



DUKE ENERGY CORPORATION

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Kristen Cocanougher  
Sr. Paralegal  
E-mail: Kristen.cocanougher@duke-energy.com

**VIA OVERNIGHT DELIVERY**

February 16, 2012

RECEIVED

FEB 17 2012

PUBLIC SERVICE  
COMMISSION

Mr. Jeff Derouen  
Executive Director  
Kentucky Public Service Commission  
211 Sower Blvd  
Frankfort, KY 40601

**Re: Case No. 2011-448  
In the Matter of the Application of Duke Energy Kentucky, Inc. for the Annual  
Cost Recovery Filing for Demand-Side Management**

Dear Mr. Derouen:

Enclosed please find an original and twelve copies each of *Duke Energy Kentucky, Inc.'s Responses to Commission Staff's Second Set of Data Requests* in the above captioned case. A CD is also enclosed which contains the electronic version of the attachments to Data Request Nos. 6, 7, 9 and 10.

Please date-stamp the extra two copies of the filing and return to me in the enclosed envelope.

Sincerely,

Kristen Cocanougher

cc: Larry Cook  
Richard Raff  
Florence W. Tandy  
Carl Melcher

VERIFICATION

State of Ohio )
County of Hamilton ) SS:

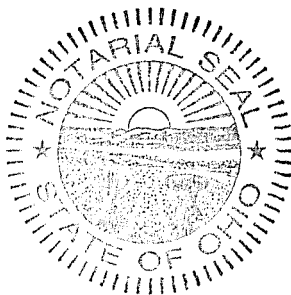
The undersigned, Thomas J. Wiles, being duly sworn, deposes and says that he is the General Manager, Market Analytics, that he has supervised the preparation of the responses to the foregoing information requests; and that the matters set forth in the foregoing responses to information requests are true and accurate to the best of his knowledge, information and belief, after reasonable inquiry.

Thomas J. Wiles
Thomas J. Wiles, Affiant

Subscribed and sworn to before me by Thomas J. Wiles on this 14th day of February 2012.

Melissa Managh Feldmeier
NOTARY PUBLIC

My Commission Expires:



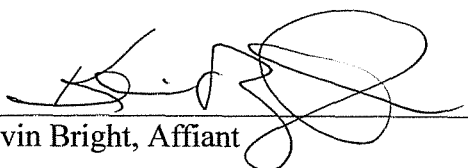
MELISSA MANAUGH FELDMEIER, Attorney at Law
NOTARY PUBLIC - STATE OF OHIO
My commission has no expiration date, Section 147.03 O.R.C.

**VERIFICATION**

**State of Ohio**                    )  
  )  
**County of Hamilton**        )

**SS:**

The undersigned, Kevin Bright, being duly sworn, deposes and says that he is the Managing Director, Large & Small Business Market Strategy & Products, that he has supervised the preparation of the responses to the foregoing information requests; and that the matters set forth in the foregoing responses to information requests are true and accurate to the best of his knowledge, information and belief, after reasonable inquiry.

  
\_\_\_\_\_  
Kevin Bright, Affiant

Subscribed and sworn to before me by KEVIN BRIGHT on this 6<sup>TH</sup>  
day of February 2012.

**ADELE M. DOCKERY**  
Notary Public, State of Ohio  
My Commission Expires 01-05-2014

  
\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: 1/5/2014

VERIFICATION

State of Ohio )  
 ) SS:  
County of Hamilton )

The undersigned, Richard G. Stevie, being duly sworn, deposes and says that he is the Chief Economist, that he has supervised the preparation of the responses to the foregoing information requests; and that the matters set forth in the foregoing responses to information requests are true and accurate to the best of his knowledge, information and belief, after reasonable inquiry.

Richard G. Stevie  
Richard G. Stevie, Affiant

Subscribed and sworn to before me by RICHARD G. STEVIE on this 6<sup>TH</sup> day of February 2012.

ADELE M. DOCKERY  
Notary Public, State of Ohio  
My Commission Expires 01-05-2014

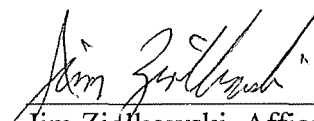
Adele M. Dockery  
NOTARY PUBLIC

My Commission Expires: 1/5/2014

**VERIFICATION**

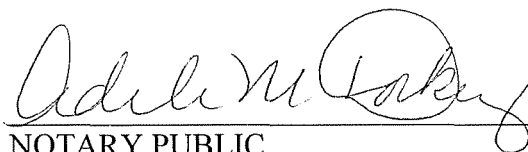
State of Ohio                    )  
  )  
County of Hamilton            )        **SS:**

The undersigned, Jim Ziolkowski, being duly sworn, deposes and says that he is the Rates Manager, that he has supervised the preparation of the responses to the foregoing information requests; and that the matters set forth in the foregoing responses to information requests are true and accurate to the best of his knowledge, information and belief, after reasonable inquiry.

  
\_\_\_\_\_  
Jim Ziolkowski, Affiant

Subscribed and sworn to before me by JIM ZIOLKOWSKI on this 9<sup>TH</sup>  
day of February 2012.

**ADELE M. DOCKERY**  
Notary Public, State of Ohio  
My Commission Expires 01-05-2014


  
\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: 1/5/2014

VERIFICATION

State of North Carolina    )  
  )  
County of Mecklenburg    )       SS:

The undersigned, Rick Mifflin, being duly sworn, deposes and says that he is the Sr. Manager, Marketing, that he has supervised the preparation of the responses to the foregoing information requests; and that the matters set forth in the foregoing responses to information requests are true and accurate to the best of his knowledge, information and belief, after reasonable inquiry.

  
\_\_\_\_\_  
Rick Mifflin, Affiant

Subscribed and sworn to before me by Rick Mifflin on this 9th day of February 2012.

  
\_\_\_\_\_  
NOTARY PUBLIC  
ELAINE FALCONE

My Commission Expires: FEB. 27, 2014

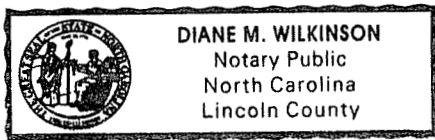
VERIFICATION

State of North Carolina )  
 ) SS:  
County of Mecklenburg )

The undersigned, Michael Corn, being duly sworn, deposes and says that he is Lead Marketing Manager, that he has supervised the preparation of the responses to the foregoing information requests; and that the matters set forth in the foregoing responses to information requests are true and accurate to the best of his knowledge, information and belief, after reasonable inquiry.

Michael Corn  
Michael Corn, Affiant

Subscribed and sworn to before me by Michael Corn on this 9<sup>th</sup> day of February 2012.



Diane M. Wilkinson  
NOTARY PUBLIC

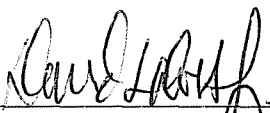
My Commission Expires:

12 July 2014

**VERIFICATION**

State of North Carolina    )  
  )  
County of Mecklenburg    )    **SS:**

The undersigned, David L. Doss, Jr., being duly sworn, deposes and says that he is the Managing Director, Project Accounting, that he has supervised the preparation of the responses to the foregoing information requests; and that the matters set forth in the foregoing responses to information requests are true and accurate to the best of his knowledge, information and belief, after reasonable inquiry.

  
\_\_\_\_\_  
David L. Doss, Jr., Affiant

Subscribed and sworn to before me by David L. Doss, Jr. on this 9<sup>th</sup> day of February 2012.

  
\_\_\_\_\_  
NOTARY PUBLIC

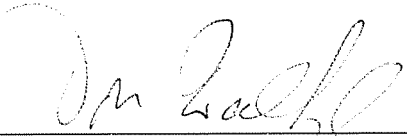
My Commission Expires: 02/26/2012



VERIFICATION

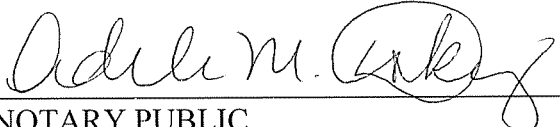
State of Ohio            )  
                                  )  
County of Hamilton    )

The undersigned, William Don Wathen Jr., being duly sworn, deposes and says that I am employed by the Duke Energy Corporation affiliated companies as General Manager Duke Energy & Vice President Rates-Ohio & Kentucky; that on behalf of Duke Energy Kentucky, Inc., I have supervised the preparation of the responses to the foregoing information requests; and that the matters set forth in the foregoing response to information requests are true and accurate to the best of my knowledge, information and belief after reasonable inquiry.

  
\_\_\_\_\_  
William Don Wathen Jr., Affiant

Subscribed and sworn to before me by William Don Wathen Jr. on this 10<sup>TH</sup> day of February 2012.

**ADELE M. DOCKERY**  
Notary Public, State of Ohio  
My Commission Expires 01-05-2014

  
\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: 1/5/2014



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**Duke Energy Kentucky**  
**Case No. 2011-448**  
**Staff Second Set Data Requests**  
**Date Received: February 3, 2012**

**STAFF-DR-02-001**

**REQUEST:**

Refer to Duke Kentucky's response to Commission Staffs first information request ("Staffs First Request"), Item No. 1. The Gross Annual kWh Impact Prior to Evaluation (per bulb) was 67.7 and the Gross Annual kWh Impact After Evaluation (per bulb) is 52.76. Explain the decrease in kWh impact from 67.7 to 52.76.

**RESPONSE:**

Savings related to the installation of more energy efficient lighting are driven primarily by two factors. First, there is a reduction in wattage when the bulb is replaced, i.e. replacing a 100 watt incandescent bulb with lower wattage CFL. Second, savings are driven by the number of hours that the more efficient bulb typically operates.

Duke Energy performed Measurement and Verification analyses in 2008 and again in 2010 and the methodology used for both of these evaluations were essentially the same. A sample of customers was surveyed to collect information about which bulbs in their home were replaced with CFLs, both the wattage and the location. In addition, lighting loggers, a device which records the number of hours a bulb operates, were installed in a sample of homes to determine the average hours of operation in various locations within the home.

While many factors influenced the final results of these two evaluations, the data indicates that, compared to 2008, customers tended to be replacing bulbs in rooms where the typical hours of operation were lower. In addition, the average wattage of the bulb that was replaced tended to be lower.

The combination of these two factors leads to a lower overall savings, i.e. less wattage savings combined with fewer hours of operation creates less overall average savings.

**PERSON RESPONSIBLE:** Thomas J. Wiles



**Duke Energy Kentucky**  
**Case No. 2011-448**  
**Staff Second Set Data Requests**  
**Date Received: February 3, 2012**

**STAFF-DR-02-002**

**REQUEST:**

Refer to Duke Kentucky's response to Item No. 3 of Staffs First Request.

- a. Explain whether the Company Labor Program Administration cost of \$13,280 is for additional employee costs, or if these costs are for existing employees and are included in base rates.
- b. Provide a breakdown, by type, of costs of the \$169,838 of Other costs.

**RESPONSE:**

- a. In its most recent electric base rate case, Case No. 2006-00172, Duke Energy Kentucky included an adjustment to eliminate all costs and all revenue related to DSM because such costs and revenue were addressed in a separate tracker (See Schedule D-2.21 in Company's Application in Case No. 2006-00172). Consequently, there are no costs related to demand-side management or energy efficiency in Duke Energy Kentucky's current base rates. This is how all of the energy efficiency program costs are treated for cost recovery in Duke Energy Kentucky. Therefore, the cost of \$13,280 is not included in base rates.
- b.

|   |            |
|---|------------|
| <b>Internal Labor, Benefits and Taxes</b> | \$ 142,117 |
| <b>Internal Employee Expenses</b>         | \$ 6,231   |
| <b>Marketing Expense</b>                  | \$ 3,882   |
| <b>External Labor</b>                     | \$ 17,609  |
| <b>Total Other</b>                        | \$ 169,838 |

Note: Amounts represent costs that were not directly charged to a specific program but were allocated to all programs based on each programs direct costs incurred.

**PERSON RESPONSIBLE:** a. William Don Wathen, Jr.  
b. David Doss





**Duke Energy Kentucky  
Case No. 2011-448  
Staff Second Set Data Requests  
Date Received: February 3, 2012**

**STAFF-DR-02-003**

**REQUEST:**

Refer to Duke Kentucky's response to Item No. 5a of Staffs First Request. The response states, "[d]ue to changes in program management by one of the vendors, refrigerator testing data was not consistently maintained. Therefore, all refrigerator testing data was unable to be reported to Duke Energy." Explain what Duke Kentucky has done to resolve this issue.

**RESPONSE:**

Duke Energy worked with the agency to understand the Program Manager vacancy and the impact on program reporting. The agency informed Duke Energy Kentucky that 11 refrigerator tests were not reported during the program manager vacancy in 2010-2011. Those 11 tests have been added to the program reporting for the 2011-2012 fiscal year. The agency filled the vacant position in the spring of 2011 and began reporting normally at that time.

**PERSON RESPONSIBLE:** Rick Mifflin



**Duke Energy Kentucky**  
**Case No. 2011-448**  
**Staff Second Set Data Requests**  
**Date Received: February 3, 2012**

**STAFF-DR-02-004**

**REQUEST:**

Refer to Duke Kentucky's response to Item No. 7 of Staffs First Request.

- a. Provide a breakdown of the \$97,444 of actual program expenditures between program administration fees for the vendor and internal Duke Energy overhead costs.
- b. Provide a detailed description of the type and amounts of the Duke Energy overhead costs.
- c. Explain whether the overhead costs are included in base rates, or if they are incremental costs.

**RESPONSE:**

**a. and b.**

|                                    |                  |
|------------------------------------|------------------|
| Vendor Program Administration Fees | \$ 71,481        |
| External Direct Cost               | \$ 112           |
| Allocated Internal Costs           |                  |
| Internal Labor, Benefits and Taxes | \$ 21,632        |
| Internal Employee Expenses         | \$ 948           |
| Total Allocated Internal Costs     | <u>\$ 22,580</u> |
| Allocated External Costs           |                  |
| Marketing Expense                  | \$ 591           |
| External Labor                     | \$ 2,680         |
| Total Allocated External Costs     | <u>\$ 3,271</u>  |
| Actual Program Expenditures        | \$ 97,444        |

Note: Amounts represent costs that were not directly charged to a specific program but were allocated to all programs based on each programs direct costs incurred.

- c. In its most recent electric base rate case, Case No. 2006-00172, Duke Energy Kentucky included an adjustment to eliminate all costs and all revenue related to DSM because such costs and revenue were addressed in a separate tracker (See Schedule D-2.21 in Company's Application in Case No. 2006-00172). Consequently, there are no costs related to demand-side management or energy efficiency in Duke Energy Kentucky's current base rates. This is how all of the energy efficiency program costs are treated for cost recovery in Duke Energy Kentucky.

**PERSON RESPONSIBLE:** a, b: David Doss  
c: William Don Wathen, Jr.



**Duke Energy Kentucky**  
**Case No. 2011-448**  
**Staff Second Set Data Requests**  
**Date Received: February 3, 2012**

**STAFF-DR-02-005**

**REQUEST:**

Refer to Duke Kentucky's response to Item No. 8 of Staffs First Request.

- a. Explain whether the Company Labor Program Administration costs of \$28,696 are new employee costs or if the costs are for existing employees and are included in base rates.
- b. Provide a breakdown by type of costs of the \$269,960 of Other costs.

**RESPONSE:**

- a. In its most recent electric base rate case, Case No. 2006-00172, Duke Energy Kentucky included an adjustment to eliminate all costs and all revenue related to DSM because such costs and revenue were addressed in a separate tracker (See Schedule D-2.21 in Company's Application in Case No. 2006-00172). Consequently, there are no costs related to demand-side management or energy efficiency in Duke Energy Kentucky's current base rates. This is how all of the energy efficiency program costs are treated for cost recovery in Duke Energy Kentucky. Therefore, the cost of \$28,696 is not included in base rates.

**b.**

|   |            |
|---|------------|
| <b>Internal Labor, Benefits and Taxes</b> | \$ 225,852 |
| <b>Internal Employee Expenses</b>         | \$ 9,915   |
| <b>Marketing Expense</b>                  | \$ 6,176   |
| <b>External Labor</b>                     | \$ 28,017  |
| <b>Total Other</b>                        | \$ 269,960 |

Note: Amounts represent costs that were not directly charged to a specific program but were allocated to all programs based on each programs direct costs incurred.

**PERSON RESPONSIBLE:** a. William Don Wathen, Jr.  
b. David Doss





**Duke Energy Kentucky**  
**Case No. 2011-448**  
**Staff Second Set Data Requests**  
**Date Received: February 3, 2012**

**STAFF-DR-02-006**

**REQUEST:**

Refer to Duke Kentucky's response to Item No. 13 of Staffs First Request. Provide, in an electronic format with formulas unprotected, a breakdown by type and amount of the other variable costs that make up the \$0.0019 per kWh.

**RESPONSE:**

The variable O&M figure of \$0.0019 was obtained from an internal Company document and has been used for a few years. The source document and exact calculations that derive this figure are not available because of organization and personnel changes.

The STAFF-DR-02-006 Attachment attempts to replicate this number using data from Duke Energy Kentucky's last base rate case, Case No. 2006-00172.

The kWh sales figures in the spreadsheet are from Schedule M-2.1 in the 2006-00172 case. The energy-related production maintenance expenses are from the settlement Cost Of Service Study in that case.

Dividing the approximately \$12.4 million of variable production maintenance costs by the annual kWh figures results in a variable maintenance rate of about \$0.0033 per kWh.

The combined tax rate from the COSS is 0.387605. Application of this tax adjustment to the preceding number yields a variable rate of about \$0.0020 per kWh.

**PERSON RESPONSIBLE:** James E. Ziolkowski

DUKE ENERGY KENTUCKY  
 CASE NO. 2006-00172  
 FORECAST PERIOD REVENUES AT AVERAGE RATES  
 FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2007  
 (ELECTRIC SERVICE)

DATA: \_\_\_ BASE PERIOD \_\_\_X FORECASTED PERIOD  
 TYPE OF FILING: \_\_\_X ORIGINAL \_\_\_ UPDATED \_\_\_ REVISEC  
 WORK PAPER REFERENCE NO(S):  
 25 Year Average Normalized Period of 1981 - 2005

FORECAST PERIOD ACTUAL

SCHEDULE M-2.1  
 PAGE 1 OF 1

| LINE NO. | RATE CODE (A) | CLASS / DESCRIPTION (B) | CUSTOMER BILLS (C) | SALES (KWH) (D) | BASE PERIOD REVENUE LESS FUEL COST (E) | AVERAGE RATE (F=E/D) | % OF REV TO TOTAL EXCLUSIVE OF FUEL COST (G) | FUEL COST REVENUE (H) | BASE PERIOD REVENUE TOTAL (I) | % OF REV TO TOTAL (J) |
|----------|---------------|-------------------------|--------------------|-----------------|--|----------------------|--|-----------------------|-------------------------------|-----------------------|
| 1        | RS            | RESIDENTIAL SERV        | 1,457,429          | 1,524,062,000   | 102,175,525                            | 6.70                 | 40.62  | (3,848,257)           | 98,327,269                    | 40.53                 |
| 2        | DS            | DISTRIBUTION SERV       | 147,481            | 1,035,731,000   | 69,321,579                             | 6.69                 | 27.56  | (2,615,221)           | 66,706,359                    | 27.70                 |
| 3        | DT-PRI        | TIME OF DAY             | 427                | 429,689,000     | 20,819,182                             | 4.85                 | 8.28   | (1,084,965)           | 19,734,217                    | 8.19                  |
| 4        | DT-SEC        | TIME OF DAY             | 2,258              | 729,460,000     | 40,455,731                             | 5.55                 | 16.08  | (1,841,887)           | 38,613,844                    | 16.03                 |
| 5        | EH            | ELEC SPACE HEATING      | 883                | 14,024,000      | 729,666                                | 5.20                 | 0.29   | (35,411)              | 694,255                       | 0.29                  |
| 6        | SP            | SPORTS SERV             | 320                | 401,000         | 36,046                                 | 8.99                 | 0.01   | (1,013)               | 35,033                        | 0.01                  |
| 7        | GSFL          | SMALL FIXED LOADS       | 10,358             | 6,230,000       | 488,550                                | 7.84                 | 0.19   | (15,731)              | 472,819                       | 0.20                  |
| 8        | DP            | PRIMARY VOLTAGE         | 151                | 34,093,000      | 1,853,715                              | 5.44                 | 0.74   | (66,085)              | 1,767,630                     | 0.73                  |
| 9        | TT            | TIME OF DAY             | 182                | 180,379,000     | 8,998,610                              | 4.99                 | 3.58   | (455,457)             | 8,543,153                     | 3.55                  |
| 10       | DT-RTP PRI    | REAL TIME PRICING       | 12                 | 21,016,000      | 1,174,430                              | 5.59                 | 0.47   | (348,151)             | 826,279                       | 0.34                  |
| 11       | DT-RTP SEC    | REAL TIME PRICING       | 36                 | 11,004,000      | 596,243                                | 5.17                 | 0.24   | (115,763)             | 480,480                       | 0.12                  |
| 12       | DS-RTP        | REAL TIME PRICING       | 24                 | 6,988,000       | 86,668                                 | 8.63                 | 0.03   | (16,632)              | 70,036                        | 0.03                  |
| 13       | TL            | REAL TIME PRICING       | 24                 | 11,509,000      | 414,347                                | 5.93                 | 0.16   | (115,763)             | 298,584                       | 0.12                  |
| 14       | SL            | STREET LIGHTING         | 24                 | 11,420,000      | 1,193,353                              | 5.17                 | 0.47   | (190,658)             | 826,279                       | 0.34                  |
| 15       | TL            | STREET LIGHTING         | 142,529            | 11,420,000      | 277,330                                | 4.60                 | 0.11   | (15,233)              | 262,097                       | 0.11                  |
| 16       | UOLS          | TRAFFIC LIGHTING        | 88,620             | 6,033,000       | 277,330                                | 4.60                 | 0.11   | (15,233)              | 262,097                       | 0.11                  |
| 17       | OL            | UNMTRD OUTDR LIGHT      | 110                | 13,000          | 395                                    | 3.04                 | 0.01   | (33)                  | 362                           | 0.01                  |
| 18       | NSU           | OUTDOOR LIGHT SERV      | 51,832             | 5,258,000       | 534,689                                | 10.17                | 0.21   | (13,276)              | 521,413                       | 0.22                  |
| 19       | NSP           | NON STD STREET LIGHT    | 8,739              | 450,000         | 54,889                                 | 12.20                | 0.02   | (1,136)               | 53,753                        | 0.02                  |
| 20       | SC            | NON STD POL'S           | 5,189              | 293,000         | 45,462                                 | 13.52                | 0.02   | (740)                 | 44,722                        | 0.02                  |
| 21       | SE            | S I - OVR HD EQUIV      | 2,224              | 114,000         | 3,538                                  | 3.10                 | 0.06   | (288)                 | 3,250                         | 0.06                  |
| 22       | ID01          | INTERDEPARTMENTAL       | 12                 | 2,114,000       | 147,429                                | 10.78                | 0.06   | (3,454)               | 144,046                       | 0.06                  |
| 23       | IS            | INTERDEPARTMENTAL       | 0                  | 0               | (58,320)                               | -                    | 0.02   | (58,320)              | 0                             | (0.02)                |
| 24       | WS            | BAD CHECK CHARGES       | 0                  | 0               | 11,012                                 | -                    | 0.01   | 0                     | 11,012                        | 0.01                  |
| 25       | WS            | RECONNECT CHGS          | 0                  | 0               | 57,413                                 | -                    | 0.02   | 0                     | 57,413                        | 0.02                  |
| 26       | WS            | RENTS                   | 0                  | 0               | 1,505,049                              | -                    | 0.60   | 0                     | 1,505,049                     | 0.62                  |
| 27       | WS            | SPECIAL CONTRACTS       | 126                | 322,000         | 13,221                                 | 4.11                 | 0.01   | (813)                 | 12,408                        | 0.01                  |
| 28       | WS            | OTHER MISC              | 0                  | 0               | 463,106                                | -                    | 0.18   | 0                     | 463,106                       | 0.18                  |
| 29       | TOTAL         |                         | 1,941,699          | 4,021,971,000   | 251,545,356                            | 6.25                 | 100.01                                       | (10,724,377)          | 240,820,983                   | 99.97                 |

| RS            | DS            | DP          | DT-PRI      | DT-SEC      | EH          | DS-RTP      | DT-PRI-RTP  | DT-SEC-RTP  | Totals        |
|---------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
| 4,963,922     | 3,398,313     | 111,690     | 1,419,130   | 2,379,009   | 46,034      | 3,298       | 65,298      | 26,438      | 12,413,132    |
| 12,612,020    | 8,634,223     | 283,775     | 3,605,638   | 6,044,438   | 116,960     | 8,379       | 165,906     | 67,172      | 31,538,511    |
| 1,524,062,000 | 1,035,731,000 | 34,093,000  | 429,689,000 | 729,460,000 | 14,024,000  | 1,004,000   | 21,016,000  | 6,988,000   | 3,796,067,000 |
| 0.003257034   | 0.003281077   | 0.003276039 | 0.003302891 | 0.003261329 | 0.003282516 | 0.003284861 | 0.003107061 | 0.003783343 | 0.003269998   |
| 0.612395      | 0.612395      | 0.612395    | 0.612395    | 0.612395    | 0.612395    | 0.612395    | 0.612395    | 0.612395    | 0.612395      |
| 0.001994591   | 0.002009315   | 0.002006523 | 0.002022551 | 0.001997222 | 0.002010196 | 0.002011632 | 0.001902749 | 0.0023169   | 0.002002531   |

O&M EXPENSES  
 PRODUCTION O&M  
 ENERGY RELATED PRODUCTION O&M  
 OTHER PRODUCTION EXPENSE - MAINTENANCE  
 TOTAL ENERGY RELATED

Annual kWh  
 Tax Adjustment  
 Variable O&M Rate (Production Maintenance)



**Duke Energy Kentucky**  
**Case No. 2011-448**  
**Staff Second Set Data Requests**  
**Date Received: February 3, 2012**

**STAFF-DR-02-007**

**REQUEST:**

Refer to Duke Kentucky's response to Item No. 14 of Staffs First Request.

- a. Explain whether the total Company Labor Program Administration costs of \$227,158 for all programs are new employee costs or if the costs are for existing employees and are included in base rates.
- b. Provide by program, a breakdown by type of costs of the Other costs totaling \$634,682.

**RESPONSE:**

- a. In its most recent electric base rate case, Case No. 2006-00172, Duke Energy Kentucky included an adjustment to eliminate all costs and all revenue related to DSM because such costs and revenue were addressed in a separate tracker (See Schedule D-2.21 in Company's Application in Case No. 2006-00172). Consequently, there are no costs related to demand-side management or energy efficiency in Duke Energy Kentucky's current base rates. This is how all of the energy efficiency program costs are treated for cost recovery in Duke Energy Kentucky.
- b. See Staff-DR-02-007 Attachment.

**PERSON RESPONSIBLE:** a. William Don Wathen, Jr.  
b. Richard G. Stevie

|                                    | Res. Conservation & Energy Education | Refrigerator Replacement | Residential Home Energy House Call | Res. Comprehensive Energy Education | Payment Plus  | Power Manager  | Energy Star Products | Energy Efficiency Website | Personalized Energy Report Program | Residential SmartSaver | High Efficiency Program | Non-Res Power/Share |
|------------------------------------|--------------------------------------|--------------------------|------------------------------------|-------------------------------------|---------------|----------------|----------------------|---------------------------|------------------------------------|------------------------|-------------------------|---------------------|
| Internal Labor, Benefits and Taxes | 110,950                              | 22,200                   | 20,243                             | 17,559                              | 33,298        | 182,628        | 44,284               | 4,905                     | 9,789                              | 53,165                 | 32,638                  | 6,087               |
| Internal Employee Expenses         | 4,865                                | 973                      | 898                                | 770                                 | 1,460         | 8,017          | 1,950                | 217                       | 449                                | 2,372                  | 1,571                   | 269                 |
| Marketing Expense                  | 3,030                                | 606                      | 560                                | 480                                 | 909           | 4,984          | 1,215                | 135                       | 280                                | 1,478                  | 979                     | 168                 |
| External Labor                     | 13,747                               | 2,750                    | 2,539                              | 2,177                               | 4,126         | 22,665         | 5,510                | 613                       | 1,270                              | 6,704                  | 4,439                   | 760                 |
| <b>Total</b>                       | <b>132,592</b>                       | <b>26,529</b>            | <b>24,240</b>                      | <b>20,986</b>                       | <b>39,793</b> | <b>218,294</b> | <b>52,959</b>        | <b>5,870</b>              | <b>11,788</b>                      | <b>63,720</b>          | <b>39,627</b>           | <b>7,284</b>        |



**STAFF-DR-02-008**

**REQUEST:**

Refer to Duke Kentucky's response to Item No. 18, Staffs First Request, page 16 of 19 of the attachment. The Lost Revenues and Shared Savings for July 2010 for the Residential Home Energy House Call program are \$23,202.96 and \$2,111.86, respectively. Also refer to the response to Item No. 28 of Staffs First Request, page 1 of 6 of the attachment. The Lost Revenues 7/10 through 6/11 in column 7 are \$19,054 and the Shared Savings 07/10 through 06/11 in column 8 are (\$967) for the Residential Home Energy House Call program.

- a. Explain why these values are not the same.
- b. Explain whether Appendix B that was revised in response to Item No. 28 and the associated tariffs should be revised.

**RESPONSE:**

- a. The Lost Revenues and Shared Savings for July 2010 for the Residential Home Energy House Call program found on page 16 of 19 of Item No. 18, Staff's First Request, are the actual lost revenues and shared savings for the filing period. The Lost Revenues and Shared Savings for the Residential Home Energy House Call program found in column 7 of the attachment to Item No. 28, Staff's First Request, incorporate adjustments, a reduction of \$4,148.49 in Lost Revenues and a reduction of \$3,079.69 in Shared Savings, to the prior filing period's Lost Revenue and Shared Savings calculations, found on page 6 of 6 of the attachment to Item No. 28, Staff's First Request.
- b. Appendix B that was revised in response to Item No. 28 and the associated tariffs should not be revised.

**PERSON RESPONSIBLE:**

Thomas J. Wiles





**Duke Energy Kentucky**  
**Case No. 2011-448**  
**Staff Second Set Data Requests**  
**Date Received: February 3, 2012**

**STAFF-DR-02-009**

**REQUEST:**

Refer to Duke Kentucky's response to Item No. 18 of Staffs First Request. The lost revenue factor used to calculate actual lost revenues on the attachment is \$0.0497/per kWh for residential programs and \$0.01651per kWh for non-residential programs. The projected lost revenue factor shown on the attachment to the response to Item No. 15 of Staffs First Request is \$0.039768 for all residential programs, except the Residential Smartsaver.

- a. Provide, in an electronic format with formulas unprotected, the calculation and supporting information which shows how the \$0.0497/per kWh was determined.
- b. Provide, in an electronic format with formulas unprotected, the calculation and supporting information which shows how the \$0.0165/per kWh was determined.
- c. Provide, in an electronic format with formulas unprotected, the calculation and supporting information which shows how the \$0.039768/per kWh was determined.
- d. Provide, in an electronic format with formulas unprotected, the supporting information and calculation as to how the \$0.051619/per kWh, from the attachment of the response to Item No. 15 of Staffs First Request, was determined.

**RESPONSE:**

- a. The calculation appears in STAFF-DR-02-009 Attachment Tab "Response to a and b."
- b. The calculation appears in STAFF-DR-02-009 Attachment Tab "Response to a and b."
- c. The calculation of this rate is not available. This rate was included in the 2004-00389 filing and has been carried forward to present.
- d. The calculation appears in STAFF-DR-02-009 Attachment Tab "Response to d."

**PERSON RESPONSIBLE:** James E. Ziolkowski

# July 10 - June 2011 rates and usage

Variable O&M rate Y TT Rate N  
Worksheet: Calculation of Rates for Lost Revenues for the Kentucky DSM Application

## Residential

|                     |                   |
|---------------------|-------------------|
|                     | Tail-Block        |
|                     | Rate              |
| Energy Charge       | \$0 085379        |
| Variable O&M        | -\$0 001900       |
| Blank               |                   |
| Blank               |                   |
| Blank               |                   |
| Blank               |                   |
| Blank               |                   |
| Sub-Total           | \$0 083479        |
| less: Embedded Fuel | \$0.033760        |
| Total               | <u>\$0.049719</u> |

## Non-Residential

|                     |                   |                   |                   |                   |                   |       |
|---------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------|
|                     | Rate DS           |                   |                   |                   |                   | Total |
|                     | First 6000 kWh    | Next 300 kWh/kW   | Additional kWh    | First 15kW        | Additional Kw     |       |
| Energy Charge       | \$0 091568        | \$0 060042        | \$0 050966        | \$0 000000        | \$7 750000        |       |
| Variable O&M        | -\$0 001900       | -\$0 001900       | -\$0 001900       |                   |                   |       |
| Blank               |                   |                   |                   |                   |                   |       |
| Blank               |                   |                   |                   |                   |                   |       |
| Blank               |                   |                   |                   |                   |                   |       |
| Blank               |                   |                   |                   |                   |                   |       |
| Blank               |                   |                   |                   |                   |                   |       |
| Sub-Total           | \$0 089668        | \$0 058142        | \$0 049066        | \$0 000000        | \$7 750000        |       |
| less: Embedded Fuel | \$0.033760        | \$0.033760        | \$0.033760        |                   |                   |       |
| Total               | <u>\$0 055908</u> | <u>\$0 024382</u> | <u>\$0 015306</u> | <u>\$0 000000</u> | <u>\$7 750000</u> |       |

|                       |             |             |             |           |           |                   |
|-----------------------|-------------|-------------|-------------|-----------|-----------|-------------------|
| kWh by rate block     | 379,976.386 | 597,043.730 | 105,820.331 | 1,419.310 | 2,615.322 | 1,082,840.447     |
| Weighted average rate |             |             |             |           |           | <u>\$0.053276</u> |

Weighted Avg Rate  
0 02301555  
702.864,061

|                     |                   |                   |                   |  |
|---------------------|-------------------|-------------------|-------------------|--|
|                     | Rate DP           |                   |                   |  |
|                     | First 300 kWh/kW  | Additional kWh    | All kW            |  |
| Energy Charge       | \$0 060991        | \$0 053121        | \$7 080000        |  |
| Variable O&M        | -\$0 001900       | -\$0 001900       |                   |  |
| Blank               |                   |                   |                   |  |
| Blank               |                   |                   |                   |  |
| Blank               |                   |                   |                   |  |
| Blank               |                   |                   |                   |  |
| Blank               |                   |                   |                   |  |
| Sub-Total           | \$0 059091        | \$0 051221        | \$7 080000        |  |
| less: Embedded Fuel | \$0.033760        | \$0.033760        |                   |  |
| Total               | <u>\$0 025331</u> | <u>\$0 017461</u> | <u>\$7 080000</u> |  |

|                       |            |           |       |
|-----------------------|------------|-----------|-------|
| kWh by rate block     | 13,114.149 | 5,839.606 | 46097 |
| Weighted average rate |            |           |       |

18,953.755  
\$0.040125  
Weighted Avg Rate  
0 02290627  
18.953.755

|                     |                   |                   |                   |                    |                   |       |
|---------------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------|
|                     | Rate DT           |                   |                   |                    |                   | Total |
|                     | Summer On-Peak    | Winter On-Peak    | Off-Peak          | On Peak kW         | Off Peak kW       |       |
| Energy Charge       | \$0 054118        | \$0 052118        | \$0 046118        | \$12 296667        | \$1 150000        |       |
| Variable O&M        | -\$0 001900       | -\$0 001900       | -\$0 001900       |                    |                   |       |
| Blank               |                   |                   |                   |                    |                   |       |
| Blank               |                   |                   |                   |                    |                   |       |
| Blank               |                   |                   |                   |                    |                   |       |
| Blank               |                   |                   |                   |                    |                   |       |
| Blank               |                   |                   |                   |                    |                   |       |
| Sub-Total           | \$0 052218        | \$0 050218        | \$0 044218        | \$12 296667        | \$1 150000        |       |
| less: Embedded Fuel | \$0.033760        | \$0.033760        | \$0.033760        | \$0.000000         | \$0.000000        |       |
| Total               | <u>\$0 018458</u> | <u>\$0 016458</u> | <u>\$0 010458</u> | <u>\$12 296667</u> | <u>\$1 150000</u> |       |

|                       |             |             |             |           |        |                   |
|-----------------------|-------------|-------------|-------------|-----------|--------|-------------------|
| kWh by rate block     | 126,213.684 | 224,354.627 | 827,600.302 | 2,503.328 | 43.777 | 1,178,168.614     |
| Weighted average rate |             |             |             |           |        | <u>\$0.038628</u> |

Weighted Avg Rate  
0 012457576  
1,178.168,614

|                     |                   |
|---------------------|-------------------|
|                     | Rate EH           |
| Energy Charge       | \$0 071447        |
| Variable O&M        | -\$0 001900       |
| Blank               |                   |
| Blank               |                   |
| Blank               |                   |
| Blank               |                   |
| Blank               |                   |
| Sub-Total           | \$0 069547        |
| less: Embedded Fuel | \$0.033760        |
| Total               | <u>\$0.035787</u> |

|     |          |            |                   |
|-----|----------|------------|-------------------|
| kWh | 14386431 | 14,386,431 | <u>\$0.035787</u> |
|-----|----------|------------|-------------------|

|                     |                   |                   |                   |
|---------------------|-------------------|-------------------|-------------------|
|                     | Rate TT           | OnPK kW           | OffPK kW          |
| Energy Charge       | \$0 052571        | \$6 693333        | \$1 150000        |
| Variable O&M        | -\$0 001900       |                   |                   |
| Blank               |                   |                   |                   |
| Blank               |                   |                   |                   |
| Blank               |                   |                   |                   |
| Blank               |                   |                   |                   |
| Sub-Total           | \$0 050671        | \$6 693333        | \$1 150000        |
| less: Embedded Fuel | \$0.033760        | \$0.000000        | \$0.000000        |
| Total               | <u>\$0.016911</u> | <u>\$6.693333</u> | <u>\$1.150000</u> |

|     |             |         |        |                   |
|-----|-------------|---------|--------|-------------------|
| kWh | 223,895.817 | 500.117 | 30.087 | <u>\$0.000000</u> |
|-----|-------------|---------|--------|-------------------|

|  |    |               |
|--|----|---------------|
| Total kWh  |    | 2,294,349,247 |
| Weighted average lost revenue non-residential rate | \$ | 0 045536      |

Notes:  
<sup>1</sup> Rates are those approved in Case No 2008-00522  
<sup>2</sup> kWh based on July 2010 through June 2011

# 2010 Rates using Jan - Dec 2009 Usage

Variable O&M rate        N

Workpaper: Calculation of Rates for Lost Revenues for the Kentucky DSM Application

| Residential         | Tail-Block<br>Rate |
|---------------------|--------------------|
| Energy Charge       | \$0 085379         |
| Variable O&M        | \$0 000000         |
| Blank               |                    |
| Blank               |                    |
| Blank               |                    |
| Blank               |                    |
| Blank               |                    |
| Sub-Total           | \$0 085379         |
| less: Embedded Fuel | <u>\$0.033760</u>  |
| Total               | <u>\$0.051619</u>  |

Non-Residential

Notes:

<sup>1</sup> Rates are those approved in Case No 2008-00522

<sup>2</sup> kWh based on Jan through Dec 2009



**Duke Energy Kentucky**  
**Case No. 2011-448**  
**Staff Second Set Data Requests**  
**Date Received: February 3, 2012**

**STAFF-DR-02-010**

**REQUEST:**

Refer to the responses to Item Nos. 16 and 18 of Staffs First Request. The following table shows the projected and actual shared savings/measures per participant for residential programs.

| Program<br>Descriptions                        | Projected Shared<br>Savings/Measure<br>per Participant | Actual<br>Shared<br>Savings<br>Rate |
|--|--|-------------------------------------|
| Residential Conservation<br>& Energy Education | (\$1 1.66)   | \$27.3589                           |
| Refrigerator Replacement                       | \$6.00   | (\$1 05.6000)                       |
| Home Energy House Call                         | \$71.40  | \$41.3280                           |
| Power Manager                                  | \$69.60  | \$19.3086                           |
| Energy Star Products                           | \$1.57   | \$3.2930                            |
| Energy Efficiency Web<br>Site                  | \$1.62   | \$1 7.1 864                         |
| Personalized Energy<br>Report Program          | \$8.13   | \$74.2914                           |
| Residential SmartSaver                         | \$42.55  | N/A                                 |

- a. Provide by program, in an electronic format with formulas unprotected, the calculations which show how each projected shared savings/measure per participant shown in the attachment to the response to Item No. 16 of Staffs First Request was determined.

- b. Provide by program, in an electronic format with formulas unprotected, the calculations which show how each actual shared savings rate shown in the response to Item No. 18 of Staffs First Request was determined.
- c. Explain by program why differences of these magnitudes exist between the projected shared savings/measure per participant and the actual shared savings rate.

**RESPONSE:**

- a. See Staff-DR-02-010 Attachment, Tab STAFF-DR-02-010a
- b. See Staff-DR-02-010 Attachment, Tab STAFF-DR-02-010b
- c. See Staff-DR-02-010 Attachment, Tab STAFF-DR-02-010c

**PERSON RESPONSIBLE:** a. Richard Stevie  
b,c. Thomas J. Wiles

| Residential Projected Shared Savings   |  |          |                      |           |              |                |                        |                                       |           |
|--|--|----------|----------------------|-----------|--------------|----------------|------------------------|---------------------------------------|-----------|
| 10a                                    |  |          |                      |           |              |                |                        |                                       |           |
|  |  | Original | Projected            | Projected | Projected    | Projected      | Projected              | Projected                             | Projected |
|  |  | Utility  | Cost Test            | Savings   | Net Savings  | Shared Savings | Number of Participants | Shared Savings/Measure or Participant |           |
| <b>Residential - Programs/Measures</b> |  |          |                      |           |              |                |                        |                                       |           |
|  | <b>Residential Conservation &amp; Energy Education</b> |          | <b>Program Costs</b> |           |              |                |                        |                                       |           |
|  |  |          | \$ 499,800           | \$ 0.93   | \$ 464,814   | \$ (34,986)    | \$ 300                 | \$ (11.66)                            |           |
|  | Refrigerator Replacement                               |          | \$ 100,000           | \$ 1.03   | \$ 103,000   | \$ 3,000       | \$ 50                  | \$ 6.00                               |           |
|  | Home Energy House Call                                 |          | \$ 150,000           | \$ 3.38   | \$ 507,000   | \$ 357,000     | \$ 500                 | \$ 71.40                              |           |
|  | Residential Comprehensive Energy Education             |          |                      |           | NA           | NA             | NA                     | NA                                    |           |
|  | Home Energy Assistance Plus                            |          |                      |           | NA           | NA             | NA                     | NA                                    |           |
|  | Power Manager  |          | \$ 750,000           | \$ 3.32   | \$ 2,490,000 | \$ 1,740,000   | \$ 2,500               | \$ 69.60                              |           |
|  | Energy Star Products (Total)                           |          | \$ 243,000           | \$ 3.61   | \$ 877,497   | \$ 634,497     | \$ 40,500              | \$ 1.57                               |           |
|  | Energy Efficiency Web Site                             |          | \$ 31,110            | \$ 1.95   | \$ 60,665    | \$ 29,555      | \$ 1,830               | \$ 1.62                               |           |
|  | Personalized Energy Report Pilot Program               |          | \$ 153,000           | \$ 5.78   | \$ 884,340   | \$ 731,340     | \$ 9,000               | \$ 8.13                               |           |
|  | Residential SmartSaver (Total)                         |          | \$ 448,520           | \$ 2.20   | \$ 986,744   | \$ 538,224     | \$ 1,265               | \$ 42.55                              |           |
|  | <b>Total Residential Projected Shared Savings</b>      |          |                      |           |              | \$ 399,863     |                        |                                       |           |

| Residential Actual Shared Savings   |               |                   |              |             |                |                        |   |        |        |
|---|---------------|-------------------|--------------|-------------|----------------|------------------------|---|--------|--------|
| 10b   |               |                   |              |             |                |                        |   |        |        |
|   | Actual        | Actual            | Actual       | Actual      | Actual         | Actual                 | Actual                                    | Actual | Actual |
|   | Program Costs | Utility Cost Test | Savings      | Net Savings | Shared Savings | Number of Participants | Shared Savings/Measure or Participant (1) |        |        |
| <b>Residential - Programs/Measures</b>  |               |                   |              |             |                |                        |   |        |        |
| Residential Conservation & Energy Education   | \$ 640,199    | 1.01 \$           | 646,601 \$   | 6,402 \$    | 640            | 234                    | \$ 2.74                                   |        |        |
| Refrigerator Replacement  | \$ 72,957     | 0.89 \$           | 64,932 \$    | (8,025) \$  | (803)          | 76                     | \$ (10.56)                                |        |        |
| Home Energy House Call  | \$ 140,792    | 1.15 \$           | 161,911 \$   | 21,119 \$   | 2,112          | 511                    | \$ 4.13                                   |        |        |
| Residential Comprehensive Energy Education Payment Plus (Home Energy Assistance Plus) | \$ 97,444     | NA                | NA           | NA          | NA             | NA                     | NA  |        |        |
| Power Manager   | \$ 1,082,096  | 1.17 \$           | 1,266,053 \$ | 183,956 \$  | 18,396         | 9,527                  | \$ 1.93                                   |        |        |
| Energy Star Products (Total)  | \$ 122,046    | 1.37 \$           | 167,203 \$   | 45,157 \$   | 4,516          | 13,712                 | \$ 0.33                                   |        |        |
| Energy Efficiency Web Site  | \$ 13,667     | 1.21 \$           | 16,538 \$    | 2,870 \$    | 287            | 167                    | \$ 1.72                                   |        |        |
| Personalized Energy Report Pilot Program  | \$ 90,693     | 3.77 \$           | 341,914 \$   | 251,220 \$  | 25,122         | 3,381                  | \$ 7.43                                   |        |        |
| Residential SmartSaver (Total)  | \$ -          | NA                | NA           | NA          | NA             | NA                     | NA  |        |        |
| Total Residential Actual Shared Savings   | \$ -          | NA                | NA           | NA          | 50,270         | NA                     | NA  |        |        |

(1) The values previously provided in response to Item No. 18 of Staff's First Data Request were incorrectly labeled as "SS Rate", or "Shared Savings Rate". These values should have been labeled "Total Savings Rate". The Shared Savings Rate, used to compute shared savings, is 10% of the Total Savings Rate, and is provided in column H above.



| 10c  | Differences Between Residential Projected and Actual Shared Savings/Measure or Participant |  |  |
|--|--|--|--|
| <b>Residential - Program/Measures</b>  | <b>Actual</b>  | <b>Difference (Actual - Projected)</b> | <b>Explanation</b>   |
| Residential Conservation & Energy Education  | \$   | 14.40                                  | The initial projection had a UCT test than one, which resulted in negative shared savings. Actual result for the test period resulted in a UCT greater than one which resulted in positive shared savings.   |
| Refrigerator Replacement   | \$   | (15.58)                                | The initial projection had a UCT greater than one, which resulted in positive shared savings. Actual result for the test period resulted in a UCT less than one, and negative shared savings.  |
| Home Energy House Call   | \$   | (8.22)                                 | The initial projection had a higher UCT score than the UCT using actual results for the test period. This resulted in a lower shared savings than projected.   |
| Residential Comprehensive Energy Education<br>Payment Plus (Home Energy Assistance Plus) | NA   | NA                                     | NA   |
| Power Manager  | NA   | NA                                     | NA   |
| Energy Star Products (Trial)   | \$   | (27.67)                                | The actual result for the test period had a lower UCT score than the initial projection. This resulted in a lower level of shared savings than projected for the test period.  |
| Energy Star Products (Trial)   | \$   | (1.24)                                 | The initial projection had a higher UCT score than the actual UCT score for the test period, which resulted in a lower level of shared savings than projected.   |
| Energy Efficiency W&B Site   | \$   | 0.10                                   | The initial projection was based on higher program costs and participation than the actual results for the test period. The drop in participation was more significant than the decrease in savings, which resulted in slightly increased savings per participant. |
| Personalized Energy Report Pilot Program   | \$   | (0.20)                                 | The initial projection had a higher UCT score than the UCT using actual results for the test period. This resulted in a lower shared savings than projected.   |
| <b>Residential SmartSaver (Total)</b>  | <b>NA</b>  | <b>NA</b>                              | <b>NA</b>  |



**STAFF-DR-02-011**

**REQUEST:**

Refer to Duke Kentucky's response to Item No. 20 of Staffs First Request. Staff requested a comparison of actual program costs versus projected program costs and an explanation for each residential and commercial program with a difference of 20 percent of more by program, whether the difference was positive or negative.

- a. For each residential or commercial program that did not reach its projected participation goal, regardless of the percentage difference, if not previously provided, provide an explanation for why the projected participation goal was not met.
- b. Provide, by program, a description of Duke Kentucky's efforts to
  - (1) educate applicable customers about the need for greater energy efficiency, for both electricity and natural gas; and
  - (2) promote its demand-side management programs, due to the rising cost of electric energy and the strain of electric usage on the utility system at times of peak demand.

**RESPONSE:**

a.

**Commercial High Efficiency Program**

Participation and spending in the lighting and HVAC technologies has remained constant since 2007 which is comparable to the filed projections for these technologies. Participation and spending in the motors, pumps, and drives technology has remained fairly constant since 2009. The projected program costs of \$100,678 set for this technology in 2008 is consistently 90% more than needed since the program began. In 2011, incentives were discontinued for NEMA Premium motors in response to the efficiency standard revisions for motors under the Energy Independence and Security Act of 2007, taking effect December, 2010. Duke Energy continues to provide incentives for

high efficiency pumps and variable frequency drives. Economic conditions in the greater Cincinnati and Northern Kentucky area resulted in reduced participation in the programs.

Duke Energy personnel continue ongoing discussions with Kentucky K-12 customers to educate them on the benefits of energy efficiency and how Duke’s Custom Incentive program can help them achieve energy goals. These conversations led to the energy assessments referenced in the filing leading to this discovery. Recommendations from those assessments are under review by school personnel. Additionally, the interaction has led to recently received, but not yet approved, applications for one school district.

**PowerShare®**

PowerShare® actual program costs were over 53% above the projected program costs due to the actual participation level being much higher than was anticipated when the projections were created. The actual program costs for the current period were an 18% increase over the previous year (\$344,772). Curtailable load contracted on the program increased by 11%, and the program experienced existing participants migrating to the option with the highest maximum of economic events—and the accompanying highest capacity incentive.

**Residential Comprehensive Energy Education (NEED)**

The NEED program spent \$78,880 of the \$81,500 allocated for the program. The majority of the funds were spent on outreach and recruitment of teachers. Workshops are offered to interested teachers to explain the program and provide training on how the energy curriculum could be utilized in their classrooms. Participation is based upon the number of Energy Efficiency Starter Kits distributed to DE-KY served families, but the number of students receiving curriculum is typically higher. Many teachers are reluctant to commit to distributing kits to the students because it’s difficult.

b.

| <b>1) Energy Efficiency Programs</b>          |  |
|---|--|
| <b>Program Name</b>                           | <b>Education and Outreach Activities</b>   |
| Commercial High Efficiency                    | Trade ally outreach through the program vendor (WECC), personal contact with DE-KY representatives, DE website, electronic newsletters and direct mail.  |
| Residential Conservation and Energy Education | Coordination of communication with low income agencies and companies in the area, direct mail, bill inserts and web based information. Customers receive educational materials about saving energy and how to operate/ maintain the measures |

|  |   |
|--|---|
|  | installed.  |
| Refrigerator Replacement   | Coordination with low income agencies and companies that perform weatherization work. This program is part of the weatherization work completed on qualified residences.  |
| Payment Plus   | Coordination with low income firms and direct mail to qualified customers. The Payment Plus program educates families about financial management and energy saving actions.   |
| Personalized Energy Report   | Direct mail where customers can receive customer specific information about their home's energy use and opportunities to save.  |
| Energy Efficiency Website  | Web based tools provide interactive experience for customers to input information about their home and receive customized recommendations. There are also appliance specific tools that allow for more specific savings estimates.  |
| Home Energy House Call   | Direct mail and DE Website are used for customer acquisition. The in home assessment provides face to face interaction with an energy expert. The customer receives specific recommendations about their home and can have measures installed during the assessment.  |
| Residential Comprehensive Energy Education (NEED)                      | Personal contact with educators, direct mail and educator workshops are used for enrollment. Students receive interactive curriculum that can be used in their homes  |
| Residential Smart Saver®   | Trade ally recruitment, direct mail and web based information is used to inform trade allies and educate customers.   |
| <b>2) Demand Response Programs (referred to as DSM programs above)</b> |   |
| PowerShare®  | Direct marketing through Duke Energy Account Managers with commercial and industrial accounts. Customers are targeted for annual campaign to coincide with required registrations with RTOs. During these meetings, customers are also provided information about Duke Energy's energy conservation programs. |
| Power Manager®   | Marketed to residential customers through direct mail and by providing web based information about the program.   |

**PERSON RESPONSIBLE:** Kevin Bright/Commercial High Efficiency Program &  
PowerShare®  
Rick Mifflin/Residential programs



**Duke Energy Kentucky**  
**Case No. 2011-448**  
**Staff Second Set Data Requests**  
**Date Received: February 3, 2012**

**STAFF-DR-02-012**

**REQUEST:**

Refer to Duke Kentucky’s response to Item No. 21 of Staff’s First Request. In the table provided, in the column labeled Program, the Reason for Difference for Other, Duke states, “[f]or the projected lost revenues, the mixture of measures had an average impact of 1,679 kWh and the actual mixture of measures had an average impact of 202 kWh.” Provide an explanation for a difference of this amount between the 1,679 kWh projected and the actual 202 kWh.

**RESPONSE:**

The projected average impacts and actual average impacts for the “Other” category are different due to the differences in participation between the projected measures installed and actual measures installed. An example of this is the “Moisture Traps - Condensate Drain Valve” measure, which has a projected participation of 72, but did not have any participation during the three years of Lost Revenues calculated for this filing period. The lower actual average impact is due to higher actual participation in lower impact measures than projected.

The table below compares the projected participation for the “Other” category to the actual participation.

| <b>Other Measures</b>                                  | <b>Projected Participation</b> | <b>Actual Participation</b> |
|--|--------------------------------|-----------------------------|
| Setback/Programmable Thermostat                        | 138                            | 35                          |
| Engineered Nozzles - COMPRESS AIR                      | 72                             | 0                           |
| Zone Shutoff Valves -COMPRESSED AIR                    | 14                             | 0                           |
| Dew Point Controlled Desiccant Dryers - Compressed air | 2                              | 0                           |
| Moisture Traps - Condensate Drain Valve                | 72                             | 0                           |
| Chilled Water Reset                                    | 8                              | 0                           |
| Central Lighting Control                               | 30                             | 0                           |
| Switching Controls for Multilevel Lighting             | 30                             | 0                           |
| Daylight Sensor controls                               | 30                             | 0                           |
| Trim Impellers/Reduce Throttling Pumps                 | 8                              | 0                           |



|  |      |       |
|--|------|-------|
| Unoccupied Cycle - CONTROLS                          | 8    | 0     |
| Commercial Clothes Washers - Washer Only             | 88   | 0     |
| Commercial Clothes Washers - Electric Dryer & Washer | 88   | 0     |
| Supply Air Reset -Controls                           | 8    | 0     |
| Ventilation Scheduling - Controls                    | 8    | 0     |
| Optimal Start /Stop - Controls                       | 8    | 0     |
| Economizer Cycle - Controls                          | 30   | 0     |
| Vending Equipment Controller                         | 72   | 73    |
| Barrel Wraps ( Inj Mold & Extruders)                 | 14   | 10    |
| High Efficiency Units - Refrigeration Display Cases  | 8    | 2     |
| Efficient condensor Refrigerator                     | 2    | 0     |
| Head Pressure Control                                | 4    | 0     |
| Night covers for displays                            | 30   | 114   |
| Window Film  | 1456 | 22955 |
| Air Flow Restriction Curtains                        | 2    | 0     |
| Pellet Dryer Tanks & Ducts                           | 8    | 0     |
| HI-EFF Multiplex Compressor                          | 0    | 0     |
| Anti-Sweat Heater Controls                           | 0    | 16    |
| SAW Anti-Sweat Heater Controls                       | 0    | 13    |
| Ice Machine > 1000 lbs, 24 hours                     | 0    | 5     |
| Combination Oven (90 lbs_hr)                         | 0    | 1     |

**PERSON RESPONSIBLE:** Thomas J. Wiles



**Duke Energy Kentucky  
Case No. 2011-448  
Staff Second Set Data Requests  
Date Received: February 3, 2012**

**STAFF-DR-02-013**

**REQUEST:**

Refer to Duke Kentucky's response to Item Nos. 23 and 24 of Staff's First Request. The last paragraph of each response states, "[t]he Company proposes to work with the Collaborative to develop a revision to the spreadsheet model in order to allow for more matching between costs and revenues, and submit its proposed model to Commission Staff for review and approval." Explain when Duke Kentucky intends to begin work with its Collaborative and when the Commission might be made aware of the proposed revision to the spreadsheet model.

**RESPONSE:**

Work with the Collaborative will begin in the third quarter of 2012 to make adjustments to the spreadsheet model and once a finalized recommendation is suggested, Duke Energy Kentucky will file the spreadsheet model for approval.

**PERSON RESPONSIBLE:** James E. Ziolkowski



**Duke Energy Kentucky  
Case No. 2011-448  
Staff Second Set Data Requests  
Date Received: February 3, 2012**

**STAFF-DR-02-014**

**REQUEST:**

Refer to Duke Kentucky's response to Item No. 28 of Staff's First Request, page 6 of 6 of the attachment. Explain where the values listed in the Increase (Decrease) in Values - Lost Revenues of (\$4,148) and Shared Values (\$3,079) can be found on pages 1-5.

**RESPONSE:**

The values listed on page 6 of 6 of Item No. 28, Staff's First Request, are incorporated by reference into the formulas found on page 1 of 6, in cells H12 and I12.

**PERSON RESPONSIBLE:** Thomas J. Wiles



**STAFF-DR-02-015**

**REQUEST:**

Refer to Duke Kentucky's response to Item No. 34 of Staffs First Request. Door-to-door canvassing was one of the additional marketing efforts that Duke Kentucky might utilize in its Residential Smart Saver CFL Program.

- a. Explain whether any Duke Energy subsidiary utility has experience conducting door-to-door canvassing.
- b. If the answer to part a. is yes, provide the results of the canvassing and explain whether this has been an effective outreach tool to customers.

**RESPONSE:**

- a. Not on a broad scale, but Duke Energy Kentucky recently received information from a potential vendor. The draft proposal had an attractive cost structure coupled with individual reporting of results. Duke Energy Kentucky continues to evaluate the proposal to determine value and risks.
- b. N/A

**PERSON RESPONSIBLE:** Rick Mifflin