

## Integrating storage – consultation 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  |
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| Chapter 1 – Introduction |  |   |
| Questic                  | on 1: Proposed assessment framework (p. 5)   |   |
| 1                        | Do you agree with the proposed assessment<br>framework or are there any additional<br>assessment criteria the Commission should<br>use when assessing identified issues and<br>possible solutions? | The Commission should take care to ensure that any rule changes do not inadvertently undo all the good that has been done to enable independent aggregators (i.e. non-retailers) to participate in the NEM on customers' behalf via the SGA, MASP and soon to be DRSP registration categories. These frameworks allow businesses like Enel X to offer a site's flexibility (be that generation or demand response) into the energy and FCAS markets, independently of the FRMP (retailer) at the connection point. The creation of a Bi-directional Resource Provider category would seem to assume that only one market participant could control and trade that flexibility. The SGA and MASP frameworks have brought significant new capacity to the energy and FCAS markets by allowing a split of responsibility within the one site, with resulting impacts on competition and prices in those markets. We expect the DRM will support a similar outcome. Any rule changes through this process should seek to preserve the intention of the SGA, MASP and DRSP frameworks, which is to support the provision of energy and other services by a range of providers, to maximise competition to the benefit of consumers. Similarly, any rule changes should not hinder these parties' ability to use storage assets under those frameworks. |



| Questions  |  | Feedback  |  |
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| Chapter  | Chapter 2 – The threshold question: should storage be defined in the NER?  |   |  |
| Questio  | n 2: Current issues caused by the treatment  | of storage (and hybrids) under the NER (p. 14)  |  |
| 1  | Do you agree with AEMO that there are<br>currently significant issues for storage units<br>and hybrid facilities being caused by the rules<br>not including a storage definition? Why, or<br>why not?  | <ul> <li>There is indeed a lot of uncertainty around the use of new technologies and business models under the current market arrangements. However, it is not clear that this is entirely a rules issue. While greater clarity would certainly be achieved if everything were set out in black and white in the rules, the reality is that the rules cannot, and should not have to, cater to every specific. In our view, many uncertainties regarding the registration and participation of new technologies and business models would be better addressed if AEMO: <ul> <li>worked through these issues in an open forum with interested participants, the AEMC, and the AER, with legal advice</li> <li>provided more transparency on its internal deliberations and the conclusions it draws on certain issues</li> <li>communicated the outcomes of these processes more regularly and publicly, for example by publishing more detailed fact sheets and/or holding regular information or Q&amp;A sessions.</li> </ul> </li> <li>Note that the above comments are provided in the context of Enel X's experiences registering and enrolling assets (including batteries) under the SGA and MASP frameworks, rather than the connection of large-scale, standalone batteries.</li> </ul> |  |
| 2  | Has AEMO identified all the current issues for<br>storage and hybrid facilities that arise from its<br>primary issue that the NER does not<br>recognise and adequately define storage? If<br>not, what are the other issues?   | No comment.   |  |
| Question 3: Implications for storage forecasts (p. 21) |  |   |  |
| 1  | Do you agree that storage and hybrid facilities<br>are likely to play a significant role in the future<br>market? If so, do you agree that this indicates<br>that the issues AEMO has identified in its rule<br>change request, arising from the current<br>treatment of storage under the NER, are likely | No comment.   |  |



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|         | to become worse over time? Why, or why not?   |  |
| Questic | on 4: AEMO's rationale for defining storage ar  | nd hybrids in the NER (p. 25)  |
| 1       | Do you agree with AEMO that there is a<br>strong rationale for defining storage and<br>hybrid facilities in the NER (as different to load<br>and generation)? Why or why not?   | As noted in response to question 1.1, not all assets within a "hybrid facility" will be owned and operated by the one party. Defining a hybrid facility and creating a single participant category seems to assume this will be the case. This would have flow on impacts for the ability of SGAs and MASPs (soon to be DRSPs) to offer services independently of a customer's retailer. The rules should continue to allow flexibility for different parties to own/operate the assets. Similarly, any new rules should not hinder an SGA or DRSP's ability to use storage assets under those frameworks. So, while we do not necessarily oppose the introduction of new definitions, we do have concerns that doing so will restrict the flexibility of other market participant categories. |
| 2       | Bearing in mind that the two-sided market<br>reforms (as discussed in section<br>2.2.4) propose to move towards service-<br>based requirements (rather than technology-<br>based requirements), are there differences in<br>the nature of the services provided by or to<br>storage facilities that require these services to<br>be distinguished from generation and load? | No comment.  |
| Questic | on 5: AEMO's rationale for defining storage ar  | nd hybrids in the NER (p. 27)  |
| 1       | Do you have any comments on<br>AEMO's wording for its proposed<br>definitions of storage and hybrid facilities?   | No comment.  |
| Questio | Question 6: Alternative to AEMO's proposed solution to integration issues for storage (p. 29)   |  |
| 1       | In light of the alignment issues between<br>AEMO's rule change request and the direction<br>the ESB's two-sided market reforms are  | We support the move toward a two-sided market, and service-based definitions. However, the benefits of the latter should not be overstated. Further, it is not clear where or when the ESB's   |



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|         | taking, which of the following approaches do you support and why?   | two-sided markets work will land. Efforts to clarify the application of the existing rules should not be delayed to wait for an outcome on the ESB work.  |  |
|         | a. Waiting for the implementation of the two-sided market reforms to address the integration issues facing storage and hybrid facilities  | Ultimately, the ease with which someone can register in the NEM depends on the simplicity of the registration framework, over which AEMO already has a lot of control. In Enel X's view, the current registration process is costly, time consuming and administratively burdensome for both AEMO and participants. While some of this may be addressed by combining market participant categories and clarifying some aspects of the rules, much of it will still rely on AEMO's own                                   |  |
|         | <ul> <li>Introducing AEMO's rule change<br/>proposal as an interim step prior to the<br/>implementation of the two-sided<br/>market reforms</li> </ul>  | systems and processes. At the end of the day, prospective market participants need a registration framework that is clear, simple and cost-efficient. It is not clear that changes to the rules are needed to achieve this outcome.   |  |
|         | c. Implementing certain aspects of the<br>two-sided market reforms through this<br>rule change project, such as combining<br>the different types of market<br>participants and imposing obligations<br>based on services rather than assets |   |  |
|         | <ul> <li>Taking an alternative approach -<br/>please specify.</li> </ul>  |   |  |
| Chapter | <sup>·</sup> 3 – Registration issues for storage units and  | hybrid facilities   |  |
| Questio | Question 7: Understanding the interest in registering hybrid facilities and the challenges that exist (p. 35)   |   |  |
| 1       | Why would you consider aggregating different<br>technologies together in a hybrid<br>facility? Which technologies do<br>new participants propose to combine in hybrid<br>facilities?  | Many customer sites (indeed many residential premises) could be considered to be "hybrid facilities". Industrial and commercial sites are primarily energy users, but many have onsite generators (diesel, PV) and increasingly storage to help them address reliability issues or minimise electricity costs. Many of these assets can be configured to provide flexibility services to the grid (e.g. energy, FCAS, network support), independently of the customer's retailer and the customer's electricity supply. |  |



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| 2       | Are you considering using storage to minimise<br>causer-pays liabilities by balancing the output<br>of your units across multiple connection points<br>under the current NER? What are the<br>challenges of this approach? | No comment.  |
| 3       | Would you prefer to balance output and<br>consumption across multiple connection<br>points or combine technologies behind an<br>individual connection point?   | No comment.  |
| 4       | Are you considering aggregating renewable<br>plant and batteries together as a scheduled<br>generating unit under the current rules? What<br>regulatory challenges do you see with this<br>approach?                       | No comment.  |
| 5       | Do you consider that the lack of clarity in the<br>NER on whether different technologies can be<br>aggregated is a significant issue<br>for registering hybrid facilities? If so, why?                                     | No comment.  |
| Questio | on 8: Registration process issues (p. 36)  |  |
| 1       | What are your experiences with the current registration categories for storage projects and hybrid facilities?   | Enel X does not have experience connecting large scale storage assets, but we do apply to register as an SGA and/or MASP in "hybrid facilities". In general, AEMO's registration processes are costly, time consuming, and administratively archaic (e.g. require "wet" signatures). |
| 2       | Do you agree the existing approach imposes<br>high administrative and financial costs for<br>participants registering storage units and<br>hybrid facilities or create barriers to entry?                                  | See above comments.  |



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| 3       | Do you consider that the NER should set out<br>how participants with storage units and hybrid<br>facilities should register and participate in the<br>market, rather than AEMO guides? Or have<br>AEMO's guides and fact sheets now solved<br>the identified registration issues for storage<br>and hybrid facilities? | Given the above, we support any changes that will create a simple, cost-effective framework for registration for all market participant categories. Regarding storage specifically, it is not clear that this would need to be done through the rules. For example, it should already be possible to register a battery as both a customer and a generator, but have a single application form and only charge one application fee.   |
| 4       | Do you consider the registration issues AEMO<br>has raised in its rule change request will<br>become worse in the future if the current<br>NER are retained?   | No comment.   |
| 5       | Are there other registration issues for<br>intending participants with storage and hybrid<br>facilities that arise from the fact that the<br>NER do not fully consider these technologies,<br>which are not detailed in AEMO's rule<br>change?   | There is currently no ability for storage in the 5-30 MW range to apply for registration exemption (like other generators can). This should be consistent across all 'generation' types, regardless of technology.  |
| Questic | on 9: Issues with small storage units (p. 38)  |   |
| 1       | Do you agree that there is not sufficient clarity<br>regarding whether SGAs and other market<br>participants, can include small storage units in<br>their portfolios?  | We support the ability for SGAs to include storage units in their portfolio.<br>Given the 2016 rule change to clarify that storage is covered by the definition of generating unit,<br>Enel X's rule interpretation, which has been confirmed informally by AEMO, is that SGAs can<br>use a storage unit provided that it meets the definition of small generating unit, and the other<br>criteria of the SGA framework. However, storage is not referred to in AEMO's <i>Small generation</i><br><i>aggregators in the NEM</i> fact sheet, and SGAs are not referred to in its <i>Registering a battery</i><br><i>system in the NEM</i> fact sheet. Again, this is perhaps more easily clarified through amendments<br>to these documents than through a rule change process.<br>The rules define <i>small generating unit</i> as one that is <30MW and its owner/operator/controller<br>has been exempted from registration. Given the above AEMO-imposed restriction on storage in |



| Questions  |  | Feedback  |
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|  |  | the 5-30MW range applying for registration exemption (like other generating units can), the reality is that SGAs can only use <5MW storage assets in their portfolio. |
| Questic  | on 10: Proposed approach to registration cate  | gories and classifications (p. 43)  |
| 1  | Do you consider that AEMO's proposed<br>solution will make the registration process<br>simpler and less expensive for intending<br>participants seeking to classify storage units<br>and hybrid facilities?  | See above comments.   |
| 2  | In relation to the registration of hybrid<br>facilities, do you agree that the NER should<br>provide that participants cannot aggregate<br>units with different classifications or different<br>technology types (unless AEMO approves it<br>on a case-by-case basis)? | No comment.   |
| Questic  | Question 11: Registering pumped hydro facilities (p. 44)   |   |
| 1  | Do you support AEMO's proposed approach<br>to registration and classification for pumped<br>hydro facilities?  | No comment.   |
| 2  | Is a storage unit's ability to ramp linearly from<br>production to consumption the best way to<br>determine whether it should classify as a bi-<br>directional unit, or classify as a scheduled<br>generating unit and scheduled load?                                 | No comment.   |
| Question 12: Proposed approach for transitional arrangements (p. 44) |  |   |
| 1  | Would participants with storage that are<br>currently registered as a Market Generator   | No comment.   |



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|           | and Market Customer want to transition to<br>AEMO's new category and classification? If<br>so, what advantages would it offer?  |  |  |
| 2         | Should owners/operators of existing<br>standalone storage units be grandfathered,<br>i.e. permitted to remain on their current<br>registration and classification arrangements?   | No comment.  |  |
| Questic   | on 13: AEMO's solution to clarify what small u  | inits SGAs can aggregate (p. 45)   |  |
| 1         | Do you agree with AEMO's proposal to clarify<br>how an SGA can include storage<br>units in its portfolio?   | See response to question 9.1.  |  |
| 2         | Does AEMO's solution provide flexibility for an SGA to include DER, other than storage, that may have bi-directional energy flows?  | As noted in our response to question 9.1, it is not clear that this is a rules issue. But, flexibility is important. Allowing an SGA to include all types of DER in its portfolio would maximise its ability to participate in the energy market. Where possible, market frameworks should allow any technology to participate, provided it can deliver the service. |  |
| Questic   | on 14: Adding further registered participant ca   | ategories (p. 47)  |  |
| 1         | Is there a strong case to add a participant<br>category for storage or are there other<br>alternative solutions that could help to reduce<br>complexity?  | See above comments.  |  |
| Questio   | Question 15: Alternative solutions for registered participant categories (p. 48)  |  |  |
| 1         | Is AEMO's proposed rule the most efficient<br>and effective way to address the identified<br>issues relating to participant registration and<br>unit classification? Are there alternatives<br>or ways to potentially improve it? | See above comments.  |  |



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| Chapte  | Chapter 4 – Technical and operational challenges relating to utility scale storage and hybrid facilities   |             |  |
| Questio | on 16: Bidding in scheduled storage facilities   | (p. 54)     |  |
| 1       | How complex are the current arrangements<br>for bidding for a scheduled storage facility<br>compared to bidding for a scheduled<br>generator or load?                          | No comment. |  |
| 2       | If available and if you had storage facilities,<br>would you opt to change from the existing<br>arrangements to a single DUID model, with 10<br>price bands rather than 20?    | No comment. |  |
| Questio | on 17: Dispatch conflicts (p. 55)  |             |  |
| 1       | How often these conflicts occur in relation to<br>energy and FCAS, and how material are they<br>for the operators of scheduled storage units<br>and other market participants? | No comment. |  |
| 2       | To what extent can these conflicts be, or to<br>what extent have they already been,<br>remediated through experience and through<br>improved bidding systems?                  | No comment. |  |
| 3       | Would moving to a single DUID model be an appropriate and proportionate response?  | No comment. |  |



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| Questic   | Question 18: Aggregation and ramp rates (p. 57)  |             |
| 1         | What problems arise under the current arrangements in relation to the application of minimum ramp rates?   | No comment. |
| 2         | Do you agree with AEMO's proposal to rely on<br>the aggregation approach set out in Chapter 3<br>of the NER (rather than the one set out in<br>Chapter 2 of the NER)?  | No comment. |
| Questic   | on 19: Forecasting and energy availability (p.   | 60)         |
| 1         | Are there problems arising from energy-<br>limited plant not being reflected in forecasts?   | No comment. |
| 2         | Could this problem be addressed by requiring<br>storage facilities to provide<br>additional information on energy limits in their<br>bids, as proposed by AEMO?  | No comment. |
| Questic   | on 20: Performance standards (p. 62)   |             |
| 1         | Are the current rules unclear on how<br>performance standards should apply in<br>facilities with a mix of asset types? Do the<br>current rules create barriers for storage hybrid<br>facilities? To maintain power system security,<br>should AEMO have greater visibility of the<br>assets behind a connection point? | No comment. |



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| 2  | Could these challenges be mitigated by<br>having a single set of performance standards<br>for each asset, as proposed by AEMO?   | No comment.   |
| Chapte   | r 5 – Issues with fees and charges   |   |
| Questic  | on 21: Issues with how fees and charges, and   | non-energy costs are recovered (p. 69)  |
| 1  | Do you agree that there is an inconsistency<br>with how fees and charges and non-energy<br>costs are recovered from Market Participants?   | No comment.   |
| 2  | What is the impact of this issue? Does it create an uneven playing field and does it create (or has it the potential to create) perverse behaviours and outcomes?  | No comment.   |
| 3  | Do you consider the burden of costs will be<br>exacerbated as exempt generating units<br>increase behind the meter?  | No comment.   |
| 4  | Are there any other issues that the<br>Commission should consider with respective<br>to fees and charges, and non-energy cost<br>recovery?   | No comment.   |
| Question 22: Solutions for issues with fees and charged and non-energy cost recovery (p. 71) |  |   |
| 1  | Do stakeholders agree with AEMO's proposed<br>solution that MSGA and the proposed bi-<br>directional resource provider participant<br>categories should pay non-energy cost<br>recovery and NEM Participant fees and | No. Fees and charges for market participants should be based on whether the participant was a net generator or a net consumer over a period. This approach would reflect the participant's net impact on the network, and the need for services (FCAS, etc) to be procured. |



| Questions |  | Feedback   |
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|           | charges based on consumed and sent out<br>energy separately (as is the current practice<br>for a grid-scale battery registered as both a<br>Market Generator and Market Customer)?   |  |
| 2         | Will AEMO's proposed solution level the<br>'playing field' between existing grid-<br>scale batteries, MSGAs and participants<br>under the proposed new category bi-<br>directional resource provider? That is, will<br>AEMO proposed solution more efficiently<br>allocate fees and charges and non-energy<br>costs between these Market Participants<br>categories? | AEMO's proposed solution is not consistent across participant types. A broader review of how fees and charges are applied would be appropriate if a netting approach is not adopted.   |
| 3         | For hybrid facilities are further requirements<br>needed, for example, should each asset in a<br>hybrid facility be required to have a revenue<br>meter or is supervisory control and data<br>acquisition (SCADA) data appropriate?  | Metering and telemetry requirements at the asset level would only add cost and complexity for proponents, and it is not clear what the objective of requiring this is. Surely AEMO's primary concern (as the party responsible for power system security on the shared network) is what the net flows are at the grid/parent connection point, not how each asset on the site is operating. As with other comments, Enel X's response here is made in the context of smaller-scale batteries and assets connected at commercial and industrial sites (i.e. not large-scale, transmission-connected generation and storage).  |
| 4         | Are there practical or implementation issues<br>associated with charging MSGAs non-energy<br>costs and NEM Participant fees based on<br>consumed and sent out energy?  | As noted above, it is important to remember the possible configurations under the SGA framework. While there are direct-connected small generating units, with fees/charges calculated at its connection to the network, it's also possible to have a small generating unit (e.g. battery) connected at a child connection point behind a load. In this scenario, a retailer is the FRMP (Market Customer) at the parent connection point, while another party is the FRMP (SGA) at the child connection point. It is important not to double count and double charge for consumption at the child connection point, if fees/charges on that consumption will already be applied at the parent connection point. |



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| Questic   | Question 23: Alternative solutions for issues with fees and charges and non-energy costs recovery (p. 73)  |   |
| 1         | Do you consider it appropriate to recover non-<br>energy costs from Market Customers and<br>Market Generators in the same way AEMO<br>recovers costs form grid-scale batteries? That<br>is, should participant fees, charges and non-<br>energy costs for Market Generators and<br>Market Customers be calculated on energy<br>consumed and energy sent out separately,<br>not on netted energy as is the current<br>practice? | See above comments.   |
| 2         | If changes are made to how participants' fees,<br>charges and non-energy costs are recovered,<br>do you consider creating a new participation<br>category, bi-directional resource provider, is<br>the best way to do this? Or could it be<br>appropriate to make changes to existing<br>market participant categories to achieve the<br>same outcome?   | No comment.   |
| 3         | Do you consider that there are other changes<br>that could be made to Participant fees and<br>non-energy cost recovery that would create a<br>more consistent and level the playing field<br>across Participant categories?  | No comment.   |
| Questic   | Question 24: Issues with TUOS and DUOS charging arrangements (p. 76)   |   |
| 1         | Do you agree that there is ambiguity and uncertainty around how transmission and   | Yes there is ambiguity, and NSPs take different approaches to charging UOS for energy storage systems. As this issue has been debated for some time now, a clear policy direction and |



| Questions |   | Feedback  |  |
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|           | distribution network businesses calculate and charge TUOS and DUOS for battery systems?   | consistent approach across jurisdictions is likely to help storage proponents when making investment decisions. |  |
| 2         | Does this ambiguity and uncertainty create a<br>material issue for investment in battery<br>storage projects now, or in the future as the<br>number of energy storage projects increase<br>across the NEM?  | No comment.   |  |
| 3         | What are the pros and cons to allowing each<br>NSP discretion in developing and<br>applying TUOS and DUOS charges? On<br>balance, should the approach and method to<br>applying TUOS and DUOS charges be<br>harmonised among NSPs?  | No comment.   |  |
| 4         | Is there a regulatory risk when NSPs interpret<br>how to apply the current rules to battery<br>systems?   | No comment.   |  |
| Questic   | Question 25: Solutions for clarifying the application of TUOS and DUOS charging (p. 79)   |   |  |
| 1         | Do you agree with AEMO's proposal to<br>exempt all energy storage systems from<br>TUOS charges? If you agree with an<br>exemption, should the exemption<br>of TUOS charges also apply to energy used<br>on site (auxiliary load) i.e. energy that is not<br>stored and sent out into the network? | No comment.   |  |



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|         | If battery systems are exempt from TUOS charges does this:   |   |
| 2       | a. create a subsidy for battery technology<br>and therefore an advantage over other<br>generation technologies?  | No comment.   |
|         | <ul> <li>remove the ability to provide an<br/>efficient location and/or price signal to<br/>potential battery system proponents,<br/>and therefore impact on the efficient<br/>entry and location of new battery<br/>system participants?</li> </ul>                                     |   |
| 3       | <ul> <li>If battery systems are not exempt from TUOS charging does this:</li> <li>a. create double charging of TUOS /DUOS for end use customers?</li> <li>b. distort investment signals and not align with the need for significantly more storage investment across the NEM?</li> </ul> | No comment.   |
| 4       | How should TUOS and DUOS charges apply<br>to hybrid facilities? Should TUOS and DUOS<br>charges be based on metered data at the<br>network connection point, or another option?<br>Are there technical or implementation issues<br>with this?  | As noted in previous comments, not all assets within a hybrid facility will be owned by the same party, and there may be parent/child connection points. Care should be taken to make sure that any new arrangements do not double charge UOS charges at the parent and child connection points, for example if there is a load behind the parent connection point and a battery behind a child connection point. For simplicity, it would seem to make sense to calculate any use of system charges at the network (or parent) connection point. |
| 5       | Do you agree that battery systems should pay<br>DUOS charges for consumed energy? Please<br>explain why or why not.  | See response to question 25.1.  |



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| Questic   | Question 26: Alternative solutions for issues with TUOS and DUOS charging (p. 82)  |             |  |
| 1         | How would charging all Market Participants<br>TUOS and DUOS, based on the services<br>received by participants (energy<br>consumed) rather than based on the asset<br>type, impact participants' behaviour and<br>market outcomes? This would mean that all<br>Market Participants would be liable for<br>TUOS and DUOS charges for the energy that<br>is consumed at their network connection<br>point. | No comment. |  |
| 2         | If all Market Participants were charged TUOS<br>and DUOS, would this have any impact on<br>existing external arrangements?   | No comment. |  |
| 3         | Is a definition for storage technologies needed<br>to clarify TUOS and DUOS charging, or could<br>AEMO's proposed solution or an alternate<br>solution be implemented using the existing<br>Market Participant categories, such as a<br>scheduled load?  | No comment. |  |
| 4         | Are there technical issues or complications<br>with implementing AEMO's proposed solution<br>or an alternative solution?   | No comment. |  |
| 5         | Do stakeholders consider there is an<br>inconsistency in the approach NSPs use to<br>calculate network prices? If yes, would a more<br>harmonised approach to network pricing<br>provide clearer investment signals across the   | No comment. |  |



| Questions  |  | Feedback           |
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|  | NEM and reduce costs for battery system proponents?  |                    |
| 6  | Does the introduction of LMP and FTRs as<br>contemplated through transmission access<br>reform impact whether storage should face<br>TUOS?   | No comment.        |
| 7  | Are there any other approaches that could be<br>considered to address the issues raised by<br>AEMO?  | No comment.        |
| Chapte   | r 6 – Storage and hybrid integration drafting a  | and other issues   |
| Questic  | on 27: Technology specific drafting in the NEF   | R – issues (p. 88) |
| 1  | Are you concerned that the terms relating to<br>load and generation, or other terms in the<br>NER, are not sufficiently technologically<br>neutral? If so why?   | No comment.        |
| 1  | Do you consider key terms in the NER such<br>as 'generation' and 'load' are ambiguous when<br>applied to storage and hybrids? If so, why?  | No comment.        |
| Question 28: Technology specific drafting in the NER – proposed solution (p. 91) |  |                    |
| 1  | Would AEMO's proposed changes to these<br>key terms in the NER assist with the effective<br>integration of storage and hybrids in the NER?<br>Are there other terms or definitions that are<br>more appropriate than those suggested by<br>AEMO? | No comment.        |



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| 2   | Do you think the benefits of this proposed<br>drafting solution would likely outweigh the<br>costs, given the scale of the changes?   | No comment.               |
| 3   | Would changes to these fundamental terms in<br>the NER affect related external documents<br>such as contracts, procedures and guidelines<br>(other than AEMO's), and if so would the<br>changes cause you to incur costs or other<br>difficulties? What implementation period<br>would be needed to address these issues? | No comment.               |
| Questic   | on 29: Technology specific drafting in the NEF  | R – other options (p. 91) |
| 1   | Are there other terms and definitions in the NER that are not sufficiently technology neutral?  | No comment.               |
| 2   | What are some other drafting approaches<br>which could be used to make the NER more<br>technology neutral?  | No comment.               |
| Question 30: Intervention compensation – issues (p. 97) |   |                           |
| 1   | What other specific issues relating to storage<br>and hybrid assets need to be considered in<br>formulating appropriate intervention<br>compensation arrangements?  | No comment.               |
| 2   | Are the current arrangements for applying the<br>market suspension framework and<br>administered price period compensation<br>framework to storage and hybrid appropriate   | No comment.               |



| Questio | ns  | Feedback    |
|---------|---|-------------|
|         | in light of the increasing numbers of these facilities in the NEM? If not, what changes do you consider are required?   |             |
| 3       | Should changes be made to clause 3.15.7B to create consistency with the existing definition of direct participant and address the omission of scheduled loads?  | No comment. |
| Questio | on 31: Intervention compensation – solutions  | (p. 97)     |
| 1       | Do you consider that a separate<br>compensation framework should be<br>developed for storage and hybrid assets, or<br>should they continue to be compensated in<br>line with existing intervention compensation<br>frameworks in order to minimise market<br>distortions, subject to the amendments<br>currently under consideration? | No comment. |
| 2       | If you consider a separate compensation<br>framework should be developed, how should<br>it differ from the existing frameworks?   | No comment. |
| 3       | If you consider that the current frameworks<br>should continue to apply to storage and hybrid<br>assets, are any additional amendments<br>required?   | No comment. |
| Questio | Question 32: RRO – issues (p. 100)  |             |
| 1       | Is it appropriate for the electricity imported from the grid for the purposes of energy   | No comment. |



| Questio   | ns   | Feedback    |  |
|---|--|-------------|--|
|   | storage to form part of a liable entity's liable load under the RRO?   |             |  |
| 2   | Should operators of storage assets be liable entities under the RRO?   | No comment. |  |
| Questic   | on 33: RRO – solutions (p. 100)  |             |  |
| 1   | Do stakeholders agree with AEMO that the<br>RRO should apply to storage only when the<br>storage system is co-located with a separate<br>load in a hybrid facility (this does not refer to<br>the battery's own load)? | No comment. |  |
| 2   | Would alternative or additional changes to the application of the RRO to load for storage be more appropriate?   | No comment. |  |
| Questic   | Question 34: RRO – storage contribution to reliability issues (p. 101)   |             |  |
| 1   | What are your views on the issues which relate to whether or not storage contribute to reliability issues?   | No comment. |  |
| 2   | Are there any other issues to consider when<br>evaluating the treatment of load used<br>for storage under the RRO?   | No comment. |  |
| Question 35: RRO – implementation issues (p. 101) |  |             |  |
| 1   | Should RRO liabilities for hybrid facilities continue be calculated at the connection point? If not, where?  | No comment. |  |



| Questions  |   | Feedback    |
|--|---|-------------|
| Questic  | Question 36: RRO – other options (p. 102)   |             |
| 1  | Can the issues (if any) related to the<br>application of the RRO to storage and<br>hybrids be resolved without establishing a<br>new market participant category for these<br>facilities?   | No comment. |
| Questic  | on 37: Marginal loss factors – issues (p. 103)  |             |
| 1  | Are the current arrangements for calculating<br>and applying MLFs to storage and hybrids<br>appropriate in light of the increasing numbers<br>of these facilities in the NEM? If not, what<br>changes do you consider are required?   | No comment. |
| Questic  | on 38: Marginal loss factors – solution (p. 103)  | )           |
| 1  | Do you agree with AEMO's proposed solution<br>of applying the existing<br>arrangements for applying MLFs to<br>its proposed new market participant<br>category (if this category were to be<br>established)?                          | No comment. |
| Question 39: Reliability Panel representation (p. 104) |   |             |
| 1  | Is it appropriate to require that the Reliability<br>Panel include a member to specifically<br>represent storage and hybrid asset<br>proponents, or are the current mandatory and<br>discretionary membership provisions<br>adequate? | No comment. |



| Questions  |  | Feedback    |  |
|--|--|-------------|--|
| Questio  | Question 40: Other drafting issues – issues (p. 106)   |             |  |
| 1  | Do you consider it appropriate to<br>address these additional drafting issues<br>identified by AEMO in the course of this rule<br>change process?  | No comment. |  |
| 2  | Are there any other issues similar to those<br>presented in Table 6.3 which have not been<br>identified by AEMO, which you consider<br>should be addressed in the course of this rule<br>change process? | No comment. |  |
| Question 41: Other drafting issues – solution (p. 108) |  |             |  |
| 1  | Do these solutions proposed by AEMO in 6.3<br>effectively resolve the issues identified in<br>6.2? If not, what solution would be preferable?  | No comment. |  |