



February 18, 2008
EnergyConnect, Inc.
51 East Campbell Avenue
Suite 145
Campbell, CA 95008

PJM Board of Managers
955 Jefferson Avenue
Norristown, PA 19403

Re: "Dispatch Enhancement" for Demand Response

Dear Members of the PJM Board of Managers:

EnergyConnect, Inc. is a full member of PJM providing curtailment services to retail customers in the PJM territory, with participating customers in all facets of PJM's demand response including energy. We are concerned about an imminent PJM proposal to unilaterally impose interim changes in dispatch rules applicable to Demand Response participants offering dispatchable Demand Response resources in the Real Time real time market. The proposed changes (attached) were offered by PJM Staff for stakeholder review but not for stakeholder endorsement at the Demand Response Working Group and the Market Implementation Committee. PJM Staff maintains that the proposed interim changes do not require manual or tariff changes and that Stakeholder endorsement is not required. EnergyConnect believes otherwise. EnergyConnect requests that the Board direct PJM staff to defer implementation of this interim change.

This is an urgent matter because PJM staff is proposing to unilaterally implement the change on Feb 20, 2008 without stakeholder endorsement or further stakeholder consideration. This is barely one month after the proposal's introduction at the January 16th Demand Side Response Working Group meeting. We regret the short notice that this letter provides for your action but events leave us little choice.

The proposed changes, characterized as PJM Dispatch Enhancements, are intended to address an anomaly in the PJM tariff and PJM settlement systems that results in Balancing Operating Reserve payments to DR providers in excess of the amounts intended. This anomaly has existed for some time but became apparent after the Demand Response incentive provisions expired. PJM has proposed that an interim solution be imposed on February 20 that will be followed by a permanent tariff change. EnergyConnect recognizes the anomaly and supports the proposed tariff change (attached) as posted on February 14 with the February 21 MRC Agenda. EnergyConnect cannot support the interim change as proposed and believes that the interim change is inconsistent with PJM Manuals and non-compliant with the PJM Tariff.

In today's Real Time market, Demand Response participants offer strike prices to indicate the LMP level at which they are willing to reduce demand, comparable to generators that offer bids



indicating their willingness to increase output. PJM dispatchers then notify the providers when their offers are selected. The with proposed interim change interim change, for demand response participants PJM dispatchers change strike prices in the Unit Dispatch System by an amount equal to the Generation plus Transmission Rate (G&T Rate). This introduces added complexity to the DR program by requiring participants to calculate a strike price that anticipates the commitment level that dispatchers will actually use. The added complexity approaches impossibility for participants with DA LMP based supply contracts. For these participants the interim change will impose a G&T rate equal to the average peak hour DA LMP for the dispatch day for these participants. Thus these participants will need to recalculate a strike price after 4 pm each day in order to participate.

Another recently identified issue is the treatment of Emergency events. In the Emergency Load Response Programs, the Minimum Dispatch Price is a required offering and is used similarly to the RT dispatch price. In fact PJM uses the same data entry point for RT economic dispatch and the Minimum Dispatch Price. The tariff specifies that emergency Load Response participants are compensated at the Minimum Dispatch Price or LMP. Because the interim solution requires that the offered dispatch price anticipate a G&T adder in order to be committed at the participant's desired price, tariff compliance will require that Emergency responders receive reduced compensation. PJM staff has not addressed how Emergency Load response participants will be compensated under the interim proposal.

EnergyConnect has several concerns. From a business perspective the interim solution adds needless complexity and effectively precludes some of our clients for participating in RT dispatch. In addition the interim solution, to be followed by a permanent change in a few months time, imposes excess administrative costs on the developing demand response community.

From a legal perspective the interim proposal is inconsistent with the OA, OATT and the Manuals, all of which state that strike prices will indicate the LMP at which participants will reduce demand¹. This is inconsistent with a PJM staff calculated commitment price. The interim proposal would require a strike price offer that differs from the LMP at which participants will reduce demand.

These concerns have been voiced through the very limited opportunities afforded through the stakeholder process and through several email exchanges that expressed our concerns and raised questions regarding implementation. We have supported the framework of the proposed permanent solutions and urged PJM to implement a form of the permanent solution in lieu of the interim solution. Indeed we believe that if PJM had initially conducted settlements based on the permanent solution, there would not be an issue today.

PJM staff has indicated that the proposed permanent solution, which addresses the concern through market settlements rather than through dispatch, cannot clearly be implemented without a tariff change. While we agree that the current language is not as clear as one might like, we

¹ From the OA, Schedule 1, Section 3.3A.4: The Economic Load Response Participant shall provide the Office of the Interconnection with a **strike price for the end-use customer's zonal Locational Marginal Price at which the end-use customer will reduce demand**...Similar language appears in the Manual 11 at page 102.



also believe that the interim proposal clearly contravenes the Tariff and the Operating Agreement. As result EnergyConnect supports an interim solution that is consistent with the proposed permanent tariff change.

In summary, EnergyConnect requests that the Board of Managers immediately direct Staff to defer implementation of the interim solution and provide an assessment of urgency for an interim solution and the tariff implications for both the proposed interim solution and an interim solution consistent with the proposed permanent solution. At a minimum staff should be directed to specify the interim treatment of the Minimum Dispatch Price for Emergency Load Response. We urge the Board to consider directing Staff to implement an interim version of the permanent proposal.

Sincerely,

John Stremel
Senior Vice President of Technology

Cc
Bruce Campbell – EnergyConnect
Terry Boston – PJM
Andy Ott - PJM

- Significant increase in operating reserve charges due to DSR “make whole payment” for dispatched resources
- Short term enhancement
 - CSP with real time dispatch resource should set strike price exclusive of G&T rate.
 - If CSP has already set strike price to take into consideration G&T rate then CSP should update strike prices.
 - PJM to add G&T rate to strike price entered by CSP for the UDS algorithm
 - Note - Day ahead based contracts will have strike price estimated based on day ahead zonal average onpeak (HE8-HE23) price.
 - PJM to monitor strike prices below G&T rate
 - New procedure will be implemented on 2/20/08
 - Originally expected on 2/15 but extended to allow additional time for market participants to adjust any strike prices

- The WSA, expressed in percentage terms, shall be applied to each hour of the CBL during the event period in order to establish a weather-adjusted CBL.
- For end-use customers without interval data from the previous summer that select the regression analysis, the WSA shall initially be set at 100 percent. After one month of actual program response, a regression analysis shall be performed and the WSA shall be adjusted in accordance with Steps 1-4 above.
- In no event shall application of the WSA produce a weather-adjusted CBL that exceeds the end-use customer's historical, seasonal, on-peak non-coincident peak load.

(b) Following a Load Reduction Event that is submitted to the Office of the Interconnection for compensation, the Office of the Interconnection shall provide directly metered data and Customer Baseline Load and Weather-Sensitive Adjustment calculations to the appropriate electric distribution company or Load Serving Entity for optional review. The electric distribution company or Load Serving Entity will have ten business days to provide the Office of the Interconnection with notification of any issues related to the metered data or calculations.

3.3A.4 Market Settlements in Real-time Energy Market.

(a) Economic Load Response Participants participating in the Real-time Energy Market shall be compensated for reducing demand based on the actual kWh relief provided in excess of committed day-ahead load reductions. The Economic Load Response Participant that curtails or causes the curtailment of demand in real-time will be compensated by the Office of the Interconnection the real-time Locational Market Price less an amount equal to the applicable generation and transmission charges. The applicable generation and transmission charges are the charges the participant would have otherwise paid the Load Serving Entity absent the demand reduction.

(b) In cases where the demand reduction is dispatched by the Office of the Interconnection, ~~payment will not be less than the total value of the demand reduction bid less an amount equal to the applicable generation and transmission charges. The applicable generation and transmission charges are the charges the participant would have otherwise paid the Load Serving Entity absent the demand reduction.~~ Any shortfall will be made up through normal, real-time operating reserves. In all cases, the applicable zonal or aggregate (including nodal) Locational Marginal Price is used as appropriate for the individual end-use customer. ~~For the purposes of this section, the total value of a demand reduction bid shall include~~ any submitted start-up costs associated with reducing demand, including direct labor and equipment costs and opportunity costs and any costs associated with a minimum number of contiguous hours for which the demand reduction must be committed.

Deleted: or the strike price of the end-use customer with a Locational Marginal Price based contract, as defined in Section 3.3A.4(d) below, is reached and such demand reduction is dispatched by the Office of the Interconnection,

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(c) An Economic Load Response Participant shall accumulate credits for energy reductions in those hours when the energy delivered to the end-use customer is less than the end-use customer's Customer Baseline Load at the corresponding hourly rate. In the event the end-use customer's hourly energy consumption is greater than the Customer Baseline Load, the Economic Load Response Participant will accumulate debits at the corresponding hourly rate for the amount the end-use customer's hourly energy consumption is greater than the Customer Baseline Load. However, in no event will the Economic Load Response Participant credit be reduced below zero on a daily basis.

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(d) Economic Load Response Participants that have Locational Marginal Price based contracts pursuant to which they have agreed to pay their Load Serving Entity for the physical delivery of energy according to the hour value of the real-time Locational Marginal Price as calculated by the Office of the Interconnection, may choose to reduce demand and be compensated for the reduction in the Real-time Energy Market under the following circumstances. The Economic Load Response Participant shall provide the Office of the Interconnection with a strike price for the end-use

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zonal Locational Marginal Price at which the end-use customer will reduce demand, as well as any start-up costs associated with reducing load, including direct labor and equipment costs and opportunity costs and costs associated with the minimum number of contiguous hours for which the demand reduction must be committed. In cases where the Economic Load Response Participant's zonal Locational Marginal Price reaches the strike price and the demand reduction is dispatched by the Office of the Interconnection, the Office of the Interconnection shall pay such Economic Load Response Participant the difference between the actual savings achieved based on zonal Locational Marginal Price and the total value of the end-use customer's demand reduction bid. For purposes of this provision the total value of the demand reduction bid will be the sum of the strike price times the MW of reduction achieved during each hour of the time period the demand reduction was dispatched by the Office of the Interconnection or the minimum down-time whichever is greater, plus the submitted start-up costs. Demand reductions hereunder will not be eligible to set real-time Locational Marginal Price.

3.3A.5 Market Settlements in the Day-ahead Energy Market.

(a) Economic Load Response Participants participating in the Day-ahead Energy Market shall be compensated for reducing demand based on the reductions of kWh committed in the Day-ahead Energy Market. An Economic Load Response Participant that submits a demand reduction bid day ahead that is accepted by the Office of the Interconnection shall be paid the day-ahead Locational Marginal Price less an amount equal to the applicable generation and transmission charges. The applicable generation and transmission charges are the charges the participant would have otherwise paid the Load Serving Entity absent the demand reduction. Total payments to Economic Load Response Participants for accepted day-ahead demand reduction bids will not be less than the total value of the demand reduction bid, including any submitted start-up costs associated with reducing load, including direct labor and equipment costs and opportunity costs and any costs associated with a minimum number of contiguous hours for which the load reduction must be committed. Any shortfall will be made up through normal, day-ahead operating reserves. In all cases, the applicable zonal or aggregate (including nodal) Locational Marginal Price is used as appropriate for the individual end-use customer.

(b) Economic Load Response Participants that have demand reductions committed in the Day-ahead Energy Market that cannot demonstrate hourly performance in real-time equal to at least that of the day-ahead commitment will be charged real-time Locational Marginal Price for the amount of the shortfall, plus any associated balancing operating reserve charges. Load Serving Entities

Deleted: (d) The foregoing notwithstanding, until December 31, 2007 (unless extended by a two-thirds sector vote of the Members Committee), this Section 3.3A.4(d) shall apply. In the event the real-time Locational Marginal Price is greater than or equal to \$75/MWh, an Economic Load Response Participant that curtails or causes the reduction in demand in real-time will be paid the real-time Locational Marginal Price. In such event, an amount equal to the Economic Market Participant's generation and transmission charges, if any, will be recovered from all load within the zone in which the demand that was reduced is located. The applicable generation and transmission charges are the charges the participant would have otherwise paid the Load Serving Entity absent the demand reduction. If, in a calendar year, the total amount of recoverable charges reflecting generation and transmission related to demand reductions in the Real-time Energy Market and Day-ahead Energy Market combined exceeds \$17.5 million, for the remainder of the year, Economic Load Response Participants in the Real-time Energy Market shall receive for their demand load reductions the real-time Locational Marginal Price less an amount equal to the applicable generation and transmission charges regardless of the level of the Locational Marginal Price.¶

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that otherwise would have load that was reduced shall receive any associated operating reserve credit plus, if the real-time Locational Marginal Price is higher than the day-ahead Locational Marginal Price during the shortfall, the difference between the day-ahead and the real-time Locational Marginal Price times the shortfall.

(c) Economic Load Response Participants that have real-time Locational Marginal Price-based contracts may not participate in the Day-ahead Energy Market.

Deleted: (d) The foregoing notwithstanding, until December 31, 2007 (unless extended by a two-thirds sector vote of the Members Committee), this Section 3.3A.5(d) shall apply. In the event that an Economic Load Response Participant that submits a demand reduction bid in the Day-ahead Energy Market is accepted by the Office of the Interconnection when the day-ahead Locational Marginal Price is greater than or equal to \$75 MWh, the Economic Load Response Participant will be paid the day-ahead Locational Marginal Price. In such event, an amount equal to the Economic Market Participant's generation and transmission charges, if any, will be recovered from all load within the zone in which the demand that was reduced is located. The applicable generation and transmission charges are the charges the participant would have otherwise paid the Load Serving Entity absent the demand reduction. If, in a calendar year, the total amount of recoverable charges reflecting generation and transmission related to load reductions in the Real-time Energy Market and Day-ahead Energy Market combined exceeds \$17.5 million, for the remainder of the year, Economic Load Response Participants in the Day-ahead Energy Market shall receive the day-ahead Locational Marginal Price less an amount equal to the applicable generation and transmission charges regardless of the level of the Locational Marginal Price.¶

-----Section Break (Next Page)-----

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