Modification proposal: **Connection and Use of System Code (CUSC) CMP242: Charging arrangements for interlinked offshore transmission solutions connecting to a single onshore substation**

Decision: The Authority\(^1\) consents that the CMP242 WACM1 modification\(^2\) be made\(^3\)

Target audience: National Grid Electricity Transmission PLC (NGET), Parties to the CUSC and other interested parties

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### Background

A number of developers of offshore projects are planning the construction of transmission cables linking the offshore substations of some of their projects that connect to a single common substation. These cables, known as interlinks, are held in open standby in case the cable to shore associated with either project becomes unavailable. If this happens, the project concerned can still export some (or all) of its output to shore through the interlink and the other project’s cable to shore (depending on the capacity available on the cable and interlink). The interlink would provide additional security to projects, providing a cheaper alternative to building multiple cables to a single common substation from each offshore project.

At present, the charging methodology for offshore transmission considers only radial cables to shore and therefore does not take account of any interlinks that may be built.

### The modification proposal

National Grid Electricity Transmission plc (NGET) raised CUSC modification proposal CMP242 in March 2015. This proposal aims to develop the charging arrangements by which the costs of interlinks would be recovered from generators through the generators’ offshore local circuit charge, as part of their overall Transmission Network Use of System (TNUoS) charges. These charging arrangements are designed to apply to configurations where the interlinked substations are connected to a single common substation.

The modification was assessed by a Workgroup. The Workgroup’s assessment resulted in the development of three solutions (the Original Proposal and two Workgroup Alternative CUSC Modifications (WACMs)). These are described in more detail in the Final Modification Report (FMR)\(^4\):

1. **Original Proposal:** The costs for the interlink cable would be shared between the generators connected by it, based on a formula representing the opportunity each generator has to use the interlink and the available cable to shore in the event of a fault.

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\(^1\) 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.

\(^2\) ‘Change’ and ‘modification’ are used interchangeably in this document.

\(^3\) This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

\(^4\) All documents associated with CMP242 can be found on National Grid’s website at: [http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP242/](http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP242/)
2. **WACM1**: The formula that would be used to calculate the costs is the same as with the Original Proposal. However, generators would also have an option to negotiate how the costs for the interlink circuit would be shared between them to take into account other factors not included in the formula. If the generators were unable to reach an agreement on the way in which the costs of the interlink were to be allocated, they could refer their dispute to the Authority.

3. **WACM2**: The costs of the interlink circuit would be shared between the generators as determined by negotiation between them only. If the generators were unable to reach an agreement on the way in which the costs of the interlink were to be allocated, they could refer their dispute to the Authority.

While the Workgroup considered that all of the options better facilitate the CUSC charging objectives when compared to the current arrangements, the Workgroup was evenly split on whether the Original or WACM1 is the best option.

**CUSC Panel**\(^5\) recommendation

The CUSC Panel considered the draft FMR for CMP242 at its meeting on 18 December 2015. The Panel voted unanimously that all three options were better than the current arrangements when assessed against the CUSC charging objectives. On which solution is ‘best’, there was a 6:3 majority for WACM1 over the Original. The views of the Panel members are set out in full in the FMR.

**Our decision**

We have considered the issues raised by the modification proposal and the FMR dated 6 January 2016. We have also considered and taken into account the responses to the Code Administrator consultation on the modification proposal which are attached to the FMR.\(^6\) We have concluded that:

1. implementation of WACM1 will best facilitate the achievement of the applicable objectives of the CUSC;\(^7\) and
2. directing that the modification be made is consistent with our principal objective and statutory duties.\(^8\)

**Reasons for our decision**

In making our decision, we have taken the following matters into consideration:

**Formula**

We consider that the use of the formula proposed under the Original and WACM1 options would provide transparency, clarity and certainty to developers on how the costs of the interlink will be allocated to interlink users through TNUoS charges.

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\(^5\) The CUSC Panel is established and constituted from time to time pursuant to and in accordance with the section 8 of the CUSC.

\(^6\) CUSC modification proposals, modification reports and representations can be viewed on NGET’s website at http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/amendments/

\(^7\) As set out in Standard Condition C10(1) of NGET’s Transmission Licence, see: http://epr.ofgem.gov.uk/document_fetch.php?documentid=5327

\(^8\) The Authority’s statutory duties are wider than matters which the Panel must take into consideration and are detailed mainly in the Electricity Act 1989 as amended.
We recognise that the Workgroup has tried to design a formula which allocates costs between interlink users as cost-reflectively as is reasonably practicable. However, the Workgroup identified some factors, such as the likelihood of faults on the cables to shore and load profiles, which could be relevant in allocating interlink costs but which, at the present time, cannot be quantified for inclusion in the formula.

**Negotiation**

Over time, information may become available about these factors which interlink users may feel creates a need to review the allocation of the costs of the interlink. WACM1 includes provision for the parties to negotiate how the costs of the interlink should be shared between them in such circumstances. This should enable a more cost-reflective solution to be agreed.

In their response to the Code Administrator consultation, Dong expressed concern that introducing an option to negotiate the allocation of costs of interlinks through WACMs 1 and 2 would reduce stakeholders’ ability to estimate charges.\(^9\) We consider that, under WACM1, the provision of the formula would allow a reasonable estimate of charges to be made even where negotiation is chosen, since the formula is likely to provide a starting point in these circumstances. We also consider that the generators, as negotiating parties, have full sight of the negotiations through their involvement, enabling them to estimate their charges.

Under WACM2, negotiation is the only route to allocating costs. We note that none of the Workgroup members or the CUSC Panel members chose WACM2 as their preferred option. We understand they favoured the options which include a formula because under the Original, this offers certainty of cost allocation, and, under WACM1, parties have access to the formula and the advantages this can offer (ie certainty in cases where the formula is used, and a starting point when negotiation is used). We agree that greater certainty on costs helps developers make investment decisions.

**Dispute referral**

The Workgroup thought that options to negotiate the cost allocation under WACMs 1 and 2 require a process by which disputes could be referred to the Authority. We considered the practicalities of the Authority making a determination on such a dispute. The formula in WACM1 could provide the Authority with a starting point for assessing such disputes. It would be our expectation that, before referring a dispute to the Authority, parties would have made every effort to resolve their differences and that dispute referral would be the exception.

**CUSC charging objectives**

We set out below our views on the applicable CUSC charging objectives that we consider are affected by the modification proposal. We consider that the proposal is neutral in respect of objective (d).

Objective (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

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\(^9\) Standard Licence Condition C4 states that the TNUoS methodology should "enable any person (...) to make a reasonable estimate of the charges to which he would become liable for the provision of such services".
consistent therewith) facilitates competition in the sale, distribution and purchase of electricity;”

All three options provide a more transparent approach to interlink cost allocation when compared to the current arrangements. Transparency on costs facilitates competition between generators. Therefore, all the options better facilitate Objective (a).

We recognise that the use of a formula provides developers with certainty about how costs of an interlink will be allocated between parties. However, in cases where information has become available about relevant factors that are not included in the formula, the formula could result in a flawed cost allocation. We consider that in such cases, giving interlinked generators the ability to negotiate a more cost-reflective outcome would facilitate competition amongst these generators better than the other options. We therefore consider that WACM1 would best achieve Objective (a) by providing the flexibility to use the most appropriate method of cost allocation, depending on the circumstances.

Objective (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 in accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard condition C26 (Requirements of a connect and manage connection);”

We consider all options better facilitate Objective (b) compared to the current arrangements, as both the formula and negotiation can lead to a cost-reflective allocation of costs, depending on the circumstances. If all the assumptions on which the formula is based are an accurate reflection of the opportunity a generator will have to use the interlink, then the formula should be cost-reflective. If, on the other hand, information becomes available on factors that are not included in the formula but which influence the likelihood that generators will need to use the interlink, then negotiations between generators are likely to result in a more cost-reflective allocation of costs.

Therefore, we consider that finding the most cost-reflective allocation of costs is best facilitated when generators can select either the formula or negotiation, whichever is most appropriate. For this reason, we consider that WACM1 is the option that best facilitates Objective (b) compared with the other options.

We note that, under WACM1, if the parties cannot agree on how the costs should be allocated, then they can refer their dispute to us. We have considered whether the costs to consumers associated with these disputes would outweigh the benefits. Given that the dispute procedure is structured as a measure of last resort, we consider that the cost to consumers is proportionate to providing the opportunity for the Authority to reach a determination. WACM1 could also enable us to use the formula as a starting point in assessing disputes.

We will monitor the number of times disputes are referred to the Authority.

Objective (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”

There are currently no OFTO-owned offshore interlinks. However, we understand that there are several offshore wind projects under development with offshore interlinks, where the developers intend to transfer these interlinks to OFTOs on completion.
Interlinks will typically be built for use by more than one generator. At present, there is no provision for apportioning the interlink-related costs between interlink users. All three options propose making such provision and therefore take account of the developments in the System Operator’s and the OFTOs’ businesses and better facilitate Objective (c). It is worth noting that the method for allocating interlink-related costs is intended to apply in the case of both generator-built and OFTO-built interlinks.

**The Authority’s principal objective and statutory duties**

In making a decision on this proposal, we consider that we have done so in accordance with our principal objective and statutory duties. Putting in place a clear and transparent methodology for allocating the costs of interlinks will help enable efficient interlinks to be built. A clear regulatory charging regime that provides certainty to investors is a benefit to existing and future consumers. In addition, interlinks allow more renewable energy to be exported to the electricity network in the case of a fault on one of the cables to shore. This would reduce carbon emissions, which is also in the interests of existing and future consumers.

**Conclusion**

We have considered all three options against the CUSC charging objectives and our statutory duties. All three options better facilitate the CUSC charging objectives. However, overall we consider that WACM1 best facilitates the achievement of the objectives, as set out above, when compared to the Original and WACM2.

In making our decision, we have also considered the proposed legal text giving effect to the WACM1 solution. We have identified some house-keeping amendments to the legal text, specifically in paragraph 14.15.65, to improve its clarity. We expect NGET to propose appropriate modifications as soon as practicable.

We recognise that the Workgroup discussions identified a number of offshore policy areas which were not within scope of CMP242 but which may require further development. We encourage stakeholders to engage further on these issues as they arise.

**Decision notice**

In accordance with Standard Condition C10 of NGET’s Transmission Licence, the Authority hereby consents that modification proposal CMP242: ‘Charging arrangements for interlinked offshore transmission solutions connecting to a single onshore substation’, WACM1, be made.

**Kersti Berge**  
**Partner, Networks**  
Signed on behalf of the Authority and authorised for that purpose