

Ireland-UK (IU) TSOs proposal of common capacity calculation methodology in accordance with Article 10 of Commission Regulation (EU) 2016/1719 of 26 September 2016 establishing a guideline on forward capacity allocation

**04 February 2020**

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IU TSOs, taking into account the following:

### **Whereas**

1. Commission Regulation (EU) 2016/1719 establishes a guideline on forward capacity allocation (hereinafter referred to as the “FCA Regulation”), which entered into force on 17 October 2016.
2. This document, including its annexes, is a common proposal developed by all Transmission System Operators (hereafter referred to as “TSOs”) of the Ireland-UK Capacity Calculation Region (hereafter referred to as “IU Region”) regarding the proposal for the common capacity calculation in accordance with Article 10 of the FCA Regulation. This proposal (hereinafter referred to as the “IU CC Methodology”) is required by Article 10 (1) of the FCA Regulation.
3. The IU CC Methodology considers the general principles and goals set in the FCA Regulation.
  - a. According to Article 10 (2) of the FCA Regulation, the approach to use in the common capacity calculation methodology shall be either the coordinated net transmission capacity approach or a flow-based approach. In this methodology the coordinated net transmission capacity approach is used;
  - b. In accordance with Article 10 (1) of the FCA Regulation, the IU CC Methodology shall be submitted within 6 months after the approval of the common coordinated capacity calculation methodology referred to in Article 9(7) of Regulation (EU) 2015/1222;
  - c. The capacity calculation methodology shall be compatible with the capacity calculation methodology established for the day-ahead and intraday time frames pursuant to Article 21(1) of Regulation (EU) 2015/1222. It will further be compatible with the fall-back procedures, and the requirement provided for in Article 21(3) of Regulation (EU) 2015/1222;
  - d. According to Article 4(8) of the FCA Regulation, the expected impact of the IU CC Methodology on the objectives of the FCA Regulation has to be described. The impact is presented below (recital 4 of this Whereas Section).
  - e. According to Article 10(4) of the FCA Regulation, the uncertainty associated with long-term capacity calculation time frames shall be considered when applying a security analysis or statistical approach based on historical cross-zonal capacity. This methodology uses both a statistical approach and a security analysis approach to release capacity in tranches. A statistical approach is used in earlier parts of the capacity release process to take into account future uncertainty, while a security analysis is used in later parts of the release process where Common Grid Models and better quality planned outage information are available, and
  - f. According to Article 10(7) of the FCA, requirements for the fallback procedures and the requirement provided for in Article 21(3) of the CACM Regulation shall be taken into account. This has been considered and the methodology is compatible with the relevant fallback procedures.
4. The IU CC Methodology contributes to and does not in any way hinder the achievement of the objectives of Article 3 of the FCA Regulation. In particular, this IU CC Methodology:
  - a. Establishes a common and coordinated process for the capacity calculations by defining a set of harmonised rules for long-term cross-zonal capacity calculation, seeking to minimise planned reductions in cross-zonal capacity and make participants aware of these reductions in good time. As such, this serves the objective of promoting effective long-term cross-zonal trade with long-term cross-zonal hedging opportunities for market participants in accordance with Article 3(a) of the FCA Regulation;

- b. Contributes to the objective of optimising the calculation of long-term cross-zonal capacity in accordance with Article 3 (b) of the FCA Regulation by standardising and codifying a methodology to calculate this;
- c. Contributes to the objective of providing non-discriminatory access to long-term cross-zonal capacity in accordance with Article 3 (c) of the FCA Regulation by ensuring that the capacity calculation is available to all market participants and is transparent;
- d. Contributes to the objective of ensuring fair and non-discriminatory treatment of TSOs, the Agency, regulatory authorities and market participants in accordance with Article 3 (d) of the FCA Regulation by reducing long-term uncertainty around cross-zonal capacities;
- e. Contributes to the objective of respecting the need for a fair and orderly forward capacity allocation and orderly price formation in accordance with Article 3(e) of the FCA regulation by providing market participants with complete information around planned reductions from long-term cross-zonal capacity to inform bidding behaviour;
- f. Contributes to the objective of ensuring and enhancing the transparency and reliability of information on forward capacity allocation in accordance with Article 3(f) of the FCA regulation by requiring information to be published in good time, and providing a financial incentive to TSOs to do this;
- g. Supports the objective of contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union in accordance with Article 3(g) of the FCA regulation by providing TSOs with information on cross-border availability in good time to plan for contingencies.

**SUBMIT THE FOLLOWING IU CC METHODOLOGY PROPOSAL TO IU NATIONAL REGULATORY AUTHORITIES:**

**TITLE 1**  
**GENERAL PROVISIONS**

**Article 1**

Subject matter and scope

1. The common capacity calculation methodology as determined in this IU CC Methodology is the common proposal of all the TSOs of the IU Region in accordance with Article 10(1) of the FCA Regulation.

**Article 2**

Definitions and interpretation

1. For the purposes of the IU CC methodology, the terms used shall have the meaning given to them in Article 2 of Regulation (EC) 714/2009, Article 2 of Regulation (EC) 2013/543, Article 2 of Regulation (EC) 2015/1222 and Article 2 of Regulation (EC) 2016/1719.
2. In addition, the following definitions shall apply:
  - a. ‘MPTC’ means, for the relevant market time unit(s), the maximum permanent technical capacity which is the maximum continuous active power which a cross-zonal network element (interconnector/HVDC system) is capable of transmitting (taking into account potential reduced availability due to planned and unplanned outages of the interconnector asset). This parameter is defined by the interconnector’s asset operators, and only considers the interconnector asset availability.
  - b. Firm Connection Capacity (FCC) means the MPTC or the firm connection capacity of an interconnector as specified in relevant connection agreements, if this is lower than the MPTC.
  - c. Critical Network Element and Contingency (CNEC) means the outputs of Article 6 of the IU regional capacity calculation methodology established for the day-ahead and intraday time frames pursuant to Article 21(1) of Regulation (EU) 2015/1222.
3. In this IU CC Methodology, unless the context requires otherwise:
  - a. the singular indicates the plural and vice versa;
  - b. headings are inserted for convenience only and do not affect the interpretation of this methodology; and
  - c. any reference to legislation, regulations, directives, orders, instruments, codes or any other enactment shall include any modification, extension or re-enactment of it when in force.

**Article 3**

Application of this methodology

1. This IU CC methodology applies solely to long-term cross-zonal capacity calculation within the IU Region. Common capacity calculation methodologies within other Capacity Calculation Regions or other timeframes are outside the scope of this methodology.

**TITLE 2**

**LONG-TERM CROSS-ZONAL CAPACITY CALCULATION**

**Chapter 1**

General considerations

**Article 4**

Overview of the calculation of long-term cross-zonal capacities methodology

1. For the long-term timeframe, interconnector owners and connecting TSOs will jointly calculate the long-term cross-zonal capacity for each respective interconnector on the IU bidding zone border for the subsequent calendar year.
2. This will be achieved using the following annual process:

- a. There will be guaranteed capacity available from July Y-1 to allow adequate long-term hedging for market participants. 50% of the Firm Connection Capacity for each interconnector, but a higher percentage if all TSOs are agreed, will be available to be allocated in this stage, subject to planned reduction periods or unless there is a historic reason to suggest that less than 50% is likely to be available. The process for establishing this initial cross-zonal capacity is outlined in more detail in Article 6.
- b. An additional security analysis conducted in September Y-1 in accordance with Article 19 of this methodology to account for the release of the Common Grid Model for year Y will release a further tranche of long-term capacity. At least 90% of the Firm Connection Capacity up to 31<sup>st</sup> March in year Y for each interconnector will be available at this stage, but potentially 100% (subject to planned reduction periods) if all TSOs are agreed. Any additional capacity released above the guaranteed capacity from July can be allocated as additional long-term transmission rights up to 31<sup>st</sup> March in year Y. Capacity allocated for periods after this date and above the guaranteed capacity released in July will not be subject to the TSO compensation arrangements described under Article 27. It is possible that this step will result in reductions to the long-term capacity released in the initial tranche in July. In this case the compensation provisions outlined in Article 27 will apply.
- c. In December Y-1, a final security analysis is conducted in accordance with Article 22 to account for finalised outage schedules available to the connecting TSOs. At this stage all long-term cross-zonal capacity will be released up to the Firm Connection Capacity and up to the end of year Y, subject to planned reduction periods. The same provisions as outlined in paragraph (b) apply with regards additional capacity and compensation.
- d. This methodology only applies to the long-term timeframe, and cross-zonal capacity may be increased for shorter timeframes in accordance with relevant methodologies, including the capacity calculation methodology established for the day-ahead and intraday time frames pursuant to Article 21(1) of Regulation (EU) 2015/1222.

## **Article 5**

### **Allocation Constraints**

1. TSOs of the IU Region may take into account those allocation constraints referred to in Article 24 of the day-ahead and intraday capacity calculation methodology as established under Article 20 of Commission Regulation (EU) 2015/1222 when performing the long-term capacity calculations outlined in Chapter 2, Chapter 6, and Chapter 7.

## **Chapter 2**

### **Initial calculation of long-term cross-zonal capacity**

#### **Article 6**

##### **General principles for calculation of initial cross-zonal capacity**

1. All TSOs will, by the end of June Y-1, provide to the CCC a value  $j$ , where  $0.5 \leq j \leq 1$ , representing the maximum proportion of FCC on each interconnector that they are willing to allocate at that point for year Y.
2. The CCC will then collate these  $j$  values and take the lowest value from the submitted set ( $J_{\text{MIN}}$ ). This value will represent the maximum proportion of FCC that will be released as guaranteed capacity for allocation, subject to known reduction periods, in this first stage.
3. By the 3<sup>rd</sup> working day in July Y-1, all TSOs will provide the CCC with already known reduction periods for the year Y. The CCC will then run a statistical model as described in Article 7 to determine how much capacity to release for allocation in these reduction periods.
4. The CCC will calculate the initial cross-zonal capacity for year Y by the 5<sup>th</sup> working day in July Y-1, taking into account the TSOs'  $j$  values and known outage periods.

## Article 7

### Detailed methodology of statistical approach

1. The CCC will take hourly data for each interconnector in each direction from the 2 calendar years preceding Y-1 regarding capacity as calculated at the day ahead stage in accordance with the day ahead and intraday capacity calculation methodology developed under Article 20 of Commission Regulation (EU) 2015/1222, excluding interconnector asset outages. This data will be presented as a percentage of FCC for each hour.
2. The CCC will order this data from the highest percentage period to the lowest percentage period. They will then determine the 90th percentile value for each interconnector in each direction to account for the risk-level of the dataset and potential differences between the historic cross-zonal capacity and future long-term cross-zonal capacity.
3. The CCC will then compare this 90th percentile value to the percentage value determined under Article 5 (i.e.  $J_{MIN}$ ), for each direction on each interconnector.
  - a. Where the selected historic availability exceeds the  $J_{MIN}$  value established in Article 5, then the value in Article 6 will be taken as the long-term capacity percentage to be released in July Y-1. This will be released in MW terms and calculated as  $J_{MIN} * FCC$  for each hourly period.
  - b. Where the selected historic availability is less than the  $J_{MIN}$  value established in Article 5, then the 90<sup>th</sup> percentile value identified as per paragraph (2) above will be taken as the capacity percentage to be released in July Y-1, unless a higher value is agreed by the relevant TSOs. This will be released in MW terms and calculated as  $\% * FCC$  for each hourly period.
4. Where outages impacting interconnectors or relevant CNECs in accordance with Article 2 are known at the time of this calculation, these will be taken into account in the July Y-1 release and a scenario-based assessment will be carried out to determine the maximum capacity available on the interconnector during the affected periods in accordance with the methodology laid out in Chapter 5 and where this value is below the value determined in paragraph (3), these outages may be incorporated as reduction periods.
5. The CCC will then inform all TSOs of the capacity to be released for the long-term timeframe at July Y-1, taking into account potential reduction periods as appropriate.
6. Where new infrastructure and generation and different load patterns are envisaged, these will be considered in the interconnector's FCC in accordance with its connection agreements.
7. No provision of this common capacity calculation methodology shall be deemed to alter or impair the rights or obligations of the interconnector TSOs under their respective connection agreements.

## Article 8

### Validation of initial cross-zonal capacity

1. Validation of the results of the initial cross-zonal capacity calculation will be in accordance with Article 26. All TSOs should validate the results of the calculation within three working days.

## Chapter 3

### Methodologies for the provision of inputs for the scenario-based capacity calculation

## Article 9

### Reliability margin methodology

1. Reliability margins shall not be considered within the IU Region. Reliability margins do not apply to DC interconnections due to their controllability.



## **Article 10**

### **Methodologies for operational security limits**

1. In accordance with Article 12 of the FCA Regulation, each TSO within the IU Region shall define for each CNE the maximum permanent allowable current according to its operational security limits criteria defined in line with Article 25 of the SO GLs.
2. When applicable, each TSO within the IU Region may define for all or some of the CNEs the maximum temporary allowable current according to its operational security limits criteria defined in line with Article 25 of the SO GL.
3. When applicable, each TSO of the IU Region may consider the application of dynamic line rating for the determination of the maximum permanent and/or temporary allowable current of some CNE.

## **Article 11**

### **Generation shift keys methodology**

1. The TSOs of IU Region shall define the generation shift keys (“GSK”) in accordance with Article 13 of the FCA Regulation.
2. In Long-Term timeframes, the Great Britain GSK shall represent the best forecast of the relation of a change in net position of the bidding zone to a specific change of generation or load in the common grid model.
3. In Long-Term timeframes, the SEM GSK shall represent the best forecast of the relation of a change in net position of the bidding zone to a specific change of generation or load in the common grid model.
4. Generation shift keys should be developed in accordance with the ENTSO-E Generation and Load Shift Key Implementation Guide as currently drafted and amended. Following consultation and agreement with the coordinated capacity calculator, TSOs of the IU Region should specify generation shift keys according to one of the following descriptions:
  - a. Proportional to committed generation in each base case.
  - b. Proportional to participation factors provided by the relevant TSO of the IU Region.
  - c. Proportional to the remaining capacity available on already committed generation in each base case.
  - d. In accordance with a merit order provided by the relevant TSO.
  - e. By the use of an interconnection shift key to alter flows across interconnections with other capacity calculation regions.

## **Article 12**

### **Methodology for remedial actions in capacity calculation**

1. Each TSO of IU Region shall define individually the remedial actions that shall be made available for the Long-Term Capacity Calculation within IU Region in accordance with Article 23 of the FCA Regulation and shall at minimum respect the following:
  - a. All relevant available non-costly remedial actions according to the TSOs’ operational principles and available at a long-term timeframe are made available to the CCC. The type of non-costly remedial action shall cover, among others, topological changes and phase shifting transformer tap changes.
  - b. All remedial actions considered in the long-term capacity calculation and remaining available shall be made available for the day-ahead and intraday capacity calculations.
2. Each TSO of the IU region shall make available costly remedial actions which the TSO deems as reasonable, proportionate and efficient.

- a. In determining which costly remedial actions to make available the TSO shall consider whether these are efficient when compared to the alternative compensation cost of interconnector capacity reduction.
  - b. The compensation cost of interconnector capacity reduction shall be determined relative to the firm capacity value stated in the relevant connection agreements, and shall reflect the value of interconnector capacity to the market
3. When defining a remedial action, each TSO of the IU Region shall specify at minimum:
  - a. The type of the remedial action and the sequence of actions to be implemented;
  - b. In case of quantifiable remedial action, the maximum and minimum values of the scalable quantity;
  - c. Whether the remedial action has to be applied in a preventive or curative context; and
  - d. Whether the remedial action is a shared remedial action and can be considered for all contingencies or whether it shall be limited to a subset of contingencies. In the latter case, the TSO shall specify the list of contingencies.
4. In case a remedial action made available for the capacity calculation in the IU Region is also one which is made available in another capacity calculation region, the TSO taking control for the remedial action shall take care when defining it of a consistent use in its potential application in both regions to ensure a secure power system operation.
5. In the case of non- costly remedial actions an example within the IU region would involve the tapping of phase shifting transformers, and in the case of costly remedial actions a typical example would involve the re-dispatching of generation.

### **Article 13**

#### Scenarios definition methodology

1. In accordance with Article 19 of the FCA Regulation, referring to Article 10 of the FCA Regulation, all TSOs in capacity calculation regions shall jointly develop a common set of scenarios to be used in the common grid model for each long-term capacity calculation time frame.
2. In order to meet the above requirements, the IU TSOs shall use the annually created ENTSO-E year-ahead reference scenarios (i.e. default scenarios), in accordance with Article 3.1 of Common Grid Model Methodology (“CGMM”) for FCA in conjunction with Article 65 of the SOGL Regulation. This Pan-European process is based on the common grid methodology as developed in accordance with Article 18 of the FCA Regulation.

### **Article 14**

#### Timestamp selection

1. Long-Term cross-zonal capacities will be computed in accordance with Article 19 and Article 22 of this methodology only for the periods with a planned outage on the interconnector cables and for the periods with a planned outage of CNECs.
2. The outage planning of the grid elements listed before is available through the Outage Planning Coordination (OPC) database according to Article 97, 98 & 99 of the SOGL Regulation.
3. The timestamp selections based on the outage planning of the CNE in the IU region is proposed by the CCC to the TSOs sufficiently in advance of each calculation.
4. In case the CCC has no access to the outage planning then the CCC requests the individual outage planning sufficiently in advance to the concerned TSOs prior to the calculation.
5. For each selected timestamp the CCC will generate a CGM in accordance to the CGMM related to the Art. 18 of the FCA Regulation and shall add the planned outages according to Article 13.

## **Chapter 4**

### **Input gathering phase for the scenario-based capacity calculation**

#### **Article 15**

##### **Provision of inputs for the scenario-based capacity calculation**

1. Prior to each scenario-based capacity calculation as outlined in Article 19 and Article 22, the TSOs of the IU Region shall provide the CCC before a deadline commonly agreed between the TSOs and the CCC the following inputs:
  - a. Generation Shift Key (GSK) in accordance with Article 11;
  - b. Maximum permanent technical capacity in accordance with Article 2;
  - c. Critical Network Elements and Contingencies (CNECs) in accordance with Article 2;
  - d. Flow Reliability Margin (FRM) in accordance with Article 9;
  - e. Maximum current on a Critical Network Elements ( $I_{max}$ ) / Maximum allowable power flow ( $F_{max}$ ) in accordance with Article 10;
  - f. Remedial actions in accordance with Article 12; and
  - g. Ad hoc timestamp in accordance with Article 14.
2. When providing the inputs, the TSOs of the IU Region shall respect the formats commonly agreed between the TSOs and the CCCs of the IU Region.

## **Chapter 5**

### **Qualification phase of the long-term capacity calculation**

#### **Article 16**

##### **Co-ordinated net transmission capacity process**

1. The CCC shall prepare the CGM for the timestamps selected according to Article 14 and shall use GSKs following Article 11 to each scenario timestamp in order to reflect the starting point (maximum import/maximum export) for exchanges on the interconnectors.
2. The CCC shall run, with the objective to maximize cross-zonal capacity, a contingency analysis on the CGM using the CNEC list provided by the TSOs and evaluate results either that permit interconnector capacity at maximum import/export without further actions or indicating a potential interconnector import or export limitation as a result of a negative margin on a CNE violation or operational security standard.
3. For each base case with negative margin on a CNE, the CCC shall deploy the list of remedial actions to alleviate the negative margin on the CNE. If remedial actions can mitigate the CNE, the interconnector maximum import/export capacity can be made available for that scenario timestamp. If the remedial actions provided cannot alleviate the CNE violation, the interconnector import/export of the bidding zone where the limiting CNEC(s) is/are located should be progressively reduced in steps from starting points following Article 17. Following each import/export reduction, the contingency analysis should be repeated with the remedial actions already deployed until a level of interconnector import/export has been identified for which no CNE violations occur.

#### **Article 17**

##### **Implementation of reduction of import/export**

1. For each timestamp, the CCC shall perform a reduction as follows:
  - a. In case of negative margin on the CNECs which cannot be solved with available remedial actions, the CCC shall in his binary approach reduce the import or export value of the interconnectors in the bidding zone where the limiting element is located.
  - b. In case several interconnectors are located in the concerned bidding zone, the reduction shall be applied only to the interconnectors which have an influence.

## **Article 18**

### **Implementation of shift of import/export**

1. When computing the final capacity, the CCC shall implement any shift of the power transfer between two bidding zones by adjusting the generation in each of the bidding zones using the GSK of the bidding zones.

## **Chapter 6**

### **Mid-year long-term capacity calculation**

## **Article 19**

### **General provisions for mid-year capacity calculation**

1. The CCC shall calculate, by the 15<sup>th</sup> working day in September Y-1, over all the interconnectors of the IU Region bidding zone borders for each timestamp up to and including 31<sup>st</sup> March in year Y following the process outlined in Article 16:
  - a. The maximum secure value of simultaneous import; and
  - b. The maximum secure value of simultaneous export.
2. All TSOs will provide the Capacity Calculator with a value  $s$ , where:  $\text{Max}(0.9, J_{\text{MIN}}) \leq s \leq 1$ , representing the maximum proportion of FCC on each interconnector that they are willing to allocate in September. The Capacity Calculator will then collate these  $s$  values and take the lowest value ( $S_{\text{MIN}}$ ) from the submitted set.
3. The mid-year long-term capacity release for allocation for each direction shall then be the lower value of the result of the calculation outlined in paragraph (1) of this Article, and the percentage equivalent to  $S_{\text{MIN}}$  of the interconnector's FCC.

## **Article 20**

### **Already released for allocation capacity**

1. For the mid-year long-term capacity calculation, for each interconnector in both import and export, the results obtained in Article 19 shall be taken as the capacity to be validated in accordance with Chapter 8. If this value is higher than the firm capacity derived in Article 6 for each corresponding timestamp, then subject to validation in accordance with Chapter 8, the interconnector owner can subsequently allocate transmission rights up to the new value. If the value is lower than the firm capacity derived in Article 6, then subject to validation in accordance with Chapter 8, the provisions for compensation to interconnector owners outlined in Article 27 will apply for capacity that has already been allocated as long-term transmission rights.

## **Article 21**

### **Validation of mid-year long-term capacity**

1. Validation of the results of the mid-year capacity calculation will be in accordance with Article 26. In accordance with Article 20, already released for allocation capacity which has been previously validated will not need to be validated again, however where the mid-year capacity calculation leads to a reduction from the initial cross-zonal capacity calculation, compensation may be paid in accordance with Article 27.

## **Chapter 7**

### **Final long-term capacity calculation**

#### **Article 22**

##### **General provisions for final capacity calculation**

1. The CCC shall calculate by the 10<sup>th</sup> working day in December Y-1, over all the interconnectors of the IU Region bidding zone borders for each timestamp following the process outlined in Article 16:
  - a. The maximum secure value of simultaneous import; and
  - b. The maximum secure value of simultaneous export.
2. These values will be the final long-term capacity released for allocation in each direction.

#### **Article 23**

##### **Already released for allocation capacity**

1. For the final long-term capacity calculation, for each interconnector in both import and export, the results obtained in Article 22 shall be taken as the capacity to be validated in accordance with Chapter 8. If this value is higher than the firm capacity derived in Article 19, then subject to validation in accordance with Chapter 8, the interconnector owner can subsequently allocate transmission rights up to the new value. If the value is lower than the firm capacity derived in Article 19, then subject to validation in accordance with Chapter 8, the provisions for compensation to interconnector owners outlined in Article 27 will apply for capacity that has already been allocated as long-term transmission rights.

#### **Article 24**

##### **Validation of final long-term capacity**

1. Validation of the results of the final capacity calculation will be in accordance with Article 26. In accordance with Article 20, already released for allocation capacity which has been previously validated will not need to be validated again, , however where the final capacity calculation leads to a reduction from the long-term capacity allocated at the mid-year cross-zonal capacity calculation, compensation may be paid in accordance with Article 27.

## **Chapter 8**

### **Validation phase**

#### **Article 25**

##### **General considerations**

1. In accordance with Article 15 of the FCA Regulation, there will be a cross-zonal validation methodology which shall meet the requirements set out in Article 26 of Regulation (EU) 2015/1222.
2. Each TSO of the IU Region may reassess the computed NTCs on the interconnectors of his bidding zone if unforeseen changes in grid conditions have occurred during the qualification phase. For the purposes of this Capacity Calculation Methodology, unforeseen changes in grid conditions means any changes in the availability of one or more CNECs that could reasonably be expected to impact NTC should such availability be considered for the qualification phase. The reassessments of NTCs shall be per individual cross-zonal interconnector of its bidding zone.
3. Following paragraph (2), one or more of the TSOs in the IU Region may have to reject the NTCs calculated on the interconnectors of its bidding zone pursuant to Article 19 and Article 22. Those TSOs shall be entitled to reduce the proposed NTC towards an interconnector to a level that mitigates the potential risk to Security of Supply in its bidding zone. For monitoring purposes, the relevant TSO shall identify the limiting CNEC and provide the coordinated capacity calculator, and each TSO in the IU Region, with an explanation of the unforeseen

event causing the NTC reduction. Under these circumstances the NTC shall be the value provided by the TSO conducting the reassessment.

4. Whilst Regulation 2016/1719 contains no explicit requirement for TSOs to report NTC reductions to the NRAs, TSOs will report to NRAs any NTC reduction resulting from the validation phase and the related CNEC. Such reporting will be conducted by email by the 7<sup>th</sup> calendar day of the following month, or as otherwise agreed between TSOs and NRAs.

### **Article 26**

#### **Cross-zonal capacity validation methodology**

1. The CCC shall send the proposed cross-zonal capacity values for the long-term market, calculated in accordance with Chapter 2 or Chapter 5, to all TSOs in the IU Region by a deadline which the TSOs and the CCC have agreed upon.
2. Each TSO in the IU Region shall consider for the interconnectors of its bidding zone the proposed cross-zonal NTC values and indicate their acceptance or rejection to the CCC by a deadline which the TSOs and the CCC have agreed upon.
3. If a TSO in the IU Region rejects a proposed NTC value for the long-term market, that TSO shall provide to the CCC by a deadline which TSOs and the CCC have agreed upon:
  - a. An explanation of the unforeseen event which has rendered the proposed NTC value invalid;
  - b. Identification of the CNEC which necessitates the rejection of the proposed NTC; and
  - c. The value of NTC which the TSO can accommodate for the interconnector of its bidding zone.
4. If the CCC has not received acceptance or rejection responses from each TSO in the IU Region by the deadline which TSOs and the CCC have agreed, the CCC shall assume this as a deemed acceptance of each NTC value for which rejection/acceptance has not been indicated by a TSO.
5. If the CCC receives acceptances from all TSOs in the IU Region in accordance with this Article, it shall immediately issue a global acceptance message to all TSOs in the IU Region.
6. If a TSO in the IU Region issues a rejection of NTC values to the CCC in accordance with this Article, then the CCC shall immediately issue for information a rejection message to each TSO in the IU Region.

### **TITLE 3**

#### **COMPENSATION**

### **Article 27**

#### **General principles for compensation for reductions of already allocated long-term cross-zonal capacity**

1. In the event that either the mid-year or final capacity calculation reduces released for allocation capacity below already allocated capacity, or a TSO requires a reduction in cross-zonal capacity after the capacity calculation processes have been run, the TSOs must compensate the relevant interconnector owner for already allocated capacity according to the “causer pays” principle.
2. The concerned TSO on the bidding zone border where cross-zonal capacity has been reduced shall compensate the interconnector owner for any resultant lost income and/or costs related to already allocated capacity in accordance with the FCA Regulation, Harmonised Allocation Rules and associated regional specific Annex to SEM-GB<sup>1</sup>. This will include, but not be limited to:
  - a. Subject to sub-paragraph (b), compensating the interconnector owner with the loss-adjusted Day Ahead market spread multiplied by the reduction in cross-zonal

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<sup>1</sup> <http://www.eirgridgroup.com/site-files/library/EirGrid/Annex-7-to-the-Harmonised-Allocation-Rules.PDF>

capacity required associated with the new planned reduction periods subject to relevant caps in accordance with the FCA Regulation and as set out in the Harmonised Allocation Rules and Article 2 of the regional specific Annex to SEM-GB.

- b. In the event that the concerned TSO reduces cross-zonal capacity, resulting in curtailment of long-term transmission rights, compensation will be paid in accordance with relevant articles as set out in Chapter 9 of the Harmonised Allocation Rules including inter alia:
  - i. Where this is due to force majeure, the compensation due to the interconnector owner in respect of such curtailment shall equal the amount initially paid for the concerned long-term transmission rights already allocated during the forward allocation process.
  - ii. Where this is not due to force majeure, the compensation due to the interconnector owner in respect of such curtailment shall not exceed the amount of any compensation to be paid to holders of curtailed long-term transmission rights for already allocated capacity.
3. Where guaranteed cross-zonal capacity has not been allocated in advance of the identification of a new planned reduction in cross-zonal capacity, no compensation will arise.

## **TITLE 4 FALL BACK**

### **Article 28**

#### Fall-back procedure for initial capacity calculations

1. In case the inputs for the capacity calculation outlined in Article 6 are not available in time, or this capacity calculation cannot be run for any reason, the amount of capacity released for allocation will be equal to 50% of the Firm Connection Capacity, subject to already known outage periods on CNECs, during which zero capacity will be allocated, unless otherwise agreed by the relevant TSOs.

### **Article 29**

#### Fall-back procedure for mid-year capacity calculations

2. In case the inputs to the capacity calculation outlined in Article 15 are not available in time for the capacity calculation outlined in Article 19, or this capacity calculation cannot be run for any reason, the amount of capacity released for allocation will be equal to 90% of the Firm Connection Capacity, subject to already known outage periods on CNECs, during which zero capacity will be allocated, unless otherwise agreed by the relevant TSOs.

### **Article 30**

#### Fall-back procedure for final capacity calculations

1. In case the inputs to the capacity calculation outlined in Article 15 are not available in time for the capacity calculation outlined in Article 22, or this capacity calculation cannot be run for any reason, the amount of capacity released for allocation will be equal to 100% of the Firm Connection Capacity, subject to already known outage periods on CNECs, during which zero capacity will be available, unless otherwise agreed by the relevant TSOs.

## **TITLE 5**

### **PUBLICATION AND IMPLEMENTATION**

#### **Article 31**

##### Publication and implementation of the IU Capacity Calculation Methodology

1. The TSOs of the IU Region shall publish the IU CC Methodology without undue delay after IU regulatory authorities have approved the proposed IU CC Methodology or a decision has been taken by the Agency for the Cooperation of Energy Regulators in accordance with Article 4 (10) and Article 4(11) of the FCA Regulation.
2. The fall-back processes outlined in Title 4 will apply until such a time that the Common Grid Model is available.
3. The TSOs of the IU Region shall implement the IU CC Methodology for the capacity calculation for the calendar year 2021.

### **Article 32**

#### **Publication of information**

1. Following the CCC issuing a global acceptance message in accordance with Article 26, each TSO of the IU Region will publish the firm long-term cross-zonal capacity in accordance with Article 29 of the Harmonised Allocation Rules.
2. Notwithstanding the multi-TSO outage planning and co-ordination process, the TSO responsible for any given outage must abide by their responsibilities under Regulation (EU) 543/2013. Namely, within an hour of the decision to take a planned outage, and having precise information regarding that outage, the relevant TSO must publish the relevant information regarding this outage.

### **Article 33**

#### **Language**

1. The reference language for this IU CC Methodology shall be English. For the avoidance of doubt, where TSOs need to translate this IU CC Methodology into their national language(s), in the event of inconsistencies between the English version published by TSOs and any version in another language, the relevant TSOs shall be obliged to eliminate any inconsistencies by providing a revised translation of this IU CC Methodology to their relevant national regulatory authorities.