

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

CONSIDERATION OF THE)	
REQUIREMENTS OF THE FEDERAL)	ADMINISTRATIVE
ENERGY POLICY ACT OF 2005)	CASE NO.
REGARDING FUEL SOURCES AND FOSSIL)	2007-00300
FUEL GENERATION EFFICIENCY)	

O R D E R

On August 8, 2005, President George W. Bush signed into law the Energy Policy Act of 2005 ("EPAAct 2005"), which amended the Public Utility Regulatory Policies Act of 1978 ("PURPA") by adopting new standards for electric utilities regarding net metering, fuel source diversity, fossil fuel generation efficiency, smart metering, cogeneration and small power production, and interconnection. EPAAct 2005 requires that certain actions be taken by each electric utility and each state regulatory authority regarding the EPAAct 2005 amendments.

The Commission initiated this administrative proceeding on August 2, 2007 to consider the requirements of Subtitle E Section 1251 of EPAAct 2005 relating to fuel source diversity and fossil fuel generation efficiency standards. All Kentucky jurisdictional electric generating utilities¹ ("generators") were made parties to this proceeding even though, as generation and transmission cooperatives, Big Rivers and

¹ Big Rivers Electric Corporation ("Big Rivers"), Duke Energy Kentucky, Inc. ("Duke Kentucky"), East Kentucky Power Cooperative, Inc. ("EKPC"), Kentucky Power Company ("Kentucky Power"), Kentucky Utilities Company ("KU"), and Louisville Gas and Electric Company ("LG&E").

EKPC are not subject to PURPA because they do not make retail sales. The Kentucky Industrial Utility Customers, Inc. ("KIUC") is the only party that has intervened in this proceeding.

An informal conference to identify the major issues of this case was held on August 13, 2007. Comments of the generators were submitted on or before September 28, 2007. Commission Staff issued its first data request on November 9, 2007.

With its Order of February 26, 2008, the Commission, finding that the issues in this proceeding were related to and dependent upon the investigation in Case No. 2007-00477,² placed this matter in abeyance until the completion of that case. That proceeding was initiated in response to Section 50 of House Bill 1, Incentives for Energy Independence Act ("HB 1" or "2007 Energy Act"), passed in a special session of the Kentucky General Assembly ("General Assembly") in August 2007.

Subsequent to the completion of Case No. 2007-00477, this case was reopened by the Commission's Order of October 14, 2008, which required the submission of testimony by November 7, 2008. The generators submitted their testimonies as directed. Procedural schedules were then established, allowing for a second data request as well as allowing KIUC to file comments or testimony and permitting the parties an opportunity to request a hearing. KIUC declined to file comments or testimony. In light of the fact that no request for a hearing has been submitted, the matter now stands submitted for a decision.

² Administrative Case No. 2007-00477, An Investigation of the Energy and Regulatory Issues in Section 50 of Kentucky's 2007 Energy Act (Ky. PSC Nov. 20, 2007).

EPAct 2005 requires each state regulatory authority to conduct a formal investigation and issue a decision on whether or not it is appropriate to implement certain standards. The Commission previously considered Section 1252 standards regarding time-based metering and demand response, and the Section 1254 standard relating to interconnection service in Administrative Case No. 2006-00045,³ which was completed in December 2006.

In 2008, the Kentucky General Assembly, pursuant to the enactment of Senate Bill 83 ("SB 83"), amended then-existing statutory requirements for net metering of electricity, which are codified in KRS 278.465 et seq. SB 83 directed the Commission to adopt interconnection and net metering guidelines for all jurisdictional retail electric suppliers. In accordance with the directives of SB 83, the Commission initiated Administrative Case No. 2008-00169⁴ and established interconnection and net metering guidelines. The Commission is of the opinion that this prior action fully addresses the net metering standards set forth in Section 1251 of EPAct 2005.

The EPAct 2005, Section 1251 standards regarding fuel sources and fossil fuel generating efficiency, which are the subject of this proceeding, are the only two EPAct 2005 standards remaining for the Commission to address.

³ Administrative Case No. 2006-00045, Consideration of the Requirements of the Federal Energy Policy Act of 2005 Regarding Time-Based Metering, Demand Response, and Interconnection Service (Ky. PSC Dec. 21, 2006).

⁴ Administrative Case No. 2008-00169, Interconnection and Net Metering Guidelines for Retail Electric Suppliers and Qualifying Customer-Owned Generators (Ky. PSC Jan. 8, 2009).

FUEL SOURCES STANDARD - DISCUSSION

The EPC Act 2005, Section 1251(12), standard regarding fuel sources, requires an electric utility to develop a plan to minimize dependence on one fuel source and to ensure that the electric energy it sells to consumers is generated using a diverse range of fuels and technologies, including renewable technologies. The generators all recommend that no fuel source diversity standard be adopted. One or more of the generators consistently cited several factors in support of that position. Those factors include:

1. The requirements of the Commission's Integrated Resource Planning ("IRP") regulation, 807 KAR 5:058, and the IRP review process. This includes the requirement to provide a reliable supply of electricity at the lowest possible cost.
2. The ability of the Commission to review a generator's resource selection under the statute governing Certificates of Public Convenience and Necessity ("CPCN"), KRS 278.020.
3. The ability to review resource options under the Commission's broad investigative authority pursuant to KRS 278.280.
4. The General Assembly's stated policy to encourage the use of Kentucky coal pursuant to the preamble to the Environmental Surcharge statute, KRS 278.183, and in the language of KRS 278.020.
5. The belief that a mandatory fuel source diversity standard may be counterproductive and result in increased costs by requiring a utility to acquire energy resources that are not cost-effective.
6. The generators' own internal resource procurement process that allows for the consideration of energy efficiency, the purchase of green power, and the consideration of other renewable resources.

The testimony submitted by the generators essentially mirrors their initial comments. EKPC, in fact, adopts its earlier comments as its testimony. The comments and testimony submitted by each generator are discussed as follows.

Big Rivers

In its filed comments, Big Rivers states that, in addition to the directive provided by the General Assembly in KRS 278.183 to encourage the use of Kentucky coal, a standard requiring all generation utilities in Kentucky to diversify fuel portfolios is not consistent with the policy set forth in the IRP regulation that electric utilities should provide power at the lowest reasonable cost, since that cost is likely to increase fuel costs for Kentucky utilities. Big Rivers also points out that the standard encourages the use of renewable energy, which may force utilities to increase rates because of the higher cost of renewables in relation to the low cost of power from base-load plants.⁵

In its testimony, Big Rivers states that the fuel source diversity standard “is not consistent with a number of public policies applicable”⁶ in Kentucky. As it did in its comments, Big Rivers cites the provision of adequate power at the lowest reasonable cost set forth in the IRP regulation. Big Rivers further states that, since Kentucky generation is heavily coal-based, Kentucky generators may suffer certain efficiency losses if required to diversify. Also, Big Rivers argues that requiring utilities to invest in renewable energy may force them to increase rates.⁷ Finally, Big Rivers states that the EPAAct 2005 fuel source diversity standard is inconsistent with the General Assembly’s policy to encourage the use of Kentucky coal.⁸

⁵ Comments of Big Rivers, September 28, 2007.

⁶ Testimony of David A. Spainhoward, November 7, 2008, at 3.

⁷ Id., at 4.

⁸ Id., at 5.

Big Rivers recommends that, rather than adopting the fuel source diversity standard, the Commission consider a utility's need to diversify as part of the IRP process. Big Rivers states that, if problems with a utility's fuel portfolio are uncovered in the IRP process, the Commission has the authority to initiate a formal proceeding to address such problems. In addition, Big Rivers notes that the review within the IRP process is consistent with the requirement to provide adequate power at the lowest reasonable cost.⁹

Duke Kentucky

Duke Kentucky also cites in its comments the legislative directive to encourage the use of Kentucky coal. Duke Kentucky argues that there is no need to adopt the fuel source diversity standard due to the authority already granted the Commission by the IRP regulation,¹⁰ the CPCN statute,¹¹ the Fuel Adjustment Clause ("FAC") regulation,¹² the Demand-Side Management ("DSM") statute,¹³ the Net Metering statute,¹⁴ the Complaint statute,¹⁵ and the statute relating to service.¹⁶

⁹ Id., at 6.

¹⁰ 807 KAR 5:058.

¹¹ 807 KAR 5:001, Section 9.

¹² 807 KAR 5:056

¹³ KRS 278.285.

¹⁴ KRS 278.465 to 278.468.

¹⁵ KRS 278.260.

¹⁶ KRS 278.280; Comments of Duke Kentucky, September 26, 2007.

Duke Kentucky's testimony cites the Commission's IRP process, the CPCN process, the FAC regulation, and the Commission's authority to approve energy efficiency plans as currently providing it with the authority to address fuel source diversity.¹⁷ Duke Kentucky argues that, in addition to diversity, the overriding principle of resource planning is to provide a least-cost resource mix that also includes balancing reliability and environmental considerations. As such, Duke Kentucky argues that a strict fuel source diversity standard is impractical and contrary to the public interest.¹⁸ Duke Kentucky recommends that a feasibility study be performed to determine whether alternative resources are possible, reliable, cost-effective, and deliverable before any standard is considered.¹⁹

EKPC

EKPC, in its comments, cites the existing regulatory process as a mechanism to ensure that fuel source diversity issues are adequately addressed. In addition, EKPC cites the General Assembly's directive encouraging the use of Kentucky coal. Finally, EKPC notes that mandating a percentage mix of alternative fuel sources will inevitably lead to higher costs.²⁰

EKPC adopts its comments as its testimony and recommends that the fuel source diversity standard not be adopted.²¹

¹⁷ Testimony of David E. Freeman, November 6, 2008, at 4–8

¹⁸ Id., at 8 and 9.

¹⁹ Id., at 9.

²⁰ Comments of EKPC, September 28, 2007.

²¹ Testimony of James C. Lamb, Jr., November 6, 2008.

Kentucky Power

In its comments, Kentucky Power argues that the adoption of the federal fuel source standard would be contrary to the directive to use Kentucky coal established by the General Assembly. Kentucky Power's 1,450 MW of generation is entirely coal-fired, base load generation; therefore, requiring it to provide specific amounts of generation from other fuels to achieve diversity would require it to lock into restrictive plans to produce fuel source diversity that would be inefficient and uneconomic. Finally, Kentucky Power cites the same statutes and regulations cited by the other generators that, it argues, negate the need for adoption of the federal standard.²²

In its testimony, Kentucky Power restated its position that the fuel source diversity standard is unnecessary, would impose significant costs on Kentucky ratepayers, would contravene a legislative policy (to encourage the use of Kentucky coal), and is inappropriate.²³ Kentucky Power explains that its 1,450 MW of generation is entirely coal-fired base load and that even a minimal shift in fuel mix will significantly increase costs to its ratepayers. Kentucky Power explains that its parent company, American Electric Power ("AEP"), has investigated renewable resources and found that renewables have a higher cost than conventional resources. Kentucky Power states that, because of the higher cost of renewable resources, it is difficult to justify expending the resources required to plan, acquire and seek approval for renewable generation under existing regulatory constraints. In addition, Kentucky Power notes that many

²² Comments of Kentucky Power, September 28, 2007.

²³ Testimony of Errol K. Wagner, November 7, 2008, at 2 and 3.

renewable resources pose operational (questionable reliability) and planning (valued at 10 to 15 percent of name plate value) issues.²⁴

Kentucky Power also testified that the current CPCN process and FAC review provide the Commission with existing authority to consider fuel source diversity. Kentucky Power further cites the newly developed net metering guidelines and its recently approved Green Power Rider as an indication of its willingness to consider renewable resources. Finally, Kentucky Power cites the General Assembly's policy to foster the use of Kentucky coal and the fact that the 2007 Energy Act did not limit the use of coal-fired generation and, in fact, authorized \$2 million to study carbon dioxide sequestration as continued legislative support for coal-fired generation.²⁵ Kentucky Power, therefore, recommends that the fuel source diversity standard not be adopted by the Commission without seeking legislative authority and that any standard be voluntary, recognize the diversity of generation resources currently available through contractual and other relationships, be coupled with incentives, and provide no disincentive for the use of coal.²⁶

KU and LG&E

In their comments, KU and LG&E cited the IRP process, the CPCN process, and the Commission's existing broad investigative authority as justification to reject the federal standard. KU and LG&E also pointed to their own fuel procurement policies

²⁴ Id., at 4-6.

²⁵ Id., at 7-9.

²⁶ Id., at 11-13.

which, they assert, help ensure the reliability and long-term availability of coal at reasonable prices. In addition, KU and LG&E emphasize the importance of diversity when selecting mine sources and fuel transportation.²⁷

In their testimony, KU and LG&E reiterated their comments regarding the IRP process, the CPCN process, the Commission's broad investigative authority, and their own fuel procurement process as support for their contention that the fuel source diversity standard need not be adopted.²⁸ In addition, KU and LG&E state that they are pursuing a sensible renewable strategy through their Green Energy Program that allows customers to purchase green power or Renewable Energy Certificates.²⁹ KU and LG&E also cite the General Assembly's policy to encourage the use of Kentucky coal. Finally, KU and LG&E believe that a mandatory fuel source diversity standard could be counterproductive by requiring utilities to employ generation fuels that are "neither financially prudent nor needed to meet demand" and would unnecessarily increase the cost of service.³⁰

²⁷ Comments of KU and LG&E, September 28, 2007.

²⁸ Testimony of Lonnie E. Bellar, November 7, 2008, at 2-3.

²⁹ Id., at 4.

³⁰ Id., at 5-6.

FUEL SOURCES STANDARD - FINDINGS

In several administrative cases,³¹ the Commission has noted its support for both energy efficiency and renewable resources. Kentucky's 7-Point Strategy for Energy Independence ("Governor's Energy Plan") includes specific goals for energy efficiency, renewables, and biofuels by 2025. That plan also allows for electricity from nuclear power generators but includes no specific goals for such generation. In addition, it appears from the national debate in the United States Congress that there is a strong movement toward greater use of energy efficiency, renewables, and biofuels as well as the consideration of more nuclear power to meet the demand for electricity now supplied by fossil-fueled generation. It is in the interest of both Kentucky's generators and their ratepayers that greater consideration of fuel source diversity be encouraged, coupled with proposed carbon legislation.

While the General Assembly encourages the use of Kentucky coal, the evolving environmental concerns cited above, as well as in the Governor's Energy Plan, dictate that Kentucky's generators develop plans to further diversify their generation mix and eliminate dependence on one source of fuel. As set forth in the IRP regulation, Kentucky's generators are required to provide a least-cost resource mix while balancing

³¹ Administrative Case No. 387, A Review of the Adequacy of Kentucky's Generation Capacity and Transmission System (Ky. PSC Dec. 20, 2001); Administrative Case No. 2005-00090, An Assessment of Kentucky's Electric Generation, Transmission and Distribution Needs (Ky. PSC Sept. 15, 2005); and Administrative Case No. 2007-00477, An Investigation of the Energy and Regulatory Issues in Section 50 of Kentucky's 2007 Energy Act (Ky. PSC Nov. 20, 2007).

cost-effectiveness with reliability and environmental concerns. The Commission believes the realities facing today's electric industry requires that greater fuel source diversity be considered. The Commission has engaged in developing cost-effective resource planning by Kentucky's utilities, as evidenced by its approval of net metering guidelines, its support of a voluntary real-time pricing pilot program for large commercial and industrial customers, and its support of the residential real-time pilot program currently authorized for LG&E.

While strongly supporting fuel source diversity, the Commission declines to mandate a single, restrictive standard. The changing nature of the environmental debate in Congress and even possible action by the General Assembly on the Governor's Energy Plan would likely make such a mandate moot. In addition, the prevailing statutes and the IRP regulation not only require consideration of fuel source diversity by Kentucky's electric generators, but also allow the Commission broad authority to review the actions of those generators. The Commission finds that the IRP regulation provides a continuing mechanism for planning and provides the generators with the flexibility to react as technology and alternative resources evolve and as the statutory climate changes.

The IRP regulation, 807 KAR 5:058, Section 8(2)(b), requires the generators to include in their IRPs an assessment of cost-effective conservation, load management, or DSM programs not already in place. Likewise, Section 8(2)(d) requires the generators to include in their IRPs an assessment of cost-effective non-utility generation, including cogeneration, renewables, and other non-utility sources. Other

sections of the IRP regulation require a detailed discussion of new energy efficiency programs as well as the utility's resource assessment and acquisition plan.

While the long-term planning horizon for each IRP is 15 years, the information required for the broad issue of fuel source diversity is generally discussed in terms of a three-year perspective that corresponds to the standard filing cycle for IRPs. The Commission finds that the information required for the IRP and its authority under various statutes to review fuel source diversity is adequate and that no fuel source standard need be adopted. Review of IRPs is performed by Commission Staff in an informal process resulting in a Staff Report, rather than being addressed in a formal proceeding before the Commission. However, should it find it necessary to do so, the Commission is authorized by other statutes to initiate a formal proceeding to evaluate a generator's IRP, as well as the cost-effectiveness of its energy supply.

In connection with its decision not to mandate adoption of a fuel source standard, the Commission directs the jurisdictional generators to place greater emphasis on research into cost-effective alternatives to generation based on coal, natural gas, and fuel oil. Also, in accordance with 807 KAR 5:058, Section 8(2)(b) and (d), the Commission directs the generators to include a full, detailed discussion of such efforts in IRPs filed subsequent to the date of this Order.

FOSSIL FUEL GENERATION EFFICIENCY STANDARD - DISCUSSION

The EAct 2005, Section 1251(13), standard regarding fossil fuel generation efficiency, requires each electric utility to develop and implement a 10-year plan to increase the efficiency of its fossil fuel generation. The generators all recommend that

no generation efficiency standard be adopted and consistently cite several factors in support of their positions. Those factors are:

1. The generators currently have incentives to improve generation efficiency in order to reduce costs.
2. The requirements of the IRP regulation and the IRP review process. This includes the requirement to provide discussion of improvements to and more efficient utilization of existing generation.
3. The concern that any significant improvements to generating facilities may trigger costly New Source Review permitting requirements.
4. The assertion that considerations of cost-effective improvements are part of the generators' planning process. Examples of certain improvements were provided.
5. Generation efficiency needs to be utility-specific and unit-specific because of differing operating constraints and characteristics.

As with the fuel sources standard, the testimony submitted by the generators essentially mirrors their comments. The comments and testimony submitted by each generator are discussed below:

Big Rivers

In its comments, Big Rivers states that the generator efficiency standard requires an increase in efficiency without taking into account the economic impact on each utility and without consideration of each utility's individual circumstances. According to Big Rivers, since the standard does not allow for the consideration of cost-effectiveness, it is not consistent with the policy that electric utilities should provide power at the lowest

reasonable cost. Big Rivers recommends that the Commission continue to review generator efficiency in the context of the IRP process.³²

In its testimony, Big Rivers reinforces its opinion that the generation efficiency standard requires an increase in efficiency without consideration of cost-effectiveness. In addition, Big Rivers expresses its concern that improvements may require a New Source Review permit. Also, Big Rivers notes that generators run their plants at differing capacity rates depending on the load being served.³³

Big Rivers recommends that the Commission reject the adoption of the EPA 2005 generation efficiency standard or any generation efficiency standard and review generation efficiency as part of the IRP process, which requires the utility to discuss consideration of improvements to and more efficient utilization of existing generation.³⁴

Duke Kentucky

In its comments, Duke Kentucky noted its belief that the generation efficiency standard may be in conflict with the interpretation of the U.S. Environmental Protection Agency that any upgrade, modification, or other change in operation of an existing generating unit without compliance with new source performance standards is in violation of the federal New Source Review program. According to Duke Kentucky, efforts to obtain any significant increase in efficiency could trigger a New Source Review

³² Comments of Big Rivers, September 28, 2007.

³³ Testimony of David A. Spainhoward, November 7, 2008, at 7-8.

³⁴ Id., at 8.

permitting process, the cost of which would more than likely offset the benefits of the improvement in efficiency.³⁵

Duke Kentucky's testimony reiterates its concern that significant improvements in efficiency may impose additional costs by triggering a New Source Review procedure and, as such, would adversely impact ratepayers. Duke Kentucky argues that generation efficiency is a "generating unit, a company-specific, and an independent system operator" issue that requires flexibility.³⁶ Duke Kentucky discusses an actual example of how generation efficiency at its Woodsdale generating station is negatively impacted by being dispatched at low loads to meet the spinning reserve requirements of the Midwest Independent System Operator ("MISO"), even though Woodsdale provides reliability and operational value to MISO when dispatched in this manner. In addition, Duke Kentucky states that the EPCRA 2005 generation efficiency standard would create a conflicting objective of compliance with new environmental requirements, which typically have a negative impact on generation efficiency.³⁷

Duke Kentucky identifies two types of improvement projects. The first is periodic maintenance to correct wear and degradation to components due to normal operation. Duke Kentucky defines this as recurring or non-sustainable heat rate improvement. Examples are steam turbine overhaul, burner tip replacement, and air heater or condenser washes. The second type involves significant improvements or

³⁵ Comments of Duke Kentucky, September 26, 2007.

³⁶ Testimony of John G. Bloemer, November 6, 2008, at 10.

³⁷ Id., at 11-12.

modifications to the original design, which involves significant capital expenditures. An example is major design of the unit or sub-system. Opportunities for this second type of improvement are limited and may trigger the need for a New Source Review permit application.³⁸

Duke Kentucky's position is that a statewide requirement for a ten-year efficiency plan is not necessary, nor is it in the best interest of ratepayers.³⁹

EKPC

EKPC argues in its comments that its existing business model creates strong demands for it to be as efficient as possible and that competition for new loads dictates improved efficiency. EKPC cites Commission oversight of base rates and the forced outage provision of the FAC regulation as encouraging efficiency. Therefore, a single standard would not be prudent, according to EKPC.⁴⁰

EKPC adopts its comments as its testimony. EKPC does not recommend that any generation efficiency standard be adopted.⁴¹

Kentucky Power

Kentucky Power's comments note that generation efficiency is company-specific and should not be limited by rigid plans driven only by the pursuit of generation efficiency. Kentucky Power stated that Commission review of fuel and generation costs

³⁸ Id., at 12-14.

³⁹ Id., at 15.

⁴⁰ Comments of EKPC, September 28, 2007.

⁴¹ Testimony of James C. Lamb, Jr., November 6, 2008.

in base rate cases and FAC proceedings compels it toward efficient generation. Kentucky Power cited several examples wherein the AEP system has developed or undertaken efficiency improvement activities. Finally, Kentucky Power stated that adherence to one standard would limit its flexibility.⁴²

In its testimony, Kentucky Power restates its original comments. Kentucky Power claims that efficient operation of fossil fuel generating plants requires flexibility in operation, maintenance, and equipment upgrades. In addition, Kentucky Power argues that adoption of the federal standard would punish the utilities that have already made significant investments to improve generation efficiency. Also, Kentucky Power noted that the installation of environmental controls often masks increases in efficiency because such controls consume significant amounts of energy. It also states that the FAC review compels it toward efficient generation.⁴³

Kentucky Power discusses its recognition of the need to improve generation efficiency and identifies examples of the AEP system's efforts in this area. Among those are:

1. The development and operation of the first supercritical double reheat unit.
2. The development of a sliding pressure technique to improve partial load efficiency.
3. The installation of more efficient turbine valves on certain units.
4. The installation of Advanced Design Steam Paths on certain units.
5. The development of on-line performance monitors.

⁴² Comments of Kentucky Power, September 28, 2007.

⁴³ Testimony of Errol K. Wagner, November 7, 2008, at 14-15.

6. The creation of a Generation Performance Team.⁴⁴

Kentucky Power recommends that the Commission not adopt any generation efficiency standard.⁴⁵

KU and LG&E

In their comments, KU and LG&E state that they continuously search for ways to improve the heat rates (the direct measure of efficiency) of their units. In addition, they cite the IRP process as one factor that drives them toward greater efficiency and indicate that optimizing generation efficiencies is standard procedure for them.⁴⁶

KU and LG&E testify that they oppose the EPA 2005 generation efficiency standard for four reasons:

1. Utilities already have an incentive to increase generation efficiency.
2. The Commission can review generation efficiency in the IRP process.
3. System operating constraints, including meeting environmental requirements, make it difficult to fully realize theoretically attainable improvements.
4. It is unlikely that their generation fleet will improve generation efficiency at a reasonable cost over the next ten years.⁴⁷

KU and LG&E explain that, because less fuel results in lower costs, they focus on testing and other approaches that make incremental improvements to optimize

⁴⁴ Id., at 15-16.

⁴⁵ Id., at 16.

⁴⁶ Comments of KU and LG&E, September 28, 2007.

⁴⁷ Testimony of Lonnie E. Bellar, November 7, 2008, at 6.

performance which benefit both them and their customers.⁴⁸ KU and LG&E cite the discussion of generation efficiency improvements in the Commission's Section 50 Report⁴⁹ wherein, responding to the recommendation for a new surcharge to encourage generation efficiency, the Commission stated its belief that utilities currently have incentives to implement cost-effective improvements and that the costs of improvements that are not cost-effective should not be borne by ratepayers.⁵⁰

KU and LG&E oppose the adoption of the EAct 2005 standard or any generation efficiency standard, stating that they and the other generators do what is reasonable and prudent to ensure reliable, cost-effective service.⁵¹

FOSSIL FUEL GENERATION EFFICIENCY STANDARD - FINDINGS

The Commission finds that the IRP regulation requires the utilities to discuss consideration of improvements to and more efficient utilization of existing generation. In addition, we agree with the generators that the Commission presently has adequate authority under various statutes to review generation efficiency. The statutes and regulations cited by the jurisdictional generators are set forth below:

- KRS 278.190 – Procedure when new schedule of rate filed – Suspension of new rate schedule – Burden of proof – Refunds.
- KRS 278.230 – Access to property, books and records of utilities – Reports and information may be required.
- KRS 278.250 – Investigation of condition of utility.
- KRS 278.255 – Periodic management and operation audits.

⁴⁸ Id., at 6-7.

⁴⁹ "Electric Utility Regulation and Energy Policy in Kentucky: A Report to the Kentucky General Assembly Prepared Pursuant to Section 50 of the 2007 Energy Act," Case No. 2007-00477, July 1, 2008, Report at 51.

⁵⁰ Id., at 7.

⁵¹ Id., at 9.

- KRS 278.260 – Jurisdiction over complaints as to rates or service – Investigations – Hearing.
- 807 KAR 5:013 – Management and operation audits.
- 807 KAR 056 – Fuel adjustment clause.

As noted in the KU and LG&E testimony above, in its report to the Commission in Case No. 2007-00477,⁵² Overland Consulting, Inc. (“Overland”) included one recommendation specific to generation efficiency. Recommendation No. 23 stated:

“A new surcharge should be created to include and accelerate expenditures associated with efficiency improvements in utility generation facilities. The rate of return on Commission approved projects should be 50 bp higher than the most recent authorized return in the utility’s rate proceedings.”⁵³

Overland claimed that investment to improve the efficiency of existing generation facilities results in the production of fewer environmental wastes otherwise created by coal-fired facilities. Overland believed the Commission could help foster and possibly accelerate these investments by providing policy support and financial incentives.⁵⁴

In its Section 50 Report, the Commission stated that it did not support a new surcharge or a higher return. However, it did state its support for cost-effective efficiency improvements and noted that utilities currently are allowed to recover the costs of such programs and to sell the increased output. The Commission also stated its belief that financial incentives (such as grants and tax credits) should be provided for

⁵² Case No. 2007-00477, Review of the Incentives for Energy Independence Act of 2007, Section 50, prepared for the Public Service Commission, Overland Consulting, Inc., March 4, 2008.

⁵³ Id., at 108.

⁵⁴ Id.

programs that are not cost-effective but that the costs thereof should not be borne by ratepayers.⁵⁵

The Commission finds that the generators currently have incentives to improve their generation efficiency; that the IRP review process allows for sufficient review of generation efficiency; and that consideration of cost-effective generation efficiency improvements is part of a generator's planning process. In addition, the Commission finds that, outside of the IRP review process, it has the authority under several statutes and regulations to investigate generation efficiency.

The Commission does not share the generators' concern that a generation efficiency standard must be not only company-specific but also unit-specific. While the Commission agrees with the premise that generation efficiency needs to be flexible in order to accommodate company-specific and unit-specific circumstances, we believe the requirement to implement a plan as set forth in the proposed standard would allow each generator the flexibility to consider not only the operating characteristics of its generation fleet as a whole but also the specific operating characteristics of each individual generation unit.

The Commission is concerned that a literal interpretation of the proposed generation efficiency standard would require the development of generation efficiency improvement plans without consideration of cost-effectiveness and that significant improvements might trigger costly New Source Review permitting requirements. As

⁵⁵ Electric Utility Regulation and Energy Policy in Kentucky, A Report to the Kentucky General Assembly Prepared Pursuant to Section 50 of the 2007 Energy Act, by the Kentucky Public Service Commission, July 1, 2008, at 51.

stated in addressing the fuel sources standard, the Commission believes that it is not practical to mandate a single generation efficiency standard at this time. While supporting the principle of greater generation efficiency, the Commission finds that reliance on its current statutory authority and the IRP regulation provides it the broad authority and flexibility to review the generators' actions to address generation efficiency. Therefore, based on the foregoing discussion, the Commission finds there is no need to adopt any generation efficiency standard at this time.

The IRP regulation, 807 KAR 5:058, Section 8(2)(a), requires the generators to include a discussion of "improvements to and more efficient utilization of existing utility generation, transmission, and distribution facilities" in their IRPs.

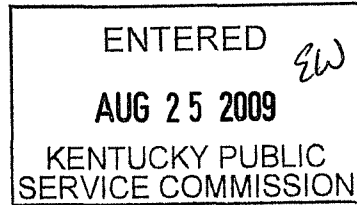
As it similarly stated in its fuel source findings, while there is no mandate to adopt a generation efficiency standard, the Commission directs the jurisdictional generators to focus greater research into cost-effective generation efficiency initiatives and to include a full, detailed discussion of such efforts in subsequent IRPs in accordance with Section 8(2)(a).

SUMMARY

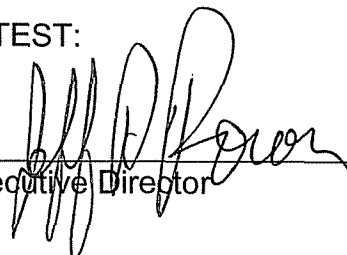
The Commission has determined that Kentucky's jurisdictional generators need not adopt either the Section 1251(12) fuel sources standard or the Section 1251(13) generation efficiency standard. The Commission has, however, indicated its strong support for the principles of both standards. The Commission believes that its decision provides for continued flexibility, which it prefers over strict standards that may become obsolete and restrict both the ability of the generators to act and the Commission's own ability to review evolving resource options and generation efficiency activities.

IT IS THEREFORE ORDERED that the EAct 2005 Section 1251(12) standard regarding fuel sources and the Section 1251(13) standard regarding fossil fuel generating efficiency shall not be adopted.

By the Commission



ATTEST:



Executive Director

Commission's own ability to review evolving resource options and generation efficiency activities.

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