

CMP419: Generation Zoning Methodology Review – Workgroup 1

12 October 2023

Online Meeting via Teams

WELCOME



Agenda

Topics to be discussed	Lead
Introductions	Chair
Code Modification Process Overview <ul style="list-style-type: none">• Workgroup Responsibilities• Workgroup Alternatives and Workgroup Vote	Chair
Objectives and Timeline <ul style="list-style-type: none">• Walk-through of the timeline for the modification	Chair
Review Terms of Reference	All
Proposer presentation and questions	Proposer
Agree Terms of Reference	All
Cross Code Impacts	All
Any Other Business	Chair
Next Steps	Chair



Modification Process

Lizzie Timmins – ESO Code Administrator

Code Modification Process Overview





Refine solution Workgroups



- If the proposed solution requires further input from industry in order to develop the solution, a Workgroup will be set up.
- The Workgroup will:
 - further refine the solution, in their discussions and by holding a **Workgroup Consultation**
 - Consider other solutions, and may raise **Alternative Modifications** to be considered alongside the Original Modification
 - Have a **Workgroup Vote** so views of the Workgroup members can be expressed in the Workgroup Report which is presented to Panel



Consult Code Administrator Consultation

- The Code Administrator runs a consultation on the **final solution(s)**, to gather final views from industry before a decision is made on the modification.
- After this, the modification report is voted on by Panel who also give their views on the solution.





Decision



- Dependent on the Governance Route that was decided by Panel when the modification was raised
- **Standard Governance:** Ofgem makes the decision on whether or not the modification is implemented
- **Self-Governance:** Panel makes the decision on whether or not the modification is implemented
 - an appeals window is opened for 15 days following the Final Self Governance Modification Report being published

Implement

- The Code Administrator implements the final change which was decided by the Panel / Ofgem on the agreed date.





Workgroup Responsibilities

Lizzie Timmins – ESO Code Administrator

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 Alternatives and Workgroup Vote

Lizzie Timmins – ESO Code Administrator

Can I vote? and What is the Alternative Vote?

To participate in any votes, Workgroup members need to have attended at least 50% of meetings

Stage 1 – Alternative Vote

- Vote on whether Workgroup Alternative Requests should become Workgroup Alternative Code Modifications.
- The Alternative vote is carried out to identify the level of Workgroup support there is for any potential alternative options that have been brought forward by either any member of the Workgroup OR an Industry Participant as part of the Workgroup Consultation.
- **Should the majority of the Workgroup OR the Chair believe that the potential alternative solution may better facilitate the CUSC objectives than the Original then the potential alternative will be fully developed by the Workgroup with legal text to form a Workgroup Alternative Code modification (WACM) and submitted to the Panel and Authority alongside the Original solution for the Panel Recommendation vote and the Authority decision.**

Can I vote? and What is the Workgroup Vote?

To participate in any votes, Workgroup members need to have attended at least 50% of meetings

Stage 2 – Workgroup Vote

- 2a) Assess the original and Workgroup Alternative (if there are any) against the relevant Applicable Objectives compared to the baseline (the current code)
- 2b) Vote on which of the options is best.

Workgroup Membership

Role	Name	Company
Proposer	Nitin Prajapati	National Grid ESO
Workgroup Member	Ryan Ward	ScottishPower 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
Authority Representative	Pedro Arcain	Ofgem



Objectives and Timeline

Lizzie Timmins – ESO Code Administrator

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

Lizzie Timmins – ESO Code Administrator

Terms of Reference

Workgroup Terms of Reference

- a) Consider EBR implications
- b) Consider how the implementation of a new zoning methodology 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.



Proposer's Solution

Nitin Prajapati - ESO



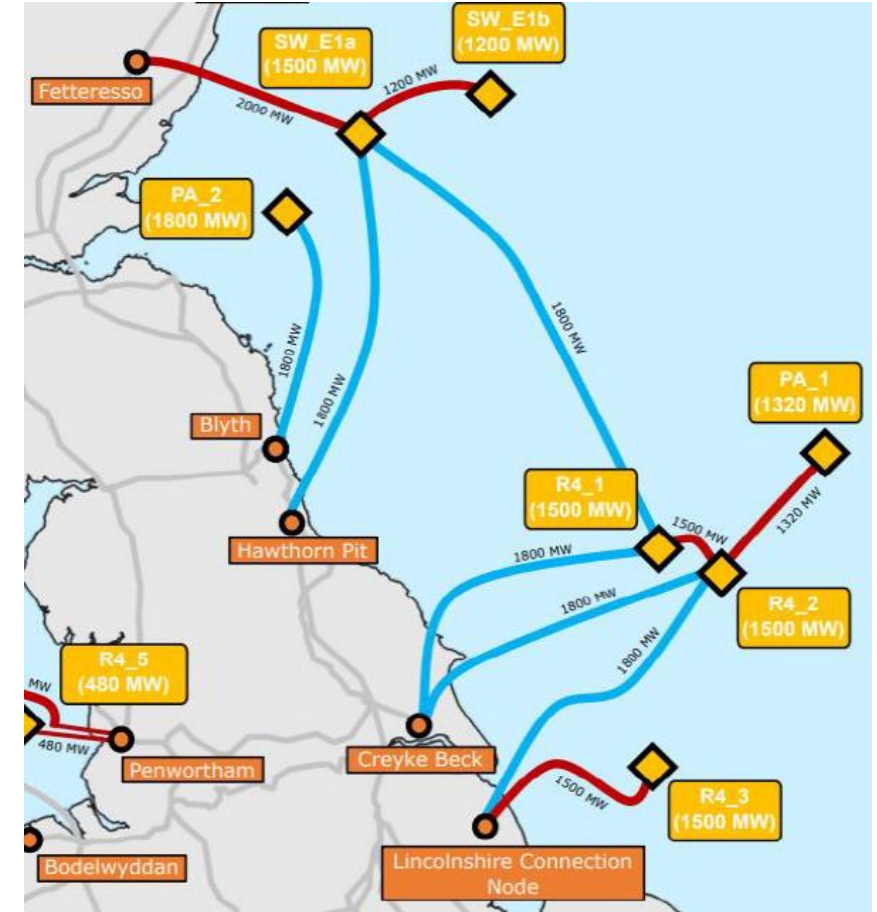
CMP419 –Generation Zoning Methodology Review

Workgroup 1, October 2023

Background

- CUSC section 14.15.37 ensures nodes are assigned to generation zones for the purpose of applying the Transmission Network Use of System (TNUoS) Wider tariffs to generators.
- Currently there are 27 generation zones which aim to provide a level of tariff stability along with predictability and balance the nodal marginal costs fluctuation derived from locational signals.
- Within the Holistic Network Design (HND) additional nodes may be created offshore which fall outside the existing 27 generation zones.
- Therefore, the CUSC is not clear how the Wider tariff would be applied to offshore generators that are connected via non radial offshore transmission and fall outside the 27 generation zones.
- To ensure offshore generators can be charged for their use of non radial offshore transmission (wider network), there is a need to review the zoning methodology to incorporate the assets in the HND.

Holistic Network Design: East Coast Region



Background Continued

- Linked to this, is the authority decision on CMP324/325 which advised:
 - *'Given the significant interaction between this modification (CMP325/4) and CMP353, and any future reform to the Expansion Constant (EC) methodology, we would expect NGESO to revisit the issue of rezoning alongside the development of any future change to the expansion constant.'*
- The EC has a material bearing on the marginal costs at each node, therefore a key factor in determination of generation zones.
- The EC is currently being reviewed by CMP315/375, so it is an appropriate time review the zoning methodology alongside the application of the Wider tariff for offshore generators.
- This ensures we consider onshore and offshore generation zones in one review, noting the interactions and dependencies, to help develop a holistic solution.
- Industry feedback also highlights the importance of reviewing the generation zoning methodology to help improve tariff stability and predictability.
- Finally, there is a need to determine the methodology to calculate the loading on meshed offshore Direct Current (DC) circuits considering the approach that was developed in CMP213 which assigned an approximated reactance to High-Voltage DC circuits.

Solution – Principles and Approach

Overarching Principle

- This proposal recommends reviewing the generation zoning methodology by first building on the principles outlined in section 14.15 of CUSC to provide locational signals ‘to reflect the costs of capital investment in, and the maintenance and operation of a transmission system.’

Approach to the Solution

- Understanding the drivers of instability and unpredictability in wider charges. As a starting basis reviewing the number of nodes in a zone to help determine the impacts on stability and predictability in the long term.
 - More broadly considering the balance between cost reflectivity, stability and predictability and assessing the weight of importance between these elements will be important.
- Utilising the Electricity Ten Year statement (ETYS) boundaries as a basis to determine the generation zones to help provide a platform for a balanced impact across all generators (onshore and offshore) of the network.
- Determine the methodology to apply resistance to Direction Current (DC) circuits, by firstly considering the current approach utilised for HVDC sub-sea bootstraps to see if this is compatible or can be adapted.
 - It’s important to incorporate HVDC circuits as they form part of the HND, enabling the solution to be considered holistically.

Solution; Implementation and Elements out of Scope

Implementation Approach/Considerations

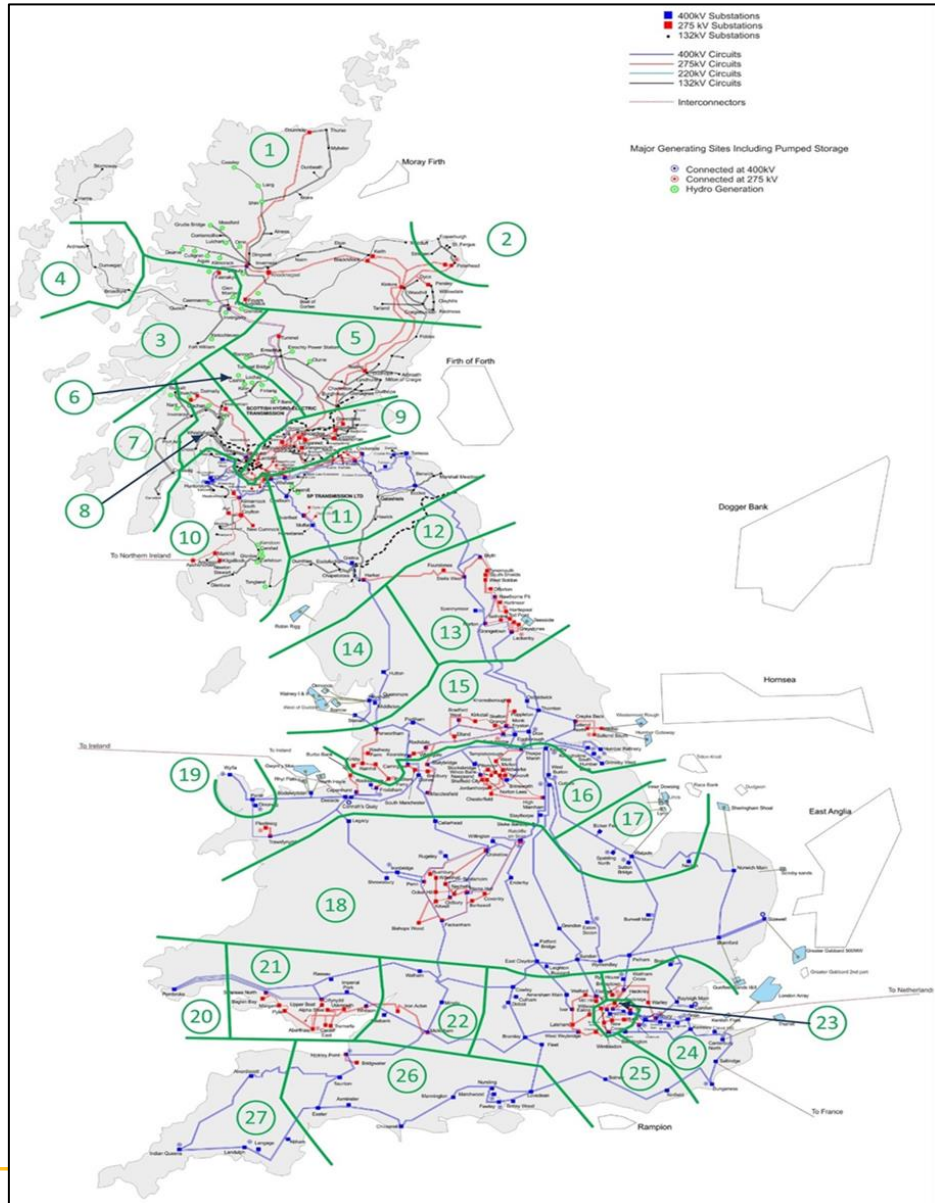
- Inclusion of HND Wider Circuits within the Transport and Tariff model.
- Level of complexity of amending the Transport and Tariff model will be determined by the detailed solution.

Elements out of scope of the modification

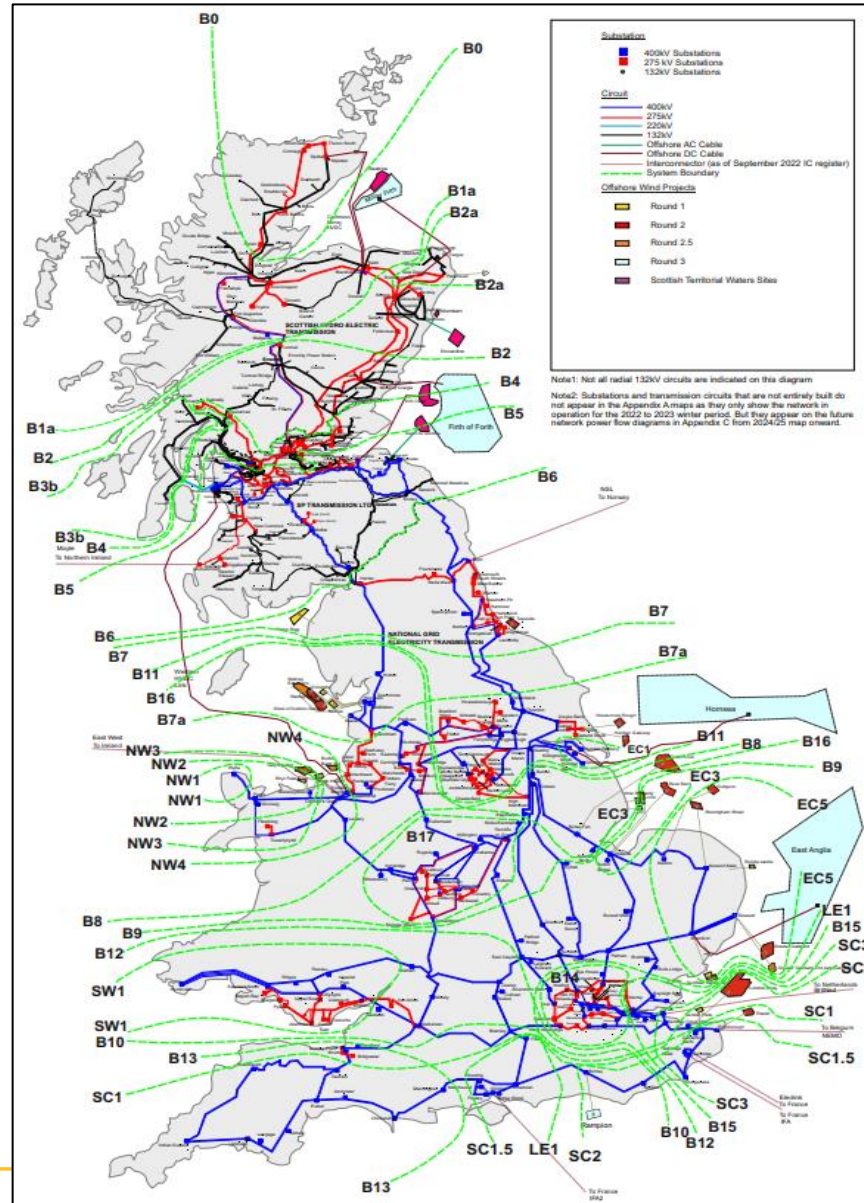
- Consideration of security factors for transmission circuits (onshore and offshore).
- Review of the methodology and approach to the connectivity element between generation zones.
- Review of the demand zones and associated methodology.

Current Generation Zones vs ETYS Boundaries

Current Generation Zones



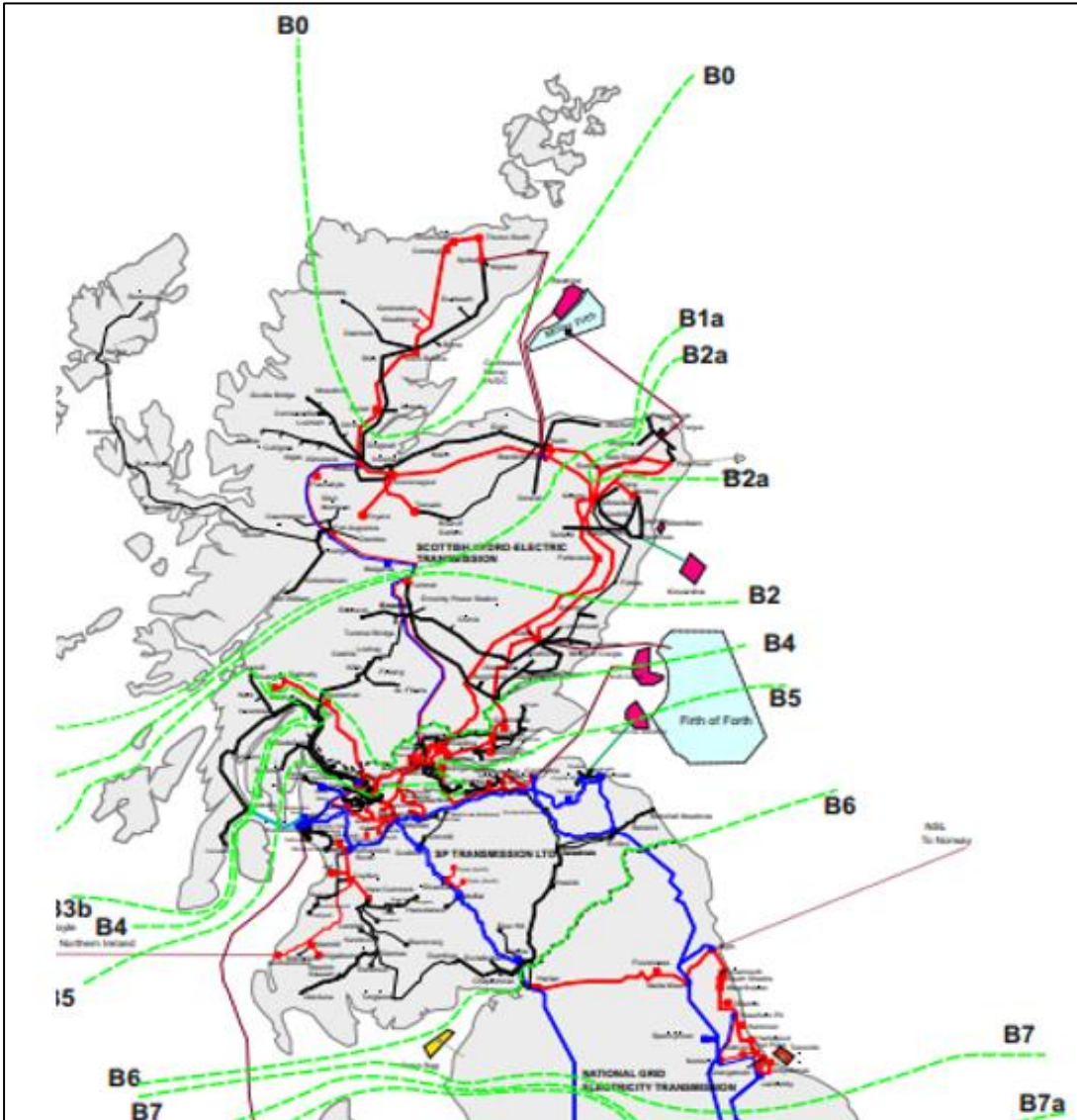
Electricity Ten Year Statement Boundaries (ETYS)



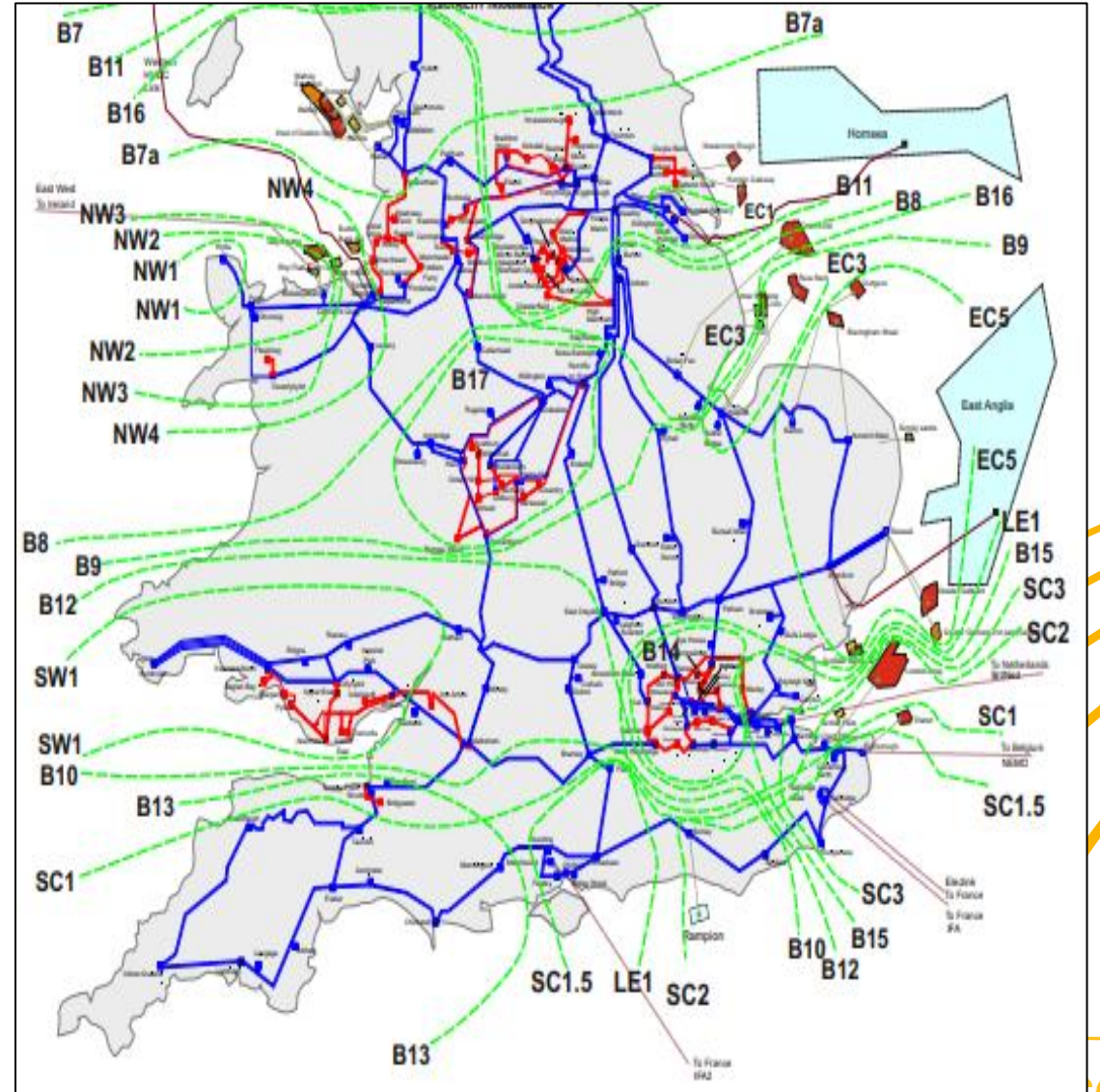
- There are currently 27 Generation Zones and 31 ETYS Boundaries.
- The ETYS boundaries help to identify the constraints on the network and capture the flows between different areas.
- Boundaries are not redrawn but new boundaries are added on the rare occasion when there is an emerging constraint.
- The ETYS boundaries contain a number of flop zones (ETYS Zones).

ETYS Boundaries Further Detailed View

North GB

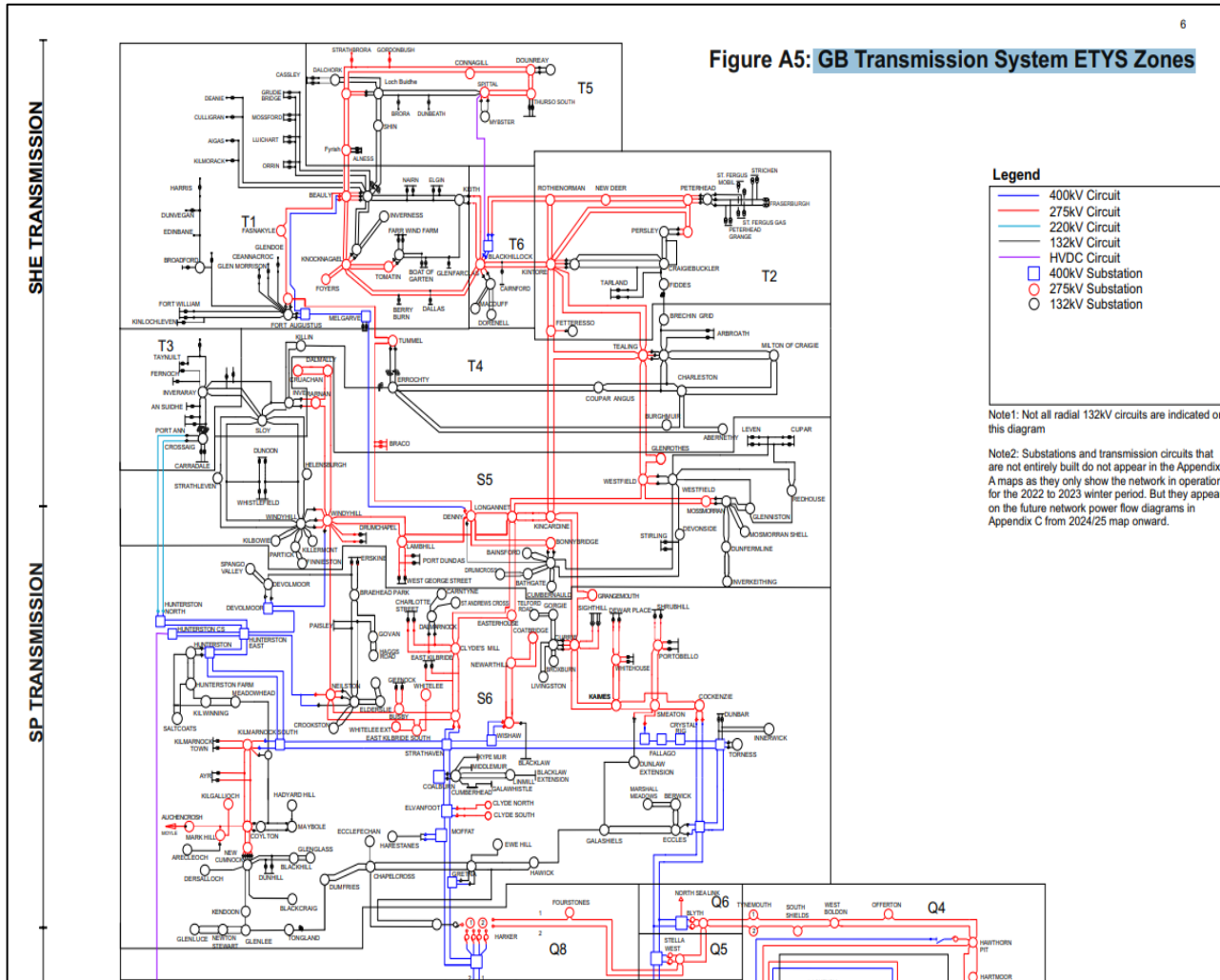


South GB

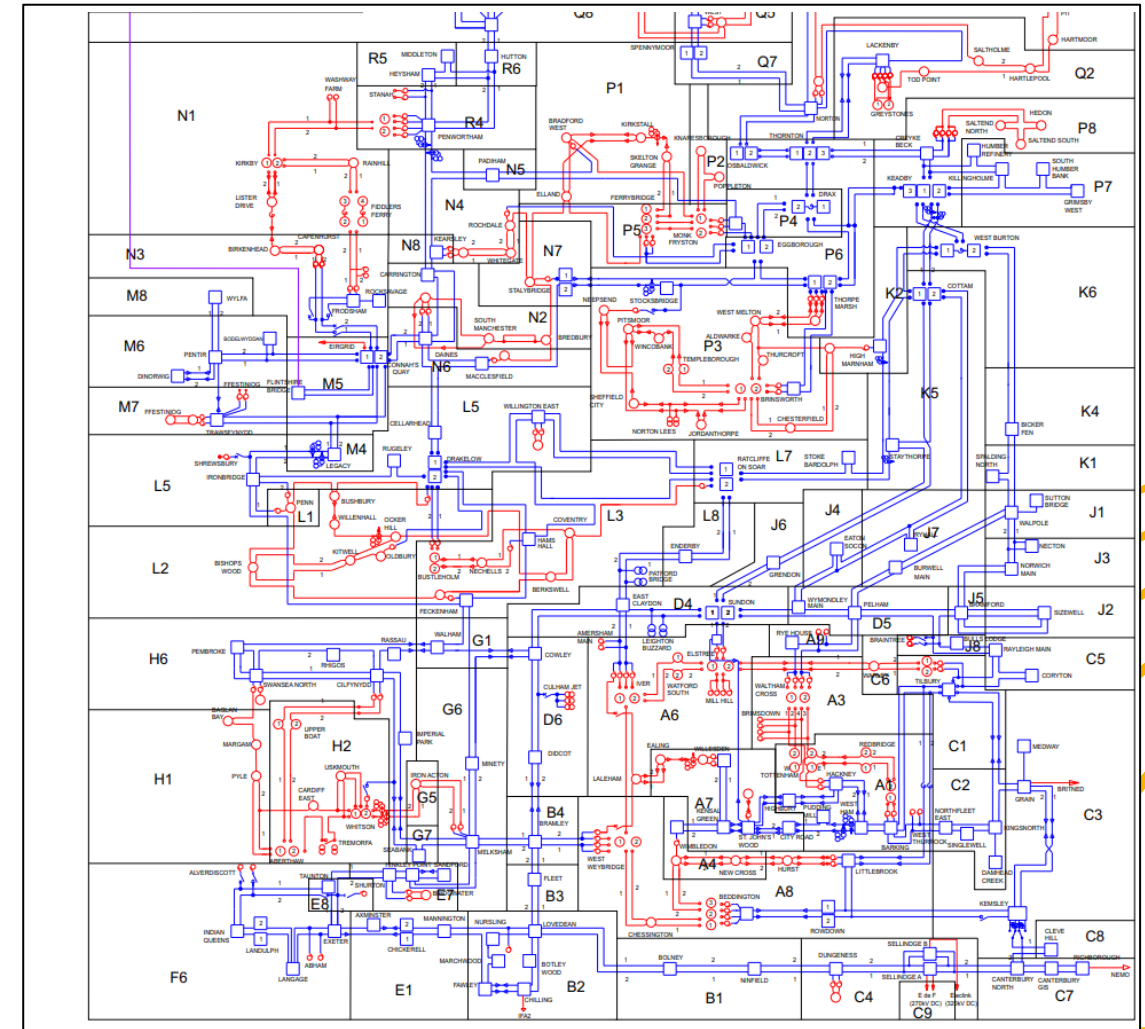


GB Transmission System ETYS Zones

SHE Transmission and SP Transmission



National Grid



Key Considerations for Discussion

- A combination of the flop zones and ETYS boundaries could be utilised to determine generation zones.
- The number of nodes and users in a zone will impact the average price.
- Should constraints also be a key factor in determining the generation zones?
- Transition between current future zoning methodologies is important.



Terms of Reference

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Cross Code Impacts

All



Any Other Business

Lizzie Timmins – ESO Code Administrator



Next Steps

Lizzie Timmins – ESO Code Administrator