Meeting 117

7 October 2021

Transmission Charging Methodologies Forum and CUSC Issues Steering Group

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Agenda

1	Introduction, meeting objectives and review of previous actions **Jon Wisdom - NGESO**	10:30 - 10:35
2	TCMF – DCMDG Alignment **Jon Wisdom - NGESO**	10:35 - 10:40
3	Code administrator update **Paul Mullen - Code Administrator NGESO**	10:40 - 10:50
4	Whole System Technical Code (WSTC) **Frank Kasibante - NGESO**	10:50 - 11:20
5	Offshore coordination update **Amy Wong - NGESO**	11:20 - 11:25
6	TNUoS & BSUoS declarations **Grahame Neale - NGESO**	11:25 - 11:40
7	ESO Bad Debt Recovery **James Thompson - NGESO**	11:40 - 11:55
8	User Commitment **Neil Bennett - SSEN**	11:55 - 12:15
9	Classify Hydro as Conventional Carbon **Damian Clough - SSE**	12:15 - 12:45
10	AOB and Meeting Close **Jon Wisdom - NGESO**	12:45 - 13:00

Review of previous actions

ID	Month	Agenda Item	Description	Owner	Notes	Target Date	Status
21-5	Sept 21	Code Administrator Update	It was requested that the TCMF & CISG page be re-populated with historical TCMF meeting documents for a minimum of 5 years previous	AH	5 years of meeting documents now published on website. Any older documents are saved within sharepoint and can be requested by getting in touch with us.	Oct 21	To be closed
21-6	Sept 21	TNUoS gen cap error margin calculation - 2021 result	Confirm whether station demand is included as eligible revenue	JZ		Nov 21	Open
21-7	Sept 21	Early Competition Plan update	Share an estimate of the length of time between tender and delivery	KM		Nov 21	Open

TCMF – DCMDG Alignment

Jon Wisdom, National Grid ESO

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Code Administrator Update

Paul Mullen, Code Administrator

Authority Decisions Summary (as at 6 October 2021)

Authority decisions since last TCMF		
Modification	**What this does?**	**Decision Date**
CMP370	Aligns the CUSC with the new Interactivity policy that has been developed collaboratively with industry through the Energy Networks Association (ENA) Open Network Projects	Decision received 20 September 2021 approving the CMP370 Original – implemented 4 October 2021.

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Authority Decisions Summary (as at 6 October 2021)

On 4 May 2021 (last updated 16 September 2021), Ofgem published a table that provides the expected decision date, or date they intend to publish an impact assessment or consultation, for code modifications/proposals that are with them for decision here

Modification	What this seeks to achieve?	Decision Date / Anticipated Decision Date
CMP335/336 and CMP343/340	Proposes the methodology for Transmission Demand Residual charges to be applied only to 'Final Demand' on a 'Site' basis, as well as how to treat negative locational charges and the application of any charging bands.; CMP335/336 looks at the Transmission Demand Residual billing and consequential changes	Expected decision dates for all these Modifications was 27 August 2021; however Ofgem confirmed at CUSC Panel on 27 August 2021 (and at CUSC Panel on 24 September 2021) that this date will not be met and will advise on the new expected decision date as soon as possible.
CMP292	Introduces a cut-off date for changes to the Charging Methodologies	30 September 2021 (previously 30 June 2021) as Ofgem consider this to be low priority
CMP371	Seeks to update CUSC Section 8 such that it is possible, under one CUSC Modification Proposal, to change CUSC provisions relating to Connection Charges, and Use of System Charging Methodologies alongside non-charging provision	Final Modification Report received 7 July 2021 – expected decision date 29 September 2021

Authority Decisions Summary (as at 6 October 2021)

On 4 May 2021 (last updated 16 September 2021), Ofgem published a table that provides the expected decision date, or date they intend to publish an impact assessment or consultation, for code modifications/proposals that are with them for decision here

Modification	What this seeks to achieve?	Decision Date / Anticipated Decision Date
CMP308	Seeks to modify the CUSC to better align GB market arrangements with those prevalent within other EU member states by removing BSUoS charges from Generation.	Final Modification Report received 23 September 2021
CMP368/369	CMP368 seeks to give effect to the Authority determination within the CMP317/327 decision published on the 17 December 2020 to amend the definition of Assets Required for Connection, create new definitions of ‘GB Generation Output’ and define Generator charges for use in the Limiting Regulation range calculation. To facilitate the change, CMP369 proposes to update the legal text relating to ‘Generation Output’ detailed in the tariff setting methodology within Section 14.14.5 and the Ex-Post Reconciliation within Section 14.17.37 of the CUSC to align with the updated definitions introduced by CMP368.	Final Modification Report received 23 September 2021 – decision requested on or before 29 October 2021

Authority Decisions Summary (as at 6 October 2021)

On 4 May 2021 (last updated 16 September 2021), Ofgem published a table that provides the expected decision date, or date they intend to publish an impact assessment or consultation, for code modifications/proposals that are with them for decision here

Modification	What this seeks to achieve?	Decision Date / Anticipated Decision Date
CMP378	Seeks to place an obligation on The Company (defined in the CUSC as National Grid Electricity System Operator (NGESO) Limited) to comply with the obligations insofar as these apply to it under Section C12 (Market-wide Half-Hourly Settlement Implementation) of the Balancing and Settlement Code (BSC).	Final Modification Report received 28 September 2021 – decision requested on or before 12 October 2021 with a view to being implemented 15 October 2021.
CMP377	Seeks to provide clarity on how the BSUoS charging methodology is described in Section 14 of the CUSC. The four areas being addressed are: Covid-19 cost recovery calculations, capitalisation of defined terms in CMP373 legal text, clarifying storage import terminology and general housekeeping	Final Modification Report received 6 October 2021

Implementations Summary (as at 6 October 2021)

Implementations

Modification	What this does?	Implementation Date
CMP373	Creates a more efficient process for Deferral of BSUoS billing error adjustment	1 October 2021
CMP370	Aligns the CUSC with the new Interactivity policy that has been developed collaboratively with industry through the Energy Networks Association (ENA) Open Network Projects	4 October 2021

Withdrawals

- None since last TCMF

Last Panel

24 September 2021

- 1 New Modification
  - **CMP379** seeks to clarify how TNUoS demand zones and therefore TNUoS demand tariffs and charges should be determined for transmission-connected demand users who connect at the boundaries of multiple DNO areas. **Workgroups to commence from January 2022.**
- Agreed that **CMP328** (which seeks to put in place an appropriate process to be utilised when any connection triggers a Distribution impact assessment) had met its Terms of Reference
- Unanimously recommended implementation of **CMP377 and CMP378**
- Presented forward look out on CUSC, Grid Code and STC Modifications for next 12 months – really helps see where the gaps and constraints are and enables the right conversations about prioritisation

Next Panel

29 October 2021

- No new Modifications
- No Workgroup Reports to be presented
- **CMP328** to be presented to Panel to recommend whether or not to implement
- Quarterly deep-dive review of the prioritisation stack
- Forward look out on Modifications for next 12 months

In Flight Modification Updates

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In flight Modifications (as at 6 October 2021)

0 open Workgroup Consultations

1 open Code Administrator Consultation

CMP328 (Seeks to put in place an appropriate process to be utilised when any connection triggers a Distribution impact assessment) – closes 5pm 18 October 2021

8 CUSC Workgroups held in September 2021

- 11 held across CUSC, Grid Code, STC and SQSS
- 11 to be held across CUSC (8 CUSC), Grid Code, SQSS and STC in October 2021

For updates on all “live” Modifications please visit “Modification Tracker” at:
https://www.nationalgrideso.com/industry-information/codes

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2021 and 2022 Dates

CUSC 2021 - Panel dates

CUSC	(TCMF) CUSC Development Forum	Modification Submission Date	Papers Day	Panel Dates
January	7	14	21	29
February	4	11	18	26
March	4	11	18	26
April	8	15	22	30
May	6	13	20	28
June	3	10	17	25
July	8	15	22	30
August	5	12	19	27
September	2	9	16	24
October	7	14	21	29
November	4	11	18	26
December	25/11	2	9	17

2022 Dates to be confirmed end November 2021 and presented at December 2021 TCMF

Digitalised Whole System Technical Code

October/November 2021

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Digitalised Whole System Technical Codes (WSTC) Webinar

Purpose of this discussion

1. To share and discuss the high level scope of the consultation paper
2. To signpost additional opportunities to engage with the digitalised WSTC project

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Introduction

Refer to consultation section 2: Introduction

The digitalised WSTC project seeks to digitalise and consolidate or align technical codes through an industry-led approach.

- The Ofgem/BEIS Energy Codes Reform recommends code simplification and consolidation
- Stakeholder feedback is that the technical codes are lengthy, overly complex, and are structured differently across Transmission and Distribution – creating a barrier to market participation and difficulty in navigation
- This ambition was supported by stakeholders and Ofgem as part of the ESO RIIO2 business plan
- NGESO has consulted at various industry forums since June 2021 to gather initial input on the scope, objectives and approach for this consultation and the wider project. The information gathered from the engagements at these forums has been used to inform this consultation.

Q1. What challenges do you have with using the technical codes?

Q2. Where there are challenges, please provide examples of areas where you would like to see change.

Potential Solutions

Refer to consultation section 3.1: Whole System Consolidation or Alignment

- Do nothing
- Align technical codes on key issues
- Develop an overarching WSTC and retain existing codes
- Develop a single WSTC

Q3. Are there further advantages and disadvantages of the potential solutions above?

Q4. Which of the issues identified in section2, (or by yourself in answer to Q1) would be addressed by each of the solution options?

Q5. Are there additional potential solutions for whole system alignment which could deliver value?

Potential Solutions

Refer to consultation section 3.2: Digitalisation

Do nothing → Enable self-service → Self-service with cross-code signposting → AI driven platform

Q6. Are there additional potential solutions for digitalisation would could deliver value?

Q7. Which of the potential solution(s) for digitalisation do you see as providing the most benefit?

Q8.What risks and/or opportunities do you see in digitalising codes in parallel to work on code alignment, potential consolidation, and the Energy Codes reform programme? Please also share your views on how best to mitigate these risks.

Q9. Do you think the digitalised codes should be legally binding or for guidance only? Why?

Potential Solutions

Refer to consultation section 3.4: Work that can progress independently of the ECR outcome

- Simplification & rationalisation of Distribution Code (& ERECs) and Grid Code separately
- Identifying areas where the Distribution Code (& ERECs) and Grid Code can be aligned
- Digitalising the Distribution Code (& ERECs) and Grid Code separately
- Inclusion of SQSS in the Grid Code
- Inclusion of P2/7 in the Distribution Code

Q10. Do you see value in progressing these work packages independently of the ECR and do you think they should be progressed?

Q11. Are there other opportunities that could be considered?

Potential Solutions

Refer to consultation section 3.5: Delivery of Solutions

Whole system alignment independent of ECR

a) Deliver modifications through existing governance process
b) Detailed recommendations for alignment delivered later, as part of ECR implementation

Code consolidation/alignment or creating new codes

a) Develop recommendations & input to the BEIS/Ofgem ECR
b) Postpone until ECR outcome

Digitalisation of codes

Digitalisation of

a) Grid Code only
b) Distribution Code (& ERECs) only
c) Grid Code and Distribution Code (& ERECs) separately
d) Grid Code and Distribution Code (& ERECs) together
e) Wait for BEIS/Ofgem ECR decision on consolidation

Q12. Stakeholders have articulated that there is strong interdependence between options in whole system consolidation or alignment (section 3.1), digitalisation (section 3.2) and the delivery of solutions (section 3.5). Do you have a preferred combination of these solutions that you see as delivering the best value considering the issues implementing the solutions? Please provide a rationale for your response.

Q13. Are there other aspects of the project delivery where you see risks and opportunities to mitigate these?

Key Benefits

Refer to consultation section 4: Key benefits

More efficient resource requirements for a connection journey

Increased market participation across the whole system

Encouraging innovation in the market

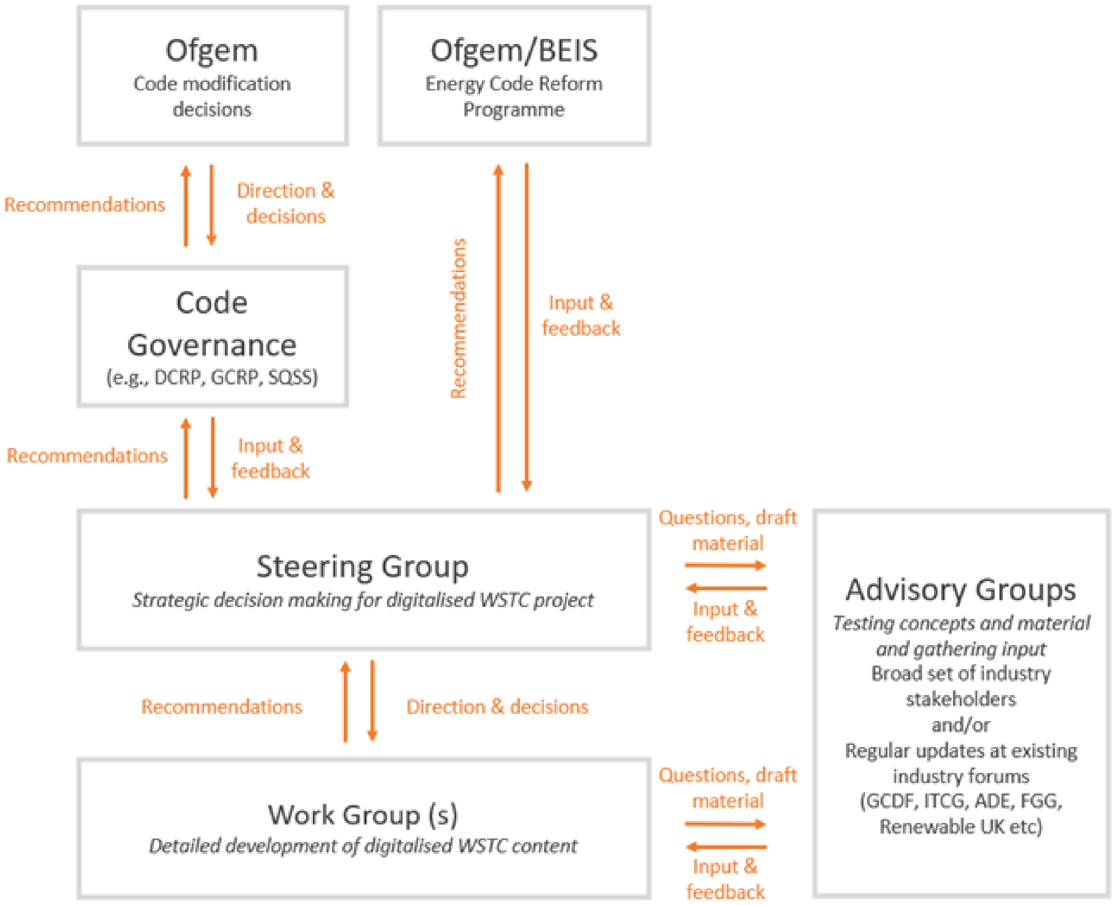
User-friendly technical codes

Streamlined implementation of changes across the whole system

Q14. Do you agree with the key benefits outlined above and can you see other benefits resulting from this project?

Project Governance

Refer to consultation section 5.1: Decision Making



Q15. Do you think that the proposed governance structure will enable delivery of the project? Would you change any aspects? If so, why?

Q16. Which elements of the project would you, or your organisation, like to be involved in? If so, please state in which capacity, and provide a short description of the perspective and value you would bring to the project?

Q17. What principles should apply when forming membership and ways of working for the various project groups?

Project Governance

Refer to consultation section 5.2: Proposed Terms of Reference – Steering Group

Membership

Frequency

Responsibilities

Q18. What are your views on the proposed Terms of Reference for the Steering Group?

Q19. Do you have further views on how best to include all relevant perspectives in the governance of the project?

Q20. How do you think the steering groups should make decisions, particularly if there is not consensus?

Project Governance

Refer to consultation section 5.3: Stakeholder Engagement

During Consultation:	During Project Execution:
Webinars	Webinars, Website & Email

Q21. What are your views on the proposed stakeholder engagement? Is there more that can be done to ensure effective stakeholder engagement?

Q22. Would you like to attend the webinars? If so, please leave your contact details in your feedback.

Q23. Would you like to request a regular update from the project at your forum? If so, please leave contact details of your forum in your feedback.

Project Governance

Refer to consultation section 5.4: Schedule

	Milestone	Date
Consultation	WSTC Consultation 1 issued to industry	27/09/21
	Webinars	05/10/21, 11/10/21, 20/10/21, 02/11/21, 05/11/21, 10/11/21
	WSTC Consultation 1 closes	12/11/21
	First proposed Steering Group meeting	Before 17/12/21

Q24. What are your views on the proposed schedule?

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How to Provide Feedback

Consultation Issued: 27th September 2021

Respond By: 12th November 2021

Contact Us

You can get the consultation document and response proforma here.

You can send your consultation responses to our email address: box.WholeSystemCode@nationalgrideso.com

You can subscribe to our mailing list here.

Webinars within the WSTC Consultation window

There will be regular webinars to explain the consultation and enable you to ask questions and provide feedback. (Repeat sessions – attend one)

- Tuesday 5 October, 11:00 – 12:00 (Click here to join the meeting)
- Monday 11 October, 10:00 – 11:00 (Click here to join the meeting)
- Wednesday 20 October, 10:00 – 11:00 (Click here to join the meeting)
- Tuesday 2 November, 14:00 – 15:00 (Click here to join the meeting)
- Friday 5 November, 10:00 – 11:00 (Click here to join the meeting)
- Wednesday 10 November, 14:00 – 15:00 (Click here to join the meeting)

Thank you

If you have any further questions, please contact the team at
box.WholeSystemCode@nationalgrideso.com

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Offshore Transmission Network Review (OTNR): Offshore Co-ordination

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Offshore Coordination Project - Update

- In June 2021, we gave an update on the Phase 1 findings and the scope of Phase 2.
- Since then, Ofgem published an OTNR consultation in July 2021 on Early Opportunities and Pathways to 2030 workstreams.
- NGESO have commenced looking into the 6 concepts that Ofgem has outlined as offshore coordination and reviewing the enablers and challenges it may have on CUSC, across the two workstreams.
- We would like to engage and work with the industry on the possible challenges to offshore coordination in CUSC and to prioritise topics that require detail discussion and assessment.
- Dedicated sessions are planned to be arranged in late November to discuss this further. Invitations to follow.
- The purpose of the session is to:
  - ➢ Engage and work with the industry on identifying and prioritising the challenges to CUSC.
  - ➢ Share our current thinking on the impacts to CUSC, that may be subject to the outcome of Ofgem's OTNR consultation.
  - ➢ To identify any code modifications that may be required to enable any of the 6 concepts.

BSUoS & TNUoS Declaration Update

October 2021

Declaration reminder

A declaration (AKA certificate) is currently required to avoid demand elements of DUoS and BSUoS charges for storage. Future changes will also remove demand residual TNUoS charges and the expand the range of eligible properties from storage to non-Final Demand Sites'.

There'll be a need to submit different declarations for DUoS, BSUoS and TNUoS and where these need to go will be different depending on meter set up.

Network Charge	DNO - SVA	DNO - CVA	Transmission
BSUoS	Elexon	NGESO	NGESO
DUoS	DNO	DNO	N/A
TNUoS	DNO	DNO	NGESO

Health Warning!

This is assuming that CMP308, the TDR mods (CMP335/6 and CMP340/3) and CMP363/4 are all approved in some form for April 2023 implementation.

Help wanted!

We are developing our internal processes and supporting documents to manage these declarations and would like your help to make these as good as they can be.

- We have drafted a single ‘declarations guidance note’ (with FAQ and template declaration) for both TNUoS and BSUoS.
  - Thanks to the CMP308 and CMP363/4 workgroups for their help so far on this.
- The ambition is to create a declaration form that is simple to use, provides all the info needed and covers both TNUoS and BSUoS.
- We’d like your feedback on this guidance note, specifically;
  1. Does the FAQ cover all the questions?
  2. Do the answers actually answer the question?
  3. Is the declaration template (and associated annex!) easy to use?
  4. Any other feedback would be appreciated
- We plan to create separate guidance for the TNUoS and BSUoS methodologies at a later date so this is focused on the declarations.

Timeline, Next Steps & Getting Involved.

1. Seek industry feedback on the declaration and means of submission – Now until Christmas 2021
2. Develop and build internal processes (inc resourcing and training) – Jan to June 2022
3. Final guidance (inc TNUoS and BSUoS methodology guidance) circulated – July to Oct 2022
4. Start submission of declarations – 1st Sept 2022 to 30th Nov 2022
5. Tariffs published and go-live (reflecting declarations submitted) – Jan 2023 and April 2023 respectively

Notes

- We would welcome your feedback at any point and we'll provide updates throughout
- Aim to accelerate these dates if possible
- Declarations submitted after 30th Nov 2022 will be processed but not included in calculation of 2023/4 tariffs
- Longer-term piece of work underway to streamline this across industry, still early days.

To get involved, please contact: Grahame.Neale@nationalgrideso.com or Sean.Donner@nationalgrideso.com

ESO Bad Debt Recovery

James Thompson, National Grid ESO

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Process for recovering bad debt

RIIO-1

- RIIO-1 licence was silent on bad debt
- ESO incurred bad debt but had no mechanism to recover costs

RIIO-2

- ESO licence has been amended to allow recovery of TNUoS and BSUoS bad debt
- Licence also allows for recovery of bad debt incurred in RIIO-1
- Debt is recoverable when normal payment terms have been exceeded and all reasonable efforts have been made to collect the debt
- ESO carries all bad debt risk (i.e. **not** by the Onshore TOs following the K risk transfer)

Process

- ESO makes a forecast of bad debt ahead of each charging year
- The forecast amount is recovered through network charges
- The forecast amount is trued up in the subsequent year for actual bad debt incurred
- Any recovery of bad debt e.g. through liquidation process is passed back through subsequent forecasts
- There are 2 distinct licence terms to recover BSUoS & TNUoS bad debt through the respective charge type

User Commitment

Neil Bennett, SSEN

Workstream 2 Product 5

CUSC 15 issues-Next steps

October 2021

Background

- There has been an informal consultation that has run over 2 months requesting feedback on the 30 issues which the WS2 product 5 working group raised

- Feedback was requested on whether the issues were:
  - Definitive
  - Any that are priorities
  - Any that shouldn't be progressed

- There has been 3 responses, although of those 3, 2 were from Energy Associations which represents multiple parties and therefore there these responses will be made up of more parties which are unidentified.

Feedback

- Of the 30 issues raised there were 7 issues which feedback was unanimous that should be progressed
- Only 3 of these were deemed as requiring CUSC modification. The other 4 were based on lack of transparency and provision of additional information
- Of the 3 requiring CUSC modification, one was associated with the incorporating CUSC 15 into the new Appendix G/TIA process, one was on the disparity of security percentage between T and D customers and the other was enabling the ability to moved to variable from fixed.
- The respondents agreed that the issues raised were all reasonable issues to be considered for rectifying.

Table of Security/Liability issues

Affected area	No.	Detail of Issue	What needs revising?	Summary
Trigger Date- The date when security percentages reduce from 100% and when wider works liability is applicable	1	Currently, the trigger date is the 1st April, 3 financial years prior to the financial year of the connection date. Where Transmission Owners incur significant expenditure prior to the trigger date, Developers would incur a higher security percentage.	CUSC 15	Review trigger period
	2	The trigger date can be delayed where a scheme delays their connection date. If the TO proceeds with the construction, however, expenditure would continue to increase but as the customer has not breached the trigger date, this means security would be 100% of the expenditure. Should this still be 100%?	CUSC 15	Review pre-trigger date percentage
	3	The April 1st trigger date, doesn't reflect the timing of most connection schemes which occur around Oct-Dec following summer outage periods.	CUSC 15	Review of when pre trigger commences
Security Percentage	4	Consented schemes reduce percentage of security only when they have breached the trigger date. Consented schemes reduce the risk of termination irrespective of when consenting has been achieved.	CUSC 15	Review security percentage reduction for consented scheme

	5	The reduction of security percentage once trigger has been achieved is 45%(non consented) and 26% (consented) for Distribution and 42%(non consented) and 10%(consented) for Transmission. Firstly, the disparity between Distribution and Transmission should be reviewed but also whether these percentages overall reflect a reasonable reduction.	CUSC 15	Review percentage disparity between Distribution and Transmission as well as overall percentages
Wider Cancellation Charge	6	Wider works cancellation charge commences when a scheme reaches the trigger date. Generally, schemes which aren't ready to connect, delay their connection date just prior to this commencing due to the fact that wider works cancellation is a mandatory termination charge. Delaying the commencement of the wider works cancellation charge may have a positive effect of reduced modification applications.	CUSC 15	Review commencement of wider cancellation charge
	7	The wider cancellation charge increases in 25% increments once trigger date has been reached but a review of these should be undertaken to ensure these percentages are relevant. Eg a customer is more likely to proceed to connection within 2 years of connection so perhaps high level of percentage closer to the connection (eg 90% and 100%) but further out from the connection date, lower the percentage (eg 10% and 30%).	CUSC 15	Review wider cancellation charge percentages
	8	A wider cancellation charge is applicable irrespective of its commencement and so a wider fee does not always seem reflective of existing works and therefore is the £/MW level reasonable.	CUSC 15	Review £/Mw level
	9	There is a wider works cancellation charge post connection but clarity is required on whether this is applicable to DNOs as well as Transmission connected schemes. If it isn't applicable to DNOs, what is the cause of this and is this potentially discriminatory?	Guidance note	Clarify requirement for post connection wider cancellation charge
	10	More transparency is required on the calculation of wider works. There has been extreme variations in forecast accuracy in recent years and a review should be held to improve accuracy or improve communication in how its calculated.	NGESO processes and communication	Clarify wider works calculation process

Fixed Liability	11	Once a scheme has chosen a fixed liability, there is no option to become variable again but there are circumstances where the TO drastically change the scope of works.	CUSC 15	Review when a scheme can change from fixed to variable
	12	The £/KW rates when a scheme is on a fixed liability prior to the trigger date- Does the evidence show these are reasonable amounts?	CUSC 15	Review £/kw rates
Transmission Impact Assessment/APP G	13	Considerations required on how to implement securities into TIA for example will there be a cooling off period where, after a customer is allocated onto appendix G, they can terminate without incurring termination fees?	CUSC 15	Assess potential for cooling off period for securities/liabilities in Appendix G
	14	Where there are multiple schemes allocated to Appendix G which has a single reinforcement required for a GSP, how are termination fees determined where schemes have terminated? Should it be a last man standing principle? Affected area for revision.	CUSC 15	Assess termination principles on Appendix G
	15	Forecasts for liabilities for Attributable Works for App G GSPs where there is known works required- Affected area for revision- NGESO process and communication.	NGESO process and communication	Assess viability for attributable works forecasting for Appendix G
Embedded specific	16	Explicit clarification that DNOs are not liable for the balance of cancellation (ie total liabilities less any recovered from security) if they have followed appropriate recovery steps with the developer. – Affected area for revision- NGESO process and communication.	NGESO process and communication.	Investigate DNO recovery rights where liabilities are not fully acquired post-termination
	17	Feedback from Solar Energy UK is that there is a general lack of transparency from the network companies with regards to what the securities/liabilities are made up of. Solar Energy UK Members have suggested that the preferred approach would be based on UKPN's provision of information with the added inclusion of National Grid's 4-year prediction of charges, and for all DNOs to adopt a similar approach and provide the same information.	New guidance note/fact sheet	Review the potential for a new guidance note or fact sheet.

Security provision	18	Security provisions occur bi-annually. Could this be moved to annual to provide more stability for the customer? STC(BI annual estimate)/CUSC 15/TO process improvement Affected area for revision- NGESO and TO process. Also CUSC and STC amendments.	NGESO and TO process. Also various CUSC and STC amendments	Investigate whether amending security provisions to annual would be appropriate
	19	Are there any alternatives for security provision (ie the ways of providing security eg letter of credit) and can the current Triple A rating option be lowered in order to allow more companies to be able to use credit rating as an option.	Guidance note and CUSC 15	Assess whether there are any alternative ways to provide security
	20	At present, securities that are not provided in cash form must be in place 45 days or more in advance but could this be reviewed to see if non cash security provision can be aligned with cash?	CUSC 15	Assess period for security provision
Security calculation	21	Is there a consistent treatment of component capability by the Transmission Owners (TO's) eg where a component does not have an MVA value, are these allocated a value consistently as it will affect the SIF value of the liability. Affected area for revision.	STC and TO processes	Assess component capability treatment by the TO's
	22	MITS node/Attributable- Securities for attributable works are only for works up to and including the MITS node. Where there are GSPs that are only single circuit and Transformer, these will not be classed as MITS nodes and the MITS nodes can be far beyond the GSPs for Developers to securitise.	CUSC 11	Assess definition of MITS node and attributable
Accessibility/Clarifications	23	Is the NGESO guidance note up to date and still relevant?	Guidance note	Assess relevance of NGESO's guidance note
	24	Can the current MM(security/liability) statement layout be improved for increased User-friendliness?	MM statements	Assess relevance of NGESO's guidance note
	25	Where the TO delays reinforcement of the network is it fair to enforce cancellation charges to the developers if that delay makes their project unviable?	CUSC 15 and guidance note	Assess cancellation charge requirements following TO initiated delays

Miscellaneous	26	There are occasions where wider transmission enabling works have completed prior to the connection of the scheme but as they works are attributable the scheme would still incur a liability due to the potential of stranded assets. Many wider assets have multiple customers connecting to them and would therefore not cause stranded assets so can there be a way of reducing/removing liability for these customers?	CUSC 15	Assess liability of schemes that connect after infrastructure is constructed
	27	Demand Users are still not subject to CUSC 15 and are still on the old securities system.	CUSC 15	Assess incorporating Demand Users into CUSC 15

DNO specific concerns

These are separated from the above as they deal with DNO issues that would need to be assessed separately from Code/ESO concerns and would need to be agreed upon by all DNOs in order to be implemented.

	28	Although NGESO allow security provision in a wide variety of forms (letter of credit, escrow etc) not all DNOs support these and some only allow either cash or triple A security ratings. This can cause cash flow issues for the majority of companies that do not have sufficient rating.	DNOs processes	Review aligning DNO's forms of security provision
	29	There are some inconsistencies with regards to how long it takes for the DNO to pass through securities to the end customer which can cause cash flow issues for the customer.	DNOs processes	Review aligning DNO's forms of security provision
	30	There is a lack of transparency regarding when a customer provides their key consents and how long this takes to pass through to the ESO and when it will amend the security percentage.	DNOs processes/ Fact sheet	Review provision of guidance on key consents

Next Steps

- Following the consultation results there are a few options that can be considered
  - 1- Raise a CUSC mod to progress all CUSC issues identified
  - 2- Raise 2 separate CUSC mods-1 for the priority issues and 1 for the remaining
  - 3- Raise 2 separate CUSCC mods- 1 for the “quick wins” and 1 for the remaining
  - 4- Group the issues into specific areas eg wider cancellation charge issues, trigger date issues etc

Pros and Cons

– 1- Raise a CUSC mod to progress all CUSC issues identified

Pros-

-Single mod which will not require any interdependencies

-Single working group could see whole picture of issues

-Less administration and working groups

Cons-

-Will likely be long period for conclusion of mod

-Some of the easier sections will not be implemented in a quicker timeframe than they would in a separate mod for the quick wins

Pros and Cons

- 2- Raise 2 separate CUSC mods-1 for the priority issues and 1 for the remaining
- 3- Raise 2 separate CUSC mods- 1 for the “quick wins” and 1 for the remaining

Pros-

-Priority/quick wins issues will be smaller and therefore potentially quicker to implement

-Small level of working groups

Cons

-Potential interdependencies with the 2 groups

-Main issues will still be of a substantial size to be considerably longer to conclude

Pros and Cons

– 4- Group the issues into specific areas eg wider cancellation charge issues, trigger date issues etc

Pros

- Easier to manage within each group
- Potentially quicker to progress

Cons

- Multiple working groups
- Potential for interdependencies
- More administration

Next Steps

- Please could you provide feedback on which of the choices should be progressed.
- Any other feedback also welcome on any additional choices not shown above
- Please contact me at Neil.bennett@sse.com

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Classify Hydro as Conventional Carbon

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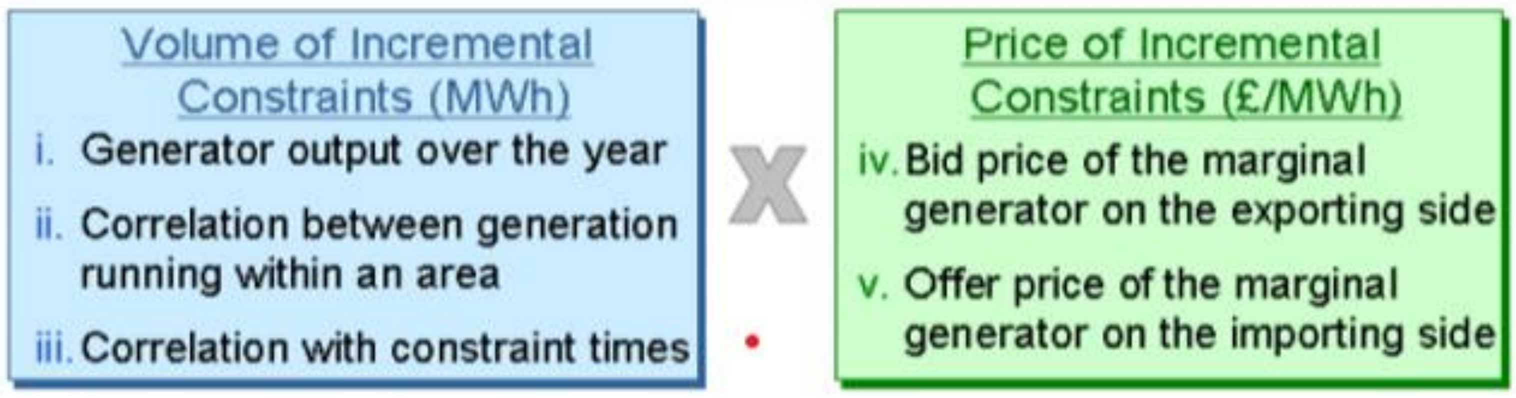
Potential Hydro Mod

- This modification proposal seeks to alter the definition of Non Cascade Hydro from Conventional Low Carbon to Conventional Carbon
- The arguments and economic principles established in two key historic CUSC Modification Proposals, CMP213 and CMP268, provide an important theoretical foundation for this proposal:
- Under the Economy criteria Network infrastructure is assumed to be shared
- Sharing breaks down where there are high concentrations of low carbon generation.
- Diversity and Bid Price are therefore key determinants of whether to invest in the network or not; so should be reflected in TNUoS tariffs

Hydro Mod

- The DCLF Model calculates the flows under two scenarios. Security (Peak), and the Economy (Year Round).
- The key principle introduced for the Year Round scenario is that different forms of generation share transmission capacity and the ability to share which depends on the concentration of types of generation in an area. This relationship was found to be driven by Incremental Constraint Costs, governed by the formula below



- The use of a generator’s ALF as a proxy for the incremental cost of transmission network investment was at the heart of many of the CMP213 charging options including WACM 2. The use of ALF seeks to reflect that planning decisions are increasingly driven between a trade-off between investment to increase capacity and incurring constraint costs. This relationship is captured by transmission planners when they consider a CBA analysis.
    - There was found to be a linear relationship between TEC & Load Factor when compared to Constraint costs.
    - **This relationship broke down in zones where there is high concentrations of Low Carbon technology.**

- **Why?** In zones with high concentrations of Low Carbon they tended to generate at the same time, and were expensive to bid off. Therefore it was economically more efficient to build new network
- The Year Round incremental costs per zone were therefire then further split into Shared and Not Shared based on the % of Carbon/Low Carbon behind the boundary of that zone
- All Generators paid the YR Not Shared Tariff x TEC

- **CMP268 ‘Recognition of sharing by Conventional Carbon plant of Not Shared Year-Round circuits**’ (implemented in April 2018) recognised that different types of Conventional Generation cause different network transmission investment costs which should be reflected in the TNUoS charges for different plant – particularly Carbon generators.
- CMP268 found that these types of generators caused a lower Incremental Constraint Cost than Low Carbon plant such as wind, nuclear and hydro, which are a function of its relatively negative bid prices and coincident running at times of grid constraints.
  - For Conventional Carbon located behind boundaries with <50% diversity of Carbon to Low Carbon their YR Not Shared Tariff’s are reduced by ALF

- This Modification proposal builds on the back of CMP268
- ***Ofgem concluded CMP268 to be more cost-reflective than the baseline (CMP213) 92. They agreed that CMP213 analysis supports Conventional Carbon generators having lower impact on constraint costs. These generators are more likely to 'avoid coincident running with wind and present a lower cost option to constrain off when coincident running does occur as part of normal commercial operations'.***
- For Non Cascade Hydro, bid prices are lower than Wind, Cascade Hydro and Nuclear
- Why? Due to Storage, Hydro has flexibility. It does not need to run or lose out on revenue
- Hydro therefore acts more like Conventional Carbon than Conventional Low carbon

Why split out Cascade Hydro and Hydro?

- BID3 calculates constraint costs which feeds into the NOA process. BID3 itself splits up Hydro into Hydro with storage reservoirs and Hydro with cascade and models these differently with different average bid prices. It recognises that these technologies have different impacts on Constraint prices ergo Network Investment
- The TNUoS Methodology currently does not reflect this


Volume Weighted Average Accepted Bid Price
Bid Price (£/MWh)
300
250
200
150
100
50
0
-50
-100
2015
2016
2017
2018
2019
2020
Anomolous operational period due to COVID-19 pandemic (2020)
Coal
Gas (CCGT)
OCGT
Pumped Storage
Hydro
Wind
Cascade Hydro

Why now/What Next?

AOB & Close