

COMMONWEALTH OF MASSACHUSETTS  
Before the  
DEPARTMENT OF PUBLIC UTILITIES

Investigation by the Department of Public Utilities  
on its own Motion into Rate Structures that will  
Promote Efficient Deployment of Demand Resources

Docket No. D.P.U. 07-50

COMMENTS OF COMVERGE, INC.

Pursuant to the Revised Notice of Investigation and Request for Comments issued on July 26, 2007 in the above-noted proceeding, Comverge, Inc. (“Comverge”) submits its Comments on the Department of Public Utilities’ (“Department” or “DPU”) “Vote and Order Opening Investigation” (“Order”) issued in this proceeding on June 22, 2007. Comverge applauds and strongly supports the Department’s initiation of this investigation and appreciates the Department’s efforts in jump starting the investigation through the presentation of a straw proposal. The Order clearly lays out the policy objectives of pursuing the decoupling of utility revenues from sales and provides an accurate summary of rate structures and approaches applied in the Commonwealth to date. Most importantly, the Department recognizes that the disincentives imposed under the current revenue collection mechanisms “must be addressed expeditiously.” Order at 3. Comverge agrees. As will be discussed more fully below, we believe that the most expeditious approach to developing an effective decoupling mechanism is to establish the revenue requirement using the current rate structure for each utility rather than new base rate cases.

## **I. Executive Summary**

Comverge supports the Department's conclusions regarding the need for a change in the cost recovery mechanisms currently in effect for gas and electric utilities in the Commonwealth. The current structure is a barrier to the implementation of large scale cost effective demand side programs. Comverge encourages the Department to continue this investigation into developing a different cost recovery structure that breaks the link between revenue and cost recovery, including changes in the earnings and rate of return incentives embedded in volumetric sales. Failure to address these issues expeditiously will hamper the Commonwealth's policy objectives to reduce energy demand and environmental impacts from energy use in the Commonwealth. These changes can and should be achieved expeditiously and fairly without having to initiate full cost of service rate cases in setting the starting revenue requirement. The existing rate plans and circumstances for each utility should be examined and used in determining the starting revenue requirement. Certain generic policies related to earnings sharing and incentives may then be incorporated into each utility mechanism.

Current incentives to utilities to implement energy efficiency measures and performance based earnings should be maintained in any decoupling mechanism. Decoupling alone is not sufficient to achieve large scale cost effective demand side programs because of the effect on rate base of measures such as load control programs, particularly when implemented as a deferral or elimination of infrastructure upgrades.

## **II. Introduction**

Comverge, Inc. is the largest Demand Response company, with over 4.5 million Demand Response devices installed throughout the US, accounting for over 6,000 MW of available

load reduction. Comverge's VPC™ ("Virtual Peaking Capacity")<sup>1</sup> offering is the only fully outsourced, "turn-key", "pay-for-performance" load management solution available on the market today. Comverge markets, installs and operates a load control system and assumes all the performance risk associated with the program. Our clients only pay for the verifiable load reduction they receive. Comverge's predecessor companies (which were combined in 1997 to form Comverge, Inc.) were divisions of world leaders in communications and controls technologies, and include Lucent Technologies' Utilities Solutions and Scientific Atlanta's Control Systems Divisions. As Comverge, we have built upon the amassed technologies of these giants to continue to develop state-of-the-art solutions and business models geared specifically towards our clients' unique needs and goals.

Comverge has extensive experience in negotiating contracts for the delivery of demand side programs throughout the country in many regulatory jurisdictions. It is our experience that traditional cost of service rate recovery mechanisms whereby a utility's earnings and cost recovery are received through volumetric rates is, in fact, a barrier to the willingness of utility's to pursue demand side measures that reduce energy usage. While many utilities will endeavor to implement a variety of energy saving programs in response to both customer and regulatory desires, few will aggressively pursue such measures on a broad scale basis without clearly established mechanisms to ensure cost and earnings recovery on a current basis. In these circumstances, it is not enough to simply tell a utility it can always "just file a rate case" if it believes it is under-recovering as a result of demand side measures. As the Department is fully aware, there are numerous reasons why a utility might not wish to file a rate case. First, they are costly and require a significant amount of time and effort by

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<sup>1</sup> Comverge's Alternative Energy Resources Group currently has under contract 495 MWs of load reduction with the following utilities: San Diego Gas & Electric, Nevada Power Company, Rocky Mountain Power, Pacific Gas & Electric Company, Public Service Company of New Mexico and ISO-NE.

both the utility and the participants in the rate proceeding. These costs are ultimately passed on to customers. For this reason, utilities often delay filing cases until there are sufficient increased costs to justify the effort and expense. In the interim, they have an incentive to reduce costs but also increase sales to further delay the filing of a case and maintain earnings. Implementation of demand side programs work against these objectives. Further, it does not make sense to go through an entire cost of service proceeding simply to adjust for a reduction in sales due to demand side programs.

Second, there is a regulatory lag between when the utility seeks recovery and is allowed to increase rates. In the interim, they lose revenue. Finally, utilities bear the brunt of bad publicity when they file for rate cases – even when they are doing the right thing, such as implementing demand side programs which reduce costs to consumers, provide environmental benefits and improve reliability. Contrary to what many think, it has been our experience that utilities do not relish filing rate cases.

The problem is exacerbated by situations involving rate freezes and performance based rates that limit the ability of the utility to capture the lost revenue from demand side programs. This is particularly the case in the Commonwealth. As presented in footnote 8 of page 9 of the Order, virtually all of the gas and electric companies in the Commonwealth are under a variety of PBR or PBR-like plans. Recovery of both the cost of demand side programs and the lost revenue effects can be difficult within the context of these plans and they are a barrier to the adoption of large scale demand side programs by these utilities. It is worth noting that the situation is further complicated by the fact of the Commonwealth being a restructured state. The distribution companies must calculate the cost benefit of demand side programs within the complexities of capturing the reduced generation costs incurred by

customers both from Basic Service and competitive suppliers. A decoupling mechanism should address these challenges as well.

Another dimension to the problem not raised by the Department's order is the disincentive the current rate structure imposes on utilities considering load response programs such as those offered by Comverge. As mentioned above, Comverge provides a full service pay-for-performance demand response program. We are willing to supply the capital needed to implement the program, take all of the risk of investment and operations and guarantee performance of the program. Unlike many companies that provide only individual pieces of a demand response program, leaving it to the utility to coordinate the implementation and operation of the program, Comverge's business proposition is an all-inclusive, full service, pay-for-performance proposal that guarantees delivery of the desired load reduction at a price that reflects the kW's delivered. This ensures that the benefits are achieved at little or no risk to the ratepayers. Comverge has encountered significant resistance from utilities to adopting this approach to implementing a load control program largely because it may take away from the utility the ability to include the capital cost of the program in rate base and earn a return on the investment. This problem is exacerbated in the scenario where a load response program is well suited to reduce distribution constraints. In those circumstances, a contract for performance may be a double whammy to the utility since it may not only not earn a return on the load response equipment investment but may also miss the opportunity to earn a return on the infrastructure investment.

In some jurisdictions, utilities have contracted with Comverge for what we refer to as a "VPC-lite" approach whereby the utility owns the equipment, thereby receiving rate base treatment, but otherwise placing the performance risk on Comverge. This has not been a

viable approach in the Commonwealth, however, because of the rate freezes and fixed rate plans in effect to date. This disincentive would not be addressed by the straw proposal unless there is a way to change the revenue requirement coincident with the adoption of the load response program. In examining a decoupling mechanism, Comverge urges the Department to also take into consideration the rate base issues affecting utility decisions about demand side measures that may be better provided by a third party,

In sum, Comverge agrees with the Department that there is a critical need to address the disincentives utilities have in the Commonwealth to implement large scale cost effective demand side programs. While ordinarily it would make sense to start this process with traditional cost of service proceedings, because so many of the utilities are currently operating under a variety of different PBR and PBR-like plans, we do not recommend that this approach be adopted for the Commonwealth. It will be costly and time consuming to establish base revenue levels for each utility through cost of service proceedings. This approach will not address the issues “expeditiously” as hoped by the Department. Indeed, we believe it will result in protracted litigation. As the Department is aware, several of the rate plans currently in effect for the electric utilities have not only been in place for several years, but in many cases, as the result of settlements, that have not been subject to fully litigated cost review. We urge the Department to initiate proceedings to establish base revenue requirements based on the current rate plans of each utility and establish a frame work for future assessment of those baselines using cost of service and other criteria after the decoupling mechanisms are in place.

### III. Questions

#### Allowed Revenues per Customer

**1. The Department's proposal that a company's allowed revenues per customer be determined through a subsequent base rate proceeding is intended to ensure that the allowed revenue levels, which serve as the basis for the base revenue adjustment mechanism, are closely aligned with the company's costs. Under what, if any, circumstances should the Department permit a company's allowed revenues per customer to be determined through some manner other than a base rate proceeding?**

As noted above, Comverge submits that for any utility that is currently operating under a PBR or PBR-like rate plan, a different approach is warranted to establishing the initial revenue requirement under the decoupling mechanism. Not only would base rate proceedings be costly and protracted, they may, indeed, not be fair to utilities who have operated under these rate plans for a period of time assuming certain risks and operating performance criteria not ordinarily applied under traditional rate structures. Unfortunately, the Commonwealth's forward thinking approach to move its utility regulation to PBRs makes the move to decoupling more complicated. But we nonetheless, should not jettison the goals and benefits of PBR simply to start a new and different cost recovery structure that addresses a different problem.

Comverge urges the Department to establish base revenue levels for each utility based on the specific circumstances of each utility – preserving as much as possible the performance goals and financial incentives embodied in those rate plans. This might mean starting with the current revenue of such a utility or looking at a forecasted revenue level under the current rate plan and averaging or calculating a net present value of the revenue level or applying some escalation factor. We strongly urge the Department to not thrust each of these utilities and the interested parties into base rate proceedings. They will be costly and time consuming and greatly delay the implementation of decoupling.

**2. The Department's proposal uses an approach in which a company's allowed revenues per customer for each rate class does not change between base rate proceedings. An alternate approach would be to adjust the allowed revenues per customer values periodically, based on changes in each rate class' average usage per customer. Please discuss the merits of each approach.**

The appropriateness of periodic adjustments to the amount of revenue per customer will depend on the approach taken in establishing the initial revenue requirement. If, as suggested in response to the question above, the Department establishes the revenue amount on a basis other than a full cost of service analysis, periodic adjustment may be a part of reconciling the PBR provision of the previous rate plan with the transformation to the decoupling mechanism. On the other hand, a freeze of the revenue amount per customer might be consistent with such a reconciliation. Periodic adjustment should be established in the context of the existing rate structure for the particular utility.

## Annual Reconciliation Calculation

**3. The Department's proposal that a company's actual versus allowed revenues be reconciled annually is intended to balance three objectives: rate stability, rate continuity, and administrative efficiency. Do annual reconciliations strike an appropriate balance among these three objectives or would alternate reconciliation periods (e.g., quarterly or semi-annually) better do so?**

More frequent reconciliations may be necessary to meet these objectives. The Maryland Public Service Commission has adopted quarterly adjustments as part of their Bill Stabilization Adjustment provisions. See, Delmarva Power, Order 81518 issued July 17, 2007. This has the benefit of adjusting for seasonal effects that can cause lumpiness in revenue, i.e. higher revenues during summer cooling and winter heating periods. This is not unlike the quarterly fuel clause adjustments the Commonwealth implemented pre-restructuring. The problem with quarterly adjustments is that they can cause cross-subsidization within customer classes when some customers may disproportionately contribute to those higher revenue amounts and then have those revenues credited back to the entire class. This issue should be explored more fully during the hearing phase of the proceeding.

**4. The Department's proposal to determine a company's actual revenue based on billed revenues is consistent with the base rate treatment applied to distribution-related bad debt costs. An alternate approach would be to determine actual revenues based on payments received. Please discuss the merits of each approach.**

Comverge has no opinion on this issue.

**5. The Department's proposal for determining billed revenues is based on actual consumption. An alternate approach would be to determine billed revenues based on consumption normalized for weather and/or other factors.**  
**(a) Please discuss the merits of determining billed revenues using actual versus weather-normalized consumption.**  
**(b) Should consumption be normalized for other factors (e.g., economic conditions)? If so, identify those factors and describe how the normalization for such factors could be done.**

The revenue requirement does not need to be weather normalized since the revenue requirement will be reconciled to actuals. Weather normalization is needed only under the traditional cost of service approach where rates will remain in place over some period without adjustment.



### **Annual Base Rate Adjustment**

**6. The Department's proposal to recover the difference between a company's target and projected revenues through adjustments to its base energy charges is intended to send appropriate price signals to consumers. An alternate approach would be to adjust both base energy and demand charges (where applicable) to recover this difference. Please discuss the merits of each approach.**

The adjustments should be to **both** the energy and demand charges so that the customer sees the effects of both demand and energy reduction measures such as load control. If adjustments are only to the energy portion of the customer's bill, the customers will not have an incentive to reduce their demand charges as well as their energy charges. Further, unless the decoupling mechanism takes into account both the revenue from energy and demand charges, the utility will not have an incentive to reduce its demand costs as well as energy costs.

### **Reconciliation Filings**

**7. The Department's proposal to require a company to submit quarterly filings identifying actual and allowed revenues is intended to ensure that changes in rates are made in a predictable and gradual manner.**

**(a) Under what circumstances should the Department allow an adjustment in base charges during a reconciliation period?**

**(b) Under what circumstances should the Department initiate a review of a company's base revenue adjustment mechanism?**

The Department should allow for adjustments due to exogenous factors that may significantly increase or decrease the utility's costs such as implementation of advanced metering or decreases in tax rates.

**8. What standards should the Department use to measure the performance of a company's base revenue adjustment mechanism over time?**

Comparability to other utilities to other in-state and regional utilities could be one measure used to measure performance.

### **Change in Risk**

**9. How will the implementation of a base revenue adjustment mechanism affect a company's risk and how should such considerations be reflected in a company's capital structure and ROE?**

Moving to a base revenue adjustment does not necessarily reduce a utility's risk. If, for example, some form of performance incentive, including penalties for non-performance, are built into the mechanism, the risk of the utility may actually increase. Further, decoupling alone may not be sufficient to achieve the level of demand side implementation needed to meet effective levels of energy reduction. Rather than reducing

a utility's ROE, it may be appropriate and necessary to increase the ROE in order to incent certain behavior, such as when a load response program is used to defer or avoid distribution system upgrades.

A decoupling mechanism would allow the utility to earn the same amount of revenue even though it has not increased its rate base but here again, this can only be achieved if the base revenue level is not established using only a traditional cost of service, which limit the return to that required on the existing rate base.

### **Shared Earnings Provision**

**10. The Department's proposal to include a shared earnings provision in the base revenue adjustment mechanism is intended to strike an appropriate balance between the risks borne by customers and shareholders associated with company earnings. Please comment on the merits of such a provision. Also, comment on the design of the proposed earnings sharing provision.**

Comverge supports an earnings sharing mechanism. This type of mechanism should include a floor as well as a ceiling for earnings so that the utility can make prudent operating decisions in the best interests of customers and shareholders. A good example would be allowing higher earnings where the utility implements a load control program under a pay for performance type contract to not only reduce capacity and energy costs for customers but to avoid infrastructure investments through use of load reduction rather than the distribution upgrades.

### **Performance Based Regulation**

**11. Please comment on the merits of implementing a base rate adjustment mechanism with and without the individual elements of a PBR plan (e.g., fixed term, inflation, productivity, performance standards, exogenous factors).**

Comverge urges the Department to maintain elements of a PBR in the base rate adjustment. As discussed above, there are many important elements to PBRs such as performance standards that should be maintained in any decoupling mechanism. Indeed, these performance standards should be expanded upon to provide additional incentives to the utility to pursue all cost effective demand side measures at least cost and risk to consumers. The Commonwealth has successfully moved away from traditional cost of service regulation as a part of the restructuring of the electric and gas industries. To go back to traditional regulation in the name of decoupling will be a step backwards and a return to cost plus regulation.

### **Implementation Schedule**

**12. Please comment on how the Department should schedule the implementation of a base revenue adjustment mechanism for each gas and electric company in light**

**of the need to move expeditiously, the resources required to implement such changes, and the specific circumstances of each company. How should the Department determine the order of individual base rate proceedings?**

Comverge suggests that the implementation schedule should be set based on the number of customers for the utilities so that the larger utilities are dealt with first. As the Department has already recognized, there is urgency in addressing these issues expeditiously in order to begin the process of removing barriers to the implementation of demand side resources. Further, as is obvious from the listing of utilities that have PBR and PBR-like rate plans in place today, they are the larger utilities. Removing these barriers for the larger utilities first, ensures that the largest potential for energy reductions occur as quickly as possible. Dealing with these utilities first may also provide some guidance that will expedite the remainder of the utility determinations later.

### **Other Questions**

**13. How should the implementation of a base revenue adjustment mechanism affect the performance-based shareholder incentives that gas and electric companies currently are eligible to receive for promoting energy efficiency?**

As discussed above, the revenue adjustment should not only preserve but be supplemented with new performance-based incentives promoting energy efficiency. For example, these incentives should be expanded to include demand response programs that reward the utility for implementing programs on a pay-for-performance basis. Under either the current or the straw proposal, the utility still will not have an incentive to implement a third party demand response program since the utility not only loses the revenue from the load reduction but also misses the opportunity to increase its rate base and earn a return on the equipment needed for the program. This is also the case where the load reduction program can be used to avoid distribution upgrades, since the utility not only loses the rate base treatment of the DR program but also the rate base treatment of the infrastructure update.

Comverge urges the Department to consider incentives that compensate the utility not only for lost revenue but also lost rate base treatment as a part of its development of a decoupling mechanism. The disincentives inherent in the traditional cost of service approach affect rate base as well as base revenues.

### **IV. Conclusion**

In conclusion, Comverge encourages the Department to continue this investigation into developing a different cost recovery structure for the electric and gas utilities in the Commonwealth that breaks the link between revenue and cost recovery, including changes in

earnings and rate of return incentives embedded in volumetric cost recovery. We support the Department's conclusions that this cost recovery structure inhibits utilities from pursuing cost effective demand side programs and will hamper the Commonwealth's policy objectives to reduce energy demand and environmental impacts from energy use in the Commonwealth. These changes can and should be achieved expeditiously and fairly.

Respectfully submitted,

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September 10, 2007

