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PUBLIC SERVICE
COMMISSION

May 1, 2008

Stephanie L. Stumbo
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40602-0615

RE: AN INVESTIGATION OF THE ENERGY AND REGULATORY
ISSUES IN SECTION 50 OF KENTUCKY'S 2007 ENERGY ACT
Adm. Case 2007-00477

Dear Ms. Stumbo:

The Governor's Office of Energy Policy (GOEP) presents for your review and consideration comments on the Overland Consulting Report, dated March 4, 2008, consistent with the Commission's order initiating this administrative case on November 20, 2007.

GOEP believes that Overland Consulting Report, dated March 4, 2008, addresses the requirements set forth by Section 50 of Kentucky's 2007 Energy Act and the report can serve as a roadmap to help guide the Commonwealth toward the analysis of demand-management strategies, diversified energy portfolios, full-cost accounting and rate design.

However, in each of these four specific areas addressed by Section 50, GOEP has additional comments that that may assist the Commission in developing their final report to the Legislative Research Commission. GOEP's comments are attached and are aligned to each specific area referenced in the legislation. If the Commission would like additional information concerning our comments, please contact me.

Sincerely,

Henry Clay "Hank" List



Governor's Office of Energy Policy Comments on the Overland Consulting Report

The Governor's Office of Energy Policy submits the following comments in reference to Public Service Commission Case No. 2007-00477. GOEP is offering comments on energy policy issues raised by the report of Overland Consulting (Overland) to the PSC as part of Case No. 2007-00477. GOEP does not intend for its comments to address issues of the current or potential jurisdiction or authority of the Commission

BACKGROUND

House Bill 1, the "Incentives for Energy Independence Act," enacted in August, 2007 addresses the full range of energy resources found in Kentucky, including fossil fuels, renewables, and energy efficiency and conservation. The Act provides incentives for increasing the production and sale of alternative transportation fuels and for increasing the production and sale of synthetic natural gas, chemicals, chemical feedstocks, or liquid fuels from coal, biomass resources, or waste coal through a gasification process. The Act provides incentives for generation of electricity for sale through alternative methods such as solar power, wind power, biomass resources, landfill methane gas, hydropower, or similar renewable resources.

In addition to providing incentives for innovative energy production, the Act directs the Public Service Commission to review its authority over utilities as it relates to the following issues:

- (1) Eliminating impediments to the consideration and adoption by utilities of cost-effective demand-management strategies for addressing future demand prior to Commission consideration of any proposal for increasing generating capacity;
- (2) Encouraging diversification of utility energy portfolios through the use of renewables and distributed generation;
- (3) Incorporating full-cost accounting that considers and requires comparison of life-cycle energy, economic, public health, and environmental costs of various strategies for meeting future energy demand; and
- (4) Modifying rate structures and cost recovery to better align the financial interests of the utility with the goals of achieving energy efficiency and lowest life-cycle energy costs to all classes of ratepayers.

The GOEP believes that the incentives established in the Act will help the Commonwealth achieve energy security and economic development goals defined in the Act and will reassert the leading role of Kentucky in national energy policy.

In the following comments, GOEP will address Overland's findings and recommendations concerning the four issues identified in Section 50 of the Act. GOEP believes that the issues raised in Section 50 of the Act have major implications for the energy policy of Kentucky and, as such, require close, careful, and continuing evaluation. GOEP finds that Overland has done, overall, a careful and thoughtful job and that the conclusions and recommendations are generally consistent with Kentucky's energy policy.

GOEP Comments:

Issue (1)—Eliminating impediments to the consideration and adoption by utilities of cost-effective demand-management strategies for addressing future demand prior to Commission consideration of any proposal for increasing generating capacity.

Overland offers several recommendations concerning the expansion of demand-side management mechanisms (DSM) for reducing energy demand and consequently, reducing the energy outlays of industry and citizens in Kentucky.

GOEP also supports the report's recommendation that input be solicited from both non-utility and utility stakeholders when developing Kentucky's demand-management strategy. To this end we also encourage the Commission to coordinate with non-regulated utilities that serve Kentucky. This would include discussions with both the Tennessee Valley Authority (TVA) and municipalities that offer electric service. These providers serve over a quarter of a million Kentuckians that can also benefit from effective demand management strategies. Collaboration with TVA may well prove insightful as their leadership has recently embarked on a demand management initiative with a goal to achieve at least 1,200 MW of load reduction by 2013.

GOEP is concerned that the report's numerous recommendations (a total of 28 recommendations covering the range of issues addressed in HB 1, with 15 ranked as high priority) may result in a less effective demand-management implementation based upon multiple priorities coupled with limited resources to analyze and accomplish these priorities. For this reason GOEP has identified six recommendations that should be addressed first and receive the greatest emphasis by the Commission regarding demand-management strategies. In doing so the Commission will develop a greater level of expertise and a more sophisticated knowledge base to address the more rigorous recommendations addressed in the report. GOEP suggests the following six recommendations from the Overland Report should be the focus in addressing policies related to Issue 1 from Section 50 of HB 1.

1. The Commission should develop a set of standards for how to evaluate the benefits of proposed DSM programs. Such standards should broadly specify the range of benefits to be recognized and the appropriate analytical approaches for evaluating future benefits. The standards should recognize the variety of benefits created by DSM,

while also acknowledging that DSM cannot be substituted for power plant development on an undifferentiated basis. The standards should require the development and application of screening models sophisticated enough to systematically compare and contrast the relative attractiveness of alternative DSM options in different settings. (Page 53)

2. The KPSC should consider the need to revise the DSM statute to expressly authorize the KPSC to act on its own initiative or direction to investigate and direct utilities to implement particular DSM programs, the costs of which would be recovered by the surcharge. (Page 54)

3. Rules governing industrial customer exclusion from DSM program participation should be clarified, standardized, and uniformly applied. It is important that customers who seek to opt-out of the DSM program make a showing of their own energy efficiency efforts, before they are allowed an exemption from the DSM surcharge and related programs. (Page 56)

4. The current statute defining the CPCN process should be modified to require the consideration of demand and supply-side alternatives including: IPP and merchant power options; energy efficiency and DSM programs; and renewable alternatives. (Page 84)

5. The current DSM Surcharge mechanism should be modified. Utility expenditures (capital, and operating costs related to the period of the program) should be capitalized, with amortization based on the estimated period of program benefits. Utilities should be allowed a minimum return of 100 bp higher than the most recent authorized rate of return in the utility's last rate proceedings. Utilities should be allowed to receive additional incentives based on the actual benefits achieved relative to appropriate targets from energy efficiency and DSM programs. Assuming that program targets are met, these incentives should provide a reasonable opportunity to earn a graduated return of up to 300 bp over the minimum premium, based on results. (Page 106)

6. The Commission should provide for additional staffing, and relevant training, necessary to support increased activities associated with IRP, DSM, Environmental Surcharge, Certificate, and other filings. The Staff additions would also monitor federal and state energy legislation, industry research and programs, and Kentucky regulated utility parent company activities. Staff resources may need to be further supplemented to support increasing requirements over time. (Page 110)

Issue (2)--Encouraging diversification of utility energy portfolios through the use of renewables and distributed generation;

GOEP agrees with the Overland report's recommendation that any renewable portfolio standard be "voluntary...(and) ...be realistic and cost effective in light of Kentucky

geological constraints...”(p. 69) A mandatory requirement in Kentucky would impose undue burdens on ratepayers, especially those on low or fixed incomes. As the report states, Kentucky has very limited wind, solar, or hydropower potential. Consequently, utilities in Kentucky would have to obtain renewable-generated power from other generators at high prices relative to the cost for a utility that has access to renewable resources on its own system. And, certainly, the cost will be very high relative to low-cost coal-fueled generation.

GOEP would add to Overland’s analysis an additional consideration stemming from the imminence of national climate change legislation. As noted in the Overland report, proposed climate change legislation will result in increased costs for electricity generation. To the extent that carbon dioxide emissions allowances are auctioned rather than being allocated to utilities, the cost impact will be greater and more immediate on states in which generation is predominantly coal-fired. It would be very harmful to add to such cost shock the costs resulting from a mandatory renewable portfolio standard.

Issue (3)--Incorporating full-cost accounting that considers and requires comparison of life-cycle energy, economic, public health, and environmental costs of various strategies for meeting future energy demand; and

Concerning the Section 50 requirement that the PSC make recommendations relating to “full cost accounting that considers and requires comparison of life-cycle energy, economic, public health, and environmental costs of various strategies for meeting future energy demand,” Overland recommends that “(T)he Commission should not require the recognition of environmental or public health externalities in the IRP or certificate processes.” (p. 96)

Overland cites the following as the major reasons for its recommendation:

- (1) It agreed with the past assessment of the Commission that current statutes do not provide for consideration of specific analysis of public health or other externalities.
- (2) Recognition of externalities in the resource planning process is not generally considered in the U.S. Overland points out that it is extremely difficult to identify and quantify the impacts, and determine the appropriate levels of compensation.
- (3) To impose recognition of externalities would arbitrarily and improperly cause energy costs in Kentucky to increase significantly; jeopardize the credit quality of regulated utilities in the State, and hamper economic development.

GOEP agrees with each of these reasons. GOEP is not aware of any state commission that requires recognition of externalities in resource planning processes. In addition to

these three reasons, GOEP would point out that federal and state policymakers have typically chosen cap and trade mechanisms or best available control technology requirements to reduce pollutant emissions to levels considered necessary for public health or environmental protection rather than imposing costs for externalities. These approaches have proven to be very successful in driving development and deployment of emissions control technologies and in reducing emissions levels.

Regarding life-cycle and economic costs of various fuel strategies, Overland recommends that the Commission require utilities to provide in IRP and CPCN filings best available estimates of expected carbon impacts in justifying resource selections among portfolio options until such time as anticipated federal legislation is formally enacted addressing carbon emission standards. Overland states that only KU and LG&E currently consider potential impacts of carbon taxes, or other carbon cost effects in determining avoided costs and that those utilities have done so in a very limited way.

GOEP has no objection to a utility's being required by the PSC to estimate economic costs of technology for reducing carbon dioxide emissions or for capturing or sequestering carbon dioxide, if the Commission determines that doing so is within its jurisdiction. Certainly, utilities are already doing so to an extent and in various ways. American Electric Power (AEP) and Duke Energy, along with the U.S. Environmental Protection Agency, U.S. Department of Energy and other government agencies, have prepared estimates of rate impacts of the Lieberman-Warner bill and other proposed climate change legislation. Wall Street investment banks have announced that they will require such estimates before investing in utility generating plants.

However, it is extremely important to understand that there is a great difference between estimating the costs of carbon capture and sequestration and doing life-cycle cost analysis that includes assumptions about social and environmental costs associated with a specific fuel choice. Such effects are extremely difficult to identify and quantify and attempts to do so have been shown to be very subjective. The recognition of these life-cycle health, environmental, and other externalities in the regulatory processes is not feasible for the same reasons that Overland cited in recommending against requiring recognition of externalities. GOEP is not aware of any state commission that requires recognition of life cycle health or environmental externalities in fuel choice aspects of resource planning processes.

Issue (4)--Modifying rate structures and cost recovery to better align the financial interests of the utility with the goals of achieving energy efficiency and lowest life-cycle energy costs to all classes of ratepayers.

The PSC and industry have for some time been assessing the potential for modified rate structures to increase incentive for utilities to offer energy efficiency programs and services to all classes of customers. In the report, Overland discusses a number of techniques including rate decoupling, interruptible and load control tariff options, time of use rates, and smart metering. Overland also assesses the fuel adjustment clause mechanism, the DSM surcharge mechanism, and the environmental surcharge

mechanism in light of their possibly acting as impediments in their present forms to energy efficiency and to recommend modifications that might provide new incentives for energy efficiency investment and for compliance with potential greenhouse gas legislation. Overland recommends a new surcharge to include and accelerate expenditures associated with efficiency improvements in utility generation facilities. The consultant also recommends an incentive rate of return on Commission- approved projects of this type.

Overall and within the Commission's determination of its current jurisdiction and authority and its determination of its jurisdiction and authority relative to the proposed modifications in rate structures, GOEP agrees with the assessments and the types of modifications recommended.

In November 2007, La Capra Associates Inc., completed a report for the GOEP specifically addressing the potential financial, social and economic impacts of alternative rate design structures and ratemaking methodologies that may encourage increased utilization of and investment in cost-effective energy efficiency and other demand response resources. This report was not reviewed as part of the Overland Consulting report and GOEP believes that many of the La Capra report's recommendations are germane to the Section 50 analysis and for this reason the La Capra report recommendations are presented below for review and consideration.

The LaCapra report notes that Kentucky's history of very low electric costs is changing - and it will change further as load growth necessitates building new capacity. Rates could change dramatically with new or pending environmental regulations. Kentucky's electric rate history explains why Kentucky's electric customers use more electricity than the U.S. as a whole, and why until recently there has not been a strong interest in improving energy efficiency. The changing cost situation and broader environmental concerns call for a number of responses, according to the report, and it will take time for all of the suggested response to have an impact on load. LaCapra recommends the following actions be taken soon to avoid enough load growth in the next five years to delay building new generation.

Building codes and efficiency standards

LaCapra recommends that Kentucky should effectively utilize building codes and efficiency standards for new electric equipment, when cost justified, which may require enforcement of such codes and standards.

Rate Design

LaCapra recommends that Kentucky consider various rate design changes that can contribute to energy efficiency. These include seasonal rates, possibly increasing block rates, and time-of-use rates that better communicate marginal costs. While this may not require large changes, this approach will introduce changes that may become even more important in the future.

Approach to DSM

LaCapra states that utility DSM programs may be missing a potential for a large amount of energy efficiency that could result from industrial programs and that programs appear not to have been developed for this class. The ability of industrial customers to avoid paying for any DSM by stating that they have instituted energy efficiency seems to be the reason that programs have not been developed for this class. Given the legislative provision regarding industrial customers' ability to opt out of DSM programs, LaCapra recommends that the Commission adopt a procedure to review whether alternative measures are "cost-effective" on the same basis that is used to judge utility DSM programs.

Decoupling

LaCapra recommends that decoupling should be adopted only after full consideration of all of the impacts of decoupling and if it is determined that the benefits outweigh the costs. The report states that this analysis should include an investigation of how much incremental impact decoupling will have on utilities' DSM programs, and in particular whether existing ratemaking methodology, including a lost revenues component to DSM and possibly a modified incentive to utilities, can achieve the same result. LaCapra recommends the Commission should also include consideration of how decoupling will impact utilities, ratepayers, and regulators.

Incentives for Efficiency programs

LaCapra recommends that Kentucky investigate what level of incentives and possibly penalties will be effective in encouraging implementation of cost effective DSM. Incentives for efficiency programs may be necessary, but they should be related to utility performance rather than simply the amount spent. Incentives that reward utilities for spending more encourage utilities to spend more, but unless there is very thorough oversight, the larger spending may not achieve the energy efficiency potential of the state.

Integrating Demand and Supply Planning

LaCapra recommends that the Commission should provide firm direction to the utilities in IRP, DSM and Environmental Compliance proceedings, utilizing the same information that is or will be used in CPCNs. LaCapra also recommends that the PSC should review and make enforceable findings regarding the IRPs and DSM programs. Without this oversight and direction, supply planning and energy efficiency programs are less likely to achieve the Commission's major overriding goals.