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Nova Energy Limited
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16 December 2022

Submissions
Electricity Authority
PO Box 10041
Wellington 6143

By email: wholesaleconsultation@ea.govt.nz

Re: Options to reduce operational coordination risk – consultation paper

Nova Energy (Nova) supports the work the Authority has completed to address the increasing risks of peak demand exceeding the available generation capacity. Some of the issues, such as improving wind forecasting and the static value of lost load have been around for many years, and costs of earlier inaction are being felt now in the need to address capacity concerns for next winter. The time frames for addressing the market's concerns are now compressed, but not insurmountable if the Authority is prepared to take a pragmatic approach to implementing changes.

An example is option I, where the value of lost load should be increased immediately to reflect accumulated inflation since 2011. The project to reassess the value of lost load can then be completed later as a comprehensive process.

Nova's further responses to the Authority's questions are appended to this letter.

Yours sincerely

Paul Baker

Commercial & Regulatory Manager

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Nova submission: Wholesale market competition review

Q No.	Question	Response
Q1.	Do you agree that operational coordination performance has become more challenging for the reasons indicated above? If not, what is your view and why?	Nova agrees with the analysis, and in particular the challenges around committing thermal generation plant. With fuel costs, inclusive of carbon, exceeding the long run costs of renewable generation, thermal generators can no longer afford to run at baseload for long periods in anticipation of profitable price spikes.
Q2.	Do you agree that the factors in paragraphs 4.10 to 4.63 create information challenges or misaligned incentives, and that these make it hard to achieve optimal commitment actions? If not, what is your view and why?	Nova agrees that all of the issues described contribute to the challenges of meeting demand peaks in the most cost effective manner. These challenges have become more apparent due to the changing generation mix. Controllable load, primarily relays controlling hot water systems, has also been under-valued in the past, leading to its potential not being fully realised.
Q3.	Do you agree that it is prudent to examine options to address information and incentive gaps identified above? If not, what is your view and why?	Yes. The impact of the information and incentive gaps identified are likely to have greater significance as the market moves more towards a higher proportion of intermittent generation sources.
Q4.	Do you agree with the proposed evaluation criteria? If not, what is your view and why? Are there other criteria that the Authority should consider?	The evaluation criteria given are appropriate, but the changes proposed should also be measured against the level of net benefit expected, particularly if the extent of the change requires significant investment in resources.
Q5.	What if any other options should be considered to better manage residual supply risk for Winter 2023?	Nova has proposed an alternative to the day-ahead market under Q.16 below.
Q6.	Option A	Yes, in Nova's experience this would be useful in determining the extent of the risk and potential actions that may need to occur.

Q No.	Question	Response
	Do you think it would be beneficial to publish the residual offer information used by the system operator when calculating Grid Warning and Emergency Notices? If not, what is your view and why?	
Q7.	Option B Do you think it would be beneficial to provide sensitivity case spot price forecasts in forward schedules, as well as central forecasts? If not, what is your view and why?	Yes.
Q8.	Option C Do you agree that cross-industry work on improving the quality of intermittent generation forecasts is unlikely to be available for Winter 2023? If not, what is your view and why?	Nova notes that improved wind forecasting technologies have been around for many years. Nova suspects that there are improved wind output forecasting models that should be available for winter 2023. Some operators are likely to be already using improved forecasting models for their own purposes.
Q9.	Option D Do you agree that the system operator should procure an external wind forecast and ask participants to review their offers if there are large discrepancies between the forecast and offers? If not, what is your view and why?	Yes, if the expected benefit to the market exceeds the cost.
Q10.	Option E Do you agree that the availability and use of ‘discretionary’ demand control	Nova encourages immediate improvements to the management and measurement of load control.

Q No.	Question	Response
	(such as ripple control not used for instantaneous reserves) should be clarified? If not, what is your view and why?	Accountability for managing controlled loads needs to be reviewed and brought into line with generators obligations. There seems to have been minimal focus on the response of distributors to the GEN notice issued at 17:10 on 9 August 2021. A Code change should require all controllable load to be disconnected within a specified time period of receipt of a GEN notice during a grid emergency. To the extent that this leads to a reduction in automatic under-frequency load shedding, this can be notified to the System Operator at the time. The reduction in reserves must, by definition, be less than the drop in load, and therefore beneficial to the system when it is under stress. While the changes and benefits achievable by winter 2023 may be limited, that work should help identify further Code changes that might be introduced to improve the incentives to make more efficient use of load control. For the longer term, there is a question of whether consumers are adequately recompensed for load control, and whether the parties benefiting from load control are the same as those paying for the assets employed to control load. Consumers with controllable load traditionally benefit from lower distribution charges, but this is becoming less prevalent as distributors no longer benefit through reduced transmission charges. Some distributors have eliminated or reduced the pricing difference between controlled and uncontrolled loads.
Q11.	Option F Do you agree that work should be undertaken on a new integrated ancillary service for winter 2023 to help manage increased uncertainty in net demand? If not, what is your view and why?	Nova supports the introduction of a new integrated ancillary service for winter 2023 to cover the uncertainties in net demand. Nova assumes this would involve dispatching load or demand response with around 15 minutes or longer notice and for that to be sustainable for a few hours over a peak demand period. It is important however that the costs for this service are allocated appropriately. Some of the cost can be attributed to retailers given the variation in their demand, but where the causer of any particular situation is clearly identifiable, then that party should also pick up some of the costs.
Q12.	Option G Do you agree that selectively increasing ancillary service cover should be considered as an interim	Option G is acceptable as a back-up to option F, should F not be achievable by winter 2023. The increase in planned reserve cover would better reflect the market risks under a peak load scenario and create an increased incentive for generation capacity

Q No.	Question	Response
	option for Winter 2023? If not, what is your view and why?	and load response to be made available. As discussed, the allocation of costs is an issue that should really be resolved before making such a change.
Q13.	If increased cover from an existing ancillary service at times is pursued further as an option for Winter 2023, what are your views on whether to utilise frequency keeping or instantaneous reserve, and why?	Nova favours increasing reserves over adding frequency keeping capacity, primarily because there are more parties that can provide reserves than there are in providing frequency keeping services. Reserves have the benefit in that the requirement is co-optimised within SPD, and excess reserves that are not dispatched have no cost, therefore there is less need for the System Operator to adjust the additional reserves requirement over time. From a technical perspective, there may be scope for utilising slower response reserves to make up the balance, which cannot normally meet the System Operator's requirements for 60s reserves? Adding to the reserves requirement may also help stimulate expansion of demand response capability.
Q14	Option H Do you agree the option of requiring retailers to make compensation payments to customers affected by forced power cuts should not be explored for Winter 2023? If not, what is your view and why?	Nova agrees with the principle that retailers should not benefit financially from electricity demand reductions caused by forced power cuts. The application of scarcity pricing in final prices reflects the value of lost load, but retailers may be spared some of those costs due some of their customers being disconnected at such times. Because power cuts are regional specific, the quantum of savings per retailer would need to be based on previous demand patterns and market shares in the affected regions. This could be the responsibility of the reconciliation manager to determine, or alternatively calculated by the Authority based on data provided by the Reconciliation Manager. In terms of recompense to consumers, Nova believes the costs of setting up the payments to the affected customers is likely to be excessive in relationship to the amounts involved. Retailers have systems set up for paying rebates etc to consumers, but this gets more complex when targeting specific groups of ICPs within a network. Instead, Nova would suggest the monies paid could go to a fund that is targeted towards supporting consumers that are struggling to pay their electricity accounts. Such a fund has already been created to support consumers in the transition away

Q No.	Question	Response
		from the low fixed charge regime. Applying funds to support such consumers would be a suitable vehicle for distributing such monies.
Q15	Option I Do you agree that reviewing the default pricing in the Code to apply in energy and reserve shortfalls should not be explored for Winter 2023? If not, what is your view and why?	Disagree. The numbers should be updated provisionally at least by increasing the figures determined in 2011 by the increase in the Producers Price Index. The absolute numbers should also be removed from the Code and specified in the Code by reference to a schedule that is updated annually. It is appropriate that the numbers be re-examined in detail, but that should not be a reason for delaying an immediate increase. Given the increased reliance on digital systems and broadband communications interfaces since 2011, it would be very surprising if the real cost of power outages is not significantly greater now than it was in 2011.
Q16	Option J Do you agree that an hours-ahead market should not be explored for possible adoption for Winter 2023? If not, what is your view and why?	Nova accepts that it is impractical to introduce an hours-ahead market by winter 2023, and it is not convinced that the option as described is necessary in any case. Nova suggests that instead the Authority could facilitate the development of a market for day-ahead peak CfDs. If the transaction costs can be minimised through: • using a standard form contract, • listing through a contracted intermediary, and • settled through the Clearing Manager, then parties such as Genesis and Contact may have sufficient incentive to offer peak period CfDs on a day ahead basis each day. Obviously, these would need to meet a minimum gross value in each case to justify the operation of key generation units. Such a product would enable them to commit their large thermal units to generate when otherwise the risk of incurring a net loss is too high. Such a proposal would not require any changes to SPD but would achieve much the same result as a day-ahead market. This option would only be worth considering if Genesis and Contact indicate their support.

Q No.	Question	Response
Q17	Option K Do you agree that mechanisms that procure additional resources outside of the spot market should not be explored further for Winter 2023? If not, what is your view and why?	Agreed
Q18	Do you agree that options A, B, D, and E appear attractive and should be progressed further? If not, why not?	Yes.
Q19	Do you agree that options F and G should be assessed further to determine if they are likely to have net benefits? If not, why not?	Yes.
Q20	Do you agree that options C, H, I, J and K should not be progressed further for winter 2023? If not, why not?	No. As per the responses to the options listed, there are actions that can be implemented by winter 2023.
Q21	What if any other matters should be considered when assessing options to better manage residual supply risk for Winter 2023?	