Integrating storage – options paper: stakeholder feedback template

The template below has been developed to assist stakeholders in providing their feedback on the questions posed in this paper and any other issues that they would like to provide feedback on. The AEMC encourages stakeholders to use this template to assist it to consider the views expressed by stakeholders on each issue. Stakeholders should not feel obliged to answer each question, but rather address those issues of particular interest or concern. Further context for the questions can be found in the consultation paper.

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Questions		Feedback
Chapter 1 – Registration and participation framework		
Question 1: Registration and classification (p. 17)		
1	Is introducing a new participant category, an Integrated Resource Provider (option 4), to better facilitate entry and participation of storage and hybrid facility, more preferable than modifying existing participant categories (option 3)? Are either option 3 or 4 more preferable to options 1 and 2?	Enel X has several concerns with the options proposed. **Definition of hybrid facility** It is still not clear who is intended to be captured by the term "hybrid facility". P17 states that, under option 3, "it would be mandatory for all entities that own, operate or control … hybrid facilities with bi-directional energy flows to register as a Market Generator". Without a clear definition of "hybrid facility" and a threshold of generation/load capacity above which the definition applies, many energy users with onsite generation would be captured and required to be registered. And, depending on where the AEMC lands on the *Generator registrations and connections* rule change, these facilities may have to be scheduled too. As noted in our submission to that rule change, the costs and complexity of being registered and scheduled far outweigh the potential benefit for many generators, particularly those that are co-located with C&I load and were not built for the sole purpose of participating in the NEM but rather backup power or energy management. Such generators will therefore seek to either be exempt from registration or classified as non-scheduled if they must be registered. The AEMC should clearly define "hybrid facility" by considering who it is intending to capture through this rule change request, and then consider the options in that light. In our view, the term

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		should apply to large-scale facilities whose primary business objective is to participate in the energy markets, i.e. it should not capture C&I load with co-located generation/storage. **Assumption that one site = one market participant** The descriptions of options 3 and 4 imply that only one party will be registered at the grid connection point for the supply of electricity and the provision of all other services. This interpretation depends on the definition of "hybrid facility" as discussed above. If it is intended to cover large-scale facilities built for the purpose of energy market participation only, then the proposed approaches may be suitable. However, if the term covers customer load with co-located generation/storage, then options 3 and 4 will restrict the provision of services at that site to only one market participant. This outcome is inconsistent with the intention of the SGA, MASP and DRSP frameworks, which were established to allow parties other than a customer's retailer to provide energy, FCAS and demand response, to the benefit of competition in those markets. The last dot point on p4 of the paper states that the trader services model will enable new participation models that allow end users to obtain services from more than one trader at a site. While we agree that this is the right outcome, it can and does already occur under the SGA, MASP and DRSP frameworks. Enel X is a registered SGA and MASP, and we provide energy and FCAS using C&I load flexibility *independently* of the customer's retailer at each site. The same will occur in relation to wholesale demand response under the DRSP framework when that commences in October 2021. While we support improvements to the regulatory framework that make things clearer and simpler for market participants, we need to make sure that the changes don't unwind existing frameworks that were put in place to drive competition. **Link between registration and classification, and scheduling** It is not clear what the link between registration and classification is proposed to be, if there is one. Options 3 and 4 imply that registration = scheduled. The current arrangements allow registered generators to be classified as non-scheduled. While the threshold for this is currently under review in another rule change, it should not be assumed that the non-scheduled category will no longer exist. The statement on page 17 that option 3 "would allow SGAs to provide scheduled generation" is confusing. The attraction of the SGA framework is that it does not require scheduling. It is a suitable registration framework for smaller generators and/or those that participate in the NEM

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		infrequently. Requiring scheduling will deter participation in the NEM by smaller generators, not encourage it. Below are some further comments on the options: • It is unclear at this stage what the practical impact of the trader services model would be in terms of AEMO registration and market participation, given that the NEM will still involve the procurement and provision of different services. That said, we are supportive of rule changes that remove unnecessary restrictions on certain market participants providing particular services, e.g. the restriction on SGAs providing FCAS. • In general, it is not clear what obligations would apply to the IRP, whether a threshold would be applied to IRP registration, and how they would be classified (if at all). As above, a framework that requires all participants captured by the "hybrid facility" term to register and be scheduled is unlikely to be an attractive one to participate in. If the objective is to create a two-sided market, the framework should incentivise participation, not deter it. • We do not support making changes to the regulatory framework through this rule change that give effect to the "two-sided" concept when that concept is still in the early stages of development, does not yet have stakeholder buy-in, and is not well understood. Specifically, we do not support the starting assumption that everything will need to be scheduled in a two-sided market, and there is little clarity on the concept of "scheduled-lite". • We are supportive of the proposal to clarify that SGAs can use batteries, and to enable SGAs to classify their assets as ancillary services load or generation. • Under option 3, we do not support the proposed restriction that a hybrid facility's load must also fall below the generation exemption threshold to be able to register as an MSGA. It's not clear what the policy objective of this restriction is, and why load size is relevant, when the purpose of the SGA framework is to bring more small generation into the energy market.
Question 2: Classifying MSGAs (p. 18)		
1	Do you agree that, if an Integrated Resource Provider category (option 4) is established, battery aggregators should use that category and MSGAs should not be allowed to classify storage units exempt from the requirements to register as a Generator? And in that case,	We do not support the starting assumption that aggregators of small batteries should be shut out of the SGA framework (regardless of size) and register as an IRP. As per our response to question 1, this approach: • runs counter to the intention of the SGA framework (to reduce barriers to small generators participating in the energy market)

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	should the current arrangements regarding the provision of market ancillary services by MSGAs be maintained?	• assumes that there is only one market participant delivering services per customer • does not recognise that most small generators (regardless of whether they have a battery or other type of generation capacity) see no benefit in being registered or scheduled and will therefore either seek exemption or not participate at all. Again, it's important to define "grid-scale" and "hybrid facility", but in effect this proposal would mean that the MSGA category would only be open to small, non-battery generating units. If that's the case, it's not clear why "the current arrangement that MSGA participants are not allowed to provide market ancillary services would be maintained". Why restrict the provision of ancillary services by those units if they are technically capable?
Question 3: Existing storage participants (p. 19)		
1	Should existing storage participants be transitioned to a single participant category (as they are currently registered as both a Market Generator and Market Customer)?	No comment.
Question 4: Scheduling of hybrid facilities (p. 20)		
1	What proportion of a hybrid facility's sent-out generation capacity would need to be dispatchable for the whole of the hybrid facility's sent-out generation to be able to follow dispatch instructions, under a single DUID?	As above, scheduling should not be the starting assumption. The scheduling and dispatch arrangements, in their current form, are a significant deterrent to energy market participation for small generators/batteries. The Commission's approach to scheduling should be proportionate to the risk / benefit, and should recognise how the load or generation is intended to be used. In the case of generation / batteries: • What is the asset's primary purpose? Was it built to participate in the NEM, or does it primarily serve another business purpose, e.g. backup supply to a commercial or industrial facility? • How often is the asset expected to participate in the NEM? This is linked to the above consideration. If the generator / battery has another primary purpose, it is likely to be participating in the NEM infrequently, e.g. to capture high spot prices or to provide wholesale demand response or FCAS. The costs of scheduling and investing in the capability to receive and follow dispatch instructions in a 5-minute market will far outweigh the benefits of this level of participation.

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		• Does the generator, and its owner/operator/controller, have the technical capability to participate in the central dispatch process and comply with the various obligations on scheduled generators, including mandatory primary frequency response? • What are the benefits to the customer and to AEMO of the generator being scheduled? If scheduling requirements are imposed, we caution against making the threshold too low. As currently drafted, any hybrid facility (to be defined) with onsite generation over a threshold as low as 1MW would have to register as an IRP and be scheduled, even if they don't want to participate in the energy market, or would only offer into the market a handful of times per year. As noted in responses to previous questions, we are concerned that these proposals will have unintended consequences. We should be creating incentives for energy resources to offer their flexibility to the market, not deterring it.
2	Would a dynamic approach to scheduling obligations, for example shifting between scheduled and semi-scheduled obligations based on the state of charge of the storage unit, be appropriate, and how should this operate?	No comment.
3	Could the same approach be taken to scheduling load where storage is added to a Market Customer's site, or should different considerations apply?	No comment.
Question 5: Number of price bands (p. 21)		
1	Do you agree that 20 price bands would be appropriate for grid-scale batteries or would another number of bands be more appropriate?	No comment.
Question 6: Dispatching hybrid facilities (p. 21)		
1	Are there certain configurations of hybrid facilities that cannot, or should not, be dispatched at a single connection point?	No comment.

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2	What benefits are achieved by dispatching a hybrid facility at a single connection point, and what issues arise?	No comment.
Question 7: Performance standards (p. 22)		
1	What issues may arise if performance and access standards are set at the connection point for hybrid facilities? Would these standards need to be amended to provide appropriate flexibility for hybrid facilities?	No comment.
Chapter 3 – Recovery of non-energy costs		
Question 8: Options for the recovery of non-energy costs (p. 27)		
1	Which option do you consider to be the most appropriate for the recovery of non- energy costs from market participants? Please provide detail on why it would be the most appropriate option.	Under the current rules, a single customer can be served by multiple market participants, and sometimes in embedded network configurations. The approach taken should recognise this to make sure that two participants are not paying the non-energy costs for the same load/generation, either at the same or different (parent/child) connection points. We agree that any approach to cost allocation should be technology neutral and as consistent across participant categories as possible.
2	Are there any other factors the Commission should consider when deciding how non-energy costs should be recovered from market participants?	No comment.
3	Are there any implementation issues the Commission should consider?	No comment.

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Chapter 4 – Additional issues relating to storage		
Question 9: Network service provider connection points (p. 34)		
1	Do you support the solution outlined in this options paper for resolving the potential issues with establishing standards for NSP owned energy storage?	No comment.
2	If not, do you consider there to be other potential solutions for resolving this issue?	No comment.
Question 10: DC coupled systems (p. 38)		
1	What capital, operational or efficiency benefits do DC-coupled systems provide participants and the NEM as a whole, and how might these benefits help consumers in line with the NEO?	No comment.
2	Do you support amending the NER to permit the registration and operation of DC-coupled systems? If so, how should they register and operate?	No comment.
Question 11: Provision of ancillary services (p. 40)		
1	Do you support AEMO's proposal to redraft ancillary services provisions in Chapter 2 of the NER to make it more consistent with the services approach to regulation currently being considered by the ESB's two-sided market work? Please explain why or why not.	We support the proposed changes to reflect that a single asset or site can provide ancillary services by varying import and export quantities. Such a change would presumably flow through to a more streamlined and cheaper classification process (i.e. rather than separately seeking classification as both an ancillary services load and ancillary services generating unit in relation to the same asset). It's not clear whether this change must be made in the NER – it may be more easily and appropriately considered through the MASS review that is currently underway.