CMP419: Generation Zoning Methodology Review – Workgroup 2

08 November 2023

Online Meeting via Teams


WELCOME

Agenda

Topics to be discussed	Lead
Introductions	Chair
Timeline and Terms of Reference	Chair
Action Log	Chair
Proposer presentation and questions	Proposer
Cross Code Impacts	All
Any Other Business	Chair
Next Steps	Chair

Expectations of a Workgroup Member

- Contribute to the discussion
- Be respectful of each other's opinions
- Language and Conduct to be consistent with the values of equality and diversity
- Do not share commercially sensitive information
- Be prepared - Review Papers and Reports ahead of meetings
- Complete actions in a timely manner
- Keep to agreed scope

Your Roles

- Help refine/develop the solution(s)
- Bring forward alternatives as early as possible
- Vote on whether or not to proceed with requests for Alternatives
- Vote on whether the solution(s) better facilitate the Code Objectives

Workgroup Membership

Role	Name	Company
Proposer	Nitin Prajapati	National Grid ESO
Workgroup Member	Ryan Ward	Scottish Power Renewables
Workgroup Member	Paul Jones	Uniper UK Ltd
Workgroup Member	Grace March	Sembcorp Energy
Workgroup Member	Lauren Jauss	RWE Supply & Trading GmbH
Workgroup Member	Claire Hynes	RWE Renewables
Workgroup Member	Robin Dunne	Intergen
Workgroup Member	Dennis Gowland	Research Relay Ltd
Workgroup Member	Calum Duff	Thistle Wind Partners
Workgroup Member	Graz Macdonald	Waters Wye & Associates
Workgroup Member	Damian Clough	SSE Generation
Workgroup Member	Paul Youngman	Drax
Authority Representative	Pedro Arcain	Ofgem

Timeline for CMP419

Milestone	Date	Milestone	Date
Modification presented to Panel	25 August 2023	Code Administrator Consultation (15 working days)	04 June 2024 to 25 June 2024
Workgroup Nominations (15 Working Days)	30 August 2023 to 20 September 2023	Draft Final Modification Report (DFMR) issued to Panel (5 working days)	18 July 2024
Workgroup 1 – Workgroup 4 To discuss the defect, analysis required and begin refining the solution	12 October 2023 08 November 2023 12 December 2023 17 January 2024	Panel undertake DFMR recommendation vote	26 July 2024
Workgroup Consultation (15 working days)	23 January 2024 to 13 February 2024	Final Modification Report issued to Panel to check votes recorded correctly	30 July 2024 to 06 August 2024
Workgroup 5 – Workgroup 7 To review the Workgroup Consultation responses and to finalise the solution	12 March 2024 16 April 2024 14 May 2024	Final Modification Report issued to Ofgem	07 August 2024
Workgroup report issued to Panel (5 working days)	23 May 2024	Ofgem decision	Q3 2024
Panel sign off that Workgroup Report has met its Terms of Reference	31 May 2024	Implementation Date	01 April 2027

Terms of Reference

Workgroup Term of Reference
a) Consider EBR implications
b) Consider how the implementation of a new zoning methodology, its governance and associated impact of rezoning will impact the predictability, cost reflectivity, and stability of charges.
c) Assessing the use of ETYS boundaries and/or use of other methods to develop generation zones before considering how this may or may not increase the range of nodal prices within a generation zone.
d) Assess the frequency of reviewing the number of generation zones, factoring in the decision from CMP324/325 and associated impacts on the stability of TNUoS charges.
e) Consider relevant regulatory changes

Panel made minor amends when approving the Terms of Reference

Action Log for CMP419

Action number	Workgroup Raised	Owner	Action	Comment	Due by	Status
1	WG1	DG	Provide views to ESO on potential anomalies in charging methodology	Update to follow	WG2	Open
2	WG1	NP	Investigate with Revenue as to whether implementation date can be moved forward, or provide justification if not	Verbal Update to be provided at WG2	WG2	Open
3	WG1	NP	Investigate who is responsible for Governance of ETYS boundaries and how many new boundaries have been created in the past 10 years	Verbal Update to be provided at WG2	WG2	Open
4	WG1	NP	Investigate potential effect on boundaries if constraints are removed by the bootstrap. Also look into expected trajectory of constraints.	Verbal Update to be provided at WG2	WG2	Open
5	WG1	NP	Circulate a document which provides an overview of the ETYS Boundaries and ETYS Zones	Document provides detail in pages 4 and 6	WG2	Propose to close
6	WG1	ML	Create Microsoft Form for Workgroup members to feed interactions into	Link shared in WG1 Summary	WG2	Propose to close

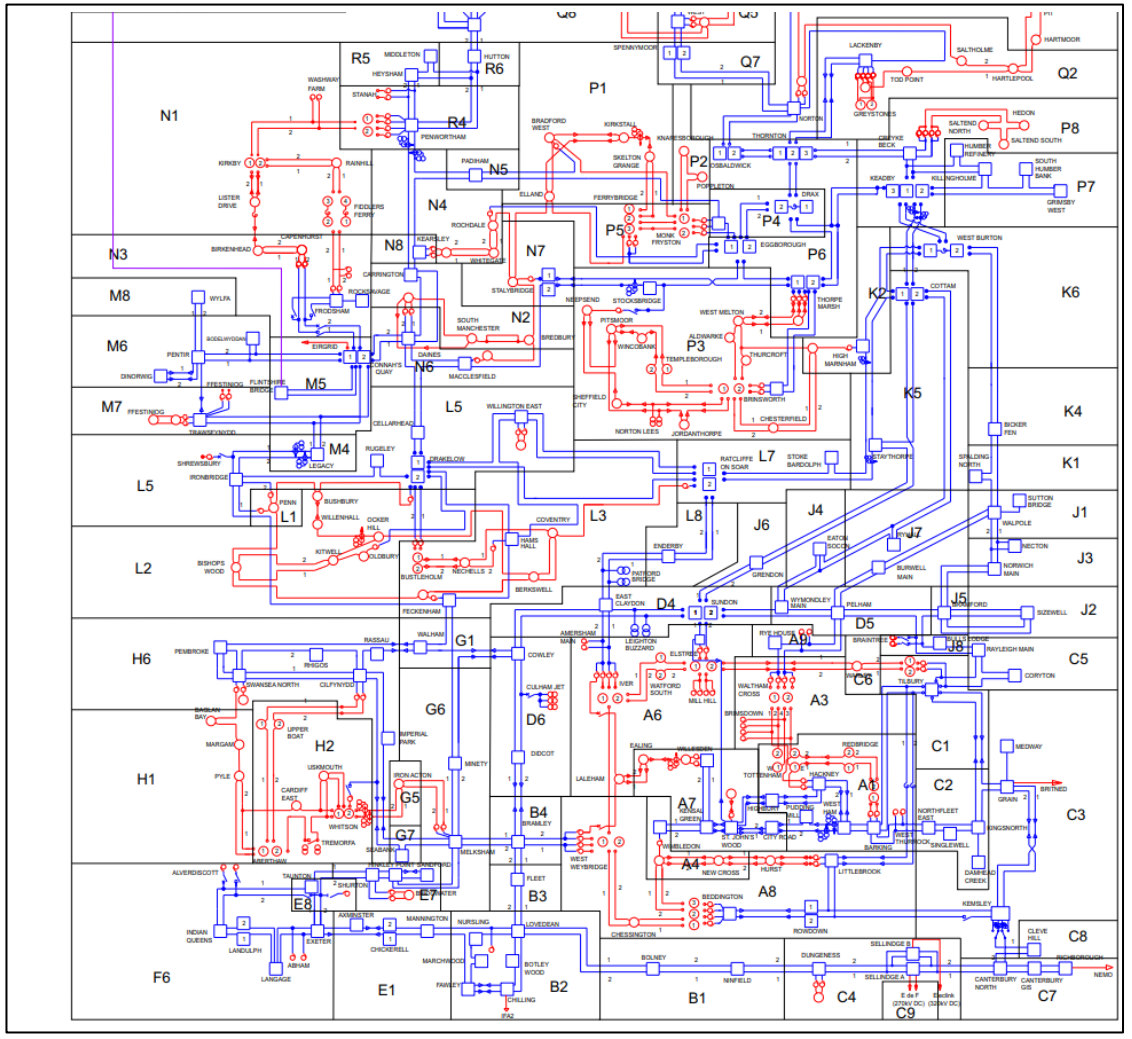
Proposer’s Update

Nitin Prajapati - ESO

Composition ETYS Zones

- The Electricity Ten Year Statement (ETYS) zones are identified by two characters.
- The first alphabetic character describes a major large zone which then contains more, smaller minor zones.
- For example, major zone A describes an area covering London, and A1 describes a smaller area in London that includes Hackney and Barking.
- So A1, A2, A3, A4, A4, A5, A7 and A8 would all be individual minor zones and A1-A8 combined would form a major ETYS zone.
- There are currently 18 major zones
  - To incorporate offshore generators related to the HND, additional zones are being considered offshore and will be outlined in a publication later this year.

ETYS Zones



Further details and rationale on proposed solution

- Use of ETYS major zones as the basis for the generation zones.
- The ETYS zones are stable and only change approximately once every five years.
- The ETYS Zones are linked to the ETYS Boundaries which help to identify the constraints on the network.
    - Therefore ETYS Zones are indirectly linked to constraints on the network,
- Although constraints could be considered an operational signal, consistent and long term constraints on the network in specific locations could provide a long term investment signals.
    - Encouraging investment in the network in less constrained areas should help reduce the need for further cost associated in network development to reduce constraints.
- ETYS Zones are used in other commercial areas at the moment such as User Commitment.
- Using ETYS zones as the basis for generation zones will enable more nodes to fall into a generation zone.

Benefits of proposed solution

We can consider the benefits of the proposed solution in context of three key considerations, cost reflectivity, tariff stability and tariff predictability.

Cost Reflectivity

- The inherent cost-reflective locational element within nodal prices will not be amended and so still underpin the methodology.
- The geographic location is still at the heart of the solution to provide the appropriate investment signal.

Tariff Stability

- As the ETYS Zones will not change regularly, this will provide tariff stability as nodes are unlikely to change from one generation zone to another.
- Overall there will be more nodes in a zone, so if nodal price change, there will be a more balanced impact across the network.

Tariff Predictability

- Due to the ETYS zones changing infrequently, this will also enable more certainty around tariffs.

Determining the methodology to apply to HVDC Circuits

Challenge for HVDC Circuits

- The Holistic Network Design (HND) will also need to be considered when developing the generation zones.
- The HND includes High Voltage Direct Current (HVDC) circuits as well as Alternating Current (AC) circuits.
- With the current MWkm charging methodology, flows along meshed AC circuits are determined by circuit parameters (reactance).
- The reactance for a DC circuit can vary within a significant range, and therefore makes it challenging to determine circuit flows.

Proposed high level solution

- Consider treating DC circuits as AC circuits.
- Consider the approach used for HVDC sub-sea “bootstraps” (the “Western Link”) and whether this is compatible.
- The reactance can be modelled to ensure a fixed portion of wider boundary flows go past HND circuits (i.e. similar to the bootstrap methodology).
- The relevant boundaries will be known when the ETYS is published later this year.

Determining the methodology to apply to HVDC Circuits

Questions

- Is it appropriate to treat DC direct as AC directs in the context of modelling them on a set value?
- Can the approach used for Western Bootstrap be utilised?
- Or can the approach of the Western Bootstrap be adapted to develop a solution?

Cross Code Impacts

All

Link for Workgroup

Any Other Business

Lizzie Timmins – ESO Code Administrator

Next Steps

Lizzie Timmins – ESO Code Administrator