## RECEIVED

September 9, 2011
SEP 092011
PUBLIC SERVICE COMMISSION
Mr. Jeff Derouen, Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
P.O. Box 615

Frankfort, KY 40602
RE: Case No. 2011-00096
Application of South Kentucky Rural Electric Cooperative Corporation, for an Adjustment of Rates

## Dear Mr. Derouen:

Please find enclosed the original and ten (10) copies of the responses to the Commission's Order "Second Data Request of the Commission Staff to South Kentucky Rural Electric Cooperative Corporation" dated August 26, 2011.

Please contact me at (606) 523-1370 or Allen Anderson at (606) 678-4121 with any questions regarding this filing.

Respectfully submitted,


[^0]Enclosure

## COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

## In the Matter of adjustment of Rates

## Of South Kentucky Rural Electric Cooperative

Corporation
Case No. 2011-00096

## APPLICANT'S RESPONSES TO

## SECOND DATA REQUEST OF COMMISSION STAFF

The applicant, South Kentucky Rural Electric Cooperative Corporation, makes the following responses to the "Second Data Request of Commission Staff", as follows:

1. The witnesses who are prepared to answer questions concerning each request are

Allen Anderson, Stephen Johnson, and Jim Adkins.
2. Allen Anderson, President and CEO of South Kentucky Rural Electric Cooperative Corporation is the person supervising the preparation of the responses on behalf of the applicant.
3. The responses and Exhibits are attached hereto and incorporated by reference herein.

[^1]The undersigned, Allen Anderson, as President \& CEO of South Kentucky Rural Electric Cooperative Corporation, being duly sworn, states that the responses herein are true and accurate to the best of my knowledge and belief formed after reasonable inquiry.

Dated September 9, 2011

## SOUTH KENTUCKY RURAL ELECTRIC CORPORATION



Subscribed, sworn to, and acknowledged before me Allen Anderson, as President \& CEO for South Kentucky Rural Electric Cooperative Corporation on behalf of said Corporation this $9^{\text {th }}$ day of September, 2011.


## CERTIFICATE OF SERVICE

The undersigned counsel certifies that the following responses have been served upon the Following:

## Original and Ten Copies

Mr. Jeff Derouen, Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40601
Copy
Hon. Lawrence W. Cook
Assistant Attorney General
1024 Capital Center Drive, Suite 200
Frankfort, Kentucky 40601
This $9^{\text {th }}$ day of September, 2011


ATTORNEY FOR SOUTH KENTUCKY RURAL ELECTRIC COOPERATIVE

South Kentucky Rural Electric Cooperative Case No. 2011-00096<br>Second Information Request<br>Witness: Jim Adkins

1. Refer to paragraph 1 of the Application. South Kentucky states that it provides service in eleven counties in Kentucky and two counties in Tennessee.
a. Provide the number of Tennessee customers served by South Kentucky.
b. State whether South Kentucky's Tennessee customers are charged the same rates as their Kentucky customers.
c. State whether the Tennessee customers and revenue are included in the revenue summary and billing analysis filed as Exhibits $G$ and $J$ to the Application.

Response to Question 1.
a. The number of Tennessee customers is 194.
b. The Tennessee and Kentucky customers are charged the same rates. South Kentucky treats all customers the same.
c. The Tennessee customers and revenue are included in Exhibits G and J.

# SOUTH KENTUCKY RECC <br> CASE NO. 2011-00096 <br> RESPONSE TO COMMISSION STAFF'S SECOND INFORMATION REQUEST Witness: Jim Adkins 

Refer to paragraph 12 of the Application. South Kentucky indicates that it has given notice to its members in accordance with 807 KAR 5:001, Section 3-10(3) and (4), and further states that a copy of the notice is attached in Exhibit D.
a. Question:

State the manner in which South Kentucky provided notice to its members

## a. Response:

Official notice of the proposed increase was run three times in each of the Cooperative's service territory's newpapers. Additionally, members were informed in May 2011 in SKRECC's Annual Report in the Kentucky Living magazine of the coop's intent to apply for an increase. In June 2011 an article regarding the proposed rate increase was run in the SKRECC.s section the Kentucky Living magazine.
b. Question:

Identify the newspapers or trade publications and the dates of publication in each newspaper or publication in which South Kentucky published notice of the Application in this manner.
b. Response:

Listed below is the newspapers used in the publication of the notice along with the dates of publication:

## Newspaper:

Clinton County News, Albany, KY
Commonwealth Journal, Somerset, KY

## Dates of Publication:

June 9, June 16, and June 23
June 8, June 15, and June 22
Newspaper:
McCreary County Record, Whitley City, KY
McCreary County Voice, Whitley City, KY
News Register, Jamestown, KY
Times Journal, Russell Springs, KY
Dates of Publication:
June 7, June 14, and June 21
June 9, June 16, and June 23
June 11, June 18, June 25
June 9, June 16, and June 23
Wayne County Outlook, Monticello, KY June 8, June 15, and June 22

# SOUTH KENTUCKY RECC <br> CASE NO. 2011-00096 <br> RESPONSE TO COMMISSION STAFF'S SECOND INFORMATION REQUEST Witness: Jim Adkins 

## Question:

Refer to the revised Exhibit D and the revised proposed tariff for Schedule STL Street Lighting Service. Revised Exhibit D shows eight different street lights but only two different rates for the eight lights shown. The revised proposed STL tariff shows only two street lights. Explain why the eight street lights listed in revised Exhibit D are not set out separately in the tariff and why it would not be appropriate to do so.

## Response:

The STL tariff covers the street lights for SKRECC plus the street lights from the Monticello Electric Plant Board ("MEPB"). This is the primary reasons as to why eight different lights are listed in the notice. The first four lights listed in the revised Exhibit D are those from the MEPB. The were assigned to the two rates on SKRECC's STL tariff based on the previous rate with the MEPB. The next four lights in the revised Exhibit D are from SKRECC's. The STL tariff rates are based on a lumens rating range and includes both mercury vapor lights and sodium vapor lights.

These lights are not set out separately and should not be set out separately in a tariff because all mercury vapor lights will be phased out and all future lights will be within the lumens rating as provided in the current tariff.

Refer to the Application, Exhibit H, the Direct Testimony of Allen Anderson, specifically to Item 11 A on page 3 , where the current and proposed customer charges for Schedule A and B are listed.
a. Question:

Explain how the increase in the proposed customer charge for Schedule A form $\$ 9.14$ to $\$ 15$ is consistent with the principal of gradualism.
a. Response:

SKRECC feels that this increase does support the concept of gradualism as SKRECC is now moving to a more cost based rate design for Schedule A. Attached on page 2 is a listing of the results of the customer service study per customer and per kWh and the total customer related monthly revenue requirements per customer is $\$ 27.86$. The current customer charge of $\$ 9.14$ represents a recovery of approximate one third of the consumer related costs through the customer charge. If SKRECC would increase this rate by $\$ 6$ every rate case and with a rate case filed every five years, it would take another ten years before SKRECC would be able to move to a full cost of service amount for its customer charge. Since SKRECC is substantially below the level of a cost based customer charge, the proposed increase of $\$ 5.86$ is consistent with the gradualism concept.

## b. Question:

Explain how the increase in the customer charge for Schedule B for $\$ 17.14$ to $\$ 25$ is consistent with the principal of gradualism.

## b. Response:

SKRECC feels that this increase does support the concept of gradualism as SKRECC is now moving to a more cost based rate design for Schedule B. Attached on page 2 is a listing of the results of the customer service study per customer and per kWh and the total customer related monthly revenue requirements per customer is $\$ 29.42$. The current customer charge of $\$ 17.14$ represents a recovery of approximate one third of the consumer related costs through the customer charge. If SKRECC would increase this rate by $\$ 8$ every rate case and with a rate case filed every five years, it would take another five more years before SKRECC would be able to move to a full cost of service amount for its customer charge. Since SKRECC is substantially below the level of a cost based customer charge, the proposed increase of $\$ 5.86$ is consistent with the gradualism concept.

Cost based rates provide a pricing structure where customers in each rate class pay their fair share of the cooperative's costs so there are minimal subsidies between classes of customers To the extent possible, each individual customer within the rate class also should pay for the costs imposed on the system in a way that reflects the origin of the costs. This approach sends the proper message about costs to consumers and ensures cooperatives values are upheld.

# SOUTH KENTUCKY RECC <br> CASE NO. 2011-00096 <br> RESPONSE TO COMMISSION STAFF'S SECOND INFORMATION REQUEST Witness: Jim Adkins 

Refer to the Application, Exhibit H, the Direct Testimony of James R. Adkins ("Adkins Testimony").
a. Refer to page 3, Response 7 and Attachment 1.
(1) Question:

The first sentence of Response 7 refers to a Times Interest Earned Ratio ("TIER") 2.44X. The second sentence refers to a TIER of 2.32. Provide the correct TIER for this case.
(1) Response.

The correct TIER amount is 2.44 X .
(2) The first sentence of Response 7 states that South Kentucky has a capitalization goal of reaching an equity level of 40 percent in 15 years with a TIER of 2.44. However, in Attachment 1, the TIER necessary to achieve the stated goal is 2.503. Explain the discrepancy.
(2) Response:

The wrong percent amount on equity capitalization was listed in the testimony. The correct equity target is ${ }^{`} 35 \%$ in 15 years.
b. Question:

Refer to the last sentence of Response 7 related to restarting payment of capital credits on a 20 year cycle. Provide a detailed description of South Kentucky's plan for paying capital credits.
b. Response

Attached is a separate page page 6 in this response, which provides an estimate of capital growth, an estimate of capital credits payouts, and the equity capitalization ratio

Witness: Jim Adkins
assuming that the amount of increase requested is granted and using the capital growth approach.
c. Question:

Refer to page 9, Response 17, and page 12, Response 20. Confirm that the references to "Meade County" should be "South Kentucky."
c. Response:

The proper references are "South Kentucky".
d. Question:

Refer to page 10 of the Adkins Testimony and Schedule R, pages 15-22 of 40. On page 10 of his testimony, Mr. Adkins states that " $[t]$ he minimum size method was used to determine the demand related and consumer related components for account 365 overhead conductor. The zero-intercept method was used for account 368 -transformers and account 364 -poles." The testimony goes on to state that [ t$]$ he minimum size method was used for poles as a reasonable amount was able to be developed using G the zero intercept approach." The above two quotes seem to contradict each other with regard to account 364 -poles. Pages $15-22$ of Schedule R indicate that the zero intercept method was used for the three accounts 364,365 , and 368 . Confirm that this is correct or state which method was used for each.
d. Response:

The zero intercept method was used for accounts 364,365 , and 368 . The quotes above from Adkins Testimony are in error and should be amended to read as follows. "The zero intercept method is the preferred method for determining the demand related component and the consumer related component and has been used to determine these components for accounts 364,365 and 368 in this Application."
e. Refer to the Application, page 13 of the Adkins Testimony and revised Exhibit D. On page 13, Mr. Adkins states that " $[t]$ he increases for the ETS Marketing rates based on the Schedules A and B will remain at a forty percent discount for each contract period.

Those ETS customers not under contract will see and (sic) increase in their ETS rates by one third of the difference between the current rate and the rate based on the COSS
(1) Question:

Revised Exhibit D shows that the proposed ETS contact to be $\$ 0.05290$. Confirm that 60 percent of the Schedule A residential energy rate of $\$ 0.08819$ would instead be $\$ .05291$.
(1) Response:

It is confirmed that 60 percent of $\$ 0.08819$ is equal to $\$ 0.05291$ instead of \$0.05292.
(2) Question:

It appears from revised Exhibit D that only Residential ETS customers have contracts. Is this correct? If no, explain why only one rate, which is not at a 40 percent discount, is shown for the Small Commercial Marketing Rate.
(2) Response:

Only the Residential ETS has customers under contract.
(3) Question:

Provide the number of Residential ETS customers that have contracts and when the contracts will expire.
(3) Response:

South Kentucky has 471 ETS customers under contract at the current time. Listed below are the dates and number of customers whose contracts will expire.

| Year | Number of Contracts that Expire |
| :---: | :---: |
| 2012 | 77 |
| 2013 | 63 |
| 2014 | 61 |
| 2015 | 86 |
| 2016 | 46 |

Witness: Jim Adkins

| Year | Number of Contracts that Expire |
| :---: | :---: |
| 2017 | 55 |
| 2018 | 44 |
| 2019 | 32 |
| 2020 | 13 |
| 2021 | 6 |

(4) Question:

State the rate that will be charged to Residential ETS customers with contracts when the contracts expire.
(4) Response:

Once a contract expires, the ETS customer will go on the regular ETS rate which is currently proposed to be $\$ 0.06705$.
f. Refer to Response 22, page 14 of the Adkins Testimony, where references made to South Kentucky's Demand-Side Management ("DSM") activities.
(1) Question:

Provide a description of the efforts South Kentucky's is currently undertaking to expand existing programs.
(1) Response:

South Kentucky's current plans for its overall DSM programs are as follows. The AMI deployment will be approximately $75 \%$ complete by the end of the year. With the AMI deployment, SKRECC plans to expand into these new programs for the cooperative:

- Direct Load Control ("DLC") in January 2012,
- Participation in the "Beat the Peak" program,
- Enhance the present "Tune Up" program for direct marketing to manufactured homes with high usage,
- Develop a Prepaid Metering program,
- Implement several Time of Day ("TOD") rates


## Witness: Jim Adkins

- Implement a Meter Data Management ("MDM") program and educate the membership on the information and data available via the customer/membership internet portal.
(2) Questions:

Provide the amounts of planned annual expenditures for each of the years ending 2011-2014 and the percentages of expenditures relative to projected annual electric sales revenues for each year.
(2) Response:

SKRECC has Member Services group that implements and educates members on Energy Efficiency and the DSM programs offered by the Cooperative. Annual estimated expenditures are provided below:

|  | ESTIMATED DSM EXPENDITURES |  |
| :---: | :---: | :---: |
| Year | Expenditure \$ | Percent of Revenue |
|  |  |  |
| 2011 | 720,000 | $0.60 \%$ |
| 2012 | 750,000 | $0.60 \%$ |
| 2013 | 780,000 | $0.60 \%$ |
| 2014 | 810,000 | $0.60 \%$ |

(3) Question:

Provide the projected annual energy efficiency savings relative to projected annual sales for each of the years ending 2011-2014.
(3) Response: Provided below is the requested information

ESTIMATED DSM SAVINGS

| Year | kWh | Percent of $\mathbf{k W h}$ Sales |
| :---: | ---: | :---: |
|  | $13,077,608.00$ | $1.00 \%$ |
| 2011 | $14,319,383.00$ | $1.07 \%$ |
| 2012 | $15,561,158.00$ | $1.15 \%$ |
| 2013 | $16,802,933.00$ | $1.22 \%$ |


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# SOUTH KENTUCKY RECC <br> CASE NO. 2011-00096 <br> RESPONSE TO COMMISSION STAFF'S SECOND INFORMATION REQUEST Witness: Jim Adkins 

## Question:

Refer to the Application, Exhibits G and J. Provide an update to these exhibits based on the rate change approved for South Kentucky on May 31, 2011 in Case No. 2010-00510

Response:
Attached as this response are the revised Exhibits G and J with the the rate change approved in Case NO. 2010-00510.

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# SOUTH KENTUCKY RECC <br> CASE NO. 2011-00096 <br> RESPONSE TO COMMISSION STAFF'S SECOND INFORMATION REQUEST <br> Witness: Jim Adkins 

## Question:

Provide an updated copy of Exhibits G, J, and R electronically on CD-ROM in Microsoft Excel format with all formulas intact and unprotected. It revisions to these exhibits are necessary as a result of responses to these data requests, provide revised electronic versions of the exhibits as well as hard copies.

## Response:

Attached as this response are the revised Exhibits G, J, and R in hard copy form and in electronic form.

## SOUTH KENTCKY RECC

## COST OF SERVICE STUDY

February 2011-J. Adkins

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SOUTH KENTUCKY RECC CASE NO. 2011-00096

CLASSIFICATION OF EXPENSES


SOUTH KENTUCKY RECC
CASE NO. 2011-00096
CLASSIFICATION OF EXPENSES

Revised Exhibit R
Schedule 3.1
Page 14 of 4
Witness: Jim Adkins





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# SOUTH KENTUCKY RECC <br> CASE NO. 2011-00096 <br> RESPONSE TO COMMISSION STAFF'S SECOND INFORMATION REQUEST <br> Witness: Jim Adkins 

Question:
South Kentucky has a tariff rider for Renewable Resource Energy-Schedule 16. State the number of customers who have chosen this rider, the amount of revenue received during the test year and the account in which this revenue is recorded.

Response:
South Kentucky has 193 Renewable Resource Energy Customers, with a total revenue of $\$ 6,685$ during the test year. This revenue is recorded in accounts 440.1 Residential Sales Rural and 442.1-Commercial and Industrial Sales Small.

# SOUTH KENTUCKY RECC <br> CASE NO. 2011-00096 <br> RESPONSE TO COMMISSION STAFF'S SECOND INFORMATION REQUEST <br> Witness: Jim Adkins 

Question:
South Kentucky has a Schedule TVB, Unmetered Commercial Service, in its tariff. State the number of customers receiving service under this tariff, the amount of revenue received during the test year, and the account in which this revenue is recorded.

## Response:

South Kentucky had no consumers on this rate schedule during the test period.
This revenue is recorded in account 442.1.

# South Kentucky Rural Electric Cooperative <br> Case No. 2011-00096 <br> Second Information Request <br> Witness: Jim Adkins 

10. In Case No. 2007-00374, ${ }^{1}$ the Commission approved South Kentucky's financing of the acquisition of the fixed assets of the Monticello Electric Plant Board ("MEPB"). In that case, South Kentucky was required to file a tariff for service to MEPB's existing customers at TVA-approved rates. Those tariffs had an expiration date of December 31, 2008.
a. State whether the former MEPB customers have been assimilated into South Kentucky's rate classes. If yes, state whether South Kentucky's tariff pages reflecting the TVA-approved rates for the MEPB customers can be deleted. If no, explain.
b. State whether the former MEPB revenues and customers are reflected in Exhibits $G$ and $J$ of the Application. If no, explain.

Response to Question 10.
a. The former MEPB customers have been assimilated into South Kentucky's rate classes. These tariff pages can be deleted.
b. The former MEPB customers are reflected in Exhibit G and J.

1 Case No. 2007-00374, Application of South Kentucky Rural Electric Cooperative Corporation for Approval to Purchase the Fixed Assets of the Monticello Electric Plant Board, Monticello, Kentucky (Ky. PSC Dec. 18, 2007).

South Kentucky Rural Electric Cooperative<br>Case No. 2011-00096<br>Second Information Request<br>Witness: Jim Adkins

11. Refer to the Application, Exhibit K.
a. Refer to page 1, the column entitled "Actual Test Year" and the row entitled "Total". Have the non-cash patronage dividends of $\$ 4,491,817$ been included twice in the total number of $\$ 18,805,403$ ? If so, provide a corrected schedule.
b. Refer to page 2. The amount for Materials has increased 74 percent from September 2009 to September 2010. Provide an explanation for this level of increase.
c. Refer to page 3, the column entitled "Test Year 2010" and the row entitled "Total" in the section "Return excluding G\&T patronage dividends". Explain the basis for the amount listed as $\$ 8,968,569$.
d. Refer to page 7. Explain the basis for the numbers, other than long-term debt, listed in the column entitled "Proposed."

## Response to Question 11.

a. The non-cash patronage dividends have been included twice. This has been corrected is as follows:

## South Kentucky Rural Electric Cooperative

 Case No. 2011-00096Computation of Rate of Return
September 30, 2010

|  | Actual <br> Test Year | Adjusted <br> Test Year |
| :---: | :---: | :---: |
| Net margins | \$7,799,911 | \$9,020,584 |
| Non-cash patronage dividends | $(4,918,417)$ | 0 |
| Interest on long-term debt | 6,087,075 | 6,294,713 |
| Total | 8,968,569 | 15,315,297 |
| Net rate base | 165,274,919 | 161,682,075 |
| Rate of return | 5.43\% | 9.47\% |
| Equity Capitalization | 182,070,277 | 169,586,217 |
| Rate of return | 4.93\% | 9.03\% |

b. The majority of the increase is directly related to AMI equipment that will be installed at the substation. The actual meters are capitalized through special equipment. RUS requires installations at the substation to be through the work order process, which dictates that material be recorded through the Materials account.
c. This calculation is to show what the rate of return is when G\&T capital credits are excluded.

# South Kentucky Rural Electric Cooperative 

Case No. 2011-00096
Second Information Request
Witness: Jim Adkins
12. Refer to the Application, Note 15, page 13, Exhibit N and Exhibit 5.
a. In Note 15, South Kentucky's auditor discusses a Department of Energy grant and matching loan. Identify any portion of the matching loan included on Exhibit 5.
b. Provide an update for the expenditures and benefits of the project.

Response to Question 12.
a. As of the test year, there were no loan advances against the DOE program.
b. As of July 2011, South Kentucky has installed approximately 42,700 meters with total expenditures of $\$ 11.3$ million. The project is expected to be completed in September 2013. When the project is completed, South Kentucky will be able to collect KWH usage and demand data on interval basis in addition to voltage monitoring. This data can then be utilized for many cost saving purposes. It will provide an accurate system usage model to be used in planning to help identify necessary upgrades, potential voltage problems and deferring the need for new line upgrades and substations. The system will also be able to provide remote connect and disconnect to accounts. Consumers will also be able to view their own usage to better manage and control their electric consumption.

# SOUTH KENTUCKY RECC <br> CASE NO. 2011-00096 <br> RESPONSE TO COMMISSION STAFF'S SECOND INFORMATION REQUEST <br> Witness: Jim Adkins 

Refer to Exhibit R, pages 7 and 8 of 40 .
a. Refer to Page 7.
(1) Question:

The basis for allocating Accounts 503, Overhead Line Exp., and 584, Underground Line Exp., is shown as "DA" for directly assigned. Confirm that, instead of being directly assigned, these accounts were allocated based on footnote 1 from page 9 of 40 .
(1) Response.

It is confirmed that footnote 1 is the basis for the allocation
(2) Question:

The basis for allocating Account 587, Consumer Installations is
shown as footnote 2 . Confirm that instead this account was directly assigned.
(2) Response:

This account was directly assigned.
b. Refer to page 8.
(1) Question:

Account 936, Maintenance of General Plant, is shown as having been allocated using the General Plant percentages from the Rate Base Schedule. However, the allocation appears to be based on Rate Base Percentages from the Rate Base Schedule. Confirm that the Rate Base percentages were incorrectly used. If a correction is needed, provide copies of all exhibits that would be revised.
(1) Response:

The correction is contained in the response to Item No. 7

## Witness: Jim Adkins

b. (2) Question:

Depreciation-Distribution Plant and Depreciation General Plant are shown as having been allocated using the Net Plant Percentages from the Rate Base Schedule. However, the allocation for Depreciation-Distribution Plant appears to be based on the Distribution Plant percentages and Depreciation-General Plant appears to be based on the General Plant percentages from the Rate Base Schedule. Confirm that South Kentucky intended to use these allocation percentages. If not, and a correction is needed, provide copies of all exhibits that would revised as a result of the correction.
(2) Response:

South Kentucky confirms that it intended to use the allocation percentages from the Distribution Plant percentages and General Plant percentages.
(3) Question:

The basis for allocating Total Miscellaneous Expense of $\$ 117,015$
is shown as Total Plant. However, it appears that Total Miscellaneous Expense is allocated based on the Rate Base percentages. Confirm that South Kentucky intended to use this allocation percentage. If not, and a correction is needed, provide copies of all exhibits that would be revised as a result of the correction.
(3) South Kentucky confirms that it intended to use these percentages.

# SOUTH KENTUCKY RECC <br> CASE NO. 2011-00096 <br> RESPONSE TO COMMISSION STAFF'S SECOND INFORMATION REQUEST 

Witness: Jim Adkins

## Question:

Refer Exhibit R, page 9 of 40 , Footnote 6 at the bottom of the page. Explain Where in the COSS the allocations calculated in footnote 6 are used.

Response:
It has not been used in this COSS.
"

# SOUTH KENTUCKY RECC <br> CASE NO. 2011-00096 <br> RESPONSE TO COMMISSION STAFF'S SECOND INFORMATION REQUEST 

Witness: Jim Adkins

Question:
Refer to Exhibit R, page 10 of 40 . Explain how Account 597, Maintenance of Security Lights, in the amount of $\$ 358,094$, appears in the "Transformers" column instead of the "Security Lighting" column. If a correction is needed, provide copies of all exhibits that would be revised as a result of the correction.

## Response:

This entry was made in error to the "Transformer"" column. A revision has been made and its impact is provided in the response to 7 above.

## SOUTH KENTUCKY RECC

CASE NO. 2011-00096

## RESPONSE TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

Refer to Exhibit R, page 23 of 40.
a. Question:

This appears to be the first page of a two page schedule: however, a second page is not included. Provide the second page of this schedule or, if this is a one page schedule, explain why all of the rate schedules were not included.
a. Response:

The second page of this two part schedule was not included by mistake. Attached as page two this response is copy of the revised page 23 and the missing page which is labeled as page 23.1 of 40 .
b. Question:

Explain why Rate 4 is identified at the top half of this page as "Large Power" but is identified at the bottom half of the page as "Small Commercial" b. Response:

The wrong label was placed at the bottom of the page and the appropriate label has been included as a part of the response to Item 16a above.
c. Question:

Provide the location in the COSS of the percentage allocation calculations for Purchased Power Demand and Purchased Power Energy.
c. Response:

The calculations for the allocation factors for Purchased Power Demand are located on pages 25 and 29 of Exhibit in the Application. The calculations for the

## Witness: Jim Adkins

Purchased Power Energy allocation factors are located on pages 24 and 28 of Exhibit R in the Application.
d. Question:

Refer to the bottom section of the page. Under the column entitled "Amount" for the rows entitled "Energy Related" and "Revenue Requirements" there are errors for amounts of each.
d. Response:

Corrections have been made in the response to item 16a above.

SOUTH KENTUCKY RECC
CASE NO. 2011-00096
RESPONSE TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

## Witness: Jim Adkins

Refer to Exhibit R. pages 32-34 of 60 .
(a) Question:

Refer to the Lines table at the top of page 32. Explain why for Rate 6, Residential ETS and Rate 7, Small Commercial ETS, no customers are shown in the table where when customers are shown in these rate classes in Exhibit J.
a. Response:

No customers are included in this table for these two rate schedules because ETS units not allocated any customer related line expenses. They are not allocated any of these customer expenses as the ETS unit is considered an incremental item for a customer whose additional electric service is a part of another, standard rate schedule and the customer related costs associated with lines is covered through an allocation for that rate class.
b. Question:

Refer to the Transformers table at the bottom of page 32. The amounts in the "Relative Weight" column do not equal column 3 multiplied by column for Rate 4, Large Power, and Rate 5, Optional Power Services. Explain how the amounts in this "Relative Weights" column were calculated.
b. Response:

The product of column 3 multiplied by column 4 has been multiplied by a factor of three as the normal minimum size transformer bank to serve these rate classes is comprised of three 25 kVa transformers. This calculation provides the amount that are in column 5 "Relative Weights'. However, in reviewing this data the multiplication of a

## Witness: Jim Adkins

factor of 3 was already accommodated in column 3. A revision has been made and is contained in the response to Item 7.
c. Question:

Refer to the Meters table at the bottom of page 33. Explain why the allocation percentages for are zero for rates classes 17, LP-1, LP-2, and LP-3.
c. Response:

An allocation should have been made to rate 17, All Electric Schools, and a revision is provided in the response to Item 7. No allocation is provided to rate classes LP-1, LP-2 and LP-3 as these meters have been paid for by East Kentucky Power Cooperative ("EKPC") and are considered as load research meters for their load research program.
d. Refer to the Consumer and Accounting Services table on page 34.
(1) Question:

Explain how the 7,125 in "Allocation Percent" column for the outdoor lighting was calculated.
(1) Response:

The "Consumer Records" column is multiplied the "Total" column. The "Total" column represents the number of customers or in this case the number of lights. The "Consumer Records" column is the product of the "Multiplier" column multiplied by the "Factor" column. The "Factor" column is based on the number of items on the bill or its complexity and the "Multiplier" column is a measure of the complexity of keeping records for these types of accounts.
(2) Question:

Explain how the 113 in the "Allocation Percent" column for the Decorative Street Lighting was calculated.

## SOUTH KENTUCKY RECC

CASE NO. 2011-00096
RESPONSE TO COMMISSION STAFF'S SECOND INFORMATION REQUEST
Witness: Jim Adkins

Question:
Refer to Exhibit R, page 35 of 40 . Other Revenue was allocated to the rate classes based on Actual Revenue from Rates for each class to Total Actual Revenue from Rates. Please state whether Other Revenue could have been directly assigned. If yes, explain why it was not directly assigned. If no, explain why it cannot be directly assigned.

Response:
Other Revenue includes the following sources of revenue identified by account number and amount.

| OTHER REVENUE |  |  |
| :---: | :--- | ---: |
|  | Description | Amount |
| Account | ( |  |
| 450 | Forfeited Discounts | $1,111,222$ |
| 451 | Misc Service Revenue | 211,101 |
| 452 | Return Check Charge | - |
| 454 | Rent from Electric Prop. | $1,879,391$ |
| 456 | Other Electric Revenue | 73,019 |
| 415 | Net Revenue from Merchandising | 133,984 |
| 416 | Cost of Merchandising | $(174,082)$ |
| 417 | Revenue fron Non-utility Operations | 1,649 |
| 418 | Revenue from Non-operating rentals | 10,181 |
| 419 | Interest Income | 100,164 |
| 421 | Misc. Non-operating Income | 121,446 |
| 424 | Other Capital Credits | 261,565 |
|  | Total Other Income | $3,729,639$ |

## Witness: Jim Adkins

Most of the sources for the Other Revenue is very general in nature and does not lend itself to a direct assignment to a rate class. A prime example of this situation is Rent from Electric Property. In those instances where a direct assignment may seem feasible such as forfeited discounts, the accounting records are not maintained in a manner where the rate class is easily identifiable.

## SOUTH KENTUCKY RECC

CASE NO. 2011-00096

## RESPONSE TO COMMISSION STAFF'S SECOND INFORMATION REQUEST <br> Witness: Jim Adkins

Question:
Refer to Exhibit R, page 38 of 40 . Provide the calculations for energy charge of $\$ 0.06705$ for the Residential ETS class and the $\$ 0.07405$ for the Small Commercial ETS class.

Response:
Provided below is the basis for the calculation of the ETS rates.

| CALCULATION OF ETS RATES |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rate Class | Revnue from Rates |  | Increase Amount |  | Total Revenue Requirements |  | Billing Units Energy kWh$10,530,533$ | Proposed Rate per kWh |  |
| Residential ETS | \$ | 582,128 | \$ | 123,947 | \$ | 706,075 |  | \$ | 0.06705 |
| Small Commercial ETS | \$ | 1,934 | \$ | 364 | \$ | 2,298 | 31,036 | \$ | 0.07405 |

# South Kentucky Rural Electric Cooperative <br> Case No. 2011-00096 <br> Second Information Request <br> Witness: Jim Adkins 

20. Refer to the Application, Exhibit S.
a. Refer to page 1 which shows the amount of the proposed increase based upon attaining a TIER of 2.43X. Describe how South Kentucky determined that 2.43 was the appropriate TIER on which to base the requested increase.
b. Refer to page 2, the column entitled "Adjustments to Test Year" and the row entitled "In service." Provide a breakdown of the assets contained in the \$14,218,717 amount.
c. Refer to page 3 .
(1) An adjustment of $\$ 5,237,525$ is shown to Base Rates.

However, this amount does not reconcile with Adjustment 15, Normalization of Revenue. Explain how this amount was calculated.
(2) An adjustment of $\$ 5,144,971$ is shown to Cost of Power. This amount does not appear in Exhibit 14, Normalization of Purchased Power. Explain how this amount was calculated.

Response to Question 20.
a. South Kentucky has a goal of attaining an equity level of $40 \%$. To achieve this goal, earnings must be at a level which increases equity. This level of earnings calculates at a TIER of $2.43 x$ for the test year.
b. The adjustment to plant In service is comprised of the following:

| Balance at beginning of test year | $4,557,790$ |
| :--- | ---: |
| Plant additions during test year | 654,537 |
| Retirements during the test year | $(215,152)$ |
|  |  |
| Balance, September 30, 2010 | $5,427,479$ |
| Retire mechanical meters | $(4,547,809)$ |
| Adjustment to DOE project | $18,756,545$ |

20. 

c. (1) There were some revisions made to the normalization of revenues after the adjustment was entered on page 3 . The amount listed in Adjustment 15 is correct.
d. (2) There were some revisions made to the normalization of Purchase Power after the adjustment was entered on page 3. The amount listed in Adjustment 14 is correct.

South Kentucky Rural Electric Cooperative<br>Case No. 2011-00096<br>Second Information Request<br>Witness: Jim Adkins

21. Refer to Item 9 in the Response to Commission Staff's First Request for Information ("Staff's First Request"), which provides a comparison of income statement account levels for the test period and the twelve months preceding the test period.
a. Refer to page 2 of the Response. Provide a detailed breakdown of Accounts 450, Forfeit Discount; 451, Miscellaneous Service Revenue; 454, Rent from Electric Property; and 456, Other Electric Revenue.
b. For Accounts 450, 451, 454, and 456, provide the September 30 balances of these accounts for the most recent five-year period.
c. Account 586.00, Meter Expense, increased from \$981,246 in the twelve months preceding the test year to $\$ 1,121,474$ in the test year. Provide a detailed explanation for why this expense increased by this magnitude.
d. Account 587.10, Consumer Inspections (Credits), increased from $\$ 100,062$ in the twelve months preceding the test year to $(\$ 5,364)$ in the test year. Provide a detailed explanation for a decrease of this magnitude.
e. Page 4 shows that Account 593.50, Maintenance of Overhead Lines-Right-of-Way, increased from $\$ 2,507,795$ in the twelve months preceding the test year to $\$ 3,447,528$ in the test year. Provide a detailed explanation for why this expense increased by this magnitude. Account 597, Meter Maintenance Expense, decreased from $\$ 26,774$ in the twelve months preceding the test year to $\$ 18,815$ in the test year. Provide a detailed explanation for the decrease in this expense.
f. Account 598, Maintenance of Miscellaneous Distribution Plant, increased from $\$ 329,364$ in the twelve months preceding the test year to $\$ 369,491$ in the test year. Provide a detailed explanation for why this expense increased by this magnitude.
g. Page 6 shows that Account 923, Outside Services Expense, decreased from $\$ 239,976$ in the twelve months preceding the test year to $\$ 134,980$ in
the test year. Provide a detailed explanation for why this expense decreased by this magnitude.
h. Account 923.10, Outside Services Expense-Economic Development, increased from $\$ 254,247$ in the twelve months preceding the test year to $\$ 283,873$ in the test year.
(1) Describe the nature and purpose of this account.
(2) Provide a detailed explanation for why this expense increased by this magnitude.
(3) Explain why Account 923.10 is not listed in Exhibit M, Chart of Accounts, or Exhibit Y, Trail Balance.
(4) Explain why South Kentucky considers this to be an allowable expense for ratemaking purposes.
i. Account 928, Regulatory Commission Expense, decreased from $\$ 27,502$ in the twelve months preceding the test year to $\$ 7,797$ in the test year. Provide a detailed explanation for why this expense decreased by this magnitude.
j. Page 7 shows that Account 930.21, Directors Expenses, increased from $\$ 233,491$ in the twelve months preceding the test year to $\$ 565,435$ in the test year. Provide a detailed explanation for why this expense increased by this magnitude.
k. Account 930.23, Annual Meeting Expense, increased from $\$ 142,709$ in the twelve months preceding the test year to $\$ 183,130$ in the test year. Provide a detailed explanation for why this expense increased by this magnitude.
I. Account 930.31, Miscellaneous General Expense-People Fund, increased from $(\$ 98,405)$ in the twelve months preceding the test year to $\$ 144,676$ in the test year.
(1) Describe the nature and purpose of this account.
(2) Provide a detailed explanation for why this expense increased by this magnitude.
(3) Explain why South Kentucky considers this to be an allowable expense for ratemaking purposes.
m. Page 8 shows Account 408.70, Regulatory. Explain what this account is and why it is not listed in Exhibit M, Chart of Accounts, or Exhibit Y, Trial Balance.
n. Account 431.00, Interest Expense on Consumer Deposits, decreased from \$170,294 in the twelve months preceding the test year to \$59,074 in the test year. Provide a detailed explanation for why this expense decreased by this magnitude.
o. Account 431.10, Short Term CFC Loan Interest Expense, decreased from $\$ 81,356$ in the twelve months preceding the test year to $\$ 0$ in the test year. Provide a detailed explanation for why this expense decreased by this magnitude.
p. Page 9 shows Account 419.0, Interest Income. Provide the complete account number.
q. Account 418.0, Equity Investments, decreased from $\$ 3,976$ in the twelve months preceding the test year to $(\$ 100)$ in the test year. Provide an explanation for this decrease and the complete account number.
r. Account 415.01, Revenue from ETS Heaters, declined from $\$ 91,621$ in the twelve months preceding the test year to $\$ 42,391$ in the test year. Provide an explanation for why this revenue declined by this magnitude.
s. Page 10 shows Account 416.02, Cost of ETS Heater, decreased from $\$ 124,465$ in the twelve months preceding the test year to $\$ 79,914$ in the test year. Provide a detailed explanation for why this account decreased by this magnitude.
t . The account balances for Account 415.01, Revenue from ETS Heaters, and Account 415.04, Revenue from Water Heaters, are listed in Schedule $X$ as debit accounts. Account 416.02, Cost of ETS Heaters, and Account 416.04, Cost of Water Heaters, are listed in Exhibit $X$ as credit accounts. However, in Exhibit Y, Trial Balance, the test year end balances for the revenue accounts are treated as credits and the expense accounts are treated as debits. Provide a detailed explanation of South Kentucky's accounting treatment of these items and if corrections are needed, provide copies of all exhibits that would be revised as a result.

Item 21
Page 4 of 6
u. Page 11 shows Account 424.0, Total Other Patronage, increased from $\$ 115,202$ for the twelve months preceding the test year to $\$ 261,565$ for the test year. Provide a detailed explanation for why this account increased by this magnitude.

Response to Question 21

| Calendar Year | 450.10 | 451.00 | 454.00 | 456.00 |
| :--- | :---: | :---: | :---: | :---: |
| 2009 | $1,035,308$ | 243,508 | $1,816,691$ | 60.491 |
| 2008 | 981,625 | 181,086 | $1,741,489$ | 86,303 |
| 2007 | 950,612 | 109,275 | $1,550,283$ | 16,294 |
| 2006 | 821,030 | 116,037 | $1,425,764$ | 14,629 |
| 2005 | 681,960 | 147,126 | $1,069,386$ | 12,832 |

a.

A/C 450.10 Forfeited Discounts
451.00 Miscellaneous Service
454.00 Rent from Electric Property
456.00 Other Electric Revenue
b. Calendar Year

12 months ending 9/30/10

1,111,214
211,101
1,879,691
16,385
c. Increase due to the AMI project.
d. Increase in the rates charged for electrical inspections.
e. Maintenance of Overhead Lines- Right-of-Way increased due to the concerns of the recent ice storms that hit the surrounding utilities and the Kentucky Public Service Commission's lengthy inquiries into negative management practices, South Kentucky decided to take a more aggressive approach to its right-of-way program.

Meter Maintenance Expense decreased as a result of fewer meters being required to be tested during the period.
f. Maintenance of Miscellaneous Distribution Plant increased due to the discontinuation of Mercury Vapor lighting and equipment. The Mercury Vapor lighting was replaced by Metal Halide lighting and equipment which is more expensive.
g. Outside Services Expense has decreased due to the reduction of outside services related to the Monticello Plant Board acquisition as well as a reimbursement of attorney fees associated to prior period expenses.
h. 1. This account is used to track the Economic Development activities account in which South Kentucky is involved with.
2. Due to the growth of the program additional revenue was needed to meet the need.
3. The Account number listed in Item 9 of the First Data Request to South Kentucky should have listed the account number as 923.01 Instead of 923.10 . Account 923.01 is listed in both Exhibits M and $Y$ of the application.
4. Garland and Associates, Inc. ("Garland") provides knowledge and expertise in the areas of economic development in all areas served by South Kentucky. Garland visits local agencies and officials; particularly those affiliated with community and economic development. Garland makes applications for Community Economic Development and Public Safety purposes; works to generate USDA Loan Funds and Grants; creates industrial master plans for those without such plans; conducts . and assists in community meetings with emphasis on Economic Development; assist in recruiting new industries; works with new and existing businesses and industries in funding sources for job creation and retention in South Kentucky's service area. Since these expenditures create and retain jobs, industry, and development, the costs associated with economic development, they should be included for rate making purposes.
i The Regulatory Commission Expense had been fully amortized during the period.
j. Refer to Exhibit 12 of the application.
k. Refer to Exhibit 11 Page 11 of 13 of the application.
I. 1. In Exhibit 9 Page 7 of 11, the account 930.31 Other Misc. is made up of account 930.31 - People Fund and account 930.37 is an Economic Development project expense.
2. The People Fund which is a fund that customers can elect to have their electric bills rounded up with the proceeds going to charity type of organizations. The other account which makes up the largest portion of the 243,081 variance is due to a grant being received in the prior period for $\$ 195,000$.
3. See Exhibit 11 Page 13 of 13.
m . The account number and description is incorrect on Exhibit 9 Page 8 of 11. Instead of having account 408.70 Regulatory the
account should have been 408.11 PSC Assessment. The balances are for 408.11.
n. Account 431.00 Interest Expenses on Consumer Deposits had an interest expense on LTD charged to this account in the prior period.
o. No interest paid during the period on Short Term Loans
p. The account \# is 419.00
q. The account number for the balances goes with account number 418.12 Equity in Earnings - South Kentucky Services. This reduction is a result in the equity from South Kentucky Services.
r. Account 415.01 Revenue from ETS heaters has declined due to lower number of units sold.
s. See Response to Item $R$ above.
t. The account balance for Account 425.01, Revenue from ETS heaters, and Account 415.04, Revenue from Water Heaters are listed in Schedule $X$ as credit accounts. Account 416.02, Cost of ETS Heaters, and Account 416.04, Cost of Water Heaters, are Listed in Exhibit $X$ as debit accounts.
u. Account 424.00 increased because South Kentucky received CFC Patronage Capital Allocation in October 2009 and in September 2010, resulting in both entries being in the test year. During the test year we received a new Patronage Capital from Duo Telephone.
22. Refer to Item 10 of the Response to Staff's First Request where South Kentucky states that it does not have property held for future use. Describe the current use of the property listed in the Response to Item 11 of the Staff's First Request, if any of the property has any anticipated future use, and if so, what that use might entail.

Response to Question 22.
The 76 acres at the industrial site are rented to a local farmer. The farmer maintains the land and barn located on the property. South Kentucky has used this site in the past for its annual meeting. South Kentucky does not have any future plans for the property at this time.

The house located at 933 N. Main Street is located next to South Kentucky's headquarters building. This is presently being used by South Kentucky's contracted meter readers and for additional storage. There are no future plans for this property.

# South Kentucky Rural Electric Cooperative 

Case No. 2011-00096
Second Information Request
Witness: Jim Adkins
23. Refer to the Application, Exhibit 1, page 1.
a. In the first paragraph, it states, "Overtime pay is calculated at 1 and $1 / 2$ times regular pay for 8 hours worked per day." Confirm this statement is incorrect and provide the correct language.
b. In the second paragraph on the page, it states, "A cost of living increase of $0.50 \%$ was granted."
(1) When was the decision made to grant the cost of living increase?
(2) Provide the authority for the cost of living increase.
(3) What was the effective date of the cost of living increase?
(4) Was the cost of living increase given to all employees?
(5) Explain when the cost of living increase will be given to affected employees.
(6) Explain how the cost of living increase was factored into the wages reflected in South Kentucky's request for a rate increase.
(7) Explain the difference in South Kentucky's definition of a cost of living increase and a normal salary increase.

Response to Question 23.
a. This statement is incorrect. It should read "Overtime pay is calculated at 1 and $1 / 2$ times regular pay for hours worked in excess of 8 hours per day."
b. Cost of living increase
(1) A cost of living increase was incorrectly stated in the narrative included in Exhibit 1, page1. It should have stated that employees received a "Safety Nickel" increase for each quarter when there were no OSHA Reportable offenses for the prior 3 month period. Employees do not receive a cost of living increase.
Each employee received a nickel (\$0.05) effective April 24, 2010, January 30, 2010 and October 24, 2009. The Safety Nickel increase was discontinued after the increase granted April 24, 2010.
(2) - (7) Not applicable since South Kentucky does not, and has not, granted cost of living increases. When increases are approved, they are merit based.

South Kentucky Rural Electric Cooperative<br>Case No. 2011-00096<br>Second Information Request<br>Witness: Jim Adkins

24. Refer to the Application, Exhibit 1.
a. Page 2 of the exhibit shows the Labor Distribution of test year payroll. Describe the methods used by South Kentucky to distribute test-year payroll to the accounts listed on page 2. These methods may include, but not be limited to, direct time reporting, allocations based on time studies, or allocations based on other factors. Also, discuss the internal controls used by South Kentucky to ensure that the distribution of payroll costs properly matches the actual work performed by its employees.
b. State the method used to determine the allocation percentages for the $\$ 93,267$ salary decrease, on page 2 , to the accounts receiving a portion of the decrease and provide work papers showing the calculation of the allocation percentages.
c. Page 3 of the exhibit contains a breakdown of the actual test-year wages and the normalized wages.
(1) In the column for "Hours Worked" for the Actual Test Year wages, the regular hours worked for all employees is 2,088 hours. Explain the basis for using 2,088 hours for the regular hours worked for the actual test-year wages.
(2) For Normalized Wages, 2,080 hours was used as the basis the computation of wages. As a result, the regular wages for all salaried personnel in the actual test year was more than for the normalized test-year. Confirm that this is correct. If not, provide the appropriate corrections for all personnel wages and affected exhibits.
a. All employees prepare time sheets. The office employees prepare theirs on a bi-weekly basis. Allocations are based on actual work performed with some employees using the same account numbers based on performing the same job functions each day. Outside employees prepare daily sheets. Allocations to accounts are based on the actual work performed. All time sheets require a supervisors' approval who ensures that the information on the time sheet is accurate and complete. This task is performed prior to processing payroll.
b. Page 2 reflects the actual payroll distribution by account for the test year, along with the percentage. The decrease of $\$ 93,267$ was allocated to accounts based on the percentages of actual test year payroll.
c. (1) Employees were paid for 2,088 of hours worked during the test year. To calculate the actual test year wages, the actual test year hours were used.
(2) This is correct.

South Kentucky Rural Electric Cooperative

Case No. 2011-00096
Second Information Request
Witness: Jim Adkins
25. Refer to Exhibit 1, pages 2 and 7.
a. The total wages for the test year listed on page 2 do not equal the amount on page 7. Provide an explanation and all applicable corrections.
b. Refer to lines 14 and 15, page 7, for the test year.
(1) Explain why overtime wages did not decrease as much as the overtime hours decreased when comparing the test year with the twelve-month period ending in 2009.
(2) Explain why the overtime hours for the test year are less than any of the prior years listed.
Response to Question 25.
a. South Kentucky sincerely apologizes for this. This schedule was printed from a file that was not updated. The correct page 7 is attached to this response.
b. (1) The overtime wages and overtime hours are more closely related with the updated schedule.
(2) South Kentucky did not incur as much overtime due to storms during the test year as in previous years.

Item 26
Page 1 of 1

## South Kentucky Rural Electric Cooperative

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Second Information Request
Witness: Jim Adkins
26. Refer to the Application, Exhibit 1, pages 3-6.
a. For each employee listed in Table 1 below, explain in detail why they worked less than 2,080 hours in the test period.

| Table 1 |  |  |
| :---: | :---: | ---: |
|  | Employee No. | Regular Hours |
| $(1)$ | 328 | $1,828.0$ |
| $(2)$ | 353 | $1,644.0$ |
| $(3)$ | 376 | $1,840.0$ |
| $(4)$ | 586 | $2,035.5$ |
| $(5)$ | 597 | $2,053.0$ |
| $(6)$ | 614 | $2,059.5$ |
| $(7)$ | 617 | $2,070.0$ |
| $(8)$ | 628 | $2,040.0$ |
| $(9)$ | 636 | $1,756.0$ |

b. Explain why 2,080 hours was used in calculating normalized wages rather than the actual hours worked during the test period.

Response to Question 26.
a.

| Employee <br> Number | Regular <br> Hours | Explanation |
| :---: | ---: | :--- |
| 328 | $1,828.0$ | Personal time off without pay |
| 353 | $1,644.0$ | Short term disability |
| 376 | $1,840.0$ | Short term disability |
| 586 | $2,035.5$ | Short term disability |
| 597 | $2,053.0$ | Personal time off without pay |
| 614 | $2,059.5$ | Short term disability |
| 617 | $2,070.0$ | Personal time off without pay |
| 628 | $2,040.0$ | Leave without pay |
| 636 | $1,756.0$ | Maternity leave |

b. There are normally 2,080 working hours in a year. However, occasionally when pay is on a bi-weekly basis, there will be 2,088 working hours (about every 4 years, Leap Year) in a particular year. During the test year for South Kentucky, the actual paid hours were 2,088.

South Kentucky Rural Electric Cooperative<br>Case No. 2011-00096<br>Second Information Request<br>Witness: Jim Adkins

27. Refer to the Application, Exhibit 3, Pages 1 and 2. The first paragraph on page 1 states that, "the ending plant balance is multiplied by rates that are within RUS approved guidelines." This calculation is shown on page 2. Provide a copy of the referenced RUS guidelines.
Response to Question 27.
See Big Sandy Rural Electric Cooperative Case No. 2008-00401, PSC Second Data Request, Question 7.c. for a copy of RUS Bulletin 183-1, Depreciation Rates and Procedures.

South Kentucky Rural Electric Cooperative<br>Case No. 2011-00096<br>Second Information Request<br>Witness: Jim Adkins

28. Refer to the Application, Exhibit 3, page 2.
a. State whether South Kentucky has received Rural Utility Service's ("RUS") approval of the proposed depreciation rates.
(1) If yes, provide a copy of RUS's approval letter.
(2) If no, state when RUS's approval is anticipated and submit a copy of the RUS approval letter after it is received by South Kentucky.
b. Explain what steps and procedures are necessary for RUS to accept depreciation rates that do not fall within the "RUS Low and High" range.
c. Explain what authority RUS has to accept or reject the rates proposed as a result of the depreciation study.
Response to Question 28.
a. (2) South Kentucky has not received approval to date. At the time RUS approval is obtained, South Kentucky will submit that correspondence to the PSC.
b. RUS allows for rates above or below the "RUS Low and High" range when the rates are supported by a depreciation study.
c. South Kentucky follows the RUS Uniform System of Accounts (USDA). The USDA follows the guidelines of RUS Bulletin 183-1 for recording and accounting for depreciation.

South Kentucky Rural Electric Cooperative Case No. 2011-00096<br>Second Information Request<br>Witness: Jim Adkins

29. Refer to the Application, Exhibit 3, page 3 of 7, which shows the test-year actual and normalized total depreciation expense and the test-year actual and normalized depreciation expense charged to transportation clearing.
a. Provide the same information for each of the calendar years 2000 to 2009.
b. State specifically the non-regulated activities to which depreciation has been allocated and provide the work papers showing the calculation of the allocated amounts.

Response to Question 29.
a. Depreciation expense and charged to clearing are as follows:

Depreciation

## Expense Clearing

| 2009 | $5,438,408$ | 535,740 |
| :--- | :--- | :--- |
| 2008 | $5,158,391$ | 624,831 |
| 2007 | $4,742,213$ | 774,002 |
| 2006 | $4,322,468$ | 892,418 |
| 2005 | $4,058,804$ | 841,339 |
| 2004 | $3,831,582$ | 811,910 |
| 2003 | $3,576,181$ | 750,654 |
| 2002 | $3,380,397$ | 647,003 |
| 2001 | $3,102,172$ | 603,002 |
| 2000 | $2,824,137$ | 432,772 |

b. The attached Schedule contains the information which makes up the depreciation for the non-regulated activities as shown in the following calculation:

2009 yearly depreciation for office and warehouse space is $\$ 185,041.54$ divided by total expense of $\$ 1,019,807.33$
Multiplied by the square foot per month charge.

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# South Kentucky Rural Electric Cooperative 

Case No. 2011-00096
Second Information Request
Witness: Jim Adkins
30. Refer to the Application, Exhibit 3, Page 5. Provide a detailed general ledger transaction report for each asset account group showing each plant addition and retirement entry during the test year. Include a complete description for each transaction shown in the report.

Response to Question 30.

Accounts 364.00 to 373.00 plant additions and retirements that are listed as PLEL are additions and retirements through the work order system. Others are through special equipment accounting. Plant additions for Accounts 360.00 and 362.00 and 389.00 to 398.00 are through the Accounts Payable System. Retirements listed in these accounts are either sold, traded, or disposed of through general journal entries.

Attached are the general ledger sheets for each account.


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Page 25 of 49


Attachment for Item 30 Page 26 of 49

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| JE | 58 | 0.00 | GP392000 | 1714 | 1100 | 03／09／10 | R | 430 | $1.00-$ | ． 00 |
| JE | 58 | 0.00 | GP392000 | 1714 | 1100 | 03／09／10 | R | JE10187 | $1.00-$ | ． 00 |
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| JE | 58 | 0.00 | Gp393000 | 1800 | 1100 | 03／10／10 | V | JE10187 | 1．00－ | 00 |
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| JE | 51 | 0.00 | GP392000 | 1800 | 1100 | 03／10／10 | R | 413 | $1.00-$ | ． 00 |
|  |  |  |  |  |  |  | V | JE10186 |  |  |
| JE | 58 | 0.00 | GP392000 | 1804 | 1100 | 03／11／10 | R | 323 | $1.00-$ | ． 00 |
| JE | 51 | 0.00 | GP392000 | 1804 | 1100 | 03／11／10 | $\mathrm{R}^{\mathrm{V}}$ | JE10184 | $1.00-$ | ． 00 |
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| JE | 58 | 0.00 | GP392000 | 1804 | 1100 | 03／11／10 | R | 326 | 1．00－ | ． 00 |
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| JE | 58 | 0.00 | GP392000 | 1802 | 1100 | 03／11／10 | R | 368 | $1.00-$ | ． 00 |
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| JE | 58 | 0.00 | GP392000 | 1803 | 1100 | 03／11／10 | $\mathrm{R}^{\mathrm{V}}$ | JE10185 | $1.00-$ | ． 00 |
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| JE | 58 | 0.00 | GP392000 | 1713 | 1100 | 03／23／10 | R | 289 | $1.00-$ | ． 00 |
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| JE | 51 | 0.00 | GP392000 | 1713 | 1100 | 03／23／10 | R | 291 | $1.00-$ | ． 00 |
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| JE | 51 | 0.00 | GP392000 | 1713 | 1100 | 03／23／10 | R | 363 | $1.00-$ | ． 00 |
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Attachment for Item 30

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Attachment for Item Page 45 of 49
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Attachment for Item 30 Page 46 of 49





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DATE RANGE FROM $10 / 01 / 09$ TO 09 $0 / 30 / 10$




Attachment for Item 3C
Page 47 of 49

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Item 31
Page 1 of 1
South Kentucky Rural Electric Cooperative
Case No. 2011-00096
Second Information Request
Witness: Jim Adkins
31. Refer to the Application, Exhibit 3, pages 2, 5, and 7. On page 2, normalized depreciation for meters, for which rate recovery has been requested, is calculated by multiplying the test-year ending balance for the meter account, $\$ 19,636,215$, by a deprecation rate of 6.67 percent. From the information shown on page 5 , it appears that $\$ 4,342,638$ of the test-year ending balance $(\$ 4,557,790$, beginning test-year balance minus $\$ 215,152$, test-year retirements) represents the cost of older mechanical meters that, according to the Application at page 7, will be entirely replaced within the next three years with new Advanced Metering Infrastructure ("AMI") meters. In light of the fact that depreciation on 95.3 percent $(\$ 4,342,638 / \$ 4,557,790)$ of the existing mechanical meters appears to be included in the calculation of normalized depreciation, explain why also including, for rate recovery, amortization of the anticipated loss on the retirement of the mechanical meters, as shown on page 7 , does not represent a double recovery of the cost of the mechanical meters.

Response to Question 31.

Refer to Question 31.a. of this response. The total in the meter account after the implementation of AMI will be the $\$ 19,636,215$. The adjustment referenced in Question 20.a. of this response details the old mechanical meters have been retired and will be retired, and the addition of mechanical and the AMI meters as a result of the DOE project.

As indicated by this response, there is not a double recovery of costs. The total meters in Exhibit 3, page 5 will be the amount of AMI meters after the retirement of mechanical meters. The adjustment for amortization is after the adjustments to arrive at the $\$ 19,636,215$.

Item 32
Page 1 of 1

## South Kentucky Rural Electric Cooperative Case No. 2011-00096 <br> Second Information Request Witness: Jim Adkins

32. Refer to the Application, Exhibit 3, page 4 of 7, which shows distribution plant in service, accumulated depreciation for distribution plant, and the reserve ratio percentages for distribution plant for each of the years 1995 through 1999 and 2005 through 2009. Provide the same information as of the end of the test year and for the years from 2000 through 2004.

Response to Question 32.
Please find enclosed the information for the year 2000 through 2004. Also note that the information for the years 2009 thru 2005 and 1999 thru 1995 have been changed to reflect the information relative to South Kentucky. The amounts previously reported were from another file that should have been updated for the following information.

| Year | Distribution <br> Plant in | Accumulated <br> Depreciation <br> For | Reserve | Ratio of Current <br> Distribution Plant <br> to Distribution <br> Plant 10 Years |
| :---: | :---: | :---: | :---: | :---: |
| 2009 | Service | Distribution | Ratio | $\underline{\text { Prior }}$ |
| 2008 | $166,855,526$ | $30,084,164$ | $18.03 \%$ | 1.89 |
| 2007 | $158,529,989$ | $26,681,799$ | $16.83 \%$ | 1.91 |
| 2006 | $149,015,442$ | $24,654,608$ | $16.55 \%$ | 1.92 |
| 2005 | $136,615,424$ | $24,229,259$ | $17.74 \%$ | 1.90 |
|  | $128,004,181$ | $23,760,409$ | $18.56 \%$ | 1.90 |
| 1999 |  |  |  |  |
| 1998 | $88,439,029$ | $17,306,749$ | $19.57 \%$ |  |
| 1997 | $82,874,563$ | $16,394,221$ | $19.78 \%$ |  |
| 1996 | $77,745,614$ | $15,481,761$ | $19.91 \%$ |  |
| 1995 | $71,974,098$ | $14,759,018$ | $20.51 \%$ |  |
|  | $67,450,334$ | $14,093,624$ | $20.89 \%$ |  |
| 2004 |  |  |  |  |
| 2003 | $120,066,035$ | $22,992,602$ | $19.15 \%$ |  |
| 2002 | $113,447,865$ | $21,578,379$ | $19.02 \%$ |  |
| 2001 | $107,120,268$ | $20,352,691$ | $19.00 \%$ |  |
| 2000 | $101,238,865$ | $19,103,391$ | $18.87 \%$ |  |
|  | $94,787,060$ | $18,198,086$ | $19.20 \%$ |  |
|  |  |  |  |  |

# South Kentucky Rural Electric Cooperative <br> Case No. 2011-00096 <br> Second Information Request Witness: Jim Adkins 

33. Refer to the Application, Exhibit 3, Pages 5 and 7.
a. State the total anticipated cost of replacing all mechanical meters with AMI and provide documentation supporting the anticipated cost.
b. Provide a copy of the grant and matching loan documents from the Department of Energy ("DOE").
c. Provide the amounts and the dates on which DOE grant funds have been received to date.
d. Provide the amounts and the dates on which DOE loan funds have been received to date.
e. Provide the amounts and the dates all future DOE grant funds are expected to be received.
f. Provide the amounts and the dates all future DOE loan funds are expected to be received.
g. State why South Kentucky proposes to record the removal of the retired meters by debiting Accounts 108.60, Accumulated Depreciation, in the amount of $\$ 824,093$ and 186.37, Deferred Meter Retirement, in the amount of $\$ 3,723,716$ instead of debiting the entire amount to Account 108 as required by the Uniform System of Accounts. ${ }^{2}$
h. Explain how the five-year amortization period for the deferred meter retirement account was determined. Include in this discussion, all other amortization periods that were considered and why they were not chosen. Specifically, discuss why an amortization period equal to the estimated average life of the new, replacement meters was not chosen as the amortization period.

[^5]i. On page 5, additions to meters are shown in the amount of $\$ 15,293,577$. Is this amount shown gross or net of any grant funds received from DOE prior to the end of the test year?

Response to Question 33.
a. See PSC Case No. 2009-00489 First Data Request Item No. 8 and Item No. 9.
b. Copy to attach
c. $11 / 1 / 10 \quad \$ 1,373,858$

5/12/11 $\quad \$ 1,791,492$
9/12/11 \$ 1, 137,694
d. No DOE loan funds associated with AMI project.
e. 12/2/11 2,094,076

4/16/12 1,361,149
9/4/12 1,047,038
g. The Uniform System of Accounts allows for recording the entire retirement in Account 108, however, RUS will allow cooperatives to record a Deferred debit in Account 186 with approval from a regulatory agency. South Kentucky determined that an entry of this magnitude would be too large an entry to make to accumulated depreciation. The effect of writing off the $\$ 4,547,809$ of meters retired to accumulated depreciation, Account 108 would be as shown below. In the adjustment of rates of Jackson Energy Cooperative, Case No. 2000-373, the Commission required Jackson Energy to record a deferred debit due to the large impact. South Kentucky is following that order in applying the write-off of meters.

Before meter retirement:
Electric plant in service $\quad 172,910,308$
Accumulated depreciation 31,150,089
Reserve ratio 18.02\%

After meter retirement:
Electric plant in service
$168,362,499$
Accumulated depreciation 26,602,280
। Reserve ratio 15.80\%
33.
h. South Kentucky considered several amortization periods for the retired meters. A 3 year period was deemed too short. An amortization period over 5 years would have the effect of recognizing an expense for periods much after the retired meters were removed from service. The estimated useful life for the new AMI meters has no correlation to the amortization period for mechanical meters that have been retired.
i. The amount of $\$ 15,293,577$ is the gross amount. RUS representatives have informed South Kentucky that the proper accounting for the grant proceeds is to record this amount as donated capital.


|  | FOR OFFICIAL USE | Attachment |
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| CONTINUATION SHEET | REFERENCE NO OF DOCUMENT BEING CONTINUED |  |
|  | DE-OE0000278 | 2 |

NAME OF OFFEROR OR CONTRACTOR
ITH KENTUCKY RURAL ELECTRIC COOPERATIVE CORPORATION

| $\left\lvert\, \begin{gathered} 115 \mathrm{M} \text { NO } \\ (A) \end{gathered}\right.$ | SUPPLIES/SERVICES $(B)$ | QuANTITY (C) | UNIT | UNIT PRICE (E) | AMOUNT (F) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | DUNS Number: 006946214 <br> Special Terms and Conditions (Attached) <br> The Project Description for this Grant, as contained in the Application submitted in response to Funding Opportunity Announcement Number DE-FOA-0000058, is incorporated by reference. <br> Attachment A, SF-424A - Budget Information for Non-Construction Programs <br> Attachment B, DOE F 4600.2 - Eederal Assistance Reporting Checklist <br> Attachment C, Intellectual Property Provisions |  |  |  |  |

(NRD-1003) Nonresearch and Development

Attachment D, National Folicy Assurances to be Incorporated as Award Terms

Attachment E, Statement of Project Objectives
ASAP: NO Extent Competed: COMPETED Davis-Bacon Act: NO
Fund: 05846 Appr Year: 2009 Allottee: 60 Report Entity: 302931 Object Class: 25100 Program:
3123742 Project: 2006000 WEO: 0000000 Local Use:
0000000 TAS Agency: 89 TAS Account: 0328

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## 1. RESOLUTION OF CONFLICTING CONDITIONS

Any apparent inconsistency between Federal statutes and regulations and the terms and conditions contained in this award must be referred to the DOE Award Administrator for guidance.

## 2. AWARD PROJECT PERIOD AND BUDGET PERIOD

The Period of Performance for this Award is sixty (60) months from the effective date. The project start date will be 03/10/2010. Project implementation shall not exceed thirty-six (36) months. The balance of the Period of Performance will be for data collection activities.

## 3. PAYMENT PROCEDURES - REIMBURSEMENT THROUGH THE AUTOMATED CLEARING HOUSE (ACH) VENDER INQUIRY PAYMENT ELECTRONIC REPORTING SYSTEM (VIPERS)

a. Method of Payment Payment will be made by reimbursement through ACH.
b. Requesting Reimbursement. Requests for reimbursements must be made electronically through Department of Energy's Oak Ridge Financial Service Center (ORFSC) VIPERS. To access and use VIPERS, you must enroll at https://finweb.oro doe gov/vipers.htm. Detailed instructions on how to enroll are provided on the web site.

You must submit a Standard Form (SF) 270, "Request for Advance or Reimbursement" at https://finweb.oro doe.gov/vipers.htm and attach a file containing appropriate supporting documentation. The file attachment must show the total federal share claimed on the SF 270, the non-federal share claimed for the billing period, and cumulative expenditures to date (both Federal and non-Federal) for each of the following categories: salaries/wages and fringe benefits; equipment; travel; participant/training support costs, if any; other direct costs, including subawards/contracts; and indirect costs
c. Timing of submittals. Submittal of the SF 270 should coincide with your normal billing pattern, but not more frequently than every two weeks. Requests for reimbursement must be limited to the amount of disbursements made during the billing period for the federal share of direct project costs and the proportionate share of any allowable indirect costs incurred during that billing period.
d. Adjusting payment requests for available cash. You must disburse any funds that are available from repayments to and interest earned on a revolving fund, program income, rebates, refunds, contract settlements, audit recoveries, credits, discounts, and interest earned on any of those funds before requesting additional cash payments from DOE.
e. Payments. The DOE approving official will approve the invoice as soon as practicable but not later than 30 days after your request is received, unless the billing is improper. Upon receipt of an invoice payment authorization from the DOE approving official, the ORFSC will disburse payment to you. You may check the status of your payments at the VIPER web site. All payments are made by electronic funds transfer to the bank account identified on the ACH Vendor/Miscellaneous Payment Enrollment Form (SF 3881) that you filed.

## 4. MAXIMUM OBLIGATION

The maximum obligation of the DOE is limited to the amount shown on the Agreement Face Page. You are not obligated to continue performance of the project beyond the total amount obligated and your pro rata share of the project costs.

## 5. COST SHARING FFRDC'S NOT INVOLVED

a. Total Estimated Project Cost is the sum of the Government share and Recipient share of the estimated project costs. The Recipient's cost share must come from non-Federal sources unless otherwise allowed by law. By accepting federal funds under this award, you agree that you are liable for your percentage share of total allowable project costs, even if the project is terminated early or is not funded to its completion. This cost is shared as follows:

| Government Share <br> $\$ / \%$ | Recipient Share <br> $\$ / \%$ | Total Estimated Cost |
| :---: | :--- | :--- |
| $\$ 9,538,234-49 \%$ | $\$ 10,097,981-51 \%$ | $\$ 19,636,215$ |

b. If you discover that you may be unable to provide cost sharing of at least the amount identified in paragraph a of this article, you should immediately provide written notification to the DOE A ward Administrator indicating whether you will continue or phase out the project. If you plan to continue the project, the notification must describe how replacement cost sharing will be secured.
c. You must maintain records of all project costs that you claim as cost sharing, including in-kind costs, as well as records of costs to be paid by DOE. Such records are subject to audit.
d. Failure to provide the cost sharing required by this Clause may result in the subsequent recovery by DOE of some or all the funds provided under the award.

## 6. REBUDGETING AND RECOVERY OF INDIRECT COSTS - REIMBURSABLE INDIRECT COSTS AND FRINGE BENEFITS

a. If actual allowable indirect costs are less than those budgeted and funded under the award, you may use the difference to pay additional allowable direct costs during the project period. If at the completion of the award the Government's share of total allowable costs (i.e., direct and indirect), is less than the total costs reimbursed, you must refund the difference.
b. Recipients are expected to manage their indirect costs. DOE will not amend an award to provide additional funds for changes in indirect cost rates. DOE recognizes that the inability to obtain full reimbursement for indirect costs means the Recipient must absorb the under-recovery. Such underrecovery may be allocated as part of the organization's required cost sharing.

## 7. PRE-AWARD COSTS (As Applicable)

Any work performed prior to the effective date of award stated on the Agreement Face Page is done at the recipient's risk. You are able to recoup costs incurred on or after August 6, 2009, that are otherwise allowable. All pre-award costs must be in accordance with the applicable Federal Cost principles referenced in 10 C.F.R. 600.

## 8. USE OF PROGRAM INCOME - COST SHARING

If you earn program income during the project period as a result of this award, you may use the program income to meet your cost sharing requirement.

## 9. STATEMENT OF FEDERAL STEWARDSHIP

DOE will exercise Federal stewardship in overseeing the project activities performed under this award. Stewardship activities include, but are not limited to, conducting site visits; reviewing performance and financial reports'; providing technical assistance and/or temporary intervention in unusual circumstances to correct deficiencies which develop during the project; assuring compliance with terms and conditions; and reviewing technical performance after project completion to ensure that the award objectives have been accomplished.

## 10. SITE VISITS

DOE's authorized representatives have the right to make site visits at reasonable times to review project accomplishments and management control systems and to provide technical assistance, if required. You must provide, and must require your subawardees to provide, reasonable access to facilities, office space, resources, and assistance for the safety and convenience of the government representatives in the performance of their duties. All site visits and evaluations must be performed in a manner that does not unduly interfere with or delay the work.

The DOE will be provided reasonable access to Recipient facilities to verify the installation, configuration, and operational status of the components, devices, facilities, and systems being installed under this award. The DOE shall request access reasonably in advance and shall be accompanied by representative(s) of the Recipient.

## 11. REPORTING REQUIREMENTS

The reporting requirements for this award are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2 , attached to this award. Failure to comply with these reporting requirements is considered a material noncompliance with the terms of the award. Noncompliance may result in withholding of future payments, suspension, or termination of the current award. A willful failure to perform, a history of failure to perform, or unsatisfactory performance may also result in a debarment action to preclude future awards by Federal agencies.

## 12. PUBLICATIONS

If you publish or otherwise make publicly available the results of the work conducted under the award, an acknowledgment of Federal support and a disclaimer must appear in the publication of any material, whether copyrighted or not, based on or developed under this project, as follows:

Acknowledgment: "This material is based upon work supported by the Department of Energy under Award Number(s) [Enter the award number(s)]."

Disclaimer: "This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof."

## 13. FEDERAL, STATE, AND MUNICIPAL REQUIREMENTS

You must obtain any required permits and comply with applicable federal, state, and municipal laws, codes, and regulations for work performed under this award.

## 14. LOBBYING RESTRICTIONS

By accepting funds under this award, you agree that none of the funds obligated on the award shall be expended, directly or indirectly, to influence congressional action on any legislation or appropriation matters pending before Congress, other than to communicate to Members of Congress as described in 18 U.S.C. 1913. This restriction is in addition to those prescribed elsewhere in statute and regulation.

## 15. NOTICE REGARDING THE PURCHASE OF AMERICAN-MADE EQUIPMENT AND

## PRODUCTS - SENSE OF CONGRESS

It is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available under this award should be American-made.

## 16. PROPERTY

Real property and equipment acquired by the Recipient shall be subject to the rules set forth in 10 CFR 600.321 .

Consistent with the goals and objectives of this project, the Recipient may continue to use real property and equipment purchased in whole or in part with Federal funds under this award for its authorized purpose beyond the Period of Performance without obligation to make payment to DOE to extinguish DOE's interest to such property as described in 10 CFR 600.321, subject to the following: (a) the Recipient continues to utilize such property for the objectives of the project as set forth in the Statement of Project Objectives; (b) DOE retains the right to periodically ask for, and the Recipient agrees to provide, reasonable information concerning the use and condition of the property; and (c) the Recipient follows the property disposition rules set forth in 10 CFR 600.321 if the property is no longer used by the Recipient for the objectives of the project, and the fair market value of property exceeds $\$ 5,000$.

Once the per unit fair market value of the property is less than $\$ 5,000$, pursuant to $10 \mathrm{CFR} 600.321(\mathrm{f})(1)(\mathrm{i})$, DOE's interest in the property shall be extinguished and Recipient shall have no further obligation to the DOE with respect to the property.

Consistent with the 10 C.F.R. $\S \S 600.132$ (a), 600.134 (c), and 600.321 (b)(2), a recipient may request that the DOE contracting officer consider approving encumbrance of real property and equipment purchased in whole or in part with Federal funds under the award.

## 17. INSOLVENCY, BANKRUPTCY OR RECEIVERSHIP

a. You shall immediately notify the DOE of the occurrence of any of the following events: (i) you or your parent's filing of a voluntary case seeking liquidation or reorganization under the Bankruptcy Act, (ii) your consent to the institution of an involuntary case under the Bankruptcy Act against you or your parent; (iii) the filing of any similar proceeding for or against you or your parent, or its consent to, the dissolution, winding-up or readjustment of your debts, appointment of a receiver, conservator, trustee, or other officer with similar powers over you, under any other applicable state or federal law; or (iv) your insolvency due to your inability to pay your debts generally as they become due.
b. Such notification shall be in writing and shall: (i) specifically set out the details of the occurrence of an event referenced in paragraph a; (ii) provide the facts surrounding that event; and (iii) provide the impact such event will have on the project being funded by this award.
c. Upon the occurrence of any of the four events described in the first paragraph, DOE reserves the right to conduct a review of your award to determine your compliance with the required elements of the award (including such items as cost share, progress towards technical project objectives, and submission of required reports). If the DOE review determines that there are significant deficiencies or concerns with your performance under the award, DOE reserves the right to impose additional requirements, as needed to institute payment controls.
d. Failure of the Recipient to comply with this provision may be considered a material noncompliance of this financial assistance award by the Contracting Officer.

## 18. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REQUIREMENTS

The project proposed and approved by DOE as detailed in this award is categorically excluded from National Environmental Policy Act (NEPA) requirements. However, if the project changes or is
supplemented your work associated with the new activity is restricted from taking any action using Federal funds, which would have an adverse effect on the environment or limit the choice of reasonable alternatives prior to DOE providing either a NEPA clearance or a final NEPA decision regarding this project.

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

## 19. FINAL INCURRED COST AUDIT

In accordance with 10 CFR $600, \mathrm{DOE}$ reserves the right to initiate a final incurred cost audit on this award If the audit has not been performed or completed prior to the closeout of the award, DOE retains the right to recover an appropriate amount after fully considering the recommendations on disallowed costs resulting from the final audit.

## 20. SPECIAL PROVISIONS RELATING TO WORK FUNDED UNDER AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (MAR 2009)

Preamble
The American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, (Recovery Act) was enacted to preserve and create jobs and promote economic recovery, assist those most impacted by the recession, provide investments needed to increase economic efficiency by spurring technological advances in science and health, invest in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits, stabilize State and local government budgets, in order to minimize and avoid reductions in essential services and counterproductive State and local tax increases. Recipients shall use grant funds in a manner that maximizes job creation and economic benefit.

The Recipient shall comply with all terms and conditions in the Recovery Act relating generally to governance, accountability, transparency, data collection and resources as specified in Act itself and as discussed below.

Recipients should begin planning activities for their first tier subrecipients, including obtaining a DUNS number (or updating the existing DUNS record), and registering with the Central Contractor Registration (CCR).

Be advised that Recovery Act funds can be used in conjunction with other funding as necessary to complete projects, but tracking and reporting must be separate to meet the reporting requirements of the Recovery Act and related guidance. For projects funded by sources other than the Recovery Act, Contractors must keep separate records for Recovery Act funds and to ensure those records comply with the requirements of the Act.

The Government has not fully developed the implementing instructions of the Recovery Act, particularly concerning specific procedural requirements for the new reporting requirements. The Recipient will be provided these details as they become available. The Recipient must comply with all requirements of the Act. If the Recipient believes there is any inconsistency between ARRA requirements and current award terms and conditions, the issues will be referred to the Contracting Officer for reconciliation.

## Definitions

For purposes of this clause, Covered Funds means funds expended or obligated from appropriations under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5. Covered Funds will have special accounting codes and will be identified as Recovery Act funds in the grant, cooperative agreement or TIA and/or modification using Recovery Act funds. Covered Funds must be reimbursed by September 30,
2015.

Non-Federal employer means any employer with respect to covered funds -- the contractor, subcontractor, grantee, or Recipient, as the case may be, if the contractor, subcontractor, grantee, or Recipient is an employer; and any professional membership organization, certification of other professional body, any agent or licensee of the Federal government, or any person acting directly or indirectly in the interest of an employer receiving covered funds; or with respect to covered funds received by a State or local government, the State or local government receiving the funds and any contractor or subcontractor receiving the funds and any contractor or subcontractor of the State or local government; and does not mean any department, agency, or other entity of the federal government.

Recipient means any entity that receives Recovery Act funds directly from the Federal government (including Recovery Act funds received through grant, loan, or contract) other than an individual and includes a State that receives Recovery Act Funds.

## Special Provisions

## A. Flow Down Requirement

Recipients must include these special terms and conditions in any subaward.
B. Segregation of Costs

Recipients must segregate the obligations and expenditures related to funding under the Recovery Act. Financial and accounting systems should be revised as necessary to segregate, track and maintain these funds apart and separate from other revenue streams. No part of the funds from the Recovery Act shall be commingled with any other funds or used for a purpose other than that of making payments for costs allowable for Recovery Act projects.

## C. Prohibition on Use of Funds

None of the funds provided under this agreement derived from the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, may be used by any State or local government, or any private entity, for any casino or other gambling establishment, aquarium, zoo, golf course, or swimming pool.

## D. Access to Records

With respect to each financial assistance agreement awarded utilizing at least some of the funds appropriated or otherwise made available by the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, any representative of an appropriate inspector general appointed under section 3 or 8 G of the Inspector General Act of 1988 (5 U.S.C. App.) or of the Comptroller General is authorized ---
(1) to examine any records of the contractor or grantee, any of its subcontractors or subgrantees, or any State or local agency administering such contract that pertain to, and involve transactions that relate to, the subcontract, subcontract, grant, or subgrant; and
(2) to interview any officer or employee of the contractor, grantee, subgrantee, or agency regarding such transactions.

## E. Publication

An application may contain technical data and other data, including trade secrets and/or privileged or confidential information, which the applicant does not want disclosed to the public or used by the Government for any purpose other than the application. To protect such data, the applicant should specifically identify each page including each line or paragraph thereof containing the data to be protected and mark the cover sheet of the application with the following Notice as well as referring to the Notice on each page to which the Notice applies:

Notice of Restriction on Disclosure and Use of Data
The data contained in pages $-\cdots$ - of this application have been submitted in confidence and contain trade secrets or proprietary information, and such data shall be used or disclosed only for evaluation purposes, provided that if this applicant receives an award as a result of or in connection with the submission of this application, DOE shall have the right to use or disclose the data here to the extent provided in the award. This restriction does not limit the Government's right to use or disclose data obtained without restriction from any source, including the applicant.

Information about this agreement will be published on the Internet and linked to the website www.recovery.gov, maintained by the Accountability and Transparency Board. The Board may exclude posting contractual or other information on the website on a case-by-case basis when necessary to protect national security or to protect information that is not subject to disclosure under sections 552 and 552 a of title 5, United States Code.

## F. Protecting State and Local Government and Contractor Whistleblowers.

The requirements of Section 1553 of the Act are summarized below. They include, but are not limited to:
Prohibition on Reprisals: An employee of any non-Federal employer receiving covered funds under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, may not be discharged, demoted, or otherwise discriminated against as a reprisal for disclosing, including a disclosure made in the ordinary course of an employee's duties, to the Accountability and Transparency Board, an inspector general, the Comptroller General, a member of Congress, a State or Federal regulatory or law enforcement agency, a person with supervisory authority over the employee (or other person working for the employer who has the authority to investigate, discover or terminate misconduct), a court or grand jury, the head of a Federal agency, or their representatives information that the employee believes is evidence of:

- gross mismanagement of an agency contract or grant relating to covered funds;
- a gross waste of covered funds;
- a substantial and specific danger to public health or safety related to the implementation or use of covered funds;
- an abuse of authority related to the implementation or use of covered funds; or
- as violation of law, rule, or regulation related to an agency contract (including the competition for or negotiation of a contract) or grant, awarded or issued relating to covered funds.

Agency Action: Not later than 30 days after receiving an inspector general report of an alleged reprisal, the head of the agency shall determine whether there is sufficient basis to conclude that the non-Federal employer has subjected the employee to a prohibited reprisal. The agency shall either issue an order denying relief in whole or in part or shall take one or more of the following actions:

- Order the employer to take affirmative action to abate the reprisal.
- Order the employer to reinstate the person to the position that the person held before the reprisal, together with compensation including back pay, compensatory damages, employment benefits, and other terms and conditions of employment that would apply to the person in that position if the reprisal had not been taken.
- Order the employer to pay the employee an amount equal to the aggregate amount of all costs and expenses (including attorneys' fees and expert witnesses' fees) that were reasonably incurred by the employee for or in connection with, bringing the complaint regarding the reprisal, as determined by the head of a court of competent jurisdiction.

Nonenforceablity of Certain Provisions Waiving Rights and remedies or Requiring Arbitration: Except as provided in a collective bargaining agreement, the rights and remedies provided to aggrieved employees by this section may not be waived by any agreement, policy, form, or condition of employment, including any predispute arbitration agreement. No predispute arbitration agreement shall be valid or enforceable if it requires arbitration of a dispute arising out of this section.

Requirement to Post Notice of Rights and Remedies: Any employer receiving covered funds under the American Recovery and Reinvestment Act of 2009, Pub. L, 111-5, shall post notice of the rights and
remedies as required therein. (Refer to section 1553 of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, www.Recovery.gov, for specific requirements of this section and prescribed language for the notices.).

## G. "RESERVED"

## H. False Claims Act

Recipient and sub-recipients shall promptly refer to the DOE or other appropriate Inspector General any credible evidence that a principal, employee, agent, contractor, sub-grantee, subcontractor or other person has submitted a false claim under the False Claims Act or has committed a criminal or civil violation of laws pertaining to fraud, conflict of interest, bribery, gratuity or similar misconduct involving those funds.

## I. Information in Support of Recovery Act Reporting

Recipient may be required to submit backup documentation for expenditures of funds under the Recovery Act including such items as timecards and invoices. Recipient shall provide copies of backup documentation at the request of the Contracting Officer or designee.

## J. Availability of Funds

Funds appropriated under the Recovery Act and obligated to this award are available for reimbursement of costs until September 30, 2015.

## K. Additional Funding Distribution and Assurance of Appropriate Use of Funds (As Applicable)

Certification by Governor -- Not later than April 3, 2009, for funds provided to any State or agency thereof by the American Reinvestment and Recovery Act of 2009, Pub. L. 111-5, the Governor of the State shall certify that: 1 ) the state will request and use funds provided by the Act; and 2 ) the funds will be used to create jobs and promote economic growth.

Acceptance by State Legislature -- If funds provided to any State in any division of the Act are not accepted for use by the Governor, then acceptance by the State legislature, by means of the adoption of a concurrent resolution, shall be sufficient to provide funding to such State.

Distribution -- After adoption of a State legislature's concurrent resolution, funding to the State will be for distribution to local governments, councils of government, public entities, and public-private entities within the State either by formula or at the State's discretion.

## L. Certifications (As Applicable)

With respect to funds made available to State or local governments for infrastructure investments under the American Recovery and Reinvestment Act of 2009, Pub L. 111 -5 , the Governor, mayor, or other chief executive, as appropriate, certified by acceptance of this award that the infrastructure investment has received the full review and vetting required by law and that the chief executive accepts responsibility that the infrastructure investment is an appropriate use of taxpayer dollars. Recipient shall provide an additional certification that includes a description of the investment, the estimated total cost, and the amount of covered funds to be used for posting on the Internet. A State or local agency may not receive infrastructure investment funding from funds made available by the Act unless this certification is made and posted.

## 21. REPORTING AND REGISTRATION REQUIREMENTS UNDER SECTION 1512 OF THE, RECOVERYACT

(a) This award requires the recipient to complete projects or activities which are funded under the American Recovery and Reinvestment Act of 2009 (Recovery Act) and to report on use of Recovery Act funds provided through this award. Information from these reports will be made available to the public.
(b) The reports are due no later than ten calendar days after each calendar quarter in which the recipient receives the assistance award funded in whole or in part by the Recovery Act.
(c) Recipients and their first-tier sub-recipients must maintain current registrations in the Central Contractor Registration (http://www.ccr.gov) at all times during which they have active federal awards funded with Recovery Act funds. A Dun and Bradstreet Data Universal Numbering System (DUNS) Number (http://www.dnb.com) is one of the requirements for registration in the Central Contractor Registration.
(d) The recipient shall report the information described in section 1512(c) of the Recovery Act using the reporting instructions and data elements that will be provided online at http://www.FederalReporting.gov and ensure that any information that is pre-filled is corrected or updated as needed.

## 22. REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS -SECTION 1605 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

(a) Definitions. As used in this award term and condition-*
(1) Manufactured good means a good brought to the construction site for incorporation into the building or work that has been--
(i) Processed into a specific form and shape; or
(ii) Combined with other raw material to create a material that has different properties than the properties of the individual raw materials.
(2) Public building and public work means a public building of, and a public work of, a governmental entity (the United States; the District of Columbia; commonwealths, territories, and minor outlying islands of the United States; State and local governments; and multi-State, regional, or interstate entities which have governmental functions). These buildings and works may include, without limitation, bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals, and the construction, alteration, maintenance, or repair of such buildings and works.
(3) Steel means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements.
(b) Domestic preference. (1) This award term and condition implements Section 1605 of the American Recovery and Reinvestment Act of 2009 (Recovery Act) (Pub. L. 111-5), by requiring that all iron, steel, and manufactured goods used in the project are produced in the United States except as provided in paragraph (b)(3) and (b)(4) of this section and condition.
(2) This requirement does not apply to the material listed by the Federal Govemment as follows: "NONE"
(3) The award official may add other iron, steel, and/or manufactured goods to the list in paragraph (b)(2) of this section and condition if the Federal Government determines that-.
(i) The cost of the domestic iron, steel, and/or manufactured goods would be unreasonable. The cost of domestic iron, steel, or manufactured goods used in the project is unreasonable when the cumulative cost of such material will increase the cost of the overall project by more than 25 percent;
(ii) The iron, steel, and/or manufactured good is not produced, or manufactured in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or
(iii) The application of the restriction of section 1605 of the Recovery Act would be inconsistent with the public interest.
(c) Request for determination of inapplicability of Section 1605 of the Recovery Act . (1)(i) Any recipient request to use foreign iron, steel, and/or manufactured goods in accordance with paragraph (b)(3) of this section shall include adequate information for Federal Government evaluation of the request, including--
(A) A description of the foreign and domestic iron, steel, and/or manufactured goods,
(B) Unit of measure;
(C) Quantity,
(D) Cost;
(E) Time of delivery or availability;
(F) Location of the project;
(G) Name and address of the proposed supplier; and
(H) A detailed justification of the reason for use of foreign iron, steel, and/or manufactured goods cited in accordance with paragraph (b)(3) of this section.
(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed cost comparison table in the format in paragraph (d) of this section.
(iii) The cost of iron, steel, and/or manufactured goods material shall include all delivery costs to the construction site and any applicable duty.
(iv) Any recipient request for a determination submitted after Recovery Act funds have been obligated for a project for construction, alteration, maintenance, or repair shall explain why the recipient could not reasonably foresee the need for such determination and could not have requested the determination before the funds were obligated. If the recipient does not submit a satisfactory explanation, the award official need not make a determination.
(2) If the Federal Government determines after funds have been obligated for a project for construction, alteration, maintenance, or repair that an exception to section 1605 of the Recovery Act applies, the award official will amend the award to allow use of the foreign iron, steel, and/or relevant manufactured goods. When the basis for the exception is nonavailability or public interest, the amended award shall reflect adjustment of the award amount, redistribution of budgeted funds, and/or other actions taken to cover costs associated with acquiring or using the foreign iron, steel, and/or relevant manufactured goods. When the basis for the exception is the unreasonable cost of the domestic iron, steel, or manufactured goods, the award official shall adjust the award amount or redistribute budgeted funds by at least the differential established in 2 CFR 176.110(a).
(3) Unless the Federal Government determines that an exception to section 1605 of the Recovery Act applies, use of foreign iron, steel, and/or manufactured goods is noncompliant with section 1605 of the American Recovery and Reinvestment Act.
(d) Data. To permit evaluation of requests under paragraph (b) of this section based on unreasonable cost, the Recipient shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Items Cost Comparison Description Unit of measure Quantity Cost (dollars)*
Item 1:
Foreign steel, iron, or manufactured good
Domestic steel, iron, or manufactured good Item 2:
Foreign steel, iron, or manufactured good
Domestic steel, iron, or manufactured good $\qquad$
[List name, address, telephone number, email address, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]
[Include other applicable supporting information.]
[*Include all delivery costs to the construction site.]

## 23. REQUIRED USE OF AMERICAN IRON, STEEL, AND MANUFACTURED GOODS (COVERED UNDER INTERNATIONAL AGREEMENTS)--SECTION 1605 OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

(a) Definitions. As used in this award term and condition--

Designated country --(1) A World Trade Organization Government Procurement Agreement country (Aruba, Austria, Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea (Republic of), Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and United Kingdom;
(2) A Free Trade Agreement (FTA) country (Australia, Bahrain, Canada, Chile, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Israel, Mexico, Morocco, Nicaragıa, Oman, Peru, or Singapore); or
(3) A United States-European Communities Exchange of Letters (May 15, 1995) country: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, and United Kingdom.
Designated country iron, steel, and/or manufactured goods --(1) Is wholly the growth, product, or manufacture of a designated country; or
(2) In the case of a manufactured good that consist in whole or in part of materials from another country, has been substantially transformed in a designated country into a new and different manufactured good distinct from the materials from which it was transformed.

Domestic iron, steel, and/or manufactured good $\cdots$ (1) Is wholly the growth, product, or manufacture of the United States; or
(2) In the case of a manufactured good that consists in whole or in part of materials from another country, has been substantially transformed in the United States into a new and different manufactured good distinct from the materials from which it was transformed. There is no requirement with regard to the origin of components or subcomponents in manufactured goods or products, as long as the manufacture of the goods occurs in the United States.

Foreign iron, steel, and/or manufactured good means iron, steel and/or manufactured good that is not domestic or designated country iron, steel, and/or manufactured good.

Manufactured good means a good brought to the construction site for incorporation into the building or work that has been--
(1) Processed into a specific form and shape; or
(2) Combined with other raw material to create a material that has different properties than the properties of the individual raw materials.

Public building and public work means a public building of, and a public work of, a governmental entity (the United States; the District of Columbia; commonwealths, territories, and minor outlying islands of the United States; State and local governments; and multi-State, regional, or interstate entities which have governmental functions). These buildings and works may include, without limitation, bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals, and the construction, alteration, maintenance, or repair of such buildings and works.

Steel means an alloy that includes at least 50 percent iron, between .02 and 2 percent carbon, and may include other elements.
(b) Iron, steel, and manufactured goods. (1) The award term and condition described in this section impiements--
(i) Section 1605 (a) of the American Recovery and Reinvestment Act of 2009 (Pub. L. 111n-5) (Recovery Act), by requiring that all iron, steel, and manufactured goods used in the project are produced in the United States; and
(ii) Section 1605 (d), which requires application of the Buy American requirement in a manner consistent with U.S. obligations under international agreements. The restrictions of section 1605 of the Recovery Act do not apply to designated country iron, steel, and/or manufactured goods. The Buy American requirement in section 1605 shall not be applied where the iron, steel or manufactured goods used in the project are from a Party to an international agreement that obligates the recipient to treat the goods and services of that Party the same as domestic goods and services. This obligation shall only apply to projects with an estimated value of $\$ 7,443,000$ or more.
(2) The recipient shall use only domestic or designated country iron, steel, and manufactured goods in performing the work funded in whole or part with this award, except as provided in paragraphs (b)(3) and (b)(4) of this section.
(3) The requirement in paragraph (b)(2) of this section does not apply to the iron, steel, and manufactured goods listed by the Federal Government as follows:

## None

(4) The award official may add other iron, steel, and manufactured goods to the list in paragraph (b)(3) of this section if the Federal Government determines that--
(i) The cost of domestic iron, steel, and/or manufactured goods would be unreasonable. The cost of domestic iron, steel, and/or manufactured goods used in the project is unreasonable when the cumulative cost of such material will increase the overall cost of the project by more than 25 percent;
(ii) The iron, steel, and/or manufactured good is not produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality; or

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(iii) The application of the restriction of section 1605 of the Recovery Act would be inconsistent with the public interest.
(c) Request for determination of inapplicability of section 1605 of the Recovery Act or the Buy American Act. (1)(i) Any recipient request to use foreign iron, steel, and/or manufactured goods in accordance with paragraph (b)(4) of this section shall include adequate information for Federal Government evaluation of the request, including--
(A) A description of the foreign and domestic iron, steel, and/or manufactured goods;
(B) Unit of measure;
(C) Quantity;
(D) Cost;
(E) Time of delivery or availability;
(F) Location of the project;
(G) Name and address of the proposed supplier; and
(H) A detailed justification of the reason for use of foreign iron, steel, and/or manufactured goods cited in accordance with paragraph (b)(4) of this section.
(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed cost comparison table in the format in paragraph (d) of this section.
(iii) The cost of iron, steel, or manufactured goods shall include all delivery costs to the construction site and any applicable duty.
(iv) Any recipient request for a determination submitted after Recovery Act funds have been obligated for a project for construction, alteration, maintenance, or repair shall explain why the recipient could not reasonably foresee the need for such determination and could not have requested the determination before the funds were obligated. If the recipient does not submit a satisfactory explanation, the award official need not make a determination.
(2) If the Federal Government determines after funds have been obligated for a project for construction, alteration, maintenance, or repair that an exception to section 1605 of the Recovery Act applies, the award official will amend the award to allow use of the foreign iron, steel, and/or relevant manufactured goods. When the basis for the exception is nonavailability or public interest, the amended award shall reflect adjustment of the award amount, redistribution of budgeted funds, and/or other appropriate actions taken to cover costs associated with acquiring or using the foreign iron, steel, and/or relevant manufactured goods.. When the basis for the exception is the unreasonable cost of the domestic iron, steel, or manufactured goods, the award official shall adjust the award amount or redistribute budgeted funds, as appropriate, by at least the differential established in 2 CFR 176.110(a).
(3) Unless the Federal Government determines that an exception to section 1605 of the Recovery Act applies, use of foreign iron, steel, and/or manufactured goods other than designated country iron, steel, and/or manufactured goods is noncompliant with the applicable Act.
(d) Data. To permit evaluation of requests under paragraph (b) of this section based on unreasonable cost, the applicant shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Items Cost Comparison

Description Unit of measure QuantityCost
(dollars)*
Item 1:
Foreign steel, iron, or manufactured good
Domestic steel, iron, or manufactured good $\qquad$ Item 2:
Foreign steel, iron, or manufactured good
Domestic steel, iron, or manufactured good $\qquad$
[List name, address, telephone number, email address, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]
[Include other applicable supporting information.]
[*Include all delivery costs to the construction site.]

## 24. WAGE RATE REQUIREMENTS UNDER SECTION 1606 OF THE RECOVERY ACT (AS Applicable)

(a) Section 1606 of the Recovery Act requires that all laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the Federal Government pursuant to the Recovery Act shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code.

Pursuant to Reorganization Plan No. 14 and the Copeland Act, 40 U.S.C. 3145 , the Department of Labor has issued regulations at 29 CFR parts 1,3 , and 5 to implement the Davis-Bacon and related Acts. Regulations in 29 CFR 5.5 instruct agencies concerning application of the standard Davis-Bacon contract clauses set forth in that section. Federal agencies providing grants, cooperative agreements, and loans under the Recovery Act shall ensure that the standard Davis-Bacon contract clauses found in 29 CFR 5.5(a) are incorporated in any resultant covered contracts that are in excess of $\$ 2,000$ for construction, alteration or repair (including painting and decorating).
(b) For additional guidance on the wage rate requirements of section 1606 , contact your awarding agency, Recipients of grants, cooperative agreements and loans should direct their initial inquiries concerning the application of Davis-Bacon requirements to a particular federally assisted project to the Federal agency funding the project. The Secretary of Labor retains final coverage authority under Reorganization Plan Number 14.

## 25. RECOVERY ACT TRANSACTIONS LISTED IN SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS AND RECIPIENT RESPONSIBILITIES FOR INFORMING SUBRECIPIENTS

(a) To maximize the transparency and accountability of funds authorized under the American Recovery and Reinvestment Act of 2009 (Pub. L. 111--5) (Recovery Act) as required by Congress and in accordance with 2 CFR 215.21 "Uniform Administrative Requirements for Grants and Agreements" and OMB Circular A-102 Common Rules provisions, recipients agree to maintain records that identify adequately the source and application of Recovery Act funds. OMB Circular A-102 is available at http://www.whitehouse.gov/omb/circulars/a102/a102.html.
(b) For recipients covered by the Single Audit Act Amendments of 1996 and OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations," recipients agree to separately identify the expenditures for Federal awards under the Recovery Act on the Schedule of Expenditures of Federal Awards (SEFA) and the Data Collection Form (SF--SAC) required by OMB Circular A--133. OMB Circular A-w 133 is available at http.//www.whitehouse.gov/omb/circulars/a133/a133.html. This shall be accomplished by identifying expenditures for Federal awards made under the Recovery Act separately

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on the SEFA, and as separate rows under Item 9 of Part III on the SF--SAC by CFDA number, and inclusion of the prefix "ARRA-" in identifying the name of the Federal program on the SEFA and as the first characters in Item 9d of Part III on the SF--SAC.
(c) Recipients agree to separately identify to each subrecipient, and document at the time of subaward and at the time of disbursement of funds, the Federal award number, CFDA number, and amount of Recovery Act funds. When a recipient awards Recovery Act funds for an existing program, the information fumished to subrecipients shall distinguish the subawards of incremental Recovery Act funds from regular subawards under the existing program.
(d) Recipients agree to require their subrecipients to include on their SEFA information to specifically identify Recovery Act funding similar to the requirements for the Recipient SEFA described above. This information is needed to allow the Recipient to properly monitor subrecipient expenditure of ARRA funds as well as oversight by the Federal awarding agencies, Offices of Inspector General and the Government Accountability Office.

## 26. DAVIS BACON ACT AND CONTRACT WORK HOURS AND SAFETY STANDARDS ACT (NOV 2009) (If Applicable)

Definitions: For purposes of this clause, Clause 27, Davis Bacon Act and Contract Work Hours and Safety Standards Act, the following definitions are applicable:
(1) "Award" means any grant, cooperative agreement or technology investment agreement made with Recovery Act funds by the Department of Energy (DOE) to a Recipient. Such Award must require compliance with the labor standards clauses and wage rate requirements of the DavisBacon Act (DBA) for work performed by all laborers and mechanics employed by Recipients (other than a unit of State or local government whose own employees perform the construction) Subrecipients, Contractors, and subcontractors.
(2) "Contractor" means an entity that enters into a Contract. For purposes of these clauses, Contractor shall include (as applicable) prime contractors, Recipients, Subrecipients, and Recipients' or Subrecipients' contractors, subcontractors, and lower-tier subcontractors. "Contractor" does not mean a unit of State or local government where construction is performed by its own employees."
(3) "Contract" means a contract executed by a Recipient, Subrecipient, prime contractor, or any tier subcontractor for construction, alteration, or repair. It may also mean (as applicable) (i) financial assistance instruments such as grants, cooperative agreements, technology investment agreements, and loans; and, (ii) Sub awards, contracts and subcontracts issued under financial assistance agreements. "Contract" does not mean a financial assistance instrument with a unit of State or local government where construction is performed by its own employees.
(4) "Contracting Officer" means the DOE official authorized to execute an Award on behalf of DOE and who is responsible for the business management and non-program aspects of the financial assistance process.
(5) "Recipient" means any entity other than an individual that receives an Award of Federal funds in the form of a grant, cooperative agreement, or technology investment agreement directly from the Federal Government and is financially accountable for the use of any DOE funds or property, and is legally responsible for carrying out the terms and conditions of the program and Award.
(6) "Subaward" means an award of financial assistance in the form of money, or property in lieu of money, made under an award by a Recipient to an eligible Subrecipient or by a Subrecipient to a lower-tier subrecipient. The term includes financial assistance when provided by any legal
agreement, even if the agreement is called a contract, but does not include the Recipient's procurement of goods and services to carry out the program nor does it include any form of assistance which is excluded from the definition of "Award" above.
(7) "Subrecipient" means a non-Federal entity that expends Federal funds received from a Recipient to carry out a Federal program, but does not include an individual that is a beneficiary of such a program.

## (a) Davis Bacon Act

(1) Minimum wages.
(i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and, without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in §5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.
(ii)(A) The Contracting Officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the Contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
(1) The work to be performed by the classification requested is not performed by a classification in the wage determination;
(2) The classification is utilized in the area by the construction industry; and
(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe

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benefits where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30 -day period that additional time is necessary.
(C). In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30day period that additional time is necessary.
(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs $(\mathrm{a})(1)(\mathrm{ii})(\mathrm{B})$ or $(\mathrm{C})$ of this section, shall be paid to all workers performing work in the classification under this Contract from the first day on which work is performed in the classification.
(iii) Whenever the minimum wage rate prescribed in the Contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
(iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
(2) Withholding. The Department of Energy or the Recipient or Subrecipient shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this Contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to DavisBacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the Contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the Contract, the Department of Energy, Recipient, or Subrecipient, may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
(3) Payrolls and basic records.
(i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of
wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section $1(b)(2)(B)$ of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section $1(b)(2)(B)$ of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
(ii) (A) The Contractor shall submit weekly for each week in which any Contract work is performed a copy of all payrolls to the Department of Energy if the agency is a party to the Contract, but if the agency is not such a party, the Contractor will submit the payrolls to the Recipient or Subrecipient (as applicable), applicant, sponsor, or owner, as the case may be, for transmission to the Department of Energy. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR $5.5(\mathrm{a})(3)(\mathrm{i})$, except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead, the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime Contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the Department of Energy if the agency is a party to the Contract, but if the agency is not such a party, the Contractor will submit them to the Recipient or Subrecipient (as applicable), applicant, sponsor, or owner, as the case may be, for transmission to the Department of Energy, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the Recipient or Subrecipient (as applicable), applicant, sponsor, or owner)
(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the Contract and shall certify the following:
(1) That the payroll for the payroll period contains the information required to be provided under $\S 5.5$ (a)(3)(ii) of Regulations, 29 CFR part 5 , the appropriate information is being maintained under $\S 5.5$ (a)(3)(i) of Regulations, 29 CFR part 5 , and that such information is correct and complete;
(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the Contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that

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no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the Contract.
(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section
(D) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 3729 of title 31 of the United States Code.
(iii) The Contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Department of Energy or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5. 12.
(4) Apprentices and trainees-
(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a Contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that
determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
(iii) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended and 29 CFR part 30.
(5) Compliance with Copeland Act requirements. The Contractor shall comply with the requirements of 29 CFR part 3 , which are incorporated by reference in this Contract.
(6) Contracts and Subcontracts. The Recipient, Subrecipient, the Recipient's, and Subrecipient's contractors and subcontractor shall insert in any Contracts the clauses contained herein in(a)(1) through (10) and such other clauses as the Department of Energy may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Recipient shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of the paragraphs in this clause.
(7) Contract termination: debarment. A breach of the Contract clauses in 29 CFR 5.5 may be grounds for termination of the Contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12 .
(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this Contract.
(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this Contract shall not be subject to the general disputes clause of this Contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5,6 , and 7. Disputes within the meaning of this clause include disputes between the Recipient, Subrecipient, the Contractor (or any of its subcontractors), and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
(10) Certification of eligibility.
(i) By entering into this Contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
(ii) No part of this Contract shall be subcontracted to any person or firm ineligible for award of a

Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1)
(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.
(b) Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.
(1) Overtime requirements. No Contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of $\$ 10$ for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.
(3) Withholding for unpaid wages and liquidated damages. The Department of Energy or the Recipient or Subrecipient shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.
(4) Contracts and Subcontracts. The Recipient, Subrecipient, and Recipient's and Subrecipient's contractor or subcontractor shall insert in any Contracts, the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Recipient shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.
(5) The Contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the Contract for all laborers and mechanics, including guards and watchmen, working on the Contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records to be maintained under this paragraph shall be made available by the Contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the Department of Energy and the Department of Labor, and the

Contractor or subcontractor will permit such representatives to interview employees during working hours on the job.
(c) Recipient Functions (Only if applicable).
(1) On behalf of the Department of Energy (DOE), Recipient shall perform the following functions:
(a) Obtain, maintain, and monitor all DBA certified payroll records submitted by the Subrecipients and Contractors at any tier under this Award;
(b) Review all DBA certified payroll records for compliance with DBA requirements, including applicable DOL wage determinations;
(c) Notify DOE of any non-compliance with DBA requirements by Subrecipients or Contractors at any tier, including any non-compliances identified as the result of reviews performed pursuant to paragraph (b) above;
(d) Address any Subrecipient and any Contractor DBA non-compliance issues; if DBA non-compliance issues cannot be resolved in a timely manner, forward complaints, summary of investigations and all relevant information to DOE ;
(e) Provide DOE with detailed information regarding the resolution of any DBA non-compliance issues;
(f) Perform services in support of DOE investigations of complaints filed regarding noncompliance by Subrecipients and Contractors with DBA requirements;
(g) Perform audit services as necessary to ensure compliance by Subrecipients and Contractors with DBA requirements and as requested by the Contracting Officer, and
(h) Provide copies of all records upon request by DOE or DOL in a timely manner.
(2) All records maintained on behalf of the DOE in accordance with paragraph (1) above are federal government (DOE) owned records. DOE or an authorized representative shall be granted access to the records at all times.
(3) In the event of, and in response to any Freedom of Information Act, 5 U.S.C. 552, requests submitted to DOE, Recipient shall provide such records to DOE within 5 business days of receipt of a request from DOE

## 27. GOVERNMENT INSIGHT

DOE and the Recipient are bound to each other by a duty of good faith and best effort to achieve the goals of the Project. DOE and the Recipient agree to provide early notification to each other of problems or issues which may arise in the performance of this Project, and to work collaboratively to resolve problems.

The Recipient is responsible for the overall Project, including execution, technical and project management, reporting, financial and administrative matters.

In recognition of the significance of this Project to the nation's energy infrastructure and energy agenda the Recipient agrees to provide additional access to project related information. The DOE Program Manager or their designee will be provided access, on a non-interference basis, to technical and project status meetings or tests via telephone or in person to better understand the progress and challenges of the Project. DOE may participate in meetings, reviews, and tests and may provide input and comment but has no right of approval or direction. The Recipient shall notify the DOE Program Manager of meetings, reviews, or tests and
provide related documents reasonably in advance to permit insight. The Recipient is not expected to delay any aspect of performance to accommodate DOE insight.

DOE federal employees are subject to the provisions of the Trade Secrets Act. If DOE contractor support personnel participate they shall be subject to appropriate obligations of confidentiality to DOE.

## 28. NO COST EXTENSION - REQUIREMENT FOR TIMELY DELIVERABLES

In recognition of the significance of this Project to the nation's energy infrastructure and energy agenda the DOE requests any extension to the Project period be coordinated in advance, in writing, with the cognizant DOE Contracting Officer. The Recipient is requested to provide a proposed end date, the reason for the extension, an explanation how the Project will be completed by the proposed end date, a positive statement that the available funding on the award is adequate to complete the Project, and a positive statement that all Project costs will be submitted to DOE in sufficient time to allow for payment no later than September 30, 2015.

If DOE agrees with the need for an extension and the request is fully supported the Contracting Officer shall issue a modification to the award with the revised project period.

The Recipient does have the right to unilaterally extend the award one time for up to one year. However, any one-time, no cost extension will not change the requirements for deliverables or milestone dates unless agreed to in writing by DOE.

## 29. FAILURE TO RECEIVE OR RECISSION OF REGULATORY AND OTHER REQUIRED PROJECT APPROVALS

In the event the project fails to secure required approval(s) from a Public Utility Commission or similar regulatory or other body required to grant approvals for the project to proceed, or prior approvals are rescinded, the Recipient shall immediately notify the DOE Contracting Officer and Technical Project Officer. In addition, the Recipient shall immediately halt project work on the portion of the project that was subject to required approval(s). Within three working days of the notification of such event, the DOE Contracting Officer and Technical Project Officer shall initiate an examination, with the Recipient, of the impact of the withheld or withdrawn approvals on the project's objectives. This review shall include, but is not limited too, the Recipient's continued ability to provide their cost share; the ability to meet the project's technical objectives; the ability of the project to complete data and metrics objectives, including agreed to consumer behavior studies; the ability of the project to complete work on schedule. Upon completion of the examination of the impact, the Contracting Officer will issue direction as to whether the project shall proceed as planned, proceed in a modified form or be terminated. If the project is modified or terminated, the recipient will not be liable for repayment of DOE funds received and reimbursed. Further, if the project is modified or terminated, DOE shall maintain its responsibility to pay its share of all allowable project costs incurred by the recipient but not yet submitted for reimbursement to DOE through the date of termination. The DOE will have the unilateral right to deobligate any federal funds over and above those required to meet our reduced obligation.

## 30. PROJECT DELIVERABLES

## A. CYBER SECURITY PLAN

The Recipient is required to submit to the DOE Technical Project Officer, a plan for how it will address cyber security requirements. Failure to submit an acceptable cyber security plan within a reasonable time frame may result in termination of the award. In addition, failure to effectively implement the DOE approved cyber security plan may result in termination of the award.

The cyber security plan shall describe the Recipient's approach to detect, prevent, communicate with regard to, respond to, or recover from system security incidents. The plan shall address the following areas from both a technical and a management (organizational) perspective:

- Risk Assessment (focusing on vulnerabilities and impact);
- Risk Mitigation (focusing on vulnerabilities and impact);
- Standards;
- Quality Assurance;
- Impact on Overall Grid Security.

This plan shall be consistent with the cyber security approach provided in the proposal, modified or enhanced as necessary to address any issues identified by DOE during negotiations. The plan is to be submitted within 30 calendar days of the date the Contracting Officer signs the award agreement. Thereafter, the Contracting Officer will provide approval or non-approval with comments. If the Recipient is required to resubmit its plan, the revised plan is due within 15 working days of receipt of DOE's comments.

## B. PROJECT EXECUTION PLAN

The Recipient is required to submit to the DOE Technical Project Officer a draft Project Execution Plan (PEP) within 30 calendar days of the date the Contracting Officer signs the award agreement and a final PEP within 60 days of the date the Contracting Officer signs the award agreement in the format outlined below. The elements of the Project Execution Plan should be consistent with the Management Plan, Project Schedule, and Risk Management discussions contained in the Recipient's proposal in the application submitted in response to Funding Opportunity Announcement Number DE-FOA-0000058 and with the detailed budget submission.

The intent of the Project Execution Plan is to provide the DOE with appropriate understanding and insight into the approach and methodology the Recipient will use to manage the project to successful completion. The Recipient is expected to use a set of tailored project management tools and techniques in the management of their projects. It will also provide the baseline against which the Recipient will provide status of progress on project execution. This clause is not intended to limit or restrict the Recipient's ability to implement any management systems or controls deemed necessary for the management of the project, except as otherwise provided by law or this agreement.

The PEP provided to DOE will contain the following items:

- A description of the project including the end product or end result being accomplished
- Work Breakdown Structure (WBS) to Level 2, with dictionary
- Integrated Schedule
- Performance Measurement Baseline (PMB)
- A Listing of Major Project Milestones tied to the WBS and PMB
- The Project Responsibility Assignment Matrix for the WBS
- Project Risk Management Plan

The methodology and approach used to meet the various requirements listed in the PEP should be tailored appropriately in consideration of the complexity, cost, and risks of each project. Requirements must be addressed to the extent necessary and practical for managing the project. Tailoring may involve consolidation of decisions, documentation, substituting equivalent documents, or concurrency of processes. Tailoring does not imply the omission of essential elements.

All of the PEP elements or an equivalent will be required for all projects, but their initial character/attributes and subsequent implementation can vary based on project size.

A common structure for reporting the current status of SGIG projects will be used to deliver project status and assessment information to DOE. SGIG projects will provide the following data. These data will be
compiled into status reports to assist DOE in its reporting requirements under the Recovery Act.
The Recipient shall use the following template to submit the Project Execution Plan Template;

## Section 1 - Cover and Signature Pages

### 1.1 Cover Page

The cover page should include the title of the document, document control number, project name, project number, site name, document date, restrictions or classification (as applicable), and any appropriate disclaimers.

### 1.2Revisions Page

All revision numbers and associated dates should be captured along with the date the document was approved.

### 1.3Signature Page

The signature page (only one page in length) is the second page and should contain the following:

- Project name and number
- Site name
- Date
- Restrictions or classification
- Approval authority
- Signature block for the primary author


### 1.4 Table of Contents

The document table of contents should include lists of tables and figures.

### 1.5Acronyms List

The list should include acronyms used in the document and their definitions.

## Section 2-Main Body

### 2.1 Introduction

In this section, the awardee should briefly describe the PEP and the major participants involved in the project. Example text is provided below.

This document is the Project Execution Plan (PEP) for the name of SGIG Project. It sets forth roles and responsibilities, project baselines, and project risks.

This PEP will be updated as required and reviewed at least annually until the project is complete.

### 2.2 Project Description

Provide a summary-level description of the project, including:

- Project objectives
- Major system components and their functions
- Major project assumptions and uncertainties


### 2.3Management Structure

The project organization should be described, including an organization chart that identifies the various participants, their roles and responsibilities, interfaces and reporting relationships. If certain
vendors or contractors have not yet been chosen, identify their roles in a generic fashion.
Section 3 - Tailoring Strategy
This section should document how the PEP requirements will be met through a tailored application of project management and project controls.

Tailoring is a flexible approach that allows appropriate levels of effort or analytical rigor to be used in fulfilling all requirements. Tailoring does not mean waiving requirements, nor does it imply the omission of essential elements in the acquisition process.

## Section 4-Project Baseline

### 4.1 Performance Management Baseline (PMB)

The PMB is a time-phased budget plan for accomplishing work, against which performance is measured. It includes the budgets assigned to scheduled control accounts and the applicable indirect budgets. The PMB should represent the monetized value of all work expected to be accomplished under the project. It represents the Budgeted Cost of Work Scheduled (BCWS) element in the online web-based Project Management Reporting System.

Technical performance parameters and deliverables should define key features of the project and how it/they will perform when completed at Project Close Out including characteristics (quantity, size, etc.), functions, requirements, or the design basis that, if changed, would have a major impact on system or facility performance. It includes all costs for both Federal and recipient.

### 4.1.1 Work Breakdown Structure (WBS) and WBS Dictionary

The WBS is the product-oriented grouping of project elements that organize and define the total scope of the project. A WBS Dictionary is a listing of WBS elements with a short description of the work scope content in each element. The Dictionary helps ensure consistent understanding and use of the WBS elements among all of the WBS users.

Provide WBS Level 2 and WBS Dictionary listing of work breakdown structure elements with a short description of the work scope content in each element. For the purposes of the PEP due to DOE, WBS Level 1 should be the project that the SGIG grant is funding, e.g., Smart Grid West Virginia

### 4.1.2 Integrated Schedule

The integrated schedule should display duration and linkages of the various tasks required to accomplish the project and should display the project's critical path. Preferentially the integrated schedule will be provided as a Gantt chart with the task identified and planned start and completion dates listed

### 4.2 List of Major Project Milestones

Provide a list of the major project milestones. Examples of the types of major milestones could be the completion of design for communications architecture, initiation of Phase I meter installation, and receipt of state Public Utilities Commission (PUC) approval. The list should describe the milestone and the planned milestone date. If using an early start/late start milestone planning approach, identify which date.

### 4.3 Project Responsibility Assignment Matrix

The Project Responsibility Assignment Matrix allocates responsibility for accomplishment of the outcome of a specific element identified in the WBS to a specific individual.

## Section 5 - Project Risk Management/Oversight

### 5.1. Risk Management

A Risk Management Plan (RMP) should be prepared to identify and manage those events that could threaten the project's success. The RMP should describe the policies and practices for managing risk and a summary of the results of your risk analysis. The identification, evaluation, associated handling strategy or action, and the ultimate disposition of each risk should be documented.

To the extent that it covers these factors, the risk management section of your proposal can be used as the RMP.

At a minimum, the RMP should comprise a table that provides the following risk event information

|  |  |  | of ascurrent | $\mathrm{CD}$ | $y^{2}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## C. METRICS AND BENEFITS REPORTING PLAN

The Recipient is required to develop and implement a plan for the collection and reporting of projectrelated metrics and benefits, as stated in the Smart Grid lnvestment Grant (SGIG) Funding Opportunity Announcement (DE-FOA 000058). This information will be used by DOE to assess the impact of smart grid technology deployed by the SGIG program. More information on the types of metrics and benefits DOE is interested in examining are provided in the "Guidebook for ARRA Smart Grid Program Metrics and Benefits" (Guidebook), dated December 7, 2009. The Recipient is encouraged to work collaboratively with DOE to seek guidance and clarification regarding questions in completing its Metrics and Benefits Reporting Plan.

## 1. Plan Outline

The Recipient shall be responsible for developing and submitting a Metrics and Benefits Plan that is consistent with its SGIG proposal and provides a sufficiently detailed description of how metrics information will be developed and reported to DOE. The Metrics and Benefits Plan shall include at a minimum the following information:

- Discussion of Project Metrics and Benefits:
- An identification with pertinent descriptions of the specific build and impact metrics that will be reported to DOE. The metrics will apply to the total project supported both by DOE and cost-shared funds. These metrics are described in more detail in Appendix A of the Guidebook.
- Sufficient information so that build metrics can be correlated with numbers and types of customers (i.e., residential, commercial, industrial), the extent of service area covered, and how funding is allocated against equipment, as well as with other related build metrics (e.g., type of dynamic pricing program correlated with metering features). Build metrics will include the numbers and types of jobs created.
- A description of the types of data, including their characteristics (e.g., frequency of measurement, units), and the calculations used to derive impact metrics. Assumptions or ranges of input values used should be provided.
- A description of how impact metrics would lead to benefits with recommendations for how benefits would be quantitatively estimated.
- Baseline values for each build and impact metric, including the basis and methods applied for calculating baseline information (e.g., application of normalization, averaging or forecasting approaches).
- Implementation:
- Provide a schedule showing how the reporting of build and impact metrics coincides with the deployment of smart grid technology and key decision milestones (e.g., implementation of approved dynamic pricing tariffs).
- Present approaches for collaboration between DOE and the Recipient (including representative organizations) to discuss key issues and share valuable information derived from the project.
- Reporting:
- Present the schedule for reporting build and impact metrics and benefits, as specified in Attachment B, Federal Assistance Reporting Checklist and Instructions.


## 2. Consistency and Data Quality

DOE expects to work collaboratively with the Recipient to develop consistency and quality in the methods used to calculate metrics and develop appropriate baselines. It is the Recipient's responsibility to collect and assemble data required to produce the metrics and benefits. In addition, the Recipient shall be available to answer questions DOE may have regarding how the metrics were developed.

## 3. Plan Development and Submittal

Within 60 days following the award of a grant, the Recipient is required to submit to DOE a draft Metrics and Benefits Reporting Plan. The Recipient is encouraged to work collaboratively with DOE to seek guidance and clarification regarding questions in completing the Metrics and Benefits Reporting Plan. The Recipient shall submit a draft final Metrics and Benefits Reporting Plan within 30 days following the receipt of written comments from DOE. The draft final plan will be considered final once approved by DOE.

## D. CONSUMER BEHAVIOR STUDY PLAN Not Applicable (N/A)

Special Note: This clause only applies to recipients who proposed in their application submitted in response to the Funding Opportunity Announcement Number DE-FOA-0000058 to conduct a consumer behavior study with control and randomized treatment groups. Recipients may opt out of this program after discussion with their Technical Project Officer.

Recipients who proposed conducting a consumer behavior study with control and randomized treatment groups, as stated in the Smart Grid Investment Grant (SGIG) Funding Opportunity Announcement (DE-FOA-000058) are required to develop and implement a plan to carefully evaluate the behavior of consumers with respect to the dynamic pricing of electricity rates. More information on the approach recommended for these studies, including the types of data that would be made available, is provided in Appendix D of the "Guidebook for ARRA Smart Grid Program Metrics and Benefits" (Guidebook), dated December 7, 2009, as amended from time to time.

Within 90 days following the award of a grant, the Recipient is required to submit to DOE a Consumer Behavior Study Plan. In addition, the Recipient is required to submit interim and final Evaluation Reports (Attachment B, Federal Assistance Reporting Checklist and Instructions). The Recipient is encouraged to work closely with DOE in developing this plan, as well as throughout the study period. DOE expects that final submitted Consumer Behavior Study Plan shall be consistent with the requirements of the SGIG FOA, and adhere to well-established and theoretically appropriate methods.

## For Official Use Only

## 1. Plan Outline

The Recipient is responsible for developing and submitting a Consumer Behavior Study Plan consistent with its SGIG proposal and provide a more detailed description of how the dynamic pricing with randomization component of its project will be designed, implemented, evaluated, and reported to DOE. The Consumer Behavior Study Plan shall include at a minimum the following:

- Project Design:
- Identify key research questions to be addressed in the project;
- Describe how the project will be marketed to customers and how customers will participate (e.g., opt-in, opt-out, randomly assigned);
- Describe the target population and sample and how it will be stratified and developed;
- Describe control and treatment groups that will be represented (e.g., pricing, technology, education) and how customers will be assigned to each group (e.g., opt-in, opt-out, randomly assigned) based on desired levels of confidence and precision within the analysis;
- Describe the specific rate design(s) that will be tested and controlled for, as well as what price levels will be used;
- Describe specific enabling technologies, if any, that will be tested and controlled for;
- Describe the specific feedback information approaches and/or methods, if any, that will be tested and controlled for;
- Describe customer characteristic information that will be collected from each participant (see Appendix D of the Guidebook for minimum requirements) and methods that will be used to collect this information (e.g., field survey, utility customer database). Stipulate if this information will be reported to DOE at the customer level or the customer-cohort level. If results are reported at the customer-cohort level, the Recipient shall ensure that cohort level data has at least three customers in each "cell."
- Implementation:
- Provide a milestone schedule for the implementation phase of the project, including expected dates for obtaining regulatory approval and for submitting the draft Evaluation Report, as specified in Attachment B, Federal Assistance Reporting Checklist and Instructions;
- Describe how the target sample will be maintained throughout the duration of the project;
- Describe the data collection process that will be required for the evaluation.
- Evaluation:
- Describe methodology that will be used to evaluate the key research questions;
- Describe data requirements to complete the evaluation;
- Describe what kinds of information will be reported as an output from the evaluation.
- Data Reporting:
- Describe the frequency of reporting with respect to the Consumer Behavior Study Plan, Interim and Final Evaluation Reports, and data, as specified in Attachment B, Federal Assistance Reporting Checklist and Instructions.


## 2. Regulatory Approval Process

Where required, the Recipient shall seek approval from the applicable regulatory authority and/or oversight body to implement the dynamic pricing with randomization project.

If the Recipient receives approval from the applicable regulatory body and/or oversight board for the dynamic pricing with randomization project consistent with what is specified in the approved Consumer Behavior Study Plan, the study may proceed under current funding levels.

## 31. ADVANCE UNDERSTANDING FOR FEDERAL INCOME TAX TREATMENT

The Recipient and the Department of Energy (DOE) understand that the Recipient's project scope, budget and project execution plan are based on the assumption that the Smart Grid Investment Grant (SGIG) funds provided by DOE will be considered nontaxable income under Internal Revenue Code (IRC) 118(a). As of the date of this Agreement, the Internal Revenue Service ("IRS") has not yet issued guidance or otherwise made a determination regarding the applicability of IRC 118(a) under the SGIG program. For this reason and so that the Recipient is not prejudiced by an IRS determination following the execution of this Agreement, the process set out below will be followed in the circumstances described:
(A) In the event the IRS declines to issue guidance by May 1, 2010 providing that some or all of SGIG grant funds may be treated as nontaxable income under IRC 118 (a) under the terms and conditions of this Agreement, Recipient may elect to reopen this Agreement for negotiation as provided for below.
(B) In the event IRS determines that terms and conditions which differ from those contained in this Agreement would permit all or some of the SGIG funds to be treated as nontaxable income and in the event DOE offers to modify the standard terms and conditions for other SGIG recipients in order to cause all or some portion of the SGIG grant funds to be treated by IRS as nontaxable capital contributions, the DOE Contracting Officer shall notify the Recipient of the proposed modification(s).
(C) Within the earliest of (i) thirty calendar days after delivery of a notification by DOE that the IRS has advised that the IRS has declined to issue guidance providing that some or all of SGIG grant funds may be treated as nontaxable income under IRC 118(a); (ii) fourteen calendar days after the date of notice from the Contracting Officer of a modification of the Agreement provided for in (B) above to support treatment as nontaxable capital contributions; or (iii) by May 14, 2010 if IRS has failed to issue guidance by May 1, 2010, the Recipient shall notify the DOE Contracting Officer and Technical Project Officer as to whether the Recipient elects (1) to proceed with the project as planned, or (2) to reopen this Agreement (including the scope of the project) for negotiation to reflect impacts to the project If Recipient elects to reopen this Agreement for negotiations, DOE and Recipient shall dedicate authorized representatives to negotiate in good faith
(D) If the parties have not satisfactorily concluded negotiations after a period of sixty calendar days: (i) DOE may elect to terminate such negotiations; (ii) Recipient may elect to terminate such negotiations and may, but shall not be required to, terminate this Agreement in its entirety in accordance with 10 C.F.R. § 600.351 (a) (3). If the project is modified or terminated pursuant to this Provision of the Agreement, allowable costs will not include costs incurred after the effective date of the termination and the Recipient authorizes DOE to deobligate amounts in excess of the amounts incurred at the effective date of the termination. In the event of modification of the project scope or termination of the Agreement pursuant to this Provision, DOE shall have no liability for any termination costs. If the project is modified or terminated pursuant to this Section 31, Recipient shall not be liable for repayment of DOE funds received that are otherwise allowable through the date of such modification or termination.
icant Name: South Kentucky Rural Electric Cooperative



## 5 Special Instructions

## Other Reporting

Details regarding the data elements set forth below are provided in the "Guidebook for ARRA Smart Grid Program Metrics and Benefits", or Guidebook, dated December 7, 2009, provided separately.

## A. Reporting of Cumulative Jobs Created/Retained

- For the first six months of this award the Recipient must report the data specified in this section on a monthly basis beginning with the quarter of the effective date of the award After the six month period the reporting frequency shall be quarterly unless the Office of Management and Budget authorizes continued monthly reporting
- Recipient will provide the data required in this section via a mutually agreed upon format and media to DOE
- Recipients will report the cumulative number of jobs directly created or retained by project and activity or contract Recipients will be required to report these direct jobs numbers by labor categories, as provided below.
- Managers
- Engineers
- Computer-related Occupations
- Environmental and Social Scientists
- Construction, Electrical and Other Trades
- Analysts,
- Business Occupations
- Recording, Scheduling, Computer Operator Occupations
- A job created is a new position created and filled or an existing unfilled position that is filled as a result of the Recovery Act, a job retained is an existing position that would not have been continued to be filled were it not for Recovery Act funding A job cannot be counted as both created and retained Also, only compensated employment in the United States or outlying areas should be counted See 74 FR 14824 for definitions
- The estimate of the number of jobs required by the Recovery Act should be expressed as "full-time equivalents" (FTE), which is calculated as total hours worked in jobs created or retained divided by the number of hours in a full -time schedile, defined here as 2,080 hours per calendar year The FTE estimates must be reported cumulatively each calendar quarter
- Prime recipients of these grants must include in the aggregate number an estimate of jobs created and retained on projects and activities managed by their funding sub-recipients (including prime and sub-prime contractors)
- Recipients will have the option to report on the employment impact on materials and equipment suppliers and central service providers (so-called "indirect" jobs) Employees who are not directly charged to Recovery Act supported projects/activities, who, nonetheless, provide critical indirect support are considered indirect jobs created/retained Recipients will not be required to report on the employment impact on the local community ("induced" jobs)
- The requirement for reporting jobs is based on a simple calculation used to avoid overstating the number of other than full-time, permanent jobs This calculation converts part-time or temporary jobs into "full-time equivalent" (FTE) jobs In order to perform the calculation, a recipient will need the total number of hours worked that are funded by the Recovery Act by category and the total number of hours worked for the entire project by labor category The number of hours in a full-time schedule for a quarter will equal 520 (one-quarter of 2,080)

The two formulas for reporting Cumulative Jobs Created/Retained are represented as.
"Cumulative Recovery Act Funded Hours Worked (qtr l n)" divided by
cumulative hours in a full-fime schedule" Cumulative Total Project Hours Worked (qtr 1 n)" divided by cumulative hours in a full-fime schedule"

## B. Reporting Requirements for Metrics and Benefits

The recipient is required to repon Build Metrics on a quarterly basis and Impact Metrics and Benefits on a semi-annual basis following the award date Baselinc data will be provided as specified within the Metrics and Benefits Reporting Plan The recipient will provide this information in a mutualiy agreed upon format and media to a location identified by DOE

## C. Reporting Requirements for Consumer Bchavior Studies

Special Note: This section only applies to recipients who proposed in their application submitted in response to the Funding Opportunity Announcement Number DE-FOA-0000058 to conduct a consumer bchaviur study with control and randomized treatment groups

Participating recipients shall submit a comprehensive interim Evaluation Report, within 360 days following commencement of the Consumer Behavior Study, and a final Evaluation report at completion of the study, as specified in the Consumer Behavior Study Plan. Participating recipients shall submit a draft of both the interim and final Evaluation Reports to DOE and make a good faith effort to address issues raised by DOE in the final version of the Evaluation Reports The Evaluation Reports shall include at a minimum

1. Overview of the project, including its goals,
2. Description of how the project was designed and implemented to achieve these goals,

3 Synopsis of the evaiuation framework and methodology, and
4. Summary of the results and lessons learned

The Final Evaluation Report will be made available to the public, confidential information should not be included

C 2 Provision of Project Data

The recipient shall be responsible for submitting comprehensive data that was used, or served as the foundation, for the analysis of the dynamic pricing with randomization project, as delined within the Consumer Behavior Study Plan Please refer to Appendix D of the Guidebook The recipient will provide customerlevel data in a mutually agreed upon format and media to DOE, or an entity designated by DOE (e g a national laboratory) It is expected that the data provided to DOE shall have gone through the necessary quality assurance processes internal to the recipient in order to ensure the data is accurate and complete This data shall be consistent with requirements outlined in the final submitted Consumer Behavior Study Plan

The data will be publicly available for subsequent analysis and evaluation for those interested in assessing and better understanding the impacts that dynamic pricing enabled by the smart grid can have on customer behavior The identity of specific customers shall not be included with the data To protect customer confidentiality, masked customer identifiers shall be provided for individual customers

It is expected that the data will include at a minimum the following data elements for each customer. I) hourly interval data for electric consumption, tariff pricing (i e , retail rate level in effect), and weather, 2) customer characteristics (as described in Appendix D of the Guidebook), and 3) hourly electricity usage data for $12-18$ months prior to the dynamic pricing project

## Federal Assistance Reporting Instructions (2/09)

## A. MAANAGEMENT REPORTING

## Progress Repont

The Progress Report must provide a concise narrative assessment of the status of work and include the following information and any other information identified under Special Instructions on the Federal Assistance Reporting Checklist. The Recipient must report data specified in this section monthly for the first six months of the award and quarterly thereafter unless the monthly frequency is approved by the Office of Management and Budget. The Recipient will provide the data required in the Progress Report via an e-mail or mutually agreed upon format and media.

1 The DOE award number and name of the recipient.
2. The project title and name of the project director/principal investigator
3. Date of report and period covered by the report.
4. A comparison of the actual accomplishments with the goals and objectives established for the period and reasons why the established goals were not met
5. A discussion of what was accomplished under these goals during this reporting period, including major activities, significant results, major findings or conclusions, key outcomes or other achievements. This section should not contain any proprietary data or other information not subject to public release. If such information is important to reporting progress, do not include the information, but include a note in the report advising the reader to contact the Principal Investigator or the Project Director for further information.
6. Any changes in approach or aims and reasons for change. Remember significant changes to the objectives and scope require prior approval by the contracting officer.

7 Actual or anticipated problems or delays and actions taken or planned to resolve them.
8. Any absence or changes of key personnel or changes in consortium/teaming arrangement.
9. A description of any product produced or technology transfer activities accomplished during this reporting period, such as:
A. Publications (list journal name, volume, issue); conference papers; or other public releases of results.
B. Web site or other Internet sites that reflect the results of this project.
C. Networks or collaborations fostered
10. The recipient will provide monthly project execution data in a mutually agreed upon format and media to DOE. It is expected that the dataset provided to DOE shall have gone through the necessary quality assurance processes internal to the recipient in order to ensure the data is accurate and complete.

A Project Value Management System (PVMS) Reporting -- The input of PVMS data described below will be required. PVMS reporting will be at the Project Level.

| Field |  | Definition/Metrics | Field Type |
| :--- | :--- | :--- | :--- |
| ACWP | Actual Cost of <br> Work <br> Performed | The cost actually incurred for the work accomplished during <br> the month. | Input |
| BCWP | Budgeted Cost <br> of Work <br> Performed | Sum of all budgets for all completed work and the <br> completed portions of ongoing work. Total budget for the <br> scope that was actually accomplished during the month | Input |
| BCWS | Budgeted Cost <br> of Work <br> Scheduled | Planned accomplishment established in performance <br> measurement baseline. | Input |
| ETC | Estimate to <br> Complete | Current estimate for the remaining project scope. This is <br> the estimate for all remaining work excluding contingencies. | Input |
| BAC | Budget at <br> Completion | Sum of all budgets allocated to a project excluding <br> management reserve | Input |

B. Risk Management Data Reporting - Recipients will submit updates of the Risk Management Plan (RMP) to DOE in the event of changes to the risk profile data required as part of the Project Execution Plan (PEP)

## Special Status Report

The recipient must report the following events by e-mail as soon as possible after they occur:

1. Developments that have a significant favorable impact on the project

2 Problems, delays, or adverse conditions which materially impair the recipient's ability to meet the objectives of the award or which may require DOE to respond to questions relating to such events from the public The recipient must report any of the following incidents and include the anticipated impact and remedial action to be taken to correct or resolve the problem/condition:
a. Any single fatality or injuries requiring hospitalization of five or more individuals.
b. Any significant environmental permit violation.
c. Any verbal or written Notice of Violation of any Environmental, Safety, and Health statutes
d Any incident which causes a significant process or hazard control system failure
e. Any event which is anticipated to cause a significant schedule slippage or cost increase
f. Any damage to Government-owned equipment in excess of $\$ 50,000$
g. Any other incident that has the potential for high visibility in the media.

## B. SCIENTIFIC/TECHNICAL REPORTS - Not applicable to this award.

## Final Scientific/Technical Report

Content. The final scientific/technical report must include the following information and any other information identified under Special Instructions on the Federal Assistance Reporting Checklist:

1. Identify the DOE award number, name of recipient; project title; name of project director/principal investigator; and consortium/teaming members.
2. Display prominently on the cover of the report any authorized distribution limitation notices, such as patentable material or protected data. Reports delivered without such notices may be deemed to have been furnished with unlimited rights, and the Government assumes no liability for the disclosure, use or reproduction of such reports.

3 Provide an executive summary, which includes a discussion of 1) how the research adds to the understanding of the area investigated; 2) the technical effectiveness and economic feasibility of the methods or techniques investigated or demonstrated; or 3) how the project is otherwise of benefit to the public. The discussion should be a minimum of one paragraph and written in terms understandable by an educated layman.
4. Provide a comparison of the actual accomplishments with the goals and objectives of the project.
5. Summarize project activities for the entire period of funding, including original hypotheses, approaches used, problems encountered and departure from planned methodology, and an assessment of their impact on the project results. Include, if applicable, facts, figures, analyses, and assumptions used during the life of the project to support the conclusions.
6. Identify products developed under the award and technology transfer activities, such as:
a Publications (list journal name, volume, issue), conference papers, or other public releases of results.
b. Web site or other Internet sites that reflect the results of this project;
c. Networks or collaborations fostered;
d. Technologies/Techniques;
e Inventions/Patent Applications, licensing agreements; and
f. Other products, such as data or databases, physical collections, audio or video, software or netware, models, educational aid or curricula, instruments or equipment.
7. For projects involving computer modeling, provide the following information with the final report:
a. Model description, key assumptions, version, source and intended use;
b. Performance criteria for the model related to the intended use;
c. Test results to demonstrate the model performance criteria were met (e g, code verification/validation, sensitivity analyses, history matching with lab or field data, as appropriate);
d. Theory behind the model, expressed in non-mathematical terms;
e. Mathematics to be used, including formulas and calculation methods:
f. Whether or not the theory and mathematical algorithms were peer reviewed, and, if so, include a summary of theoretical strengths and weaknesses;
g. Hardware requirements; and
h. Documentation (e g, users guide, model code)

Electronic Submission. The final scientific/technical report must be submitted electronically-via the DOE Energy Link System (E-Link) accessed at http://www. osti.gov/elink-2413.

Electronic Format Reports must be submitted in the ADOBE PORTABLE DOCUMENT FORMAT (PDF) and be one integrated PDF file that contains all text, tables, diagrams, photographs, schematic, graphs, and charts.

Submittal Form. The report must be accompanied by a completed electronic version of DOE Form 241.3, "U.S. Department of Energy (DOE), Announcement of Scientific and Technical Information (STI)." You can complete, upload, and submit the DOE F 241.3 online via E-Link. You are encouraged not to submit patentable material or protected data in these reports, but if there is such material or data in the report, you must: (1) clearly identify patentable or protected data on each page of the report; (2) identify such material on the cover of the report; and (3) mark the appropriate block in Section K of the DOE F 241.3 Reports must not contain any limited rights data (proprietary data), classified information, information subject to export control classification, or other information not subject to release. Protected data is specific technical data, first produced in the performance of the award that is protected from public release for a period of time by the terms of the award agreement.

Protected Personally Identifiable Information (PII). Management Reports must not contain any Protected PII. PII is any information about an individual which can be used to distinguish or trace an individual's identity. Some information that is considered to be PII is available in public sources such as telephone books, public websites, university listings, etc. This type of information is considered to be Public PII and includes, for example, first and last name, address, work telephone number, e-mail address, home telephone number, and general educational credentials. In contrast,

Protected Pll is defined as an individual's first name or first initial and last name in combination with any one or more of types of information, including, but not limited to, social security number, passport number, credit card numbers, clearances, bank numbers, biometrics, date and place of birth, mother's maiden name, criminal, medical and financial records, educational transcripts, etc.

## Conference Papers/Proceedings

Content. The recipient must submit a copy of any conference papers/proceedings, with the following information: (1) Name of conference; (2) Location of conference; (3) Date of conference; and (4) Conference sponsor.

Electronic Submission. Scientific/technical conference paper/proceedings must be submitted electronically-via the DOE Energy Link System (E-Link) at http.//www.osti.gov/elink-2413 Non-scientific/technical conference papers/proceedings must be sent to the URL listed on the Reporting Checklist.

Electronic Format. Conference papers/proceedings must be submitted in the ADOBE PORTABLE DOCUMENT FORMAT (PDF) and be one integrated PDF file that contains all text, tables, diagrams, photographs, schematic, graphs, and charts

Submittal Form. Scientific/technical conference papers/proceedings must be accompanied by a completed DOE Form 241.3. The form and instructions are available on E-Link at http://www.osti gov/elink-2413. This form is not required for non-scientific or non-technical conference papers or proceedings.

Software/用anual _ Not applicable to this award.
Content. Unless otherwise specified in the award, the following must be delivered: source code, the executable object code and the minimum support documentation needed by a competent user to understand and use the software and to be able to modify the software in subsequent development efforts.

Electronic Submission. Submissions may be submitted electronically-via the DOE Energy Link System (E-Link) at http://www.osti.gov/estsc/241-4pre.jsp. They may also be submitted via regular mail to:

Energy Science and Technology Software Center
P.O. Box 1020

Oak Ridge, TN 37831
Submittal Form. Each software deliverable and its manual must be accompanied by a completed DOE Form 241.4 "Announcement of U.S. Department of Energy Computer Software." The form and instructions are available on E-Link at http.//www.osti.gov/estsc/241. 4pre.jsp.

## C. FINANCIAL REPORTING

Recipients must complete the SF-425 as identified on the Reporting Checklist in accordance with the report instructions. A fillable version of the form is available at http://www.whitehouse gov/omb/grants/grants forms.aspx

## D. CLOSEOUT REPORTS

## Final Invention and Patent Report - Not applicable to this award.

The recipient must provide a DOE Form 2050.11, "PATENT CERTIFICATION" This form is available at http://www.directives.doe.gov/pdfs/forms/2050-11.pdf and http://management.energy.gov/business doe/business forms.htm

## Property Certification

The recipient must provide the Property Certification, including the required inventories of nonexempt property, located at http://management.energy.gov/business doe/business forms.htm.

## E OTHER REPORTING

## Annual Indirect Cost Proposal and Reconciliation

Requirement. In accordance with the applicable cost principles, the recipient must submit an annual indirect cost proposal, reconciled to its financial statements, within six months after the close of the fiscal year, unless the award is based on a predetermined or fixed indirect rate(s), or a fixed amount for indirect or facilities and administration (F\&A) costs.

Cognizant Agency. The recipient must submit its annual indirect cost proposal directly to the cognizant agency for negotiating and approving indirect costs.

## Annual Inventory of Federally Owned Property

Requirement. If at any time during the award the recipient is provided Government-furnished property or acquires property with project funds and the award specifies that the property vests in the Federal Government (i.e. federally owned property), the recipient must submit an annual inventory of this property no later than October $30^{\text {th }}$ of each calendar year, to cover an annual reporting period ending on the preceding September $30^{\text {th }}$.

Content of Inventory. The inventory must include a description of the property, tag number, acquisition date, location of property, and acquisition cost, if purchased with project funds The report must list all federally owned property, including property located at subcontractor's facilities or other locations

## Intellectual Property Provisions Nonresearch and Development

For all recipient organizations, the following intellectual property provisions shall apply:
(a) Recipients may copyright any work that is subject to copyright and was developed under an award. DOE reserves a royalty-free, nonexclusive and irrevocable right to reproduce, publish or otherwise use the work for Federal purposes and to authorize others to do so.
(b) The DOE has the right to: (1) obtain, reproduce, publish or otherwise use the data first produced under an award; and (2) authorize others to receive, reproduce, publish or otherwise use such data for Federal purposes.

Nonprofit organizations are additionally subject to the intellectual property requirements set forth at 10 CFR 600.136(d).

For certain "impact metrics" data which Recipients are required to report pursuant to Attachment B, Federal Assistance Reporting Checklist, Section 5.B (Special Instructions - Other Reporting, Reporting Requirements for Metrics and Benefits), Recipients may mark such data, as set forth below, as "Commercially Valuable Smart Grid Data", and shall deliver such data to the National Renewable Energy Laboratory (NREL), and not to DOE.

COMMERCIALLY VALUABLE SMART GRID DATA
Recipient agrees to deliver to the National Renewable Energy Laboratory (NREL) all "impact metrics" data as described in the Guidebook for ARRA Smart Grid Program Metrics and Benefits, dated Dec. 7, 2009, as amended from time to time, to be submitted by the Recipient in accordance with its Metrics and Benefits Reporting Plan as required pursuant to Attachment B, Federal Assistance Reporting Checklist, Section 5.B (Special Instructions - Other Reporting, Reporting Requirements for Metrics and Benefits), of this agreement.

Based on information identified above that has been and will be provided by Recipient, the parties agree that the data required to be delivered to NREL. under this clause has commercial value and its disclosure would cause competitive harm to the commercial value or use of the data.

In accordance with 10 C.F.R. 1004.3(e), Recipient shall mark any such data to be delivered to NREL with the following legend:
"Commercially Valuable Smart Grid Technical Data and Information. Withhold from Disclosure under 10 C.F.R. 1004.3(e). The use of this data by NREL is governed by the provisions of the DOE grant. Unless compelled by a court of competent jurisdiction, there may be no public release of this data to the public without the written consent of the Recipient and DOE. Aggregate data that does not identify company-specific impact metric information may be released as set forth in the grant."

Other information required to be delivered, but not covered under this Commercially Valuable Smart Grid Data clause, shall be delivered in accordance with Attachment B, Federal Assistance Reporting Checklist and Instructions, to this agreement.
(August 2008)
To the extent that a term does not apply to a particular type of activity or award, it is selfdeleting.

## I. Nondiscrimination Policies

You must comply with applicable provisions of the following national policies prohibiting discrimination:

1 On the basis of race, color, or national origin, in Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.), as implemented by DOE regulations at 10 CFR part 1040;

2 On the basis of sex or blindness, in Title IX of the Education Amendments of 1972 (20 U.S.C. 1681 et seq.), as implemented by DOE regulations at 10 CFR parts 1041 and 1042;

3 On the basis of age, in the Age Discrimination Act of 1975 (42 U.S.C. 6101 et seq.), as implemented by Department of Health and Human Services regulations at 45 CFR part 90 and DOE regulations at 10 CFR part 1040;

4 On the basis of disability, in Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), as implemented by Department of Justice regulations at 28 CFR part 41 and DOE regulations at 10 CFR part 1041;

5 On the basis of race, color, national origin, religion, disability, familial status, and sex under Title VIII of the Civil Rights Act ( 42 U.S.C. 3601 et seq.) as implemented by the Department of Housing and Urban Development at 24 CFR part 100; and

6 On the basis of disability in the Architectural Barriers Act of 1968 (42 U.S.C. 4151 et seq.) for the design, construction, and alteration of buildings and facilities financed with Federal funds.

## II. Environmental Policies

You must:
1 Comply with applicable provisions of the Clean Air Act (42 U.S.C.7401, et. seq.) and Clean Water Act ( 33 U.S.C. 1251, et. seq.), as implemented by Executive Order 11738 [3 CFR, 1971-1975 Comp., p. 799] and Environmental Protection Agency rules at 40 CFR part 32, Subpart J.
2 Immediately identify to us, as the awarding agency, any potential impact that you find this award may have on:
a. The quality of the human environment, including wetlands, and provide any help we may need to comply with the National Environmental Policy Act (NEPA, at 42 U.S.C. 4321 et. seq.) and assist us to prepare Environmental Impact Statements or other environmental documentation. In such cases, you may take no action that will have an adverse environmental impact (e.g., physical disturbance of a site such as breaking of ground) or limit the choice of reasonable alternatives until we provide written notification of Federal compliance with NEPA, as implemented by DOE at 10 CFR part 1021 .
b. Flood-prone areas, and provide any help we may need to comply with the National Flood Insurance Act of 1968 and Flood Disaster Protection Act of 1973 (42 U.S.C. 4001 et. seq.), which require flood insurance, when available, for Federally assisted construction or acquisition in flood-prone areas, as implemented by DOE at 10 CFR part 1022.
c. Use of land and water resources of coastal zones, and provide any help we may need to comply with the Coastal Z.one Management Act of 1972(16 U.S.C. 1451, et. seq.).
d. Coastal barriers along the Atlantic and Gulf coasts and Great Lakes' shores, and provide help we may need to comply with the Coastal Barriers Resource Act (16 U.S.C. 3501 et. seq.), concerning preservation of barrier resources.
e. Any existing or proposed component of the National Wild and Scenic Rivers system, and provide any help we may need to comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271 et seq.).
f. Underground sources of drinking water in areas that have an aquifer that is the sole or principal drinking water source, and provide any help we may need to comply with the Safe Drinking Water Act( 42 U.S.C. $300 \mathrm{~h}-3$ ).

3 Comply with applicable provisions of the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4821-4846), as implemented by the Department of Housing and Urban Development at 24 CFR part 35. The requirements concern lead-based paint in housing owned by the Federal Government or recejving Federal assistance.

4 Comply with section 6002 of the Resource Conservation and Recovery Act of 1976, as amended ( 42 U.S.C. 6962), and implementing regulations of the Environmental Protection Agency, 40 CFR Part 247, which require the purchase of recycled products by States or political subdivision of States.

## III. Live Organisms

1 Human research subjects. You must protect the rights and welfare of individuals that participate as human subjects in research under this award in accordance with the Common Federal Policy for the Protection of Human Subjects ( 45 CFR part 46) , as implemented by DOE at 10 CFR part 745.

## 2 Animals and plants.

a. You must comply with applicable provisions of Department of Agriculture rules at 9 CFR parts 1-4 that implement the Laboratory Animal Welfare Act of 1966 (7 U.S.C. $2131-$ 2156) and provide for humane transportation, handling, care, and treatment of animals used in research, experimentation, or testing under this award.
b. You must follow the guidelines in the National Academy of Sciences(NAS) Publication "Guide for the Care and Use of Laboratory Animals"(1996, which may be found currently at http://www.nap.edu/readingroom/books/labrats/) and comply with the Public Health Service Policy and Government principles Regarding the Care and use of animals (included as Appendix D to the NAS Guide).
c. You must immediately identify to us, as the awarding agency, any potential impact that you find this award may have on endangered species, as defined by the Endangered Species Act of 1973, as amended ("the Act," 16 U.S.C. 1531-1543), and implementing regulations of the Departments of the Interior ( 50 CFR parts 10-24) and Commerce ( 50 CFR parts 217-227). You also must provide any help we may need to comply with 16 U.S.C. 1536(a)(2). This is not in lieu of responsibilities you have to comply with provisions of the Act that apply directly to you as a U.S. entity, independent of receiving this award.

## IV. Other National Policies

1 Debarment and suspension. You must comply with requirements regarding debarment and suspension in Subpart C of 2 CFR parts 180 and 901.

2 Drug-free workplace. You must comply with drug-free workplace requirements in Subpart B of 10 CFR part 607, which implements sec. 5151-5160 of the Drug-Free Workplace Act of 1988 (Pub. L. 100-690, Title V, Subtitle D; 41 U.S.C. 701, et seq.).

## 3 Lobbying.

a. You must comply with the restrictions on lobbying in 31 U.S.C.1352, as implemented by DOE at 10 CFR part 601 , and submit all disclosures required by that statute and regulation.
b. If you are a nonprofit organization described in section 501(c)(4)of title 26, United States Code (the Internal Revenue Code of 1968), you may not engage in lobbying activities as defined in the Lobbying Disclosure Act of 1995 (2 U.S.C., Chapter 26). If we determine that you have engaged in lobbying activities, we will cease all payments to you under this and other awards and terminate the awards unilaterally for material failure to comply with the award terms and conditions. By submitting an application and accepting funds under this agreement, you assure that you are not an organization described in section 501(c)(4) that has engaged in any lobbying activities described in the Lobbying Disclosure Act of 1995 (2 U.S.C. 1611).
c. You must comply with the prohibition in 18 U.S.C. 1913 on the use of Federal funds, absent express Congressional authorization, to pay directly or indirectly for any service, advertisement or other written matter, telephone communication, or other device intended to influence at any time a Member of Congress or official of any government concerning any legislation, law, policy, appropriation, or ratification.
4. Officials not to benefit. You must comply with the requirement that no member of Congress shall be admitted to any share or part of this agreement, or to any benefit arising from it, in accordance with 41U.S.C. 22.

5 Hatch Act. If applicable, you must comply with the provisions of the Hatch Act (5 U.S.C. 1501-1508 and 7324-7326), as implemented by the Office of Personnel Management at 5 CFR part 151, which limits political activity of employees or officers of State or local governments whose employment is connected to an activity financed in whole or part with Federal funds.

6 Native American graves protection and repatriation. If you control or possess Native American remains and associated funerary objects, you must comply with the requirements of 43 CFR part 10 , the Department of the Interior implementation of the Native

American Graves Protection and Repatriation Act of 1990 (25 U.S.C., chapter 32).
7 Fly America Act. You must comply with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. 40118), commonly referred to as the "Fly America Act," and implementing regulations at 41 CFR 301-10.131 through 301-10.143. The law and regulations require air transport of people or property to, from, between or within a country other than the United States, the cost of which is supported under this award, to be performed by or under a cost-sharing arrangement with a U.S. flag carrier, if service is available.

## 8. Use of United States-flag vessels.

a. Pursuant to Pub. L. 664 (43 U.S.C. 1241 (b)), at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds under this award, and which may be transported by ocean vessel, must be transported on privately owned United States-flag commercial vessels, if available.
b. Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph 9.a of this section shall be furnished to both our award administrator (through you in the case of your contractor's bill-oflading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

9 Research misconduct. You must comply with the government-wide policy on research misconduct issued by the Office of Science and Technology Policy (available in the Federal Register at 65 FR 76260 , December 6,2000, or on the Internet at www.ostp.gov), as implemented by DOE at 10 CFR part 733 and 10 CFR 600.31.

## 10 Requirements for an Institution of Higher Education Concerning Military recruiters and Reserve Officers Training Corps (ROTC).

a. As a condition for receiving funds under an award by the National Nuclear Security Administration of the Department of Energy, you agree that you are not an institution of higher education that has a policy or practice placing any of the restrictions specified in 10 U.S.C. 983. as implemented by 32 CFR part 216 , on:
i. Maintenance, establishment, or operation of Senior ROTC units, or student participation in those units; or
ii. Military recruiters' access to campuses, students on campuses, or information about students.
b. If you are determined, using the procedures in 32 CFR part 216 , to be such an institution of higher education during the period of performance of this award, we:
i. Will cease all payments to you of funds under this award and all other awards subject to the requirements in 32 CFR pait 216 , and
ii. May suspend or terminate those awards unilaterally for material failure to comply with the award terms and conditions.
11. Historic preservation You must identify to us any:
a. Any property listed or eligible for listing on the National Register of Historic Places that will be affected by this award, and provide any help we may need, with respect to this award, to comply with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as implemented by the Advisory Council on Historic Preservation regulations at 36 CFR part 800 and Executive Order 11593, "Identification and Protection of Historic Properties," [3 CFR, 1971-1975 Comp., p. 559].
b. Potential under this award for irreparable loss or destruction of significant scientific, prehistorical, historical, or archeological data, and provide any help we may need, with respect to this award, to comply with the Archaeological and Historic Preservation Act of 1974 (16 U.S.C.469a-1, et seq.).

12 Relocation and real property acquisition. You must comply with applicable provisions of 49 CFR part 24, which implements the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970(42 U.S.C. 4601, et seq.) and provides for fair and equitable treatment of persons displaced by federally assisted programs or persons whose property is acquired as a result of such programs.

13 Confidentiality of patient records. You must keep confidential any records that you maintain of the identity, diagnosis, prognosis, or treatment of any patient in connection with any program or activity relating to substance abuse education, prevention, training, treatment, or rehabilitation that is assisted directly or indirectly under this award, in accordance with 42 U.S.C. $290 \mathrm{dd}-2$.

14 Constitution Day. You must comply with Public Law 108-447, Div. J, Title I, Sec. 111 ( 36 U.S.C. 106 note), which requires each educational institution receiving Federal funds in a Federal fiscal year to hold an educational program on the United States Constitution on September 17 thduring that year for the students served by the educational institution.

## 15 Trafficking in Persons

a. Provisions applicable to a recipient that is a private entity.

1. You as the recipient, your employees, subrecipients under this award, and subrecipients' employees may not-
i. Engage in severe forms of trafficking in persons during the period of time that the award is in effect;
ii. Procure a commercial sex act during the period of time that the award is in effect; or
iii. Use forced labor in the performance of the award or subawards under the award.
2. We as the Federal awarding agency may unilaterally terminate this award, without penalty, if you or a subrecipient that is a private entity -
i. Is determined to have violated a prohibition in paragraph a. 1 of this award term; or
ii. Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph a.l of this award term through conduct that is either-
A. Associated with performance under this award; or
B. Imputed to you or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 CFR part 901.
b. Provision applicable to a recipient other than a private entity. We as the Federal awarding agency may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity-
3. Is determined to have violated an applicable prohibition in paragraph a. 1 of this award term; or
4. Has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in paragraph a. 1 of this award term through conduct that is either-
i. Associated with performance under this award; or
ii. Imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at 2 CFR part 901.
c. Provisions applicable to any recipient.
5. You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in paragraph a. 1 of this award term.
6. Our right to terminate unilaterally that is described in paragraph a. 2 or b. of this section:
i. Implements section $106(\mathrm{~g})$ of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. $7104(\mathrm{~g})$ ), and
ii. Is in addition to all other remedies for noncompliance that are available to us under this award.
7. You must include the requirements of paragraph a. 1 of this award term in any subaward you make to a private entity.
d. Definitions. For purposes of this award term:
8. "Employee" means either:
i. An individual employed by you or a subrecipient who is engaged in the performance of the project or program under this award; or
ii. Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.
9. "Forced labor" means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.
10. "Private entity":
i. Means any entity other than a State, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25.
ii. Includes:
A. A. nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR 175.25(b).
B. A for-profit organization.
11. "Severe forms of trafficking in persons," "commercial sex act," and "coercion" have the meanings given at section 103 of the TVPA, as amended ( 22 U.S.C. 7102).

## V. National Policy Requirements for Subawards.

Recipient responsibility. You must include in any subaward you make under this award the requirements of the national policy requirements in Sections I through IV of this document that apply, based on the type of subawardee organization and situation.

# South Kentucky Rural Electric Cooperative Corporation AMI Deployment 

## A. Project Objectives

The objective of this project is to support the goal of the Smart Grid Investment Grant Funding Opportunity Announcement which is to accelerate the modernization of the nation's electric transmission, distribution, and delivery systems, and promote investments in smart grid technologies which increase flexibility, functionality, interoperability, cyber security, situational awareness and operational efficiency. An additional goal is to collect information from customers, distributors, and generators to understand how smart grid technologies may lead to reductions in demands and costs, increases energy efficiency, optimally allocates and matches demand and resources to meet that demand, and increases the reliability of the grid. The social benefits of a smart grid and energy storage technologies are reduced emissions, lower costs, increased reliability, greater security and flexibility to accommodate new energy technologies, including renewable, intermittent and distributed sources.

## B. Project Scope (Scope of Work)

The Scope of Work is in accordance with the Recipient's application submitted in response to the Smart Grid Investment Grant Program Funding Opportunity Announcement.
C. Tasks to be Performed

Tasks to be performed under this agreement are comprised of the actions and activities described in the Recipients proposal and the deliverables and reports defined elsewhere in the agreement

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South Kentucky Rural Electric Cooperative<br>Case No. 2011-00096<br>Second Information Request Witness: Jim Adkins

34. Refer to the Application, Exhibit 3, page 7 of 7, and Case No. 200900489, ${ }^{3}$ which address South Kentucky's proposed adjustment for retirement of mechanical meters and the installation of AMI meters.
a. Provide a schedule showing how many meters have been retired as of September 30, 2010 and a specific timeline for retiring the remainder of the mechanical meters.
b. Provide a status report on the installation of the AMI meters including a timeline for completion of the project.
c. Are meter purchases capitalized directly into Account 370 ?
d. Does South Kentucky have a predetermined cost of operation or maintenance capitalized in conjunction with the capitalization of the cost of meters?
e. Provide an analysis on what the completion of the AMI project will have on expense Accounts 586.00, Meter Expense, 597.00, Meter Maintenance, and 902.00, Meter Reading.
f. Provide the total expense for the accounts listed in the Response to part e., above, for the most recent five years.
g. Provide the estimated amount of annual expense for Account 902.00 , Meter Reading, which South Kentucky expects to incur after completion of the AMI project.
h. Will all of the meter bases in use by South Kentucky's customers accommodate the new AMI meters without the need to modify or replace the meter bases? If no, explain in detail the types and number of meter bases that will have to be modified or replaced, the cost per meter base and total cost for the modifications and
replacements, and whether the cost to modify or replace will be paid by South Kentucky or by the customer.
i. If any costs will be incurred by South Kentucky for the modification or replacement of meter bases, state whether those costs are reflected within the pending rate application, exhibits, and schedules, and if so, where the costs are reflected.
j. If any costs to modify or replace the meter bases will be paid directly by a South Kentucky customer, explain the reasons why the customer pays those costs and describe the procedures for notifying the customer of the need to modify or replace the meter base.

Response to Question 34.
a.

As of September 30, 2010
Thru December 2010
2011
2012

## Meters

14,617 324
33,563
37,723
b. Number of Meters installed as of August 30, 201143.653

September thru December $2011 \quad 7,891$
January thru September 2012
17,756
c. When meters are purchased, they go to Account 107.30 and then moved to Account 370 along with installation labor.
d. No
e. South Kentucky can only make what it feels is a very reasonable estimate upon the expense accounts. Listed below is the estimate for each account.

1. Accounts 586.00 - Meter Expense will decrease somewhat with the real savings be with the ability to read the meters when an account changes members. With about 16,000 such trips a year at an estimated cost of $\$ 20$ per trip, an estimated savings of $\$ 320,000$ could be realized.
2. Account --598-Meter maintenance will increase tremendously as these meters are still unknown for maintenance but other cooperatives in Kentucky have expressed a significant increase
in meter maintenance because these meters seem to be much more sensitive to items such as lightning than the older meters were.
3. Account 902 - Meter reading will decrease by approximately $80 \%$ because of a lesser need to read meters manually with the deployment of the AMI system. The decrease will not be less because of the need to physically read meters once a year also at other times meters will need to be read due to some type of malfunctions or problems.
f. Calendar 902*

| $\frac{\text { Year }}{2005}$ | $\frac{902.10}{473,828}$ |  | $\frac{597.00}{10,452}$ | $\frac{586.00}{866,709}$ |
| :--- | ---: | ---: | ---: | ---: |
| 2006 | 482,434 | 10,332 | 729,033 |  |
| 2007 | 521,853 | 12,672 | 828,027 |  |
| 2008 | 550,353 | 22,312 | 830,260 |  |
| 2009 | 551,745 | 27,492 | 979,354 |  |

g. See Response to $E$ above.
h. No, damaged meter bases are found during the installation of AMI meters. The average cost to fix damaged meter bases is $\$ 362.00$. South Kentucky pays for the modification to the meter bases. Half of the cost is reimbursed by the DOE grant.
i. Yes, a minimal amount.
j. See Response to Item $h$.

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South Kentucky Rural Electric Cooperative
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Witness: Jim Adkins
35. Refer to the Application, Exhibit 4, pages 1 and 2.
a. Provide a detailed explanation for the property tax adjustment.
b. In Case No. 2008-00371,4 the Commission authorized South Kentucky to construct a new headquarters facility.
(1) Provide a status report on this construction including costs incurred to date for land, engineering, structures, etc. by account and year.
(2) Provide a timeline for completion of the construction.
(3) Explain whether the construction has impacted the proposed property tax adjustment.
(4) Explain how the completed construction will affect operating expenses.
c. Refer to the Analysis of Other Operating Taxes on page 2.
(1) Explain why no adjustment was made to Other Taxes listed on Line No. 1.(e) to reflect an increase in Account 408.70, Public Service Company Assessment Fee, which would result from the proposed revenue increase in this case.
(2) Explain why Account 408.70 is not listed in Exhibit M, Chart of Accounts or Exhibit $Y$-Trial Balance.

Response to Question 35.
a. The property tax bills for 2010 were compared to the property tax bills for 2009. The increase was $\$ 49,536$. This increase was allocated to accounts based on the test year accrual. The difference between the amounts reported on page 7 and the adjustment on page 1 is due to a combination of amounts allocated to non-operating accounts and rounding. Neither of these would affect the adjustment to expenses that South Kentucky would propose.
b. Reference Case No. 2008-00371:

4 Case No. 2008-00371, Application of South Kentucky Rural Electric Cooperative Corporation for a Certificate of Public Convenience and Necessity to Construct a New Headquarters Facility in Somerset, Kentucky (Ky. PSC May 11, 2010).
(1) All amounts are included in Account 108.70. The total costs are $\$ 972,150$, which are comprised of surveying, design fees, filing fees, and a facilities assessment.
(2) At present there has been no construction and no estimated timeline for completion of the new headquarters facility.
(3) Construction work in progress is taxed at a $50 \%$ rate. The amount that the property tax adjustment would be affected would be on $\$ 908,344$, which would result in estimated taxes of $\$ 2,044$.
(4) The impact is included in the above referenced case. South Kentucky does not propose any impacts from the new headquarters in this application.
c. Analysis of Other Operating Taxes:
(1) This adjustment was not made by South Kentucky. However, we realize that the Public Service Company Assessment Fee would increase as a result of an increase in revenues.
(2) South Kentucky records this assessment with property taxes and allocates this amount the same as the allocation as listed in Exhibit 4, page 1 of the application.

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South Kentucky Rural Electric Cooperative<br>Case No. 2011-00096<br>Second Information Request<br>Witness: Jim Adkins

36. Refer to the Application, Exhibit 5, page 2. This is a schedule of South Kentucky's outstanding long-term debt. Provide an update of the schedules on pages 1-3 that reflect the current interest rates for long-term debt applied to the long-term debt balances as of the end of the proposed test year as a result of Case No. 2010-00355. ${ }^{5}$

Response to Question 36.
Exhibit 5, page 2, reflects the refinancing of RUS loans with CFC funds and also includes the current interest rates as a result of Case No. 2010-00355. The interest rates on the loans to CFC are fixed and will not change during the term of the loans. There are no changes in rates from the date of the application to the present for any of the loans listed.

5 Case No. 2010-00355, Application of South Kentucky Rural Electric Cooperative Corporation for Authorization to Borrow \$10,074,440 from The National Rural Utilities Cooperative Finance Corporation and Execute Necessary Note to Prepay Rural Utilities Service 5 Percent Notes of the Same Amount (Ky. PSC Sept. 23, 2010)

South Kentucky Rural Electric Cooperative<br>Case No. 2011-00096<br>Second Information Request Witness: Jim Adkins

37. Refer to the Application, Exhibit 8. In the first paragraph of page 1, it states that "South Kentucky offered an alternative to he (sic) reduce the premiums for both the employer and employee through the option of a PPO or a Health Savings Account (HAS)."
a. Provide a schedule showing which plan the employees chose for 2011 as well as the resulting cost.
b. If the amount of the medical adjustment has changed since the submission of the Application, provide updates to all affected exhibits.

Response to Question 37.
a. The number of billings listed in the "Proposed" section of Exhibit 8, page 2, are the actual plans selected by employees. The cost is the same as proposed in the adjustment.
b. The rates as reflected on page 2 are still in effect. The adjustment is the same as proposed in the application.

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South Kentucky Rural Electric Cooperative Case No. 2011-00096<br>Second Information Request Witness: Jim Adkins

38. Refer to the Application, Exhibit 9, page 1, third paragraph, regarding the hiring of a consulting firm, Garland \& Associates, to perform economic development activities.
a. Describe the process the board of directors followed for selecting a consulting firm to perform the economic development activities.
b Were any other consulting firms considered in the hiring process?
c. Provide an explanation as to what benefits South Kentucky has received to date, including any specific projects, as a result of the consulting efforts of Garland \& Associates.

Response to Question 38.
a. The board of directors discussed thoroughly what they were looking for in economic development and the desired results from hiring a consulting firm. After much discussion, the board determined that Garland \& Associates would be the best suited for providing economic development services for South Kentucky.
b. The board considered who in the area could provide the best service, and it was determined that Mr. Garland had experience with this type of activity and would best serve South Kentucky in its economic development activities.
c. Garland \& Associates, Inc. (Garland) provides knowledge and expertise in the area of economic development in all areas that South Kentucky serves. Garland visits local agencies and officials, particularly those affiliated with community and economic development. Garland makes applications for "Community Economic Development and Public Safety" purposes; works to generate USDA Loan Funds and Grants; creates industrial master plans that do not have such plans; conducts and assists in community meetings with emphasis on Economic Development; assist in recruiting new industries; works with new and existing businesses and industries in funding sources for job creation and retention in the service area.

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South Kentucky Rural Electric Cooperative Case No. 2011-00096<br>Second Information Request Witness: Jim Adkins

39. Refer to the Application, Exhibit 12, where South Kentucky estimates the expenses associated with this rate case. On a monthly basis, beginning in October 2010, provide the amount of South Kentucky's actual rate case expenses, by category, as was done in the estimate. Consider this an ongoing request which is to be updated monthly.

Response to Question 39.
Costs thru July 31, 2011 are as follows:

| Date | Check\# | Payee |
| :---: | ---: | :--- |
| 1/14/2011 | 147918 | Jim Adkins Consulting |
| $7 / 14 / 2011$ | 150070 | Commonwealth Journal |
| $7 / 6 / 2011$ | 149955 | VISA - Office Depot |
| $8 / 11 / 2011$ | 150588 | VISA - Office Depot |
| $7 / 14 / 2011$ | 150087 | Wayne County Outlook |
| $7 / 14 / 2011$ | 150089 | Federal Express |
| $7 / 21 / 2011$ | 150229 | Federal Express |
| $7 / 14 / 2011$ | 150092 | Times Journal |
| $7 / 14 / 2011$ | 150266 | Darrell Saunders, PSC |
| $8 / 18 / 2011$ | 150773 | Darrell Saunders, PSC |
|  |  | Coop labor and benefits |


| Amount | Description |
| ---: | :--- |
| $50,428.50$ | Rate case preparation |
| $2,740.92$ | Advertising |
| 447.73 | Paper |
| 545.44 | Binders |
| $1,171.80$ | Advertising |
| 50.59 | Postage |
| 54.10 | Postage |
| $2,381.40$ | Advertising |
| 31.25 | Legal fees |
| 93.75 | Legal fees |
| $1,500.65$ | No overtime included |

$59,446.13$

# SOUTH KENTUCKY RECC <br> CASE NO. 2011-00096 <br> RESPONSE TO COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION <br> Witness: Jim Adkins 

## Refer to the Application Exhibit 16, the Year End Customer Growth Adjustment.

## a. Question:

This calculation uses a twelve month average. In recent rate cases filed with the Commission, the customer growth adjustment has been calculated using a thirteen-month average. Explain the basis for using a twelve month average.
a. Response:

The use of a twelve month average instead of a thirteen month was an oversight. Information was pulled from the billing data for the test year without recognizing that data for the month previous to the test year should be included. b. Question:

Explain why the rate class AES (All Electric Schools), as well as the residential and small commercial ETS rate classes are not included in the customer growth adjustment.
b. Response:

These classes were not included as they have had very little change in the number of customers. However, a revised year end growth adjustment has been developed using the wholesale and retail rates effective on June 1, 2011. This revised adjustment is based on the twelve month average as that is the data that is readily available.
c. Question:

Explain the calculation of the "Change" for Rate B and Rate STL.
c. Response:

The calculation are the normal ones and are carried out to several decimal places which are not shown on the schedule.
d. Question:

Provide the origin of the TY Base Revenues
d. Response:

The revenue amounts come from Exhibit J and are the rates in effect as this date.
e. Provide the origin of the Energy kWh for Rate B, Rate Stl, Rate OL, and Rate DST1.
e. Response:

This information comes from Exhibit R, Schedule 4.1.
f. Question:

Provide the origin of the "Total Consumers: for Rate STL and Rate OL.
f. Response:

This information comes from Exhibit J of the Application
g. Question:

Explain how the "Purchased Power Costs" were calculated.
g. Response:

This information is based on the Cost of Service Study and is located in Exhibit R, Schedule 6 in this study.
h. Question:

Revise this exhibit for corrections made in response to any of the above subparts to this question and for the revision made to Exhibit J in Response to Item 6 of this request for information, File that response in both hard copy and electronic format with the formulas intact and unprotected.
h. Response

The revised hard copy is page 3 of this response


# South Kentucky Rural Electric Cooperative Case No. 2011-00096 <br> Second Information Request Witness: Jim Adkins 

41. Refer to the Application, Exhibit 18. Explain why the total amount for Benefits Distribution of $\$ 4,056,906$ does not match the total Benefits of $\$ 4,053,509$.

Response to Question 41.
After the allocation of benefits was made, it was discovered there the amount for payroll taxes was the payments and not the accrual. This was not adjusted after the allocation was calculated.

South Kentucky Rural Electric Cooperative Case No. 2011-00096<br>Second Information Request Witness: Jim Adkins

42. Refer to the Application, Exhibit 19, page 1 of 3 , which shows the payment of capital credits to its members on an annual basis beginning with calendar year 2005. Provide a schedule of South Kentucky's capital credit payments for all years since the inception of the plan in the same format as used in the exhibit.

Response to Question 42.

Payments of capital credits since the inception of the plan are listed in Exhibit 19.

South Kentucky Rural Electric Cooperative Case No. 2011-00096<br>Second Information Request Witness: Jim Adkins

43. Refer to Application, Exhibit 20, which contains South Kentucky's depreciation study.
a. Refer to the first paragraph on page 1.
(1) Describe the differences in the "construction unit cost basis" and the "record unit basis" for maintaining continuing property records.
(2) State the reasons South Kentucky switched from the construction unit basis to the record unit basis.
b. Refer to the second paragraph on page 1.
(1) South Kentucky states that vintage accounting is a system where a plant is accounted for by year of installation and that South Kentucky did not use vintage accounting for mass property. Explain why the information provided by South Kentucky in Exhibit 20, Section 8, does not represent vintage accounting.
(2) Mr. Adkins states that, in the absence of vintage accounting, simulated plant records were created. Using the simulated plant records, Mr. Adkins assigned lowa Type Survivor Curves to determine the average service life for each distribution asset account group. He also created simulated plant records in the depreciation studies he recently prepared for Blue Grass Energy Cooperative ("Blue Grass") in Case No. 2008-00011 ${ }^{6}$ and for Clark Energy Cooperative ("Clark Energy") in Case No. 2009-00314. ${ }^{7}$ The average service lives assigned to each distribution asset account group of South Kentucky, Blue Grass, and Clark Energy are shown in Table 2.
[^6]Also listed in Table 2 are the estimated average service lives assigned to the electric distribution assets of investor owned utilities ("IOU's") Kentucky Utilities Company, Louisville Gas and Electric Company, and Duke Energy Kentucky, Inc. in depreciation studies submitted to the Commission in Case Nos. 2007-00565, ${ }^{8}$ 2007-00564, ${ }^{9}$ and 2006-00172, ${ }^{10}$ respectively. Each study was prepared by John Spanos of Gannet Flemming. In these studies, Mr. Spanos used the retirement rate method to assign survivor curves to each plant account group. The retirement rate method includes a combination of actual plant retirement data and statistically aged plant data. ${ }^{11}$

For comparative purposes, the lives assigned by the three rural electric cooperative corporations ("RECC's") to each asset account group were averaged and shown in Table 2, along the averaged lives assigned by the three IOU's. As shown in Table 2, except for Line Transformers and Installations on Customers' Premises, the averaged lives assigned to RECC distribution assets are significantly shorter than those assigned by IOU's.
(c) Discuss the reasons that Mr. Adkins' application of the Simulated Plant Records ("SPR") method results in such a significantly shorter life for the majority of distribution plant account groups when compared to Mr. Spanos' life assignments using the Retirement Rate Method.
${ }^{8}$ Case No. 2007-00565, Application of Kentucky Utilities Company to File a Depreciation Study (Ky. PSC Feb. 5, 2009).
${ }^{9}$ Case No. 2007-00564, Application of Louisville Gas and Electric Company to file Depreciation Study (Ky. PSC Feb. 25, 2009).
${ }^{10}$ Case No. 2006-00172, An Adjustment of the Electric Rates of the Union Light, Heat and Power Company D/B/A Duke Energy Kentucky, Inc. (Ky. PSC Dec. 21, 2006).
${ }^{11}$ Case No. 2007-00565, Application, Part 1, Direct Testimony of John Spanos, Depreciation Study, Part II, Page II-10; Case No. 2007-00564, Application, Part 1, Direct Testimony of John Spanos, Depreciation Study, Part II, Page II-10; and Application of Duke Energy, Volume 8, Depreciation Study filed to satisfy 807 KAR 5:001, Section 10(9)(s), Part II, Page II-10.
(d) Explain how the absence of actual plant retirement data by vintage may result in the assignment of shorter lives by the RECC's than the lives assigned by the IOU's who have this retirement data.
(e) Explain how the judgment required when developing the lowa Type Survivor Curve analysis impacts the lives assigned to each asset group, and how the physical make-up of the RECC's distribution plant is different than that of the IOU's resulting in shorter average service lives.
(f) Identify and describe the factors that cause equipment of RECC's, other than Line Transformers and Installations on Customers' Premises, to have a shorter economic life that similar equipment of IOU's.

Table2

| Distribution Plant | Average Life based on Survivar Curve Analysis |  |  |  |  |  | Average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rural Electric Cooperative Corp. (RECC) |  |  | Investor Owned Utilities (IOU) |  |  |  |  |
|  | South Kentucky | Blue Grass Energy | Clark Energy | Kentucky Utilities | Louisville Gas \& Electric | Duke Energy |  |  |
|  | 2011-00096 | 2008-80011 | 2009-00314 | 2007-00565 | 2007.00564 | 2006-00172 | RECC | 100 |
| Station Equipment | 10 | 24 |  | 52 | 55 | 45 | 17 | 51 |
| Poles, Towers and Fixtures | 32 | 39 | 31 | 48 | 50 | 44 | 34 | 47 |
| Overhead Conductor and Devices | 29 | 29 | 22 | 48 | 45 | 44 | 27 | 46 |
| Underground Conduit | 45 |  | 36 | 55 | 70 | 65 | 41 | 63 |
| Underground Conductors and Devices | 23 | 22 | 25 | 44 | 50 | 60 | 23 | 51 |
| Line Transformers | 45 | 38 | 33 | 40 | 45 | 425 | 39 | 43 |
| Sevice (Pole to House) | 28 | 22 | 47 | 43 | 45 | 515 | 32 | 47 |
| Meters | 24 | 22 | 12 | 40 | 30 | 28 | 19 | 33 |
| Meters, AMR |  |  |  |  |  |  |  |  |
| Installations on Customers' Premises | 24 | 31 | 17 | 20 |  | 25 | 24 | 23 |
| Street Lighting \& Signal Systems | 15 | 23 | 14 | 33 | 325 | 30 | 17 | 32 |

## Response to Question 43

a. Record unit accounting
(1) The "construction unit cost basis" is the unit of measure that is used to actually construct unit of plant. The "record unit basis" is the unit of plant that RUS recommends in its work order procedures manuals. A record unit may contain more than one construction unit of property.
(2) The RUS Field Auditor made the recommendation and RUS required all cooperatives that maintained CPRs on the construction unit cost basis to convert to the record unit basis. South Kentucky made the conversion as required by RUS.
b. Vintage accounting.
(1) The accounting software used by South Kentucky does not allow for vintage accounting. Additions and retirements are averaged for life to date by record unit. Retirements are recorded using the average plant balance for each record unit that is removed from service.
(2) Service lives of assets.
c) The use of Simulated Plant Records (SPR) instead of the Retirement Rate Method (RRM) in itself should not result in significant differences. The plant additions and retirements would account for this difference. Below is the average service life for Jackson Energy Cooperative, Case No. 2007-0033, which was prepared by Gannett Fleming, as compared to the average for the RECC's. As indicated, the differences for the average of the RECC's and Jackson Energy are not significantly different. This would indicate that the SPR method and the RRM method, in and of itself, would not result in significant average service life differences.

|  | Distribution Plant Accounts | Average Service Life |  |
| :---: | :---: | :---: | :---: |
|  |  | Average RECC | Jackson Energy |
| 362 | Station equipment | 17 | 15 |
| 364 | Poles, towers and fixtures Overhead conductor and | 34 | 29 |
| 365 | devices | 27 | 31 |
| 366 | Underground conduit Underground conductor and | 41 | 50 |
| 367 | devices | 23 | 30 |
| 368 | Line transformers | 39 | 39 |
| 369 | Services | 32 | 28 |
| 370 | Meters | 19 | 24 |
| 371 | Security lights | 24 | 21 |
| 373 | Street lights | 17 | 21 |

(d) Actual plant data by vintage should result in more accurate calculation of the average service lives. In the absence of vintage data, simulated data must be calculated to match the closeness between actual annual amounts and those that have been simulated. This should not result in shorter lives of assets.
(e) The RECC's plant is unique from IOU's in the standpoint that most of the plant makeup for RECC's is in very rural areas. Poles and conductor are installed on hillsides, along winding roads, through forests, and generally in any location available to get to consumers. Plant for IOU's is generally in more populated urban areas where construction is along streets and access that is easier to maintain.
(f) RECC's have right of way issues where minor wind and storms can cause trees to fall across lines, poles are on hillsides that can shift with rain and erosion, and pockets of growth can make existing conductor outdated and required to be replaced. IOU's generally do
not have the right of way issues and more planned growth, which would lend itself to less replacement of conductor.

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South Kentucky Rural Electric Cooperative<br>Case No. 2011-00096<br>Second Information Request<br>Witness: Jim Adkins

44. Refer to the Application, Exhibit 20, Scope, first page, third paragraph.
a. Describe how the SPR method is used to analyze data to fit the data to the "best curve."
b. Is the SPR method used in Exhibit 20 recognized by the Society of Depreciation Professionals as an acceptable method?

Response to Question 44.
a. The selection of a retirement dispersion was calculated for each account that matched the closeness between actual annual amounts and those that had been simulated when compared to one of the lowa Curves. The life with the closest match was selected as the average service life for that account.
b. Absent vintage records, the SPR method is recognized as acceptable by the Society of Depreciation Professionals.

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45. Refer to the Exhibit 20, Scope, second page, third paragraph. It states that, " $[t]$ he most likely retirement patterns and average service lives were developed based on the SPR analysis." State specifically how the retirement patterns and average service lives were developed using the SPR analysis. Include in the response, discussion of the degree of professional judgment required when developing the retirement patterns and average service lives.

Response to Question 45.
The actual plant retirements and balances were compared with the guideline curves and corresponding life for each asset account. There are no exact matches between the curves and lives, therefore, the actual activity that most closely matches a curve and historical life is selected as the best fit. The differences between each curve and historical life is summed with the lowest rated difference being the curve and life selected. Professional judgment is used to review the results to ensure they are reasonable and similar to other electric cooperatives.

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46. Refer to the Exhibit 20, Scope, second page, third paragraph. It states that the SPR analysis was "analyzed for appropriateness and a curve and service life were selected for each account."
a. State specifically the type of analysis performed. Include in the response, discussion of the degree of professional judgment required in this analysis.
b. State what is meant by appropriateness. Include in the response, discussion of the degree of professional judgment required when determining the appropriateness.
c. State specifically how a curve and service life was selected for each asset account group. Include in the response, discussion of the degree of professional judgment required when making these selections.

Response to Question 46.
a. The computer model calculates an average service life and historical life curve. The average service life and curve are compared to other RECC's to determine both are reasonable as compared to other studies performed.
b. The results were compared to other RECC's to determine if the results were similar. If the results were similar, then the average service lives were considered appropriate. Since South Kentucky was in the process of replacing its existing meters with AMI, it was determined that a historical life of 24 years would not be appropriate. There were also discussions with South Kentucky personnel as to whether there would be an aggressive pole, conductor, transformer, or other asset group replacement program. South Kentucky stated there was none anticipated, therefore, the historical lives appeared appropriate.
c. The SPR method was used to indicate the generalized survivor curve that best represents the life characteristics of each asset account since property records do not contain the age of the property upon retirement. The selection of the curve and average service life was based upon the closeness of the match between actual and simulated annual amounts. Curves and lives were compared to other studies performed for RECC's for reasonableness. AMI meters and station equipment, which relates to AMI were determined to have a life of 15 years. This is consistent with other electric cooperatives that have installed AMI.

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47. Refer to the Application, Exhibit 20, Scope, second page, fourth paragraph; Exhibit 20, Section 3, page 1; and Exhibit 20, Section 7.
a. In the Scope, South Kentucky states that net salvage was allocated to the primary account on a percentage basis. Provide the calculation of the allocations and explain why the allocations are appropriate.
b. In Section 3, the salvage is stated as a percentage of original cost.
(1) Explain why net salvage was not allocated to Station Equipment, Line Transformers, Meters, or Street Lighting.
(2) Explain why salvage value was allocated to underground conduit.
c. By applying the salvage percentages to original cost as stated on Section 3 , total net salvage is a negative $\$ 57,658,395$. Section 7 appears to detail historical salvage values. Show how the $\$ 57,658,395$ was derived from the information shown in Section 7. If the $\$ 57,658,395$ was not derived from the information shown in Section 7, provide work papers detailing its calculation.
Response to Question 47.
a. The allocation of net salvage is based upon assumptions. Net salvage percentages were based on the same percentages as other RECC's, then adjusted to arrive at net salvage percentages that would most closely relate to the actual net salvage as recorded by South Kentucky in its accumulated depreciation for distribution plant. South Kentucky used net salvage percentages that are similar to other electric cooperatives.
b. Net salvage percentages of original cost.
(1) Net salvage was applied to Street Lighting in the amount of $0.85 \%$ on the proposed rates. The rate of $45 \%$ was omitted from the schedule after the Scope section and calculation of composite remaining life in Section 5. Net salvage is not allocated to Station Equipment, Line Transformers, or Meters since the RUS Uniform System of Accounts requires any costs after the initial installation of transformers or meters to be expensed. The station equipment in service all relates to AMI equipment.
(2) When underground conduit is retired, employees record a portion of their labor to the retirement work order. Allocating a portion of net salvage to underground conduit more closely relates to the actual recording of labor on retirement work orders.
c. The net salvage ratios as indicated in Section 7 are calculated as indicated in 47.a. of this response. The negative $\$ 57,948,245$ is the result of multiplying the above ratio by the plant balance.

## South Kentucky Rural Electric Cooperative <br> Case No. 2011-00096 <br> Second Information Request <br> Witness: Jim Adkins

48. Refer to the Application, Exhibit 20, Scope, second page, last paragraph, first line. This line reads, "When utilizing the whole life method . . . ." Is this accurate or is this sentence actually referring to the remaining life method?

Response to Question 48.
The line should read "When utilizing the remaining life method $\qquad$

South Kentucky Rural Electric Cooperative<br>Case No. 2011-00096<br>Second Information Request<br>Witness: Jim Adkins

49. Refer to the Exhibit 20, Scope, third page, second paragraph, and page 4.
a. Provide all engineering data available to South Kentucky supporting the fifteen-year service life assigned to AMI meters.
b. From information provided by South Kentucky in its Application, it is understood that South Kentucky will replace all existing meters with AMI meters within the next three years. Explain why it is appropriate to assign a fifteen-year depreciable life to the new AMI meters when the analysis provided by South Kentucky in its depreciation study at Section 4, page 15, establishes the historic average life of a meter at twenty-four years.
c. Refer to page 4. Provide a list of other RECC's who utilize a fifteen-year depreciable life for recently installed AMI devices.

Response to Question 49.
a. South Kentucky has had conversations with its vendor of meters. The vendor only give verbal information that it estimates meters technology will probably not last for fifteen years. However, they estimate the hardware of the meters should last "longer than" the technology of the meters.
b. The 24 year historical life from the study is based on the mechanical meters. It is estimated that AMI meters useful lives will not be as long due to technical obsolescence.
c. Other RECC's that South Kentucky is aware of that use a fifteen-year life for AMI include:

Big Sandy RECC
Blue Grass Energy
Clark Energy Cooperative
Cumberland Valley Electric
Farmers RECC
Grayson RECC
Jackson Energy Cooperative
Licking Valley RECC
Meade County RECC
Nolin RECC
Owen Electric Cooperative
Shelby Energy Cooperative

## South Kentucky Rural Electric Cooperative Case No. 2011-00096 <br> Second Information Request Witness: Jim Adkins

50. Refer to the Application, Exhibit 20, Scope, fourth page, second paragraph. It is stated that, "[t]he study findings are based upon many factors and assumptions . . . ." Provide all factors and assumptions used in the development of the depreciation study.
51. 

Response to Question 50.

Assumptions and factors include, but are not limited to:

- Conductor replacement programs in effect.
- Future conductor replacement programs.
- Right of way programs in effect and future considerations.
- Unusual or unique situations for both plant and reserve accounts that have occurred.

South Kentucky Rural Electric Cooperative<br>Case No. 2011-00096<br>Second Information Request<br>Witness: Jim Adkins

51. Refer to the Application, Exhibit 20, Scope, fourth page, last paragraph and Exhibit 20, Section 3, page 3. In the Scope, South Kentucky states that whole life depreciation was chosen based on "asset lives" and the "current reserve ratio." In Section 3, South Kentucky provides information showing that accumulated depreciation per books is $\$ 40,945,888$, or $\$ 25,832,989$ ( 39 percent) less than the calculated reserve of $\$ 66,778,877$ using the results of the depreciation study.
a. Explain how the "asset lives" were considered in the determination to use whole life depreciation rates instead of remaining life depreciation rates.
b. Explain how the "current reserve ratio" was considered in the determination to use whole life depreciation rates instead of remaining life depreciation rates.
c. Explain how the 39-percent deficit in the booked accumulated depreciation account compared to the calculated reserve was taken into consideration when determining whether to use whole life depreciation rates or remaining life depreciation rates.

Responses to Question 51.
a. The remaining life method was considered when determining depreciation rates. However, this Commission has recognized the Whole Life Method of selecting historical lives and using the average net salvage of the last five years in determining the depreciation rate to use. South Kentucky elected this method which is consistent with other electric cooperatives and has been accepted by the Commission.
b. The reserve ratio has remained fairly constant. The depreciation guideline curve information put South Kentucky slightly below the RUS Minimum Curve line.
c. The calculated reserve was reviewed for reasonableness, after the review the decision was made to use the whole life rates.

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South Kentucky Rural Electric Cooperative Case No. 2011-00096 Second Information Request Witness: Jim Adkins

52. Refer to the Application, Exhibit 20, Section 3, page 1.
a. The amounts listed as future accruals for each Distribution Plant Account are determined in Exhibit 20, Section 5, which is based on simulated plant balances. Explain why it is appropriate to calculate the annual accrual amounts using the future accruals that are based on the simulated balances instead of the actual book balances.
b. Is the use of future accruals that are based on simulated balances a method accepted by the Society of Depreciation Professionals?

Response to Question 52.
a. The historical lives are based on simulated plant balances. In order to properly match the accrual with the life of the asset, the simulated balance should be used to calculate the annual accrual.
b. The use of future accrual based on simulated balances is a method accepted by the Society of Depreciation Professionals.

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South Kentucky Rural Electric Cooperative Case No. 2011-00096<br>Second Information Request Witness: Jim Adkins

53. Refer to the Application, Exhibit 20, Section 4.
a. Presented in Section 4 are the service life statistics for each asset account group. One of the statistics included for each account group is the "Historical Percent Surviving." Explain how these percentages were determined. Include in the response, discussion of the degree of professional judgment required in the determination of these percentages.
b. Page 1 and page 2 are the service life statistics for Account 362, Station Equipment. This information includes the simulated plant survivors for each year. The simulated plant-survivor percentages indicate that no station equipment placed into service prior to 1992 remained in service at the time the depreciation study was completed.
(1) In the judgment of Mr. Adkin's, is it reasonable to expect that no substation plant remains in service today that was placed into service prior to $1992 ?$ Explain.
(2) Explain the changes in the ending balances for Account 362 from 2006 through 2008.

Response to Question 53.
a. These are the percentages that correspond to the S1 curve with a historical life of 32 years. There is no judgment with this percentage.
b. Account 362, Station Equipment:

1. All amounts that were placed in Account 362 prior to 1992 have been removed, or transferred to another account. None of this equipment is in service, or in account 362.
2. The additions in 2007 relate to AMI equipment located at the substation. The adjustment in 2008 was to transfer equipment that was not placed in service to Account 107.30 until the equipment was actually placed in service.

# SOUTH KENTUCKY RECC <br> CASE NO. 2011-00096 <br> RESPONSE TO COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION <br> Witness: Jim Adkins 

Question:
Provide a schedule showing a comparison of the retirement of poles and overhead conductor from Accounts 364 and 365 respectively, along with a schedule of poles and overhead conductor planned to be retired as contained in South Kentucky's construction work plans for the calendar years 2001-2010. Provide the overhead conduction information both in terms of cost, type and length.

Response:
South Kentucky is in the process of developing this information and will forward it as soon as it is completed.

# South Kentucky Rural Electric Cooperative Case No. 2011-00096 <br> Second Information Request Witness: Jim Adkins 

55. Explain why South Kentucky did not propose an adjustment to cable television attachment rates in its Application.

Response to Question 55.
South Kentucky reviewed its cable television attachment rates and determined they were reasonable and any change would be minimal. Therefore, South Kentucky has not proposed any changes to its cable television attachment rates.

# South Kentucky Rural Electric Cooperative <br> Case No. 2011-00096 <br> Second Information Request <br> Witness: Jim Adkins 

56. Explain why South Kentucky did not propose adjustments to other charges such as connections, disconnections, meter testing, returned checks, etc. in its Application.

Response to Question 56.
South Kentucky reviewed its non-recurring charges and determined they were reasonable and proposed no changes to these charges.

# SOUTH KENTUCKY RECC <br> CASE NO. 2011-00096 <br> RESPONSE TO COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION <br> Witness: Jim Adkins 

Refer to South Kentucky's last rate case, Case No. 2005-00450. In the settlement, South Kentucky agreed to amend its bylaws concerning the qualification of directors and adopt a board policy that promotes the avoidance of nepotism, self-dealing and conflicts of interest.
a. Question:

In the test year and the twelve months preceding the test year, has South Kentucky violated any of the amendments to the revised bylaws?
a. Response:

To the best of its knowledge, South Kentucky feels that it has not violated its bylaws. To be completely frank, South Kentucky at the current time does not allow any type of transaction that could be construed as violating its bylaws.
b. Question:

If the answer to a above is affirmative, provide a detailed description of the violation(s).
b. Response:

South Kentucky feels that it does not have any violations.
c. Question:

If South Kentucky make purchases from businesses owned by any
member of the Board of Directors in the timeframe listed in a above, provide a schedule of each purchase and explain how it was determined to be the least cost alternative or the best and most cost efficient alternative.

## c. Response:

South Kentucky is in the process of developing this information for filing with the Commission as soon as possible. Since purchases with business owned by Item

Witness: Jim Adkins
directors is no longer allowed, it is taking some time to develop the necessary
information. A third party, who is not an employee of the company, is developing this informaton for filing with the Commission.


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    CASE NO. 2011-00096

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[^5]:    2 Department of Agriculture, Rural Utilities Service, 7 CFR Pat 1767, Accounting Requirements for RUS Electric Borrowers, Page 747, Account 108, B.

[^6]:    ${ }^{6}$ Case No. 2008-00011, The Application of Blue Grass Energy Cooperative Corporation for an Adjustment in Its Electric Rates (Ky. PSC Aug. 28, 2008). See the Application, Exhibit 3, Service Life and Net Salvage Study, Scope, First Page, Paragraphs 2 and 3.
    ${ }^{7}$ Case No. 2009-00314, Application of Clark Energy Cooperative, Inc. for an Adjustment of Rates (Ky. PSC Apr. 16, 2010). See the Application, Exhibit 3, Service Life and Salvage Study and Recommended Depreciation Accrual Rates, Scope, First Page, Paragraphs 2 and 3.

