COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

JOINT APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY FOR REVIEW, MODIFICATION, AND CONTINUATION OF EXISTING, AND ADDITION OF NEW, DEMAND-SIDE MANAGEMENT AND ENERGY-EFFICIENCY PROGRAMS	)))))))	CASE NO. 2014-00003

COMMISSION STAFF'S THIRD REQUEST FOR INFORMATION TO LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY

Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU") (collectively the "Companies"), pursuant to 807 KAR 5:001, are to file with the Commission the original in paper medium and an electronic copy of the following information. The information requested herein is due no later than April 28, 2014. Responses to requests for information shall be filed in accordance with the electronic filing procedures set forth in 807 KAR 5:001, Section 8, and shall be appropriately indexed and bookmarked. Each response shall include the name of the witness who will be responsible for responding to questions related to the information provided.

Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a governmental agency, be accompanied by a signed certification of the preparer or person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

The Companies shall make timely amendment to any prior response if they obtain information which indicates that the response was incorrect when made or, though correct when made, is now incorrect in any material respect. For any request to which the Companies fail or refuse to furnish all or part of the requested information, they shall provide a written explanation of the specific grounds for their failure to completely and precisely respond.

Careful attention should be given to copied material to ensure that it is legible. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request.

1. Refer to pages 3-5 of the response to Item 34 of Commission Staff's Second Request for Information in Case No. 2011-00134.[1]

a. Provide, by demand-side management ("DSM") component, program, and year, similar schedules for 2011 to 2013.

b. Provide, by DSM component, program, and year, similar projected schedules for 2014 to 2018.

2. Refer to parts d. and e. of Item 1 of the response to Commission's Staff's Second Information Request ("Staff's Second Request") in Case No. 2014-00003, which states,

> This is associated with less heat being derived from more efficient lighting sources thus the facilities heating system will be utilized more to maintain the temperature of the building.

[1] Case No. 2011-00134, Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for Review, Modification, and Continuation of Existing, and Addition of New Demand-Side Management and Energy-Efficiency Programs (Ky. PSC Nov. 9, 2011).

> As lighting retrofits create an increase in gas consumption LG&E bills the customer for the increased usage. As such LG&E does not claim any lost sales associated with the LGE-CGS rate class.

a. Explain whether LG&E seeks lost sales and incentives when the heating source is electric and, due to less heat being emitted from more efficient lighting sources, the facility's heating system is utilized more to maintain the temperature of the building.

b. Explain whether LG&E seeks lost sales and incentives when the cooling source is electric, and due to less heat being emitted from more efficient lighting sources, the facility's cooling system is utilized less to maintain the temperature of the building.

3. Refer to Item 2 of the response to Staff's Second Request, which states,

> KRS 278.265(2)(b) provides that the Commission may approve DSM programs that include "incentives designed to provide financial rewards to the utility for implementing cost-effective demand-side management programs...." and the Commission's long-established practice concerning providing utilities a financial incentive to implement DSM programs.

a. If the Companies are receiving lost sales and incentives for the Residential and Commercial Load Management programs, and may receive lost sales and incentives for the proposed Advanced Metering Systems program, explain whether the Companies are now receiving an incentive as to the Residential and Commercial Load Management programs and may be receiving an incentive for the proposed Advanced Metering Systems program in the future.

b. Explain whether the Companies are receiving a return on and a return of the Residential and Commercial Load Management programs through the DSM Capital Cost Recovery Component (DCCR).

c. By company, provide the supporting calculations for DSM cost recovery mechanism if the return on equity is 10.25 percent.

4. Refer to Item 10 of the response to Staff's Second Request.

a. Explain how the shelving factor of 10 percent was derived, and provide any supporting documentation.

b. Based on homes having roughly 40 sockets and a saturation level of approximately 20 and 15 percent for LG&E and KU respectively, explain why the Companies believe that 90 percent of the compact fluorescent light ("CFL") bulbs mailed within a given year will be placed into service, especially considering the projected long-life of the CFLs.

c. By company, provide the number of customers who received CFL bulbs, the number of CFL bulbs received by each customer, the wattage of the bulbs mailed in 2013, and the projections for 2014.

5. Refer to Item 13 of the response to Staff's Second Request, which states,

> The rates filed in this proceeding will not be the exact same rates even after taking into account the adjustment for the DSM Balancing Adjustment that would be filed in 2015. The Companies will re-calculate the rates using the latest customer base energy rate, weighted average cost of capital, corporate tax rates and depreciation schedules at the time of filing the new rates, consistent with past KPSC approval.

To avoid any confusion as to what DSM rates should appear in the appendices of the Final Order, provide the Companies' recommendation based on the response to Item 13 of Staff's Second Request.

6. Refer to the Department of Energy's Lawrence Berkeley National Laboratory report on the cost of saved energy under customer-funded efficiency programs, referenced in the "Cost of Efficiency Programs Examined" article in the April 1, 2014, Platt's Megawatt Daily, attached as an Appendix hereto. The article states, "The report says the levelized cost of energy saved accrues over the lifetime of actions taken under such programs is 2.1 cents/kWh nationally."

a. By company and year, provide the Companies' annual cents/kWh cost of energy savings for 2012 and 2013.

b. Provide, by company and year, the Companies' projected cents/kWh cost of energy savings for 2014-2018.

Jeff Derouen
Executive Director
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DATED APR 16 2014

cc: Parties of Record

APPENDIX

APPENDIX TO A REQUEST FOR INFORMATION FROM THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2014-00003 DATED APR 16 2014

PLATTS
McGRAW HILL FINANCIAL
www.platts.com
[ELECTRIC POWER]
MEGAWATT DAILY
www.twitter.com/plattspower
Tuesday, April 1, 2014

Cost of efficiency programs examined

ANALYSIS It is well known that some states have been more aggressive than others in pushing utilities to pursue energy efficiency and help consumers save energy. Whether those states are facing higher costs because some of the low-cost efficiency savings have been wrung out of the system is gaining scrutiny, with no conclusive data showing rising costs in those states.

Such information will be easier to track in the future, now that the Department of Energy's Lawrence Berkeley National Laboratory has issued an extensive report on the cost of saved energy under customer-funded efficiency programs. The report says the levelized cost of energy saved that accrues over the lifetime of actions taken under such programs is 2.1 cents/kWh nationally.

State costs of saved energy (CSE) under efficiency programs can vary, as illustrated in the LBNL report, but it and other studies

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SPP 'pleased' with FERC order on grid dispute

MARKETS Southwest Power Pool and others on Monday praised the Federal Energy Regulatory Commission's decision to send a dispute regarding Midcontinent Independent System Operator's use of certain transmission assets for administrative hearing.

"SPP is pleased that FERC has recognized the need for SPP and all interested parties to have a full and fair hearing to address MISO's intentional use of its neighbor's transmission systems without compensation," said Carl Monroe, SPP executive vice president and COO. "Friday's order is consistent with what SPP has been urging FERC to do since 2011."

SPP and MISO are at odds over compensation for MISO power flows moving from the traditional MISO footprint into MISO South, which includes Entergy and other assets, that exceed the

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IPPs want review of Colo.-N.M. grid links

TRANSMISSION After getting the brush off from a utility transmission planning group, Colorado independent power producers want the Colorado Public Utilities Commission to take an initial look at the merits of expanding transmission capacity to link Colorado to New Mexico.

Last fall, the Colorado Independent Energy Association asked the Colorado Coordinating Planning Group to examine possible transmission upgrades between Path 48 in northern New Mexico and points in western and eastern Colorado. The conceptual projects could allow Colorado generators to export power to the Southwest via the Four Corners trading hub.

The CCPG utilities – Black Hills Energy, Public Service Co. of Colorado and Tri-State Generation and Transmission Association – declined to take up CIEA's request, which included three other

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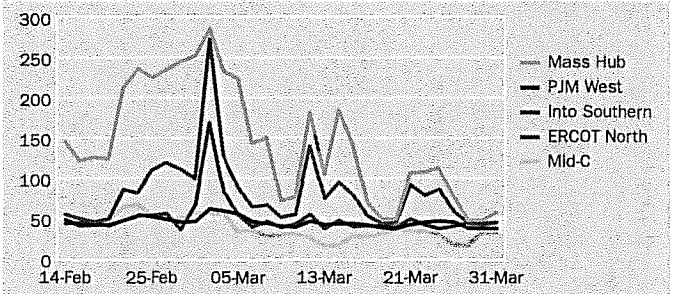
Price trends at key trading points ($/MWh)



Source: Platts

Low and high average day-ahead LMP for Apr 1 ($/MWh)

	On-peak low	On-peak high	Off-peak low	Off-peak high
ISONE	53.08	58.22	52.29	54.32
NYISO	44.26	56.22	37.63	42.59
PJM	43.95	58.82	26.08	39.80
MISO	33.02	44.51	11.86	36.60
ERCOT	42.53	54.28	29.35	29.80
SPP	40.66	47.74	17.68	24.37
CAISO	47.01	49.47	38.43	39.78

Note: Lows and highs for each ISO are for various hubs and zones. A full listing of average LMPs are availible for the hubs and zones inside this issue.

Day-ahead bilateral indexes and spark spreads for Apr 1

	Index	Marginal heat rate	Spark spreads @7k	@8k	@10k	@12k	@15k
Northeast							
Mass Hub	57.75	9494	15.17	9.09	-3.08	-15.24	-33.49
N.Y. Zone-A	40.25	9288	9.92	5.58	-3.08	-11.75	-24.75
PJM/MISO							
PJM West	45.00	10835	15.93	11.77	3.47	-4.84	-17.30
Indiana Hub	40.00	9153	9.41	5.04	-3.70	-12.44	-25.55
Southeast & Central							
Southern, Into	37.50	8503	6.63	2.22	-6.60	-15.42	-28.65
ERCOT, North	45.00	10453	14.87	10.56	1.95	-6.66	-19.58
West							
Mid-C	32.03	7243	1.07	-3.35	-12.20	-21.04	-34.31
SP15	49.00	10757	17.12	12.56	3.45	-5.66	-19.33

Note: All indexes are on-peak. Spark spreads are reported in ($) and Marginal heat rates in (Btu/kWh). A full listing of bilateral indexes and marginal heat rates are inside this issue.

Inside this Issue

the most popular by volume in this month's auction, with 1,800 MW of FTRs cleared for $82,458. Clearing prices for FTRs on this path ranged from about $59/MW for on-peak April obligations to about negative $30/MW for off-peak May obligations. All of the FTRs that cleared on this path in this month's auction were purchases by J Aron.

FTRs that appear to run from unit 2 of the Quad Cities nuclear power plant in Rock Island County in northwestern Illinois (4 QUAD C18 KV QC-2) to Northern Illinois hub had the highest net and total absolute dollars in this month's auction, with about $754,016 for about 723 MW of all types of FTRs. Clearing prices for FTRs on this path ranged from about $1,074/MW for on-peak April obligations to about $994/MW for off-peak April obligations. All of the FTRs that cleared on this path in this month's auction were sales by Exelon Generation.

The highest clearing price in this month's auction — about $6,668/MW — was for on-peak April obligations that appear to run from unit 1 of the Hope Creek nuclear power plant in Salem County in southwestern New Jersey (HOPECREE25 KV UNIT 1) to unit 6 of the Commonwealth Chesapeake Power Station in New Church in northern Accomack County, Virginia (NEWCHURC13KV CT6). Elliot Bay Energy Trading sold 0.4 MW of this type of FTR in this month's auction for about $2,667. Clearing prices for on-peak April FTRs on this path in last month's auction were about $17,354/MW.

The largest negative clearing price in this month's auction was about negative $6,493/MW for on-peak April obligations from the Bayview power plant in Northampton County, Virginia (BAYVIEW) to unit 11 of the Christiana power plant in New Castle County, Delaware (CHR138 12 KV G11). EDF Trading sold about 0.5 MW of this type of FTR for about negative $3,247. Clearing prices for on-peak March obligations on this path in last month's auction were about negative $11,534/MW while clearing prices for on-peak April obligations on this month's path in last year's auction were about negative $3,308/MW.

— Juliana Brint

N.J. BPU details efficiency savings

New Jersey reported nearly a quarter of a million MWh saved through energy efficiency programs during the last six months of 2013, or 48% of the annual savings goal.

A report issued by the Board of Public Utilities said residential programs supported by the state clean energy program saved 141,821 MWh between July 1 and December 31. The program reached 55% of its annual MWh savings goal of 257,299 MWh. The largest source of energy savings was through energy efficient products, the report said.

Commercial and Industrial programs saved 107,432 MWh, the report said. The C&I segment reached 41% of its 261,066 MWh annual goal.

The largest single source of energy savings for commercial and industrial customers was through the retrofit program, the report said.

The state has an annual goal of achieving 12,065 MWh of energy savings through combined heat and power fuel cells, but the program did not produce any savings, according to the report.

Customers have committed to an additional 256,212 MWh of energy savings, 18,697 from residential customers and 237,515 from C&I customers.

Installed demand side savings programs achieved 39,134 kW of savings, 18,363 kW of which was from residential programs and 20,589 kW was from C&I programs. The programs have an additional 61,537 kW of committed savings, 15,283 from residential customers and 46,254 from C&I customers, the report said.

Previously New Jersey had a goal to reduce energy use 20% by 2020, but it has since revised that to reflect the PJM Interconnection's outlook for more modest peak load growth, the state said in its most recent energy master plan.

Governor Chris Christie has been cutting the BPU's clean energy programs to plug budget shortfalls since 2010. "About $1 billion has been diverted out," Jeff Tittel, executive director of the New Jersey chapter of the Sierra Club, said Monday in an interview.

The BPU staff in July proposed a budget that it said could work toward reaching the 20% reduction in usage by 2020. But there is no mandatory energy savings goal, Tittel said.

"It's a hap-hazard program. Some years utilities participate in energy efficiency program, but there is no metric to see what they are doing. There is no coordinated state program," Tittel said. Public Service Electric & Gas said it reduces usage about 281 million kWh a year through the BPU funded programs.

Staff recommended a 2014 budget of $379.25 million, but the approved budget for energy efficiency programs was $303 million. The actual and committed expenditures for the year is expected to be $190.5 million, or 62.87% of the authorized funding, the BPU report on energy savings said.

— Mary Powers

Cost of efficiency programs examined ...from page 1

have consistently shown that efficiency savings are as much as one-third to one-half the cost of other resource options, such as new power plants. A recent report by the American Council for an Energy-Efficient Economy said the national average CSE is 2.8 cents/kWh, though its sample size is much smaller than that of the LBNL report. Both reports use levelized costs that amortize the initial cost of programs over the lifetime of a measure at a discount, since savings continue to accrue following initial efficiency investments.

The arrival of spring brought several reports on energy efficiency blooming, most of which point to increased utility spending on efficiency programs. The Edison Foundation's Institute for Electric Innovation said electric efficiency spending was $5.9 billion in 2012, a 3% increase from 2011 levels, and in five states, efficiency spending more than doubled from 2011 levels.

Electricity saved under those programs reached 126 TWh in 2012, compared with 107 TWh in 2011. The report found that states with energy efficiency resource standards and regulatory

policies that support utility efforts to pursue efficiency tend to be leaders in efficiency savings, since utilities account for 89% of the customer-funded efficiency spending in 2012.

"Behind the trend toward larger energy efficiency budgets is the progress that electric utilities and state regulators are making in turning energy efficiency into a sustainable and scalable business for utilities. We believe that efficiency-aligned regulatory frameworks, along with standards, will lead to customer-funded electric efficiency budgets in excess of $14 billion by 2025, up from about $7 billion in 2013," Lisa Wood, executive director of the institute and vice president at the Edison Foundation, said in a statement.

The ACEEE report and LBNL report detail the costs associated with saving energy through various efficiency programs, with ACEEE collecting data from 20 states for electricity programs for 2009 to 2012. LBNL examined program results in 31 states covering mainly 2009-2011, saying the study contains the largest sample of efficiency program administrators to date.

Both reports noted that because states and regional entities have different definitions and formats for reporting energy savings, broad samples and comparing state or utility costs are a challenge. Both reports offered recommendations for states and utilities to improve consistency and transparency in reporting efficiency practices.

ACEEE issues a separate annual report ranking state efficiency programs, with the top 10 states in that benchmarking study, in order of ranking, Massachusetts, California, New York, Oregon, Connecticut, Rhode Island, Vermont, Washington, Maryland and Illinois.

In the LBNL report, the five highest-cost states for efficiency based on their CSE are Massachusetts, Vermont, Florida, Rhode Island and Connecticut. Thus, with four of those states farther along on the efficiency front and perhaps moving past the "low-hanging fruit" of lighting programs and some of the low-cost early efficiency efforts, it may appear that CSE costs rise over time.

LBNL examined the issue, noting that as efficiency programs get beyond a certain number of years, saturation of low-cost measures may push program administrators toward more costly measures or target harder-to-reach market segments. But a regression analysis within the report does not show a statistically significant relationship, and any effect is small based on the data gathered. "Our results were inconclusive," said Megan Billingsley, senior research associate at LBNL and one of the authors of the report.

"We plan to gather additional data, refine our method to estimate program administrator experience variable, and re-examine evidence for this relationship," LBNL said in the report.

The state CSE figures range from a high of 5 cents/kWh for Massachusetts to 1 cent/kWh or below in Illinois, Ohio and Indiana. Vermont is the only other state above 4 cents/kWh, with Florida at 4 cents/kWh. California, which has been a leader among states pursuing efficiency savings for many years, has a CSE of 2.5 cents, according to the LBNL report.

Some state efficiency mandates direct utilities to acquire all cost-effective efficiency savings, but there are a number of factors that can go into cost-effectiveness calculations, said Billingsley. The CSE figures seem to be more affected by the state targets and efficiency goals, and not how long a program has been in place, Billingsley said in an interview.

"Many analysts have hypothesized" that CSE costs will increase over time as efficiency program administrators increase savings levels, ACEEE said in its report. "An initial correlation analysis in this study finds only a very weak correlation between CSE values and energy savings levels. This analysis casts doubt on the claim that higher savings levels are associated with higher costs," the report said.

Both reports emphasize that efficiency savings will continue to accrue as efficiency investments provide benefits to consumers and utilities over time. Those benefits include avoided transmission and distribution costs, lower peak demand, price mitigation effects in wholesale markets and reduced pollution, ACEEE said.

LBNL's electricity markets and policy group is holding a webcast to discuss the results of its study on Wednesday. More information is available at http://emp.lbl.gov/

— Tom Tiernan

SPP 'pleased' with FERC order

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1,000 MW direct connection between them. SPP has argued that this practice improperly uses SPP assets without reservation or compensation, while MISO has argued that the terms of their joint operating agreement allow it to send such flows unless there is congestion or other priority use (EL14-21).

FERC on Friday found that the dispute raised "issues of material fact that cannot be resolved based on the record before us," sending the matter for settlement proceedings and, if necessary, an evidentiary hearing. SPP in recent comments had called hearings necessary to resolve the conflict, while MISO had argued that setting the matter for hearing was "neither required nor necessary."

Unless a settlement can be agreed upon, FERC predicted that a final decision following an evidentiary hearing would likely not be reached until January 2016.

Southern Co. as well welcomed FERC's decision, as spokeswoman Jeannice Hall on Monday called it "a positive outcome that will provide all of the involved parties additional time to work toward a mutual resolution of the issues surrounding the Entergy integration into MISO." Southern, along with the Tennessee Valley Authority and others, have like SPP argued that MISO is using their transmission assets on an unauthorized basis.

Meanwhile, MISO is emphasizing that FERC's order was "procedural" and "did not decide the primary issue in this case."

"MISO is continuing to evaluate the order," said Jennifer Curran, the grid operator's vice president for transmission, in a statement Monday. She went on to say that "we look forward to working through the process to achieve solutions which are reliable, equitable and provide benefits to end use consumers."

— Bobby McMahon, Juliana Brint

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