STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY **Approval of the Energy Efficiency and Demand Response Plan**	))))))))))	**Docket No. 07-0540**

Testimony and Exhibits of Geoffrey C. Crandall

On Behalf of

The Environmental Law & Policy Center

December 14, 2007

Q. What is your name and business address?

A. My name is Geoffrey C. Crandall. My business address is MSB Energy Associates, Inc., 7507 Hubbard Avenue Suite 200, Middleton, Wisconsin 53562.

Q. On whose behalf are you testifying today?

A. I am testifying on behalf of The Environmental Law & Policy Center (ELPC).

Q. Please describe your background and experience in the field of electric utility regulation.

A. I am a principal and the Vice President of MSB Energy Associates, Inc. I have over 33 years of experience dealing with utility regulatory issues, including energy efficiency resource development, resource planning, restructuring, fuel and purchase power planning, cost recovery and other issues. I have provided expert testimony before more than a dozen public utility regulatory bodies throughout the United States. I have provided expert testimony before the United States Congress on several occasions. I have testified previously on energy efficiency and resource planning before the Illinois Commerce Commission.

My experience includes over 15 years of service on the Staff of the Michigan Public Service Commission (MPSC). During my tenure at the MPSC, I served as an analyst in the Electric Division (Rates and Tariff section) and was involved in general rate case as well as fuel and purchase power proceedings. I served as the Technical Assistant to the Chief of Staff, supervisor of the energy conservation section (involving residential and commercial energy efficiency programs) and as the Division Director of the Industrial, Commercial and Institutional Division. In that capacity, I was Director of the Division that had responsibility for the energy efficiency and conservation program design, funding, and implementation of Michigan utilities as well as DOE-funded programs involving Industrial, Commercial and Institutional gas and electric customers throughout Michigan.

In 1990, I became employed by MSB Energy Associates, Inc. and have served clients throughout the United States on projects related to energy efficiency resource development, system planning, fuel and purchase power assessments, electric restructuring and other issues. My vita is attached as Exhibit 1.1.

Q. What is the purpose of your testimony?

A. To provide suggestions and recommendations intended to improve the development and implementation of energy efficiency resources in Illinois. I have several specific recommendations regarding Ameren's proposed programs.

Q. Do you believe that Com Ed's proposed programs in this proceeding are appropriate and should be approved as proposed?

A. I give Com Ed credit for the way in which it responded to its new responsibilities under the Public Utilities Act. Having said that, I do not believe it would be in the public interest for the Commission to approve the programs exactly as Com Ed has proposed. Section 12-103(f) of the Public Utilities Act places the responsibility on Com Ed to offer and operate effective, results oriented energy efficiency programs. It requires that the programs become operational in a short period of time. The law imposes responsibilities on Com Ed including the design, development, oversight and submission of a proposed energy efficiency and demand response plan to the Commission. The Commission has an obligation and duty to seek public input and to review, modify, approve or reject the proposals within 90 days of the filing of the plan with the Commission. In addition, legislation requires that the filings satisfy annual energy savings and peak demand reduction levels and that programs be coordinated with the Department of Commerce and Economic Opportunity.

Q. Has the applicant developed and set forth programs in this application that are in compliance with the Legislative mandate and requirements in 220 ILCS 5/12-103?

A. I have reviewed the application, testimony, exhibits and responses to discovery questions and other relevant materials in conjunction with this application. I believe that Com Ed's proposed programs are a positive and constructive first step in formulating cost effective energy efficiency and demand response programs. However, I have specific concerns and suggestions regarding the proposed programs. I believe after incorporating my suggested modifications the proposed programs would be in the public interest and should be approved by the Commission. The applicant should make a good faith effort to effectively implement this initiative and assist its customers to achieve significant energy efficiency and usage reduction as a means to mitigate adverse environmental impacts, enhance system reliability and minimize costs to its customers.

Q. Have other electric utilities been providing energy efficiency and usage reduction services to their customers?

A. Yes. Com Ed wisely sought outside expertise to take advantage of the lessons learned by others who have implemented extensive energy efficiency programs. Positive program elements from other utilities who have implemented effective energy efficiency services and demand response efforts have been incorporated into the proposed programs.

Q. Do you believe the scope and magnitude of cost-effective energy efficiency and demand management programs proposed by Com Ed are reasonably achievable?

A. Yes I do. Com Ed has proposed a 247 million dollar program (for the first three years). This equates to less than 0.5% of its gross operating revenue. ACEEE has completed a study entitled *Five Years In: An Examination of the First Half-Decade of Public Benefits Energy Efficiency Policies*[1]. Utilities in a number of states have implemented energy efficiency and demand response programs at a higher relative level of funding than what Com Ed is proposing.

Q. Do you believe that a stakeholder input/collaborative process would be useful in developing, implementing and evaluating these energy efficiency and demand response programs?

[1] Available at http://aceee.org/pubs/u041.pdf

A. Yes. Com Ed has indicated that it is interested in such an approach. It identifies a process that has been in place to assist in the development of the programs. However, I believe the stakeholder input/collaborative process needs to be handled in a manner different than what is suggested by Com Ed.

Q. How should an ongoing stakeholder input/collaborative process operate and who should participate?

A. I have been involved in a number of collaborative working groups. In my experience, ongoing stakeholder involvement is critical in the development, implementation, monitoring, evaluation and revision to or elimination of energy efficiency programs. I think it is particularly important since the two investor-owned utilities in Illinois have indicated that they have little experience in running programs of this nature and magnitude. Periodic meetings and presentations to large groups of stakeholders (such as was done prior to filing of the energy efficiency plans) are not adequate. I believe that Com Ed should use a process similar to one proposed by NRDC in this case (see attachment A of their comments in this case). In this collaborative process the facilitator should report to the working group and provide technical expertise to the working group, as needed. An additional technical working group/advisory board should also be established consisting of energy efficiency and program implementation experts. This board would meet in person, hold conference calls and review documents to offer recommendations on program designs and implementation strategies. The purpose of this technical group would be to provide an opportunity for program implementers to brainstorm, address a myriad of issues and questions that arise in the process of implementing programs e.g., initial program results, backlogs, unanticipated demand, marketing and outreach strategies, etc.

Recommendations from the technical advisory board or evaluation, measurement and verification (EM&V) group would be non-binding on the utility with the exception that the designated stakeholder group must agree prior to a dismissal of an EM&V contractor.

Q. Do you have concerns regarding the financial controls and accounting system which needs to be in place to ensure proper tracking and use of ratepayer funded activities?

A. Yes. Com Ed has not explained their plans specifically for internal financial controls and fund tracking. These are unfamiliar activities and tens of millions of dollars will be flowing from ratepayers to the utilities, then out to program contractors, vendors, retail stores and consumers. The utilities need to take the appropriate steps to ensure proper tracking and control of these funds. The ICC staff needs to ensure that Com Ed is setting up its accounting systems appropriately so that tracking and allocations include only the legitimate costs from the new incremental activities. The Commission should direct the Staff to conduct meetings with ComEd, if necessary, and provide specific instructions and guidance as to the proper accounting treatment for these new programs. At the end of the first program year, the ICC staff should conduct a compliance audit or an independent audit should be conducted at the direction of the ICC Staff.

Q. Com Ed is seeking authorization to reallocate funds among the programs. as needed. Does this cause you concern?

A. Yes. In the proposed plan, Com Ed proposes to allocate specified dollars (and kwh/KW savings) to specific programs. It is appropriate to consider that the amounts assigned to each program be considered an operational budget. If a particular program performs better or worse than anticipated, then more or fewer dollars should be able to be allocated to that program, provided that the TRC for the program receiving additional funding continues to be greater than 1.0. Alternatively, if a program is getting a larger or smaller market response than anticipated, the utility should be able to adjust the incentive levels up or down as appropriate, again under the condition that the program still must meet the TRC test.

However, it is important that the relative share of funds assigned to specific sectors (residential, commercial, industrial) remain approximately proportionate to the proposed levels in the plan.

Q. Do you have suggestions regarding contract specifications and potential program impacts resulting from reliance on third party implementers?

A. Witness Jensen made some excellent points in his identification of eleven common elements found in successful best practice programs. In addition to his suggestions, I have a number of concerns and suggestions that should be addressed in developing and implementing the programs.

First, trade ally coordination, training and relationship building will be crucial to the success of these programs and needs to be given high priority. Second, since Illinois customers have limited experience with rebate and incentive programs for energy efficiency technologies, Com Ed may need to be a bit more generous initially with customer incentive levels to help jumpstart the programs and build customer awareness. Third, program delivery (e.g., rebate redemption) will need to be streamlined to minimize customer hassle, customer confusion and barriers to their participation.

Finally, in reviewing the proposed plan, I am concerned that no accommodation has been made to program interruptions (caused, for example, by depletion of available funds or products).. I suggest that this be addressed in the program planning and within the contracts with third party implementers.

Q. Do you agree with the concept of creating a uniform energy efficiency program that is easily identifiable to customers throughout the state?

A. Yes. Branding is an important part of the long-term success of this program. Programs such as Wisconsin's Focus on Energy or California's Flex Your Power campaign enhance consumer awareness of both specific program offerings and the opportunities for energy efficiency in general. Although there are three separate entities running programs in the state (Com Ed, Ameren and DCEO), I believe that the programs would be enhanced by a unified brand and marketing campaign supported by all three. The utilities also may want to consider a shared website and call center to provide information on these programs. However, while the specific programs by the two utilities will be similar, I don't believe that they need to have uniform incentive levels since market conditions vary across the state and each utility should have the flexibility to respond to those differences.

Q. Do you believe that customer education and awareness is necessary for this program effort?

A. Yes. There is a definite need to build customer awareness of energy efficiency options and the financial savings that result from conservation and energy efficiency. General background information using mass media can complement the specific program offerings. Customers need to be aware of both the energy impact of appliance purchase decisions and opportunities to save energy through simple lifestyle changes such as adjusting thermostat settings.

For example, a recent study by Ecos Consulting[2] concluded that large-screen plasma televisions use up to six times the amount of energy of an older-style CRT television. Put another way, average energy consumption from a large plasma tv is roughly equivalent to a refrigerator, the single largest energy-consuming appliance in most households. Growth in sales of these appliances could offset residential energy savings elsewhere if steps are not taken at the outset to make sure this does not happen.
Moreover, customers are often times not aware of common everyday opportunities such as reduction in hot water temperatures in homes,, using programmable thermostats, use of flow restrictors, outlet gaskets, etc. These aspects of efficiency should not be overlooked. The use of public service announcements involving celebrities and well known personalities should be utilized particularly in the beginning phases of this new program. This in combination with customer incentives and program promotions will help to build public awareness and ultimately improve participation levels. This should be a coordinated effort involving ComEd, Ameren, DCEO and the collaborative working group with proper safeguards to ensure that the focus is on energy efficiency and not image building for the utilities.

Q. Do you have concerns regarding the implementation schedule for the programs?

A. Yes. I believe that the residential lighting and appliance program as well as the residential new HVAC incentive programs should be ready to launch as soon as the

[2] Available at http://www.energystar.gov/ia/partners/prod_development/revisions/downloads/tv_vcr/Ecos_Presentation.pdf

Commission files a final order in this case. . Programs similar to these have been long established and I see no credible reason that their implementation should be delayed, as is described in the proposed plan.

Q. Understanding that there was a very short timeframe available to develop this energy efficiency and demand response plan, do you believe there is a need to have an energy efficiency and load management potential study done in Com Ed's service territory at some point in the future?

A. Yes. This is a very important assessment that provides energy efficiency resource planners a better understanding of the magnitude and location of energy efficiency potential in Illinois. Such a study would allow a targeted and more precise approach in efforts to obtain cost effective energy efficiency resources. The last such study done in Illinois was done in 2002 for the Midwest Energy Efficiency Alliance and covered the residential sector only[3]. I suggest that Com Ed conduct a series of statewide studies preferably in conjunction with a university or other organization, Ameren and DCEO. Exhibit 1.2 is the 2007 Georgia Power Company Technical Potential and is an example of the type of study that I am referring to In addition, a survey needs to be done in Illinois to aid in developing and fine tuning energy efficiency resource programs in the future. Exhibit 1.3 is an example of a statewide appliance saturation survey done in another state.

Q. The utility plans are based on technologies using the California Database for Energy Efficiency Resources (DEER data base) savings and performance standards, adjusted for Illinois. Is this adequate?

A. Because Illinois has not had extensive utility-sponsored energy efficiency programs before, there is pent up demand for all of these programs. However, since local labor and equipment costs would be very helpful to obtain for program planning purposes, I believe that the utilities need to commission a revised technology database (Illinois DEER equivalent) to better understand the costs and operating characteristics of various energy efficiency technology and program elements. This need not be done prior to initiating

[3] Midwest Energy Efficiency Alliance, *Illinois Residential Market Analysis*, May 12, 2003. Available at www.mwalliance.org

these programs but should be conducted over the next year to enhance planning for subsequent plan years.

Q. Does this complete your testimony?

A. Yes.