CUSC Modification Proposal Form	At what stage is this document in the process?
# CMP303: Improving local circuit charge cost-reflectivity	01 Proposal Form 02 Workgroup Consultation 03 Workgroup Report 04 Code Administrator Consultation 05 Draft CUSC Modification Report 06 Final CUSC Modification Report

Purpose of Modification: This modification seeks to make part of the TNUoS charge more cost-reflective through removal of additional costs from local circuit expansion factors that are incurred beyond the connected, or to-be-connected, generation developers' need.

	**The Proposer recommends that this modification should:** • proceed to Consultation This modification was raised 19th July 2018 and will be presented to the July 2018 CUSC Panel**.** The Panel will consider the Proposer's recommendation and determine the appropriate route.
	**High Impact**: None
	**Medium Impact:** Some local circuit-connected generation connectees (medium or low – more probably low)
	**Low Impact:** Other users of the transmission system (generators) who directly or indirectly pay TNUoS charge (very low)

Guidance on the use of this Template: *Please complete all sections unless specifically marked for the Code* ***Administrator.*** *Green italic text is provided as guidance and should be removed before submission. Contact us:* ***The Code Administrator is available to help and support the drafting of any modifications, including guidance on completion of this template and the wider modification process. If you have any questions or need any advice on how to fill in this form please contact the Panel Secretary: e-mail: cusc.team@nationalgrid.com***

Contents

Timetable

The Code Administrator will update the timetable.

The Code Administrator recommends the following timetable:
(amend as appropriate)

Workgroup Consultation issued to the Industry	September 2018, straight to CA consultation without workgroup as is straightforward
Modification Panel decision	End October 2018
Final Modification Report issued to the Authority	8 November 2018
Decision implemented in CUSC	01 February 2019

Any questions?

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Proposer Details

Details of Proposer: (Organisation Name)	Paul Mott EDF Energy
Capacity in which the CUSC Modification Proposal is being proposed: (i.e. CUSC Party, BSC Party or "National Consumer Council")	CUSC Party
Details of Proposer's Representative: Name: Organisation: Telephone Number: Email Address:	Paul Mott EDF Energy 07752 987992 Paul.Mott@edfenergy.com
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Attachments (No): **If Yes, Title and No. of pages of each Attachment:**	

Impact on Core Industry Documentation.

Please mark the relevant boxes with an "x" and provide any supporting information

BSC	
Grid Code	
STC	
Other	

This is an optional section to be completed where relevant.

1 Summary

Defect

When a new local circuit is built to enable the export of new generation, extra costs may be incurred on additional functionality that is unrelated to the needs of said generation. For example, on an island requiring a DC connection, the transmission owner would naturally build the HVDC infrastructure as one-way, only allowing flow from the island, where the generation is located, to the mainland. There may be a cost difference if the link is built as bidirectional. The relevant TO may choose to incur any such incremental expenditure making the link bidirectional, if it felt that there were security benefits in terms of, under certain scenarios, securing demand. That is one example; there may be other additional functionality to be included in AC local circuits, that are at the behest of the transmission owner or system operator, and not related to the needs of the generator.

The defect is that, absent clarification of the exclusion of these extra costs, they are very likely to be included in the actual costs used to calculate the expansion factor and hence the relevant local circuit charge, meaning that relevant generators are facing a local circuit charge that is not fully cost-reflective.

What

The calculation of local circuit expansion factor should only include costs relevant to and needed by the connected generators. The incremental cost of extra functionality that the TO chooses to add, of wider benefit, should not be included. If the cost is already excluded under CMP301, if passed, then it could not also be excluded under this mod.

Why

If the calculation of the expansion factor and hence LCT, includes the cost of extra functionality included for wider societal/system benefits unrelated to the relevant generators' needs, the charge will not be cost-reflective as to what is being provided to connect up relevant generators, as opposed to what is additionally being provided for other transmission users.

How

Baseline CUSC says at 14.15.75 that AC cable and HVDC circuit expansion factors are to be calculated on a case by case basis using actual project costs (Specific Circuit Expansion Factors). It is suggested that a following paragraph be added, to make clear that where there are extra costs unrelated to the relevant generators' needs, they should be excluded from the relevant expansion factor. The Transmission Owner will provide the cost information on a case by case basis (to Grid), removing any additional costs not solely for the developer. STC procedures 13 and 14 already allow for the TO to provide relevant information to the TNUOS charging team, using broad and inclusive wording, so they will not need amendment.

2 Governance

There are CFD auctions that new generators will compete in to secure support, which are expected to be in summer or autumn 2019, with qualification in Spring. In order to decide to take part, and then compete in this auction efficiently, potential such plant must be able to forecast the local circuit tariff element of their TNUoS charge. To do that, they need to know, if the TO is proposing to add cost by constructing a link providing extra functionality not needed by the developer(s), how that incremental cost, will or will not impact on their local circuit tariff. This mod elegantly gives that clarity in a simple way that maximises cost-reflectivity and if processed quickly, is able to be passed a few weeks ahead of the earliest conceivable auction tender submission deadline. It is up to Panel if it needs Urgent status.

Requested Next Steps

This modification should:

Go straight to code admin consultation, aiming for a fairly quick process.

3 Why Change?

By default, the likely interpretation is to include any extra costs relating to a TO choice to build local circuits with extra functionality unrelated to the needs of developers of connected generation. Clarification to aid cost-reflectivity is vital.

4 Code Specific Matters

Technical Skillsets

Respondents to a consultation will benefit from understanding of charging and of CUSC charging applicable objectives. Proposer does not believe that a workgroup is essential.

Reference Documents

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5 Solution

Baseline CUSC says at 14.15.75 that AC sub-sea cable and HVDC circuit expansion factors are to be calculated on a case by case basis using actual project costs (Specific Circuit Expansion Factors). A following paragraph to be added, should make clear that the incremental costs, as identified by the TO, of extra functionality unrelated to the developers' needs, should be excluded.

6 Impacts & Other Considerations

Generators connected via local circuits with extra functionality unrelated to their needs will benefit from more cost-reflective charges. There will be a much more dilute impact on the charges faced by others – at present our understanding of the operation of EC838/2010 is that in today's climate it is other generators (and, to be exact, the relevant generators for that local circuit as well, but in the same way as others) that would be slightly affected (via the TGR charge element), though this may not always be the case. No other codes are affected, as STC Procedures 13 and 14 are written in a wide and inclusive enough manner already. No significant systems changes are needed; a different approach to calculating expansion factors by the charge calculation team, is the only affect.

Does this modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

Our view is that this change falls outside the scope of the "targeted charging review" SCR. This defect has certainly not been documented or discussed within the TCR seminars or documentation.

Consumer Impacts

There will be a diluted adverse impact on the charges faced by others – at present our understanding of the operation of EC838/2010 is that in today's climate it is other generators that would be affected, not Suppliers/consumers, though this may not always be the case.

7 Relevant Objectives

Impact of the modification on the Applicable CUSC Objectives (Charging):

Relevant Objective	Identified impact
(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;	Positive – allows relevant generators to compete fairly in the market without being handicapped by paying extra costs unrelated to the export of their power
(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	Positive – ensures relevant generators face a cost-reflective local circuit charge, without paying for extra costs

connect and manage connection);	unrelated to the export of their power
(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;	Positive – HVDC island links don't exist yet, this mod among other scenarios covers the case where the TO adds bidirectionality as a function to such a link. This mod brings the CUSC up to date and ensures any such developments in relation to local circuit charges are properly taken account of in a fair and cost-reflective manner
(d) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency. These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1 *; and	Not relevant
(e) Promoting efficiency in the implementation and administration of the CUSC arrangements.	Not relevant
*Objective (d) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).	

8 Implementation

This proposal is linked to an imminent date related issue; namely that the date of the next CFD auctions that some local-circuit-connected generators, both AC and DC connected, will compete in to secure support, is expected to be March 2019 or shortly after (in any event, by or before June 2019). In order to compete in this auction efficiently, this plant must be able to forecast the local circuit tariff element of their TNUoS charge. This mod needs to be **implemented** (in force) a few weeks ahead of the earliest conceivable auction tender submission deadline.

9 Legal Text

- Replace 14.15.75 and 76 with,
- 14.15.75 AC sub-sea cable and HVDC circuit expansion factors are calculated on a case by case basis using actual project costs (Specific Circuit Expansion Factors), except that these project costs should only include costs relevant to and needed by the connected generators. The incremental cost of any extra functionality that the TO chooses to add, of wider benefit, should not be included.
- 14.15.76 Subject to 14.15.75, for HVDC circuit expansion factors both the cost of the converters and the cost of the cable are included in the calculation.

10 Recommendations

Proposer's Recommendation to Panel

Panel is asked to:

- Agree that the normal governance procedure should apply, sending it straight to consultation bearing in mind timescales described in section 8.

