



7 December 2015

Mr John Pierce Chairman Australian Energy Market Commission Level 6, 201 Elizabeth Street Sydney NSW 2000

Online submission

Dear Mr Pierce

RE: Demand side obligations to bid into central dispatch (Ref ERC0189)

GDF SUEZ Australian Energy (GDFSAE) appreciates the opportunity to comment on the Australian Energy Market Commission (AEMC) consultation on the rule change proposal by Snowy Hydro regarding demand side obligations to bid into central dispatch.

The AEMC demand side obligations to bid into central dispatch consultation paper notes that the rationale for the proposed rule change is the current lack of information about the dispatch intentions of price sensitive demand in the National Electricity Market (NEM). As noted in the AEMC consultation paper, these deficiencies lead to material inefficiencies in pre-dispatch forecasting, reserve forecasts, constraint management and financial contracting.

The rule change proposal is that all market loads of 30 MW or greater that are (or intend to be) responsive to the NEM spot price would be required to become scheduled loads and participate in central dispatch. By including the expected price response of these loads into the NEM dispatch and pricing process, the dispatch targets and prices for all scheduled participants will be more accurate, leading to greater confidence on the part of market participants in the dispatch and pricing results.

GDFSAE supports the objectives that underpin the rule change proposal, and agree that including the price responsive market loads above 30 MW would be an effective method for achieving substantial efficiency benefits.

While the Snowy Hydro proposal focuses on market loads, GDFSAE believes that this rule change proposal applies principles that by extension are relevant to price responsive generators that are currently not subject to the NEM scheduling and dispatch processes. These are typically generators that are less than 30 MW, and their impact on the NEM is similar to price sensitive loads, which is that they reduce the measured demand when the NEM spot price reaches a certain threshold.

GDFSAE is in the process of preparing a related rule change proposal that seeks to better capture information regarding non-scheduled generator dispatch intentions and intends to lodge this proposal with

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the AEMC shortly. In GDFSAE's view this further potential rule change, while related in principle, should be managed separately.

As a further point of interest, GDFSAE notes that at present there is a rule change related to demand response mechanisms. While it is important that these rules are treated separately the shared timing of these two rule changes raises a useful point about demand response and the nature of load.

Specifically, if load rejects calls to be scheduled but supports demand response interventions in the NEM it shows a significant conflict in intentions. This is because scheduled load has a greater ability to demonstrate its firmness in the market and enter into contracts with other market participants at known price points. If a load participant rejects the proposed scheduling arrangements there can be little confidence in that loads actual ability to provide demand response and thus it should be no surprise that their non-firm demand response is not highly valued in the market.

In other words, the market currently allows for demand response and loads taking steps to firm up their ability to respond, not the introduction of contrived arrangements, is the key requirement to increasing the value of demand response products. This rule change has the potential to signal and deliver real demand side value in the NEM and is superior to any artificial arrangements.

The AEMC consultation paper includes questions grouped into eight different categories. GDFSAE have provided responses to these question categories below.

1. The rule change request

GDFSAE believes that the lack of participation of market loads in the central dispatch process is a material issue as it leads to Australian Energy Market Operator (AEMO) dispatching scheduled generation to meet a forecast increase in demand which, turns out not to eventuate due to price responsive market loads. These avoidable requests for scheduled generation to meet price/demand spikes that turn out to be false, cause unnecessary costs on scheduled plant, and reduce confidence in the NEM dispatch process.

The rule change proposal would in GDFSAE's opinion, address the issue as it would ensure that the price response of market loads is taken into account when dispatching scheduled plant.

Additionally, it understood that early energy-only market designs presumed that load would play a significant role in setting price and responding to market signals. Unfortunately, this has not been borne out in practice and has led to a range of problem with how price is set and dispatch is structured. While resolving these issues is not the intent of this proposal, the benefits of implementing changes so the NEM starts to better reflects economically efficient price setting and revenue recoveries over the longer term should also be welcomed by the AEMC.

2. Market impacts

Placing an obligation on market loads to become scheduled will require the impacted participant to introduce new bidding and dispatch processes, and give consideration to related businesses processes. For participants that intend to be very active in how they interact with the NEM such an obligation should accord with their existing business practices; however, GDFSAE believes that the majority of market loads respond to the NEM prices at pre-determined and stable thresholds that might only vary occasionally. If this understanding is correct, GDFSAE expects that the new requirements will not have a significant on-going impact on the effected participants.



In response to the AEMC question regarding impacts on non-scheduled generators, GDFSAE is of the view that these should also be required to improve the level of information that they provide to the central dispatch process, and as indicated above, is in the process of preparing a rule change proposal to that end.

GDFSAE does not see any immediate impact, positive or negative, on the impact on frequency control ancillary services (FCAS) markets. Market loads are already able to provide FCAS if they choose to, without the need to become scheduled. If anything, once a market load has moved down the path of becoming scheduled, it might be more inclined to choose to become an FCAS provider as well, on the basis that once it has a bidding interface in place with AEMO, FCAS would be more of an incremental step. Nevertheless, the dominant influence for any participant is whether it is able to meet the technical requirements of FCAS provision.

Importantly from GDFSAE's perspective, the market impact would be positive in that the dispatch and pricing outcomes would be less likely to be unnecessarily inaccurate due to not being able to take account of price responsive demand.

3. Obligations on market loads

The AEMC have asked for comment on the appropriateness of the 30 MW threshold for mandatory participation of market loads. Given that the threshold for generators to be scheduled is currently 30 MW, it is understandable that Snowy Hydro have suggested this as the new threshold for market loads. Nonetheless, it may be that a threshold below 30 MW is also appropriate. GDFSAE notes that this issue could be revisited at a later date.

GDFSAE is mindful that the threshold for mandating market loads to be scheduled needs to be carefully considered, to avoid unintended consequences. The rule proposal seems to be targeting large single load blocks, and not connection points that supply a large number of customers that in aggregate are greater than 30 MW. GDFSAE suggests that the AEMC modify the rule change proposal to ensure that these types of connection points are not impacted by the change, as it is critical that whatever the threshold for the obligation is it is an obligation on the participant with control of the price responsive load not a retailer at a connection point.

GDFSAE believes that the proposed tests that a market load is, or intends to be, price responsive might be problematic, as they appear to be potentially difficult to measure and assess. In the absence of a clear test, GDFSAE would initially suggest that the rule change be applied to all single load blocks that exceed 30 MW for a nominated period of aggregate time in a year.

4. Incentives and obligations

The incentive for a market load to participate in the central dispatch process would be that it provides a target to the market load whenever the spot price moves beyond its nominated price. Both normally on and normally off market loads can participate, but evidently (based on AEMO's registration information) only market loads that are normally off currently participate in dispatch. These are pump-storage load blocks that seek to come on (pump) when the spot price falls below their bid price.

Although the central dispatch process offers market loads some incentive to become scheduled, it seems clear from the lack of participation in scheduled demand that market loads have decided that the burden of bidding and following dispatch targets is too onerous.



There is a potential that if loads that are currently market loads (purchase their electricity from the pool) are mandated to become scheduled loads, then they might choose to withdraw their registration as a market load, and avoid the obligation to become scheduled. This would require the market load to negotiate a power purchase agreement either with a generator directly, or through a retailer or some other intermediary.

5. Provision of information

The AEMC have asked if there are alternative proposals that might achieve the information provision sought by the rule change proposal, without requiring market loads to become scheduled. GDFSAE has given this issue some thought, and believes that it might be possible to achieve some improvements in information transparency without requiring market loads to become scheduled; however, scheduling remains the preferred approach and would ensure greater transparency and efficiency.

AEMO currently have the capacity to perform real time demand measurement at all connection points across the NEM, and to correlate these historical measurements with the 5-minute spot prices in each region. This process could be applied over time, and used to determine a "proxy" for the expected aggregate demand response within a region at various price-points.

This information could be published by AEMO so that all participants have an understanding of the likely demand changes that could occur, and at what price. Noting that it would be lagging data and not responsive to changes in accurate timeframes.

It would also be feasible that having determined the expected aggregate demand changes and the price points, AEMO could then use these bands as proxy demand bids in the central dispatch process. This would not be as rigorous as a demand bid provided by the responsible participants, but would have the advantage that it could potentially capture all price responsive movements, not just demand blocks above 30 MW. The benefits of applying such an approach to load below the determined threshold, 30 MW's or otherwise, could be further considered by industry, AEMO and ultimately the AEMC.

6. Implications on derivatives market

Improving the quality and accuracy of the pricing and dispatch has a definite impact on the derivatives market, as participants will be less inclined to take a future position, or will increase the risk premium, on what spot market outcomes might be where there is a perception that the spot prices are being distorted in some manner, or that the prices are not a true representation of the supply demand balance.

As derivatives and other risk management instruments become less available, any potential future investors in the NEM will be more cautious about their investment decisions, and may seek higher risk premiums. These all add to the costs of investing in, and operating in the electricity market.

As indicated previously, the scheduling of price sensitive loads also provides a firm avenue to demand side participation contracting. In a period of high gas costs there are some significant advantages in contracting price supressing demand response over and above pre-existing gas-fired generation.

As stated throughout this submission, GDFSAE is in support of the objectives that this rule change is seeking to achieve, and agrees that having more transparent information on price responsive demand response will benefit the spot and derivatives markets.





GDFSAE trusts that the comments provided in this response are of assistance to the AEMC in its deliberations. Should you wish to discuss any aspects of this submission, please do not hesitate to contact me on, telephone, 03 9617 8331.

Yours sincerely,

Chris Deague

Wholesale Regulations Manager