

**Technical Conference on Demand Response in Organized Markets
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Thank you very much for this opportunity to discuss the value of demand response resources and the appropriate level of compensation for these resources in organized wholesale energy markets. The current debate about appropriate pricing for demand response in wholesale energy markets was initially raised by the Commission in the ANOPR and generated numerous comments from a variety of perspectives. Unfortunately, the discussion has deteriorated into unhelpful rhetoric about payment of so-called “subsidies” to demand response, rather than focusing on achieving the most efficient wholesale market design. We appreciate the fact that the Commission has decided to allow this issue to be explored further in this Technical Conference today.

I will focus my comments on two points. The first point is that well designed demand response market rules make wholesale energy markets more efficient and, to the extent that they do so, should be preserved and enhanced. The second point is that incentive payments provided to demand response participants are completely appropriate and justified if they are cost-effective and make the overall market more efficient.

Economic demand response market opportunities provide an accessible way for retail customers to respond to changes in wholesale electricity prices. Stated another way, demand response participation in the wholesale energy markets corrects for the market failure that retail customers either do not have access to real-time pricing opportunities or have elected not to pursue them to date for any variety of reasons.

EnerNOC is supportive of expanding retail market opportunities to give customers the opportunity to see and respond to real-time pricing. This will ensure that customers are properly incented to either reduce load, or use load, according to the real market costs of energy. Absent this, load cannot be expected to reflect market elasticity.

However, we are not there yet. All of the wholesale markets in the United States encompass areas where real-time pricing opportunities are very limited to almost non-existent. It may be a long time before substantial numbers of customers adopt and adjust consumption habits to participate in real-time pricing opportunities. It also will take time for technologies and business models to further develop to remove complexity and help optimize customers' participation in these markets.

As a result of the current and significant disconnect that exists between retail and wholesale rates, wholesale markets are not as efficient as they should be. In order to correct for this deficiency, wholesale markets need a mechanism by which retail customers can see and respond to wholesale prices. This rationale for demand response participation in wholesale energy markets was addressed comprehensively in a whitepaper published by the PJM market monitor in December 2007. If you have not already reviewed this whitepaper, I highly recommend it.

Wholesale markets should not be permitted to accept market inefficiencies while we wait and hope for retail time-differentiated pricing opportunities to develop. The FERC and the RTOs/ISOs have a continuing and ongoing responsibility to ensure just and reasonable rates for customers. For this reason, wholesale markets need to preserve opportunities for demand response resources to participate in energy markets and remove market rules that create artificial limits on demand response participation. Where

demand response is not already fully integrated into the wholesale market and does not receive comparable treatment as generation, we need to get that done.

That brings me to my second point. If we agree that a market failure exists in that many end use customers do not pay the market price for electricity and that, at least until time-based rates become more widely available and adopted, opportunities for demand response to participate in the wholesale energy markets should exist, then the issue is how to appropriately compensate demand response resources for voluntary load reductions.

As an absolute minimum, wholesale markets should have a permanent market rule that allows customers to be paid the difference between the LMP and the customer's retail rate. Since this is not an incentive payment, it should be the default starting point for determination of appropriate compensation of demand response resources in wholesale markets.

The issue then becomes more narrowly defined as to whether providing an additional incentive or subsidy payment beyond the difference between LMP and retail rate is appropriate to compensate for the value of demand response. It is important to point out that in a mature and properly designed energy market without barriers in which demand and supply can interact dynamically, incentives or subsidies would be neither necessary nor appropriate. EnerNOC does not support incentives for the sake of propping up the demand response industry. However, demand is currently far from elastic and, as will be discussed later today, substantial barriers to demand response participation do persist today in every market in the United States.

Incentives that address market failure should be crafted in such a way that the benefits will always outweigh the costs. Incentives should be designed to make the wholesale market, as a whole, function more efficiently. As the wholesale market becomes more efficient and the cost of incentives cannot be clearly shown to outweigh the benefits to customers, it is then appropriate to properly consider scaling back or eliminating incentives.

As has been shown repeatedly in numerous programs in RTOs/ISOs across the United States, properly designed incentive payments have benefitted the wholesale market by making demand more elastic, reducing opportunities for market power abuse, and bringing down wholesale power costs. The incentives have served to partially counteract the effects of legacy barriers that discourage demand response. They do so in a way that makes the entire market more efficient. Ideally, we would want fewer barriers – but along the glide path toward optimally efficient wholesale markets, incentive payments to demand response participants can play a valuable role of making today's markets more efficient with incentives than without them.

Due to the legacy market barriers that will be discussed in greater depth in a later panel today, the demand side of the market remains underdeveloped everywhere. One type of barrier is of particular relevance to a discussion of pricing in energy markets. One of the most vexing problems today for the demand response industry is that we do not have the same access to markets and revenue opportunities available to generation. If we want the nation's electricity markets to continue to evolve toward greater efficiency, we need to ensure that demand-side market opportunities are not constrained by wholesale market designs. This means that the demand response industry needs

comparable opportunities as generation and other resources to participate in energy, capacity, and ancillary services markets and have comparable access to revenue opportunities across those markets within an RTO/ISO. Just as generators determine their participation in various markets (capacity, energy, ancillary services) to maximize the value of their generation portfolio, the demand response industry needs access to the same markets to maximize the value of a portfolio of demand resources.

There are examples throughout the United States in which demand response resources cannot participate in a comparable manner with other resources in a market. In many markets, the demand response industry may have the nominal opportunity to participate in the market, but the opportunity may be severely constrained. Although there may be an opportunity for demand response participation, the opportunity is limited in some manner and is not comparable to generation.

Market rule limitations on demand response participation bears directly upon the pricing discussion because, to the extent demand response is foreclosed or limited in its participation in any of the various RTO/ISO markets, demand response may need an appropriate market incentive to attract meaningful participation.

ISO-NE's energy market presents a good example of a market that has afforded only limited opportunities for demand response participation.

Today in ISO-NE, demand response resources can participate in the day-ahead energy market on a limited basis, but demand response resources are not allowed to participate in the real-time energy market. This is a limitation on demand response resources that does not apply to generators.

Even where demand response can participate in the day-ahead market, demand response bids are not integrated into the market clearing function and cannot set the market clearing price. This is another limitation on demand response resources because the demand side of the market – who are net buyers – are being denied the opportunity to place downward pressure on market prices.

Quite often the practical reason offered for not giving demand response comparable treatment is the expense to the RTO/ISO associated with changing software systems to integrate demand response resources into various markets. While we understand this concern, this is very frustrating to the demand response industry as it has slowed the growth of the industry and delayed greater efficiencies for the overall market. Failing to fully integrate demand response into markets discriminates against demand response resources and stymies improvements to market efficiency that would result from greater demand response resource participation.

My point in raising these barriers in this discussion about pricing is that we can not look at the question of incentives or subsidies in isolation. To the extent that demand response does not have full opportunities to participate in wholesale markets and where the demand side of the market is otherwise underdeveloped, it is absolutely appropriate to consider incentives as a remedy to partially overcome existing barriers and to help markets function more efficiently. The purpose of the incentive is to counteract the market failures associated with the broken link between wholesale and retail markets, and insufficient demand response resources in the market.

In summary, we believe participation of demand response in the wholesale market is essential and that the question of incentive pricing for demand response is appropriate

in the context of utilizing incentives to overcome barriers to demand response and correcting for market failures such as the underdevelopment of the demand side of the market and dearth of retail real-time pricing programs. If we want to move beyond incentives, and encourage our wholesale markets to mature and develop into efficient markets in which there is dynamic interaction between demand and supply, the important work that lies ahead is removing barriers and, as a first step, ensuring that demand response resources continue to have the opportunity to fully participate in wholesale markets.