

Trisha McAuley, CUSC Panel Chair

c/o National Grid Electricity

System Operator Limited

Faraday House

Gallows Hill

Warwick CV34 6DA

Date: 30 September 2024

Dear Trisha,

**Authority<sup>1</sup> decision to send back Connection and Use of System Code (CUSC) Modification Proposal CMP418 'Refine the allocation of Dynamic Reactive Compensation Equipment (DRCE) costs at OFTO transfer'**

***Purpose of this document***

This letter outlines our reasons for sending back the CMP418 ("the Proposal") Final Modification Report ('FMR')<sup>2</sup> and to direct the CUSC Panel to revise and resubmit the FMR. We have decided that we cannot properly form an opinion on the Proposal based on the submitted information in the FMR and we are therefore sending it back for further work.

**Context**

Ocean Winds ("the Proposer") raised the Proposal on 2 August 2023. The Proposal intends to alter the current cost allocation arrangements of Dynamic Reactive Compensation Equipment ("DRCE"). It does so by proposing to remove the offshore generator liability for those costs through the removal of DRCE costs from the Transmission Network Use of System ("TNUoS") offshore Local Circuit tariff, providing that sums are instead recovered through the Transmission Demand Residual ("TDR").

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<sup>1</sup> References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day-to-day work. This decision is made by or on behalf of GEMA.

<sup>2</sup> [CMP418: Refine the allocation of Dynamic Reactive Compensation Equipment \(DRCE\) costs at OFTO transfer Final Modification Report](#)

The Proposer states that this change will ensure a more appropriate allocation of DRCE costs and will lead to more equitable treatment between onshore and offshore generators.

We have considered the FMR and concluded that the information contained in the document lacks clarity, specifically in relation to the classification of DRCE assets, the exact extent to which the current charging methodology requires to be changed, and the consistency in the use of terminology within the FMR. Due to these deficiencies, we have concluded that we are unable to properly form an opinion on the Proposal and have decided to send it back for further work. We further outline our detailed reasons for this send back below, followed by detail on the changes required to the FMR.

### **Reason for send back**

The submitted FMR has the following deficiencies, which means that we are unable to form an opinion:

- a) The FMR and its use of interchangeable terminology and or definitions, results in it being unclear as to what basis the cost allocation comparison is being made, specifically, we are unclear as to whether the FMR is making a like-for-like comparison between categories of assets i.e. between onshore generation assets and offshore transmission assets, or two types of wider transmission assets, such as those located on the National Electricity Transmission System (“NETS”)<sup>3</sup>.
  
- b) The FMR fails to provide a clear and detailed description of the current arrangements for the recovery of DRCE costs, for either onshore or offshore generators. While the FMR states the Proposal would “harmonise the treatment between onshore and offshore Generators as the cost for the provision of reactive compensation by Offshore Transmission Owners (“OFTOs”) would now be funded by demand through the TDR instead of the offshore Generator”<sup>4</sup>, it does not sufficiently explain, nor evidence, the onshore methodology that the Proposal seeks to align with. Without this information, it is unclear which parts of the onshore methodology within Section 14 of the CUSC the Proposal is seeking to align the offshore charging methodology to.

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<sup>3</sup> The NETS refers to the interconnected, high-voltage transmission network across Great Britain, managed by multiple transmission operators. It includes both onshore and offshore assets used to transmit electricity from generators to distribution networks and consumers but may differ in its treatment of cost recovery depending on the asset type and location.

<sup>4</sup> CMP418 Final Modification Report (FMR)

- c) The FMR references that DRCE costs be moved from the circuit tariff to the onshore substation tariff and then into the wider TNUoS via the demand residual. However, the constant change of terminology in relation to tariffs and cost elements throughout the FMR means that it is unclear as to what the actual intended tariff for cost allocation would be.
  
- d) Finally, the FMR also presents significant ambiguity in its use of terminology and definitions regarding the classification and cost recovery treatment of shunt reactors and DRCE. The FMR asserts that shunt reactor costs fall into the local circuit tariff, but DRCE should not be treated in the same way. However, this differentiation is not sufficiently explained. While we consider that both shunt reactors and DRCE play critical roles in reactive power support, the FMR does not provide a clear rationale for why their cost recovery mechanisms should differ. The report briefly mentions that shunt reactors are intended to manage cable capacitance, while DRCE is used more dynamically for grid stability, but it lacks a thorough explanation of how these functional roles differ in practice and how their locations within the transmission network (whether offshore or at onshore interface points) influence their cost allocation. Understanding these differences is essential for evaluating whether the proposed cost allocation changes are appropriate and equitable.

The nature of the asserted inconsistent treatment between onshore and offshore generators, which forms the basis of the Proposal, is not clearly defined and as such it is unclear whether the comparison being made is between equivalent assets. The FMR also lacks a detailed explanation and evidence regarding the current treatment of DRCE costs, and what changes to the methodology within Section 14 of the CUSC are required. We are seeking further information to ensure that our assessment of the Proposal against the Applicable CUSC Objectives, particularly ACO (a), and our principal objective and other statutory duties is robust.

### **Required changes**

We direct that further work is undertaken to address the deficiencies above, specifically the FMR must be revised to:

1. Provide clarity in terms of the assets that are being compared and a clear and detailed explanation of the treatment of those assets between onshore and offshore generators, with respect to recovery of DRCE costs. Ensure that the comparison between onshore and offshore regimes is thorough and clearly

demonstrates the need for the proposed changes. This should also include specific examples and a clear comparison of the onshore and offshore charging methodologies.

2. The FMR must include a detailed explanation of the operational principles guiding the cost allocation for DRCE. It should explicitly compare these principles between onshore and offshore regimes, providing a robust rationale for why the proposed changes are necessary and justified.
3. The revised FMR and legal text must clearly articulate the specific changes to the cost recovery mechanism for DRCE. In particular, it should be clear as to which tariff the DRCE costs are being moved to (e.g. the demand residual). Inconsistent use of terminology should be avoided with any proposed changes being consistent with established CUSC terms to prevent any further ambiguity. Additionally, the legal text should be revised to accurately reflect this proposed mechanism, ensuring consistency with the explanations provided in the FMR.
4. If it is the Proposer's intent that shunt reactors should be included in the offshore local tariff, then the FMR and legal text should clearly state this intent and include explicit definitions of both DRCE and shunt reactors. The FMR must also clearly articulate the rationale for the different treatment of DRCE and shunt reactors, justifying why shunt reactors should remain in the offshore local circuit tariff while DRCE costs are moved to the wider TNUoS via the TDR. To support this distinction, the FMR should provide detailed explanations of their respective roles, functions, and benefits. Additionally, it is important to clarify whether the existing definition of DRCE in the System Operator Transmission Owner Code (STC) and Grid Code (GC) would include shunt reactors, as this could have implications for the legal text and the overall implementation of the Proposal.

## **Other issues**

### *Legal Text*

The legal text provided in the FMR lacks clarity regarding the exclusion of DRCE costs from offshore local circuit tariffs. There is ambiguity around the treatment and cost allocation of DRCE, particularly concerning whether these costs should be excluded from offshore local tariffs when DRCE is located at the Onshore Interface Point. Additionally, the distinction between DRCE and other reactive power equipment, such as shunt reactors, is not well-defined within the legal text. This lack of specificity creates confusion about the cost recovery process and the roles of different assets.

### *Quantitative analysis provided in Annex 7*

While we have not yet formed a definitive view of the Proposal due to the overall lack of clarity and detail, we have reviewed the quantitative analysis presented in Annex 7 of the FMR. Our initial view is that this analysis does not provide a comprehensive or balanced view of the impacts of CMP418, particularly regarding the proposed reallocation of DRCE costs. The analysis appears too high-level, focusing primarily on changes to the Tender Revenue Stream ("TRS") without adequately exploring the broader impacts any change to cost reallocation would have on the TDR tariffs and end consumers. We would encourage the Workgroup to consider a more detailed and holistic assessment to ensure that the Proposal's impacts are fully understood and appropriately evaluated.

Furthermore, we consider that the analysis and arguments presented with respect to the Proposal resulting in reduced Contracts for Difference ("CfD") bids and a net benefit for consumers over the long term, does not provide a well-rounded view of the Proposal. The removal of DRCE costs from generators via CMP418 would result in a windfall gain for those generators who already have contracts in place. Therefore, by not quantifying the value of this windfall gain in the analysis, we consider that it does not provide a balanced assessment. We would encourage the Workgroup to consider providing further analysis on the potential impacts the Proposal will have on consumers tariffs.

### *Annexes and FMR*

It is important to note that a significant amount of relevant information is currently contained within the annexes of the FMR rather than within the main body of the report itself. While annexes can be useful for providing detailed data and supplementary material, the core analysis and rationale for the proposed changes should be clearly presented within the FMR.

Best practice would suggest that the FMR should incorporate the key information from the annexes directly into the main report, accompanied by commentary that explains its relevance to the proposed modification. This approach would ensure that the FMR provides a comprehensive and self-contained document that allows for a clearer understanding by all parties of the issues at hand. Integrating this information into the main body of the report would also enhance the transparency of the decision-making process and ensure that all stakeholders have easy access to the critical information needed to evaluate the proposal effectively.

## Connection Assets

The FMR states, "As confirmed by the ESO revenue team, Local Circuit and Substation Charges are classed as Connection Assets and therefore should be excluded when calculating how much revenue can be collected from Generators under the EU Cap. This means that any changes to the Connection Exclusion amount affects the Transmission Demand Residual (TDR)". We think it important to be clear that this description is not quite correct.

In our view, "Local Circuit and Local Substation Charges" cannot be "classed as Connection Assets", as assets and charges do not describe the same concept: one is a physical piece of the transmission system, the other a financial measure. We explain the difference, for the avoidance of doubt, between the Connection Charging regime and Local Circuit/Local Substation TNUoS Tariffs below.

Connection Charges are distinct of Local Circuit and/or Local Substation Tariffs (collectively herein, "Local Charges"), are calculated under different methodologies, and relate to different assets: Connection Charges are levied in respect of the assets described at 14.2.4 - 14.2.9 of CUSC, whereas Local Charges apply per 14.15.32 - 14.15.36 of CUSC. In summary, the CUSC is clear that the assets used to connect a generator's equipment to the 'first' transmission substation on the system attract Connection Charges, and that Local Charges apply to the assets between that first substation and the Main Integrated Transmission System ("MITS"), unless that first substation is part of the MITS in which case no Local Charges are payable.

Otherwise, we agree with the statement that there is a link between the value of the so-called, "Connection Exclusion<sup>5</sup>" and the value of the Transmission Demand Residual although we do not consider that this interaction is particularly relevant to the questions raised under CMP418 based on the information presented to us so far. We do not direct any specific action in respect of this point, but we do expect that if the derivation of the Connection Exclusion is considered by any Party to be a relevant consideration in CMP418, that the interaction and rationale be fully explained. We are of the view that any description of the processes used to set TNUoS tariffs should be sufficiently clear and accurate so as to avoid any confusion by market participants either in assessing proposals or in seeking to understand charging arrangements.

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<sup>5</sup> Charges for physical assets required for connection or the upgrade of the connection, as discussed in <https://www.ofgem.gov.uk/sites/default/files/2022-05/CMP368%20Decision%20200522.pdf>

**Direction**

In view of these deficiencies in the FMR and associated annexes we cannot properly form an opinion on the Proposal. After addressing these issues and revising the FMR as directed, the CUSC Panel should re-submit it to us for decision as soon as practicable.

Yours sincerely,

**Pedro Arcain**

**Head of Electricity Network Charging  
Energy Systems Management & Security**

Duly authorised on behalf of the Authority