# Transmission Charging Methodologies Forum and CUSC Issues Steering Group

Meeting 93

13 February 2019

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# Welcome

Simon Sheridan

National Grid ESO

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# Today's agenda

| # | Item |
|---|---|
| 1 | Introduction, meeting objectives and review of previous actions |
| | **TCMF** |
| 2 | Introducing arrangements to facilitate a CUSC sandbox |
| 3 | Clean energy packages update |
| 4 | Balancing Services Charges Task Force update |
| 5 | Update on ESO TGR removal proposal |
| 6 | Code modifications update & discussion of interaction of current CUSC modifications with Access SCR |
| | **CISG** |
| 7 | Critical Friend - Code Governance modification submissions |
| 8 | Applying Power Available consistently across technical & commercial codes |
| 9 | ***AOB*** |
| | ***Close*** |

# Action Item Log

## Action items: In progress and completed since last meeting

| ID | Month | Agenda Item | Description | Owner | Notes | Target Date | Status |
|---|---|---|---|---|---|---|---|
| 21 | Jan-19 | TNUoS Tariff Timetable for 2020/21 | GM asked whether the revised error calculation in the forecast will be reflected for future years. TS responded that there is one year that will be impacted so the team will consider that. | TS | TS to investigate | Feb-19 | In-progress |
| 20 | Dec-18 | AOB | HH to find out whether any methodology changes are required on the designated sum calculation. | HH | | Feb-19 | In-progress |

# Error margin

The year that is keeping the error margin up is 2011/12, where the adjusted revenue error was -6.6%. This is large compared to the other years so we assume that when we calculate the error margin for 2020/21 with the final data the error for 2018/19 will be lower than this.

The error margin calculation uses 7 years of data.

| | 2019/20 | | | |
|---|---|---|---|---|
| | | Revenue variance | Adj | Gen |
| 2010/11 | | | | |
| 2011/12 | | -14.8% | -6.6% | -0.6% |
| 2012/13 | | -8.1% | 0.1% | 0.0% |
| 2013/14 | | -9.5% | -1.3% | -10.8% |
| 2014/15 | | -6.0% | 2.2% | -7.4% |
| 2015/16 | | -8.7% | -0.5% | -12.2% |
| 2016/17 | | -5.1% | 3.1% | -7.9% |
| 2017/18 | | -5.2% | 3.0% | -1.5% |

# CUSC Sandbox proposal

Sarah York
National Grid ESO

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# Enabling innovation through a sandbox approach


- Ofgem launched its Innovation Link in December 2016.
- The initiative also introduced a regulatory sandbox for small-scale innovative propositions to be trialled in a real-world environment without some of the usual regulatory rules applying.
- 3 sandbox projects supported 2017
- 4 sandbox projects supported 2018
- The scope of this sandbox is limited by Ofgem's remit and does not extend to industry codes.

ELEXON

- P362 implemented August 2018, introducing an electricity market sandbox in the BSC.
- Enable pre-competitive or proof of concept testing for innovative products/business models in the live BSC Settlement environment.
- Concept of derogation existed in the BSC, but was ring-fenced to particular areas of the code.
- Anyone (other than Elexon) can apply for exemption from specific BSC obligations for a fixed time period at a small scale.

September 2018 Ofgem approved the addition of a new Principle 14 to the CACoP which requires Code Administrators to support energy innovation through the wider adoption of the sandbox approach.



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# Current state and defect

The concept of derogation from the existing regulatory framework does not exist within current CUSC arrangements, nor does a regulatory sandbox process.

The absence of these processes means CUSC and non-CUSC parties may face barriers to the development / testing of innovations within the electricity market.

The only option participants currently have is to raise a CUSC Modification to facilitate their exemption from CUSC obligations which would other prevent their trial.

The facilitation of innovative products or services via the prescribed Modification process would likely be protracted and resource intensive for industry and the Code Administrator.

# Proposed option

Introduce a regulatory sandbox in the CUSC to give industry participants the ability to request derogation from relevant CUSC obligations to test and develop new produces, processes or services in a live environment.

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# Proposed option

## WHAT

- Embed the concept of a derogation and introduce an appropriate process to support the operation of a sandbox
- Derogations can be applied for by all CUSC Parties and non-Parties with innovative projects
- Non-Parties required to accede to the CUSC before derogation comes in to effect
- Any derogation granted is temporary and of a fixed duration
- Ofgem act as the coordinating body and receive and assess information from applicants in the first instance, as per CACoP principle 14

## HOW

- Introduce a principles-based approach to derogation and Sandbox Eligibility Criteria
- Change to Section 8 to facilitate process and new defined terms (i.e. Sandbox Derogation, Sandbox Report)
- Applicants required to demonstrate how the proposed innovative project better facilitates applicable CUSC objectives
- As Code Administrator, ESO facilitates sandbox and associated governance processes
- CUSC Panel review the sandbox report and make a recommendation to Ofgem
- Ofgem make a final decision on whether or not to grant a derogation

# Potential guiding principles

1. Applications to facilitate trials of an identified process improvement and/or innovative approach to current practice are encouraged and should offer identifiable direct or indirect benefits to wider industry and consumers, such as a reduction in time and cost.

2. Sandbox projects should show demonstrable benefit to the better facilitation of the Applicable CUSC Objectives.

3. Any provisions related to charging methodologies and User Commitment Methodology and to codified obligations to pay transmission charges and/or securities would be protected and made exempt from derogation in any circumstances.

4. Any provisions related to requirements that have originated from outside the CUSC and that have a higher legal standing cannot be derogated in practice. CUSC derogation should have no effect on compliance with the following non-exhaustive list of provisions and requirements:
   - (i) any Licence conditions
   - (ii) any other Industry Code
   - (iii) any relevant European Legal requirement
   - (iv) any relevant UK primary legislation

5. Where the derogation being requested is materially similar to an area already under consideration as part of a wider industry, Government and/or Ofgem-led review, and would likely conflict and make the derogation invaluable or inoperable, it would not be appropriate to grant the derogation request.

 * Guiding principles are not exhaustive nor exclusive. Broad in formulation to permit CUSC Panel and Ofgem to assess applications on a case by case basis.

# Feedback and questions

- Do you foresee any issues or gaps in the proposed option (what and how)?
- Do you agree with a principles-based approach to sandbox derogation?
- Are the potential guiding principles sufficient in scope?
- Do you have any other comments or observations?
- If you wish to provide any additional feedback after TCMF please contact sarah.york@nationalgrid.com

# Clean Energy Package: Market Design Overview

Mike Oxenham

National Grid ESO


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# General Update

- The negotiations between the European Commission, Council and Parliament concluded in December 2018 for the finalisation of the Clean Energy Package.
- We now expect that the European Council and European Parliament will approve both the Electricity Regulation and Electricity Directive over the coming weeks.
- The Electricity Regulation comes into force 20 days after publication in the journal and applies from 1 January 2020.
- The Electricity Directive comes into force 20 days after publication in the journal with MSs being required to implement through national legislative processes towards end 2020.
- Publication in the official journal is currently expected in early Spring 2019.

# Next Steps

- In the near-term we plan to monitor the EU Exit progress to determine the likelihood of the Clean Energy Package becoming directly applicable to the United Kingdom.

- Regardless, it is possible that elements of the legislation could become applicable through voluntary or negotiated domestic adoption in future.

- So, we are now exploring commencing work over the coming months to undertake a more detailed assessment of the impacts of the Clean Energy Package prior to implementation.

- For example, what processes, systems and codes will be affected, and how and when, etc.

- We have undertaken a high-level review of the text and there are some notable elements. We would appreciate your views e.g. what elements might result in significant changes.

# Electricity Market Design Overview

- At a high level some of the notable elements in the final market design text are as follows.

| System Operation / Networks | Capacity Market |
|---|---|
| - GCT can remain at intraday cross-zonal GCT<br>- Enhanced DSO role and EU-DSO entity creation<br>- CORESO to become a Regional Coordination Centre<br>- Minimum 70% of cross-border capacity to be available<br>- TSOs/DSOs mostly prohibited from storage ownership | - European adequacy assessment created and to be undertaken by ENTSO-E in future<br>- Tougher emissions limits e.g. no more than 550 grams CO2 of fossil fuel origin per kWh of electricity<br>- Potential for future direct foreign participation in CM for units in interconnected states unless derogated |
| **Balancing Market** | **Retail Market** |
| - ISP can remain at 30 minutes where exempted<br>- Aggregators to be Balance Responsible Parties<br>- Minimum % limits on procurement timescales<br>- Maximum redispatching % for renewable generation<br>- TSO assets remain able to provide ancillary services | - A right to switch supplier within 24 hours by end 2025<br>- A right to a smart meter and in most circumstances a right to a dynamic price contract<br>- A right to engage in aggregation and switch aggregator without reference to the supplier |

# And, a positive consumer outcome for some key risks…

| Risk Area | Initial and Iterative Text | Final Text |
|---|---|---|
| Regional Generation Adequacy |  | |
| Balancing Reserves, etc |  | |
| Regional Operational Centres |  | |
| TSO Asset Ownership and ASs |  | |
| ISP and GCT Harmonisation |  | |

**We welcome your views on the Clean Energy Package and we are happy to continue the discussion with you through JESG (or bilaterally) in future**

# Questions

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# Balancing Services Charging Task Force

Sophie van Caloen

National Grid ESO

- Update of the Task Force progress
- Discuss communication and engagement plan


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# Background - Drivers, Scope and Impact

## Drivers

- Balancing Service Charges recover the efficient costs incurred by National Grid ESO in undertaking our obligations in respect of operating the national electricity transmission system.
- As the energy system is changing, there are questions about how these charges work: charge not viewed to be cost-reflective,  increased volatility, does not assist in system operation, etc.

## Scope

- The objective of Task Force is to provide analysis to support decisions on the future direction of balancing services charges.
- In particular, we will examine the potential for and feasibility of some elements of balancing services charges being made more cost-reflective and hence providing stronger forward-looking signals.

## Impact

- The potential impact is significant and our wider aim is to ensure a more level playing field and to facilitate competitive markets

# Background - Deliverables of the Task Force

The new Balancing Services Charges Task Force will run from January 2019 and will deliver a **final report in May 2019**.

| Deliverables | Date |
|---|---|
| Task Force document assessing the extent to which elements of balancing services charges **currently** provide a forward-looking signal that influences the behaviour of system users. | Feb 2019 |
| Task Force document assessing the **potential** for existing elements of balancing services charges to be charged more cost-reflectively and hence provide better forward-looking signals.<br>The analysis should explore each of the existing components of balancing services charges and to what extent they have the potential to influence the behaviour of different parties. | March 2019 |
| Task Force document assessing the **feasibility** of charging any identified potentially cost-reflective elements of balancing services charges on a forward-looking basis. | April 2019 (draft report) |
| Based on the candidate elements of balancing services charges from the previous stage, assess the feasibility of charging these elements to influence user behaviour. This could include consideration of whether constraint signals are more effectively sent through balancing services charges or transmission use of system charges. It should consequently identify the extent to which the different elements of balancing services charges should be considered cost-recovery charges and therefore have potential for the TCR approach for cost-recovery charges to be applied. | May 2019 (final report) |

# Update of the Task Force

**The work of the Task Force is progressing well, in the tight timescales**

- Deliverable 1 (currently) has been the main focus of the first meeting on 29 January. The view of the Task Force is that balancing services charges broadly do not provide forward-looking signals that influences behaviour of system users (with some small nuances).
- Deliverable 2 (potential) has been initiated in the second meeting of the Task Force, on 11 February.

**The work of the Task Force will be supported by data analysis**

- Data and modelling are crucial and will be used to drive the outputs of the TF, with additional qualitative assessment.

**Our aim is to work transparently and collectively with the wider industry**

- The TF is committed to keep wider industry updated and engaged on its work throughout the process through regular engagement and publication of agreed documents (more info on next slide).

# Industry communication and engagement approach

| Recurrence/date | Channel | Topic |
|---|---|---|
| Every fortnight, Task Force | Web & Email (CF) | TF agenda, minutes and relevant presentations |
| Every month (ad hoc) | Podcast | TF “informal” summary<br>The objective is to distribute information to industry |
| Every month (ad hoc) | Webinar with Q&A | TF deliverables<br>The objective is to share more complex input and get feedback |
| Ad hoc | Meeting, email, call, etc. | Targeted (bilateral) engagement & potential to invite to future task forces to present specific views or analysis, if applicable |
| Ad hoc | Report to existing groups | Report TF work to Charging Delivery Body (CDB), code mods panels/workgroups, etc. |
| May | Consultation | Draft report |
| May / June | Event | Final report |

All the communication to industry will be coordinated through the Charging Futures website.

**Do you feel this approach will enable you to be informed and able to contribute? How would you like to be engaged further?**

# Thank you

If you have further queries or views which you would like to share please get in contact with us via:

chargingfutures@nationalgrid.com

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# Update on ESO TGR removal proposal

Jon Wisdom

National Grid ESO

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# Questions

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# Code Modifications update

# &

# discussion regarding Access SCR

Rachel Hinsley

Code Administrator

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# New modifications at workgroup

No new modifications raised at January Panel

# Modifications at workgroup (1/2)

| Mod | Latest update | Next WG date | Next meeting |
|---|---|---|---|
| CMP280/ CMP281 | 1 WG held:<br>CMP280 WG Report estimated to go to February Panel – 2 alternatives raised and voted on<br>CMP281 WG Report estimated to go to May Panel – Extension Granted to take into account BS Task force | March 2019 | WG13 |
| CMP285 | Code Admin consultation closed 17 January 2019. Potential for short second CAC to be issued early February 2019 | N/A | WG7 |
| CMP286/ CMP287 | Liaising with the proposer to discuss the contents of the WG Consultation. Extension on Report until may | TBC | WG7 |
| CMP288/ CMP289 | WG Consultation Closed 1 February 2019, WG to be arranged in coming weeks. Extension until June | Post Consultation in February/March 2019 | WG8 |
| CMP291 | WG decoupled from GC0117 | TBC – likely to be February/March 2019 | WG3 |
| CMP292 | WG consultation closed 22 January 2019. WG TBC March 2019 | TBC - March 2019 | WG3 |

# Modifications at workgroup (2/2)

| Mod | Latest update | Next WG date | Next meeting |
|---|---|---|---|
| CMP295 | WG3 held on 11 January 2019. Consultation to closed on 8 February 2019 | TBC February/March 2019 | WG5 |
| CMP298 | WG2 held December, further workgroup to be held in February, date TBC | TBC February 2019 | WG3 |
| CMP300 | Quoracy has been achieved – the first meeting to 'Kick Off' will be scheduled, with WG in February/March 2019 | TBC February/March 2019 | Kick Off |
| CMP303 | WG consultation closed date on 23 January 2019. 10 alternatives raised with 9 becoming WACMs. 2 Workgroups held since last TCMF | TBC March 2019 | WG4 |
| CMP304 | WG3 held 28 January 2019. Next workgroup TBC | TBC February 2019 | WG4 |
| CMP306 | WG held on 31 January 2019 | TBC March 2019 | WG2 |
| CMP308 | Second Workgroup held 30 January 2019 | TBC February 2019 | WG3 |

# Authority Decision updates

## Pending Authority decisions

There are no pending decisions

## Authority Decisions

Ofgem have sent back CMP305

The decision letter requested additional information and for CMP305 to be issued back to the Authority alongside CMP304

# Dashboard - CUSC

| New Modifications | In-flight Modifications | Modifications issued for workgroup consultation | Modifications issued for code admin consultation |
|---|---|---|---|
| 0 | 25 | 1 | 1 |

| Workgroups held (December) | Authority Decisions | Modifications on hold |
|---|---|---|
| 8 | 1 | 5 |

# Questions

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# CUSC Issues Steering Group (CISG)

13 February 2019

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# Critical Friend potential modification

Chrissie Brown

Code Administrator

National Grid ESO

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# Defect

## Principle 1: Code Administrators shall be critical friends

Guidance on meeting the Principle

Code Administrators should achieve this principle by:

- Helping all new and existing energy market users effectively frame and develop Modifications.
- Proactively reviewing and commenting on draft Modifications.

How can we fulfil the CACoP (Code Administrator's Code of Practice) in the framework we have today?

***The Code Administrator can receive a modification up until 5pm on papers day and this has to then be submitted to the respective Code Panel the same day across the Codes that National Grid ESO administer (CUSC, Grid Code and STC)***

# Feedback on modifications

The **Code Administrator** has received feedback and insight as part of the Customer Journey work and within Code Panels on:

- The **defect** and how this is drafted including whether it is clear and in sufficient detail
- When **alternatives** have been raised at times the **defect** has been questioned and feedback has been provided that defects are not clear enough to determine whether the alternative would address the Original defect
- **Consumer impacts** and the population of this the Proposal form

# Modification option

How can the Code Administrator make a **step change** in the service provided when a modification is raised?

| Options |
| --- |
| Raise a modification across CUSC, Grid Code and STC to codify an obligation to submit modifications **5 working days** ahead of being submitted to the respective Code Panel |
| Raise a modification as above but for fewer working days than above but more than in the baseline today |
| **Request** rather than codify that modifications are submitted earlier than papers day |

Any other **options?**

# Modification option

## What would we do within the five working days?

- Provide feedback and work with the Proposer on the Proposal form submitted including the title, Governance route, defect identified, consumer impacts improving the quality of the modification proposals being tabled at our Code Panels
- Assess **potential impacts** and provide the Code Administrator view on this for Industry

## What route would the Code Administrator propose this under?

- No Workgroup and straight to Code Administrator Consultation


# Next Steps

- Assess feedback received today
- Make a decision on whether to raise a modification based on the feedback provided

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# Applying Power Available consistently across technical & commercial codes

William Goldsmith

National Grid ESO

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# Background

- The Power Available signal was introduced in the Grid Code for Power Park Modules to provide the ESO with visibility of the maximum available output from intermittent generation.
- Maximum Export Limit (MEL) was also redefined for Power Park Modules to be registered capacity less unavailable Power Park Units. (GC0063)
- A consequential change to the CUSC is required for Power Park Modules, to reflect the revised MEL definition and introduce Power Available.

# Who this effects

- The impact of this modification is of benefit to Power Park Modules (wind farms who are signatories to the Grid Code and CUSC with a Mandatory Services Agreement MSA)
- This modification will help facilitate the participation of Power Park Modules in Mandatory Frequency Response (MFR) as committed to in the ESO Forward Plan 2019-21, by enabling settlement that is accurate
- There is no impact for other generators who participate in MFR or change to the methodology

# The Modification

- De-load is used in the CUSC to establish the response capability of a unit (P/S/H) at any given time, by cross-referencing the de-load value against the units response matrix table.

The **De-load methodology** is: **maximum available output** less **actual output**

The existing calculation is: De-load = MEL – PN
(This still stands true for all other generators participating in MFR)

- As MEL had been redefined for Power Park Modules, the above calculation is not longer correct for this generation type. The consequential change is to replace MEL with Power Available in headroom/de-load calculations, for which there is a single solution.

- To ensure the De-load methodology is correctly applied to Power Park Modules, the calculation for these units needs to be updated to: De-load = PA – PN

- This is not a material change as it does not change the existing methodology of maximum available output less actual output or the payment calculations.

# Next Steps

- We plan to raise this modification at the March CUSC panel.
- As this is a consequential modification with a single solution and no material change, we believe that it should be subject to self governance and progress straight to a code administrator consultation.

- We are also asking for a timely decision as we plan to implement the changes in ESO systems in October 2019.
- This supports us in achieving our Power Available integration commitments in the ESO Forward Plan 2019-21.

- We are engaging the wind industry, who this modification effects, to received their support through the Wind Advisory Group for Balancing Services.

# AOB

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