

Appendix A

System schematics and geographic drawings

Contents

Appendix A includes a set of system schematics and geographic drawings of the current NETS, with the approximate locations of existing power stations and reactive compensation plants shown. The schematics also show the NETS boundaries and ETYS zones we have used in our analysis.

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Figure A1: GB Existing Power Stations

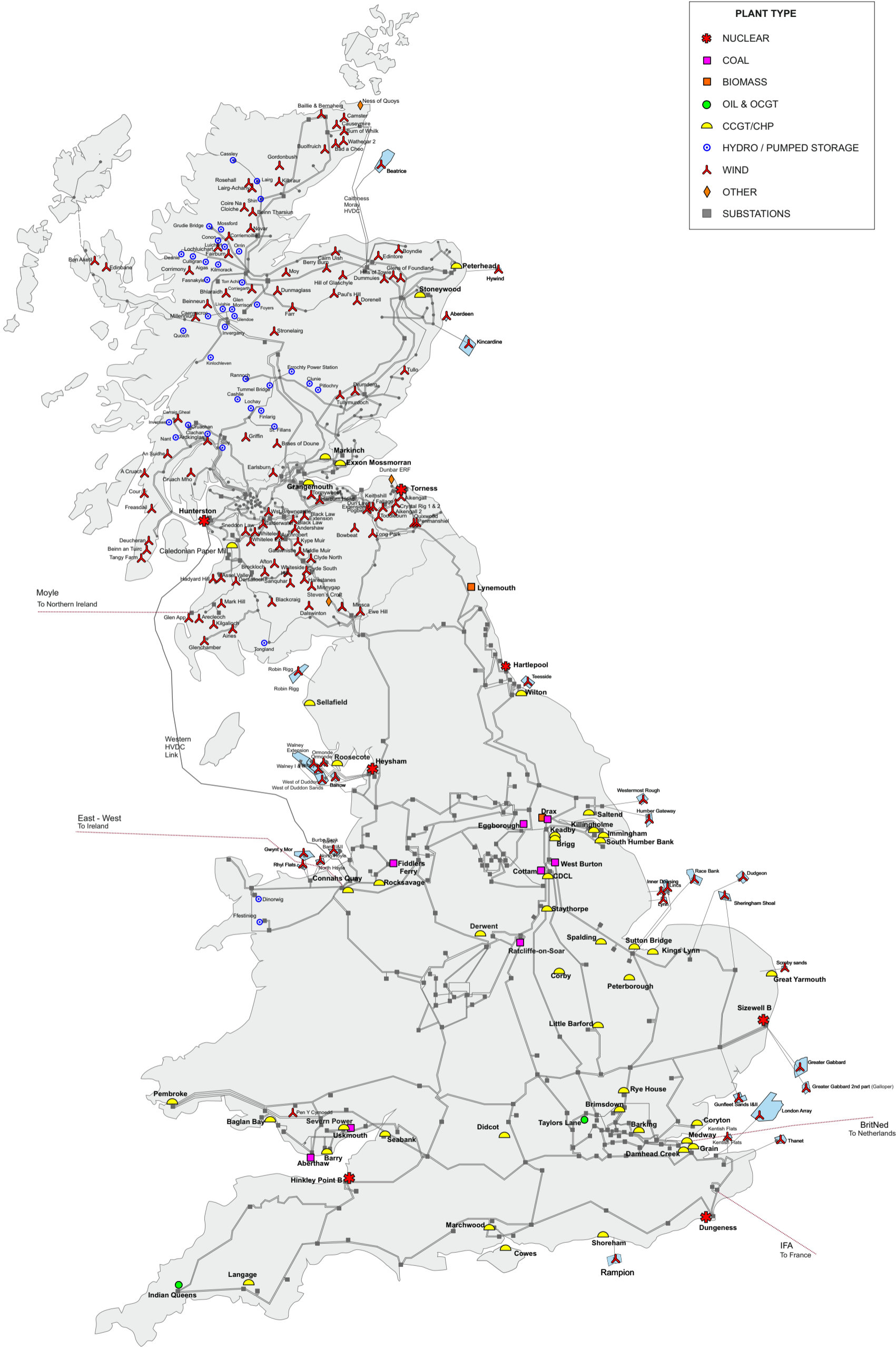


Figure A2: GB Existing Transmission System

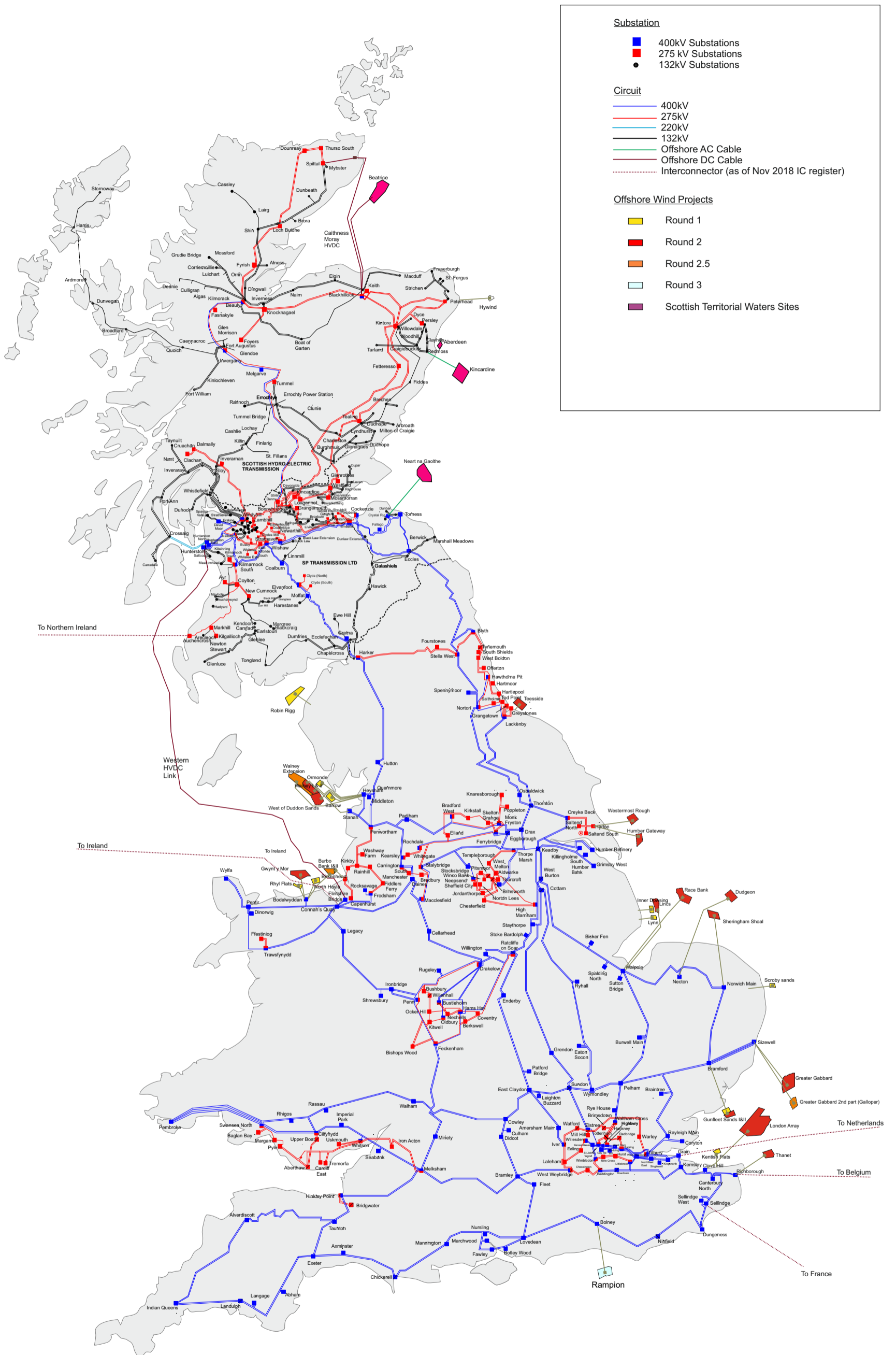


Figure A3: GB Transmission System Boundaries

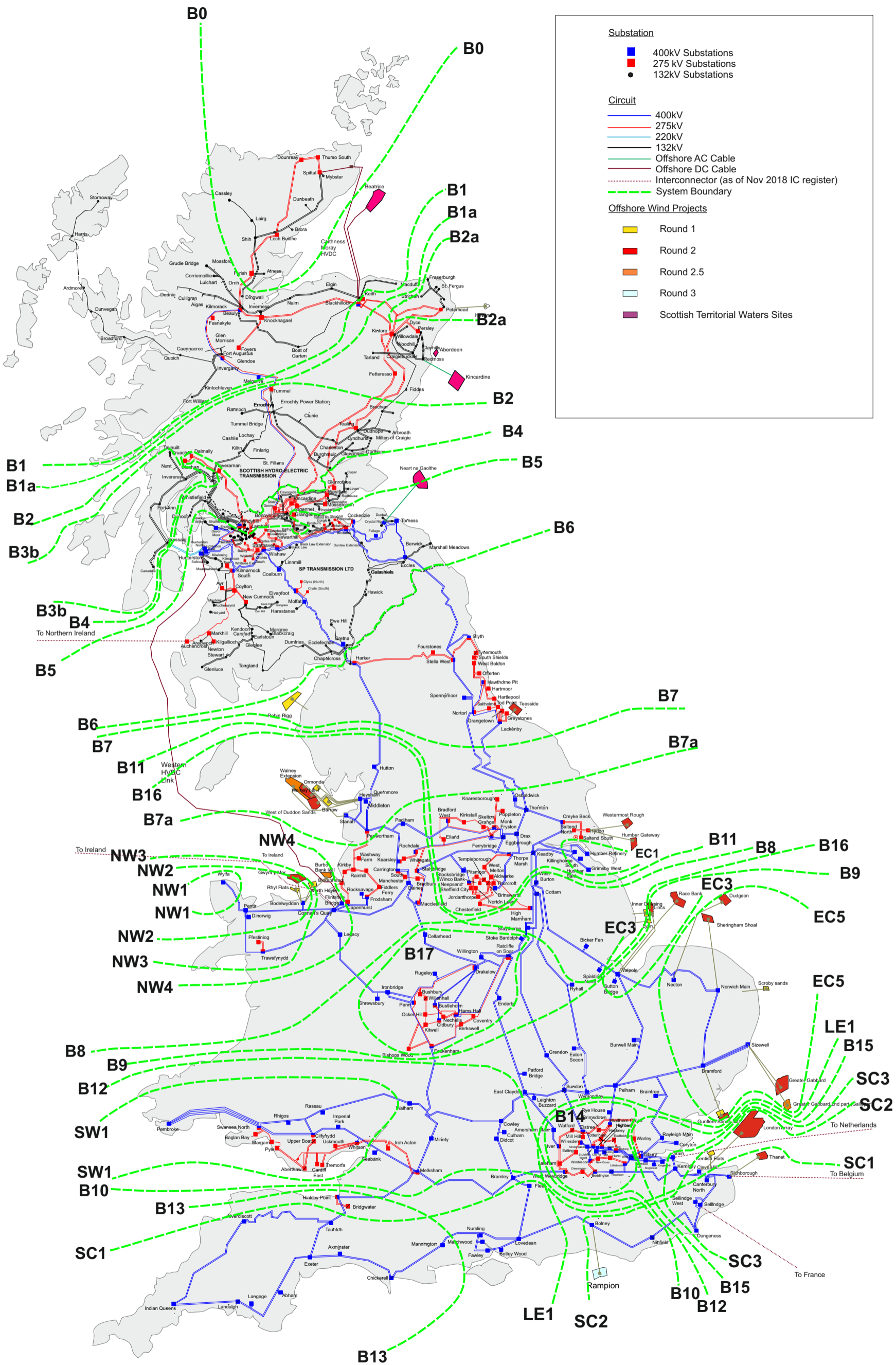
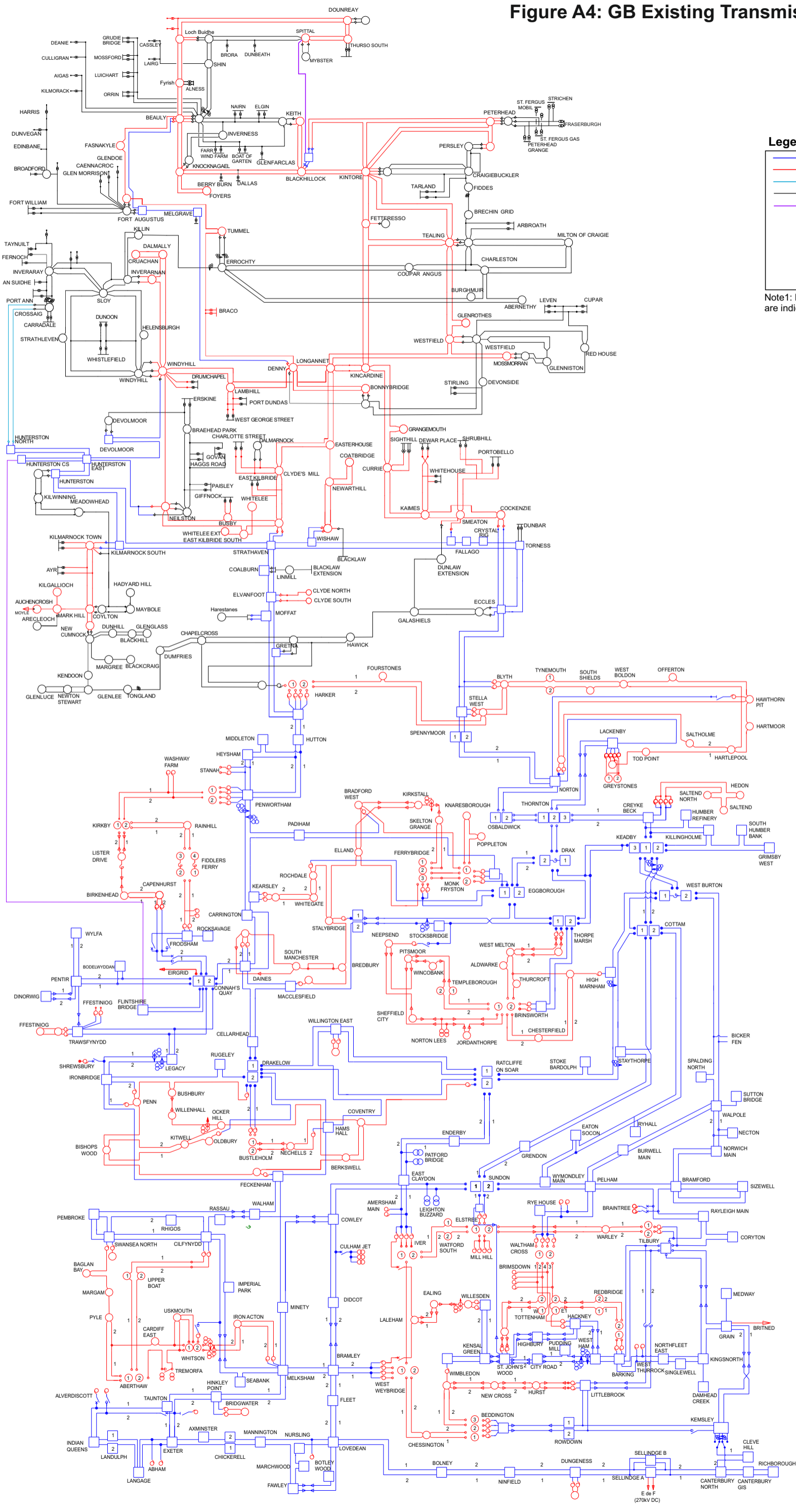


Figure A4: GB Existing Transmission System

SHE TRANSMISSION

SP TRANSMISSION

NATIONAL GRID



Legend

- 400kV Circuit
- 275kV Circuit
- 220kV Circuit
- 132kV Circuit
- HVDC Circuit
- 400kV Substation
- 275kV Substation
- 132kV Substation

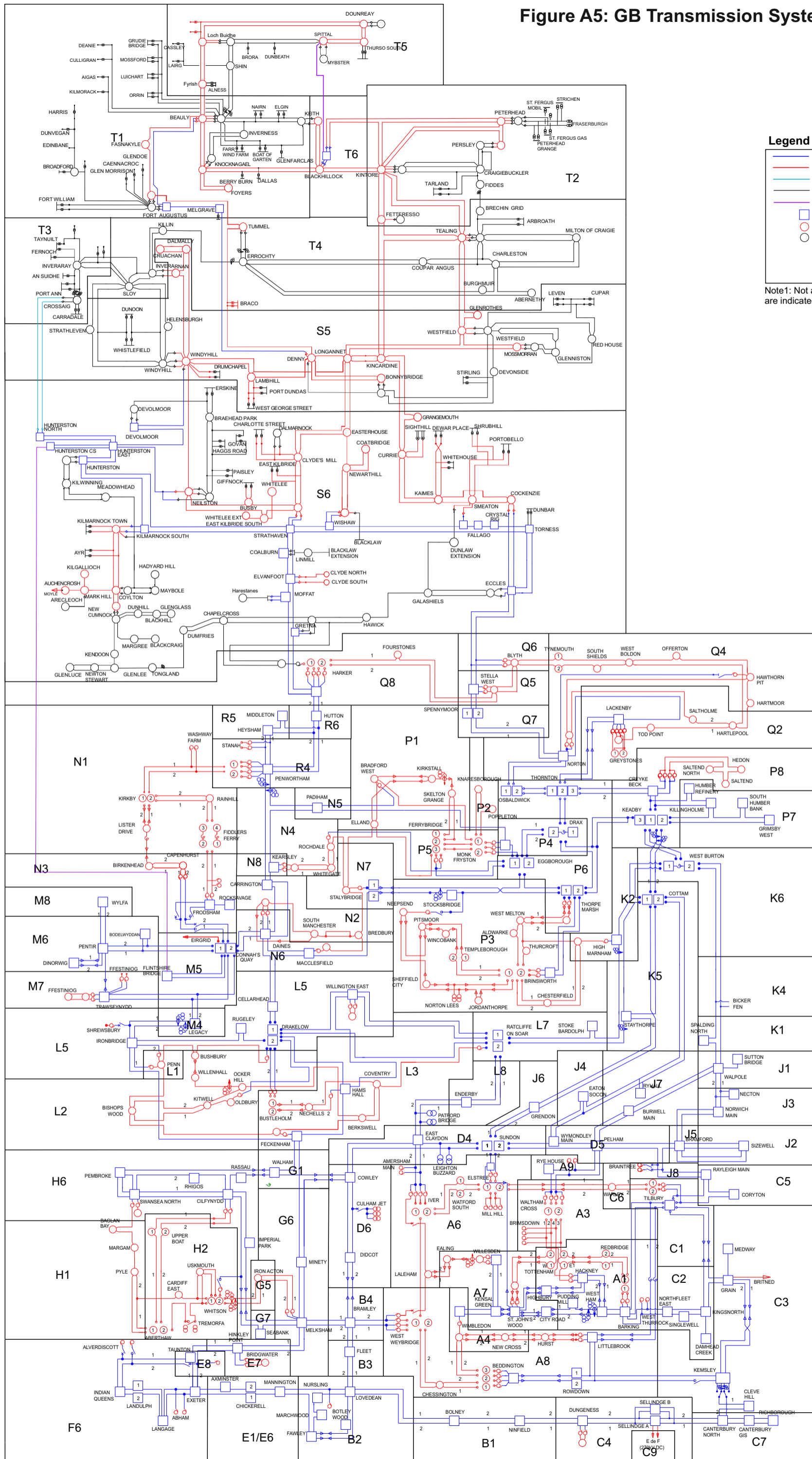
Note1: Not all radial 132kV circuits are indicated on this diagram

Figure A5: GB Transmission System ETYS Zones

SHE TRANSMISSION

SP TRANSMISSION

NATIONAL GRID



Legend

- 400kV Circuit
- 275kV Circuit
- 220kV Circuit
- 132kV Circuit
- HVDC Circuit
- 400kV Substation
- 275kV Substation
- 132kV Substation

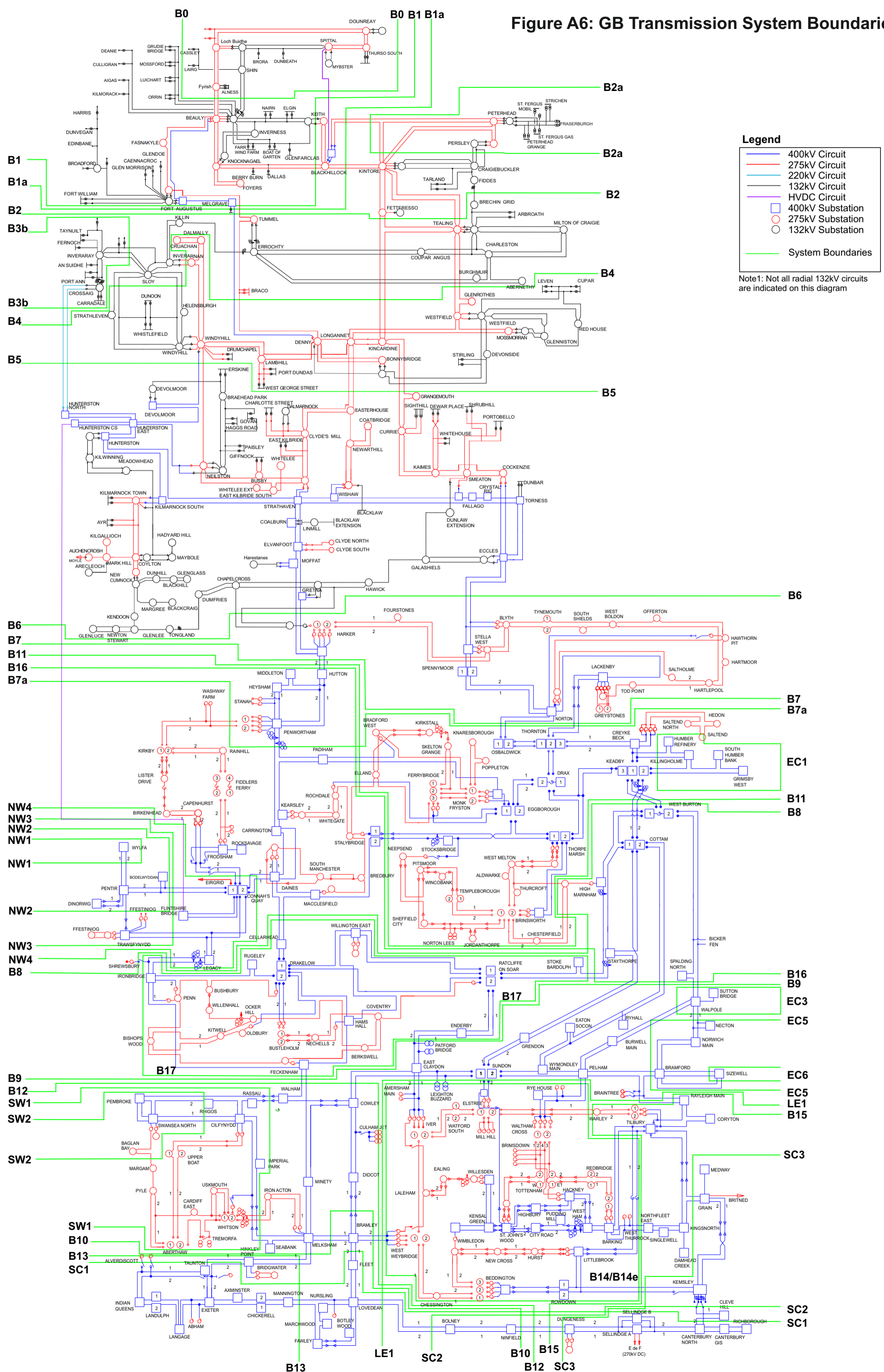
Note1: Not all radial 132kV circuits are indicated on this diagram

Figure A6: GB Transmission System Boundaries

SHE TRANSMISSION

SP TRANSMISSION

NATIONAL GRID



Legend

- 400kV Circuit
- 275kV Circuit
- 220kV Circuit
- 132kV Circuit
- HVDC Circuit
- 400kV Substation
- 275kV Substation
- 132kV Substation
- System Boundaries

Note1: Not all radial 132kV circuits are indicated on this diagram

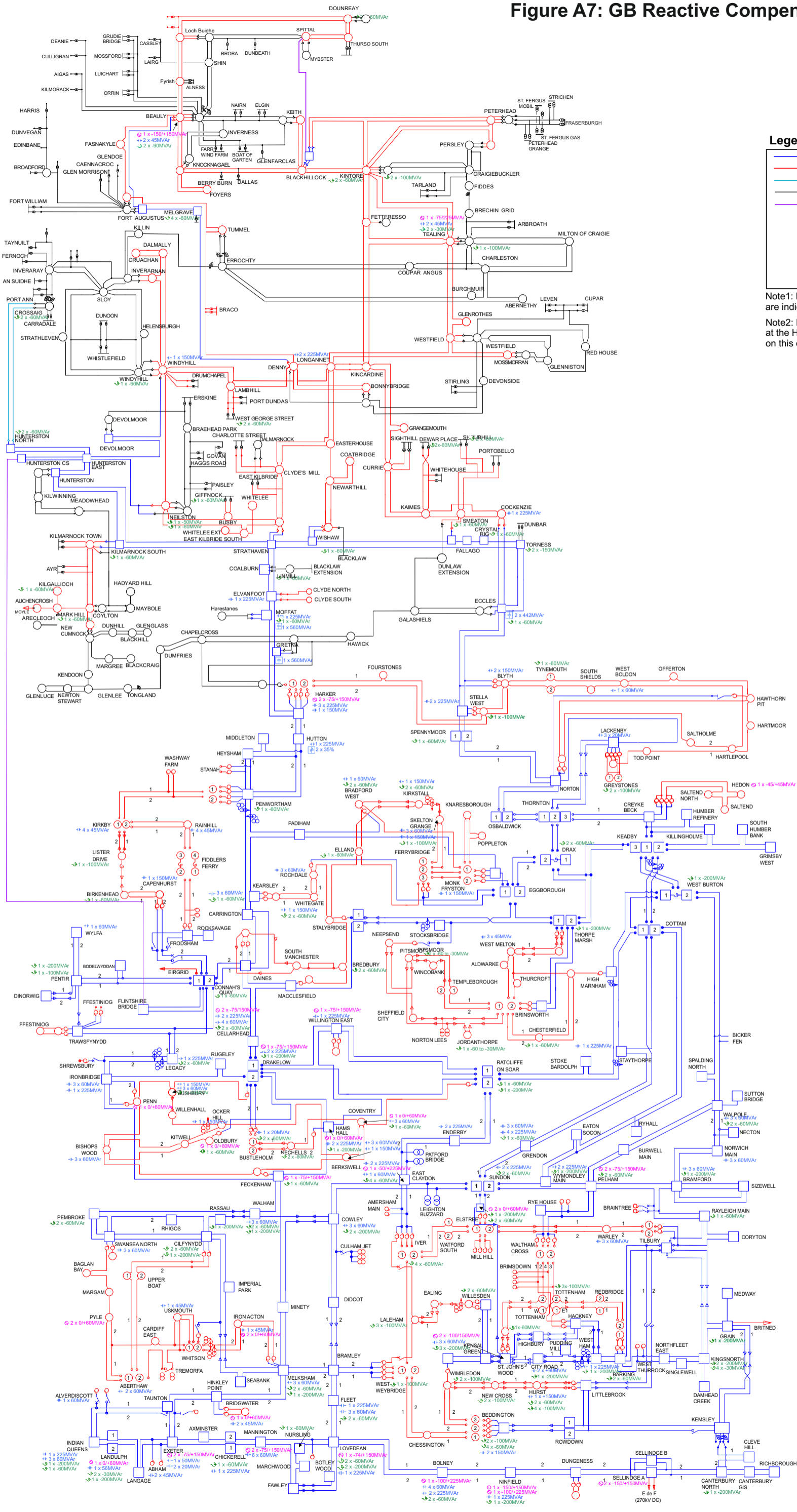
B0 B0 B1 B1a B2a B2a B2 B2 B3b B3b B4 B4 B5 B6 B7 B7a B7a EC1 B11 B8 B11 B8 B16 B9 EC3 EC5 EC6 EC5 LE1 B15 SC3 SW2 SW2 SW1 B10 B13 SC1 B13 LE1 SC2 B10 B15 B12 SC3

Figure A7: GB Reactive Compensation Plant

SHE TRANSMISSION

SP TRANSMISSION

NATIONAL GRID



Legend

- 400kV Circuit
- 275kV Circuit
- 220kV Circuit
- 132kV Circuit
- HVDC Circuit
- 400kV Substation
- 275kV Substation
- 132kV Substation
- SVC
- MSC
- + Reactor
- + Series Capacitor

Note1: Not all radial 132kV circuits are indicated on this diagram

Note2: Reactive compensation plants at the HVDC terminals are not listed on this diagram