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August 28, 2008

PUBLIC SERVICE COMMISSION

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Stephanie Stumbo, Executive Director
Kentucky Public Service Commission
P.O. Box 615, 211 Sower Boulevard
Frankfort, Kentucky 40602-0615

Re: Case No. 2008-00148

Dear Ms. Stumbo:

Please find attached for filing with the Commission an original and ten copies of my Second Public Comment in the above-referenced proceeding.

Sincerely,

Geoffrey M. Young

Geoffrey M. Young

Enclosures

cc: Parties listed on the Certificate of Service

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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THE 2008 JOINT INTEGRATED RESOURCE PLAN OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY	))))	**CASE NO. 2008-00148**

SECOND PUBLIC COMMENT OF GEOFFREY M. YOUNG

Because the Commission denied my application for full intervention in this case, I hereby submit the following comment as a non-intervenor. I submitted my first public comment on June 26, 2008, which included a number of questions that I suggested the Commission might ask the Companies to answer. I have not submitted any public comments in this case other than those of 6/26/08 and the comments in this document. In addition, I should note that these comments reflect only my own views and not the views of any organization.

1. The Companies' 2008 joint IRP represents a significant improvement over their 1999 and 2002 IRPs.

As the staff person at the Kentucky Division of Energy (KDOE) during the years 1991 to 2004 who was most directly involved with the energy efficiency initiatives of electric and combination utility companies in Kentucky, I had the opportunity to participate in the Companies' 1999 IRP case, No. 99-430, and their 2002 IRP case, No. 2002-00367. I did not participate in the Companies' 2005 joint IRP case because I had left KDOE in 2004, and Kentucky's environmental community had not yet decided to seek to become involved in PSC cases.

KDOE's comments re the 1999 and 2002 IRPs were quite critical of the Companies' demand-side management planning procedures and the scale of the DSM programs that the Companies were proposing, in particular those DSM programs that were intended primarily to help customers improve their energy efficiency. The Companies' load-shifting DSM programs, primarily the direct control of air conditioning equipment during system peak periods, have always been good, and the programs have continued to improve and expand over time as the Companies have steadily gained experience with the technology and market.

As the staff person who was most involved in developing KDOE's comments, I identified numerous problems with the way the Companies identified and ranked energy-saving DSM program options. I made several suggestions about how the Companies might identify, select, group, and design such programs that would likely improve their comprehensiveness and cost-effectiveness. The Companies appear to have taken some of these comments to heart in their 2008 IRP, at least to some extent, as well as certain comments made by Commission staff and other intervenors. The Companies' progress is exemplified by the significant expansion in the scale of their proposed DSM programs as reflected in Case No. 2007-00319, *In the Matter of: The Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company Demand-Side Management for the Review, Modification and Continuation of Energy Efficient Programs and DSM Cost Recovery Mechanisms*. I do not reach the same conclusion now that KDOE did in May 2003 when it recommended that the Commission disregard the resource acquisition strategy contained in the Companies' 2002 Joint IRP because it failed to emphasize energy-saving DSM to a sufficient degree.

Notwithstanding the positive developments noted above, there are still important ways the Companies could improve their procedures for DSM planning and implementation, supply-side resource assessment, and transmission planning, and thereby lower the present value of their projected revenue requirements (PVRR). I respectfully suggest that each of the following areas for improvement should be reflected in the Companies' next IRP, which is scheduled to be submitted to the Commission in 2011.

2. The qualitative screening step for DSM programs has become outdated and should be replaced by a more quantitative and evidence-based process.

The original rationale for using a qualitative initial screening step was to save time by reducing the number of DSM options that the Companies would need to analyze quantitatively. Although I can understand why such a winnowing procedure might have been useful in 1999, the Companies have had nine years since then to acquire and internalize quantitative details about a range of DSM technologies and programs. It should no longer be necessary for the Companies to convene a group of staff people to give their subjective opinions about whether various DSM ideas are likely to meet the four qualitative screening criteria listed in Exhibit DSM-2. Instead, the limited time of the Companies' DSM staff people should be invested in collecting, assessing, and refining data about DSM programs that have proven successful in other states.

A particularly valuable resource is the report issued in February, 2008, by the American Council for an Energy-Efficient Economy (ACEEE), titled, *Compendium of Champions: Chronicling Exemplary Energy Efficiency Programs from Across the U.S.* The complete report, including data sources and utility company contact information, is available at no cost via ACEEE's web site.

Some noteworthy points excerpted from this report include the following:

- "There is a rapidly growing demand to increase savings from energy efficiency improvements." (page 2) [i.e., in addition to shifting loads away from peak periods]
- There has been a noticeable return to long-term, integrated resource planning. (ibid.)
- After many years of experience, DSM program managers, administrators, and implementers in other states have finally figured out what works and what doesn't. (page 7)
- Innovative programs have been developed to save energy in industrial processes. The most effective such programs bring in experts who are well-recognized and respected in their particular industry (ibid.)
- "Energy efficiency program portfolios available to customers are comprehensive. Such portfolios of programs provide extensive coverage for all types of customers at all types of decision points, primarily equipment purchase/replacement, retrofit, and new construction (and major renovations and additions)." (page 8)
- "Programs themselves are increasingly comprehensive, offering a full range of services (including incentives, marketing, technical assistance, training, and education)

for a full menu of customer end-use applications – lighting, appliances, HVAC, building envelope, and other systems and technologies. Many leading programs offer a single portal or program contact to access a full range of applicable program services." (ibid.)

- Collaborations among stakeholders and market participants are key elements of numerous successful programs. (ibid.)
- "There are many exemplary new construction programs, both residential and commercial/industrial. This emphasis reflects overall program portfolio goals of avoiding 'lost opportunities' (building new, inefficient buildings)." (page 9)
- "There are programs continuing to innovate to try to achieve deeper savings with program participants, such as boosting incentives and services for customers who choose to implement large sets of recommendations, rather than single measures or small sets of measures. Comprehensive approaches are being taken in all customer segments – programs seek to improve the energy efficiency of entire buildings or industrial processes." (ibid.)

I believe these conclusions by ACEEE are compelling, and that the Companies' portfolio of DSM programs could achieve a major advance in effectiveness if they were to be selected, designed, and implemented with these "strategies of champions" firmly in mind. These characteristics of successful programs, particularly the emphasis on comprehensiveness and whole-system design, contrast with the Companies' continued tendency to focus on individual DSM technologies, e.g., "Window Shading and Films;" "Refrigeration Case Covers." The latter "program" should be reorganized into a single element within a comprehensive retrofit program for retail food stores or even for commercial buildings in general.

3. The Companies need to find a way to offer a portfolio of industrial DSM programs.

Kentucky is a relatively industrialized state, and the absence of industrial DSM programs from the offerings of a regulated utility company is a serious problem. Too many large, cost-effective opportunities for energy savings are still being lost. Recommendation No. 32 from the recently-released report from the Commission to the Kentucky General Assembly in Administrative Case No. 2007-00477 notes that the Commission is planning to clarify the definition of "energy-intensive processes" to prevent too many industrial customers from opting out of utility-sponsored DSM programs. ("Electric Utility Regulation in Kentucky," July 1, 2008) The Companies should support the Commission's efforts in this direction and should start working to develop industrial DSM programs in preparation for the likelihood that many fewer industrial customers will be opting out in the future.

The Companies may find it beneficial to work more closely with the Kentucky Pollution Prevention Center (KPPC), which has developed valuable experience with Kentucky's industries over a period of many years. For several years, KPPC has offered energy-related technical assistance in addition to their basic services that help companies reduce the amount of hazardous and solid wastes they generate. KPPC takes a comprehensive approach that appears to be very effective, successful, and worthy of emulation.

4. The Companies should take account of the economic benefits of small-scale, distributed resources in their supply-side and transmission/distribution system planning.

I have brought the book, *Small Is Profitable*, to the attention of the Companies' technical analysts on several occasions since the year 2000. The information and perspective it offers are directly relevant to the Companies' IRP process. I suggest once again that the Companies study this book carefully and incorporate its ideas into their supply-side and transmission/distribution system planning. The Companies may find it useful to review pages 38 to 40 and Attachments C and D of the Sierra Club's prepared testimony in Case No. 2006-00472, *In the Matter of: General Adjustment of Electric Rates of East Kentucky Power Cooperative, Inc.* (June 29, 2007)

Making use of the concepts and information found in *Small Is Profitable* would enable the Companies to reduce the total cost of transmission/distribution upgrades by investing in or encouraging customers to develop small-scale distributed resources at heavily-loaded locations on their electric grid. It is likely that some new transmission line projects could be deferred for many years or canceled entirely, with long-term cost savings for all customers. (Case No. 2005-00467, Prepared Testimony of Geoffrey M. Young, March 17, 2006)

The basic point of the book is that small-scale, distributed resources – both supply-side and demand-side – are generally much more valuable to the utility company and its customers than their installed cost per KW would suggest at first glance. The Companies should revise their cost assessment methodologies to account for the 200-odd economic benefits described in this seminal book.

5. The Companies should increase their efforts to work cooperatively with a range of stakeholders on DSM programs, including environmentalists who have energy-related experience or expertise.

I am unaware whether the Companies still have a DSM Advisory Group, but they should revive and expand it if it has stopped meeting. I believe that Kentucky's environmentalists are generally willing and able to provide valuable information and ideas to utility companies that wish to improve the effectiveness and comprehensiveness of their DSM programs.

The Companies should also change their bad habit of filing pro-forma objections to the intervention of serious environmentalists in future PSC cases that have implications for the environment.

Respectfully submitted,

Geoffrey M. Young — 8/28/08

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Date

CERTIFICATE OF SERVICE

I hereby certify that an original and ten copies of the foregoing Second Public Comment by Geoffrey M. Young were mailed to the office of Stephanie Stumbo, Executive Director of the Kentucky Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, KY 40601, and that copies were mailed to the following parties of record on this 28th day of August, 2008.

Rick E. Lovekamp
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Honorable Dennis G. Howard, II
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Honorable Michael L. Kurtz
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Signed,

Geoffrey M. Young   8/28/08

Geoffrey M. Young   Date