



Wholesale Electricity Market Rule Change Proposal Submission Form

RC_2010_29 Curtailable Loads and Demand Side Programs

Submitted by

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Submission

1. Please provide your views on the proposal, including any objections or suggested revisions.

EnerNOC believes the approach proposed by the IMO within the Rule Change Discussion Paper on the following Issues warrants general support:

- Issue 1: Registration of Curtailable Loads - we support the development of a DSP as a Facility Type for the reasons outlined in the IMO's paper. We do, however, envisage a potential concern with the change in that it may confine demand side management activities solely to the WEM's capacity market. Energy market developments suggest that the future market operations would seek to take full advantage of the efficiencies and associated cost reductions of dynamic loads that are fully integrated into the electricity market.

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- Issue 2: Facility Definition - we wholeheartedly support this proposal, as it removes operational inefficiencies relating to the registration and dispatch of demand side management programs, as well as formalising the concept of an aggregated demand side management portfolio that should be viewed and measured in its performance as a single unit and not as the sum of the individual loads that comprise it. We also applaud the IMO for its support to amend the Market Rules to enable portfolio over-subscription, a central and key risk management component of the aggregated / portfolio-based demand side management model;
- Issue 3: Market Fees - we support the continuation of existing rules on Fees for DSPs and the IMO's approach on this issue;
- Issue 5: Capacity Cost Refunds - we support in general the approach for capacity cost refunds for DSPs to reflect similar treatment within the rules to that provided for Generators, and believe DSPs that fail to enrol sufficient loads to meet their capacity obligations should be penalised accordingly.

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ISSUE 4: MEASUREMENT OF CL PERFORMANCE

With regards Issue 4, EnerNOC believes the IMO's proposed approach to DSP performance measurement is likely to create significant risks for DSM capacity provision and lead to greater instability and higher costs for the market as a whole.

By aligning the intervals used to determine a DSP's Relevant Demand (RD) measure with those intervals used for Individual Reserve Capacity Requirement (IRCR) purposes, the market would be bundling two separate mechanisms that require distinct measurements for their own specific purposes. Moreover, by linking the RD to the IRCR methodology, the IMO appears to falsely presume that a DSP would only be dispatched by System Management (SM) in response to a capacity shortfall, and not for other likely purposes such as transmission constraints or unforeseen system contingencies.

As a result of the IMO's proposal in RC_2010_29, IR



Profile Measurement Methodologies

EnerNOC believes the issues that the IMO seeks to resolve through modifying the RD intervals and the exclusion rules are each symptoms of the use of a flawed static baseline methodology to determine the RD measure. Moving away from a static RD would not only prevent the inherent conflicts between planning and operations detailed in the previous section, it would also improve the overall accuracy and integrity of the RD measure and associated performance calculations.

Our experience in providing DSM in electricity markets around the globe suggests that significant research has already been conducted on the relative strengths and weaknesses of different measurement methodologies for demand response, and that more advanced baselines have successfully been implemented in a variety of markets and programs. EnerNOC believes that the WEM would benefit by the



Applying an accurate profile baseline generates closer alignment with actual consumption patterns. By having a baseline that follows actual metered de



Recommendations

In relation to Issue 4, EnerNOC recommends that:

- The RD measure be amended to a profile methodology that is dynamic and efficiently balances key methodology criteria such as simplicity, accuracy, and predictability with minimising gaming potential.

As mentioned previously, EnerNOC intends to proceed with a proposed rule change that reflects the above recommendation for the IMO and Market Participants to consider. We acknowledge the rule change process within the WEM and recognise that our proposal to consider a dynamic measure may necessitate the parallel consideration of both rule change alternatives. With this in mind, and in the event the IMO looks to proceed with its current recommendation in some fashion, EnerNOC recommends:

- To provide appropriate time to consider alternative RD methodologies, and to avoid the potential for multiple changes to the RD measure, any change to the RD measure be scheduled for implementation and use no earlier than the 2012/13 market year (starting October 1, 2012);
- That the RD measure, were it to remain static, be amended so that the proposed rule change include an additional 20 intervals for a total of 32, being the peak eight (8) intervals on each of the peak four (4) days in the previous Hot Season; and utilises an arithmetic mean for averaging instead of a median. Using a median averaging calculation could be potentially problematic with the inclusion of 20 more intervals and could result in too much downward pressure on the Relevant Demand measure. As such, we believe an



EnerNOC considers the changes it has recommended to amend the IMO's proposed aligning of the RD and IRCR measures will have the following impact on the Market Objectives:

- Promote greater reliability and efficiency in the supply of electricity and electricity related services in the South West interconnected system;
- Encourage the efficient entry of new competitors to the WEM;
- Helps avoid discrimination against particular energy options and technologies that reduce overall greenhouse gas emissions;
- Better assists with minimising the long-term cost of electricity supplied to customers from the South West interconnected system; and
- Maintain the encouragement of measures to manage the amount of electricity used and when it is used.

Impact	Market Objectives
Allow the Market Rules to better address the objective	a, c, d, e
Consistent with objective	b
Inconsistent with objective	

EnerNOC considers the changes proposed to amend the capacity refund calculation for DSPs will have the following impact on the Market Objectives:

- Avoid discrimination against particular energy options and technologies by enabling refunds to be paid in relation to agreed Availability requirements only.

Impact	Market Objectives
Allow the Market Rules to better address the objective	c
Consistent with objective	a, b, d, e
Inconsistent with objective	



3. Please indicate if the proposed change will have any implications for your organisation (for example changes to your IT or business systems) and any costs involved in implementing these changes.

Changes to the static RD measurement calculation will have an impact on EnerNOC as we will need to amend existing systems containing the current static measurement approach. We envisage the costs associated with this change to be small.

Alignment of the RD measure with IRCR intervals, as proposed by the IMO, will have an impact on EnerNOC's portfolio management. We forecast that existing and new DSM-capable loads are likely to target their IRCR charges, reducing capacity potential from these loads and/or rendering some customers from being able to deliver demand response capacity to the WEM as originally planned. Such results would also potentially impact the ability to recruit sufficient capacity, as capacity obligations were taken on when the Market Rules would not have impacted the ability for customers that manage their IRCR exposure to participate in the WEM. It is unclear at the present time what the magnitude of the impact will necessarily be, however, it is expected to be potentially significant.

By increasing the risk of capacity overestimation in the WEM, as well as reducing the size of the DSM market within WA, higher funding and operational costs for all Market Participants and end-users are envisaged.

4. Please indicate the time required for your organisation to implement the change, should it be accepted as proposed.

EnerNOC estimate that, were the changes as proposed by the IMO to proceed, it may take approximately 3 months to implement changes to the measurement calculation, with the main requirements of systems and contract changes requiring this period for implementation.

EnerNOC forecasts that longer term changes in the makeup and structuring of its DSM portfolio would also be likely. Portfolio construction requirements for the 2013/14 year are likely to be impacted, together with restructuring requirements for the 2012/13 year also.