CUSC Modification Proposal Form	At what stage is this document in the process?
# CMP306: ## Align annual connection charge rate of return at CUSC 14.3.21 to price control cost of capital	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: The purpose of this modification is to align the rate of return applied to the net asset value of connection points in the calculation of annual connection charges (as set out at paragraph 14.3.21 of the Connection Charging Methodology) to the pre-tax cost of capital in the price control of the Relevant Transmission Licensee (plus a margin of 1.5 percentage points in the case of MEA-linked assets). This will improve the cost reflectivity of the charges, since the return on capital will equal the Authority's most recent assessment of that cost for the Relevant Transmission Licensee.

The Proposer recommends that this modification should be:

- assessed by a Workgroup

This modification was raised *20 September 2018* and will be presented by the Proposer to the Panel on *28 September 2018*. The Panel will consider the Proposer's recommendation and determine the appropriate route.

High Impact: Chargeable Users under the Connection Charging Methodology and transmission licensees.

*__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. <u>Contact us:</u> **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 recommends the following timetable:

Initial consideration by Workgroup	dd month year
Workgroup Consultation issued to the Industry	dd month year
Modification concluded by Workgroup	dd month year
Workgroup Report presented to Panel	dd month year
Code Administration Consultation Report issued to the Industry	dd month year
Draft Final Modification Report presented to Panel	dd month year
Modification Panel decision	dd month year
Final Modification Report issued the Authority	dd month year
Decision implemented in CUSC	dd month year

Any questions?

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Proposer Details

Details of Proposer: (Organisation Name)	Northern Powergrid on behalf of Northern Powergrid (Northeast) Ltd and Northern Powergrid (Yorkshire) plc
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:	 Lee Wells Northern Powergrid 0191 387 7157 Lee.wells@northernpowergrid.com
Details of Representative's Alternate: Name: Organisation: Telephone Number: Email Address:	 Andy Jenkins Northern Powergrid 0197 760 5857 Andy.jenkins@northernpowergrid.com
Attachments (Yes/No): **No**	

Impact on Core Industry Documentation.

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

BSC	
Grid Code	
STC	x*
Other	

* Note, the proposal does not require STC changes, but STC parties may wish to propose STC modifications related to information sharing and publication in parallel to implementation

1 Summary

Defect

Paragraph 14.3.21 of the current CUSC Connection Charging Methodology calculates the capital component of the annual connection charge by applying a now-arbitrary return element of 6% for assets indexed using the RPI, or 7.5% for assets under the MEA revaluation.

As set out at transmission standard licence condition C6.8, the connection charging methodology should allow the relevant licensee to recover (a) its costs of carrying out any works and (b) a reasonable rate of return on the capital represented by such costs. In effect, the charges should be cost-reflective. The current 6% RPI linked return was previously a reasonable assessment of the cost of capital of the Relevant Transmission Licensee, as it was aligned with a price control assessment of the cost of capital. However the figure has not been updated to reflect the latest cost of capital determinations by the Authority. The 6% figure for an RPI linked return is therefore no longer reflective of the cost of capital of the Relevant Transmission Licensee, and is therefore no longer a reasonable rate of return on the costs incurred by the Relevant Transmission Licensee.

This proposal only relates to underlying cost of capital used in calculating the appropriate rate of return. It does not consider the appropriate difference between the return on RPI-linked and MEA-linked assets (which is currently set at 1.5 percentage points).

What

It is proposed to amend the calculation of the capital components of the annual connection charges, by defining the rate of return applied to RPI-linked assets as the pre-tax cost of capital determined in the price control in force in the relevant year, and for MEA linked assets as the same value plus 1.5 percentage points.

Why

Paragraph 14.2.1 states that connection charges enable the Relevant Transmission Licensee to recover the costs involved in providing the assets to connect to the transmission system with a ‘reasonable rate of return’. As highlighted in the ‘defect’ the long-standing rates of return are not currently linked to the cost of capital the Authority has determined for the Relevant Transmission Licensee in its price control settlement, and as the cost of capital has declined the calculation of the charges has remained linked to a 6% return (and 7.5% for MEA-linked assets). Aligning the rate of return in the charging methodology to the pre-tax cost of capital in the price control settlement in force at any given time would ensure that the annual connection charges levied by the Relevant Transmission Licensee reflect Ofgem’s latest view of a reasonable rate of return for the Relevant Transmission Licensee. This will result in a more cost reflective charges to Users.

How

References to the rate of return in Section 14 Part 1 of the CUSC (‘The Statement of the Connection Charging Methodology’) should be amended to define the rate as the pre-tax cost of capital determined in the relevant price control, plus 1.5 percentage points for assets under the MEA revaluation method. All references to the previous 6% and 7.5% figures should be removed accordingly. The relevant legal text and suggested amendments are proposed in section 9 of this form.

2 Governance

Justification for Normal Procedures

This proposal should follow the normal CUSC governance process and therefore proceed to being assessed by a Working Group. This change may result in materially different charges to the relevant Users and therefore revenue for the Relevant Transmission Licensee, and as such should be considered and developed by a Working Group.

Requested Next Steps

This modification should:

- be assessed by a Workgroup

Assessment by a Working Group will allow the proposal to be considered by all Users who can contribute to the assessment and development of the necessary legal text to remedy the defect identified. The straightforward rationale and nature of the change should mean the change should not require extensive discussion.

3 Why Change?

Under the existing arrangements the Relevant Transmission Licensee sets its annual charges for connection to the transmission network to include a rate of return which is no longer reflective of the latest cost of capital determined in its price control settlement by Ofgem.

By adjusting the rate of return so it equals the cost of capital in the latest price control determination, the charges of the Relevant Transmission Licensee on Users will be more cost reflective. This greater cost reflectivity will flow through to charges ultimately levied on end users.

This can easily be archived through an adjustment to paragraph 14.3.21 of the CUSC, to align the rate of return to the cost of capital determined by the Authority in the latest price control for the Relevant Transmission Licensee, thus improving the cost reflectivity of the charges levied on Users.

Failure to address this issue will result in a continued disconnect between the rate of return reflected in connection charges levied by the Relevant Transmission Licensee and the cost of capital of the Relevant Transmission Licensee as determined by the Authority. This would result in a continued (and, based on current trends in the allowed cost of debt, growing) lack of cost reflectivity in the annual connection charges.

4 Code Specific Matters

Technical Skillsets

Those assessing the modification should be familiar with Section 14, Part 1 of the CUSC and the relevant objectives. They should also have an understanding of the price control settlement.

Reference Documents

CUSC: Section 14, Part 1, paragraph 14.3.21

Ofgem price control financial model: the following parameters for the relevant year:

- Post-tax allowed cost of equity (Input worksheet '*cost of equity*')
- Allowed cost of debt (Input worksheet '*cost of debt*')
- Gearing % (Input worksheet '*notional gearing*')

5 Solution

The Authority undertakes an extensive assessment of the evidence on the relevant cost of capital, and thus a reasonable rate of return, at each price control review. The cost of capital may then be updated within the price control period according to a pre-set indexation formula. The results of this assessment (and any indexation formula) therefore form an ideal input to the calculation of a reasonable rate of return on capital as part of annual connection charges.

References to the rate of return in paragraph 14.3.21 of the CUSC ('The Statement of the Connection Charging Methodology') should be amended to define the rate as the pre-tax cost of capital determined in the relevant price control of the Relevant Transmission Licensee, plus 1.5 percentage points for assets under the MEA revaluation method.

All references to the 6% and 7.5% figures should be removed accordingly. The relevant legal text and suggested amendments are proposed in section 9 of this form.

6 Impacts & Other Considerations

Details of any potential cross-code, consumer or environmental impacts and attach or reference any other, related work.

This proposal will directly impact the CUSC. The Relevant Transmission Licensee and The Company may also wish for consequential amendments to the System Operator-Transmission Owner Code (STC), although the public nature of the information this amendment requires means this is not strictly necessary. One possible approach to the STC is that the Relevant Transmission Licensee provides the system operator with the pre-tax cost of capital information and potentially publishes it such that customers can easily find it. We would expect the parties to the STC to develop the process and relevant drafting separately. No other system/process are expected to be impacted.

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

There is currently no SCR which will impact this proposal. Ofgem's network access consultation ('Getting more out of our electricity networks by reforming access and forward-looking charging arrangements'), launched 23 July 2018, proposes the review of access arrangements, primarily at distribution voltages. To the extent that any SCR resulting from Ofgem's consultation does impact on transmission charges, it appears unlikely from Ofgem's proposals that the cost of capital used in calculating annual transmission connection charges would be considered.

It is therefore not considered that this proposal will impact any existing SCR or potential SCR launched as part of the network access consultation, or any associated changes which may be led by industry as a result of the consultation.

Ofgem's developing RIIO-2 proposals are related in determining what the cost of capital will be in the next price control. This proposal does not impact that process; instead it is drafted to ensure the Connection Charging Methodology remains aligned with the price control on an ongoing basis.

Consumer Impacts

Aligning the rate of return to the pre-tax price control cost of capital of the Relevant Transmission Licensee when calculating connection charges will result in more cost reflective costs levied on the impacted Users. These more cost-reflective charges should ultimately be reflected in the charges seen by energy 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 – aligning the rate of return applied in connection charges to the pre-tax cost of capital in the Relevant Transmission Licensee's price control will result improved cost reflectivity.

(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 – this proposal will ensure the rate of return aligns to the price control cost of capital and thus reflect changes in subsequent price controls.
(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	None
(e) Promoting efficiency in the implementation and administration of the CUSC arrangements.	None
*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

It is recommended that this proposal is implemented at the earliest opportunity. Ideally this would be 2019/20 connection charges but we recognise that working group timescales could push a final decision beyond the date at which 2019/20 charges are finalised.

9 Legal Text

Text Commentary

Our proposed legal text replaces the current hard coded rate of return values in 14.3.21 (6% and 7.5%) with references to the latest pre-tax RPI-linked weighted average cost of capital allowed in the Relevant Transmission Licensee's price control for the charging year. This means the relevant value will update from year to year, with reference to the price control.

Our proposed text does not directly cross reference specific values (or value names or cell ranges) in the current price control financial model, or other price control documentation. This will help to future-proof the drafting against possible future changes to the structure or variable names in the price control financial model (or other documentation). However, for reference in evaluating this proposal, the relevant cost of capital values can all be sourced from rows 38-40 of the input tab to the latest

(November 2017) RIIO-ET1 price control financial model, which can be downloaded from the Ofgem website.[1]

In all its recent price control determinations, the Authority has stated its cost of capital in 'vanilla' terms, which means it mixes a post-tax cost of equity with the un-taxed cost of debt. Corporation taxes on equity returns are then allowed through separate tax allowances. The charging methodology requires a pre-tax cost of capital, so that Users pay their share of the corporation taxes that will be due on the equity element of a reasonable rate of return. To avoid ambiguity over how to calculate a pre-tax cost of capital, the proposed text uses the textbook calculation. This is as follows:

Pre-tax cost of capital = (1-gearing %) x pre-tax cost of equity + (gearing %) x cost of debt

Where:

Pre-tax cost of equity = post-tax cost of equity / (1 - corporation tax rate)

We have also introduced a housekeeping change to the post-depreciation period rate of return. This has been set to zero, which does not affect the calculated charges since it is multiplied by a NAV which, by definition, is also zero at that stage.

Proposed text modifications

14.3.21. The charge for each connection asset in year n can be derived from the general formula below. This is illustrated more fully by the examples in Appendix 2: Examples of Connection Charge Calculations.

Annual Connection Chargen = Dn (GAVn) + Rn (NAVn) + SSFn (RPIGAVn) + TCn (GAVn)

Where:

For n = year to which charge relates within the Depreciation Period

n = year to which charge relates

GAVn = GAV for year n re-valued by relevant indexation method

RPIGAVn = GAV for year n re-valued by RPI indexation

NAVn = NAV for year n based on re-valued GAVn

[1] Available at: https://www.ofgem.gov.uk/publications-and-updates/riio-ed1-financial-model-following-annual-iteration-process-2017

Dn = Depreciation rate as percentage (equal to 1/Depreciation Period) (typically 1/40 = 2.5% of GAV)

Rn = real rate of return for chosen indexation method (the Relevant Transmission Licencee's price control pre-tax RPI-linked Weighted Average Cost of Capital for year n (RPI-WACCn) for RPI indexation, or the Relevant Transmission Licensee's RPI-WACCn + 1.5% for MEA indexation~~6% for RPI indexation, 7.5% for MEA Indexation~~)

SSFn = Site Specific Factor for year n as a % (equal to the Site Specific Cost/Total Site GAV)

TCn = Transmission Running Cost component for year n (other Transmission Owner Activity costs).

RPI-WACCn = cost of debt for year n x notional gearing % for year n + post tax cost of equity for year n / (1 –corporation tax rate for year n) x (1-notional gearing % for year n)

Where:

The cost of debt, notional gearing % and post-tax cost of equity for the Relevant Transmission Licensee are as specified in the latest published Ofgem price control financial model (PCFM) relating to the relevant year or, should Ofgem fail to publish or cease to publish a PCFM, taken from the latest public regulatory determinations or decisions on the cost of capital for the Relevant Transmission Licensee for the relevant year; and

The corporation tax rate that will be applicable in year n is as announced in the latest Budget setting out details of corporation tax rates in the relevant year.

For n = year to which charge relates beyond the Depreciation Period

n = year to which charge relates

GAVn = GAV for year n re-valued by relevant indexation method

RPIGAVn = GAV for year n re-valued by RPI indexation

NAVn = 0

Dn = 0

Rn = 0 ~~6% for RPI indexation, 7.5% for MEA Indexation~~)

SSFn = Site Specific Factor for year n as a % (equal to the Site Specific Cost/Total Site GAV)

TCn = Transmission Running cost component for year n (other Transmission Owner Activity costs).

10 Recommendations

Proposer's Recommendation to Panel

Panel is asked to:

- Agree that Normal governance procedures should apply.
- Refer this proposal to a Workgroup for assessment.

