

Workgroup Consultation Response Proforma**CMP413: Rolling 10-year wider TNUoS generation tariffs**

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 October 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 cusc.team@nationalgrideso.com

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Which best describes your organisation?	<input type="checkbox"/> Consumer body <input type="checkbox"/> Demand <input type="checkbox"/> Distribution Network Operator <input type="checkbox"/> Generator <input type="checkbox"/> Industry body <input type="checkbox"/> Interconnector	<input type="checkbox"/> Storage <input type="checkbox"/> Supplier <input type="checkbox"/> System Operator <input type="checkbox"/> Transmission Owner <input type="checkbox"/> Virtual Lead Party <input checked="" 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:

- a. 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;
- b. 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 better facilitate the Applicable Objectives?	<p>Mark the Objectives which you believe the Original solution better facilitates:</p> <table border="1"> <tr> <td>Original</td> <td> <input type="checkbox"/>A <input type="checkbox"/>B <input type="checkbox"/>C <input type="checkbox"/>D <input type="checkbox"/>E </td> </tr> <tr> <td colspan="2">Click or tap here to enter text.</td> </tr> </table>	Original	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E	Click or tap here to enter text.	
Original	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E					
Click or tap here to enter text.						
2	Do you support the proposed implementation approach?	<p> <input type="checkbox"/>Yes <input checked="" type="checkbox"/>No </p> <p>Click or tap here to enter text.</p>				
3	Do you have any other comments?	<p><u>Comment 1: Zonal Averaging</u></p> <p>Since the wider TNUoS tariffs are composed of 4 components, it is unclear what is meant by a wider TNUoS tariff for each generation zone. There are 3 different calculations based on generation class, and for each of these the Tariff will be based on a site-specific ALF. A change in forecast may change the tariff of one site by £0.20/kW and another site in the same generation charging zone by £-1.50/kW.</p> <p>Is this somehow averaged over the generation zone? If so, then does this averaging include or exclude impacts due to change in site specific ALF (including change from generic to site specific) and impact due new generators within a zone or through co-location?</p> <p>Question 7 states “The Proposer has provided a mechanism by which components that feed into the wider tariff is allocated”. This is not clear in the consultation paper.</p> <p>Annex 14 appears to look at some weightings, but is referenced as “It is important to note the Workgroup is not proposing to define the process used to create the 10-year forecast by ESO but has discussed some possible options (Annex 14).”</p> <p>It is unclear how to interpret this information and how it relates to variation in tariff from one year to the next or from one year to the initial forecast and why the adjustment is ignored since this varies by year and impacts the tariff variation to be capped.</p> <p>It is also unclear how having a cap/collar by component is useful where one of the 3 components may then be breached, and how this interacts with the TNUoS adjustment changing, whether this is a breach by itself or not.</p>				

Comment 2: Contradictory application of tolerances between Proposal & Annex 8 worked example

Reading the proposal, our initial assumption was that, due to the decrease in certainty for years forecast further out, the rationale was to have a looser (wider) tolerance in the longer time horizon (+/- £2.50/kW in years 9 & 10) compared to the shorter time horizon (+/- £0.25/kW in years 1, 2, 3 & 4). This is as described in the proposal, the greater the lapsed time from initial forecast, the more scope there is for change. Thus, a greater variation against initial forecast would be allowed in later years, up to the point the final tariffs are published in Year 10. However, the spreadsheet in Annex 8 shows the reverse happening.

Annex 8 seems to show large tolerance in the first few years of reforecasting reducing to a small tolerance (against initial forecast) at final tariff publication at year 10

100% confidence in annex 8 was not possible since, even with the revised interpretation the values shown could not be replicated.

Please refer to “GD Queries Annex 8 CMP413” spreadsheet attached.

Taking Charging 2033/34 as an example, the first time this is proposed to be forecast (initial forecast) is in 2023/24. The modification allows for the forecast produced in 2024/25 to vary from this initial forecast by +/- £2.50/kW (forecast changes from £56/kW to £58.5/kW, capped model output of £60/kW). However, the final published tariff produced in 2033/34 only varies from the initial forecast by +/- £0.25/kW. (Model output of £62/kW is capped at £56.75/kW – I assume this should read £56.25/kW)

There seems little point allowing early years of reforecast larger swings away from the initial forecast when over time the forecasts will have to converge towards this initial forecast, with the smallest tolerance at final publication.

Comment 3:*[CUSC Objective C – Development]*

It has been said in the proposal that the tolerances should not be index linked. This means that over time the tolerances will effectively become tighter (assuming positive inflation).

It is a lack of inflation being applied to the £1/kW differential which is causing an increase in the number of generation zones over time, which will in turn cause major problems for a change like this.

With re-zoning, how will a comparison be made against a forecast for a previous year by zone?

Comment 4: Suitability of current model for setting a 10 year forecast*[CUSC Objective C – Development]*

It can be seen from the current scaling of TEC by the ESO in their 5 & 10 year forecast that either the current Generation Backgrounds, or the model itself, currently in use are not fit for purpose beyond 2024/25.

Any assumption that the model will right itself by the time final tariffs are created is flawed if the offshore wind generation targets are to be met.

Should a 10 year forecast be created with the current model, the numbers created will be artificial, arbitrary as the TEC scaling applied is a decision made by the ESO outside of the guidance of the CUSC.

Rather than seeking a quick fix or workaround, priority should be given to fixing the problems in the current model in such a way as to reduce tariff volatility.

Comment 5: Complexity and market distorting*[CUSC Objective A – Competition]**CUSC Objective E – Efficiency]*

This modification is proposing that the forecast produced 10 years ahead of time is more or less the final published forecast (+/- £0.25/kW or +/- £2.50/kW depending on which the proposal is suggesting).

This means the impact of any changes to TNUoS for generation will take 10 years to filter through.

Whilst this appears to give better certainty, in exchange for cost-reflectivity, for developers with a 40-year project the risks will still be broadly similar. This does not give certainty for a business plan and a go/no-go decision. The underlying tariffs will not be any more stable than they are today. Whilst it provides more short term certainty for price setting in the wholesale market 2 to 10 years out, it will not help new developers putting together a 40 year business plan.

Should TNUoS tariffs become based on a non-CUSC documented forecast process as suggested this could lead to less accurate forecasts of TNUoS over longer term time horizons and thus additional distortions in the competitive tendering of new generation.

Furthermore, with additional change still required to TNUoS it is unclear how long this proposed modification would remain in place. Given that each time a charging regime changes there is period of uncertainty, introducing additional interim change will only exacerbate this, leading to less investment certainty. Changing charging regimes (potentially multiple times) partway through medium to longer term energy contracts will only cause additional market distortions. Such disruptions could be reduced through a shorter period of tariff setting.

ESO will still need to run the same ICRP DCLF model, and will then have an additional process of looking at cap and collar. This becomes less efficient than fixing the underlying issues.

For a 40 year TNUoS forecast, the same ICRP model output will be needed, and a big step change could be expected from year 10 to year 11.

This adds complexity to the process of creating annual TNUoS forecasts either 1 year or 40 years out.

Comment 6: Worse predictability from Year 10
[CUSC Objective B – Cost Reflective]

With this proposal it will no longer be possible to forecast TNUoS.

Currently assumptions can be applied to the TNUoS model based on market information out to 2050.

However, this proposal will remove linkages between the TNUoS drivers and Tariffs and instead final tariffs will be a function of how the ESO chose to model them 10 years

ahead of time. This forecast process is not defined within CUSC.

This proposal thus removes both predictability (for anything more than 10 years out) and cost-reflectivity from the process. (Q10 suggests the trade off in having poorer cost reflectivity in exchange for better predictability)

Business plans for new projects typically look out over a 30 to 40 year time horizon.

Comment 7: Underlying Issues

[CUSC Objective C – Development]

The proposal does not seek to address the underlying causes for the tariff volatility, and indeed should it be implemented and the TNUoS taskforce or other modification then resolve tariff volatility (which is required), it would then potentially need removing; adding even more uncertainty to the overall process.

If the current incremental model is not giving suitable price signals, then it is this underlying methodology that needs to be changed.

There are large swings in TNUoS tariffs for a number of reasons. The broad change in the north-South differential is theoretically driven by factors which are fairly predictable. However, the flipping of which background generation is assigned to which node can be sensitive to slight changes to underlying model flows. There are questions around the Generation Backgrounds which are already being addressed by the TNUoS taskforce; Generation Backgrounds need to reflect some realistic real-world scenario.

‘Flipping’ Generation Background at a node may not impact the nodal tariff significantly, but due to the way this is averaged, the tariff of the whole zone can change significantly and unexpectedly. Averaging nodal tariffs to a zone may seem like it is adding stability, but sometimes it does the opposite. A further question would be if nodal tariffs are set, why are these averaged only to have to apply a complex formula to bring them back down to a nodal level. Maybe nodal output of the model would be beneficial to tariff stability.

Simpler solutions such as averaging last 3 model outputs to create a tariff, or fixing model inputs at year-3 may

retain greater relevance than the proposed change were the underlying methodology to change.

Comment 8: Query on process

What is meant by:

“Step 4: If any of the tariffs replaced by a subsequent forecast is within the Cap and Collar range then the tariff in each of the 27 generation charging zones is adjusted”?

If none of the 27 tariff moves outside the cap and collar range, then all replaced tariffs are within the cap and collar range, so what adjustment is applied to the forecast replaced in step 2?

Comment 9: European directive 838/2010

[CUSC Objective D – EU]

The proposal appears to disregard the European ‘limiting regulation’ directive 838/2010. Tariffs are taken from the ICRP DCLF model which have then had the EC directive £2.50/MWh applied across the whole GB generation fleet. The zones are then independently capped against a forecast 10 years prior. The zonal tariffs are not applied to equal amounts of TEC, and therefore applying equal and opposite cap and collar at different locations will affect overall TNUoS collected. This process applied over 27 zones could lead to a breach of this directive.

Annex 13 shows some examples that the limiting regulation is not breached. However, it is not clear:

- i) how it is proved a breach to be unlikely in the future, notwithstanding errors within annex 8 and lack of explanation of annex 13.
- ii) what capped tariffs were used – if final published is capped within £0.25 (spreadsheet) of initial forecast 10 years prior, the likelihood of breach is less than if £2.50/kW capping is applied (proposal description/FIG1 in attached spreadsheet) at final published tariff.
- iii) In Annex 13, whether the CMP413 cap/collar is applied iteratively after true-up to the TNUoS generation adjustment (based on the limiting regulation).

Changes to generation mix, ALF and TEC over the lapsed 10 year period from initial tariff forecast to final

		tariff publication could also skew the tariffs (further) towards a breach.
4	Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to Q10 consider?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <p>For consideration depending on scope of the proposal:</p> <p>(1) Publish final generation TNUoS tariffs 2 years and 60 days in advance of the start of a tariff year. This will give a rolling 3 years of tariff certainty rather than the current 1 year. (ie: reduce proposal from 10 years to 3 years and remove cap and collar regime)</p> <p>(2) TNUoS tariffs for a generator will be set based on an average of the latest ICRP DCLF output, and the outputs from the two years prior. To clarify, average the zonal cost per kmMW from the transport side of the TNUoS model over three years but apply the tariff side of the model as normal.</p> <p>(3) Inputs to TNUoS ICRP DCLF model based on one of the published Future Energy Scenario (FES) or similar. This would be in terms of demand, generation and NOA infrastructure dates &/or TWR. These model inputs would be set 3 years in advance, providing less scope for in tariffs to change over this time horizon and greater predictability beyond. This would provide tariffs based on strategy, allowing strategy (rather than the current as-is network) to become the driver for locating new generation and supporting future infrastructure build.</p> <p>The strategy, and basis for defining energy scenario and NOA/TWR or other infrastructure assumptions would all need to be defined within CUSC. This would enable, for example, inclusion of a significant infrastructure change within the model a number of years before it is due to be delivered, in order to encourage the correct location of new generation for the “to be” world.</p>

Specific Workgroup Consultation questions

5	The Original proposal is to limit the maximum variance by £2.50/kW per charging zone. Do you feel this is an appropriate level?	Based on the methodology seen in annex 8, it makes no sense having a variance (from initial forecast) at any reforecast stage which is larger than the final variance (from initial forecast) allowed at publication of final tariffs. The solution modelled in Annex 8 spreadsheet appears to be contradictory to the text and diagram describing the proposer's solution within the proposal document which seemed to show the cap & collar increasing closer to delivery of the final tariffs (year 9/10).
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		<p>The proposal removes cost reflectivity from the TNUoS tariff (comment 6 above). It would be simpler and more predictable to simply fix 10 years ahead of time rather than have a cap and collar to apply which seem to serve no purpose other than give some token tariff movement.</p>
6	<p>The Original proposal deems a 10-year period to fix tariffs between the pre-defined Cap and Collar ranges appropriate. Is there an alternative length of time that would need to be considered?</p>	<p>Longer term tariff fixing has the potential to cause market interference if it is introduced without sufficient notice for the market to adjust. Setting tariffs for 10 years may be too long a time horizon, especially given this may only be an interim fix.</p> <p>For new projects, longer term certainty is required. It would be unreasonable though to fix TNUoS for the 40 years of a business plan.</p> <p>However, the underlying data used within the TNUoS model could be made more stable in the long term and published in advance. If the ESO fixed on one of their FES (for example) for Demand, generation and NOA infrastructure dates, locking this forecast data in from year +3, this would provide more stability in the tariffs for 3 years and better predictability beyond that time horizon. No data regarding market liquidity or longer-term energy contracts from years 2 to 10 is provided in the consultation to help determine appropriate time horizon.</p>
7	<p>The Proposer has provided a mechanism by which components that feed into the wider tariff is allocated. The proposal apportions the Cap and Collar by the proportion of revenue collected for each component. Is there an alternative methodology that could be used?</p>	<p>Annex 14 appears to look at some weightings, but is referenced thus "It is important to note the Workgroup is not proposing to define the process used to create the 10-year forecast by ESO but has discussed some possible options (Annex 14)."</p> <p>and so seems to be focussing on how to set tariffs, although a change to tariff setting methodology did not appear to be part of the scope.</p> <p>It is unclear how to interpret this information and how it relates to variation in tariff from one year to the next (or from one year to the initial forecast) and why the tariff adjustment is ignored since this varies by year and impacts the tariff variation to be capped.</p> <p>It is also unclear how having a cap/collar by component is useful where one of the 3 components may then be breached, and how this interacts with the TNUoS adjustment changing, whether this latter is a breach in itself or not.</p> <p>Alternative methodology considered below relates only to identifying zonal tariff variation and not how to construct tariffs.</p> <p>For zonal tariff variation, I would assume the average tariff per kW over all generators within that zone (final tariffs weighted by TEC). Previous or initial tariff would need to be assessed on that (same) latest set of</p>

		<p>generators and attributes (TEC, ALF, co-location etc) to determine variation. This negates the issue around re-zoning.</p> <p>Breach of cap/collar could be addressed by changes to the tariff adjustment which then becomes zonal. This keeps the locational signal within zone intact, as well as keeping any zonal adjustments for the cap/collar transparent.</p>
8	Should there be a provision to trigger a re-opener in tariffs to reflect the considerable amount of reform planned both through Open Governance and via the TNUoS Task Force?	Click or tap here to enter text.
9	The Original proposal aims to protect Generators from unpredictable tariffs as the rational is that inefficient costs could ultimately cost consumers more. A breach to the Cap and Collar is socialised to Demand Users. Do you think this is appropriate?	<p>The method of 'cost-reflective' recovery should be addressed rather than covered up. This proposal removes the relationship between tariffs and underlying drivers and replaces it with one based on ESO forecast 10 years prior which is not defined within CUSC. This makes TNUoS harder to predict beyond the 10 years. Typically business plans for new projects are looking at TNUoS over a 40 year time horizon.</p> <p>One issue stated in the proposal is TNUoS currently "lacks a useful siting signal and will mean that Generators locate in less economically efficient places for the overall system". Cost saving to consumers can be achieved by more efficient overall infrastructure costs. Maybe the inference is that tariffs should reflect planned network design rather than drive sub-optimal investment. This cannot be addressed by introducing a cap and collar but will require a change to the investment signal being generated. Maybe if TNUoS tariffs were based on a "planned long term" rather than "as is" transmission network this would provide both better locational signals and stability in tariffs.</p> <p>If a breach in cap and collar causes a cost or credit to be socialised to demand users, this supports the possibility of the proposal causing breaches to the EU directive 838/2010.</p>
10	Please provide any evidence to support the	Click or tap here to enter text.

	merit of greater predictability over cost reflectivity (Clearly mark your response confidential if you wish this to be directed straight to Ofgem).	
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