

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

**PETITION OF THE MASSACHUSETTS
DIVISION OF ENERGY RESOURCES
FOR AN INVESTIGATION INTO
ESTABLISHING AN ENERGY
EFFICIENCY PERFORMANCE
STANDARD FOR
BASIC/DEFAULT SERVICE**

DEPARTMENT 06- 113

COMMENTS OF COMVERGE, INC.

Pursuant to the Department of Telecommunications and Energy (“DTE”) Notice of December 29, 2006, Comverge, Inc. hereby submits Comments on the Petition of the Division of Energy Resources (“DOER”) for an investigation into establishing an Energy Efficiency Performance Standard (“EEPS”) for Basic/Default Service (“Petition”). Comverge supports the Petition for such an investigation, supports the creation of an EEPS and supports DOER’s request for the initiation of a stakeholder collaborative process to assess the potential for energy savings, review design options for an EEPS and

address implementation issues. As will be more fully discussed below, however, we oppose DOER's specific proposal for an EEPS.

While being helpful in terms of being illustrative in how an EEPS might work in Massachusetts, the DOER proposal is greatly flawed and should not be accepted or become the starting point of discussion in the collaborative process. Rather, we request that the DTE endorse the policy objectives presented by DOER as support for the pursuit of an EEPS but leave the details of its design and implementation to the investigation and collaborative process. Specifically, we disagree with DOER's exclusion of demand response projects from the design of an EEPS and the separation of the procurement from the conventional Basic/Default service supply. We believe that the inclusion of demand response as part of a comprehensive procurement process for Basic Service is the most effective way to ensure that customers receive a reduction in the cost of generation supply from an EEPS. DOER's rate impact analysis does not reflect the nature of the service provided under Basic Service and cost savings presented by DOER are illusory. In sum, we believe that the DOER proposal would actually increase costs to customers rather than reduce them.

Benefits of an EEPS

As the Department is aware, as a part of the Restructuring Act, Massachusetts utilities were relieved of the obligation to submit to the DTE integrated resource plans. This requirement was eliminated on the theory that since the distribution companies were no longer responsible for generation supply, they no longer needed to plan the supply needs of its customers, most of who, it had been hoped, would eventually be under competitive

supply arrangements. Further, since the DTE no longer reviews such plans, the Department no longer establishes resource targets on supply, fuel diversity, load reduction and energy efficiency - all things that IRPs and the review process had historically established for the state and the region. Putting aside the wisdom of the move in this direction, it is now clear that the market has not produced results comparable to IRP in these areas – things that many policymakers believe are required for prudent energy planning.

Recent history in the region with respect to natural gas shortages for generation, incentives to build new generation, the high cost of reliability units, etc. is replete with results which may have been avoided or at least mitigated under an IRP planning process. We raise these points, not to suggest the reinstitution of IRP, but rather, to show that an EEPS can achieve some of the benefits of IRP in the context of the competitive regime. The EEPS allows the Department to set planning targets much as it did under IRP reviews without changing the competitive procurement model.

Just as IRP disappeared with restructuring, so did load management programs which had been implemented under the utility- demand side programs. There was a conscious shift away from such programs post-restructuring on the theory that load management provided benefits to the generation supplier rather than customers per se and, therefore, ratepayer funds should not be used to fund such programs. Instead, it was believed that the competitive market would fund these strategies for load reduction. This shift left behind a legacy of many effective demand reduction programs such as radio controlled water heaters, pool pumps, etc. and time -of -use rates. As the state and the region faces

significant load growth and the need to plan how that growth will be met, Comverge urges the Department to recognize that the competitive market cannot be relied upon to supply these types of resources and they should be a part of a comprehensive examination of Basic Service procurement requirements for energy reduction goals.

An EEPS That Includes Demand Response Programs Can be an Effective Strategy to Reduce Load Growth

DOER has properly described the benefits of an EEPS in reducing load growth and thereby reducing the need for new generation and costs to consumers. DOER is in error, however, in excluding from their proposed EEPS design the eligibility of demand response programs. As described by DOER, energy efficiency measures are effective in reducing both on-peak and off-peak load growth. DOER has recommended, however, that demand response programs be excluded from eligibility for the proposed EEPS. DOER Petition at 18-19. Their rationale is that such programs provide only short-term load shifting and/or load curtailment and, further, their contributions to overall energy savings are negligible. *Ibid.* Notwithstanding these characteristics, peak load reduction – not overall energy savings – are what provide the value to a Basic Service provider and the cost reduction to customers from the implementation of the EEPS.

While reducing average load growth is important, it is the growth in peak load demand that is driving the costs and supply concerns in the region. According to the ISO's 2006 Regional System Plan, "[R]educing the regional peak demand results in using the current and planned power system infrastructure more efficiently, thereby reducing total costs to consumers." 2006 RSP at 3. The numbers are quite enlightening. While the average peak

usage in New England is about 16,000 MWs, the summer peak on August 2, 2006 was in excess of 28,000 MWs. The historic winter peak is roughly 22,000 MW. The numbers are clear – we are building generation to meet demand for roughly 100 hours in the summer. This makes no sense economically, operationally or environmentally. The target for reduction cannot be overall efficiency reductions alone but peak load reduction in a very concerted and significant way. To exclude this type of program from an EEPS not only does not address the primary problem, it greatly reduces the value of the EEPS in lowering costs to customers.

DOER also suggests excluding demand response projects simply because their savings cannot be compared to kWh efficiency savings; but that presumes that kWhs is the appropriate measure for valuing an EEPS. While Basic Service is procured and priced on a fixed kWh basis, the supplier incurs both capacity and energy costs. Further, because it is a load following service for which the supplier bears all of the risk of load growth, KW as well as kWh reductions have value to the supplier. Indeed, given the high capacity costs facing the region under the recent settlement of the LICAP proceeding, it is arguable that peak load obligation is the primary driver of costs to the Basic Service provider - not energy load growth. Consequently, load reduction has as much if not greater value to a Basic Service provider as efficiency savings. Further, because certain kinds of load reductions, i.e. dispatchable peak load reductions, can be controlled and relied upon by the supplier, they could have the most value to the supplier and be the savings directly attributable to a reduction in Basic Service costs.

The best way to ensure that the value of an EEPS is reflected in the generation costs of a Basic Service price is to marry the two resources in a combined procurement process. Separate procurements for very different time periods, as suggested by DOER, will not result in providing load reduction benefits to the Basic Service provider and will, instead, result in merely increased costs to consumers since the Basic Service provider will disregard the energy savings associated with the EEPS and customers will have to fund the EEPS – even if cost justified by the avoided cost of generation. There is a disconnect in the DOER proposal that results in not delivering the benefits it is intended to provide. As the Department is aware, Basic Service is a “load flowing” service. The supplier takes all of the risk of load growth – peak and off peak. In order to be assured that the cost of the EEPS is limited to the price of generation, it is necessary to examine the price of Basic Service with and without the EEPS savings. That cannot be done in separate procurements for dramatically separate time periods as suggested by DOER.¹ Consequently, Comverge urges the Department not to adopt the DOER proposal and examine the EEPS comprehensively in the context of Basic Service procurement.

Demand Response Programs Have a Critical Role to Play in Reducing the Region's Energy Needs

The ISO-NE's 2006 RSP has identified residential central air conditioning as the primary driver for the compounding summer peak demand growth. 2006 RSP at page 4. The region's summer-peak demand is projected to grow at a compound annual growth rate of 1.9% or 500 to 600 MW per year in the long run. Ibid. Energy efficiency programs cannot significantly reduce that type of load growth as effectively as demand response

¹ DOER has proposed that the EEPS requirements be procured for five year periods, while the Basic Service procurements would continue on their current cycle of six month increments.

programs tailored to meet air conditioning load. Indeed, unlike other demand response programs that simply curtail usage, the curtailment caused by these programs permanently eliminate the load, e.g. consumers do not lower their thermostats during off-peak times to make up the air conditioning curtailed earlier in the day. Further, technology exists today to provide controls in a manner that the reduction is reliable and assured.

If the Department is concerned about the permanence and reliability of the load reduction, and does not wish to include demand response programs that simply shift load, then such differentiation should be reflected in the eligibility criteria of the EEPS. Not all DR programs are alike. The Department may choose to exclude DR programs that are dependent on the use of back-up generation to meet customer usage on-peak. Further, if there is a concern about “snap-back” effects, the Department can require that the DR program be in effect during hours that span both on and off peak periods to allow for a ramp up effect. There are a myriad of ways to address concerns about DR programs as a part of EEPS. The answer is not to simply exclude them.

Finally, DOER has also petitioned the Department to consider dynamic pricing for the Basic Service. Comverge supported that Petition (D.T.E. No. 06-101). The provision of DR programs is integral to the implementation of time differentiated rates. Customers need tools to manage the price signals they receive as a result of time-of-use rates. In particular, pre-selected, automated response to changing prices is the most efficient and

repeatable method for customers to react to pricing. We urge the Department to not look at these proposals in isolation and deal with the issues comprehensively.

Comverge has 31 years of experience across the country in providing technology and services related to the measurement and management of electricity. We have 6 million DR devices installed in North America today and are the supplier for 90% of the programs greater than 100 MW in size. We welcome the opportunity to share our expertise with the Department and the other participants in a collaborative process to design an EEPS that can effectively reduce the energy demands of the state and ensure that the value of those reductions are reflected in the price to consumers. We think that DR programs are a critical part of that strategy and it would be grave error to exclude DR programs that can cleanly and effectively reduce long-term demand on the region's electrical grid.

Respectfully submitted,

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