At what stage is this **CUSC Modification Proposal Form** document in the process? Initial Written CMP277 01 **Assessment** Workgroup 02 Consultation **Special License Condition 4J** Workgroup Report 03 **Code Administrator** 04 Consultation Draft CUSC 05 Modification Report **Final CUSC** 06 Modification Report

Purpose of Modification: Update Section 14.30.6 and 14.32 of the CUSC to reflect the changes made to the terms of the external BSUoS charges recoverable by the SO due to new License Condition 4J and changes to Special License Condition 4C.1.

The Proposer recommends that this modification should:

- Be treated as Urgent and should proceed as such under a timetable agreed with the Authority because:
- It reflects a License change currently under statutory consultation by Ofgem



- The SO wishes to have the ability to utilise the mechanism described in Special License Condition 4J as soon as possible, because the purpose of the mechanism is to reduce overall system costs, e.g. Reduce BSUoS.
- Ofgem desire the mechanism to be available to be operated from 1 April 2017.

This modification was raised **17 March 2017** by Stephen McAllister of National Grid and will be presented by the Proposer to the Panel on **31 March 2017.** The Panel will consider the Proposer's recommendation and determine the appropriate route.



High Impact: NGET



Medium Impact



Low Impact All BSUoS payers, due to the fact that the mechanism described in Special License Condition 4J is designed to reduce BSUoS cost, however it is not anticipated to reduce cost in 2017-18 by more than £10mn.

CMP277 Page 1 of 10

Contents

Summary

Governance 5 2

5 Why Change? 3

4 **Code Specific Matters** 6

Solution 5 6

Impacts & Other Considerations 7 **Relevant Objectives** 7

Implementation 8

Legal Text 8

10 Recommendations 10

Timetable

7

The Code Administrator will update the timetable.

The Code Administrator recommends the following Urgent timetable:

Initial consideration by Workgroup	w/c 10/04/2017
Workgroup Consultation issued to the Industry (5WD)	03/05/2017
Modification concluded by Workgroup	18/05/2017
Workgroup Report presented to CUSC Panel	26/05/2017
Code Administration Consultation Report issued to the Industry (5WD)	26/05/2017
Draft Final Modification Report presented to Panel	09/06/2017
Modification Panel decision (Special CUSC Panel)	16/06/2017
Final Modification Report issued the Authority	21/06/2017
Decision implemented in CUSC	07/07/2017



Contact:

4

Code Administrator





Proposer:

Stephen McAllister



Stephen.McAllister@ nationalgrid.com



01189363223

National Grid Representative:

Stephen McAllister



Stephen.McAllister@ nationalgrid.com



01189363223

CMP277 Page 2 of 10

Details of Proposer: (Organisation Name) Capacity in which the CUSC Modification Proposal is being proposed: (i.e. CUSC Party, BSC Party or "National	Stephen McAllister National Grid CUSC Party	
Details of Proposer's Representative: Name: Organisation: Telephone Number: Email Address:	Stephen McAllister National Grid 0118 9363223 Stephen.McAllister@nationalgrid.com	
Details of Representative's Alternate: Name: Organisation: Telephone Number: Email Address:	Carol Carlin National Grid 0118 936 3923 Carol.Carlin@nationalgrid.com	
Attachments (Yes/No): 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 x
Other

(Please specify)

This is an optional section. You should select any Codes or state Industry Documents which may be affected by this Proposal and, where possible, how they will be affected.

CMP277 Page 3 of 10

1 Summary

Defect

Update Section 14.30.6 and 14.32 of the CUSC to reflect the changes made to the terms of the external BSUoS charges recoverable by the SO due to new License Condition 4J and changes to Special License Condition 4C.1.

What

Referencing Ofgem's final proposals for electricity system operator incentives from April 2017, the relationship between National Grid Electricity transmission (NGET) and the transmission operators (TOs) is becoming more and more important with strong interdependencies between the two. However, there has been a gap identified in the current arrangements where the TO could increase expenditure to reduce overall system costs. However, there is no mechanism through which NGET can fund the TO for carrying out these works which lead to an overall saving.

Therefore Ofgem have introduced a new Special License Condition 4J which is only applicable between NGET SO and Scottish TOs. This condition establishes the value of SO to Scottish TOs cost allowance and places an obligation on NG to produce quarterly reports on use of the funding. It also establishes an incentive mechanism for part of the allowance. Therefore, to ensure that this is recovered correctly a change to the CUSC is needed relating to how BSUoS is calculated.

Why

The new License Condition 4J is being placed on the System Operator to allow it to procure services from the Scottish TOs when the costs of procurement are less than the savings achieved, e.g. to fund a temporary bypass circuit when a transmission circuit is out of service for maintenance in order to alleviate transmission constraint costs.

Related to this change, Ofgem have made changes to the names of the terms defining the external BSUoS cost elements in Special License Condition 4C.1

How

To keep the CUSC aligned to the License Conditions, the relevant text in 14.30.6 and 14.32 needs to be amended to reflect the License definitions. This will reflect the main components of the allowances:

- Outage costs (OC), which will be used by the SO to compensate the TO for changes to the TO works plan instigated by the SO.
- Commercial Operational Services (COS) is a new allowance. This incentivises SO and TO to work together to deliver works differently to reduce overall costs of the system.
- Joint Works (JW) Projects, where works cannot be funded elsewhere and must provide more value to customers than costs. The Authority will decide whether a project is sanctioned and the level of costs to be recovered.

The Incentive payment is decided by the Authority and will determine the level of payment based on the end of year report submitted by the SO which will provide details on the above three allowances.

CMP277 Page 4 of 10

OC expenditure and COS will be recovered via BSUoS and billed across all settlement periods. In the event a JW is used, billing will also be spread across all settlement periods.

2 Governance

The proposal should be treated as Urgent under a timetable agreed with the Authority.

The CUSC needs to be modified as soon as possible to reflect the License changes currently under Statutory Consultation by Ofgem.

3 Why Change?

Ofgem are introducing a new License Condition 4J on the System Operator to allow it to procure services from the Scottish TOs when the costs of procurement are less than the savings achieved, e.g. to fund a temporary bypass circuit when a transmission circuit is out of service for maintenance in order to alleviate transmission constraint costs.

Related to this change, Ofgem have made changes to the names of the terms defining the external BSUoS cost elements in Special License Condition 4C.1

Some extracts from "Ofgem's Final Proposals For Electricity System Operator Incentives April 2017" to explain the mechanism and rationale follow:

- 1.79. The relationship between NGET and the TOs is becoming increasingly important with strong interdependencies between the two. However, there is a gap in the current arrangements where the TO could incur increased expenditure to reduce overall system costs.
- 1.80. At present, there is no mechanism through which NGET can fund the TO for carrying out works which lead to overall system cost savings. For example, the TO could build a temporary tower so as to maintain a circuit operational when upgrading a section of the network, or add an additional shift of work to minimise the outage period.
- 1.88. We continue to believe that a pilot of the SO-TO mechanism would be useful to
 understand the effectiveness of the mechanism before making a decision on whether
 to expand, modify or remove it. We also believe it is appropriate for the pilot to
 exclude payments to NGET itself given the current integration between the SO and
 the TO in England and Wales.

Table 4: Summary of SO-TO mechanism

SO-TO Mechanism: Key facts and figures		
Size of fund pot for pilot scheme	£1.4million	
Length of mechanism	one year pilot	
Cap and floor	±£1m	
Sharing factor	10%	

CMP277 Page 5 of 10

Anticipated size of projects under	£10k - £100k
mechanism	

See details here: https://www.ofgem.gov.uk/publications-and-updates/final-proposals-electricity-system-operator-incentives-april-2017

4 Code Specific Matters

Technical Skill sets

Understanding of System Operator License Conditions.

Reference Documents

https://www.ofgem.gov.uk/publications-and-updates/final-proposals-electricity-system-operator-incentives-april-2017

5 Solution

The solution will be to amend the External BSUoS Charge for each settlement period calculation.

The text in CUSC 14.30.6 is:

$$BSUoSEXT_{jd} = CSOBM_{jd} + BSCCV_{jd}$$

$$+ \left[(IncpayEXT_d + BSCCA_d + ET_d - OM_d + RFIIR_d + ROV_d + BSFS_d + NC_d + IONT_d + LBS_d) \right]$$

$$* \left\{ \left| \sum_{j \in d}^{+} (QMBSUoS_{ijd} * TLM_{ijd}) + \left| \sum_{j \in d}^{-} (QMBSUoS_{ij} * TLM_{ij}) \right| \right\} \right\}$$

$$\sum_{j \in d}^{+} \left\{ \left| \sum_{j \in d}^{+} (QMBSUoS_{ij} * TLM_{ij}) \right| + \left| \sum_{j \in d}^{-} (QMBSUoS_{ij} * TLM_{ij}) \right| \right\} \right]$$

The text in CUSC 14.32, which is a worked example of BSUoS daily charge calculations is:

```
\begin{split} &BSUoSEXT_{11} = CSOBM_{11} + BSCCV_{11} \\ &+ \left[ \; (IncpayEXT_1 + BSCCA_1 + ET_1 - OM_1 + RFIIR_1 + ROV_1 + BSFS_1 + NC_1 + IONT_1 + LBS_1) \right. \\ &\left. * \left\{ \left| \sum^{+} (QM_{i1,1} * TLM_{i1,1}) \right| + \left| \sum^{-} (QM_{i1,1} * TLM_{i1,1}) \right| \right. \right\} / \sum_{j \in \mathbb{I}} \left\{ \left| \sum^{+} (QM_{ij} * TLM_{ij}) \right| + \left| \sum^{-} (QM_{ij} * TLM_{ij}) \right| \right. \right\} \left. \right] \end{split}
```

Above texts need changed to reflect the modified terms of the External BSUoS charges defined in Special License Condition 4C.1:

```
BXext_t = CSOBM_t + BSCC_t + TotAdj_t - OM_t + IncPayExt_t + BSC_t + FIIR_t + SOTOC_t + LBS_t
[Adjusted to rename NC<sub>t</sub> to SOTOC<sub>t</sub>, RFIIR<sub>t</sub> to FIIR<sub>t</sub>, BSFS<sub>t</sub> to BSC<sub>t</sub>, remove ROV<sub>t</sub> and IONT<sub>t</sub> terms.]
```

Also changes are needed to the BSUoS Acronym Definitions table 14.31.8.

CMP277 Page 6 of 10

6 Impacts & Other Considerations

This proposal is related to housekeeping proposal CMP278, the purpose of which is to update CUSC sections 14.30.11 and 14.32 to reflect the changed cap and collar and sharing factors of the Balancing Services Incentive Scheme as detailed in the current Ofgem Statutory License Consultation here: https://www.ofgem.gov.uk/publications-and-updates/final-proposals-electricity-system-operator-incentives-april-2017

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

No

Consumer Impacts

The intent from Ofgem of Special License Condition 4J is to reduce BSUoS cost which should filter through to reduced costs for 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;	None	
(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);	Positive	
(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	
(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	None	

CMP277 Page 7 of 10

Condition C10, paragraph 1; and	
(e) Promoting efficiency in the implementation and administration of the CUSC arrangements.	None

*Objective (c) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).

This change positively impacts charging objective (b) and (c) by properly accounting for changes in costs of the licensees business and properly takes account of developments in the licensees business.

8 Implementation

The CUSC needs to be modified as soon as possible to reflect the License changes currently under Statutory Consultation by Ofgem.

Ofgem desires the System Operator to be able to utilise this mechanism from 1 April 2017.

Expediting implementation will also ensure the System Operator is incentivised to utilise the mechanism to reduce BSUoS costs.

9 Legal Text

The text in CUSC 14.30.6 to be changed to:

$$BSUoSEXT_{jd} = CSOBM_{jd} + BSCCV_{jd}$$

$$+ \left[(IncpayEXT_d + BSCCA_d + ET_d - OM_d + FIIR_d + BSC_d + SOTOC_d + LBS_d) \right]$$

$$* \left\{ \left| \sum_{j \in d}^{+} (QMBSUoS_{ijd} * TLM_{ijd}) + \left| \sum_{j \in d}^{-} (QMBSUoS_{ijd} * TLM_{ijd}) \right| \right\} / \left[\sum_{j \in d}^{+} (QMBSUoS_{ij} * TLM_{ij}) \right] \right\}$$

The text in CUSC 14.32 to be changed to:

$$BSUoSEXT_{jd} = CSOBM_{jd} + BSCCV_{jd} \\ + \left[(IncpayEXT_d + BSCCA_d + ET_d - OM_d + FIIR_d + BSC_d + SOTOC_d + LBS_d) \right. \\ * \left\{ \left. \left| \sum_{i=1}^{+} (QM_{t1,1} * TLM_{t1,1}) + \left| \sum_{i=1}^{-} (QM_{t1,1} * TLM_{t1,1}) \right| \right. \right\} / \\ \left. \sum_{j \in I} \left\{ \left. \left| \sum_{i=1}^{+} (QM_{ij} * TLM_{ij}) \right| + \left| \sum_{i=1}^{-} (QM_{ij} * TLM_{ij}) \right| \right. \right\} \right]$$

Definitions to be added to 14.31.8:

Expression	Acronym	Unit	Definition
Black Start Costs	BSC	£	As defined in the Transmission Licence (means the allowed revenue from and associated with Black Start services in

CMP277 Page 8 of 10

			accordance with paragraph 4G.5 of Special Condition 4G (Black Start Allowed Revenue Cost Incentive))
SO Forecasting Incentive Payment	FIIR	£	As defined in the Transmission Licence (means the incentive payment which the licensee may derive from the forecasting incentive for Wind Generation Output and National Demand Wind Generation Forecasting Incentive in accordance with Special Condition 4H (Wind Generation Forecasting Incentive))
SO-TO funding allowance	SOTOC	£	As defined in the Transmission Licence (means the SO-TO Mechanism cost allowance calculated in accordance with 4C.29 Special Condition 4J (SO-TO Mechanism))

Definitions to be deleted from 14.31.8:

Expression	Acronym	Unit	Definition
Black Start Feasibility Costs	BSFS	£	As defined in the Transmission Licence
Outage Cost Adjustment	IONT	£	As defined in the Transmission Licence
Non-Incentivised Costs	NC	£	As defined in the Transmission Licence
Wind Forecast Incentive Cost	RFIIR	£	As defined in the Transmission Licence
System Operator Innovation Roll-Out Value	ROV	£	As defined in the Transmission Licence

The terms within the definition of External BSUoS costs are to be aligned to the corresponding terms in the modified License condition 4C.1.

 $BXext_t = CSOBM_t + BSCC_t + TotAdj_t - OM_t + IncPayExt_t + BSC_t + FIIR_t + SOTOC_t + LBS_t$ [Adjusted to rename NC_t to SOTOC_t, RFIIR_t to FIIR_t, BSFS_t to BSC_t, remove ROV_t and IONT_t terms.]

CMP277 Page 9 of 10

10 Recommendations

Proposer's Recommendation to Panel

Panel is asked to:

• Agree that Urgency be recommended for this proposal.

CMP277 Page 10 of 10