15 October 2020

Merryn York
Chair
Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

Dear Merryn

Re: National electricity amendment (integrating energy storage systems into the NEM) rule

CitiPower, Powercor and United Energy welcome the opportunity to respond to Australian Energy Market Commission's (AEMC) consultation paper on integrating storage systems into the National Electricity Market (NEM).

We are alive to, and supportive of, the transition currently underway in the NEM, including the growth of distributed energy resources (DER), the uptake of energy storage, and the expected uptake of electric vehicles. We note that the National Electricity Rules (NER) is currently being applied to technologies and situations it was not intended to cover. We support amending the NER to future-proof the NEM, enabling the facilitation and uptake of storage and new technologies in line with our customer's expectations.

We support the changes proposed in the consultation paper as we believe they will assist in accommodating the uptake of storage in the NEM. We do however wish to make the following points:

- we support defining storage and hybrid facilities as a means to address issues stemming from a lack of these definitions
- setting performance standards for storage will be crucial to ensuring that large amounts of storage coming online does not undermine the safety and reliability of the distribution network
- we propose to exempt customers with generation and storage facilities from network tariffs where they have signed a contract with us which stipulates there is no other load at the site, and that the generator or battery will be operated for the net benefit of our customers. We consider this is a fair and practical solution to charging for storage.

These matters are discussed below, and further at Appendix A.

1. Defining storage and hybrid facilities is necessary to facilitate the uptake of storage

We agree with AEMO that the current lack of definition in the NER for storage and hybrid facilities will cause issues going forward as energy storage takes a bigger role in the future NEM. The lack of definition means that there is currently no basis in the NER to apply storage-specific obligations. The current treatment of storage as both "load" and "generation" is problematic for a variety of reasons as outlined in the Consultation Paper, all of which we agree with. The future market is going to rely more heavily on storage and as such we agree with AEMO that addressing these issues now is appropriate.

For more detail on our support for definition storage and hybrid facilities, please see Questions 2 and 4 at Appendix A.

2. Performance standards

The current performance standards are unclear for all asset types. Performance standards currently only consider single facilities operating with a single purpose (i.e. generation or load). We support both AEMO and DNSPs having greater visibility of assets, and performance behind the connection point.

We suggest it would be appropriate for performance standards to be developed which cover performance of the hybrid system as a whole at the connection point, and cover subsets of performance for each type of storage or the generating unit at the unit level. This is preferable to having a single set of performance standards at a point of connection, given the wide variety of hybrid systems coming online. A single set of standards could be open to a wide range of interpretations and as such, we recommend developing a more comprehensive set of standards. We would be willing to engage in the development of such performance standards in the future.

Further, any performance standards developed must specifically consider setting maximum ramp rates that enable storage and hybrid facilities to meet their network performance obligations on an ongoing basis. This would mitigate the risk of aggregating small units under the current framework leading to very high minimum ramp rates, which could detrimentally impact security and quality of supply to other customers at the distribution level.

For more detail on our positions on performance standards and ramp rates, please see Question 20 at Appendix A.

3. Application of network charges

We note there is no consensus as to how best charge for storage. Our businesses propose an approach to charging distribution use of system (DUOS) charges for storage systems which we consider pragmatic and for the benefit of all customers.

Our proposed approach involves exempting customers from DUOS in certain circumstances. Customers with generation facilities or batteries will be exempt from DUOS if the customer has a signed contract with CitiPower, Powercor or United Energy to this effect. CitiPower, Powercor or United Energy would only enter into such a contract if:

- there is no other load at the site other than load associated with the generation facility or battery
- the contract provides CitiPower, Powercor or United Energy with assurance that the generator or battery will be operated to the net benefit of the grid

With regards to avoided TUOS payments, we propose to waive the network charge where a customer is eligible for avoided TUOS, satisfies the above criteria and waive their right to receive avoided TUOS.

Our approach to charging for storage therefore is focused on delivering benefit to customers. Our priority is ensuring that the uptake of storage has a positive impact for our customers.

Please see Appendix A below for answers to several of the consultation questions.

Should you have any queries, please contact Amber Wilkie on 0410 131 244 or awilkie@powercor.com.au.

Yours sincerely,

Brent Cleeve
Head of Regulation
CitiPower, Powercor and United Energy

Appendix A – stakeholder feedback template

Questions		Feedback
Chapter 1 – Introduction		
Question 1: Proposed assessment framework (p. 5)		
1	Do you agree with the proposed assessment framework or are there any additional assessment criteria the Commission should use when assessing identified issues and possible solutions?	
Chapter 2 – The threshold question: should storage be defined in the NER?		
Question 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 currently significant issues for storage units and hybrid facilities being caused by the rules not including a storage definition? Why, or why not?	We agree that the lack of definition in the NER for storage and hybrid facilities will cause issues going forward. The treatment of storage as both "load" and "generation" causes issues with storage registering and participating in the NEM under the existing regulatory framework, meaning that storage specific obligations in the NER cannot be introduced or clarified. If a definition of storage and hybrid facilities was introduced, it would be beneficial to impose storage-specific performance standards. Further, it would allow for charging arrangements for storage and hybrids to be clarified.
2	Has AEMO identified all the current issues for storage and hybrid facilities that arise from its primary issue that the NER does not recognise and adequately define storage? If not, what are the other issues?	We consider that all issues stemming from the current lack of definition of storage and hybrid facilities have been covered in AEMO's rule change request.
Question 3: Implications for storage forecasts (p. 21)		

Questions		Feedback
1	Do you agree that storage and hybrid facilities are likely to play a significant role in the future market? If so, do you agree that this indicates that the issues AEMO has identified in its rule change request, arising from the current treatment of storage under the NER, are likely to become worse over time? Why, or why not?	We agree that storage and hybrids will play a significant role in the future market. We note that a Distribution System Operator (DSO) is needed to manage issues around growth in grid-scale storage.
Question 4: AEMO's rationale for defining storage and hybrids in the NER (p. 25)		
1	Do you agree with AEMO that there is a strong rationale for defining storage and hybrid facilities in the NER (as different to load and generation)? Why or why not?	Yes, we agree that storage and hybrid facilities should be defined in the NER separately. Currently for larger scale generation connections, addition of storage either requires a separate connection point from the generating system or for the proponent to create an embedded network within which to operate generation and storage. In some cases this has forced generators to become a network service provider (NSP) to operate both generation and storage in a manner appropriate for their needs and their location. Separate definitions also allow both NSPs and AEMO to more accurately record the performance and network impacts of bi-directional facilities compared to separate load and generation sites.
2	Bearing in mind that the two-sided market reforms (as discussed in section 2.2.4) propose to move towards service-based requirements (rather than technology-based requirements), are there differences in the nature of the services provided by or to storage facilities that require these services to be distinguished from generation and load?	
Question 5: AEMO's rationale for defining storage and hybrids in the NER (p. 27)		

Questions		Feedback
1	Do you have any comments on AEMO's wording for its proposed definitions of storage and hybrid facilities?	We support the proposed definitions of storage and hybrid facilities.
Question 6: Alternative to AEMO's proposed solution to integration issues for storage (p. 29)		
1	In light of the alignment issues between AEMO's rule change request and the direction the ESB's two-sided market reforms are taking, which of the following approaches do you support and why? a. Waiting for the implementation of the two-sided market reforms to address the integration issues facing storage and hybrid facilities b. Introducing AEMO's rule change proposal as an interim step prior to the implementation of the two-sided market reforms c. Implementing certain aspects of the two-sided market reforms through this rule change project, such as combining the different types of market participants and imposing obligations based on services rather than assets d. Taking an alternative approach - please specify.	Approach B seems the most sensible, as it will allow issues arising in this consultation to be managed concurrently with issues arising out of the two-sided market reforms.

Questions		Feedback
Chapter 3 – Registration issues for storage units and hybrid facilities		
Question 7: Understanding the interest in registering hybrid facilities and the challenges that exist (p. 35)		
1	Why would you consider aggregating different technologies together in a hybrid facility? Which technologies do new participants propose to combine in hybrid facilities?	
2	Are you considering using storage to minimise causer-pays liabilities by balancing the output of your units across multiple connection points under the current NER? What are the challenges of this approach?	
3	Would you prefer to balance output and consumption across multiple connection points or combine technologies behind an individual connection point?	In order to address network constraints either from increased demand or generation above equipment ratings, NSPs may seek forms of non-network solutions that balance multiple energy use across multiple connections points. While this would not be a process NSPs would engage in directly, we may seek it as a network support service.
4	Are you considering aggregating renewable plant and batteries together as a scheduled generating unit under the current rules? What regulatory challenges do you see with this approach?	
5	Do you consider that the lack of clarity in the NER on whether different technologies can be aggregated is a significant issue for registering hybrid facilities? If so, why?	
Question 8: Registration process issues (p. 36)		

Questions		Feedback
1	What are your experiences with the current registration categories for storage projects and hybrid facilities?	We agree that the NER is currently being applied for technologies and situations it was not intended to cover. In registration this leads to a higher workload for NSPs and AEMO in assessing proposed connections and their impact. It creates performance standards that are less onerous and less clear for energy consumption as oppose to generation. This risks inconsistent application of processes across jurisdictions.
2	Do you agree the existing approach imposes high administrative and financial costs for participants registering storage units and hybrid facilities or create barriers to entry?	
3	Do you consider that the NER should set out how participants with storage units and hybrid facilities should register and participate in the market, rather than AEMO guides? Or have AEMO's guides and fact sheets now solved the identified registration issues for storage and hybrid facilities?	The core principles of how participants with storage units and hybrids participate in the market should be defined in the NER, however AEMO should still have the flexibility to create guides to cover the intricacies of registration. Our experience with generation connections has shown us that nuances arise from different technologies, and these should be able to be addressed quickly through an updated release by AEMO rather than through a more formal rule change.
4	Do you consider the registration issues AEMO has raised in its rule change request will become worse in the future if the current NER are retained?	
5	Are there other registration issues for intending participants with storage and hybrid facilities that arise from the fact that the NER do not fully consider these technologies, which are not detailed in AEMO's rule change?	

Questions		Feedback
Question 9: Issues with small storage units (p. 38)		
1	Do you agree that there is not sufficient clarity regarding whether SGAs and other market participants, can include small storage units in their portfolios?	We consider that any changes to requirements for SGAs need to include the development of mandatory standards and operating envelopes for small storage connected to the distribution network. We suggest that industry standards may be required which set limits on operation of small scale units. The above limits may not resolve all constraints that can adversely impact customers including thermal constraints. We therefore consider that visibility of the low-voltage network with dynamic controls of the small storages are vital in ensuring that these devices are allowed to partake in the market, but also within the capability of the network. Moreover, any SGA that can include small storage units in their portfolios shall define the services that they intend to provide. We consider that all services to be provided by SGAs are technically feasible and adhere to terms/conditions/agreements.
Question 10: Proposed approach to registration categories and classifications (p. 43)		
1	Do you consider that AEMO's proposed solution will make the registration process simpler and less expensive for intending participants seeking to classify storage units and hybrid facilities?	
2	In relation to the registration of hybrid facilities, do you agree that the NER should provide that participants cannot aggregate units with different classifications or different technology types (unless AEMO approves it on a case-by-case basis)?	In the short term, as the industry and AEMO build experience this will be prudent. However, creating the case by case option will increase assessment timelines for AEMO and we would like to see the rational by which AEMO makes the any approval consulted upon with NSPs before any process comes into force.
Question 11: Registering pumped hydro facilities (p. 44)		

Questions		Feedback
1	Do you support AEMO's proposed approach to registration and classification for pumped hydro facilities?	
2	Is a storage unit's ability to ramp linearly from production to consumption the best way to determine whether it should classify as a bi-directional unit, or classify as a scheduled generating unit and scheduled load?	
Question 12: Proposed approach for transitional arrangements (p. 44)		
1	Would participants with storage that are currently registered as a Market Generator and Market Customer want to transition to AEMO's new category and classification? If so, what advantages would it offer?	
2	Should owners/operators of existing standalone storage units be grandfathered, i.e. permitted to remain on their current registration and classification arrangements?	
Question 13: AEMO's solution to clarify what small units SGAs can aggregate (p. 45)		
1	Do you agree with AEMO's proposal to clarify how an SGA can include storage units in its portfolio?	Yes, we support clarifying this as we consider it will increase transparency and certainty for SGAs**.**
2	Does AEMO's solution provide flexibility for an SGA to include DER, other than storage, that may have bi-directional energy flows?	

Questions		Feedback
Question 14: Adding further registered participant categories (p. 47)		
1	Is there a strong case to add a participant category for storage or are there other alternative solutions that could help to reduce complexity?	
Question 15: Alternative solutions for registered participant categories (p. 48)		
1	Is AEMO's proposed rule the most efficient and effective way to address the identified issues relating to participant registration and unit classification? Are there alternatives or ways to potentially improve it?	
Chapter 4 – Technical and operational challenges relating to utility scale storage and hybrid facilities		
Question 16: Bidding in scheduled storage facilities (p. 54)		
1	How complex are the current arrangements for bidding for a scheduled storage facility compared to bidding for a scheduled generator or load?	
2	If available and if you had storage facilities, would you opt to change from the existing arrangements to a single DUID model, with 10 price bands rather than 20?	
Question 17: Dispatch conflicts (p. 55)		
1	How often these conflicts occur in relation to energy and FCAS, and how material are they	

Questions		Feedback
	for the operators of scheduled storage units and other market participants?	
2	To what extent can these conflicts be, or to what extent have they already been, remediated through experience and through improved bidding systems?	
3	Would moving to a single DUID model be an appropriate and proportionate response?	
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?	We agree that the aggregation of small units under the current framework would result in very high minimum ramp rates, with the potential for detriment to security and quality of supply to other customers especially at a distribution level. While network impact should be taken into account in the development of performance standards we consider that specific consideration should also be given to setting maximum ramp rates that enable storage or hybrid facilities to meet their network performance obligations on an ongoing basis. Traditionally, frequency control ancillary services (FCAS) in the NEM has been provided by transmission connected large scale plant where participation in those markets does not risk operation outside of their generator performance standards or detriment to the network. While small scale storage and DER facilities are increasingly able to provide FCAS, where this is considered on pre-existing sites as part of later aggregation, it presents a risk to distribution networks. Setting maximum ramp rates as part of the connection standards would reduce this risk although, in some locations, this may effectively prevent meaningful participation in some markets.
2	Do you agree with AEMO's proposal to rely on the aggregation approach set out in Chapter 3 of the NER (rather than the one set out in Chapter 2 of the NER)?	

Questions		Feedback
Question 19: Forecasting and energy availability (p. 60)		
1	Are there problems arising from energy-limited plant not being reflected in forecasts?	
2	Could this problem be addressed by requiring storage facilities to provide additional information on energy limits in their bids, as proposed by AEMO?	
Question 20: Performance standards (p. 62)		
1	Are the current rules unclear on how performance standards should apply in facilities with a mix of asset types? Do the current rules create barriers for storage and hybrid facilities? To maintain power system security, should AEMO have greater visibility of the assets behind a connection point?	Yes, we consider that the current rules are unclear for all asset types. Very broadly, performance standards currently only consider single facilities operating with a single purpose (i.e. generation or load). With hybrid facilities being proposed more often this either requires dedicated separate connection points, at which to base separate performance standards. Another option is a method that ensures performance standards are relevant to the individual assets that make up any hybrid facility. To this end we support both AEMO and/or NSPs having greater visibility of assets, and performance behind the connection point.
2	Could these challenges be mitigated by having a single set of performance standards for each asset, as proposed by AEMO?	A single set of performance standards at a point of connection may be hard to develop given the wide variety of hybrid systems it is possible to implement. This could leave application of hybrid system performance standards open to a diverse range of interpretations. Given that the overall hybrid system, as with a generating system, dictates performance at a connection point, it would seem prudent to have performance standards which cover both performance of the hybrid system as a whole at the connection point, and also covers subsets of performance for each type of storage or generating unit at the unit level.
Chapter 5 – Issues with fees and charges		

Questions		Feedback
Question 21: Issues with how fees and charges, and non-energy costs are recovered (p. 69)		
1	Do you agree that there is an inconsistency with how fees and charges and non-energy costs are recovered from Market Participants?	
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?	
3	Do you consider the burden of costs will be exacerbated as exempt generating units increase behind the meter?	
4	Are there any other issues that the Commission should consider with respective to fees and charges, and non-energy cost recovery?	
Question 22: Solutions for issues with fees and charged and non-energy cost recovery (p. 71)		
1	Do stakeholders agree with AEMO's proposed solution that MSGA and the proposed bi-directional resource provider participant categories should pay non-energy cost recovery and NEM Participant fees and charges based on consumed and sent out energy separately (as is the current practice for a grid-scale battery registered as both a Market Generator and Market Customer)?	

Questions		Feedback
2	Will AEMO's proposed solution level the 'playing field' between existing grid-scale batteries, MSGAs and participants under the proposed new category bi-directional resource provider? That is, will AEMO proposed solution more efficiently allocate fees and charges and non-energy costs between these Market Participants categories?	
3	For hybrid facilities are further requirements needed, for example, should each asset in a hybrid facility be required to have a revenue meter or is supervisory control and data acquisition (SCADA) data appropriate?	
4	Are there practical or implementation issues associated with charging MSGAs non-energy costs and NEM Participant fees based on consumed and sent out energy?	
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-energy costs from Market Customers and Market Generators in the same way AEMO recovers costs form grid-scale batteries? That is, should participant fees, charges and non-energy costs for Market Generators and Market Customers be calculated on energy consumed and energy sent out separately, not on netted energy as is the current practice?	

Questions		Feedback
2	If changes are made to how participants' fees, charges and non-energy costs are recovered, do you consider creating a new participation category, bi-directional resource provider, is the best way to do this? Or could it be appropriate to make changes to existing market participant categories to achieve the same outcome?	
3	Do you consider that there are other changes that could be made to Participant fees and non-energy cost recovery that would create a more consistent and level the playing field across Participant categories?	
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 distribution network businesses calculate and charge TUOS and DUOS for battery systems?	We agree there is ambiguity around how different distributors charge for storage. However, we are comfortable with our proposed charging approach, as outlined at section 3 of our letter. Our approach prioritises customers and will exempt storage from DUOS where the storage facility will be operated to the net benefit of our customers, where there's no other load at the site.
2	Does this ambiguity and uncertainty create a material issue for investment in battery storage projects now, or in the future as the number of energy storage projects increase across the NEM?	
3	What are the pros and cons to allowing each NSP discretion in developing and applying TUOS and DUOS charges? On balance, should the approach and method to	We consider that individual distributors should be able to develop their own approach to charging for storage.

Questions		Feedback
	applying TUOS and DUOS charges be harmonised among NSPs?	
4	Is there a regulatory risk when NSPs interpret how to apply the current rules to battery systems?	
Question 25: Solutions for clarifying the application of TUOS and DUOS charging (p. 79)		
1	Do you agree with AEMO's proposal to exempt all energy storage systems from TUOS charges? If you agree with an exemption, should the exemption of TUOS charges also apply to energy used on site (auxiliary load) i.e. energy that is not stored and sent out into the network?	AEMO may wish to exempt some energy storage systems from TUOS charges if those systems operate for the benefit of transmission system and if this condition is stipulated in their connection agreement. The exemption shouldn't apply on ancillary load.
2	If battery systems are exempt from TUOS charges does this: a. create a subsidy for battery technology and therefore an advantage over other generation technologies? b. remove the ability to provide an efficient location and/or price signal to potential battery system proponents, and therefore impact on the efficient entry and location of new battery system participants?	Yes, it can create subsidy to the storage system and gaming of the current arrangements. We are operating under the revenue cap, so if we exempt battery from the network tariff, that 'lost' revenue would be recovered through other customers (potentially mums and dads). It is different when we have a contract with the battery to exempt them from network tariff because it is expected that they will provide benefit to our customers in return.
3	If battery systems are not exempt from TUOS charging does this:	

Questions		Feedback
	a. create double charging of TUOS /DUOS for end use customers? b. distort investment signals and not align with the need for significantly more storage investment across the NEM?	
4	How should TUOS and DUOS charges apply to hybrid facilities? Should TUOS and DUOS charges be based on metered data at the network connection point, or another option? Are there technical or implementation issues with this?	TUOS and DUOS charges should be applied to hybrid facilities the same as any other load and export customer unless they have an exemption connection agreement with DNSPs or TNSPs. TUOS and DUOS charges should be based on metered data at the network connection point.
5	Do you agree that battery systems should pay DUOS charges for consumed energy? Please explain why or why not.	If a battery imports energy, they should be treated equally to any other customer who consumed energy to avoid cross subsidisation.
Question 26: Alternative solutions for issues with TUOS and DUOS charging (p. 82)		
1	How would charging all Market Participants TUOS and DUOS, based on the services received by participants (energy consumed) rather than based on the asset type, impact participants' behaviour and market outcomes? This would mean that all Market Participants would be liable for TUOS and DUOS charges for the energy that is consumed at their network connection point.	

Questions		Feedback
2	If all Market Participants were charged TUOS and DUOS, would this have any impact on existing external arrangements?	
3	Is a definition for storage technologies needed to clarify TUOS and DUOS charging, or could AEMO's proposed solution or an alternate solution be implemented using the existing Market Participant categories, such as a scheduled load?	
4	Are there technical issues or complications with implementing AEMO's proposed solution or an alternative solution?	
5	Do stakeholders consider there is an inconsistency in the approach NSPs use to calculate network prices? If yes, would a more harmonised approach to network pricing provide clearer investment signals across the NEM and reduce costs for battery system proponents?	It is our understanding that other distributors intend to charge batteries in the same manner as we propose to. Like us, they plan to treat batteries like any other customer that will incur network costs of their import energy. Further, they plan to adopt a similar approach to us whereby they will exempt a battery from a network tariff under a contract which agrees to conditions.
6	Does the introduction of LMP and FTRs as contemplated through transmission access reform impact whether storage should face TUOS?	
7	Are there any other approaches that could be considered to address the issues raised by AEMO?	
Chapter 6 – Storage and hybrid integration drafting and other issues		

Questions		Feedback
Question 27: Technology specific drafting in the NER – issues (p. 88)		
1	Are you concerned that the terms relating to load and generation, or other terms in the NER, are not sufficiently technologically neutral? If so why?	We support the change of terms proposed, and addition of the 'Bi-directional' category, although we note that the work to integrate this into the NER technical chapters will require detailed drafting and consultation with NSPs, participants and the broader industry. Given the broad range of possible hybrid systems a 'one size fits all' approach will be limited. We believe the NER is technologically neutral and we are not concerned about this issue.
1	Do you consider key terms in the NER such as 'generation' and 'load' are ambiguous when applied to storage and hybrids? If so, why?	Yes these terms are not fully reflective especially where storage or hybrids could rapidly transition from exporting to importing energy. Further consideration will need to be given when changing Chapter 5 specifically.
Question 28: Technology specific drafting in the NER – proposed solution (p. 91)		
1	Would AEMO's proposed changes to these key terms in the NER assist with the effective integration of storage and hybrids in the NER? Are there other terms or definitions that are more appropriate than those suggested by AEMO?	
2	Do you think the benefits of this proposed drafting solution would likely outweigh the costs, given the scale of the changes?	
3	Would changes to these fundamental terms in the NER affect related external documents such as contracts, procedures and guidelines (other than AEMO's), and if so would the changes cause you to incur costs or other	

Questions		Feedback
	difficulties? What implementation period would be needed to address these issues?	
Question 29: Technology specific drafting in the NER – other options (p. 91)		
1	Are there other terms and definitions in the NER that are not sufficiently technology neutral?	
2	What are some other drafting approaches which could be used to make the NER more technology neutral?	
Question 30: Intervention compensation – issues (p. 97)		
1	What other specific issues relating to storage and hybrid assets need to be considered in formulating appropriate intervention compensation arrangements?	
2	Are the current arrangements for applying the market suspension framework and administered price period compensation framework to storage and hybrid appropriate 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?	

Questions		Feedback
Question 31: Intervention compensation – solutions (p. 97)		
1	Do you consider that a separate compensation framework should be developed for storage and hybrid assets, or should they continue to be compensated in line with existing intervention compensation frameworks in order to minimise market distortions, subject to the amendments currently under consideration?	
2	If you consider a separate compensation framework should be developed, how should it differ from the existing frameworks?	
3	If you consider that the current frameworks should continue to apply to storage and hybrid assets, are any additional amendments required?	
Question 32: RRO – issues (p. 100)		
1	Is it appropriate for the electricity imported from the grid for the purposes of energy 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?	
Question 33: RRO – solutions (p. 100)		

Questions		Feedback
1	Do stakeholders agree with AEMO that the RRO should apply to storage only when the storage system is co-located with a separate load in a hybrid facility (this does not refer to the battery's own load)?	
2	Would alternative or additional changes to the application of the RRO to load for storage be more appropriate?	
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?	
2	Are there any other issues to consider when evaluating the treatment of load used for storage under the RRO?	
Question 35: RRO – implementation issues (p. 101)		
1	Should RRO liabilities for hybrid facilities continue be calculated at the connection point? If not, where?	
Question 36: RRO – other options (p. 102)		
1	Can the issues (if any) related to the application of the RRO to storage and hybrids be resolved without establishing a new market participant category for these facilities?	

Questions		Feedback
Question 37: Marginal loss factors – issues (p. 103)		
1	Are the current arrangements for calculating and applying MLFs to storage and hybrids appropriate in light of the increasing numbers of these facilities in the NEM? If not, what changes do you consider are required?	
Question 38: Marginal loss factors – solution (p. 103)		
1	Do you agree with AEMO's proposed solution of applying the existing arrangements for applying MLFs to its proposed new market participant category (if this category were to be established)?	
Question 39: Reliability Panel representation (p. 104)		
1	Is it appropriate to require that the Reliability Panel include a member to specifically represent storage and hybrid asset proponents, or are the current mandatory and discretionary membership provisions adequate?	
Question 40: Other drafting issues – issues (p. 106)		
1	Do you consider it appropriate to address these additional drafting issues identified by AEMO in the course of this rule change process?	

Questions		Feedback
2	Are there any other issues similar to those presented in Table 6.3 which have not been identified by AEMO, which you consider should be addressed in the course of this rule change process?	
Question 41: Other drafting issues – solution (p. 108)		
1	Do these solutions proposed by AEMO in 6.3 effectively resolve the issues identified in 6.2? If not, what solution would be preferable?	