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August 3, 2009

Mr. Andrew Melnykovich, Public Information Officer
Kentucky Public Service Commission
211 Sower Boulevard, P.O. Box 615
Frankfort, Kentucky 40602-0615

RECEIVED
AUG 4 2009
PUBLIC SERVICE
COMMISSION

Re: Administrative Case No. 2008-00408
*Consideration of the New Federal Standards of the
Energy Independence and Security Act of 2007*

Dear Mr. Melnykovich:

Please find attached for filing with the Commission an original of my public comments in the above-referenced proceeding.

Sincerely,



Geoffrey M. Young

Enclosure

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED
AUG 4 2009
PUBLIC SERVICE
COMMISSION

In the Matter of:

CONSIDERATION OF THE NEW)	ADMINISTRATIVE
FEDERAL STANDARDS OF THE)	CASE NO.
ENERGY INDEPENDENCE AND)	2008-00408
SECURITY ACT OF 2007)	

**FIRST PUBLIC COMMENT
OF GEOFFREY M. YOUNG**

Having reviewed the case record of the above-styled proceeding, I would like to offer the following public comments for consideration by the Commission and other parties.

I. Qualifications and Experience of Commenter

I received a bachelor's degree in Economics from the Massachusetts Institute of Technology, a master's degree in Mechanical Engineering from the University of Massachusetts, and a master's degree in Agricultural Economics from the University of Kentucky.

From 2/78 to 8/79, I worked as a Staff Engineer at Technology + Economics, a research consulting firm in Cambridge, Massachusetts. I analyzed the economic and energy savings resulting from energy efficiency technologies and prepared a commercialization plan for a low-cost passive solar heating and cooling system.

From 7/82 to 6/83, I was the Staff Engineer at the Small Business Development Center, administered by the University of Kentucky in Lexington. I performed cost-benefit analyses of energy efficiency and renewable energy technologies, provided technical assistance to small businesses, and maintained and updated a manual with descriptions of energy technologies.

From 4/90 to 9/91, I worked for the Kentucky Division of Waste Management in the Department for Environmental Protection as an Environmental Engineering

Technologist Senior. I performed technical and administrative reviews of applications for hazardous waste facility permits. I provided technical assistance to field and enforcement personnel, conducted hazardous waste facility assessments, and provided information to the public.

From 9/91 to 11/94, I worked as an Environmentalist Principal at the Kentucky Division of Energy (KDOE). My major duty at that time was to manage the Alternate Energy Development Program. I administered small grants for the demonstration of renewable energy technologies, developed fact sheets and other information for the public, edited a national monthly newsletter on energy efficiency programs in the 50 states, and wrote proposals for grant funding.

I was promoted to assistant director of KDOE in November 1994. In addition to administrative duties and continuing management of the Alternate Energy Development Program, my work focused on demand-side management (DSM), energy policy issues, energy-efficient building systems, and alternative fuels for vehicles. Between 1994 and 2004, I represented KDOE on DSM collaboratives at Louisville Gas and Electric Company and Kentucky Utilities Company, Kentucky Power Company (AEP), and the Union Light, Heat and Power Company (Duke Energy Kentucky). I was the lead person for the Division in addressing electric industry regulatory issues before the Commission. KDOE was later reorganized and shifted into the Governor's Office of Energy Policy. Another reorganization placed it in the Energy and Environment Cabinet.

I left State Government in the fall of 2004, and have been working full-time as a volunteer for various nonprofit organizations since then.

I prepared and submitted testimony in the following PSC cases:

- Case No. 98-426, *Application of Louisville Gas and Electric Company for Approval of an Alternative Method of Regulation of Its Rates and Service*
- Case No. 98-474, *Application of Kentucky Utilities Company for Approval of an Alternative Method of Regulation of Its Rates and Service*
- Case No. 2000-459, *The Joint Application of the Louisville Gas and Electric Company and Kentucky Utilities Company for the Review, Modification and Continuation of DSM Programs and Cost Recovery Mechanisms*
- Case No. 2001-053, *the Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity, and a Certificate of Environmental Compatibility, for the Construction of a 250 MW Coal-Fired Generating Unit (With a Circulating Fluid Bed Boiler) at the Hugh L. Spurlock Power Station and Related Transmission Facilities, Located in Mason County, Kentucky, to be Constructed Only in the Event that the Kentucky Pioneer Energy Power Purchase Agreement is Terminated*
- Administrative Case No. 387, *A Review of the Adequacy of Kentucky's Generation Capacity and Transmission System*
- I drafted testimony for KDOE in Administrative Case No. 341, *An Investigation Into the Feasibility of Implementing Demand-Side Management Cost Recovery and Incentive Mechanisms*

I was the lead participant and representative for KDOE in the following integrated resource planning cases:

- Kentucky Power Company (dba AEP), Cases No. 99-437 and 2002-00377
- Big Rivers Electric Corporation, Cases No. 99-429 and 2002-00428
- East Kentucky Power Cooperative, Inc., Cases No. 2000-044 and 2003-00051
- Louisville Gas and Electric Company and Kentucky Utilities Company, Cases No. 99-430 and 2002-00367
- The Union Light, Heat and Power Company, Case No. 99-449

I testified orally at a public hearing and submitted written follow-up comments in Administrative Case No. 2005-00090, *An Assessment of Kentucky's Electrical Generation, Transmission, and Distribution Needs*.

I served as an expert witness and submitted prepared testimony in Cases No. 2005-00142 and No. 2005-00467, both of which were styled, *Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade and Hardin Counties, Kentucky*.

I drafted extensive public comments on behalf of the Cumberland Chapter of the Sierra Club that were submitted in Case No. 2006-00564, *An Investigation into East Kentucky Power Cooperative, Inc.'s Continued Need for Certificated Generation*.

I led the Sierra Club's team that intervened in Case No. 2006-00472, *General Adjustment of Electric Rates of East Kentucky Power Cooperative, Inc.*

II. General Statement

The clear intent of the federal standards that are to be considered in this administrative case is to remove regulatory barriers to cost-effective energy efficiency improvements (and other cost-reducing measures) in all sectors of the economy. In general, the guidelines address problems and issues that are real and urgent in Kentucky. The standards are extremely well thought-out and could be implemented in the energy sector of any state. They present Kentucky with a major opportunity – to replace the patchwork of half-measures, loopholes and ambiguous regulations that have gradually built up over the years with a coherent framework aimed at achieving dramatic, sustainable improvements in energy efficiency. In general, the federal standards and guidelines are likely to work much better than the regulations and policies Kentucky has been able to devise on its own, should be adopted statewide, and should be made binding on all jurisdictional energy utility companies (and, to the extent feasible, on other energy utilities as well). Literally all parties should be able to benefit from the regulatory changes that are likely to follow the statewide adoption of these standards, because all parties can benefit when energy waste is reduced.

As Governor Beshear's energy strategy noted in its well-documented initial section on energy efficiency, "Nationally, approximately 25 percent of total electricity usage can be saved cost-effectively, at an average cost of three cents or less per saved kilowatt-hour (kWh). New generation sources cost five cents or more per kWh, making efficiency the lowest cost electricity resource." (*Intelligent Energy Choices for Kentucky's Future: Kentucky's 7-Point Strategy for Energy Independence*, released November, 2008, page 13) This is an extremely important finding that has implications for Kentucky's energy policies and future economic development. It also forms the basis for my analysis of the appropriateness of the federal standards that are the subject of this administrative case.

The following sections will discuss each standard in turn.

III. Integrated Resource Planning by Electric Utilities – Section 532(a)(16)

This section is remarkably concise and clear. The standard reads, "Each electric utility shall (A) integrate energy efficiency resources into utility, State, and regional plans; and (B) adopt policies establishing cost-effective energy efficiency as a priority resource." This standard should be adopted and implemented as a statewide mandate throughout Kentucky, and it is likely to have important beneficial effects for consumers and all parties involved in Kentucky's energy sector.

The standard makes a great deal of sense in light of the fact that when implemented correctly, energy efficiency improvements can be made at about half the total cost (or less) of new supply-side resources. An electric utility will typically find itself facing the following choice: Should we meet a given projected increase in demand for electricity over the next 20 years by investing \$500 million in energy-conserving demand-side management (DSM) programs or \$1 billion in new generating capacity and the fuel it will burn? Assume that in either case, the utility will receive full cost recovery via its Commission-approved tariffs. If the utility chooses the supply-side option, its customers' electric needs will be met, but \$1 billion will need to be added to the utility's revenue requirement and to customers' bills over the next 20 years – a rate increase of \$50 million per year. If the utility chooses the energy-saving DSM strategy, its customers' electric needs will be met, but only \$25 million per year will need to be added to customers' rates and bills. Choosing to harvest the energy efficiency resources rather than building the new generating capacity would be equivalent to giving the utility's customers a rate cut of \$25 million a year for 20 years.

Despite the Federal standard's being so concise, the Commission has never adopted anything like it in Kentucky. Instead, Kentucky has an integrated resource planning (IRP) regulation, 807 KAR 5:058, that requires each jurisdictional electric (or combination electric and gas) utility to provide certain information every three years. The Commission staff reviews the information, issues a report, and makes recommendations that the utility is asked to consider when it develops its next IRP three years later. The regulation does not require the Commission itself to approve, disapprove, or modify the IRPs developed by the utilities. If the utility chooses not to

adopt the staff's recommendations, there are no explicit consequences. If a utility chooses to treat DSM as merely a token resource, window-dressing or a public relations ploy, or if it discounts the value of demand-side resources (for whatever reason) and bases its IRP almost entirely on supply-side resources, there is very little the Commission can do about it. The well-designed but miniscule DSM programs operated by Big Rivers Electric Co-op come to mind as an unfortunate example.

There have been two statewide conferences on energy efficiency in recent years which were organized by the Kentucky Energy Efficiency Working Group, an informal group of utility company representatives, environmentalists, energy efficiency experts, and other professionals. Governor Fletcher made a brief presentation at the first one and Governor Beshear at the second. The keynote speakers at both conferences, however, were from nonprofit organizations based in other states where DSM plays a more central role in the energy system. Both speakers referred to the Southeast as “the Sahara Desert of energy efficiency” and included Kentucky among the states where the level of DSM activity is significantly lower than it should be. I concur with these experts' assessment, and believe that the absence of a standard such as the one being discussed is a part of the reason for Kentucky's sub-optimal DSM performance. We should not allow our pride in Kentucky to keep us from recognizing when someone else – even the US Congress (on rare occasions) – has a better idea than what we have been able to develop and implement here.

IV. Electric Rate Design Modifications to Promote Energy Efficiency Investments – Section 532(a)(17)

Many of the above comments apply, with equal or greater force, to this standard as well. The problem this standard was designed to address is simple: Under traditional ratemaking formulas, the more electricity the utility company sells, the more revenue and profit it makes. A critical defect shared by the rate structures of all of Kentucky's jurisdictional electric utilities is the throughput incentive that rewards the utility when it sell more electricity and punishes it severely when customers save large amounts of electricity.

The absence of decoupling from the rate structures and the presence of the fuel adjustment clause (FAC) have major implications. The most important one is that each utility has a strong financial incentive to sell more electricity at all times, and has a similarly powerful disincentive to help its ultimate customers improve the efficiency with which they use electricity.

In his seminal report, *Profits and Progress through Least-Cost Planning*, David Moskowitz described the problem as follows:

1. When rates are fixed (as a result of a rate case), revenues and profits are not fixed. Whenever the marginal revenue from the sale of an additional kWh is higher than the marginal cost of producing that kWh, which is virtually always the case, a utility can increase its net income by selling more electricity.

2. The fuel adjustment clause enables the utility to raise rates, in effect, if the utility is forced to use a higher-priced fuel to meet peak demands. According to Moskowitz,

“Utilities even make money when they sell power for what initially appears to be less than it costs to produce. For example, to meet increased demand during peak periods, a utility may crank up a relatively inefficient diesel generator that consumes 10 cents worth of fuel to produce one kWh of electricity. The regulated price of power might be seven cents per kWh, which represents five cents in fixed costs and two cents allotted for the utility’s ‘average’ fuel costs. But the utility can recover the extra eight cents in fuel costs later (that is, the generator’s ten-cent fuel cost minus the two-cent average fuel cost) by invoking the fuel adjustment clause to raise rates. In effect, the utility charges customers 15 cents for the kWh, 7 cents now and 8 cents later through the true-up provisions of the fuel clause.”

3. In general, incremental sales of electricity to an existing customer add no costs other than the fuel needed to produce the power. But because the price of electricity is fixed by the tariff and includes an element designed to allow the utility to recover its fixed costs, each kWh sold adds to net revenue.

4. The same logic applies to reductions in energy consumption. Each kWh not sold, due to customers’ energy efficiency improvements or cogenerators, nonutility power producers, etc., has a powerfully negative effect on revenue and net revenue. [Moskovitz, David, *Profits and Progress through Least-Cost Planning*, November, 1989, prepared for the National Association of Regulatory Utility Commissioners (NARUC), pp. 3-6.] The entire report is available on the web at no charge via the website of the Regulatory Assistance Project, where Moskowitz is employed: <http://www.raponline.org/Pubs/General/Pandplcp.pdf>

David Moskowitz is a Director and co-founder of The Regulatory Assistance Project. He served as a Commissioner of the Maine PUC from 1984 through 1989 after having served as a Commission Staff Attorney for six years. Mr. Moskowitz authored Maine's rules regarding the development of cogeneration and small power production. Prior to joining the Maine PUC, he was employed by Commonwealth Edison, Inc., an Illinois utility. Mr. Moskowitz has published numerous technical and policy articles on incentive regulation, least-cost planning and renewable energy. He is a frequent speaker at national seminars and has provided expert testimony on these topics. He received his B.S.E. in Engineering from Purdue University and his J.D. from Loyola University. (<http://www.raponline.org/AboutUs.asp#>)

It could be said that this set of financial incentives and disincentives is one of the unintended consequences of the traditional ratemaking approach. Just because certain consequences are unintended or have not been the focus of much recent regulatory attention, however, does not mean they are unimportant. I believe that these perverse

incentives constitute the major reason why there is no regulated utility company in Kentucky that has even come close to optimizing the scale, scope, and potential effectiveness of its energy efficiency programs.

The implications of the analysis described in Moskovitz' November 1989 report were codified in a Resolution in Support of Incentives for Electric Utility Least-Cost Planning that was approved by the Executive Committee of the National Association of Regulatory Utility Commissioners (NARUC) at its 1989 Summer Committee Meeting in San Francisco. The Executive Committee urged its member state public utility commissions to:

- 1) consider the loss of earnings potential connected with the use of demand-side resources; and
- 2) adopt appropriate ratemaking mechanisms to encourage utilities to help their customers improve end-use efficiency cost-effectively; and
- 3) otherwise ensure that the successful implementation of a utility's least-cost plan is its most profitable course of action.

The Federal Energy Policy Act of 1992 (EPAct92) then codified this concept in Federal law in the form of a ratemaking standard that each state's public utility commission was required to consider implementing. This standard is now in effect, is codified in 16 USC Chapter 46, subchapter II, Section 2611, subsection d(8), and reads as follows:

(8) Investments in conservation and demand management

The rates allowed to be charged by a State regulated electric utility shall be such that the utility's investment in and expenditures for energy conservation, energy efficiency resources, and other demand side management measures are at least as profitable, giving appropriate consideration to income lost from reduced sales due to investments in and expenditures for conservation and efficiency, as its investments in and expenditures for the construction of new generation, transmission, and distribution equipment. Such energy conservation, energy efficiency resources and other demand side management measures shall be appropriately monitored and evaluated.

The law was a guideline rather than a requirement; any given public utility commission could choose to implement it in its ratemaking activities or not. In response to this federal mandate, the Kentucky Commission conducted Administrative Case No. 341 from 1992 to 1994, which led to Kentucky's demand-side management (DSM) statute, KRS 278.285. This statute, which went into effect in July 1994, specified that DSM programs and cost recovery tariffs could be proposed by individual utility companies, and the Commission would evaluate, approve, or disapprove each proposal

on a case-by-case basis. The statute included a major loophole for certain industrial customers that allowed them to opt out of paying the costs of certain DSM programs.

The DSM cost recovery mechanisms now in place at LG&E, KU, Kentucky Power Company, and Duke Energy Kentucky do not solve the problem identified by Moskovitz, even though they provide for the recovery of DSM program costs, lost revenue, and a shareholder incentive. The electric generation and transmission cooperatives, EKPC, Big Rivers and their member distribution cooperatives, have never applied to the Commission for cost recovery pursuant to KRS 278.285. Because each utility's rate structure leaves revenue coupled to the volume of electricity sales, the rate structure rewards the marketing of more electricity at all times and penalizes the utility severely when customers reduce their energy use. For those investor-owned utilities (IOUs) whose tariffs include DSM cost recovery formulas, a complex web of incentives has been created whereby these utilities have a financial incentive to operate DSM programs that look good on paper but save very little energy in practice. The traditional incentive for these IOUs to sell more electricity at all times has been unaffected by the DSM cost recovery mechanism that the Commission has put in place.

I am compelled to conclude that to date, the Commission has failed to implement the intent of the section of EPAct92 cited above, which is that each utility's least-cost plan should be its most profitable plan. As a result, Kentucky's utility companies have operated much smaller DSM programs for the past 15 years than would have been economically optimal. (Those DSM programs designed to shift peak loads to non-peak periods have tended to be somewhat larger and more effective.) Instead, the Commonwealth's jurisdictional utilities have invested in new coal-fired power plants that have saddled customers with costs that are significantly higher than it would have cost to save the same amount of energy by improving end-use efficiency. Revenue requirements, electric rates, and customers' bills have ended up being higher than they might have been if each utility company's lowest-cost strategy had been implemented. Moreover, several additional coal-fired power plants are now under construction, and are certain to exert significant upward pressure on rates when they come on-line. These power plants may not have been needed if more cost-effective, energy-saving DSM programs had been instituted during the past 15 years.

The most effective way to eliminate the throughput incentive and put DSM on a more level playing field vis-a-vis supply-side resources is to decouple the amount of electricity a utility sells from the amount of revenue and net income it collects from its customers. This is known as decoupling.

Two utility companies – LG&E and Duke Energy Kentucky (formerly ULH&P) – operated pilot programs for four or five years whereby decoupling was in effect in the residential customer class. Decoupling was in effect in LG&E's service territory during the period from 1994 through 1998 for the residential customer class. The decoupling method that the Commission had approved at that time was a formula that included four factors. The factor that related to decoupling was called the DRLS factor, which stood for DSM Revenue from Lost Sales. At the end of each 12-month period, the utility's

non-variable revenue requirement (i.e., the total revenue less variable costs) that had been approved for the Residential Rate R in LG&E's most recent general rate case was adjusted to reflect changes in the number of customers and the usage per customer, as follows:

(1) the allowable revenue was made proportional to the number of customers, so if the number of residential customers increased by 1%, the allowable non-variable revenue from the residential class would be boosted by 1%.

(2) the allowable revenue was increased by a growth factor of 1.3% per year, to reflect the assumption that the average customer's energy use would increase at that rate.

The utility's revenue was thus recoupled to the number of customers and to an automatic growth factor. A similar decoupling formula was in effect for ULH&P.

Because these formulas can be somewhat dry and hard to understand, it may be helpful to translate the implicit messages being sent by the Commission about financial incentives by means of its approved rate structure into words. The implicit message being sent to utility companies by the traditional ratemaking formula was as follows: "For the past 60 years, one unintended side-effect of our fixed-rate formula has been that if you boost energy sales to your customers, we will reward you handsomely. Conversely, if you help your customers save large amounts of energy we will reduce your net income dramatically." The implicit message the Commission sent to LG&E and ULH&P in 1994 when it approved the decoupling formula described above was as follows: "For the next three years, on an experimental pilot basis in the residential customer class, if you help customers save energy we will stop punishing you financially; instead, we will give you a small reward. In regard to your larger customers, if you help them save large amounts of energy we will continue to cut your net income dramatically, in the same way we have done for the past 60 years." When the Commission approved the elimination of LG&E's decoupling pilot program in 1998, and a year or two later eliminated ULH&P's decoupling mechanism, it was saying, in effect, "The limited, pilot-scale experiment in one customer class was all well and good, but we are now returning to the decades-old system whereby we will reward you for boosting sales to all customers and will cut your net income dramatically if you help your customers save energy."

It is likely that the limited nature of Kentucky's experiment with decoupling had the effect of leaving largely unchanged the thinking patterns of many of the executives at LG&E and ULH&P. Because decoupling applied only to one customer class rather than across the board, and because it was termed a "pilot project," most of the top executives may not have realized that decoupling was acting against the companies' entrenched, decades-old habit of trying to boost sales of electricity at all times. The pilot decoupling project for a subset of the utilities' customers may not have been sufficiently all-encompassing to affect these utilities' corporate cultures. Even if certain executives had been aware of the implications of decoupling, it is possible that this new understanding was not transmitted clearly to the staff in the field, for example, to the members of the marketing and customer service teams. For any given policy change to take hold within a

utility company, which tends in general toward conservatism, it needs to be given a high profile by top management, transmitted to staff at all levels of the organization, and bolstered by changes in the personnel policies that determine the incentives employees will receive. To change a habit as firmly entrenched as the policy of boosting electricity sales would require a lot of leadership from top management, consistent effort, and time.

In sum, the rate structures now in effect for Duke Energy Kentucky, LG&E, KU, and Kentucky Power Company simultaneously allow these utilities to recover certain costs arising from their DSM activities, but simultaneously punish them severely if their customers reduce their energy consumption. A complex web of conflicting incentives has unintentionally been created, and the result is a much less wholehearted commitment to energy efficiency on the part of Kentucky's utility companies than would be optimal. In the cases of Big Rivers, EKPC, and their member rural electric co-ops, the existing rate structures reward the utility for selling more electricity at all times and penalize the utility severely for helping customers reduce energy use. I believe that it is essential for Kentucky to institute the above-cited federal standard statewide, and that the revenue and net income of utility companies need to be decoupled from the amount of electricity they sell.

V. Integrated Resource Planning by Natural Gas Utilities – Section 532(b)(5)

The federal standards in this section mirror for natural gas utilities the standards found in Section 532(a)(16) for electric utilities, which were discussed in Section II above. I draw the same general conclusions, and sees no valid reason not to adopt these standards, as set forth, for all natural gas utilities statewide.

VI. Rate Design Modifications to Promote Energy Efficiency Investments by Natural Gas Utilities – Section 532(b)(6)

The federal standards in this section mirror for natural gas utilities the standards found in Section 532(a)(17) for electric utilities, which were discussed in Section III above. I draw the same general conclusions, and sees no valid reason not to adopt these standards, as set forth, for all natural gas utilities statewide.

VII. Consideration of Smart Grid Investments – Section 1307(a)(16)

If adopted in Kentucky, this federal standard would require electric utilities considering investments in conventional grid facilities to assess the pros and cons of investing in smart grid technologies instead. This standard should be adopted statewide because it would prevent utilities from ignoring or improperly discounting the potential benefits of cost-effective smart grid technologies.

In order to become better acquainted with a new vision for a more advanced, sustainable electric system, I strongly recommend that Kentucky policy makers – Commissioners, PSC staff, electric utility personnel, and legislators – read Thomas L. Friedman's 2008 bestseller, *Hot, Flat, and Crowded: Why We Need a Green Revolution*

and How It Can Renew America. In particular, Chapter Ten describes what the electricity system could look like in 20 years if the utility industry and its regulators were to embrace relatively rapid technological change instead of remaining as conservative as both have been for many decades. The economic benefits to Kentucky would be enormous and long-lasting. Although Mr. Friedman is not a technical expert on electric systems, he has cited the recent writings of many of the foremost experts in the field and has grasped many of the most important implications of their proposals.

Friedman describes the future electric system as follows: “It would feel like all the power systems in your home were communicating with all the information systems in your home and that they had all merged into one big seamless platform for using, storing, generating, and even buying and selling clean electrons. It would feel like the information technology revolution and the energy technology revolution, IT and ET, had merged into a single system. It would feel like you were living with an ‘Energy Internet.’” Toward the end of that chapter, he quotes Jim Rogers, the Chief Executive Officer of Duke Energy, as saying that instead of spending \$7 billion on a new nuclear plant, he would rather the regulators let him spend the same amount to build a smart transmission and distribution grid and help customers “install solar panels on their roofs, Smart Black Boxes in their homes, smart batteries in their cars, and Grid-Friendly chips in their appliances, and then have Duke Energy maintain and service every aspect of that network.” (Friedman, pp. 239-40) The nature of the utility business would change, and I believe that such a transformation is overdue.

VIII. Smart Grid Information – Section 1307(a)(17)

This federal standard would support the transition of each state’s electric grid from its present-day conventional configuration to an interactive system such as the Smart Grid described by Thomas Friedman, Jim Rogers, and many others. The standard, as set forth in the cited section of EISA07, should be instituted throughout the Commonwealth.

IX. Additional Incentives for Recovery, Use, and Prevention of Industrial Waste Energy – Section 374

Although Kentucky has lagged behind most of the rest of the country with respect to utility-assisted, energy-saving DSM programs in all customer classes, the situation with regard to the industrial class is particularly backward. The lack of meaningful energy-saving programs for industrial customers is primarily the result of a loophole in Kentucky’s DSM statute, KRS 278.285, which was passed in 1994. The Federal standard cited here would provide industrial companies with a range of opportunities to boost their profit margins while simultaneously improving energy efficiency, reducing the utility’s revenue requirements, and keeping costs and rates lower for all customers than they would otherwise be.

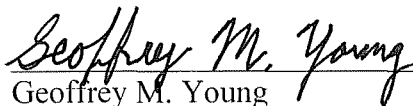
The primary method envisioned by the standard is to remove existing barriers to the sale of electricity generated by combined heat and power (CHP) facilities and thereby

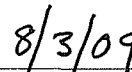
to encourage investment in such facilities. Although Kentucky is a relatively highly industrialized state, there are very few CHP facilities operating here. I believe that one of the reasons is that jurisdictional utility companies have been allowed to erect a number of barriers over the last three decades or so that make the development of CHP projects difficult or unattractive. The proposed federal standard could ameliorate this situation, and therefore it should be adopted statewide. Furthermore, the adoption of this standard would make it easier for Kentucky firms to compete successfully for federal grants such as those described in the previous section, Section 373, "Waste Energy Recovery Incentive Grant Program."

Summary

The federal standards that are the subject of this administrative case offer Kentucky an important opportunity to streamline our regulatory system to enable our energy systems to function in a more efficient way. I strongly urge the Commission not to let this opportunity pass by. All of the cited standards should be implemented throughout the Commonwealth to the maximum possible extent.

Respectfully submitted,


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Date