

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**Wholesale Competition in Regions with
Organized Wholesale Electric Markets)**

**Docket Nos. RM07-19-000
and AD07-07-000**

**Motion to Accept Late-Filed Comments and Comments of Comverge,
Inc. on the Notice of Proposed Rulemaking**

Pursuant to Section 212 and 602(f) of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (Commission), 18 CFR Section 385.602(f) (2007), Comverge, Inc. (Comverge) requests that the Commission accept the comments below of Comverge on Wholesale Competition in Regions with Organized Wholesale Electric Markets, which were due yesterday on 21 April 2008. Comverge submits that no party will be prejudiced thereby as a result.

I. Introduction

Comverge, Inc. (Comverge) greatly appreciates the opportunity offered by the Federal Energy Regulatory Commission (Commission) to comment on the Notice of Proposed Rulemaking (NOPR).¹ Comverge has 1,880 MWs of dispatchable demand response capacity available through its Alternative Energy Resources and Enerwise affiliates, and has installed 4.5 million Demand Response (DR) devices. With respect to the NOPR and the future of wholesale competition, Comverge is very concerned about

¹ *Wholesale Competition in Regions with Organized Electric Markets*, Notice of Proposed Rulemaking, 73 Fed. Reg. 12,576 (March 7, 2008), FERC Stats. & Regs. ¶ 32,628 (2008).

comparability between Demand Response (DR) and supply-side resources, including opportunities for DR to appropriately obtain concurrent benefits in markets. For competitive markets to be successful Comverge believes that more DR must be installed.

A. Specific Issues of Immediate Concern to Comverge

First, Comverge is directly impacted by decisions within PJM on market rules and pricing. Without due process or transparency, PJM has consolidated synchronous reserve pricing in two regions and reduced synchronous reserve requirements so that only Tier I resources clear the market, excluding Tier II resources. These issues and related problems with RTO/ISO governance point to the lack of comparability for DR resources.

Second, Comverge recommends that the Commission require all RTOs/ISOs to allow for concurrent benefits to flow to DR providers on comparable terms with generation providers. Specifically, Comverge asks the Commission to require market rules that allow for DR to obtain concurrent compensation for i) planning reserve/resource adequacy or capacity market participation, ii) operating reserve (spinning and non-spinning reserve) participation, and iii) energy/congestion market participation when dispatched. In ISONE, for example, DR providers can participate in the FCM market, but cannot participate in the operating reserve markets. In California, DR providers have neither.

Third, Comverge faces withholding of customer information by Load Serving Entities (LSEs), which materially interferes with the implementation of DR. This essential customer information is not being provided in a timely manner. Thus, Comverge recommends that the Commission support a standardized customer information process to ensure that DR is provided a fair opportunity to participate in these markets.

B. Recommended Actions

Comverge recommends that the Commission undertake the following:

- Reform RTO/ISO governance to increase transparency, remove discrimination, and preclude non-competitive results so that DR resources are treated comparably to supply-side resources.
- Allow firm, dispatchable DR to play in operating reserves markets and to concurrently obtain long-term capacity and energy benefits;
- Allow DR providers to aggregate retail customers and participate fully on organized markets;
- Facilitate use of long-term DR contracts to concurrently provide capacity, operating reserves, and energy and congestion benefits;
- Support greater RTO/ISO responsiveness to DR providers through use of a Board Advisory Committee with proper representation and voting;
- Support proposed Commission actions to reduce barriers to DR and more widely use DR to fortify and preserve competitive markets.

These topics will be discussed further below. In short, Comverge finds much to support and agree with in the NOPR, particularly to place DR on a more comparable basis with supply-side resources.

C. Communications Regarding this Proceeding

With Respect to this proceeding, all communications, correspondence, and service of documents should be addressed as follows:

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II. Commission Proposals to Ensure Market Participation of Demand Resources

A. Overview of Comverge Support for the Commission's Actions

Comverge commends the Commission's leadership to improve the operation of organized wholesale markets, reduce barriers to DR, and enable more effective use of DR. As the Commission stated, the basic reasons for increased use of DR are as follows:

i) to put downward pressure on prices; ii) reduce market volatility; and iii) mitigate market power and reduce gaming. Furthermore, it is Comverge's view that the Commission's jurisdictional organized markets must install a much larger amount of dispatchable DR and price-responsive DR to provide a minimum of 35 percent of total electricity resource needs in order to make these markets truly competitive.²

Comverge fully supports the Commission's concerns and its focus on the responsiveness of RTOs/ISOs to stakeholders and customers, which is truly about the governance of RTO/ISO decision making. Based on Comverge's experience, RTO/ISO governance seems decidedly biased in its decision making toward supply-side resources.

In competitive electricity markets, all supply-side resources face dramatically increasing costs, with no end in sight for this escalation, and increased evidence of generator market power. In this light, the Commission's actions to require revised Open Access Transmission Tariff (OATT) filings to better balance RTO/ISO governance and

² As many others have commented before, the Commission needs to ensure that dual auctions for power, that clear both supply AND elastic demand, not just supply, must be facilitated to provide real competition. See, Woychik, E. and B. Carlsson 2007. *An Integrated Analysis of the Electricity Market: Does More Knowledge Enable Market Manipulation?* 7th Annual Global Conference on Business and Economics, Rome, October 2007.

further enable the use of DR are fully consistent with the requirements to ensure workable competition and just and reasonable rates under the Federal Power Act.

Therefore Comverge endorses the Commission's overall direction in the NOPR, particularly in regards to the following:

- To *ensure just and reasonable rates and to remedy undue discrimination and preference and to improve wholesale competition in regions and organized markets.* (NOPR para 4)
- To use ... *market prices to elicit demand response*, particularly to provide requirements to: (1) *accept bids from demand response resources in their markets for certain ancillary services, comparable to any other resources;* (2) *eliminate, during a system emergency, a charge to a buyer in the energy market for taking less energy in the real-time market than purchased in the day-ahead market;* (3) *permit an aggregator of retail customers (ARC) to bid demand response on behalf of retail customers directly into the organized market;* (4) *modify their existing rules, as necessary, to allow the market-clearing price, during periods of operating reserve shortage, to reach a level that rebalances supply and demand so as to maintain reliability while providing sufficient provisions for mitigating market power;* and (5) *study whether further reforms are necessary to eliminate barriers to demand response in organized markets.* (NOPR para 6)
- That *each RTO and ISO provide its [Market Monitoring Unit] with access to sufficient data, resources, and personnel...and that the MMU...report directly to the RTO or ISO board.* (NOPR para 8)

- That *the MMU functions include (1) identifying ineffective market rules and recommending proposed rules and tariff changes; (2) reviewing and reporting on the performance of wholesale markets...; and (3) notifying appropriate Commission staff of instances in which a market participant's behavior requires investigation and to broaden the scope of behavior to be reported by the Commission.* (NOPR para 8)
- *[N]ew criteria ...to ensure that an RTO or ISO is responsive to its customers and stakeholders, and ultimately to the consumers who benefit from and pay for electricity services, specifically principles of (1) inclusiveness, (2) fairness in balancing diverse interests, (3) representation of minority positions; and (4) ongoing responsiveness* (NOPR para 9), *and require RTOs and ISOs to consult with their stakeholder and make a compliance filing consistent with these four principles.* (NOPR para 10)
- *To require each RTO or ISO to study whether further reforms are necessary to eliminate barriers to demand response in organized markets to ensure demand response resources are treated on a comparable basis as other resources.* (NOPR para 11)
- *For each RTO or ISO to provide a forum for affected consumers to voice specific concerns...on how to improve the efficiency of competitive markets.* (NOPR para 11)

B. Removing Barriers to DR Use – Comparability for DR is Crucial

The largest single barrier in Commission's wholesale regulatory scheme is that DR does not receive treatment that can be considered comparable to the treatment accorded

supply-side resources. Comverge fully supports the view that comparability between DR and supply-side resources is essential³, as otherwise supply-side proposals will always win-out over DR, even when the DR is least-cost and a more valuable resource.

DR directly affects wholesale rates and services. This makes it essential that OATT rates and services that DR can participate in are just and reasonable. Comparability is required to ensure just and reasonable rates. This suggests, for example, that operating reserves are primary wholesale services that DR, and generation alike, must be allowed to provide to prevent undue discrimination. Moreover, the use of DR to provide operating reserves is critical to protect the reliability of the interstate transmission, consistent with the Commission's statutory framework and legal precedent. Accordingly, comparability in DR rates and services and in the treatment of participant stakeholders (i.e., with respect to governance and market rule determination) is essential to preclude anticompetitive behavior and remove discrimination.

In the Commission's wholesale scheme, non-comparability treatment of DR manifests in a number of forms, as follows:

- DR should at least accrue concurrent benefits from both capacity markets (or resource-adequacy) and operating reserve markets, just as generation does, but DR has generally been excluded from such operating reserve markets.⁴
- DR cannot provide Operating Reserves under many OATT tariff provisions, so is excluded from comparable treatment as a result of the accompanying market rules and protocols.

³ Comparability between DR providers and supply-side providers is a major focus here, not comparability between respective supply-side resource providers.

⁴ Though Order 890 requires specific ancillary services be provided, ISOs such as PJM impose operating terms that in essence diminish the use of dispatchable DR in operating reserve markets.

- Under most OATT rules, DR that provides clean, fast, dispatchable ramping capacity is valued the same as polluting, slow-response, partially dispatchable resources (e.g. coal plants) that provide far less value.
- ISO/RTO Governance, which should support DR, is not comparable as boards and governing committees are biased in voting to favor generators.

As the NOPR explains (para 41-45), market rules that require extended DR operations (e.g., 12 hours) do not allow a DR provider to limit its frequency or the duration of its participation. These requirements may limit the type of bid that can be submitted or allow DR to participate in a co-optimized market (e.g., NYISO), both of which then restrict DR entry into related markets. These kinds of market rules are discriminatory and violate the Commission's comparability principle.

The Commission in Order 890 adopted processes to ensure more comparable OATT service in order to limit undue discrimination and anticompetitive conduct, as well as to satisfy statutory responsibilities under section 217 of the FPA.⁵ The Commission should ensure comparable treatment for DR providers, particularly in governance, to enable the adoption of non-discriminatory market rules so that DR has the opportunity to compete.

Comverge suggests that the Commission adopt a sharper *bright line* standard for comparability, like that which it used for reciprocity. Specifically, Comverge recommends that the Commission adopt an element from its reciprocity requirement, so that all holders of an OATT ensure "its provisions must be substantially conforming or superior" (Order 890 at pg. 125, mimeo) in all cases with respect to comparability. As Commission Order 888-A explains, the basis for open-access transmission is the

⁵ In the case of transmission providers they must submit proposals that comply with eight principles – coordination, openness, transparency, information exchange, comparability, dispute resolution, regional participation and congestion studies. Order 890, at pg. 241, mimeo.

agreement to offer comparable, not unduly discriminatory services, in return (30,285). Thus, the Commission should impose a *substantially conforming or superior* rule to ensure that DR services and participants are treated fairly in terms of comparability. Comparability is the core of nondiscriminatory open access provisions, which aim to ensure that competition prevails, so this should be defined with a bright line test.

III. Discussion of Commission Proposals

A. Demand Response and Pricing Issues in Organized Markets

Comverge agrees with the Commission's three proposals for RTOs/ISOs to ensure DR is treated comparably with other resources. Specifically these are: (1) to accept bids for DR to provide ancillary services and operating reserves in particular; (2) to eliminate specific charges to buyers in the energy markets for voluntary reduced demand, -- this should not be limited to system emergencies -- and (3) to permit DR providers (ARCs) to bid on behalf of retail customers into RTO/ISO markets. (NOPR para 26) Comverge fully agrees with the Commission's NOPR that market rules should be designed to ensure that DR can participate directly in all energy and ancillary services markets. As proposed in the NOPR, Comverge supports RTO/ISO adoption of reasonable standards needed for system operators to call on DR, including measurement and verification to ensure compliance with such standards.

Comverge also embraces the Commission's clear summary of the benefits of DR in competitive wholesale markets, including that when DR is bid into organized markets this lowers demand, which lowers price. Simply put, DR affects the wholesale market by reducing the requirement for retail capacity needs. Moreover, with DR all Load Serving

Entities (LSEs) can reduce the following: (i) resource adequacy requirements; (ii) operating reserves; (iii) energy; and (iv) if properly located, the need for expensive congestion relief, including new transmission lines. Furthermore, DR flattens the local and regional load profile, increases system load factor, reduces generator market power, provides downward pressure on prices, reduces resource needs, and decreases price volatility.

1. Bid Caps and Price Caps in Wholesale Market Design

The Commission's points on the impacts of bid caps and price caps are well taken (NOPR para 44, 45). Of even greater concern to Comverge, however, is that price averaging, particularly to remove or reduce hourly peak and super-peak price signals, may dramatically reduce the incentives for DR to be used and correspondingly reduce DR revenues, profitability, and cost-effectiveness. In simpler terms, price averaging spreads the benefits – the direct costs otherwise avoidable – to hours when DR does not operate. In addition, price averaging may diminish the incentives for capacity to be available when the loss-of-load expectation/probability is the highest – it provides poor signals to capacity providers and reduces the benefits from available capacity.

Finally, as the NOPR explains, certain DR programs may dampen prices during a period of shortage and that the use of *emergency* DR will create this effect. (NOPR para 44). Some RTOs/ISOs, however, have seen that the best ways to use DR is before emergency conditions are triggered (i.e., before operating reserves dip to emergency levels), as this also produces a substantial wholesale price reduction benefit. This suggests that DR should be included as an economic option, dispatched on that basis, and that some more expensive DR may be held for emergency operations. Certainly DR

should not be used exclusively as an emergency resource. DR that is relegated to be triggered only when emergencies occur, again, reflects the non-comparability of DR and supply-side resources. DR should be seen as a resource that can participate equally with at least peak and super-peak generation, for energy and capacity, ancillary services, environmental mitigation, price-response, market power mitigation, and when appropriate emergency response.

2. Accessibility of Ancillary Services Markets by DR Providers

Currently, DR providers are not able to participate in most Operating Reserve markets, particularly to provide spinning reserve and non-spinning reserve. In contrast, many generators obtain concurrent revenues for providing the same basic resource in both capacity markets (planning reserve or resource adequacy markets) and operating reserve markets. This is clearly not comparable. As explained below, PJM's Tier 1 and Tier 2 Synchronous Reserve markets are discriminatory and act to exclude DR resources, but at the same time enable many generators to participate. Thus, certain market rules to implement OATT provisions discriminate against DR and provide advantages to generators that provide operating reserves.

Accordingly, the Commission's proposal to make RTOs/ISOs accept bids from DR providers is most appropriate, particularly to enable DR providers to simultaneous participation in capacity markets (or resource adequacy) as well as operating reserve markets, and then be triggered based on price and/or reliability to provide energy and congestion benefits.

Certainly it is appropriate for specific rules to be imposed that require all resources, generators and comparable DR, to respond within specific time frames, and to meet

reasonable size, telemetry, metering, and bidding requirements. (NOPR para 49) The DR industry does not want the uncertainty of subsidies or special treatment. Rather, Comverge and other DR providers simply want comparable treatment and opportunities to provide high market value consistent with specific DR capabilities and market needs.

Comverge supports the Commission's specific proposal and recommendations for aggregators of retail customers (ARCS) to bid DR on behalf of retail customers (NOPR para 91-93), including the following:

- Meet the same requirements as DR that is provided by a load-serving entity (LSE);
- Meet comparable RTO/ISO membership and measurement and verification requirements;
- Use single aggregated bids for demand response from a single area;
- Comply with restrictions to avoid double-counting of DR;
- Require explicit notification from the retail authority to the RTO/ISO to disqualify an ARC;
- Need not require DR bids if this is not permitted by the relevant retail electricity authority.

Furthermore, Comverge agrees that DR providers should be allowed to sell into the ancillary services markets without being required to sell into the energy market, unless energy schedules are consistent with expectations about DR curtailment/load-drop and that the related energy is provided voluntarily. Accordingly, Comverge supports the Commission's proposal for competitive ancillary services bidding, to (1) provide appropriate technical value under necessary requirements, and (2) comply with applicable

bidding rules at or below market-clearing prices. Comverge respectfully requests that the Commission ensure that overly technical and burdensome requirements are not imposed, for example to provide verification of spinning and non-spinning reserves.

Of concern, the Commission suggests its proposal would apply to any competitively-bid market, but only lists energy imbalance, spinning reserves, supplemental reserves, reactive supply and voltage control, and regulation and frequency response. Comverge agrees with this but asks the Commission to include two other key services that DR has generally been excluded from participating in, Out-of-Market (OOM) and Scarcity Pricing. In accord, comparable treatment for DR should extend to all markets including these additional two.

The concept suggested by the Commission to specify limits on the frequency and duration of service in their bids (NOPR para 64) seems prudent.. This is a critical feature for DR providers, as most readily recognize.

a) Ancillary Services must not be the Exclusive Domain of Generation

Comverge agrees that DR providers must meet the same requirements as generators that provide ancillary services, particularly in bidding, response-time, and measurement and verification. The governance of RTOs/ISOs, however, when dominated by the voting of generators and utility affiliates, can easily make the rules and requirements for ancillary services less effective for DR and more effective for supply-side resources, to provide a competitive advantage to generation. A subset of related specific issues in PJM is outlined in the section below. But more broadly, ISONE does not allow DR to provide ancillary services (though it has a pilot project to consider it). Also potential problematic are CAISO's proposed requires for DR to be registered as Participating Load and to meet

intensive communications requirements when qualifying as non-spinning reserve.⁶ (CAISO requirements for DR to provide spinning reserve are not as yet contemplated.) On the other hand, Rocky Mountain Power uses residential DR to provide non-spinning reserve capacity in the Western Electricity Coordinating Council. As most all generators must have communications systems to RTOs/ISOs, communications protocols to provide ancillary services can be made very complicated and foreclose DR providers, particularly because communications from a large number of DR devices or customers is more expensive. In simpler terms, instead of an enabling policy, comparability can be used as *sword* to cut out DR participation. Accordingly, we ask the Commission to provide guidance so that ancillary services rules and protocols do not become unduly complex and burdensome for DR providers. One simple reason is that generators will face much less competition in these markets if DR resources are excluded (which is just why RTO/ISO governance is problematic). DR providers should of course be subject to registration, creditworthiness, and other requirements, as generators are, but should not face requirements that act to exclude DR providers.

b) PJM's Synch Reserve Markets Serve Generators & Discriminate Against DR

The NOPR states “only PJM allows demand response resources to provide synchronous reserves (FERC’s term for spinning reserves) and regulation service” (NOPR para 39). Comverge must explain, however, that in PJM DR is not treated comparably with generation in its markets. First, the two-tier structure of itself is discriminatory. Tier I synchronous reserve have been supplied by large scale generation primarily. Tier II synchronous reserves are mostly relegated to providers of DR. Tier I is

⁶ It seems that CAISO’s proposed requirements for Participating Load may be appropriate to enable DR to qualify as operating reserve, but further review is needed.

priced differently with a \$50/MW adder above the event LMP. Tier II is offer capped at \$7.50/MW and limited to no more than 25% of the total synchronous reserve requirement in any one reserve zone. Tier II resources are penalized for non-performance and Tier I resources are not. As well, Tier I resources are used first to satisfy synchronous reserve requirements, leaving Tier II resources as back up. Yet it seems illogical to dispatch a more expensive resource first and use a less expensive resource as backup. The bases for pricing differences and the market-share rules seem unwarranted, discriminatory, and certainly are non-comparable. Hence, Comverge requests that the Commission assist to ensure remedies are provided for these issues.

Second, large generators in the Tier I market for synchronous reserve receive notification messages with certainty. Largely Tier II resources do not – and must at times use a phone to report unavailability and face uncertain messages from PJM when a dispatch event is terminated. One major consequence of PJM's uncertain messaging to terminate an event is that DR providers must curtail for longer periods than necessary. A second consequence is that some SR resources are considered by PJM to *be noncompliant with events* as the event termination time and the supporting data does not correlate with the actual event window. The governance of PJM must allow for DR to be treated comparably with generation, which includes an overhaul of the market rules for synchronous reserves, particularly to update the communications and interface system to allow DR providers to have the same information and notifications as supply-side resources. Communications, notification, scheduling, and bidding should be comparable for both DR and generation. Comverge restates the caution here, however, which is to

make sure that communications and interface requirements are not overly burdensome, technical, or expensive.

Third, PJM's synchronous reserve zones have been altered, resulting in reduced use of Tier II resources, in one case to the point where Tier II resources cease to be used. For example, PJM has combined the Northern Illinois zone and Western zone, reduced the aggregate resource requirement level for synchronous reserves, and now Tier II reserves have not cleared the market for several months. It is not clear why this consolidation occurred. It is also unclear why the synchronous reserve resource requirement was reduced, as previously Tier II resources were used extensively. In addition, Tier II resources are at times substantially less expensive than Tier I reserves. There appears to be little transparency about how these determinations are made, but generators certainly gained advantage in recapturing a part of this market, though it is unclear that electricity rates are reduced as a result or that reliability is increased.

These three issues with PJM are but a small sample of problems that result under the current ISO/RTO structure, which seem to be a consequence of ISO/RTO governance that is not balanced, resulting in non-comparable treatment of DR. The Commission's Order 890 states, consistent with EPCA 2005 section 1223 and Order 888, that DR should be permitted to provide the necessary functions to be treated comparably, particularly with respect to transmission investments and ancillary services. (FERC Order 890, pp. 275-76, 359-60) Comverge respectfully recommends that the Commission require that each OATT that is refilled to explicitly define how it will address comparability of DR and supply-side resources, and that PJM comply with the original Orders 888 and 890 to provide synchronous reserves for DR on a comparable basis.

c) Comverge Proposes a FERC Technical Conference to Frame the Basis for Standard Ancillary Services

As the governance structures seem to be turned against DR providers in most RTOs/ISOs, it seems wise to require the Commission's intervention to frame standard ancillary services rules for bidding and participation, though they will be determined by the OATT filings of each respective RTO or ISO. Accordingly, Comverge recommends that new ancillary services rules should be determined by respective RTOs and ISOs, but initially framed in a FERC Technical Conference, consistent with the Commission's substantive recommendations to amend RTO/ISO bidding rules (NOPR para 90-93).

Thus, Comverge requests that the Commission assist in leveling the playing field by supporting the use of common parameters and elements to define standard DR services, starting with the six well established ancillary services that are defined in Commission Orders 888 and 890. Most important for DR providers in the near term is to standardized spinning and non-spinning reserves. In the longer term comparability in all bid-based and market-based services is needed to enable DR resources to fully participate.

3. Eliminate Deviation Charges under Certain Circumstances

Comverge supports the Commission's proposal to eliminate deviation charges for buyers in the energy market that take less energy when an RTO/ISO seeks to avoid an operating reserve shortage or declares an operating reserve shortage. Removal of this disincentive is important where load reduction is valued most. Comverge also supports the Commission's proposal to have any real differences in market costs that result, otherwise included as deviation charges, to be allocated as uplift to all customers of an RTO or ISO. (NOPR para 77) It appears, however, that it is difficult to fully define the

circumstances when deviation charges would be eliminated. The circumstances where an RTO/ISO seeks to avoid an operating reserve shortage are significantly different than circumstances where an operating reserve shortage – emergency – has occurred. Thus, the Commission should carefully consider how OATT proposals define the circumstances where operating reserve shortages are avoided.

4. Permit ARCs to Bid DR for Retail Customers into RTOs/ISOs

The opportunity for ARCs to aggregate retail customers and bid into RTOs/ISOs is already proven to be somewhat successful in PJM and ISONE. It is unclear to Comverge exactly how third parties as DR providers or ARCs will gain advantage where capacity markets are in place, but it is important to allow ARCs to bid into all other RTO/ISO markets, including operating reserves, energy/congestion, and other markets. As the Commission remarks, double payment must of course be avoided. (NOPR para 85)

Comverge supports initiatives to standardize several technical issues, including i) the method for determining baseline compensation, ii) tools to establish uniform baselines and verification, iii) interface tools for DR to use a common portal and protocol in organized markets, iv) telemetry and metering requirements. (NOPR para 84)

The Commission proposal to amend RTO/ISO rules and permit ARCs to bid DR for retail customers is consistent with comparability under the Federal Power Act and Orders 888 and 890. The requirements for qualification and the markets they bid into must be accessible to DR providers comparably with supply-side resources and not be overly burdensome.

5. Modify Market Rules to Allow Market-Clearing Prices During Shortage

The Commission proposal to permit ARCs to bid DR during periods of operating reserve shortage is entirely comparable with the related role that generators occupy. As CAISO and others have pointed out, the rules governing price formation should be modified to allow DR to fully participate during times of shortage.

An end-state for RTO/ISO markets is for bid caps to be fully relaxed, scarcity pricing to be used *full strength*, and for bilateral markets to enable long-term DR and supply-side resources to provide local resource adequacy (planning reserves), as well as operating reserves, energy/congestion, and Out-of-Market power when needed. This approach, to use scarcity pricing, based on market-clearing prices and bilateral contracts, during times of shortage would ideally replace the use of price-caps, capacity markets, and the muted average price signals that are now in place. A menu of DR services would be provided bounded by, on the one hand, fast, firm, dispatchable DR, and on the other, voluntary non-firm price response that flows through hourly or even sub-hourly wholesale prices to retail customers. Comverge joins DRAM, however, in the interim in stating concerns about the transition. Some capacity markets now at least provide a short-term market for dispatchable DR. The ultimate, however, is to provide markets that create certainty for long-term contracts for DR, similar to the bilateral contracts for supply-side resources.

6. Agree on Need for Technical Conference for DR Related RTO/ISO Studies

The Commission's proposal to convene a technical conference where ISOs/RTOs and others to report on standards for DR, as well as remaining barriers to DR, is indeed welcome and is fully supported by Comverge.

7. Specific Issues with Customer Information Withholding

Comverge fully believes that the LDCs and retail service providers in ISOs/RTOs need a consistent policy and protocol to enable timely transfer of customer information to DR providers in order to enable DR operations to be effective. When customer information is not provided on a timely basis, the targeting and application of DR strategies is hampered, which directly undercuts the achievement of cost-effective results. The withholding of information by LDCs has been especially problematic in PJM, undercutting DR performance for retail and wholesale customers alike.

IV. Price Formation During Operating Reserve Shortage

A. Proposals that Ensure Capacity Markets are Sustained

The market condition that occurs when supply, including operating reserves, falls short of demand obviously threatens reliability and should be remedied so that proper price signals prevail and the value of DR is not muted. The four approaches defined by the Commission to address this are as follows (NOPR para 98-101):

- Increase energy supply offer caps and demand bid caps above current levels during an emergency;
- Require RTOs/ISOs to allow only DR bid caps to be raised above current levels, keeping generation offer caps in place;
- Require a demand curve for operating reserves in each RTO/ISO market;
- Require RTOs/ISOs to modify market rules to set market clearing price for all supply and DR at the same level of payment as participants in emergency demand programs.

Comverge remains concerned about how these proposed approaches to address DR needs during shortage conditions would impact existing capacity markets, particularly in the longer term. Comverge distinguishes how these mechanisms will work in RTOs/ISOs that have capacity markets, versus RTOs/ISOs that are energy-only markets. Also, in both cases the timing to implement these mechanisms is important.

Where capacity markets are, or will be, in place each of the four proposals seems likely to under-cut capacity market prices and to require DR providers to rely more on netting a greater allocation of energy prices. This also seems troublesome because already too much of capacity pricing is based on the short-term. Moreover, long-term bilateral markets have not developed to support capacity markets. Also of concern is the potential to destabilize the current capacity markets as they are just now being developed and put to use, particularly by DR providers.

Regarding the first proposal, in energy-only markets (e.g., CAISO and MISO) if energy supply offer caps and demand bid caps are increased above current levels during an emergency this may allow for greater DR and supply-side resources to respond. But this may also invite more gaming, to withhold capacity so that emergency conditions occur, to take advantage of higher prices. However, if a much larger increments of dispatchable DR and voluntary price-response are in place the potential for gaming will be substantially reduced.

A way to prepare for the first proposal is to start with the second proposal; require RTOs/ISOs to allow only DR bid caps to be raised above current levels, keeping generation offer caps in place. Gaming by DR providers must of course be controlled, but if DR is provided through longer-term contracts this will be substantially mitigated

and at the same time this will create a transition to enable supply-side resources to take advantage of steps to relaxed price caps.

The third proposal, to require a demand curve for operating reserves in each RTO/ISO market, is difficult to do well as it requires an administrative determination of the characteristics of the demand curve, which will inevitably be designed to avoid gaming and at the same time provide needed power. This approach substitutes administrative process for market forces and bodes to invite major controversy.

The fourth proposal, to set market clearing price for all supply and DR at the same level of payment as participants in emergency demand programs, presents at least two possible perils. One, participants seem likely to ignore the market value of DR before an emergency is declared. And two, the emergency value of DR would be substituted for the market value. This may also reinforce the use of DR as an emergency-only resource, which it should not be.

Comverge recommends an alternative that allows price caps to be relaxed as greater dispatchable and price-responsive DR is implemented. This will allow for the best forms of market power mitigation, dispatchable DR and customer price response, to be used.

B. Comverge's Recommendations on the Commission's Proposal

Comverge agrees with the Commission's assessment *that existing market rules appear to be unjust, unreasonable and unduly discriminatory or preferential during times of scarcity ... they may not reflect the true value of energy and, by failing to do so, may harm reliability, inhibit demand response, deter new entry of demand response...and thwart innovation.* (NOPR para 107) Comverge further agrees with the Commission that

i) price caps constitute a barrier to new generation and demand response, ii) market prices can elicit DR to maintain reliability, iii) with bid and offer caps the optimum level of DR or generator response cannot be obtained, and iv) DR should be used to deter market power and gaming, particularly during operating reserve shortages.

Comverge supports the Commission's proposal to reflect the value of energy during times of scarcity . We support each of the six proposed criteria to demonstrate the merits of new energy market rules (NOPR para 119) and the Commission's proposed rulemaking approach for each respective RTO/ISO. Comverge respectfully recommends that the Commission add the following criteria:

- Where applicable, require a detailed assessment of the impact of new energy market rules on the respective capacity market participants.

V. Responsiveness of RTOs and ISOs to Stakeholders and Customers

A. Comments on Proposals and the Commissions Suggested Reforms

Comverge supports the Commission's focus on practices and procedures to increase the responsiveness of RTOs/ISOs to customers and other stakeholders. The proposed criteria seem appropriate to ensure more responsiveness (inclusiveness, fairness, representation of minority positions, and responsiveness).

The *independence* aspect of RTO/ISO governance is critical to ensure greater balance and further support of DR. Independent, balanced representation on stakeholder committees is essential to effective governance. Critical is the actual decision making of each RTO/ISO and use of fair representation that reflects all types of participants to ensure comparability, limit non-competitive behavior, and avoid discrimination.

Comverge supports the Commission's proposal to increase the responsiveness of RTO/ISO boards, the need for Commission action, and the Commission's proposed reform to require each RTO/ISO to demonstrate compliance based on the stated criteria (inclusiveness, fairness, representation, and responsiveness). Furthermore, Comverge agrees with the Commission's implied preference to have each RTO/ISO use a representative board advisory committee in lieu of a hybrid board approach.

Of most concern to Comverge is that DR interests are fairly represented. To the contrary, the history is for RTO/ISO boards and related committees to be represented by supply-side interests. Actions to counter-balance the supply-side interests must include appropriate representation by demand-side interests. Yet, as some have commented, demand-side interests do not have the same resources and cannot expend huge amounts of time to participate in a plethora of RTO/ISO board related meetings. Moreover, Comverge is concerned about both the challenge of selecting non-independent members for any board, including a board advisory committee, and the use of a supermajority vote. Use of a supermajority vote to select people to fill what are clearly minority positions to represent DR interests seems difficult to reconcile. A super majority voting structure is simply antithetical to minority interests. Hence, super majority voting seems at odds with fairness and the aim to allow minority views to gain greater voice. To address the imbalance in current governance, Comverge further asks whether the Commission should consider support for separate board advisory committees that are intended primarily to represent DR and demand-side resources.

B. The Need to Comparably Support Concurrent Benefits for DR

Commission supports comparability of DR and supply-side resources, recognizing that some DR resources are available only during limited times of the year and for a limited number of hours of use. Concurrent DR benefits should be recognized just as generation and transmission can net concurrent benefits through optimization. Accordingly, DR resources should be allowed the same treatment to schedule or bid into ISO/RTO markets through an LSE or ARC and to net other benefits as well, as follows:

- Planning reserve margin (15-17%) for regional or local resource adequacy and capacity market needs;
- Operating reserves in the market or separately to *self-provide* operating reserves;
- Lower super-peak prices and to obtain congestion benefits (directly and/or through transmission rights contracts);
- Avoid T&D capital costs on specific circuits, which may have repeating outages or substantial congestion;
- Environmental mitigation and for environmental dispatch to reduce NO_x/SO_x and green-house-gases (GHG);
- Scarcity pricing or OOM during super-peak and emergency periods;
- Option value of DR.

Each of these options can be tapped based on normal DR operations with proper triggers and without double-dipping.⁷ A DR resource can, with proper operations, concurrently be available to provide capacity, non-spinning reserves, and T&D

⁷ Double-dipping in this context may refer to benefits to the LDC from the wholesale market, and T&D avoided, as well as to retail customers. Concurrent DR benefits need not translate to double-dipping.

avoidance, and then be dispatched to provide energy and congestion benefits, lower grid losses, and lower NOx/SOx and GHG emissions. ISO/RTO rules must aim to properly preclude participants from over committing DR, such as through *ancillary services no-pay*, so that capacity and energy remain truly available to be called upon.

Thus, the Commission should support market rules to enable DR that qualifies for locational needs that can simultaneously be available for resource adequacy or the capacity market, operating reserves, and T&D avoidance. This same DR can then be available for dispatch to net energy and congestion benefits, lower grid losses, and lower NOx/SOx and GHG emissions.

VI. Long-Term Power Contracting

A. Proposed Reforms

The Commission's points, that *[f]orward power contracting allows buyers and sellers to hedge against risks that prices may fluctuate in the future ... improve price stability, mitigate the risk of the abuse of market power...*(NOPR para 130), should be fully emphasized and clearly underlined from Comverge's view. In support of the Commission's aims to encourage long-term power contracts, Comverge recommends that capacity market pricing be extended beyond three years to at least five years, and that the Commission take measures to discourage over reliance on spot markets. Moreover, the Commission should support the use of long-term contracts for resource adequacy.

Comverge supports the Commission's proposal for an RTO/ISO web site bulletin board (NOPR para 156) to post long-term offers to sell or buy. This seems intended to reduce the search-cost for sellers and buyers to find one another. While search costs are

important, Comverge is very concerned that parties do not have the correct incentives, particularly to purchase *least-cost, best-fit* contracts. It appears that parties have more direct incentives that distort the competitive playing field, particularly because of utility aims to rate-base resources, use reciprocity to gain mutually beneficial contracts, and to tap benefits from transmission ownership.

Comverge is willing to consider providing bilateral contract offers on the bulletin board, but it is not clear whether many supply-side resources will reciprocate, or that because of incentive distortions that there will be many takers, even if offers are very competitive.

B. The Benefits of Long-Term DR Contracting

The benefits of long-term supply-side contracting are well known, as explained by the Commission. Bilateral contracts for DR, likewise, enable hedging against price risks, including fixed and variable cost escalation, reduced fuel price risk, market power mitigation, and reductions in market gaming. Comverge fully supports the use of long-term contracting for DR as this allows the benefits of DR to be maximized in terms of capital investment, cost-effectiveness, and tapping customer involvement. Hence, Comverge recommends that the Commission use all possible means, consistent with fundamental market and economic principles, to support long-term DR investments.

The Comverge Virtual Peaking Capacity (VPC) resource further reduces risks to purchasers, as it constitutes a fully outsourced contract to i) perform marketing, procure and aggregate DR customers, ii) install and warranty equipment, iii) inspect and operate the DR system; iv) provide a customer call center, v) provide measurement & verification, and vi) obtain payment for MWs delivered. This is a bilateral contract that

places all the major risks on the DR provider, so is a performance contract with teeth. In order to make VPC contracts as valuable (cost-effective) as possible they must be extended for at least 5 to 10 years or more, particularly if residential loads are involved. Comverge urges the Commission to support the VPC model for DR and its variants as it develops policy mechanisms that encourage long-term bilateral contracts. The VPC model can be used to hedge the risks in existing markets, such as Southern Maryland Electricity Coop (SMECO) has recently done to address the generation and transmission constraints and resulting high expected prices in RPM and ILR markets.

VII. Conclusion

In the immediate term, Comverge asks the Commission to recognize that a set of very significant problems exist for DR providers in PJM, as explained above. To address these problems it seems appropriate that PJM file an amendment to its OATT as soon as possible that will remedy the known, specific issues in the synchronous reserve markets.

Consistent with the Commission's specific recommendations in the NOPR, Comverge supports revised OATT filings to reform ancillary services markets, but to first provide for a technical conference to discuss operating reserve products, valuation, eligibility, and related communications protocols.

Comverge recommends that the Commission require that the revised OATT filings accommodate DR so that it can obtain concurrent benefits consistent with comparable terms for supply-side resources. A top priority is for all RTOs/ISOs to ensure that DR providers can offer spinning and non-spinning reserves under rules that are comparable

for generation, accepting the differences that may be appropriate for communications and reporting protocols.

Furthermore, Comverge recommends that the Commission reform RTO/ISO governance to increase transparency, remove discrimination, and preclude non-competitive results so that DR resources are treated comparably to supply-side resources. This may be accompanied by the use of advisory boards to convey DR participant and customers concerns within RTO/ISO markets, though additional work to address voting rules seems necessary.

Comverge respectfully thanks the Commission and its commendable Staff for the very substantial contributions of knowledge and the extraordinary effort that went into this NOPR process. We look forward to participating in related Commission proceedings and technical conferences to the extent possible.

Respectfully submitted,

_____/s/____

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