

LEGEND

Transmission substations

- 400kV
- 275kV
- 132kV
- other*

- ◇ existing offshore wind connected to OFTO network
- ◇ existing offshore wind generator

Circuits

- 400kV
- 275kV
- 220kV
- 132kV
- OFTO* circuits
- offshore wind connection
- HVDC
- Interconnectors (as per IC register)

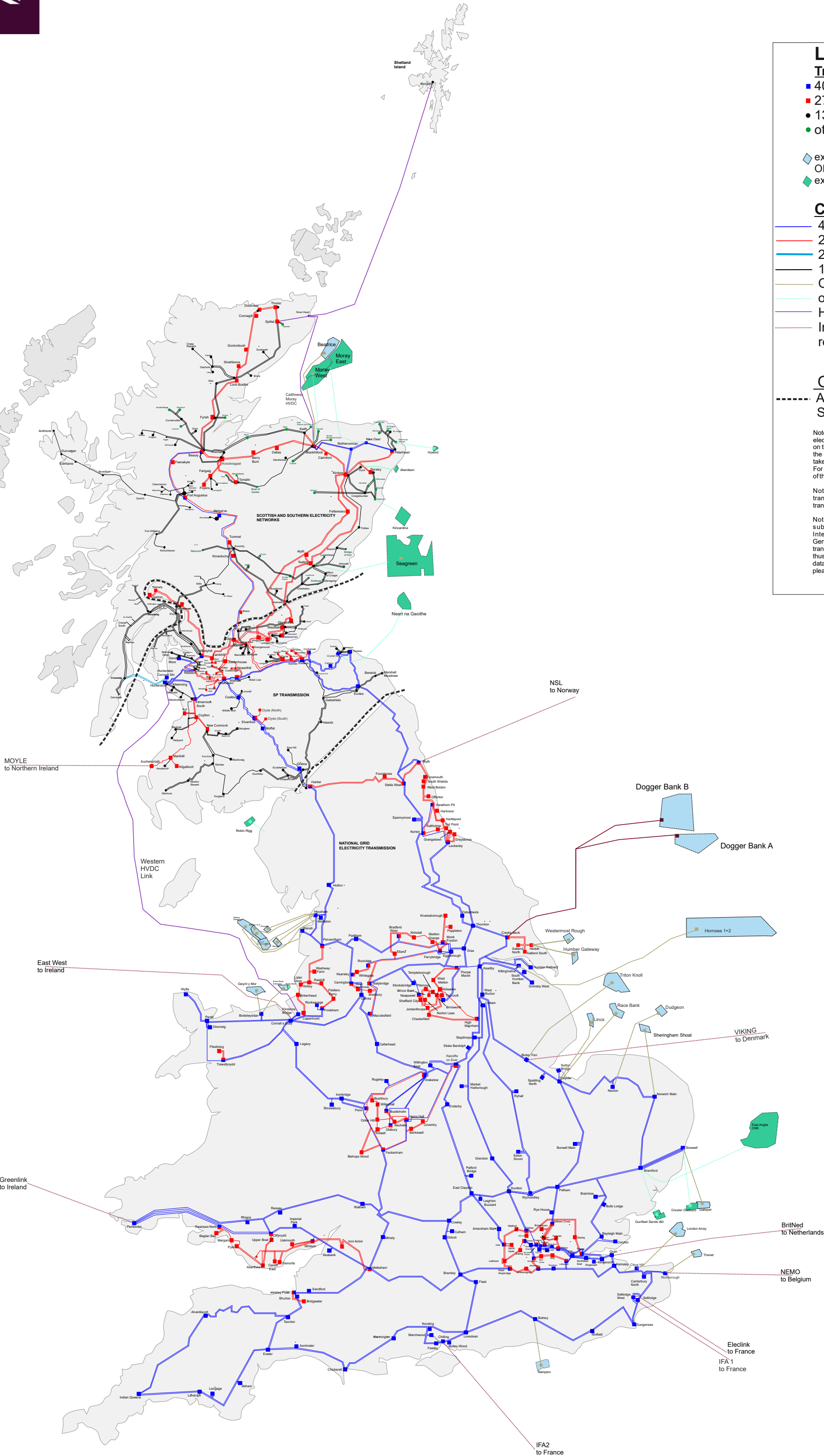
Other drawings

- Approximate border between SSEN, SPT and NGET

Note1: The map is a representation of the existing NETS (GB electricity transmission network - on land and offshore) based on the ETYS2025 Year 1, thus the routes and components of the network are only for illustrative purposes and should be taken as approximate location of assets.
For details of the location of assets please enquire the owner of the transmission network.

Note2: The OFTO network illustrates the offshore transmission circuits, as defined in Grid Code and/or transmission licensed, as per Ofgem.

Note3: Other substations in the SSEN area are all substations (like Grid Supply Points -GSP, Main Interconnected Transmission System -MITS nodes, Generation Point of Connection (GPC) that are not part of transmission system but they connect Large Power Stations thus they shouldn't be taken as precise location; for accurate data of the NETS and of the Generation connected to NETS, please enquire to the Transmission Owner TO data.



ETYS2025 Y1 GB System Boundaries - map view

Boundary drawings

- System Boundary - currently studied
- System Boundary - not currently in study

LEGEND

Transmission substations

- 400kV
- 275kV
- 132kV
- other*

- existing offshore wind connected to OFTO network
- existing offshore wind generator

Circuits

- 400kV
- 275kV
- 220kV
- 132kV
- OFTO* circuits
- offshore wind connection
- HVDC
- Interconnectors (as per IC register)

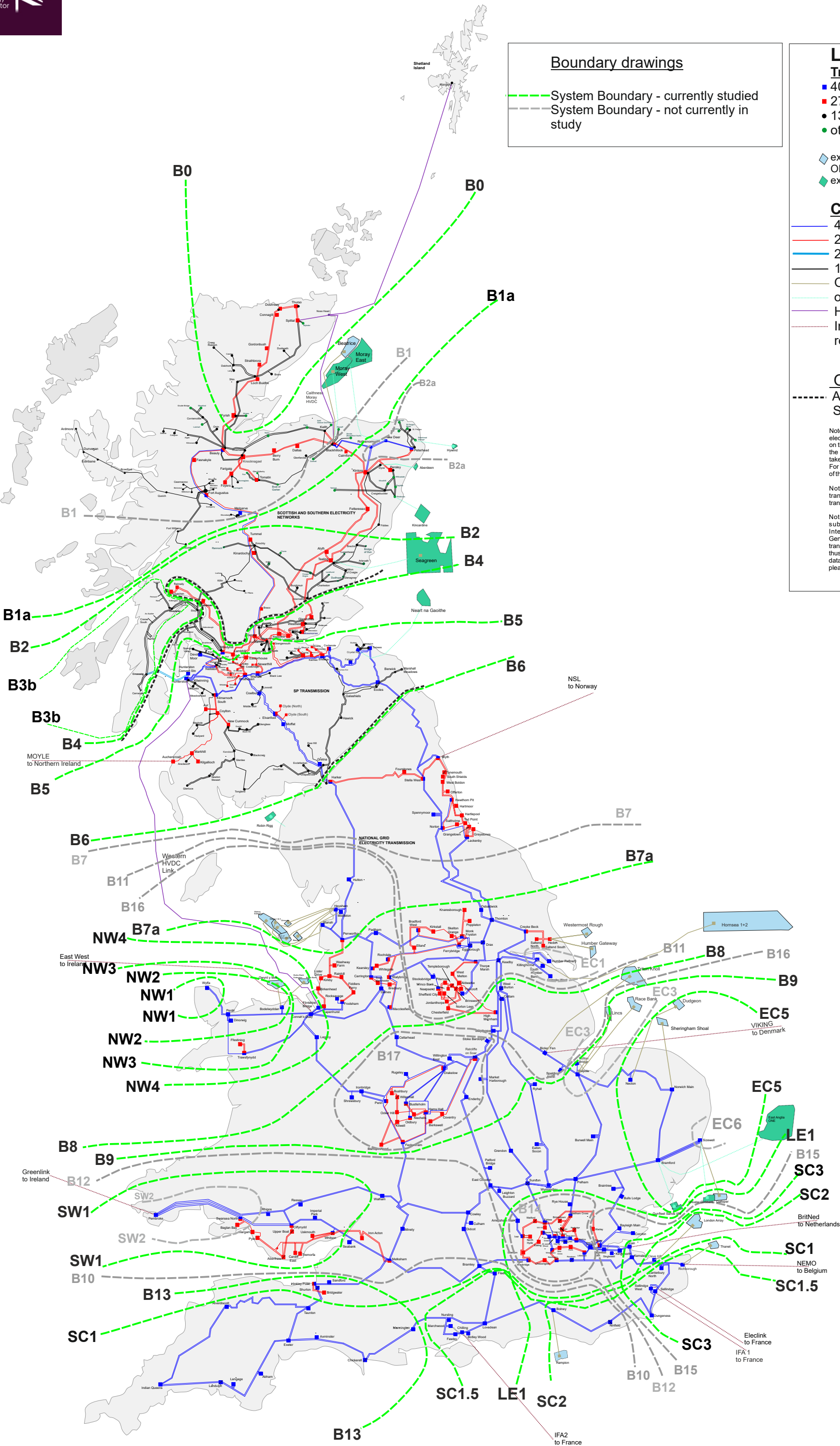
Other drawings

- Approximate border between SSEN, SPT and NGET

Note1: The map is a representation of the existing NETS (GB electricity transmission network - on land and offshore) based on the ETYS2025 Year 1, thus the routes and components of the network are only for illustrative purposes and should be taken as approximate location of assets.
For details of the location of assets please enquire the owner of the transmission network.

Note2: The OFTO network illustrates the offshore transmission circuits, as defined in Grid Code and/or transmission licensed, as per Ofgem.

Note3: Other substations in the SSEN area are all substations (like Grid Supply Points -GSP, Main Interconnected Transmission System -MITS nodes, Generation Point of Connection (GPC) that are not part of transmission system but they connect Large Power Stations thus they shouldn't be taken as precise location; for accurate data of the NETS and of the Generation connected to NETS, please enquire to the Transmission Owner TO data.



ETYS25 Y1 Existing System Generation

PLANT TYPE

Nuclear

Biomass

Oil&OCGT

CCGT&CHP

Hydro/pumped storage

Wind

Battery storage/BEISS

Solar

Other (Waste)

Note: The generations shown are existing Large Power Stations (refer Grid Code) connected to the NETS. In the NGET region this is extended to all power stations with transmission entry capacity above 25MW.

Note: The Large Power Stations are only for illustrative purposes and should be taken as an approximate location of assets.

Note: The OTHER power plants shown in the diagram are: tidal, residual waste, etc.

LEGEND

Transmission substations

400kV

275kV

132kV

other*

existing offshore wind connected to OFTO network

existing offshore wind generator

Circuits

400kV

275kV

220kV

132kV

OFTO* circuits

offshore wind connection

HVDC

Interconnectors (as per IC register)

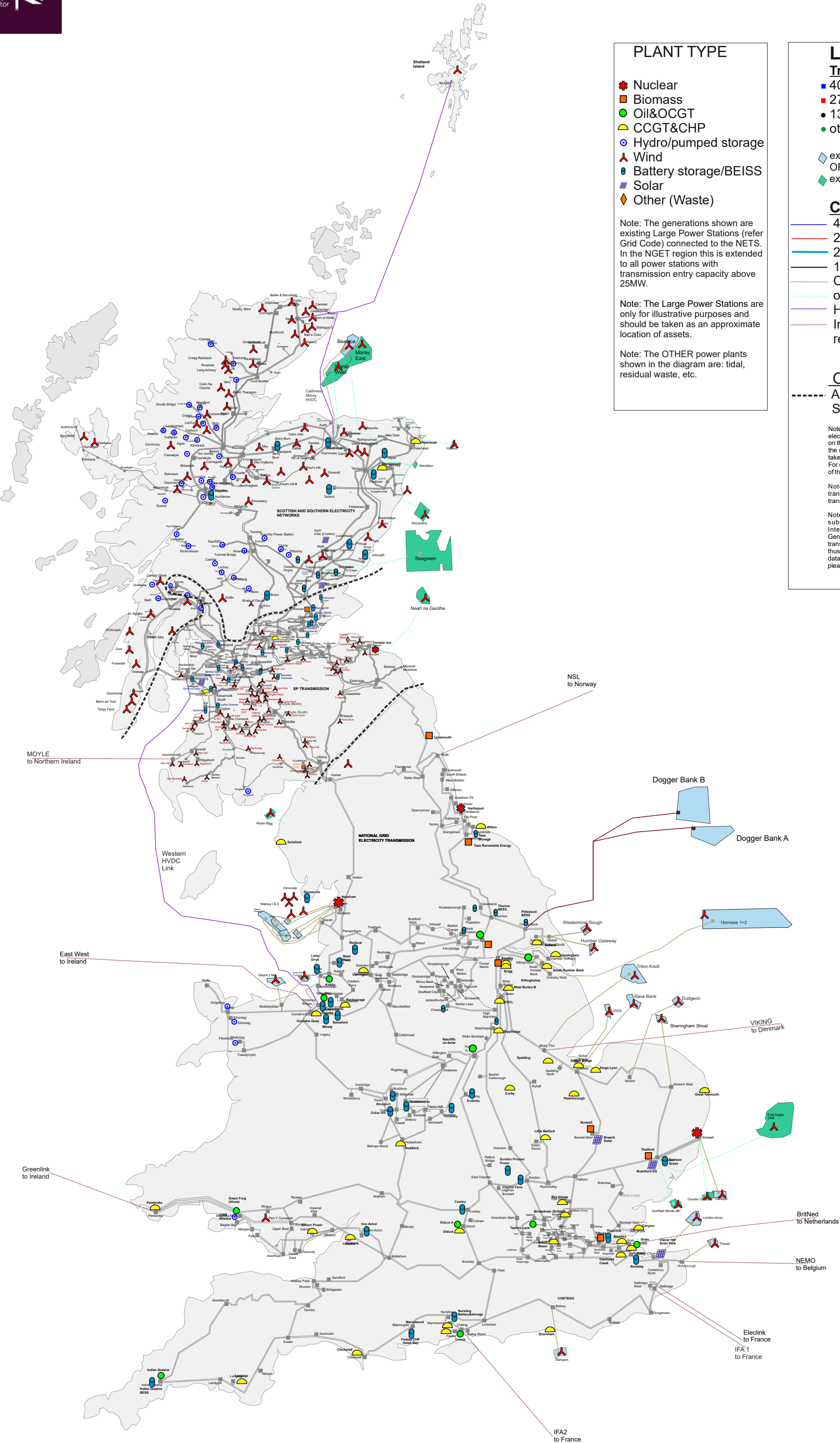
Other drawings

Approximate border between SSEN, SPT and NGET

Note1: The map is a representation of the existing NETS (GB electricity transmission network - on land and offshore) based on the ETYS2025 Year 1, thus the routes and components of the network are only for illustrative purposes and should be taken as approximate location of assets. For details of the location of assets please enquire the owner of the transmission network.

Note2: The OFTO network illustrates the offshore transmission circuits, as defined in Grid Code and/or transmission licensed, as per Ofgem.

Note3: Other substations in the SSEN area are all substations (like Grid Supply Points -GSP, Main Interconnected Transmission System -MITS nodes, Generation Point of Connection (GPC) that are not part of transmission system but they connect Large Power Stations thus they shouldn't be taken as precise location; for accurate data of the NETS and of the Generation connected to NETS, please enquire to the Transmission Owner TO data.



ETYS2025 Y1 GB Existing System Schematic Diagram

Legend

Circuits

- 400kV circuit
- 275kV circuit
- 220kV circuit
- 132kV circuit
- OFTO network
- Interconnector link
- HVDC circuit

Substations

- 400kV substation
- 275kV substation
- 132kV substation

Components

- transformers
- QB (quadrature booster)

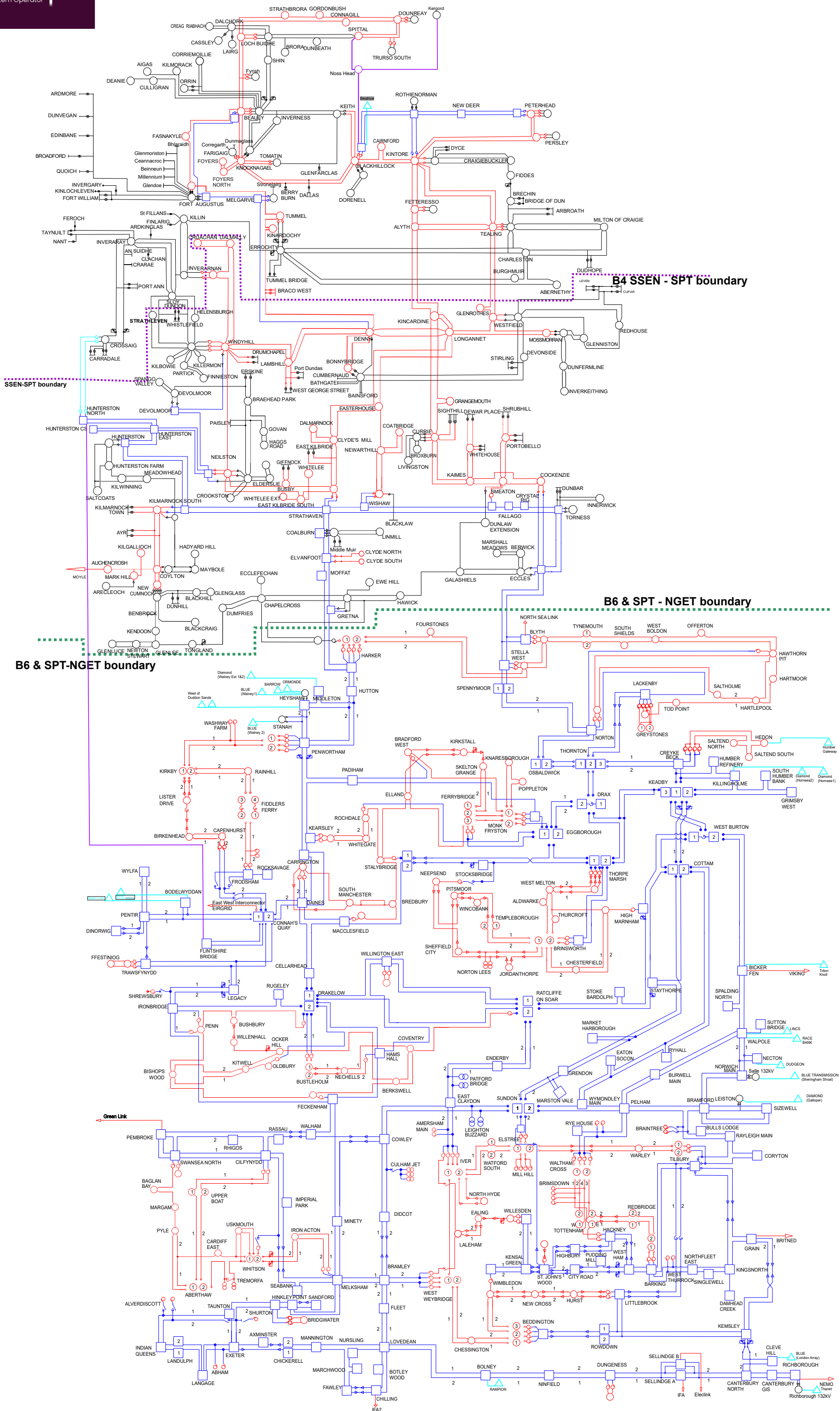
Transmission Circuit = part of the onshore or offshore electricity transmission system (275kV and 400kV for England&Wales and 132kV, 220kV, 275kV and 400kV for Scotland and with electricity transmission licence, as per Ofgem), including circuits between two or more circuit-breakers which include, for example: transformers, reactors, cables and transmission lines and DC converters but excludes busbars, generation circuits and offshore network, other than offshore transmission network (OFTO).

All GB NETS data are present in ETYS2025 Y1 Appendix B.

SSEN TRANSMISSION

SP TRANSMISSION

NATIONAL GRID ELECTRICITY TRANSMISSION



ETYS2025 Existing GB System Boundaries - schematic view

Legend

- Circuits**
- 400kV circuit
 - 275kV circuit
 - 220kV circuit
 - 132kV circuit
 - OFTO network
 - Interconnector link
 - HVDC circuit

- Substations**
- 400kV substation
 - 275kV substation
 - 132kV substation

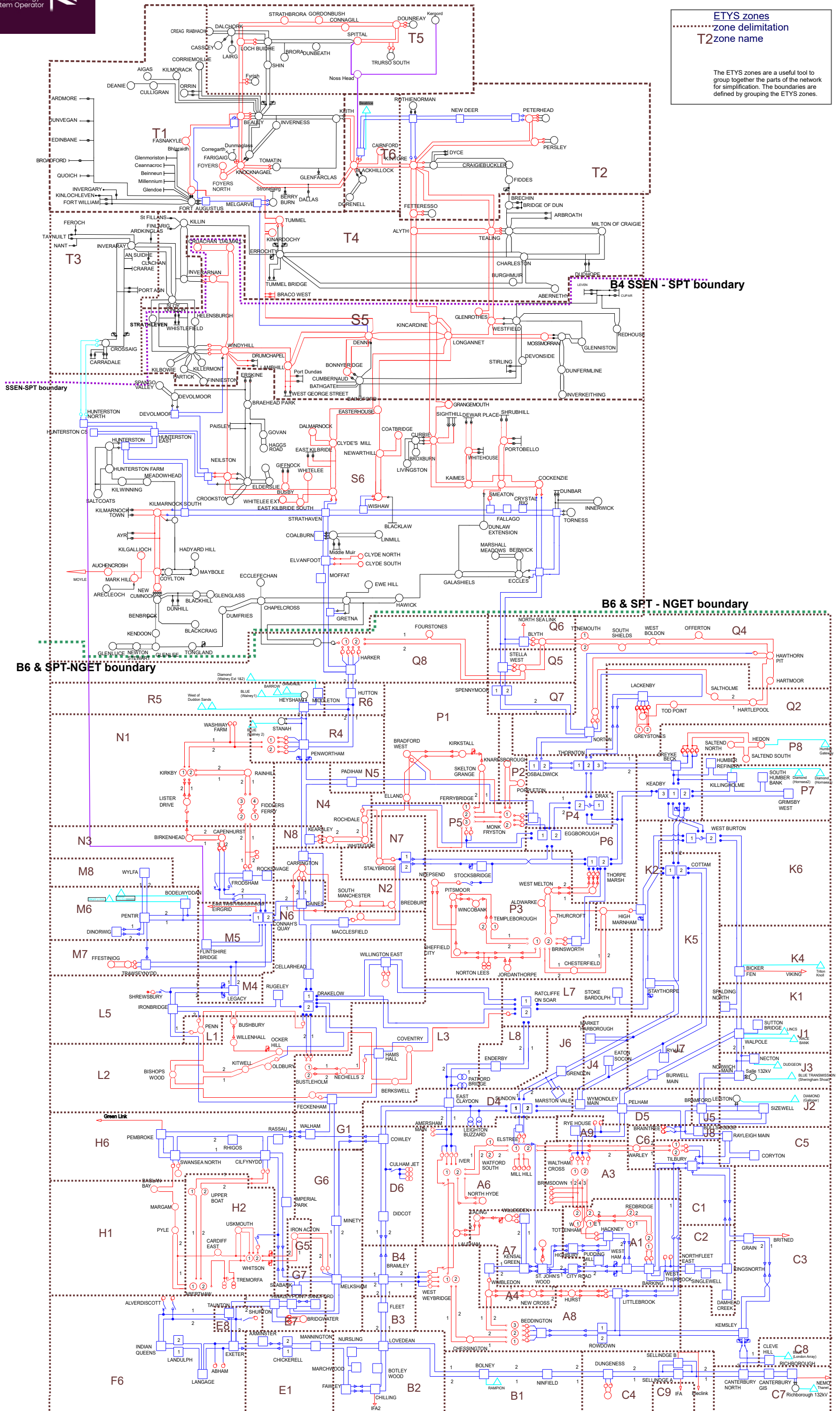
- Components**
- transformers
 - QB (quadrature booster)

Transmission Circuit = part of the onshore or offshore electricity transmission system (275kV and 400kV for England & Wales and 132kV, 220kV, 275kV and 400kV for Scotland and with electricity transmission licence, as per Ofgem), including circuits between two or more circuit-breakers which include, for example: transformers, reactors, cables and transmission lines and DC converters but excludes busbars, generation circuits and offshore network, other than offshore transmission network (OFTO).

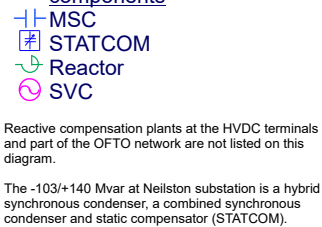
All GB NETS data are present in ETYS2025 Y1 Appendix B.

ETYS zones
zone delimitation
T2 zone name

The ETYS zones are a useful tool to group together the parts of the network for simplification. The boundaries are defined by grouping the ETYS zones.



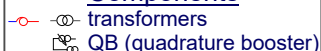
Reactive compensation components



Substations



Components



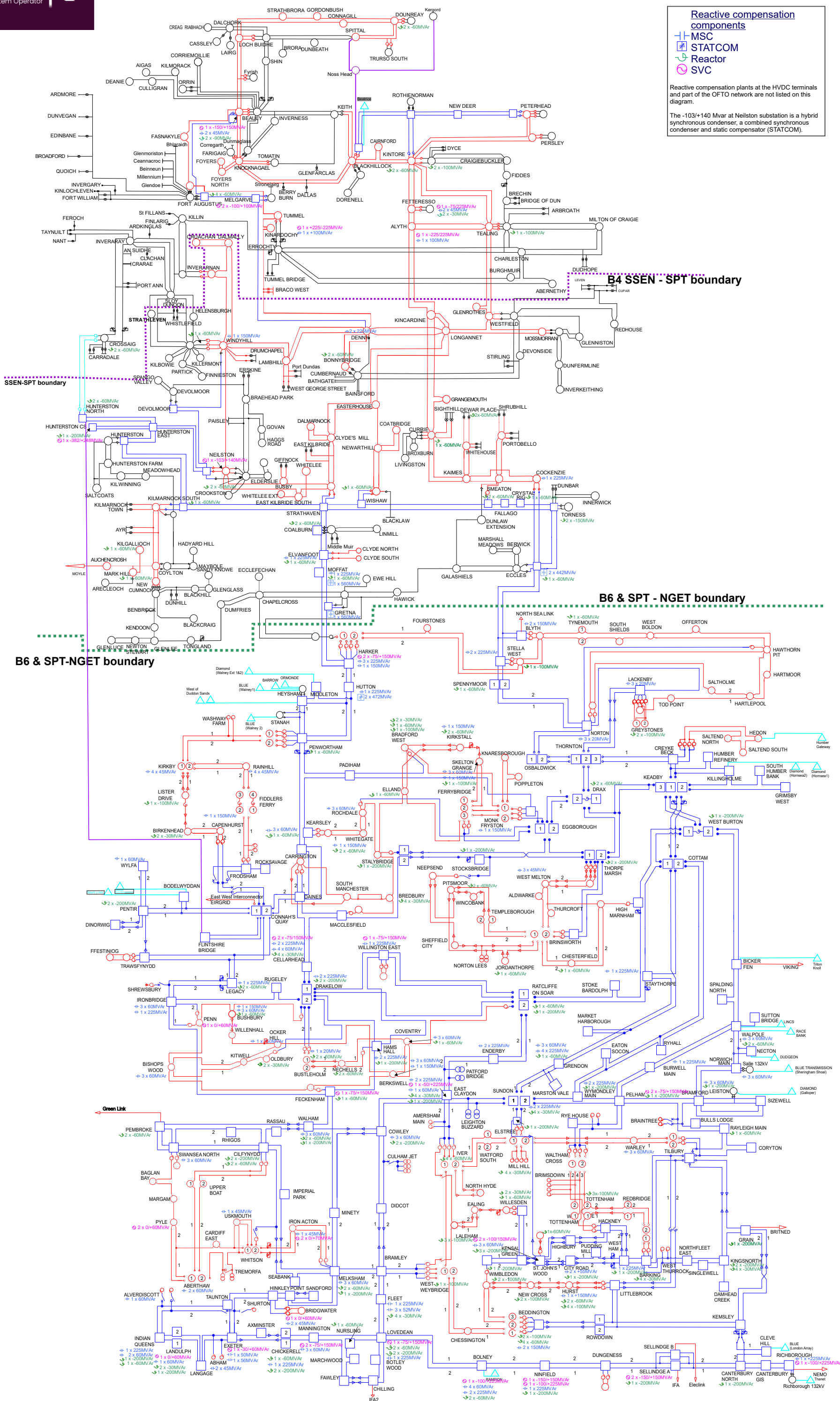
Transmission Circuit = part of the onshore or offshore electricity transmission system (275kV and 400kV for England & Wales and 132kV, 220kV, 275kV and 400kV for Scotland and with electricity transmission licence, as per Ofgem), including circuits between two or more circuit-breakers which include, for example: transformers, reactors, cables and transmission lines and DC converters but excludes busbars, generation circuits and offshore network, other than offshore transmission network (OFTO).

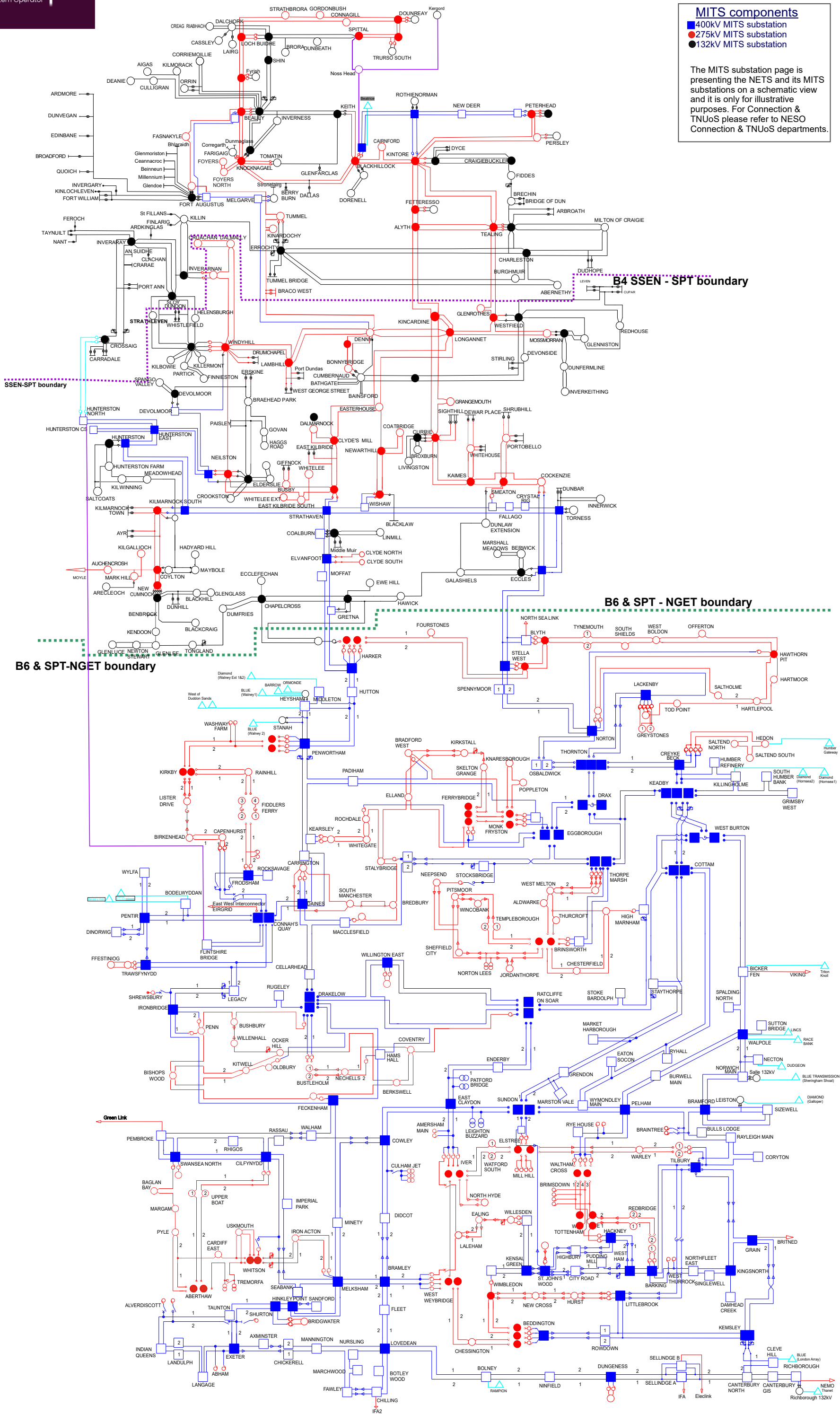
All GB NETS data are present in ETYS2025 Y1 Appendix B.

SSEN TRANSMISSION

SP TRANSMISSION

NATIONAL GRID ELECTRICITY TRANSMISSION





MITS components

- 400kV MITS substation
- 275kV MITS substation
- 132kV MITS substation

The MITS substation page is presenting the NETS and its MITS substations on a schematic view and it is only for illustrative purposes. For Connection & TNUoS please refer to NESO Connection & TNUoS departments.

Legend

Circuits

- 400kV circuit
- 275kV circuit
- 220kV circuit
- 132kV circuit
- OFTO network
- Interconnector link
- HVDC circuit

Substations

- 400kV substation
- 275kV substation
- 132kV substation

Components

- transformers
- QB (quadrature booster)

Transmission Circuit = part of the onshore or offshore electricity transmission system (275kV and 400kV for England&Wales and 132kV, 220kV, 275kV and 400kV for Scotland and with electricity transmission licence, as per Ofgem), including circuits between two or more circuit-breakers which include, for example: transformers, reactors, cables and transmission lines and DC converters but excludes busbars, generation circuits and offshore network, other than offshore transmission circuit (OFTO).

All GB NETS data are present in ETYS2025 Y1 Appendix B.