

November 3, 2008

Mr. James J. McNulty
Secretary
Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, PA 17105-3265

Subject: Docket M-~~00061984~~ 2008-206988f.

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Dear Secretary McNulty,

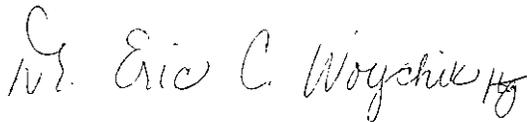
Comverge, Inc. is pleased to present the following comments in response to the questions regarding the Special *En Banc* Hearing on Alternative Energy, Energy Conservation and Efficiency, and Demand Side Response.

Enclosed you will find one (1) hard copy and one (1) electronic copy of this document for each of the following bureaus:

- Commission's Bureau of Fixed Utility Services (FUS)
- Bureau of Conservation, Economics and Energy Planning (CEEP)
- Law Bureau (Law)

We appreciate your consideration.

Sincerely,



Dr. Eric C. Woychik
Vice President Regulatory Affairs
Comverge, Inc.

EW: tlg

Enclosures

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Comments of Comverge, Inc.

**Regarding the Special *En Banc* Hearing on
Alternative Energy, Energy Conservation and Efficiency,
and Demand Side Response**

In Docket M-~~0061987~~ - 2008-2069887

Submitted by:

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and

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November 3, 2008

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I. INTRODUCTION

These comments respond to the questions recently posed by the Pennsylvania Public Utility Commission (the Commission) regarding HB 2200 enacted into law as Act 129 of 2008 (Act 129). Act 129 provides the Commission with specific oversight responsibilities and imposes specific requirements on electric distribution companies (EDCs) in order to increase the use of Energy Efficiency (EE) and Demand Response (DR), enhance default service procurement, and expand alternative energy sources. These comments address the initial phase of Act 129 implementation, the Commission's obligation to adopt an energy efficiency and conservation (EE&C) program by Jan. 15, 2009. Comverge, Inc. (Comverge) is a DR and EE company with headquarters and its operations center in Kennett Square, Pennsylvania, as well as main offices in East Hanover, New Jersey, and Atlanta, Georgia. Comverge trades on NASDAQ (COMV) has over 2,200 MW of long-term contracts for DR and EE in place and over 6,000 MW of DR equipment in operation. Comverge strongly supports the Commission's direction to implement the intent of Act 129, especially to enable responsible demand-side providers to be subject to competitive bidding, rigorous cost-benefit analysis, and pay-for-performance contracting.

II. COMMENTS

A. Commission Questions About Conservation Service Providers

1. Conservation Service Providers

a. Should the EDCs collaborate/coordinate on contracting with conservation service providers?

Comverge anticipates that each EDC in Pennsylvania is of sufficient size to contract for EE and DR at a scale that captures most or all economies of scale.

Therefore, we do not expect any significant advantages of collaboration. Moreover, we think it will be important to preserve each EDC's unique and valuable branding and program customizations in launching new EE and DR programs.

b. Are there enough common programs for the conservation service providers to provide effective measures across Pennsylvania?

The experience of Comverge suggests that there are enough common programs for CSPs to provide effective measures across the State. In the case of large industrial and commercial DR and EE, given the applicability of these programs to the requirements in PJM, commonality in these customer segments seems appropriate. With respect to residential and small commercial customers, however, Comverge suggests that the existing EE and DR programs across the state need not be uniform in all details. However, it may be beneficial to have a degree of commonality so that state-wide marketing could position all programs in the minds of customers.

c. Does the provision providing for competitive bidding for all contracts with CSPs require the utility to competitively bid all energy efficiency and conservation services? If not, what energy efficiency and demand services should not be competitively bid?

The simple and very important answer to this question is yes. Section 2806.1 (A) (7) states the need to establish procedures to require that electric distribution companies (EDCs) competitively bid all contracts with conservation service providers. Subsection (9) requires procedures to ensure compliance with requirements for reduction in consumption under the plan. Subsection (10) states a requirement for the participation of conservation service providers in the implementation of all or part of the plan. Moreover, a subset of experienced conservation service providers (CSPs), including Comverge, will be prepared under pay-for-performance contracts to absorb major risks in providing EE and DR and have extensive experience managing these risks and a track record of success in programs across the country.

Therefore it appears that Act 129 requires a contract approved by the Commission with one or more conservation service providers selected by competitive bid to implement the plan or a portion of the plan. Comverge has extensive experience with utility implementation of DR and EE and with utility outsourcing of DR and EE. In order to capture scale economies specific kinds of EE and DR should be fully outsourced using competitive bidding. DR seems particularly suited to outsourcing as it entails unique customer marketing, technology, and operations.

Large-scale (mass-market) DR and EE programs are particularly appropriate for outsourcing through competitive bidding. Both large scale DR and EE can be more cost-effective when provided through CSPs. Very importantly, the risks of marketing,

equipment warranty, and performance can be removed from customers and placed on CSPs who provide DR and EE based on pay-for-performance. In this light, Comverge recommends that the Commission place the burden of proof on the utilities to do anything other than competitively bid DR services particularly for residential and small commercial DR. In fact, we strongly recommend that the Commission establish rules to guide DR resource procurement which encourage the utilities to seek pay-for-performance (MW guaranteed with performance penalties) contracts with CSPs.

Accordingly, the advantages in scale, the shifting of risks to CSPs, and the ability to leverage existing, very well developed expertise suggest that the Commission should require EDCs to outsource the primary mass-market residential and small commercial DR and EE efforts. This will enable large scale DR and EE for all customer classes.

One possible exception to having the utilities competitively procure DR would be the already successful recruitment of large commercial and industrial (C&I) DR -- for customers over 150 kW -- by CSPs, independent of utility involvement. This process works well now and the Commission should only adopt rules which enhance this effort. Large commercial and industrial DR and EE, those over 150 KW in peak load, can be best served by competitive CSPs who are compensated directly by the PJM market. Accordingly, Comverge suggests that these segments be served by competitive CSPs. For instance, the utility might sign a contract with a CSP that provides for explicit cooperation in C&I DR recruitment and also provides for utility dispatch beyond the PJM minimum availability. Unless it is actively interfering with C&I DR recruitment, the utility should receive "credit" towards meeting the Act's goals for all DR activity in its area, irrespective of whether it actually signs a contract with a CSP.

Comverge offers a related caution to the Commission that DR should be competitively procured separately from EE. Moreover, different types of DR (e.g. air conditioner cycling), and as well different forms of EE, should not be procured together in the same competitive auction. The primary reason to separately procure DR and EE, and to separately procure different kinds of DR and EE, is that the economics of each kind of resource differs. Fast-response (e.g., 10 minute or less) direct load control has very different economic and operational value than does voluntary DR or voluntary price response. Thus, procurement of specific kinds of resources through competitive bidding should be well differentiated.

d. Under definitions, a CSP is an unaffiliated entity providing information and technical assistance. Under 2806.1 (A), however, a CSP is said to provide conservation services. How should this Commission interpret this apparent inconsistency?

Comverge suggests that any apparent inconsistency is clarified by the plain reading of Act 129 in its entirety. In particular, Act 129 states in Section 2 as follows:

Title 66 is amended by adding [section] § 2806.1. Adoption of procedures encouraging energy efficiency and demand-side response.

(a) Program.--The commission shall develop a program to provide for the implementation of cost-effective programs that reduce energy demand and consumption within the service territories of all electric distribution companies throughout this Commonwealth.

This section suggests CSPs should be interpreted to be providers of both DR and EE in all but a few selected situations. The intent of the State Legislature in providing this language seems very clear. The Subsection (1) under § 2806.1 (A) of Act 129 further suggest that CSPs are not to be involved in the Program Administrator role. The Program Administrator is directed to *develop and oversee the delivery of energy efficiency and demand-side response programs within the service territory of each electric distribution company within this Commonwealth.*

Subsection (3) under § 2806.1 seems to further clarify the role of the Program Administrator vis-à-vis the role of *third parties*, which must be interpreted to be CSPs:

Implementing the necessary administrative and financial mechanisms that facilitate a system of third-party entities to deliver all or portions of the energy efficiency and demand-side response programs within the service territory of each electric distribution company within this Commonwealth, including the levying of assessments ...

In short, CSPs seem clearly contemplated to be the providers of DR and EE as well as the unaffiliated entities that provide information and technical assistance.

e. Under 2806.2, the Commission must establish a registry of approved CSPs. What basic business elements (better business bureau rating, bonding, for example) should be required to be registered?

First, Comverge recommends that strong financial status be a prerequisite for CSPs to be involved in the provision of DR and EE. Comverge routinely provides a

certified summary of its financial status and source(s) of capital for project development when it signs long-term contracts to provide DR and EE. Hence, a certified statement of strong financial status and sources of capital seems appropriate.

Second, pay-for-performance should be required of all CSPs in order to eliminate the risks related to marketing, customer acquisition, customer churn, cost overruns, equipment performance, and operational performance. Thus, to be registered as a CSP a pay-for-performance requirement should be a standard *best practice* requirement.

Third, all DR and EE resources provided should be subject to measurement and verification (M&V) which is performed by a third-party entity, to ensure adequate performance.

f. What experience and qualifications should be required of registered CSPs?

Comverge has extensive experience with fully outsourced, pay-for-performance contracting, and suggests that a track record of at least two years in this area is essential. Registered CSPs should also provide a relative chronology of experience, including the specific types of responsibilities involved in the initiation, implementation, operation, and verification of DR and EE resources.

2. Measurement of Meeting Statutory Requirements:

a. How would the *addition* of new load in an EDC territory (i.e. RCI new development/construction) be measured, and at what point do these additions meet the “extraordinary load” exceptions?

The addition of new load in an EDC territory should be measured consistent with the reference points in Act 129 that are used to measure progress toward goals. Specifically, the addition of new load should be measured as total connected MWs during peak-load periods, consistent with EDC measurement of load for the Commission's forecast and for PJM's capacity (RPM) requirements. Comverge has no comment on the approach to definition of *extraordinary load* except to suggest that the siting of new very large industrial facilities (e.g., over 100 MW) would seem to meet the definition.

b. How would one distinguish between *reductions* in consumption as a result of customer participation in technology programs in an EDC territory, implemented as part of an EDC's Energy Efficiency and Conservation Plan, as opposed to unrelated and independent consumer actions (i.e. manually adjust thermostat heat/cooling settings, turn lights off, etc.)?

Comverge suggests there is no reason to distinguish *reductions* in consumption by participation in technology programs from independent consumer actions to adjust their loads. It is very difficult to distinguish customer actions from pure technology-only load adjustments. Comverge suggests that customer actions to reduce loads should be counted toward the EDC goals if they are consistent and verified by the M&V protocols put in place for the program.

c. How will economic activity within Pennsylvania and an EDC's service territory be considered when measuring the performance of EE/DR programs?

For example, an EDC's territory that is experiencing a recession may meet their goals from decreased economic activity from plant closures, business failures and worker migration out of the service territory.

Comverge suggests that any economic contraction be eliminated from consideration in the goals. If this is not done then contraction will be viewed as progress. If the contraction is ignored and the state meets their original goals, there will be a surplus in place when the inevitable rebound occurs. Moreover, Comverge suggests that the added costs of performing benchmarking, to net out demand reduction that results from decreased regional and national economic activity, is likely to be significant.

3. Evaluation:

a. Should the Commission establish a standardized total resource cost manual to evaluate projects? If so, is there a state or utility this Commission should use as a starting point for discussions?

Comverge suggests that a number of states and utilities have adopted the use of the total resource cost test and that it is a useful metric, but that this should not be the only test that should be used for consideration of DR and EE. Importantly, all benefits should be included, specifically all avoided generation, transmission, distribution, and environmental costs that result with long-term installation of DR and EE.¹

¹ See, Woychik, E., *Optimizing Demand Response*, Public Utilities Fortnightly May 2008.

b. What other cost benefit tests should the Commission use to achieve reduction in consumption requirements pursuant to Section 2806.1(C)(3).

In order to provide for direct comparison of cost-effectiveness between EDC and CSP programs, Comverge strongly recommends that an amended total resource cost test be used that ensures that all costs, as well as all benefits, are included. Typically, EDC costs for a wide spectrum of activities are not included in the cost benefit analysis of utility DR/EE programs, while the entire costs of CSP offered DR/EE must be included. This leads to noncomparable results between EDC and CSP cost benefit tests.

c. Act 129 requires utilities to file a plan to assure quality assurance [includes evaluation, M&V by independent parties to ensure quality of completed measures], and further requires an annual independent evaluation of cost effectiveness of the Plan. Given the exposure to penalties by EDCs for potential non-compliance on meeting statutory energy efficiency and conservation goals, what approaches are appropriate to ensure that such independent, third parties are free of coercion from the EDCs they evaluate?

Comverge recommends that an independent consultant group perform the cost benefit analysis for all CSP and EDC DR and EE programs to ensure consistency and to allow for independent comparable treatment. Comverge expects that EDCs will fully embrace CSPs to provide residential and small commercial DR, particularly to ensure large scale DR of this kind can be implemented in a timely manner and in a way that shifts virtually all risks to CSPs based on pay for performance. Comverge expects EDCs to as well embrace CSPs to perform large scale EE for residential and small commercial customers for the same reasons. Large industrial DR and EE can be provided directly by

CSPs, though EDCs are essential to assist with customer information once respective customers have authorized a CSP to act on their behalf.

Comverge also recommends that independent M&V be performed by independent consultants who are experts in this field. M&V should be the primary basis upon which pay-for-performance is administered to CSPs. Thus, independent M&V are critical for both CSPs and EDCs, as this can be used to show how DR and EE goals are met. Importantly, Comverge believes that for residential and small commercial customers, M&V, on a statistically significant sample basis, should be adopted initially so that progress can be made in advance of AMI deployments. Some jurisdictions needlessly delay meaningful DR progress by requiring interval meter data at all participating endpoints. This is unnecessary since performance can be adequately verified using properly designed and implemented sampling.

4. Cost Recovery:

a. What are the appropriate time frames to expense or amortize energy efficiency and demand response expenditures?

Comverge defers to the EDCs on these questions, as amortization of DR and EE expenditures depends on the assets being considered and may be entity specific. As well, rules for CSPs to amortize DR and EE appear to be different than for EDCs. Moreover, under the outsourced procurement approach provided for in Act 129, amortization may not be a significant issue as the EDC is not spending its own capital to enable a major portion of DR and EE resources to be supplied.

b. How should this Commission ensure recovery of only “prudent and reasonable” costs?

Is this established at the time of plan approval? Is it established only after quality assurance and performance is measured, verified, and evaluated, or is it established during the annual independent analysis?

The most clear and appropriate way to ensure prudent and reasonable costs is to ensure cost-benefit analysis is properly performed and to shift the risks of cost overruns and asset underperformance on to CSPs. The largest set of risks, which would then result in imprudent and unreasonable costs, result from the following:

- Marketing and customer acquisition costs that fail to enroll customers;
- Equipment failure (e.g., with procurement of the poorly performing, low cost programmable thermostats or digital control devices);
- Equipment installation or incompatibility problems that require repeated customer visits (and *truck rolls*);
- Customer churn caused by customer moves and dissatisfaction with the program;
- Faulty or incomplete program operation, e.g., for dispatchable DR capacity, which lowers performance (MWs or MWhs provided);
- Lack of equipment inspection and replacement (when failures occur);
- Lack of a migration path for equipment (e.g., when AMI is installed).

Thus, the most direct way that the Commission can eliminate these related risks of imprudent and unreasonable costs is to use well qualified CSPs that specifically provide

DR and EE under pay-for-performance contracting. Price competition under this approach can take the form of competitively bid fixed (known) prices (\$/kw-yr) or alternatively as an index or fraction of a transparent market price such as the PJM RPM capacity price.

c. If services are not competitively bid, how will this commission determine such costs are reasonable and prudent?

If DR and EE services are not competitively bid, after the fact (ex post) review is needed to determine whether related costs are reasonable and prudent. This is because EDCs as cost-of-service utilities are unable to engage in performance contracting. Pre-approval of bilateral contracts for power, based on competitive bidding and approved metrics, are the traditional means of ensuring reasonable and prudent costs in power procurement.

Thus, to avoid traditional after-the-fact reasonableness review of DR and EE expenditures, performance contracting should be based on competitive bidding and cost-benefit analysis to provide pre-approval. Then EDC customers will not face costs if lack of performance were to result. In contrast to EDC implementation of DR/EE programs, CSPs have huge incentives to perform or they do not get paid. Competitive bidding, cost-benefit analysis, and pay-for-performance contracting create consistency in the incentives for procurement and for performance to meet MW and MWh targets.

5. Program Design

a. How should the statutory requirement be interpreted and implemented that requires energy efficiency and conservation measures be equitably provided to all classes of customers?

The Commission should view the statutory requirement to apply to all customer classes equally. Comverge suggests that residential and small commercial customers are many times not fully recognized, particularly with respect to the delivery of DR. Accordingly, Comverge recommends that the Commission ensure that residential and small commercial customers be able to have full-scale DR and EE programs delivered by CSPs.

b. Should all EDCs be required to implement the same type of EE/DR programs? Is it likely that programs will be equally cost effective in every EDC territory?

Comverge believes that each EDC should be able to have different versions of DR and EE programs, but suggests that all residential and commercial customers be allowed to participate in a large scale air-conditioner (AC) cycling program provided by a CSP.

c. Which programs are more cost effective if implemented on a statewide basis?

Comverge suggests that large commercial and industrial DR and EE programs may have faster pay-back periods than residential and small commercial DR and EE programs. However, from Comverge's view large industrial and commercial DR and EE programs do not necessarily generate larger Net-Present-Value benefits as compared to long-term residential and small commercial DR and EE programs. A more specific

ranking of DR and EE programs is difficult to provide given the many ways that such programs can be offered and bundled.

6. Reporting Requirements

a. What additional information should the Commission require the EDCs to report under Section (I)(1)(IV)?

Comverge suggests that all DR and EE programs should be reported on through independent, third-party consultants that perform detailed M&V of actual MW and MWh results.

7. The EDCs already have some DSR Programs available to various customer classes. They have developed these programs voluntarily without any mandates.

At this time Comverge has no comments on the questions posed in this section.

8. In reference to question 1(e) above, the PA Treasury Department already offers the Keystone Home Energy Loan Program (Keystone HELP™). The Department refers to this as Pennsylvania's official streamlined, lower rate financing program for ENERGY STAR™ rated and other high efficiency and renewable energy improvements.

a. To what extent will there be overlap and duplication between this program and Act 129 programs?

The Keystone Help program is aimed at energy efficiency improvements, including ENERGY STAR appliances. Comverge does not see that there would be overlap with DR and EE programs it would provide.

b. The Treasury Department already has an application process established for customer enrollment and contractor registry. To what extent could this process be used as a model under Act 129 compliance?

The Energy Star program has different goals and objectives than the DR and EE programs contemplated by Comverge. Comverge seeks to provide DR and EE based on large scale performance contracting. For example, this may involve 200,000 customers of an EDC to provide over 200 MW of DR through AC cycling. In this kind of program, Comverge would finance the entire operation and perform a set of tasks, including work with the EDC to ensure consistent marketing, acquire the customers, provide customer incentives, install and maintain the equipment, operate the program, provide a customer call-center, and be paid based on the MW provided on an ongoing basis for the life of the program.

c. The Treasury already has a registry of certified contractors. Consumers are able to input a zip code to find certified contractors in their area. To what extent could these contractors' qualifications be used to register CSPs?

The qualifications for individual contractors seem quite different than the qualifications for large-scale DR and EE implementation through competitive, pay for

performance contracting. Thus suggests that the Energy Star program qualifications are probably not applicable.

III. CONCLUSION

Comverge greatly appreciates the Commission's guidance and direction to help refine the thinking of all stakeholders in this process on the implications of Act 129 for DR and EE. The Commission's well thought out questions help all stakeholders to refine the procurement process for DR and EE resources and to allow a shift of the major risks, as well as prudence and reasonableness, away from EDCs and their customers. Well established CSPs seek to step forward and are adept at bearing the risks of marketing, customer acquisition, equipment choice, installation and warranty, and overall system operations, based upon pay-for-performance contracting. Comverge is very supportive of the Commission's direction in these regards and looks forward to possible participation in the upcoming Commission *En Banc* proceeding.

Respectfully submitted,

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