

Workgroup Consultation Response Proforma**CMP393: Using Imports and Exports to Calculate Annual Load Factor for Electricity Storage**

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses to cusc.team@nationalgrideso.com by **5pm** on **02 June 2023**. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration.

If you have any queries on the content of this consultation, please contact jessica.rivalland@nationalgrideso.com or cusc.team@nationalgrideso.com

Respondent details	Please enter your details	
Respondent name:	Damian Clough	
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Which best describes your organisation?	<input type="checkbox"/> Consumer body <input type="checkbox"/> Demand <input type="checkbox"/> Distribution Network <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Generator <input type="checkbox"/> Industry body	<input type="checkbox"/> Interconnector <input type="checkbox"/> Storage <input type="checkbox"/> Supplier <input type="checkbox"/> Transmission Owner <input type="checkbox"/> Virtual Lead Party <input type="checkbox"/> Other

I wish my response to be:

(Please mark the relevant box)

☒ Non-Confidential☐ Confidential

Note: A confidential response will be disclosed to the Authority in full but, unless agreed otherwise, will not be shared with the Panel or the industry and may therefore not influence the debate to the same extent as a non-confidential response.

For reference the Applicable CUSC (charging) Objectives are:

- That compliance with the use of system charging methodology facilitates effective competition in the generation and supply of electricity and (so far as is consistent therewith) facilitates competition in the sale, distribution and purchase of electricity;*
- That compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard licence condition C26 requirements of a connect and manage connection);*

- c. *That, so far as is consistent with sub-paragraphs (a) and (b), the use of system charging methodology, as far as is reasonably practicable, properly takes account of the developments in transmission licensees' transmission businesses;*
- d. *Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency *; and*
- e. *Promoting efficiency in the implementation and administration of the system charging methodology.*

**The Electricity Regulation referred to in objective (d) is Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (recast) as it has effect immediately before IP completion day as read with the modifications set out in the SI 2020/1006.*

Please express your views in the right-hand side of the table below, including your rationale.

Standard Workgroup Consultation questions		
1	Do you believe that the Original Proposal facilitates the Applicable Objectives?	<p>Mark the Objectives which you believe the Original Solution facilitates:</p> <p>Original <input checked="" type="checkbox"/>A <input checked="" type="checkbox"/>B <input type="checkbox"/>C <input type="checkbox"/>D <input type="checkbox"/>E <input type="checkbox"/>F <input type="checkbox"/>G</p> <p>Overall Positive: Whilst we agree that the current locational signals for Storage do not accurately reflect the costs that Storage imposes on the system from a Generation and Constraint (exporting) perspective; or the benefits they bring to the system from a Demand (importing) perspective, combining the two load factors to offset each other, although this does better align the Generation locational signal with what we feel is the actual impact, does slightly feel like a crude way of achieving the right end result, with some potential unintended consequences i.e. diluting the benefit of locating storage where generation signals are significantly lower or negative.</p>
2	Do you support the proposed implementation approach?	<p><input checked="" type="checkbox"/>Yes <input type="checkbox"/>No</p> <p>Click or tap here to enter text.</p>
3	Do you have any other comments?	<p>With this modification, the question is do the end results justify the change to the baseline. The solution doesn't neatly fit into the existing TNUoS charging methodology as it combines both Exports and Imports; but the end tariffs feel more accurate than the current baseline results for Northern Storage. If this was to be potentially combined with changes such as non firm access, or the potential for the ESO to constrain off Storage, then this will help to further justify the solution. Netting off load factors ignores and eliminates the timing element of constraints. However, moving forward those high wind/high wholesale price periods will become less and less due to increased renewables penetration, and increased boundary capacity thus allowing those extra generation sources to serve demand. As TNUoS is a long term siting signal, you should not dismiss future changes to the system and the generation mix and just look at historic evidence. Network assets are built for 40 years plus</p> <p>Other possible modifications/assumptions. If Storage is effectively paying zero Year Round Tariffs, would it be better to also reduce their TEC down to 0 in the Transport model, as arguably their TEC is creating the need for</p>

		incremental reinforcement and pushing up prices for other generation sited locally The low carbon associated with the Storage and its TEC also affects the Year Round Shared/Not Shared mix, potentially pushing extra unnecessary costs onto intermittent generation as the Year Round Not Shared is charged based on TEC only. In terms of Peak, what exactly is the definition of Peak? Is it high wholesale prices, or high demand which creates high wholesale prices, or just winter demand. It is possible that Storage will generate at 'Peak' periods, and wind may also be operating at these times. Wind however cannot be relied upon to generate at Peak hence why they don't pay the Peak charges, however they may also operate at Peak.
4	Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Those potential alternatives which maintain negative Generation tariffs in Southern zones, and/or potentially have a different solution in, Year Round Not Shared zones are an improvement on the original proposal as this is more targeted to the actual defect whilst maintaining locational a few signals. Rather than raise an alternative the proposer may wish to alter their Original. Capping at 0 is more appropriate. It is not correct to have negative ALFs resulting in a payment to the Generator.

Specific Workgroup Consultation questions

5	Do these potential options better facilitate the charging objectives than the original proposal and if so, why?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Described above
6	Should Storage ALF be floored at zero?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Yes. Under Exports minus Imports you will always have a negative ALF due to losses. You may also incentivise behaviour which uses storage capacity downstream, or onsite, to create a larger negative ALF. If its Imports minus Exports, if you have both a DNO and TO connection as may happen for certain sites could you import from the DNO and then Export onto the TO, again creating a negative ALF. Capping at 0 reduces the benefits of gaming.

7	Would CMP393 disincentivise storage from locating in the south?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Yes but maybe for the right reasons. Incentivising Storage to locate where there are large amounts of Intermittent generation to preserve low carbon energy and use at a later date is a good thing for the SO and Society.
8	Should storage have its own generation classification for TNUoS?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No There could be merit in doing this but we need to consider the unintended consequences of doing so. Should or could Electrolysers be brought into the Classification
9	Should CMP393 apply only to storage or to all generation?	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No When other Generation imports when not generating this is classed as Station Demand. It is not for the benefit of the system and is of smaller volumes unrelated to the size of the asset or TEC, than Storage. The argument to net off ALF's is therefore far weaker and the actual impact would be negligible at best. Does the defect allow this solution?
10	How, if at all, does the proposed methodology interact with demand TNUoS charging?	<input type="checkbox"/> Yes <input type="checkbox"/> No By using Imports there is a link to demand TNUoS charging but interestingly there is no demand set against the Generator in the model, it just uses TEC. If using Imports should demand also be modelled in a similar way? The model only uses Peak Demand. However that then opens up further questions around the Year Round Demand Background.
11	Does the proposed solution have any materially different impact on battery storage compared to pumped storage that should be considered (While taking into account the proxy nature of TNUoS)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Importing energy into a Battery may have a different energy cost and value, than pumping and storing the equivalent amount of energy into Pumped Storage. The capping at 0 may help to deal with this but the proxy nature seems to cover this. We don't have different types of CCGT based on efficiencies etc. Duration of Storage may be something to consider if the rationale behind netting of imports is based on the value of imports?

