Ballard Spahr LLP

601 13th Street, NW
Suite 1000 South
Washington, DC 20005-3807
TEL 202.661.2200
FAX 202.661.2299
www.ballardspahr.com

Howard H. Shafferman
Direct: 202.661.2205
Fax: 202.626.9036
hhs@ballardspahr.com

May 13, 2010

VIA ELECTRONIC FILING

Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Re: Demand Response Compensation in Wholesale Energy Markets, Docket No. RM10-17-000; Comments of the ISO New England Inc. Internal Market Monitor

Dear Ms. Bose:

Transmitted electronically for filing in the above-referenced dockets are the Comments of the ISO New England Inc. Internal Market Monitor.

If there are any questions concerning this filing, please call me at (202) 661-2205.

Very truly yours,

/s/

Howard H. Shafferman

Enclosure

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 THE ISO NEW ENGLAND INC. INTERNAL MARKET MONITOR

Pursuant to the Notice of Proposed Rulemaking (the "DR NOPR") issued by the Federal Energy Regulatory Commission (the "Commission") on March 18, 2010 in the above-captioned docket, the ISO New England Inc. Internal Market Monitor ("ISO-NE IMM") respectfully submits these comments.

I. BACKGROUND AND EXECUTIVE SUMMARY

A. ISO New England Inc. and its Market Monitors

ISO-NE is the private, non-profit entity that serves as the Regional Transmission Organization ("RTO") for New England. ISO-NE administers the New England energy markets and operates the regional bulk power system (*i.e.*, those facilities located in the New England region) pursuant to the ISO New England Inc. Transmission, Markets and Services Tariff, FERC Electric Tariff No. 3 (the "ISO-NE Tariff")[1] and Operating Agreements with the New England transmission owners. In its capacity as the RTO for New England, ISO-NE has the responsibility to protect the short-term reliability, and plan for the long-term reliability, of the

[1] Capitalized terms used but not defined in this filing are intended to have the meaning given to such terms in the ISO-NE Tariff or in the Participants Agreement among ISO-NE and the New England Power Pool and any individual Participants (the "Participants Agreement"). The Participants Agreement was accepted by the Commission in *ISO New England, et al*., 109 FERC ¶ 61,147 (2004).

control area, a six-state region that includes approximately 6.5 million businesses and households.

The ISO-NE Internal Market Monitor conducts market power monitoring and mitigation pursuant to Appendix A of Section III of the ISO-NE Tariff. ISO-NE also has an external market monitor, Potomac Economics, Ltd. (the "ISO-NE EMM"). ISO-NE and the ISO-NE EMM are also submitting comments on the DR NOPR.

B. The DR NOPR

In the DR NOPR, the Commission proposes that:

> Independent System Operators (ISOs) and Regional Transmission Organizations (RTOs) with tariff provisions permitting demand response providers to participate as resources in energy markets by reducing consumption of electricity from their expected levels in response to price signals *be required to pay to demand response providers, in all hours, the market price for energy for such reductions*.[2]

The Commission further clarifies that ISOs and RTOs must pay demand response providers "the market price for energy, *i.e.*, *full LMP*, for demand reductions made in response to price signals."[3] The Commission reasons that "paying demand response resources the LMP in all hours will compensate those resources in a manner that reflects the marginal value of the resource to each RTO and ISO, comparable to treatment of generation resources."[4] In addition to seeking comment on whether this is the appropriate measure of compensation, the Commission seeks comment on a number of related issues.[5]

---

[2] DR NOPR at P 1 (emphasis added). The DR NOPR states that this provision would apply only to demand response acting as a resource in organized wholesale energy markets and not to demand response receiving payments to respond in reliability or emergency conditions, or participating in ancillary service markets. DR NOPR at footnote 4 and P 7.

[3] DR NOPR at P 11 (emphasis added).

[4] DR NOPR at P 12.

[5] Paragraph 20 of the DR NOPR states: "We, nevertheless, seek comment on the need to compensate demand response acting as a resource in organized wholesale energy markets. Commenters may address whether current compensation for demand response providers acting as a resource in the organized wholesale energy markets (continued...)

C. Executive Summary

As the Commission has recognized, the implementation of dynamic prices or other retail rate structures that expose customers to real-time prices at the state level is the most efficient way of encouraging demand response. In the NOPR, the Commission seeks to encourage demand response by requiring all ISOs and RTOs to pay the full competitive price for any demand reductions in the energy market. As discussed below, the ISO-NE IMM fully supports the development of an enhanced role for demand resources in the wholesale energy market, but feels that such development should be permitted to vary by region, and that changes to the full-LMP proposal are necessary to assure efficient market outcomes and that all demand reductions are genuine.

Two examples illustrate the need for regional variation in demand response policy. The state of California has taken significant steps to move towards a default retail rate structure of dynamic pricing. If dynamic pricing is implemented in a state, there is no need for wholesale programs to encourage demand response, since customers are in a position to know and react to the real-time price. The three northeastern market operators (ISO-NE, PJM and NYISO) all have capacity markets that permit participation by demand response. These capacity markets have been successful in encouraging the development of demand response. Given the success of

---

(...continued)
is adequately procuring demand response. We further solicit comment on alternative approaches to compensating demand response resources participating in organized wholesale energy markets, and the merit of those approaches in comparison to the one proposed here. In particular, we ask for comment on whether a reduction in consumption is comparable to an increase in electricity production for purposes of balancing supply and demand, and whether, therefore, demand response providers and generators should receive comparable compensation. We further seek comment on whether paying LMP to demand response resources is comparable compensation or is more or less than comparable to compensation paid to generation in the ISO and RTO energy markets. We also request comment on whether payment of LMP should apply to all hours, and, if not, the criteria that should be used for establishing the hours when LMP should apply. Additionally, we seek comment on whether requiring payment of LMP is appropriate across all ISOs and RTOs, or whether variations among ISOs and RTOs justify varying levels of demand response resource compensation. To that end, we further seek comment on whether the Commission should allow regional variations for an ISO or RTO that does not seek to compensate demand response resources participating in the organized wholesale energy market."

these capacity markets, it may not be necessary to pay demand response *in the energy markets in those regions* to achieve demand response participation in the wholesale energy markets. Because each region is affected by a unique set of state policies and has a distinctive wholesale market design, the Commission should permit each region to develop its own approach to demand response compensation.

In assessing regional proposals to encourage demand response, the Commission should base its assessment on economic efficiency with particular attention to ensuring that demand reductions that are compensated are genuine. The IMM believes that the full-LMP proposal would result in benefits to load-reducing customers that exceed the LMP. This is not economically efficient, would depress clearing prices and would result in demand response being treated more favorably than generation. The current proposal would also create incentives for customers to develop load-shifting arrangements and other schemes that would result in demand response that is not genuine.

A modification to the Commission's proposal based on requiring ownership of the energy reduction sold into the market by the demand resource provider would permit the payment of full LMP to demand response providers consistent with economic efficiency. This approach, referred to herein as "buying the baseline," requires a demand response provider to purchase its expected amount of demand reduction in the day-ahead energy market in order to be paid full LMP in the real-time energy market. The advantage of the buy-the-baseline approach is that it can be implemented by the Commission without changes in state policies.

The ISO-NE IMM urges the Commission to modify its proposal to incorporate the "buy-the-baseline" approach. If it declines to do so, the ISO-NE IMM encourages an alternative, "second best" modification of the proposal: to pay demand response providers the LMP minus

the retail price (also referred to as "LMP-G") payable by the demand response provider for the pertinent period. This approach would enhance the efficiency of demand response in the markets compared with the full-LMP model and reduce concerns about whether demand reductions were authentic.

If the Commission declines to adopt either modification, it should decline to mandate the full-LMP approach, due to the difficulties in ascertaining the genuineness of demand response and the adverse implications of incentivizing inefficient demand response. Instead, the Commission should permit each ISO and RTO to develop its own proposal based on existing state policies and wholesale market design, and evaluate those proposals based on economic efficiency.

If the Commission mandates either the full-LMP (without the buy-the-baseline modification advocated by the ISO-NE IMM) or the LMP-G proposal in this proceeding, or considers such proposals in the filings of an individual ISO or RTO, it should explicitly state that any demand reductions offered into Commission-jurisdictional markets that are not genuine, even if they are the result of "normal" activity such as the load-shifting scheme described below, may be violations of the Commission's anti-manipulation rules and subject to penalties thereunder.

II. COMMENTS

The ISO-NE IMM offers the following comments on the DR NOPR.

A. The Commission Should Permit Regional Variations in the Treatment of Demand Response, Because Both State Policies Regarding Retail Rate Design And ISO/RTO Wholesale Energy Market Designs Affect The Need For Direct Intervention In Support Of Demand Response

Retail rate design and policies regarding demand response vary significantly from state to state, while wholesale energy market designs vary greatly by region. This means that each

region and possibly even each state has a different set of factual circumstances informing the decision on the need to provide extra incentives for demand response. As noted earlier, California has started on the road to dynamic pricing. Many states have taken significant steps to implement advanced meters and have implemented programs to encourage efficient use of energy. The success of these efforts should be a factor in deciding whether and how to implement demand response programs in the wholesale market.

An important aspect of wholesale market design that affects the decision to implement demand response programs at the wholesale level is whether or not a region has a capacity market, and the extent to which the capacity market has attracted demand resources. For example, the ISO-NE capacity market has attracted a total of 2867 MWs of demand response, or about nine percent of the region's Installed Capacity Requirement for the 2012/13 period.

Capacity markets are an appropriate way to attract demand resources into the wholesale energy market because they address the problem caused by the lack of demand resources, the so-called "missing money" problem. In brief, if there were no offer cap and no active participation by demand resources in the wholesale energy market, then energy prices would rise above the marginal cost of supply to the marginal value of consumption. The "missing money" is the difference between the prices limited by the offer cap and the marginal value of consumption. ISO-NE's capacity market requires demand resources to perform in shortage hours, which are designed to be the same hours when demand would reduce in a market with price responsive demand. In this design, a demand resource receives its capacity payment and saves the energy during the shortage event, which should result in the same compensation a demand resource would receive in a market with active demand response.

In sum, if a capacity market is replacing the missing money, then the need for demand response programs in the overall energy market when energy prices are low may not be as great. Like retail rate designs, capacity markets and their designs vary by region; both directly affect the need for demand response. Therefore, each region should be permitted to develop its own approach to demand response.

B. Paying Full LMP as Proposed is Economically Inefficient and Results in Preferential, Non-Comparable Treatment of Demand Resources in Relation to Generating Resources; Paying Full LMP May Also Encourage Demand Response That Is Not Genuine, and Load-Shifting Behind Meters

The ISO-NE IMM believes that adoption of the full-LMP proposal as written would decrease market efficiency, and result in preferential, non-comparable treatment of demand resources in relation to generating resources. This would artificially lower LMPs and reduce the effectiveness of the market in supporting new and existing resources. In addition, the proposal presents an inherent difficulty in determining whether demand reductions are genuine, and creates incentives for load-shifting behind the meters.

1. The Proposal to Pay Full LMP Would Result in Payment to Demand Resources of Amounts That Exceed Economically Efficient Levels, and Would Result in Preferential, Non-Comparable Treatment of Demand Resources In Relation to Generating Resources

It is economically inefficient to pay full LMP for demand reductions based on an administratively determined customer baseline, because it can cause consumers to forego consumption even when the value of their consumption exceeds the cost of producing the energy. This happens because consumers receive both retail bill savings (net of the value of consumption) and a demand reduction payment for the same demand reduction (referred to herein as the "double payment" problem). An illustrative example follows of an inefficient market outcome in which risk-free profit can be made simply by putting generators behind the meter while receiving payments from demand reduction. This example also serves to illustrate

the point that, under full-LMP payment, demand resources receive preferential treatment compared with generating resources.

Suppose that a consumer is willing to pay a retailer up to $250/MWh for energy (in this case, based on the opportunity cost to run an on-site backup generator, including time, materials and inconvenience[6]). Under the full-LMP proposal, when the retail rate is, for example, $100 per MWh, the consumer would be willing to offer load reduction at $150/MWh (*i.e.*, $250 - $100). It is willing to offer at this price because the sum of its retail rate savings ($100) and its payment for the reduction ($150 or more) equals or exceeds the cost of running the on-site backup generator.

This would result in the customer operating the backup generator when the cost of producing the energy in the market is lower. For example, once the real-time market price equals or exceeds $150 per MWh, the load reduction offer of $150 would clear in the market and displace the next cheapest generating unit offered at, for example, $160 per MWh. This would result in a net societal cost increase of $90/MWh (*i.e.*, $250 – $160) because the double payment from the demand response program caused a higher-cost resource to be dispatched – *i.e.*, the on-site generator at $250/MWh – while a less-expensive resource – the system generator at $160/MWh – was not utilized. In this example, the market clearing price is artificially depressed – from $160 to $150/MWh, sending incorrect market signals because the market price ignores the cost of running the backup generator at $250/MWh. Society ends up paying a resource cost

[6] On-site generation is used in this example for illustrative purposes only, but this example is generally applicable even in situations where the customer does not have an on-site generator. In the latter case, a consumer's willingness to pay could be driven by the value derived from consumption. For example, the consumer may be in the business of manufacturing a widget in which it is no longer profitable to make the widget if the cost of electricity exceeds $250/MWh – hence, the manufacturer will cease electricity consumption at prices exceeding $250/MWh.

of $250/MWh, while a substantially less-expensive alternative (*i.e.*, a system generator at $160/MWh) went unused.

The example illustrates that paying the full LMP treats load reductions more favorably than generation. The customer receives $250/MWh in the above example for turning on a backup generator, while the generator that could have produced the energy at $160/MW is not utilized. The full-LMP approach makes it profitable for generators to relocate from in-front of the meter on the wholesale side to behind a customer's meter to take advantage of the demand response incentives. The full-LMP approach also encourages the installation of backup generation for the same reason, which is an inefficient investment since energy can often be produced more efficiently in the wholesale market. In sum, through double payment, a high-cost demand response resource can displace a low-cost generator, increasing the resource cost.

In the full-LMP approach, customers consume (and reduce) as if the price they paid for power were the retail rate plus the wholesale price, because reducing load saves the customer the retail price and additionally triggers an incentive payment equal to the real-time market price. Although a full-LMP approach is intended to eliminate excessive consumption during peak periods under a uniform (*i.e.*, non-dynamic) retail rate, it in fact "overshoots," resulting in under-consumption. This under-consumption lowers prices and distorts both short-term behavior and long-term investment.

2. The Proposal to Pay Full LMP Presents Inherent Difficulties in Determining Whether Demand Reductions Are Genuine

The proposal to pay full LMP presents inherent difficulties in determining whether demand reductions offered into the markets are genuine. The existing demand response programs have adopted an approach under which customer baselines are administratively determined. The administrative customer baseline methodology uses statistical methods and

historical consumption data to estimate the customer's "counterfactual" electricity consumption level in the absence of the demand response programs. If customers can consume any quantity of energy at a fixed retail rate and then sell back reductions from the baseline consumption level without a financial commitment to purchase energy at that level, there is an incentive for the customer to increase its revenues from the demand response program by increasing its baseline.

Having the customer baseline determined administratively (*i.e.,* by the ISO or RTO as market administrator) rather than having the baseline established in ways consistent with economic incentives, creates the possibility, and presents two incentives, for customers to increase their baselines. These incentives are known as the "adverse selection" and "moral hazard" problems.

The adverse selection problem arises from "asymmetrical information" on customer baselines. That is, since a customer's baseline consumption is not directly observable before participating in a demand response program, customers have better information on their baseline consumption levels than the market administrator, and can use the information to their advantage in deciding whether or not to participate in demand response programs. Therefore, the program is likely to attract disproportionate participation from customers who anticipate lower consumption for reasons having nothing to do with the demand reduction program. For instance, if last year's consumption is used as the basis for the customer baseline, firms whose production has shrunk since last year are likely to sign up. In this case, consumers could end up paying for demand reduction that would have occurred anyway. At the same time, firms that are entering their high-demand season, or have grown rapidly since last year simply will not sign up.

The moral hazard problem arises from activities that may be undertaken by customers to affect the customer baseline but are difficult to detect. Since the baseline is based on a

customer's past consumption, a customer can artificially increase its consumption during "normal" consumption periods to create a higher baseline in order to collect energy and capacity payments without actually reducing load. For example, customers with baseload, on-site generation may turn off their generators temporarily to establish an artificially high baseline level of consumption and then turn the on-site generators back on to collect extra payments for what is, otherwise, normal consumption behavior.

3. The Full-LMP Proposal Creates Incentives to Shift Load Behind Meters

The full-LMP proposal also can present incentives for demand response providers, if they have energy-consuming facilities behind more than one meter, to shift load behind those meters to create illusory demand reductions. These incentives are caused by the necessity to estimate what would have been consumed using an administratively determined customer baseline. The use of such an administrative approach means that demand resource programs do not include a requirement for underlying ownership or property rights that typically serve as a foundation for a competitive market; that is, a competitive market for a good is premised on the voluntary exchange of privately owned products, and therefore requires participants to own what they are selling. The full-LMP approach does not require demand response providers to own the reductions they are selling, relying instead on the customer baseline as an estimate of what would have been used. One way that the use of an administrative baseline can be exploited is through unproductive load-shifting behind a customer's multiple meters to create illusory demand reductions. Attachment A provides an illustrative example of this strategy. Other load-shifting schemes likely exist.

C. A "Buy-the-Baseline" Modification to the Proposal Would Cause "Full LMP" Payment to Produce Economically Efficient Results

A variation of the Commission's proposal that adopts a "buy-the-baseline" approach would permit the payment of full LMP to demand response providers to produce economically efficient results in the competitive wholesale energy markets, and would reduce issues with respect to the genuineness of demand reductions. Specifically, a demand response provider should be required to purchase its expected amount of energy consumption in advance and schedule it in the day-ahead energy market in order to be paid full LMP in the real-time energy market for reductions from the purchased, expected consumption level.

Under this approach, the consumer buys the baseline in the day-ahead energy market and sells any demand reduction from that level subsequently in the real-time market. The principal benefit of this approach is the elimination of the need to use an administrative customer baseline. Bushnell, Hobbs and Wolak articulate the advantages of such an approach as follows:

> Final consumers can schedule a given level of consumption in the day-ahead market and then sell day-ahead ancillary service capacity or real-time energy reductions relative to this day-ahead schedule in the real-time market. Similarly suppliers can schedule from their generation units in the day market and then sell day-ahead ancillary services or additional energy in the real-time market beyond that day-ahead energy schedule. This "buy your baseline" approach to selling demand reductions in a subsequent market ensures that retailers and curtailment service providers (CSPs) face the full financial consequences of their baseline choice in the same way that suppliers face the full financial consequences of their final energy schedules in the real-time market.[7]

Buy-the-baseline allows consumers to reserve a specific level of demand in the wholesale day-ahead energy market and to buy a specific amount of electricity before selling the reduction from that level in the real-time energy market. In contrast, the full-LMP proposal would allow a

[7] Bushnell, Hobbs and Wolak, "When it Comes to Demand Response, is FERC its Own Worst Enemy?," *The Electricity Journal* at 9-18 (October 2009).

demand response provider to sell first, and would require the ISO to recover the cost from the market participants through administrative cost allocation mechanism.

Under buy-the-baseline, the amount purchased in the day-ahead energy market serves as the customer's baseline level against which demand reductions can be measured. In this way, the wholesale energy market identifies those customers willing to reduce electricity use during times of high prices. This improves the economic efficiency of wholesale markets by discouraging low-value energy consumption when wholesale energy prices are high, lowering demand during times of system peak and near system peak. As a result, the market clearing price sends efficient price signals that reflect the scarcity value of resources during the shortage hours and achieve the efficient level of price-responsive demand.

The "buy-the-baseline" approach avoids the need to make difficult and contentious decisions on how to allocate costs of demand response, because the demand response is included in the baseline that clears in the day-ahead energy market, and thus demand response is cleared in the energy market settlement procedure.

D. If the Commission Declines to Adopt the "Buy the Baseline" Modification, It Should Modify its Proposal So That Demand Response Providers are Paid the LMP Minus the Retail Price

If the Commission declines to adopt the "buy the baseline" approach, the ISO-NE IMM encourages the Commission to modify its proposal in an alternative, "second best" manner: so that demand response providers are paid the LMP minus the retail price payable by the demand response provider for the pertinent period. The effect of paying for demand reductions at LMP minus the retail price is to provide the same incentives to consumers as if they were paying the wholesale price.

This approach improves efficiency (compared with the full-LMP approach) by reducing over-consumption of electricity when the wholesale LMP is higher than the retail price and the

demand response payment is positive.[8] This approach corrects the double payment issue directly, by deducting the retail price from the wholesale energy payment to demand response providers. While this approach does not eliminate the adverse selection and moral hazard problems associated with the use of administrative customer baseline, it reduces the impact of these problems, because no demand response payments would be made when wholesale prices are at or below the retail price.[9]

E. The Commission Should Make It Clear That Offering Demand Reductions That Are Not Genuine Is a Violation of Its Anti-Manipulation Rules

If the Commission adopts any proposal that permits the use of an administrative baseline, it should explicitly state that any demand reductions offered into Commission-jurisdictional markets that are not genuine,[10] even if they are the result of "normal" activity such as the load-shifting scheme described below, may be violations of the Commission's anti-manipulation rules and subject to penalties thereunder.

While baselines can be designed well, a demand reduction is not directly observable and therefore subject to gaming, as described above. A strong statement from the Commission on this issue would help reduce the likelihood of non-genuine demand response.

---

[8] However, it does not address the under-consumption inefficiency during the off-peak period when the wholesale price is lower than the fixed retail price.

[9] Although load-shifting behind the meter is profitable only when the real-time market price exceeds the retail rate, the potential gaming remains a significant concern under this approach, because it would be difficult to detect or prevent strategies that take advantage of the unlimited quantity options that customers currently have.

[10] In assessing whether demand reductions are genuine, allowance should be made for non-performance analogous to a generator's forced outage.

III. CONCLUSION

The ISO-NE IMM requests the Commission to take action on the DR NOPR consistent with its comments as submitted herein.

Respectfully submitted,

/s/ David LaPlante
David LaPlante
Vice President, Market Monitoring
ISO New England Inc.
One Sullivan Road
Holyoke, MA 01040
(413) 535-4120
dlaplante@iso-ne.com

/s/ Hung-Po Chao
Hung-Po Chao, Ph.D.
Director, Market Strategy and Analysis
Market Monitoring Department
ISO New England Inc.
One Sullivan Road
Holyoke, MA 01040
(413) 540-4567
hchao@iso-ne.com

Dated: May 13, 2010

ATTACHMENT A

ADMINISTRATIVELY DETERMINED CUSTOMER BASELINES AS AN INCENTIVE FOR LOAD-SHIFTING BEHIND MULTIPLE METERS

The following is an illustrative example of the manner in which administratively determined customer baselines create incentives for load-shifting behind multiple meters.

Suppose that a manufacturing company owns two identical facilities behind separate meters in the same RTO region. At the beginning, both facilities consume identical amounts of electricity at 80 MW per hour, when they run at the usual 80% of capacity. Before participating in the demand response program, both facilities have the same customer baseline of 80 MW per hour. If both facilities participate in a demand response program as separate assets, and each facility is paid the real-time market price for the reduced consumption below the customer baseline, then the company could implement a load shifting strategy between the two facilities, as illustrated in Table 1.

Table 1. Load Shifting Behind the Meters

	Day One			Day Two		
	Customer Baseline (MW)	Electricity Consumption (MW)	Demand Reduction (MW)	Customer Baseline (MW)	Electricity Consumption (MW)	Demand Reduction (MW)
Facility 1	80	100	-	82	60	22
Facility 2	80	60	20	80	100	-
Total		**160**	**20**		**160**	**22**

On Day One, the company could control the resources (*e.g.*, labor and materials) at the two facilities so that Facility 1 runs at 100% capacity while Facility 2 runs at 60% capacity. On this day, these facilities will consume, respectively, 100 MW and 60 MW per hour for a total of 160 MW per hour. While Facility 1 consumes 20 MW above the current baseline and will pay for the extra energy consumption at the regular fixed retail rate, but this increased expense is offset by savings at Facility 2. Moreover, since Facility 2 consumes 20 MW below the baseline, it can sell this amount as demand reduction into the wholesale energy market and be paid the

real-time market price for the demand reduction. Based on administrative baseline methodologies typically included in current ISO or RTO programs, the baseline for Facility 1 would be raised to 82 MW while the baseline for Facility 2 will remain the same at 80 MW for Day Two.[11]

On Day Two, the allocation could be reversed so that Facility 1 runs at 60% capacity while Facility 2 runs at 100%. As a result, the two facilities will consume the same amounts of electricity as on the first day at 100 MW and 60 MW, respectively, except that their positions are reversed. Now, Facility 2 will pay for 20 MW per hour at the fixed retail rate, which is offset by the bill savings at Facility 1, but Facility 1 can sell 22 MW of the amount of its consumption below the baseline as a demand reduction and be paid the real-time market price.

This load-shifting strategy can be repeated between the two facilities every day. On alternating days, one of the facilities is running at 60% capacity, and the electricity consumption would be 60 MW, which is 20 MW lower than the baseline. Therefore, the company could submit demand response bids for the facility in wholesale electricity market and get paid for 20 MWof demand reduction, even though the total electricity consumption for the two facilities stays at 160 MW. In this case, the demand reduction created by the load-shifting strategy is illusory and not genuine. Other customers bear the burden of payments for the illusory demand reduction while the manufacturing company receives the payments at virtually zero opportunity costs.

[11] The baselines at both facilities may increase such that the calculated load reduction can grow over time. This is occurs because baselines in ISO-NE are currently calculated using averages that exclude days when the demand reduction offer clears.