13/09/2019

Mr John Pierce
Chairman
Australian Energy Market Commission (AEMC)
PO Box A2449
Sydney South NSW 1235

Via electronic lodgement

Dear John,

Wholesale Demand Response Mechanism (WDR) Draft Rule

Thank you for this opportunity to provide feedback on the AEMC's draft Wholesale Demand Response Mechanism rule change.

As well as contracted transmission and distribution assets, Mondo deploys Distributed Energy Resources (DER), provides community-based energy services and is developing a market and network services offering that includes demand response. We firmly believe that demand response will play an increasingly strong role in Australia's energy future, owing to falling costs and a need for more system flexibility. This flexibility will underpin the transition to a more renewable, distributed energy future.

We strongly support the AEMC's first step towards enabling greater levels of demand response. The draft rule creates a new market participant, the Demand Response Service Provider (DRSP) which is able to offer demand response into the wholesale market. The independence of the DRSP from the Retailer is a significant development which we believe will promote demand response services.

Allowing DRSPs to value stack network services

Demand response is highly flexible, as it can reduce or increase both consumption and generation to manage a variety of issues such as network congestion, voltage issues, and market supply shortfalls. Its ability to defer or remove the need for network upgrades or new generation installations means that it will be fundamental in reducing both network and generation costs in the future.

Ultimately, emerging distribution market models are expected to integrate and co-optimise the different value streams accessible via demand response. This will provide DRSPs with an economically efficient stacked price signal - representing the full marginal value of demand response in a given location - and strongly influence where, how much and what type of demand response is provided. For instance, DRSPs would be incentivised to recruit demand response in capacity constrained networks where they have the opportunity to receive payments for both network and wholesale market services.

Outside of emerging distribution market models, value stacking might also be achieved by contracting with multiple parties. For instance, within the current framework a Retailer could receive a contracted network support payment for providing demand response while simultaneously using the demand response to reduce their energy costs.

The draft rule (clause 3.8.22A) proposed by the AEMC appears to prohibit this form of value stacking for DRSPs by requiring that demand response offered into the market is 'the result of wholesale demand response activity'. We take this to mean that where demand response is incentivised via another payment or charge, it either cannot be offered through the mechanism or only the additional amount can be offered. Answers provided during one of the WDR workshop sessions appeared to confirm that these 'additionality' provisions would also apply to loads subject to Critical Peak Pricing (CPP) tariffs.

We understand that the intent of the additionality provision is to ensure that demand response offered to the market is in fact over and above any response that would have occurred anyway, for example a response that may occur as the result of a network tariff signal. A particular concern exists in situations where a non-wholesale demand response signal leads to the baseline being biased in favour of the DRSP (upwards). For instance, where a pre-existing CPP tariff already resulted in lower demand during high price events.[1] However, this may be addressed quite simply by including CPP events within the baseline methodology. Indeed, baseline methodologies will need to include any network tariff which sends a strong time of use or demand signal. We note that time of use network tariffs are becoming increasingly common, as NSPs move to more cost reflective tariffs.

The current proposed additionality provisions run the risk of prohibiting or discouraging value stacking, especially where demand response requires long-term capital investments. For instance, in practice DRSPs will need to invest significant funds to recruit customers, install DER and install control systems. These upfront investments must be justified on the basis of expected long term returns. To the extent those returns are lower or uncertain due to regulation, this will pose a barrier to investment and result in lower levels of established demand response capacity. The additionality provisions will also result in inefficient bidding and short-run dispatch of demand response, because DRSPs will need to choose between either network tariff signals or wholesale price signals, rather than considering the needs of both simultaneously.

While DRSPs would face barriers to value stacking, under the current arrangements Retailers will be free to continue value stacking resulting in higher returns for Retailer-led investment in responsive loads. This is likely to distort customer decision making in favour of Retailers (due to higher incentives) and result in lower volumes of demand response being registered in the wholesale market via the WDR mechanism.

Given the above, a simpler and more efficient approach is to allow the network value of demand response - expressed through tariffs, demand response contracts or, at a later stage, a distribution market - to exist alongside the wholesale demand response mechanism.

[1] Critical Peak Pricing (CPP) tariffs charges customers annually based on consumption during periods of peak demand on the network. Peak periods are typically declared by the network prior to the event.

The customer benefits of allowing value stacking by DNSPs

Allowing value stacking, at least with regard to network value, will benefit customers in several ways:

- **Reduced energy costs:** Allowing value stacking will result in higher payments to DRSPs. However, given efficient pricing through the wholesale mechanism and network service contracts, this higher payment should not come at a long-term cost to customers, as it should be off-set by network & generation savings.

- **Returns to customers offering demand response:** Higher (stacked) payments will provide scope for larger customer incentive payments. This in turn is likely to persuade more customers to participate in the WDR mechanism.

- **Development of demand response markets and enabling technologies:** Higher payments will encouraging more investment in demand response businesses and enabling technologies. Given the nascent state of many demand response technologies, we expect this investment will result in relatively rapid falls in cost, compared to mature generation technologies. We note that this is not a subsidy for demand response but rather recognises the full benefit demand response provides.

Compliance Costs for DRSPs and Customers

The draft rule has been developed on the principle that demand response units are comparable to generators. Following this logic, the draft rule requires DRSPs to register demand response units with AEMO, to bid units into the wholesale market, and to follow dispatch instructions. By registering a load as a demand response unit, the WDR mechanism transforms an opaque unscheduled load into a predictable and scheduled load, which is visible to the market. From a system perspective, this arrangement is superior to a Retailer-led demand response arrangement – generally referred to as price responsive load.

The alternative perspective is that of the customer. From this perspective the added visibility and predictability of contracting with a DRSP comes at a cost. These costs include the cost of market registration and bidding, cost to causer payments, the cost of additional control systems needed to meet dispatch targets, and the cost of forecasting and demand response analysis needed to accurately predict demand response volumes. These costs can be largely avoided or substantially reduced by contracting with a Retailer. This is a point made by the Brattle Group in their 'International Review of Demand Response Mechanisms in Wholesale Markets'. The Brattle Group's report notes that in energy only markets like the NEM, compliance obligations tend to dissuade the participation of price responsive loads in central dispatch.

Given the above, we believe the final rule should not be solely guided by the treatment of demand response units as generators. The reality is that the demand which makes up demand response is a load by default and this treatment has advantages for the customer. The draft rule could be enhanced by relaxing scheduling requirements or alternatively by paying demand response units more to reflect the added system benefits.

Baseline Methodologies

Under the draft rule changes AEMO will be responsible for developing baseline methodologies and performance metrics. We note that this approach of developing a central set of basic methodologies and then allowing proponents to develop bespoke methodologies is similar to that adopted under the Retailer Reliability Obligation (RRO) with regard to firmness methodologies. Additionally, both processes share similar underlying disciplines, for instance statistics. There may be value in aligning and standardising these processes to achieve administrative efficiencies.

Information Provision

The draft rule includes provisions which grant DRSPs access to meter data. Meter data will be essential to DRSPs at both site evaluation and settlement stages, and Mondo supports this aspect of the rule change. Depending on dispatch requirements, real time metering data may also be required.

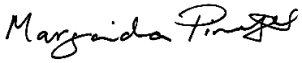
At the site evaluation stage, historic data will be needed to understand the potential cost, risk and value of demand response at a site. Preferably, data provided at this stage spans several years, allowing evaluation of both seasonality and longer term trends. Historic data will also be needed to evaluate baseline metrics and the likely eligibility of a customer to participate in the WDR mechanism. With this in mind, we would support provisions to provide DRSPs with access to meter data during evaluation, and prior to the registration, of a demand response unit. Although, data may be provided by customers, direct access via the Market Settlement and Transfer Solution system (MSATS) and the Meter Data Provider (MDP) provides a trusted data source with minimal disruption to the customer.

Provision of dispatch data to Network Service Providers

Network service providers (NSP) will be impacted by demand response in beneficial, and also potentially adverse, ways. Providing NSPs with relevant data on demand response units would aide in forecasting, network operation and the identification of further demand response opportunities. We would support changes to the draft final rule that provide NSPs with data relevant to their network including NMIs, demand response unit capacity, bid volumes and dispatch instructions.

Please feel free to contact Daniel Brass, our Market Insights Lead, (daniel.brass@mondo.com.au, ph:04 88135557) if you have any questions in relation to this submission.

Regards,



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