Joint European Stakeholder Group







Wednesday 23 August 2017 Meeting 23

Agenda

ID	Title	Lead	Time
1	Welcome & Introductions	Chair	10:00-10:10
2	CACM Day ahead and intraday capacity calculation methodology consultation update	Rob Selbie (National Grid)	10:10-10:35
3	Emergency and Restoration Code	Rachel Woodbridge Stocks (National Grid)	10:35-11:00
4	Review of Actions log	Heena Chauhan (JESG Technical Secretary)	11:00-11:15
5	Future Meeting Dates & Agenda Items	Heena Chauhan (JESG Technical Secretary)	11:15-11:30
6	Stakeholder Representation	Chair	11:30-11:40
7	Any Other Business	All	11:40-12:00

1. Welcome & Introductions

Barbara Vest Independent Chair

2. CACM Day ahead and intraday capacity calculation methodology consultation update

Rob Selbie National Grid



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IU DA/ID CCM concepts in a nutshell

CACM CAPACITY CALCULATION METHODOLOGY

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CACM Capacity Calculation Methodology

- Consultation period
- DA/ID capacity calculation methodology concepts
- DA/ID capacity calculation process overview
- Differences to Channel proposal
- Feedback and questions



Capacity Calculation Methodology Proposal for the IU CCR

Overview

This consultation concerns the regional TSO proposal for the Capacity Calculation Methodology for the Ireland and United Kingdom Capacity Calculation Region (CCR), in accordance with Article 20 of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management. This proposal covers the Capacity Calculation Methodology for both the Day-ahead and Intraday timeframes for the Ireland and United KingdomCCR.

Why We Are Consulting

We are seeking input from stakeholders, market participants, and NEMOs on this important fundament of the future European electricity market. TSOs of the CCR Ireland and United Kingdom Region (EirGrid plc, EirGrid Interconnector DAC, Moyle Interconnector Ltd, National Grid Electricity Transmission plc and SONI Ltd) are initiating this open on-line consultation

Closes 31 Aug 2017

Opened 26 Jul 2017

Contact

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Give Us Your Views

Online Survey >

Related

- DA and ID Capacity Calculation Methodology IU 202.7 kB (PDF document)
- O CACM Regulation
- ACER recommendation

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Consultation period

- Opened 26 Jul 2017
- Closes 31 Aug 2017

https://consultations.entsoe.eu/markets/capacity-calculation-methodology-iu-ccr/consult_view/

Give Us Your Views

Online Survey >

General:

- Coordinated net transmission capacity (CNTC) approach
 - NTC shall be computed for each interconnector and for each hour of the day
- Processes in 3 phases
 - Input gathering phase
 - Qualification
 - Validation
- Role & Responsibilities
 - TSOs to provide inputs, validate the results and send the NTCs for allocation
 - RSCs shall operate as CCC to merge the CGMs, perfom qualification and consolidate results after validation

- Rules for the provision of inputs shall be fully consistent with the other regions where IU TSOs are involved
 - IGMs/CGMs and CRAC file developed and exchanged according to ENTSOE CGMES/CGMA principles
 - CNEC selection, Fmax, FRM, GSK fully consistent with principles in other
 CCR regions where some IU TSOs are involved (CORE,...)
 - External constraint may be used to cover system limitations other than flow congestions (voltage, frequency stability)
 - Remedial actions allow considering preventive and/or curative application and may consist of topology change, PST tap change and generation shift
 - Maximum Permanent Technical Capacity (MPTC) shall be provided for each interconnector

Qualification phase

- Assessment of full import and full IU export (i.e. all IU interconnectors are either operated at their MPTC simultaneously in export or simultaneously in import)
- Based on Remedial Action Optimizer (RAO) aiming at securing the system
- Dichotomy shall be applied to determine the maximum full IU import/export with system secured after RAO
- Dichotomy shall apply reduction only on interconnectors connected to the bidding zone where is located the limiting CNEC
- Firmness principle: final NTCs shall always be at minimum equal to the already allocated capacity on each interconnector
- Assessment shall be performed on a predefined maximum number of timestamps with a minimum of 2. The day shall be split in periods equal to the number of computed timestamp and result of reference timestamp of a period shall be applied on non-computed timestamps of the same period

Validation

- Deemed acceptance principle
- TSOs may reject proposed NTCs in case of unforeseen event. The
 reduction of the proposed capacities has to be monitored, based at minimum
 with an identification of the limiting CNEC and the explanation of the
 unforeseen event

Fallback

 In case the CCC cannot compute NTCs, the MPTC of each interconnector shall be used, subject to TSOs' validation

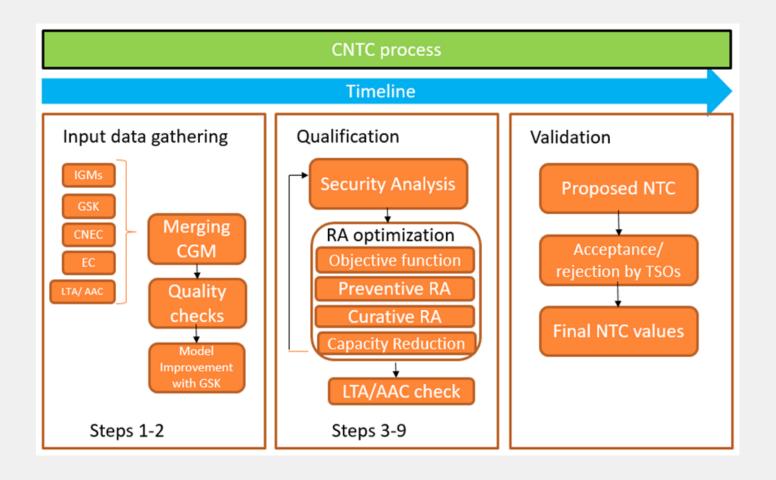
DA specificities

- Interconnector maximum capacity (MPTC) shall only be potentially reduced in case specific outage in a bidding zone to which the interconnector is connected, with significant impact on that interconnector or an alternative lower firm capacity value is stated in a connection agreement
- Standard Hybrid Coupling
- Provision of data and merging of IGMs shall be done in D-2 in a consistent way and time with other regions
- Provision of final NTCs shall be done prior to the DAFD (DA Firmness Deadline)

ID specificities

 One computation will done based on DA CGMs. Additional re-computation will be assed later based on availability and quality of ID IGMs

Day-ahead & Intraday cross-zonal capacity calculation CNTC process overview



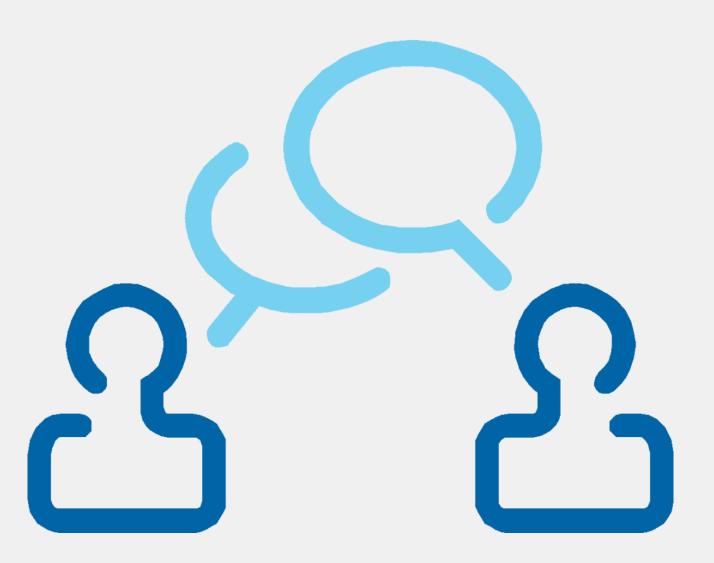
Differences between Channel and IU proposals

Please note there a couple of crucial differences between the IU and the Channel methodology proposals.

The IU proposal includes;

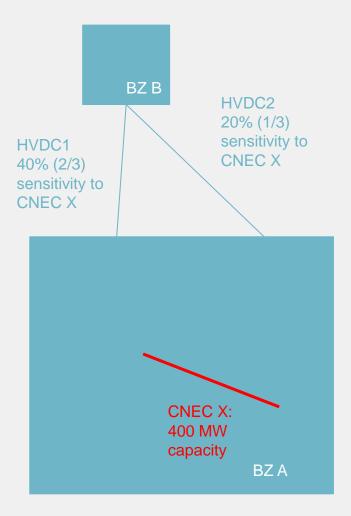
- The <u>firm capacity value</u> as specified in relevant connection agreements is referenced [see Article 4]
- TSOs are required to make available <u>costly remedial actions</u> which are reasonable, proportionate and efficient. [see article 11]

Feedback & questions



Annex

Reduction if multiple interco's on BZ border



Suppose two 1000 MW HVDC interconnectors on the bidding zone border between BZ A and BZ B

CNEC X having 400 MW capacity

The influence of 100 MW export over resp HVDC1 and HVDC2 on flows on the CNEC X is as follows:

- HVDC1: +40 MW of flow over CNEC X (40% sensitivity)
- HVDC2: +20 MW of flow over CNEC X (20% sensitivity)

2000 MW of export between BZ A and BZ B would create 600 MW flow over CNEC X, whereas only 400 MW is available

The DA/ID CCM then foresees following reduction proportional to the sensitivities of HVDC1 and HVDC2 to CNEC X:

- Proportion of reduction HVDC1 = %HVDC1/(%HVDC1+%HVDC2) =1/3 → restriction to 600 MW export (400 MW reduction)
- Proportion of reduction HVDC2 = %HVDC2/(%HVDC1+%HVDC2) =2/3 → restriction to 800 MW export (200 MW reduction)

Hence the reduction on HVDC1 is double as high as the reduction on HVDC2 given the double as high sensitivity to CNEC X

Please note that for the day-ahead timeframe a reduction could only occur in case of a planned or unplanned outage in the grid

3. Emergency & Restoration







Rachel Woodbridge Stocks

Progress and Updates

- Expecting Entry into Force Autumn 2017
 - Draft Code Mapping has been sent to
 Ofgem for review.
 - No changes were identified for EIF.
 - A compliance exercise will be undertaken with Ofgem in the coming weeks.

Progress and Updates

- Work has already begun on System Defence Plan and Restoration Plan (please note neither is required for EIF Day 1).
- Currently assessing what GB Code Mods are required post EIF.

Timeline

Date	Action
October 2016	E&R Code adopted following positive vote at Cross Border Committee
January 2017	Code mapping with stakeholders
Autumn 2017*	Estimated Entry into Force (EIF)
Autumn 2018*	System Defence Plan Developed (draft expected to go out for consultation Jan 2018)
(12 months after EIF)	Restoration Plan Developed (draft expected to go out for consultation Jan 2018)
Autumn 2019*	System Defence Plan Implemented
(24 months after EIF)	Restoration Plan Implemented
Autumn 2022*	Communications, Tools and Facilities
(5 years after EIF)	Define Compliance Testing Plan

^{*}Based on estimated EIF

4. Actions log

Heena Chauhan

JESG Technical Secretary

JESG Standing items

ID	Topic	Lead Party
S1	Continue to review the membership of the JESG and engage additional industry parties where appropriate.	JESG Chair
S2	Prepare a commentary / comparison document between the Network Code and the existing GB arrangements at appropriate stages in the Code development for each Network Code.	NGET/Ofgem/ DECC
S3	Share any intelligence about how other member states are approaching demonstrating compliance through information gained from other government departments, regulators or parent companies	DECC / Ofgem / Industry parties with European parent companies
S4	Stakeholders are requested to provide specific examples of inconsistent or problematic definitions in the Network Codes to Ofgem (natasha.z.smith@ofgem.gov.uk).	All Stakeholders
S5	Cross GB Codes ENC Changes Coordination. Step 1 engage Code Administrators, highlight to code leads	Code Administrators and JESG Technical Secretary

JESG Open Actions

ID	Topic	Lead Party	Status	Update
63	NGET to speak with ENA around GB Implementation plan and validation of modification packages	NGET	Ongoing	Update will be provided at a future JESG
67	Confirm if the XBID User Group is still running and who the contact is for this group.	NGIC	Open	Central project - Go live will be Q1 2018. GB – Q3
68	HC to facilitate with EirGrid to attend a future meeting to provide an update on interconnectors	EirGrid	Open	
69	Ofgem to confirm what the enduring elements of HAR are at the next JESG, for example boiler plate conditions.	Ofgem	Open	David Jones will provide an update via weekly update or at next JESG
70	To send a link to the Code Administrators meeting minutes for inclusion in the weekly JESG update	Jemma Williams - ELEXON	Open	ELEXON will circulate to JESG 20/07 - These will be sent to HC and issued out via the newsletter
71	JB to review the discharging of obligations in Article 56 and check how this aligns with existing Grid Code requirement and report back at a future JESG	James Bradley, National Grid	Open	

6. Future Meeting Dates & Agenda Items

Heena Chauhan

JESG Technical Secretary

Future JESG Meetings (London)

- As always registration is required and will be opened through the JESG Weekly updates.
- Stakeholders are invited to put forward agenda items for the forthcoming JESG meetings:

Date	Proposed Agenda Items
Thursday 21 September 2017	
Thursday 19 October 2017	
Thursday 23 November 2017	
Tuesday 12 December	

7. Stakeholder Representation

All

8. AOB

Code Mapping Sessions- EB GL

- Objective: To step through the EB GL and assess the impact of each article on GB arrangements and legislation
- When: 3 full day sessions have been provisionally booked in for:
 - Thursday 21st September
 - Tuesday 3rd October
 - Monday 16th October
- Where: Elexon Offices, London
- If you are interested in attending, please contact Sophie Tilley (<u>sophie.tilley@nationalgrid.com</u>) to let us know if you are able to attend the dates above.