At what stage is this document **CUSC Modification Proposal Form** in the process? **Proposal Form** 01 CMP347: Workgroup Consultation Offshore Local TNUoS Tariff **Workgroup Report** 03 Clarifications Code Administrator Consultation **Draft CUSC** 05 Modification Report **Final CUSC** 06 Modification

Purpose of Modification: This modification seeks to clarify the Embedded Transmission Use of System (ETUoS) Tariff, that forms part of the Offshore Transmission Owner's (OFTO's) revenue stream, to ensure the treatment for the three offshore local tariffs are consistent with each other. It also seeks to amend incorrect references relating to offshore local tariffs.

Report

The Proposer recommends that this modification should be:



- subject to self-governance
- and sent to Code Administrator Consultation

This modification was raised 11 June 2020 and will be presented by the Proposer to the Panel on 26 June 2020. The Panel will consider the Proposer's recommendation and determine the appropriate route.



High Impact: None Identified.



Medium Impact: None Identified.



Low Impact: Generator Users liable for Offshore Local TNUoS charges.

Contents Any questions? Contact: **Summary** 4 **Code Administrator** 2 Governance 5 paul.j.mullen@n Why Change? 6 ationalgrideso.com **Code Specific Matters** 8 **2**07794 537028 Solution 9 5 **Impacts & Other Considerations** 10 Proposer: **Relevant Objectives** 10 Sarah Chleboun 20 **Implementation** 8 11 **Legal Text** 11 sarah.chleboun@nati onalgrideso.com 10 Recommendations 12 11 Annex: Legal Text 13 07790 342584 **National Grid ESO** Representative:

Timetable

The Code Administrator recommends the following timetable:

Code Administrator Consultation	13 July 2020 to 04 August 2020
Draft Final Modification Report presented to Panel	20 August 2020
Modification Panel decision	28 August 2020
Final Modification Report issued to Panel to check votes have been recorded correctly (5 working days)	02 September 2020
Appeals Window (15 working days)	10 September 2020 to 01 October 2020
Decision implemented in CUSC	01 April 2021



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Proposer Details

Details of Proposer: (Organisation Name)	National Grid ESO
Capacity in which the CUSC Modification Proposal is being proposed: (i.e. CUSC Party, BSC Party or	CUSC Party
"National Consumer Council")	
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Attachments: No	

Impact on Core Industry Documentation.

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

BSC	
Grid Code	
STC	
Other	

This Modification Proposal has no impact on core Industry Documentation.

1 Summary

Defect

Offshore local TNUoS tariffs are the specific tariffs a generator connected to an Offshore Transmission Owner (OFTO) pays for the offshore transmission infrastructure that it uses. There are three components to offshore local tariffs which may apply: The Offshore local circuit tariff, Offshore substation tariff and, if applicable, Embedded Transmission Use of System tariff (ETUoS)

The three tariffs, set at the point of transfer of offshore assets to an OFTO, are each calculated using the actual project costs incurred in the construction of the assets to identify the proportion of the OFTO's revenue that should be recovered by each tariff.

We have noticed that there is ambiguity and out of date references within CUSC Section 14 about the treatment of offshore local tariffs.

What

The Embedded Transmission Use of System Charges "ETUoS" section provides for two independent charges that are both named "ETUoS", one that recovers part of the OFTO revenue (and is the focus of this modification) and one that is a pass-through cost that goes straight to the Distribution Network Operator (DNO) for use of the distribution system. It has become clear that this is confusing for customers and it should be clarified that they are two different charges.

CUSC paragraph 14.18.28, states that "the ETUoS payment profile will be consistent with the recovery of Offshore Transmission Owner revenue stream". This is ambiguous and should be clarified to avoid confusion and misinterpretation.

The OFTO Specific Expansion Factors section should be updated to remove and replace out of date references.

Why

The purpose of this CUSC modification proposal aims to avoid ambiguity in CUSC section 14 by clarifying the existing text to ensure consistency in the setting of offshore local tariffs and removing inaccurate references. This will avoid confusion and improve the clarity and understanding of our charges.

How

The Embedded Transmission Use of System Charges "ETUoS" section (which starts at Paragraph 14.18.25) should be amended to:

- 1. Rename the OFTO related ETUoS Tariff (referred to at Paragraph 14.18.27) to be the ETUoSofto Tariff, and also rename the DNO pass through charge (referred to at Paragraph 14.18.26) to be the ETUoSdNO Charge, to ensure that it is clear which charge is being discussed;
- 2. Include the formula that is used to calculate the ETUoSofto Tariff;

- 3. Clarify that inflation, in line with the associated OFTO's revenue, should be applied to the ETUoSofto Tariff, for each year within a price control; and
- 4. State that the ETUoSofto Tariff must be reset for the new price control.

The Expansion Constant and OFTO Specific Expansion Factors sections should be amended to remove and replace out of date references, specifically:

- 1. CUSC paragraph 14.15.68 states that "The process used to derive circuit expansion factors for Offshore Transmission Owner networks is described in 14.15.78"; this should be updated to instead reference paragraph 14.15.80 where Offshore Circuit Expansion Factors are introduced.
- 2. CUSC paragraph 14.15.84 refers to OFTO Specific Expansion Factors being "published in this statement"; however, there appear to be no expansion factors given in the text. This should be updated to reference the Charging Statement, which is published on the ESO website in line with the National Grid Electricity System Operator Licence Condition C5A, and in which the up to date Expansion Factors are published each year.
- 3. CUSC paragraph 14.15.84 contains an out of date paragraph reference for the calculation of OFTO specific expansion factors at the start of a price control. This reference should be updated to refer to paragraph 14.15.82, which contains the calculation for all year's following the initial year in which asset transfer happens.
- 4. CUSC paragraph 14.15.81 has a misleading reference to the year of "connection". This should be updated to say the year that the offshore transmission assets are transferred to the OFTO.

2 Governance

Justification for Self-Governance Procedures

The Proposer recommends that this Modification follows the Self-Governance procedure as the changes are unlikely to discriminate between difference classes of CUSC parties and is unlikely to have a material effect on:

- i) Existing or future electricity customers;
- ii) Competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution or supply of electricity;
- iii) The operation of the National Electricity Transmission System;
- iv) Matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies; and
- v) The Grid Code's governance procedures or the Grid Code's modification procedures.

Requested Next Steps

This modification should:

- be subject to self-governance
- and proceed to Code Administrator Consultation

This modification is not considered urgent but since it contains clarifications for calculations that are linked to the Price Control it would ideally be approved prior to the beginning of the RIIO-2 price control period, in April 2021, for implementation on 1st April 2021.

3 Why Change?

Offshore local TNUoS tariffs are the specific tariffs a generator connected to an Offshore Transmission Owner (OFTO) pays for the offshore transmission infrastructure that it uses.

When the assets are transferred to the OFTO, the OFTO is granted an annual revenue stream by Ofgem (defined in their offshore transmission licence as "OFTOt"), which it is paid by ESO out of TNUoS revenue. Most of this money will be paid by the generator that connects to the OFTO and, the rest of the money will be paid by all other TNUoS customers out of the residual tariff.

There are three components to offshore local tariffs which may apply:

- Offshore local circuit tariff: This component relates to the cost of transmission infrastructure assets used by generators to connect to the onshore network.
- Offshore substation tariff: This component relates to the unit costs of relevant design and type of local infrastructure substation assets required for each connection.
- Embedded Transmission Use of System Charges (ETUoS): This component, if applicable, is used to recover the element of the OFTO's Revenue that relates to any distribution charges paid during in the development of the offshore transmission network¹.

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¹ For the avoidance of doubt, all references to the ETUoS Tariff within this modification are in relation to the tariff that is used to recover historic DNO capital contributions forming part of the Offshore Transmission Owner tender revenue stream, described in CUSC 14.18.27. This is not to be confused with any enduring distribution charges made to ESO, which are passed through to the relating generator and are also known as an ETUoS charge, described in CUSC 14.18.26.

The three tariffs are each calculated using the actual project costs incurred in the construction of the assets to identify the proportion of the OFTO's revenue that should be recovered by each tariff. They are set at the point of transfer of the offshore assets to an OFTO and then inflated in line with the associated OFTO's revenue for each subsequent year within the relevant price control. These are then revised at the start of each price control period, on the basis of new forecasts of OFTO allowed revenue.

Whilst it is clear that the intention is that the three tariffs which are set in the same way, i.e. to each recover a proportion of the OFTO revenue based on capital costs, should subsequently be treated in the same way, we have noticed that CUSC Section 14 is not clear about the treatment of the ETUoS tariff. There are also several out of date references relating to offshore local tariffs which could cause confusion.

Embedded Transmission Use of System Charges "ETUoS" section has little detail on the calculation or treatment of tariff

CUSC paragraph 14.18.28 states "in terms of applicable transitional offshore generation projects the ETUoS payment profile will be consistent with the recovery of Offshore Transmission Owner revenue stream". We believe that the intent of this statement is to ensure the ETUoS tariff is treated consistently with the Offshore Local Circuit and Substation Tariffs however we believe it should be clarified to avoid confusion and misinterpretation.

Additionally, there are two ETUoS charges described in this section of the CUSC

- one that recovers part of the OFTO revenue (and is the focus of this modification); and
- one that is a pass-through cost that goes straight to the DNO for use of the distribution system.

The naming of the ETUoS charges are not unique and it has become clear that this is confusing for customers and it should be clarified that they are two different charges.

Incorrect References to OFTO Specific Expansion Factors paragraphs

A number of paragraphs within the Expansion constant section and the OFTO Specific Expansion Factors section have references to OFTO Specific Expansion Factors which are now out of date and incorrect. These should be updated to avoid confusion.

OFTO Specific Expansion Factors section has incorrect references included

CUSC paragraph 14.15.84 states that "Prevailing OFFSHORE TRANSMISSION OWNER specific expansion factors will be published in this statement". However, there appear to be no expansion factors given in the text. This should be updated to direct the user to a list of expansion factors which is kept up to date.

Also, paragraph 14.15.81 describes the calculation for the offshore circuit expansion factor in the first year of "connection". This is misleading as the generator connects typically 18-24 months before an OFTO is appointed and the transmission assets are transferred to the OFTO. This should be updated to say that the calculation is relevant

for the year in which asset transfer to the OFTO takes place and the OFTO is granted a licence and an allowed revenue.

The purpose of this CUSC modification proposal aims to avoid ambiguity in CUSC section 14 by clarifying the existing text to ensure consistency in the setting of offshore local tariffs and removing inaccurate references. This will avoid confusion and improve the clarity and understanding of our charges.

We presented the proposal for this modification at Transmission Charging Methodology Forum (TCMF) on 3rd March 2020 - no feedback was received for inclusion within the modification.

4 Code Specific Matters

Technical Skillsets

Familiarity with TNUoS arrangements for Offshore Generators.

Reference Documents

The ESO presented this modification at Transmission Charging Methodology Forum (TCMF) on 3rd March 2020 and whilst not essential, it may be useful to review the slides and minutes alongside this CMP. These can be found under the heading "Meeting 102 – 3 March 2020" on the following webpage²:

https://www.nationalgrideso.com/transmission-charging-methodology-forum-and-cuscissues-steering-group

There is a guidance document available that describes the offshore regime and the local tariffs. It is called "TNUoS for offshore generators and the OFTO regime", and can be found on the ESO website using the following link, under the heading "TNUoS Guidance":

https://www.nationalgrideso.com/charging/charging-guidance

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² Please note that it was originally stated in these slides that the Offshore Local Circuit Tariff may need updating to say that it requires reset for a price control, we have since concluded that the existing calculation and the definitions of the individual components are sufficient.

5 Solution

This modification seeks to amend the Embedded Transmission Use of System Charges "ETUoS" section (which starts at Paragraph 14.18.25) to remove ambiguity and ensure that it's treatment is consistent with the other offshore local tariffs.

In particular, the following should be addressed:

- 1. Rename the OFTO related ETUoS Tariff to be ETUoS_{OFTO} Tariff (referred to at Paragraph 14.18.27), and also rename the DNO pass through charge (referred to at Paragraph 14.18.26) to be the ETUoS_{DNO} Charge, to ensure that it is clear which charge is being discussed;
- 2. The formula for calculating the ETUoSofto Tariff should be included;
- 3. It should be made clear that inflation, in line with the associated OFTO's revenue, should be applied to the ETUoSofto Tariff, for each year within a price control; and
- 4. It should state that the ETUoSofto Tariff must be reset for the new price control.

It will also amend the Expansion Constant and OFTO Specific Expansion Factors sections to remove and replace out of date references, specifically:

- CUSC paragraph 14.15.68 states that "The process used to derive circuit expansion factors for Offshore Transmission Owner networks is described in 14.15.78"; however, 14.15.78 refers to Onshore Local Circuit Expansion Factors. Paragraph 14.15.68 should be updated to instead reference paragraph 14.15.80 where Offshore Circuit Expansion Factors are introduced.
- 2. CUSC paragraph 14.15.84 should be updated to say that Prevailing OFFSHORE TRANSMISSION OWNER specific expansion factors will be published in the Charging Statement. The Charging Statement contains up to date Expansion Factors and is published each year on the ESO website, in line with the National Grid Electricity System Operator Licence Condition C5A.
- 3. CUSC paragraph 14.15.84 also states that OFTO specific expansion factors shall be recalculated at the start of each price control period using the formula in paragraph 14.15.71. This reference appears to be out of date since there is no formula within that paragraph. This reference should be updated to refer to paragraph 14.15.82, which contains the calculation for all year's following the initial year in which asset transfer happens.
- 4. CUSC paragraph 14.15.81 has a misleading reference to the year of "connection", this should be updated to say the year that the offshore transmission assets are transferred to the OFTO.

We believe that this solution will clarify the existing offshore tariff setting process to remove any ambiguity and ensure consistency between the three offshore local tariffs is maintained.

This proposal seeks to clarify the text in line with the existing process as it is understood and carried out. For the avoidance of doubt, it does not propose any changes to the calculation of the tariffs, and therefore there is no impact on the collection of Transmission Owner or Offshore Transmission Owner allowed revenue.

6 Impacts & Other Considerations

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

This Modification has no impact on the Significant Code Review (SCR) or other significant industry change projects.

Consumer Impacts

This Modification has no material impact on consumers.

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
(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);	None
(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;	None
(d) Compliance with the Electricity Regulation and any relevant	None

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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	
(e) Promoting efficiency in the implementation and administration of the CUSC arrangements.	Positive
*Objective (d) refers specifically to European Regulation 2009/714/EC. Reference to the	

Demonstration of how the Relative Objectives are furthered:

Agency is to the Agency for the Cooperation of Energy Regulators (ACER).

(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

The proposed changes remove a barrier to entry which could be caused by ambiguous or misleading information being included in the CUSC. Confusion regarding tariff calculations and where to find current OFTO specific expansion factors could cause new customers to inadvertently use incorrect information.

(e) Promoting efficiency in the implementation and administration of the CUSC arrangements.

The proposed changes will provide customers with one accurate place to find current Offshore Transmission Owner specific expansion factors and will only require a single CUSC modification to achieve it. This avoids additional administrative burden on the industry of having to raise annual CUSC modifications to keep the parameters up to date within the CUSC since they are subject to annual indexation.

8 Implementation

This modification is not considered urgent but since it contains clarifications for calculations that are linked to the Price Control it would ideally be approved prior to the beginning of the RIIO-2 price control period, in April 2021, for implementation on 1st April 2021.

9 Legal Text

Text Commentary

The Embedded Transmission Use of System Charges "ETUoS" section (which starts at Paragraph 14.18.25) should be updated to make it clear that:

- Rename the OFTO related ETUoS Tariff to be the ETUoSOFTO Tariff (referred to at Paragraph 14.18.27), and also rename the DNO pass through charge (referred to at Paragraph 14.18.26) to be the ETUoSDNO Charge, to ensure that it is clear which charge is being discussed;
- The formula for calculating the ETUoSofto Tariff should be included;
- the ETUoSofto tariff should be inflated, in line with the associated OFTO's revenue, for each year within a price control; and
- the ETUoSofto tariff must be reset for the new price control.

The current wording for where to find the OFTO specific expansion factors should be updated to reflect that the current values can be found within the Charging Statement which is published on the ESO website. The references to the calculation within the text should also be updated to the correct paragraph number and the misleading reference to "connection" should be clarified.

Legal Text

The legal text can be found in Annex 1 of this document.

10 Recommendations

Proposer's Recommendation to Panel

Panel is asked to:

- Agree that Self Governance procedures should apply
- Submit this proposal to Code Adminstrator Consultation.

11 Annex: Legal Text

Changes to section 14 of the CUSC are proposed as follows (please note that additions are shown in blue and underlined, deletions are shown in red with strikethrough):

CUSC - SECTION 14

14.15 Derivation of the Transmission Network Use of System Tariff

The Expansion Constant

14.15.68	This process is carried out for each voltage onshore, along with other
	adjustments to take account of upgrade options, see 14.15.73, and normalised
	against the 400KV overhead line cost (the expansion constant) the resulting
	ratios provide the basis of the onshore expansion factors. The process used to
	derive circuit expansion factors for Offshore Transmission Owner networks is
	described in 14.15.7880.

Offshore Circuit Expansion Factors

14.15.81	In the first year that the offshore transmission assets are transferred to the Offshore Transmission Owner of connection, the offshore circuit expansion		
	factor would be calculated as follows:		
	$\frac{\textit{CRevOFTO1}}{\textit{L} \times \textit{CircRat}} \div \textit{Onshore 400kV OHL Expansion Constant}$ Where:		
	CRevOFTO1 = The offshore circuit revenue in £ for Year 1 L = The total circuit length in km of the offshore circuit CircRat = The continuous rating of the offshore circuit		

Prevailing OFFSHORE TRANSMISSION OWNER specific expansion factors will be published in this statement The Company's Statement of Use of System Charges which is available from the Charging website. These shall be recalculated at the start of each price control period using the formula in paragraph 14.15.7182. For each subsequent year within the price control period, these expansion factors will be adjusted by the annual Offshore Transmission Owner specific indexation factor, OFTOInd, calculated as follows; $OFTOInd_{t,f} = \frac{OFTO\,\text{Re}\,vInd_{t,f}}{RPI_t}$ where:

OFTOInd _{t,f}	=	the indexation factor for Offshore Transmission Owner <i>f</i> in respect of charging year <i>t</i> ,
OFTORevInd _{t,f}	=	the indexation rate applied to the revenue of Offshore Transmission Owner <i>f</i> under the terms of its transmission licence in respect of charging year <i>t</i> , and
RPI_t	=	the indexation rate applied to the expansion constant in respect of charging year <i>t</i> .

Section 14.18 Generation charges

Embedded Transmission Use of System Charges "ETUoS"

14.18.25	The ETUoS charges are a component of Use of System charges levied on offshore generators whose offshore transmission connection is embedded in an onshore distribution network. The charge relates to the provision and use of the onshore distribution network.	
14.18.26	The main purpose of ETUoS charges is to pass through the charges that are levied by the DNO on the NETSO to the offshore generator(s). This charge, known as the ETUoS _{DNO} charge, reflects the charges levied by the DNO for the costs of any works on and use of the DNO network in accordance with the DNO's charging statements and will include, but is not limited to, upfront charges and capital contributions in respect of any works as well as the ongoing and annual Use of System charges for generation connected to the distribution network.	
14.18.27	In the case of some relevant transitional offshore generation projects, ETUoS will also be used to pass through historic DNO capital contributions forming part of the Offshore Transmission Owner tender revenue stream, this is known as the ETUoSofto tariff. i) The ETUoSofto tariff shall be the ratio of the Offshore Transmission Owner revenue (£) associated with DNO capital contributions and the Transmission Entry Capacity (TEC) of the generation connected to the offshore substation. ii) In the year of asset transfer to the OFTO, the ETUoSofto tariff would be calculated as follows: DNRevOFTO1 TEC Where:	
	DNRevOFT01 = The offshore revenue associated to DN	

	capital contributions, in £, for Year 1
	<u>TEC</u> = the Transmission Entry Capacity of the generation connected to the offshore
	substation
	iii) In all subsequent years, the ETUoS _{OFTO} tariff would be calculated as
	follows:
	AvDNRevOFTO
	Where:
	AvDNRev0FT0 = The annual offshore revenue associated to
	DN capital contributions averaged over the
	remaining years of the National Electricity Transmission System Operator (NETSO)
	price control, in £
	TEC = the Transmission Entry Capacity of the
	generation connected to the offshore substation
	<u>Substation</u>
	iv) <u>ETUoS_{OFTO} tariffs shall be reviewed at the start of every onshore price</u> control period. For each subsequent year within the price control period,
	these shall be inflated in the same manner as the associated Offshore
	<u>Transmission Owner Revenue.</u>
14.18.28	The specific nature of the ETUoS _{DNO} charge and the payment profile for these
	will depend upon the charging arrangements of the relevant DNO and reference
	should be made to the relevant DNO's charging statement. In terms of
	applicable transitional offshore generation projects the ETUoS _{OFTO} payment profile will be consistent with the recovery of the Offshore Transmission Owner
	revenue stream, and paragraph 14.18.27.
14.18.29	Where a DNO's charge relates to more than one offshore generator, the related
14.10.29	ETUoS _{DNO} charge will represent a straight pass through of the distribution
	charge specific to each relevant offshore generator. Where specific information
	is not available, charges will be pro-rated based on the TEC of the relevant offshore generators connected to that offshore network.
	offshore generators connected to that offshore network.
14.18.30	Invoices for ETUoS _{DNO} charges shall be levied by The Company on the offshore
	generator as soon as reasonably practicable after invoices have been received by The Company for payment such that The Company can meet its payment
	obligations to the DNO. The initial payments and payment dates will be outlined
	in a User's Construction Agreement and/or Bilateral Agreement.
14.18.31	As the ETUoS _{DNO} charges reflect the DNO charges to The Company, such
	charges will be subject to variation when varied by the DNO. Where the User
	disputes regarding the ETUoS _{DNO} charge please note that this will result in a
	dispute between The Company and DNO under the DCUSA.