

**Comments  
Of  
Demand Response and Advanced Metering Coalition  
To  
Illinois Commerce Commission  
On  
Implementation of a Sustainable Energy Plan**

April 27, 2005

The Demand Response and Advanced Metering Coalition (DRAM) welcomes the opportunity to provide comments to the Commission in this proceeding. DRAM, an organization of demand response technology and service companies, is focused on education and information dissemination on demand response and its enabling technologies. We applaud Illinois for its move forward to develop a Sustainable Energy Plan that moves beyond the traditional pillars of such a plan – efficiency and renewables – and includes the important new area of demand response.

**Demand Response and Energy Efficiency**

There is much discussion today within the utility industry and among its stakeholders of the relationship between energy efficiency and demand response. As utilities in Illinois have indicated in their workshop presentations, demand response is different than energy efficiency. These two components of what has for years been called “demand side management” are similar in that each focuses on getting customers to take actions which modify their usage in ways that benefit the customer as well as the overall electricity system. But the two are also different in a number of ways. Efficiency can result in load reductions on peak, but likely cannot be dynamically controlled. Demand Response offers dynamic control and “dispatch” with both price and reliability benefits, but may not always have a large conservation effect – particularly when the demand response reductions are short in duration even if significant in their other impacts.

**Valuing Demand Response**

There is a natural tendency to view the components of an approach to meeting the Governor’s Plan and its standards in the context of kwh or MWH, i.e. a measurement of how much has been generated (by renewables) or how much has been reduced or avoided (via efficiency and conservation).

There can also be a tendency to view all kwh avoided as being equal to all others. In reality, all kwh are not equal when viewed by many parameters. Kwh saved can vary according to the fuel that would have been used for the generation of the kwh that would otherwise have been consumed. The economic value of the kwh varies also, with on

peak kwh being the more costly kwh to produce and, therefore, the more valuable to avoid.

The true value of electricity during peak is not measured best in terms of kwhs, however. It is more appropriately measured in terms of demand reduction, as expressed in kW or MW.

In order to properly value demand response and ensure that it is included in portfolios that are assembled pursuant to the Plan, it is important that the Commission recognize this different value metric for demand response. This potential need for a different metric has been put forth by utilities in their recent presentations and DRAM concurs that this is something that requires focused discussion, and potentially, some sort of weighted methodology that can be applied to more appropriately recognize the value of demand response. It may even be that a separate standard should be established for demand response.

### **Monitoring and Measuring Demand Response**

DR actions are best measured by having advanced metering and/or other technologies in place to directly measure demand reductions. It is also possible, however, to measure based on agreed-upon protocols developed through controlled research projects. This is the way energy efficiency and price-based demand response programs have traditionally been measured. In short, effects are estimated as a function of measure type (*e.g.* type of pricing program) and recorded response in the test population (*e.g.* price elasticity of demand), and then applied to the population receiving the demand response program and/or technology.

### **Utilities as DR Providers**

DRAM believes that both utilities and other parties should have the opportunity to offer and provide demand response programs and product offerings. This can be done in a way that does not introduce unfair competition by way of the utility's established position. This issue is one that was addressed relative to energy efficiency programs some time ago, and it can be addressed in this effort in a way that works for all parties, in particular the customer.

In the case of utilities that offer and provide DR programs and services, the utility should be allowed appropriate cost recovery. This should particularly be the case when it comes to providing technology that enables demand response. Deployment of such technology via utilities has been repeatedly demonstrated across the U.S. to be a cost-effective option for getting the technology installed due to the scale economies of cost that are introduced.

Because the majority of demand response benefits can flow to consumers rather than utilities, it also may be the case that the latter should be provided with incentives to help them accelerate the use of such technologies.

## **Types of Programs**

Recent presentations by utilities have focused on the inclusion of specific types of demand response programs by these utilities. This is as it should be as each utility designs a portfolio of efficiency and demand response programs that best suits their needs and the needs of its customers, while also meeting the need to meet the standard. But a wide lens should be used to view the possible ways in which to engage customers in demand response. Whereas a utility might only include certain types of demand response in its plan, as appeared to be the case in the workshops, the implementation of the Plan should not exclude any type of demand response and instead allow any that can be demonstrated to deliver measurable demand reductions.

## **Interaction and Relationship with System Operator DR Programs**

Demand response programs and standards should not be developed without consideration of what ground has already been broken on certain issues by the development and administration of DR programs at the wholesale level by regional system operators. For example, it may be that measurement and verification protocols developed for those programs are appropriate for application to retail demand response programs in Illinois. At the same time, it is important that the existence (or characteristics) of system operator DR programs not be considered to be a substitute for the development of new DR programs and offerings by utilities and other parties in Illinois. Particularly in the case of residential and small commercial customers, where demand response should be viewed as a new option for customers to manage their bills as much as it is seen as a new tool for a utility to manage system operations

## **Questions:**

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