	181,715.63	646,715.63	150,000.00	53,773.75	203,773.75	615,000.00	235,489.38	850,489.38	1,085,978.76
6/01/2017	-	175,903.13	175,903.13	-	52,273.75	52,273.75	-	228,176.88	228,176.88	
12/01/2017	475,000.00	175,903.13	650,903.13	155,000.00	52,273.75	207,273.75	630,000.00	228,176.88	858,176.88	1,086,353.76
6/01/2018	-	169,965.63	169,965.63	-	50,568.75	50,568.75	-	220,534.38	220,534.38	
12/01/2018	490,000.00	169,965.63	659,965.63	160,000.00	50,568.75	210,568.75	650,000.00	220,534.38	870,534.38	1,091,068.76
6/01/2019	-	162,615.63	162,615.63	-	48,568.75	48,568.75	-	211,184.38	211,184.38	
12/01/2019	505,000.00	162,615.63	667,615.63	165,000.00	48,568.75	213,568.75	670,000.00	211,184.38	881,184.38	1,092,368.76
6/01/2020	-	155,040.63	155,040.63	-	46,217.50	46,217.50	-	201,258.13	201,258.13	
12/01/2020	520,000.00	155,040.63	675,040.63	165,000.00	46,217.50	211,217.50	685,000.00	201,258.13	886,258.13	1,087,516.26
6/01/2021	-	146,590.63	146,590.63	-	43,742.50	43,742.50	-	190,333.13	190,333.13	
12/01/2021	535,000.00	146,590.63	681,590.63	175,000.00	43,742.50	218,742.50	710,000.00	190,333.13	900,333.13	1,090,666.26
6/01/2022	-	137,495.63	137,495.63	-	40,942.50	40,942.50	-	178,438.13	178,438.13	
12/01/2022	555,000.00	137,495.63	692,495.63	180,000.00	40,942.50	220,942.50	735,000.00	178,438.13	913,438.13	1,091,876.26
6/01/2023	-	127,783.13	127,783.13	-	37,882.50	37,882.50	-	165,665.63	165,665.63	
12/01/2023	570,000.00	127,783.13	697,783.13	185,000.00	37,882.50	222,882.50	755,000.00	165,665.63	920,665.63	1,086,331.26
6/01/2024	-	117,095.63	117,095.63	-	34,645.00	34,645.00	-	151,740.63	151,740.63	
12/01/2024	595,000.00	117,095.63	712,095.63	190,000.00	34,645.00	224,645.00	785,000.00	151,740.63	936,740.63	1,088,481.26
6/01/2025	-	105,195.63	105,195.63	-	31,225.00	31,225.00	-	136,420.63	136,420.63	
12/01/2025	615,000.00	105,195.63	720,195.63	195,000.00	31,225.00	226,225.00	810,000.00	136,420.63	946,420.63	1,082,841.26
6/01/2026	-	92,895.63	92,895.63	-	27,617.50	27,617.50	-	120,513.13	120,513.13	
12/01/2026	640,000.00	92,895.63	732,895.63	205,000.00	27,617.50	232,617.50	845,000.00	120,513.13	965,513.13	1,086,026.26
6/01/2027	-	79,695.63	79,695.63	-	23,722.50	23,722.50	-	103,418.13	103,418.13	
12/01/2027	665,000.00	79,695.63	744,695.63	215,000.00	23,722.50	238,722.50	880,000.00	103,418.13	983,418.13	1,086,836.26
6/01/2028	-	65,564.38	65,564.38	-	19,530.00	19,530.00	-	85,094.38	85,094.38	
12/01/2028	695,000.00	65,564.38	760,564.38	220,000.00	19,530.00	239,530.00	915,000.00	85,094.38	1,000,094.38	1,085,188.76
6/01/2029	-	50,621.88	50,621.88	-	15,130.00	15,130.00	-	65,751.88	65,751.88	
12/01/2029	725,000.00	50,621.88	775,621.88	230,000.00	15,130.00	245,130.00	955,000.00	65,751.88	1,020,751.88	1,086,503.76
6/01/2030	-	34,762.50	34,762.50	-	10,415.00	10,415.00	-	45,177.50	45,177.50	
12/01/2030	755,000.00	34,762.50	789,762.50	240,000.00	10,415.00	250,415.00	995,000.00	45,177.50	1,040,177.50	1,085,355.00
6/01/2031	-	17,775.00	17,775.00	-	5,375.00	5,375.00	-	23,150.00	23,150.00	
12/01/2031	790,000.00	17,775.00	807,775.00	250,000.00	5,375.00	255,375.00	1,040,000.00	23,150.00	1,063,150.00	1,086,300.00
<b>Total</b>	<b>\$11,350,000.00</b>	<b>\$5,301,320.81</b>	<b>\$16,651,320.81</b>	<b>\$3,670,000.00</b>	<b>\$1,555,535.89</b>	<b>\$5,225,535.89</b>	<b>\$15,020,000.00</b>	<b>\$6,856,856.70</b>	<b>\$21,876,856.70</b>	<b>\$21,876,856.70</b>

**City of Henderson, Kentucky Utility Commission  
Outstanding Debt**

The Utility Commission has no long-term debt outstanding as of June 30, 2011.

The City has issued the following Bond Anticipation Notes (the "BANs") for which the Utility Commission has agreed to pay the City the related debt service:

BAN	Amount Authorized	Last Maturity Date	Balance as of June 30, 2011 <sup>(1)(2)</sup>
City of Henderson, Kentucky Bond Anticipation Note, Series 2008A <sup>(1)</sup>	\$3,500,000	December 1, 2011	\$3,395,021
City of Henderson, Kentucky Bond Anticipation Note, Taxable Series 2008B <sup>(1)</sup>	9,000,000	December 1, 2011	4,529,452
City of Henderson, Kentucky Bond Anticipation Note, Taxable Series 2010A <sup>(1)</sup>	1,500,000	March 25, 2012	51,062
	<u>\$14,000,000</u>		<u>\$7,975,535</u>

Source: City of Henderson, Kentucky Utility Commission

- (1) The issuance of the Series 2011A Bonds and the Series 2011B Bonds will retire all of the BANs. The BANs were authorized in the amounts noted above. The BANs were issued on a drawdown basis: the balances shown above represent the respective principal amounts that were drawn down as of June 30, 2011.
- (2) Upon the issuance of the Bonds, it is expected that the outstanding principal balance of the Series 2008A BAN, Series 2008B BAN, and Series 2010A BAN will be \$3,500,000, \$5,281,067, and \$170,000 respectively.

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**APPENDIX B**

**CITY OF HENDERSON, KENTUCKY  
ELECTRIC SYSTEM REVENUE BONDS, SERIES 2011A**

**DEMOGRAPHIC AND ECONOMIC DATA  
OF THE CITY OF HENDERSON, KENTUCKY**

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## HENDERSON, KENTUCKY

Henderson, originally known as "Red Banks" in reference to the soil along the banks of the Ohio River, was first settled in 1797. By the early 1800's the City had grown to 1,000 inhabitants. The City was incorporated as a town in 1810 and as a City in 1867. In 1922 a commission form of government was adopted, and in 1966 it was replaced by a city manager form of government.

The Henderson area has grown steadily and is known for its friendly people and southern hospitality. Henderson ranks as Kentucky's eighth largest city in terms of population. Henderson is also the home of four governors and two lieutenant governors.

Henderson County covers a land area of 440 square miles in the Western Coal Field Region of Kentucky. The Ohio River forms the northern boundary of the county. Henderson County had an estimated 2010 population of 45,648 persons.

### Location

Henderson is the county seat of Henderson County, Kentucky, and lies on the southern banks of the Ohio River, one of the nation's major waterways, in the western Kentucky coal field region. Henderson is located 10 miles south of Evansville, Indiana, and is 120 miles north of Nashville, Tennessee, 120 miles southwest of Louisville, Kentucky and 150 miles southeast of St. Louis, Missouri. Henderson sits on a bluff; more than 70 feet above the Ohio River's low water mark, overlooking the river. For years the local slogan has been "On the Ohio, but never in it". Henderson covers 17.9 square miles and is 400 feet above sea level.

### Industry

The Henderson area is home to several diverse industries, attracting major manufacturing and processors in aluminum, coal mining, steel, plastics, and agriculture. Locally produced commodities include aluminum ingot, automotive parts, truck axles and wheels, and poultry products.

### Labor Supply

There is a current estimated labor supply of 23,045 persons available for industrial jobs in the labor market area. In addition, from 2010 to 2013, approximately 26,220 young persons in the labor market area will become 18 years of age and potentially available for industrial jobs.

Largest employers in the City are as follows (as of June 2011):

<u>Firm</u>	<u>Product/Service</u>	<u>Average Employment</u>
Gibbs Die Casting Corp.	Aluminum & magnesium die castings, headquarters	650
Dana Corporation	Truck axles & brake components	250
Brenntag Mid-South Inc.	Chemical blending, industrial chemical distribution	228
Audubon Metals LLC	Heavy-media separator and secondary specification aluminum alloy producer. Recycling process of automobile shredder residue into new aluminum castings	165
Accuride Corp.	Truck wheels & rims	141
Sitex Corporation	Headquarters and uniform supply service	124
Sonoco	Aluminum & steel can ends	112
Hugh E. Sandefur Training Center Inc.	Vocational rehabilitation, manufacturing plant producing corrugated products; boxes, partitions, die cuts. Assembly, re-work, pick/pack, bag sealing and woodworking products.	100
Service Tool & Plastics	Injection molded plastics	99
International Paper	Recycled linerboard	75

Source: Kentucky Cabinet for Economic Development

## **Churches and Schools**

The Henderson area has over 63 churches representing many major religious denominations.

The county and parochial school systems provide elementary, middle, and secondary school students with a quality education. The school systems also have an excellent student-teacher ratio of 16:1. The school system has eight elementary schools, two junior high schools, one high school, and one special education center.

Henderson Community College, a part of the Kentucky Community and Technical College System, offers two year Associate of Arts and Science degrees. The College also offers many adult continuing educational programs as well as providing support to area businesses and industry through special educational workshops tailored to meet the respective businesses' needs.

## **Medical Facilities**

The City of Henderson is fortunate to have an excellent, well staffed, 187 bed Methodist Hospital. The Hospital just recently opened two additions with total construction costs of \$21 million. Four nursing homes are located in the City as well as a state maintained county health department. Serving the medical needs of Henderson citizens are approximately 75 physicians and 15 dentists.

## **Recreation and Culture**

Available to area citizens are a wide range of recreational and cultural activities. The Henderson area is home to some of the finest duck and goose hunting in the United States, as well as many other outdoor activities.

Audubon State Park is home to the John James Audubon Museum. John James Audubon, the world-renowned wildlife artist lived in Henderson and operated a business. The museum holds an extensive collection of Audubon's works. The facility hosts visitors from all over the world who come to view Audubon's works and study his life. Lodging and camping accommodations can also be found at the park.

Municipal parks provide for picnicking, golfing, tennis, soccer, swimming, softball, and baseball. For fishermen, several lakes in the area are available, and other water sports may be enjoyed on the Ohio River.

Community activities include music, theatre, and art. Cultural activities play a major role in the lives of Hendersonians. The 1,000 seat Henderson Fine Arts Center located at the Henderson Community College provides quality entertainment with many of the top acts in the United States performing on a regular basis.

The summer is highlighted with the W.C. Handy Blues and Barbecue Festival. The Festival is held to honor the life of W.C. Handy who is known as the "Father of the Blues". Handy lived in Henderson and it is in Henderson where he honed his musical skills. Many of the top names in jazz and blues perform at the event. The celebration is traditionally ended with a dazzling display of fireworks.

Henderson County High School participates in all major team sports offered by the Kentucky High School Athletic Association. The school is continually in contention for state titles in several sports. The recently expanded Henderson Public Library is one of the finest libraries in the area with well in excess of 112,000 volumes. The library was built in the early 1900's by a grant provided by Andrew Carnegie.

## **The Economic Framework**

The total number of Henderson County residents employed in 2010 averaged 21,471. Contract construction firms provided 877 jobs; agriculture, forestry, fishing and hunting, and mining firms in the county employed 376; manufacturing firms in the county reported 4,278 employees; trade, transportation and utilities provided 2,971 jobs; 6,283 were employed in the service industry; and informational, financial activities and public administration accounted for 1,554 jobs.

**HENDERSON COUNTY, KENTUCKY  
ECONOMIC STATISTICS  
2007-2011**

<u>Year</u>	<u>Per Capita Income</u>	<u>Median Family Income</u>	<u>Average Weekly Wage</u>	<u>Employment</u>	<u>Civilian Labor Force</u>	<u>Unemployment Rate</u>
2011	(1)	\$62,900 (2)	(1)	22,046 (2)	24,099 (2)	8.5% (2)
2010	(1)	61,400	(1)	21,471	23,906	10.2
2009	\$32,070	60,900	\$671.53	21,069	23,614	10.8
2008	31,265	59,800	666.76	21,391	22,804	6.2
2007	29,434	56,900	639.29	21,932	23,096	5.0

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Source: Kentucky Cabinet for Economic Development

- (1) Data not available
- (2) As of April 2011.

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**APPENDIX C**

**CITY OF HENDERSON, KENTUCKY  
ELECTRIC SYSTEM REVENUE BONDS, SERIES 2011A**

**GENERAL OPERATING INFORMATION FOR  
THE CITY OF HENDERSON, KENTUCKY  
UTILITY COMMISSION**

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**City of Henderson, Kentucky Utility Commission  
Electric Rates**

The Utility Commission's current schedule of electric rates effective as of February 1, 2009 is shown below.

<u>Customer Class</u> Retail	<u>Rates</u> Fuel	<u>Adj.</u> Effective	<u>Rate</u>
<b><u>Residential</u></b>			
Customer Charge	\$6.23	--	--
Summer KwH	\$0.0549	\$0.01800	\$0.07290
Winter KwH	\$0.0434	\$0.01800	\$0.06140
<b><u>Church and School</u></b>			
Customer Charge	\$6.23	--	--
All KwH	\$0.0439	\$0.0180	\$0.06190
<b><u>General Service</u></b>			
Customer Charge	\$6.23	--	--
1 <sup>st</sup> 2,000 KwH	\$0.0603	\$0.01800	\$0.07830
next 13,000 KwH	\$0.0522	\$0.01800	\$0.07020
all over 15,000 KwH	\$0.0422	\$0.01800	\$0.06020
<b><u>Demand Rate</u></b>			
Customer Charge	\$125.00	--	--
plus Variable Demand Charge			
1 <sup>st</sup> 50,000 KwH	\$0.0405	\$0.01800	\$0.05850
next 50,000 KwH	\$0.0318	\$0.01800	\$0.04980
all over 100,000 KwH	\$0.0288	\$0.01800	\$0.04680
<b><u>Outdoor Lighting</u></b>			
100 Watt Rate Month	\$9.33	--	--
250 Watt Rate Month	\$13.65	--	--

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Source: City of Henderson, Kentucky Utility Commission

Set forth below is a list of the ten largest electric customers in terms of amount of revenue generated during the period of June 1, 2010 through May 31, 2011.

<b>Customer</b>	<b>Electric Usage Amount</b>	<b>Fuel Adjustment</b>	<b>Total Electric Amount</b>	<b>Billed Consumption (KWH)</b>	<b>Revenue as a % of Total Revenue</b>
International Paper	\$3,951,274	\$1,035,467	\$4,986,741	121,871,232	16.02%
Gibbs Die Cas-Interface	2,121,778	506,466	2,628,244	60,634,744	8.44
Shamrock Technologies Inc.	910,148	216,960	1,127,108	26,146,200	3.62
HND Water Utility	659,047	134,444	793,491	16,023,579	2.55
Precision Micron Powders	633,223	155,374	788,597	18,139,840	2.53
Audubon Metals – LLC	611,060	153,896	764,956	17,869,168	2.46
Methodist Hospital	602,453	135,758	738,211	16,670,604	2.37
Sonoco Products Company	354,611	82,570	437,181	9,991,440	1.40
Taubensee Steel & Wire Co.	340,781	75,340	416,121	8,728,040	1.34
Dana Corp.	<u>310,898</u>	<u>72,123</u>	<u>383,021</u>	<u>8,858,182</u>	<u>1.23</u>
<b>Total</b>	<b><u>\$10,495,273</u></b>	<b><u>\$2,568,398</u></b>	<b><u>\$13,063,671</u></b>	<b><u>304,933,029</u></b>	<b><u>41.96%</u></b>

Source: City of Henderson, Kentucky Utility Commission

Listed below are customer statistics of the System for the last five fiscal years.

	<b>FY11</b>	<b>FY10</b>	<b>FY09</b>	<b>FY08</b>	<b>FY07</b>
Number of Residential	10,299	10,269		10,249	10,231
Number of Commercial	1,623	1,635		1,626	1,625
<b>Total</b>	<b>11,922</b>	<b>11,904</b>		<b>11,875</b>	<b>11,856</b>
Dollars Sold	\$31,297,629	\$29,595,820		\$29,332,083	\$31,875,000
KWH Sold	615,346,459	577,557,821		602,132,838	657,468,447
					644,907,439

Source: City of Henderson, Kentucky Utility Commission

The following table shows a ten year projection of power and energy requirements for the City of Henderson, Kentucky Utility Commission.

<b>Fiscal Year</b>	<b>Peak Demand (MW)</b>	<b>Percent Growth</b>	<b>Energy Requirements (KWh)</b>	<b>Percent Growth</b>
2012	119.00	--	644,904,439	--
2013	121.00	1.65%	655,564,017	1.63%
2014	122.00	0.82	660,937,492	1.81
2015	123.00	0.81	666,310,968	0.81
2016	124.00	0.81	671,684,443	0.80
2017	125.00	0.80	677,057,919	0.79
2018	127.00	1.57	687,720,248	1.55
2019	128.00	0.78	693,093,063	0.78
2020	129.00	0.78	698,465,877	0.77
2021	131.00	1.53	709,129,478	1.50

Source: City of Henderson, Kentucky Utility Commission

## RESERVED CAPACITY (MW) AND ENERGY (MWH) TAKEN FROM STATION TWO

CAPACITY				ENERGY						
Budget Period	Station Two's Total Net Rated Capacity (MW)	City's Reserved Net Rated Capacity (MW)	City's % of Total Net Rated Capacity	Station Two's Total Energy Generated (MWh)	City's Energy Taken From Station Two (MWh)	Big Rivers Energy Taken From Station Two (MWh)	Station Two's Hourly Average Energy Taken From Station Two (MW)	Issuer's Hourly Average Energy Taken From Station Two (MW)	Big River's Hourly Average Energy Taken From Station Two (MW)	City's Energy % Taken From Total Energy Generated
2004	312	95	30.4%	2,200,965	655,028	1,545,937	251	75	176	29.8%
2005	312	95	30.4%	2,094,706	674,125	1,420,581	239	77	162	32.2%
2006	312	95	30.4%	2,385,785	661,022	1,724,763	272	75	197	27.7%
2007	312	95	30.4%	2,154,799	633,547	1,521,252	245	72	173	29.4%
2008 (1)	312	95	30.4%	1,906,194	596,023	1,310,171	218	68	150	31.3%
2009	312	100	32.1%	2,283,258	590,864	1,696,665	261	67	194	26.0%
2010	312	105	33.7%	2,241,136	609,946	1,635,774	256	70	186	27.2%
2011	312	(2)	35.3%	(2)	(2)	(2)	(2)	(2)	(2)	(2)
<b>Total for past seven years</b>				15,266,843	4,420,555	10,855,143				29.0%
<b>Average over past five years</b>							249	72	176	29.0%

**NOTES:**

- (1) Reductions in City's energy taken from the Station Two's and reductions in the Station Two's energy generated during "Peak Consumption Period" in 2008 are related to downturn in the economy.
- (2) Unavailable.

Source: City of Henderson, Kentucky Utility Commission

**City of Henderson, Kentucky**  
**Utility Commission**  
**Projected Proforma Debt Service Coverage**

	Fiscal Year				
	2012	2013	2014	2015	2016
<b>Revenues:</b>					
Electricity	\$36,429,608	\$37,051,686	\$37,422,203	\$37,796,425	\$38,174,389
Other Income	2,676,921	\$2,703,690	\$2,730,727	\$2,758,034	\$2,785,615
<b>Total Revenues</b>	<u>\$39,106,529</u>	<u>\$39,755,376</u>	<u>\$40,152,930</u>	<u>\$40,554,459</u>	<u>\$40,960,004</u>
<b>Expenses:</b>					
Operating Expenses	\$38,387,927	\$38,771,806	\$39,159,524	\$39,551,120	\$39,946,631
Depreciation	1,064,400	\$1,075,044	\$1,085,794	\$1,096,652	\$1,107,619
<b>Total Expenses</b>	<u>\$39,452,327</u>	<u>\$39,846,850</u>	<u>\$40,245,319</u>	<u>\$40,647,772</u>	<u>\$41,054,250</u>
<b>Net Income:</b>	(\$345,798)	(\$91,474)	(\$92,389)	(\$93,313)	(\$94,246)
<b>Plus/(Less):</b>					
Interest Income	\$188,000	\$189,880	\$191,779	\$193,697	\$195,634
Interest Expense	115,818	523,243	517,798	511,908	503,763
Depreciation	1,064,400	1,075,044	1,085,794	1,096,652	1,107,619
<b>Revenue Available for Debt Service</b>	<u>\$1,022,420</u>	<u>\$1,696,693</u>	<u>\$1,702,982</u>	<u>\$1,708,944</u>	<u>\$1,712,770</u>
<b>Debt Service</b>	<u>\$115,539</u>	<u>\$1,087,624</u>	<u>\$1,090,819</u>	<u>\$1,093,204</u>	<u>\$1,089,979</u>
<b>Total Debt Service Coverage</b>	<u>8.85</u>	<u>1.56</u>	<u>1.56</u>	<u>1.56</u>	<u>1.57</u>

Notes:

Prepared by City of Henderson, Kentucky Utility Commission except the debt service projections prepared by its financial advisor.

Rates based on current rating structure. Management is planning for a rate increase in next five years.

**APPENDIX D**

**CITY OF HENDERSON, KENTUCKY  
ELECTRIC SYSTEM REVENUE BONDS, SERIES 2011A**

**SUMMARIES OF UNAUDITED STATEMENTS OF NET ASSETS, REVENUES,  
EXPENSES AND CHANGES IN NET ASSETS FOR THE FISCAL YEAR ENDED  
MAY 31, 2011 AND AUDITED STATEMENTS OF NET ASSETS, REVENUES,  
EXPENSES AND CHANGES IN NET ASSETS FOR THE FISCAL YEARS  
ENDED MAY 31, 2006 THROUGH 2010 FOR THE CITY OF HENDERSON,  
KENTUCKY UTILITY COMMISSION**

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**Financial Information**

The following is a five year presentation of the System's finances to include balance sheets, statement of revenues, expenses and changes in retained earnings. Please refer to Appendix D for the City of Henderson, Kentucky Utility Commission 2009-10 Audited Financial Statements.

**CITY OF HENDERSON, KENTUCKY  
UTILITY COMMISSION  
(HENDERSON MUNICIPAL POWER & LIGHT SYSTEM)**

*BALANCE SHEETS*

	As of May 31,					
	<u>Unaudited</u>	<u>Audited</u>				
	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>
<b>ASSETS</b>						
<b>Current Assets</b>						
Cash and cash equivalents	\$ 6,260	\$ 243,156	\$ 691,891	\$ 1,455,817	\$ 1,020,994	\$ 982,608
Investment securities	20,289,003	23,092,056	6,323,934	7,607,036	7,166,760	9,490,970
Accounts receivable, net of allowance for uncollectible	1,909,230	2,472,377	2,797,758	1,393,050	1,786,648	404,397
Accounts receivable, Station Two Operator	1,590,547	1,590,547	298,452	-	1,262,523	-
Accrued interest receivable	30,901	39,828	100	21,989	56,855	11,636
Accrued revenue	2,174,100	2,174,099	2,015,178	2,217,708	2,378,307	1,466,813
Inventory and supplies	7,702,632	5,168,630	5,652,271	5,252,617	4,957,734	5,065,453
Prepaid expenses	63,558	63,602	96,701	83,506	110,583	128,328
Total Current Assets	<u>\$ 33,766,231</u>	<u>\$ 34,844,295</u>	<u>\$ 17,876,285</u>	<u>\$ 18,031,723</u>	<u>\$ 18,740,404</u>	<u>\$ 17,550,205</u>
<b>Property, Plant and Equipment</b>						
Utility plant, net of accumulated depreciation	69,515,885	68,501,994	67,787,039	67,708,807	69,454,860	72,615,024
<b>TOTAL ASSETS</b>	<u>\$103,282,116</u>	<u>\$103,346,289</u>	<u>\$ 85,663,324</u>	<u>\$85,740,530</u>	<u>\$88,195,264</u>	<u>\$ 90,165,229</u>
<b>LIABILITIES</b>						
<b>Current Liabilities</b>						
Accounts payable and accrued expenses	\$ 4,673,371	\$ 5,244,822	\$ 5,916,868	\$ 5,879,449	\$ 4,163,870	\$ 3,595,334
Accounts payable-construction in progress						
Station Two	-	1,758,217	-	-	-	-
Accounts payable-Station Two Operator	-	732,499	-	162,266	-	335,603
Asset retirement obligation	1,512,792	1,512,792	1,512,792	1,050,407	-	-
Short term debt-line of credit	-	-	1,200,000	2,400,000	4,800,000	6,000,000
Customer deposits	654,081	632,815	585,339	576,446	559,880	539,751
Total Current Liabilities	<u>\$ 6,840,244</u>	<u>\$ 9,881,145</u>	<u>\$ 9,214,999</u>	<u>\$10,068,568</u>	<u>\$ 9,523,750</u>	<u>\$ 10,470,688</u>
<b>Other Liabilities</b>						
Bond anticipation notes	7,975,535	5,433,241	2,225,322	-	-	-
Deferred income-sale of emission allowances	-	-	-	-	-	2,668,532
Total Other Liabilities	<u>\$ 7,975,535</u>	<u>\$ 5,433,241</u>	<u>\$ 2,225,322</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 2,668,532</u>
<b>TOTAL LIABILITIES</b>	<u>\$ 14,815,779</u>	<u>\$ 15,314,386</u>	<u>\$11,440,321</u>	<u>\$10,068,568</u>	<u>\$ 9,523,750</u>	<u>\$ 13,139,220</u>
<b>NET ASSETS</b>						
Unrestricted	26,925,987	24,963,150	6,435,964	7,963,155	8,224,221	2,708,825
Investment in plant assets, net of related debt	61,540,350	63,068,753	67,787,039	67,708,807	70,447,293	74,317,184
<b>TOTAL NET ASSETS</b>	<u>\$ 88,466,337</u>	<u>\$ 88,031,903</u>	<u>\$74,223,003</u>	<u>\$75,671,962</u>	<u>\$78,671,514</u>	<u>\$ 77,026,009</u>
<b>TOTAL LIABILITIES AND NET ASSETS</b>	<u>\$103,282,116</u>	<u>\$103,346,289</u>	<u>\$ 85,663,324</u>	<u>\$85,740,530</u>	<u>\$88,195,264</u>	<u>\$ 90,165,229</u>

Source: City of Henderson, Kentucky Utility Commission Audited Financial Statements 2006 through 2010 and Unaudited Financial Statement 2011

**CITY OF HENDERSON, KENTUCKY  
UTILITY COMMISSION  
(HENDERSON MUNICIPAL POWER & LIGHT SYSTEM)**

**COMBINED STATEMENTS OF INCOME AND CHANGES IN RETAINED EARNINGS**

	Years Ending May 31,					
	Unaudited	Audited				
	2011	2010	2009	2008	2007	2006
<b>OPERATING REVENUES</b>						
Sale of electricity-Existing System	\$ 31,871,754	\$ 29,595,620	\$ 29,332,083	\$ 31,875,692	\$ 29,713,477	\$ 28,837,952
Sale of electricity-Station Two	24,488,791	22,271,304	25,200,799	23,343,688	11,875,800	17,897,689
Off-system sales	-	-	-	-	-	490,777
Communication Services	1,062,343	982,636	1,040,013	1,128,445	971,608	521,515
Other	1,157,006	516,119	1,002,390	590,581	417,615	337,152
Total Operating Revenues	\$ 58,579,894	\$ 53,365,679	\$ 56,575,285	\$ 56,938,406	\$ 42,978,500	\$ 48,085,085
<b>EXPENSES</b>						
Operating expenses:						
Production of electricity	42,956,400	40,863,973	44,375,641	52,500,410	38,097,237	39,343,161
Operating expenses	9,214,668	8,574,304	6,412,009	-	-	6,364,285
Depreciation	3,967,873	4,836,523	4,819,060	4,798,602	4,653,106	4,511,830
Total Operating Expenses	\$ 56,138,941	\$ 54,274,800	\$ 55,606,710	\$ 57,299,012	\$ 42,750,343	\$ 50,219,276
<b>Income (Loss) from Operations</b>	\$ 2,440,953	\$ (909,121)	\$ 968,575	\$ (360,606)	\$ 228,157	\$ (2,134,191)
Interest and debt expenses:						
Interest income	175,964	285,556	141,306	368,094	486,598	323,473
Interest expense	(141,055)	(105,458)	(112,214)	(203,113)	(310,452)	(288,532)
Total Interest and Debt Expenses	\$ 34,909	\$ 180,098	\$ 29,092	\$ 164,981	\$ 176,146	\$ 34,941
<b>Income (Loss) before Transfers</b>	\$ 2,475,862	\$ (729,023)	\$ 997,667	\$ (195,625)	\$ 404,303	\$ (2,099,250)
Non-Operating Expenses:						
Gain on sale of emission allowances	-	6,545	12,637	86,933	105,365	7,202,708
Capital contributions	-	(828,380)	-	64,195	422,668	1,013,554
Transfers to City of Henderson	(1,244,724)	(1,244,724)	(1,244,734)	(1,244,727)	(1,244,724)	(900,000)
Power furnished to City of Henderson	(376,704)	(354,336)	(354,345)	(270,372)	(296,425)	(267,010)
Communication services provided to the City of Henderson and other local government agencies	(420,000)	(420,000)	(420,000)	(420,000)	(414,214)	-
Total Non-Operating Expenses	\$ (2,041,428)	\$ (2,840,895)	\$ (2,006,442)	\$ (1,783,971)	\$ (1,427,330)	\$ 7,049,252
<b>Change in Net Assets</b>	\$ 434,434	\$ (3,569,918)	\$ (1,008,775)	\$ (1,979,596)	\$ (1,023,027)	\$ 4,950,002
Settlement from Previous Station Two Operator	-	17,378,818	-	-	-	-
Cumulative effective of adoption of SFAS No. 1433						
Asset Retirement Obligation	-	-	(440,184)	(1,019,956)	-	-
	\$ -	\$ 17,378,818	\$ (440,184)	\$ (1,019,956)	\$ -	\$ -
<b>Increase/Decrease in Net Assets</b>	\$ 434,434	\$ 13,808,900	\$ (1,448,959)	\$ (2,999,552)	\$ (1,023,027)	\$ 4,950,002
Net Assets, beginning of year, as previously reported	88,031,903	74,223,003	75,671,962	78,671,514	77,026,009	72,076,007
Prior period adjustment	-	-	-	-	2,668,532	-
<b>NET ASSETS, BEGINNING OF YEAR, AS RESTATED</b>	\$ 88,031,903	\$ 74,223,003	\$ 75,671,962	\$ 78,671,514	\$ 79,694,541	\$ 72,076,007
<b>NET ASSETS, END OF YEAR</b>	\$ 88,466,337	\$ 88,031,903	\$ 74,223,003	\$ 75,671,962	\$ 78,671,514	\$ 77,026,009

Source: City of Henderson, Kentucky Audited Financial Statements 2006 through 2010 and Unaudited Financial Statement 2011

**APPENDIX E**

**CITY OF HENDERSON, KENTUCKY  
ELECTRIC SYSTEM REVENUE BONDS, SERIES 2011A**

**REPORT ON AUDITED FINANCIAL STATEMENTS FOR THE FISCAL YEARS  
ENDED MAY 31, 2010 AND 2009 FOR THE CITY OF HENDERSON, KENTUCKY  
UTILITY COMMISSION**

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