UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Demand Response Compensation in Organized Wholesale Energy Markets	))	Docket No. RM10-17-000

COMMENTS OF ROY J. SHANKER PH.D.

REGARDING THE ENERGY MARKET DEMAND RESPONSE NOPR

ON BEHALF OF THE PJM POWER PROVIDERS (P3)

TECHNICAL SESSION

SEPTEMBER 13, 2010

I. COMMENTS

A. General

1) My name is Roy J. Shanker.[1] I have been asked by the PJM Power Providers[2] to appear today and comment on the two issues that the Commission identified as topics for this technical session in its Supplemental Notice of Proposed Rulemaking and Notice of Technical Session (RM10-17-000, August 2, 2010). As usual these comments are my own, and do not necessarily represent the opinions or positions of my sponsor.

2) In its initial notice, the Commission proposed to require organized markets to pay demand response the full locational marginal price ("LMP") in all hours for such reductions. In its supplemental notice the Commission requested comments and called for a technical session to address two related issues raised in the initial comments it received. First, the need for, and specification of, a net benefits test for determining demand response compensation; and second, whether standardizing demand response compensation among ISO's requires the simultaneous standardization of a method for cost allocation of such compensation, and if so, what is the most appropriate method.

3) I have to say that I find the two topics of the technical session both perplexing and disconcerting, as they appear to assume away the substance of the Commission's initial

[1] I have extensive experience spanning 37 years in the electric utility industry and have been an active participant in the development of formal organized wholesale markets since 1995. In all of these markets the issues related to the design and compensation for participation in demand response programs has been a continuing activity in the stakeholder process in which I have been an active participant. I previously submitted an affidavit in this proceeding on behalf on the New England Power Generators Association (NEPGA). A copy of my relevant experience and background was attached as NEPGA Exhibit 2.

[2] P3 is a non-profit organization dedicated to advancing federal, state and regional policies that promote properly designed and well-functioning electricity markets in the PJM region. P3 membership is comprised of energy providers that are members of PJM, conduct business in the PJM balancing authority area, and are signatories to various PJM agreements. Combined, P3 members own over 75,000 megawatts of power and over 51,000 miles of transmission lines in the PJM region, serve nearly 12.2 million customers and employ over 55,000 people in the PJM region, representing 13 states and the District of Columbia. These comments are those of Dr. Shanker and do not necessarily reflect the specific views of any particular member of P3 with respect to either supplemental issue. For more information on P3, visit www.p3powergroup.com.

inquiry. If the Commission adopts the appropriate nondiscriminatory pricing of demand response, LMP minus the retail rate, as recommended by a number of parties, then there is no need for a net benefits test. The LSE and party reducing its demand receive the appropriate payments without any subsidy or side payments that create the potential for distortion of market prices and costs for other consumers. The LSE pays the customer the difference between LMP and the customer's retail rate (the amount the LSE would have incurred had the customer actually consumed the power) and the customer receives the benefit of the difference between LMP and what they would have paid under their retail rate, which is their net benefit of not consuming the power. Therefore there is no need for any additional net benefits test. Under this nondiscriminatory structure, demand reduction only occurs when the participant "sees" a net benefit and is better off. As appropriate, this is free standing of other market price impacts.

4) Similarly, under such compensation, there is no need for any subjective cost allocation; the financial consequences all fall to both the LSE (who is held harmless by such payments) and the conserving customer who receives a payment for the difference between what they would have paid under their LSE purchase rates, and the LMP. There are no transfers from other parties and thus no costs to allocate. Considering these two facts, from my perspective, today we are discussing solutions based on the wrong answer to the initial Commission inquiry.

5) Further, the very discussion regarding the nature of the proposed "net benefits" criteria is also troubling, as it explicitly incorporates consideration of "portfolio" effects of reduced demand on total payments made by all load, versus the independent economic evaluation/decision making of individual market participant pursuing their own legitimate

business purposes. In many ways this appears to coordinate the very type of market behavior that would be totally unacceptable if engaged in by suppliers.

6) Perhaps the best way to see this is to indulge in a slightly rhetorical analogy. Assume that there was a meeting of an electric suppliers' group representing 150,000 MW of capacity in PJM. They notice that the IMM has commented that a shift of 2.5% of demand (approximately 3,750 MW) in the PJM BRA capacity auctions changes payments to suppliers by a total of approximately $2 billion.[3] Assuming the same impact for a reduction in supply, they decide to identify which 3,750 MW of existing generation has the lowest net operating margins (after payment of "to go" costs) and see if it is cost effective to pay for that supply to retire. They discover that the worst performing 3,750 MW only nets $1,000 per MW per year or $3,750,000, after subtracting operating and to go costs from capacity and energy revenues. They collectively decide it is a wonderful opportunity to improve the economics of the group by approximately $2 billion if they pay the 3,750 MW to retire.

7) However, immediately there are problems. The owners of the 3,750 MW want more than $1,000 per MW year they were previously earning, and the remaining suppliers argue among themselves how to divide up the $2 billion dollars. They decide to petition FERC for guidance on the most cost effective net benefit criteria to reduce supply (e.g. should they retire more or less than 3,750 MW) while maintaining an efficient and reliable generation fleet with less pollution, better environmental performance and other properties associated with more modern, higher efficiency generation. They also ask for guidance as

[3] See Http://www.monitoringanalytics.com/reports/Reports/2010/Analysis_of_2013_2014_RPM_Base_Residual_Auction_20100714.pdf

to how to allocate the increased revenues among all suppliers, including the payments to those that retire their plants.

8) My suspicion is that rather than holding a technical conference, the gist of most discussions with the Commission might instead address whether or not the suppliers could negotiate for adjoining jail cells while they continue their discussions. Yet facetious as this may sound, on consideration, it is not any different than what is being discussed today. Collectively buyers are negotiating on payments, in excess of what is economically efficient, to drive down demand and price (versus suppliers driving down supply and increasing price), and justifying it based on portfolio benefits to buyers collectively via the reduced price (versus suppliers paying to drive down supply and justifying it on the benefits to sellers collectively via the increased price). They (and the Commission) are then asking for guidance on the optimal decision structure to price payments based on the portfolio effect, as well as guidance on the distribution of the costs associated with the otherwise uneconomic decisions. All of this is based on relying on the portfolio "benefits" of the reduced prices due to the overall suppression effect.

9) This is exactly the type of behavior that is continually monitored for and stopped when observed in suppliers' actions, and based on Commission precedent in capacity markets, for purchasers' actions as well[4]. From my perspective it seems to contain most if not all of the elements of the exercise of market power by buyers in the form of subsidies or transfers from one set of consumers to another with the objective being the artificial suppression of price to benefit other positions those customers hold. In fact most of the parties advocating

[4] *See, e.g., New York Indep. Sys. Operator, Inc.*, 122 FERC ¶ 61,211 at P 32 and at P 100 (2008) or *See Devon Power*, 115 FERC ¶ 61,340 at P 114.

such a net benefits calculation explicitly base it on the "benefits" of such price suppression. While potentially a short-term benefit for some consumers, it is inefficient for the economy as a whole, distorts production and consumption decisions, and raises prices in the long run. This is transparently unjust and unreasonable and unduly discriminatory.

10) With the above in mind, my short responses to the Commission's questions regarding net benefits are:

B. SPECIFIC COMMISSION QUESTIONS REGARDING NET BENEFITS TESTS

11) Should the Commission adopt a net benefits test, and what should be the objectives of such a test? I believe from the above it is clear that beyond getting the pricing right, the Commission should not adopt any benefits test. Or alternatively, that the correct nondiscriminatory pricing automatically yields the right identification of benefits.

12) This in turn answers the second question regarding how to define benefits. That is that the "right" benefits are revealed in "right" price, in this case for a fixed-rate retail customer, the payment by the LSE of LMP minus the retail rate to the party reducing their consumption. Proposed consideration of transfers such as portfolio effects on overall prices as a benefit is inappropriate.

13) Similarly, there is then no need to consider other costs of demand responders, as they will make their own decisions regarding participation based on this "right" price signal. As with other economic decisions presented to the Commission for evaluation, the proper determination of legitimate business purposes would be made on a stand-alone basis from the perspective of the demand responder.

14) In turn, there is no problem with identifying the beneficiaries; it is the participants in any approved program that verify the actual reduction in demand.

15) The fifth question presented by the Commission addressed whether a common net benefits methodology should be adopted for all ISO's and RTO's. I believe that to the extent that we are discussing DR programs predicated on assumed reductions from otherwise anticipated levels of consumption with an intervening retail rate, the common generic compensation by the LSE to the demand responder should be the LMP minus the retail rate. Though specifics can change based on settlement mechanisms and exact retail sales agreements, this general non-preferential structure should be maintained across all organized markets.

16) Finally, there is no need to address any benefits threshold issue, as the full benefit, when manifest as the payment of the "right" price, should always be available to the demand responder. It is only the presence of discriminatory subsidies that creates the potential negative benefits via actually increasing total costs for customers when the subsidies exceed aggregate price reductions.[5] Payments based on the LMP minus retail rate structure eliminate these subsidies.

17) This concludes my remarks.

[5] See Comments of PJM RM10-17.