

**Electricity
Transmission**

Regional update

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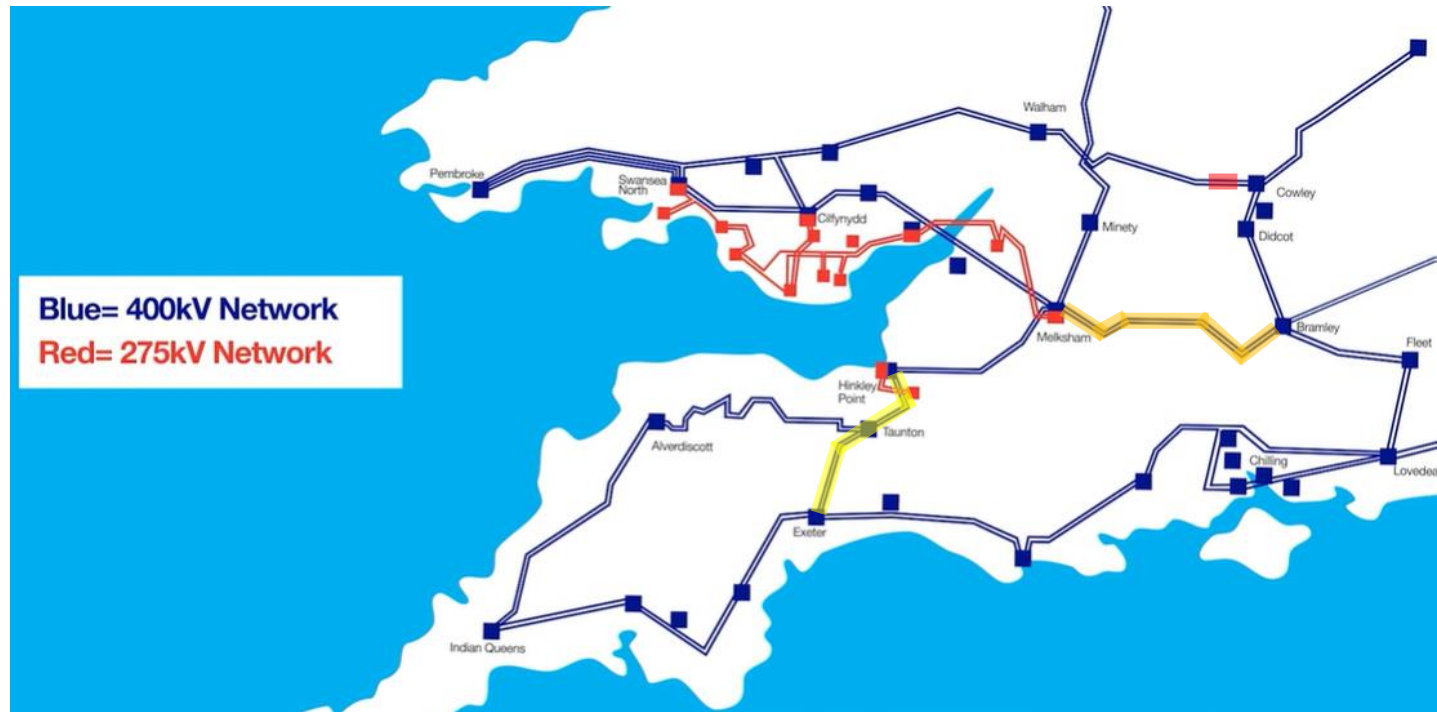


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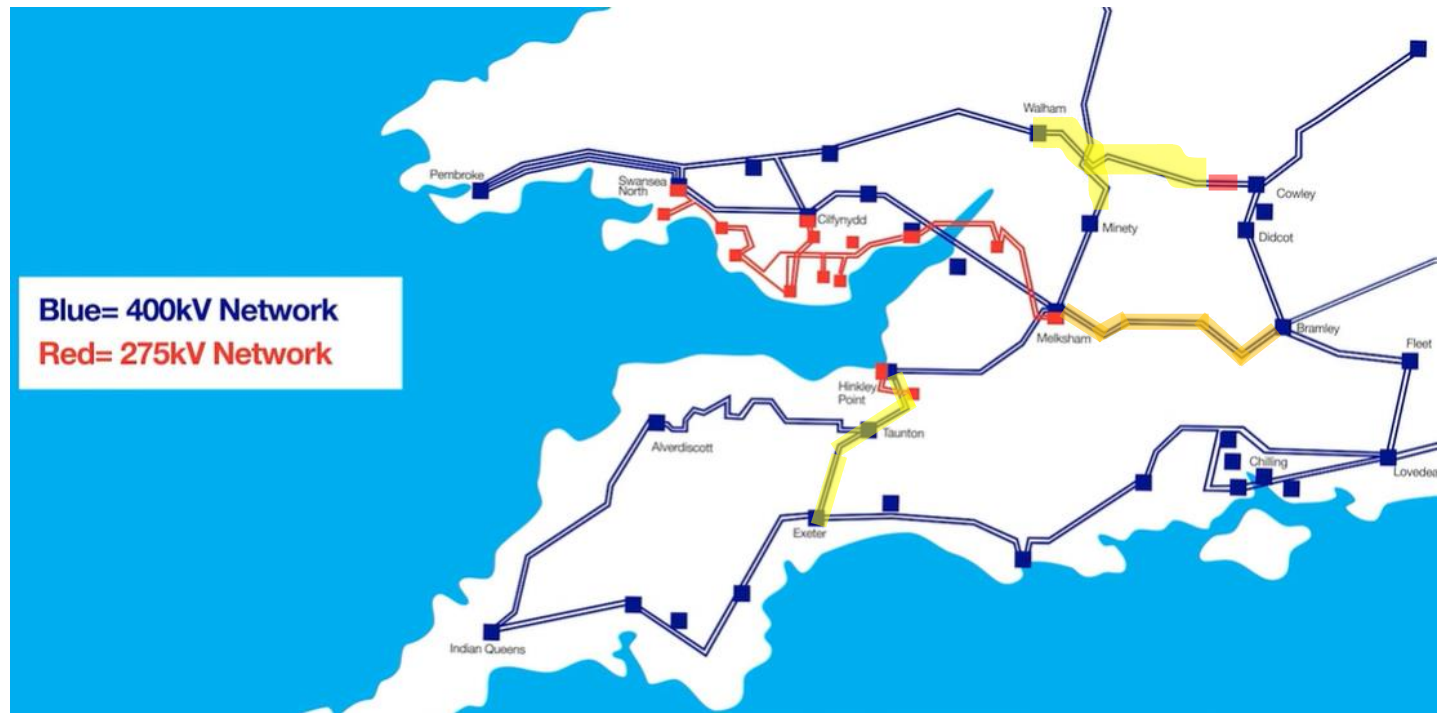
South Wales and the South West regional update

- The South West and South Wales region is at capacity for new generation connections until post-completion of a new 400kV OHL transmission circuit to provide additional capacity.
- This new transmission circuit has a notional completion date of 2036 owing to the extremely complex requirements for design, consent and construction.
- For context - over 30GW of generation contracted in this region, with further 30GW of generation in the application process – compared to a UK peak demand requirement of circa 55GW.
- Significant works are ongoing with NGET, NGENSO and wider industry to improve access to the transmission system, further information on this can be located on the links in the final slide.

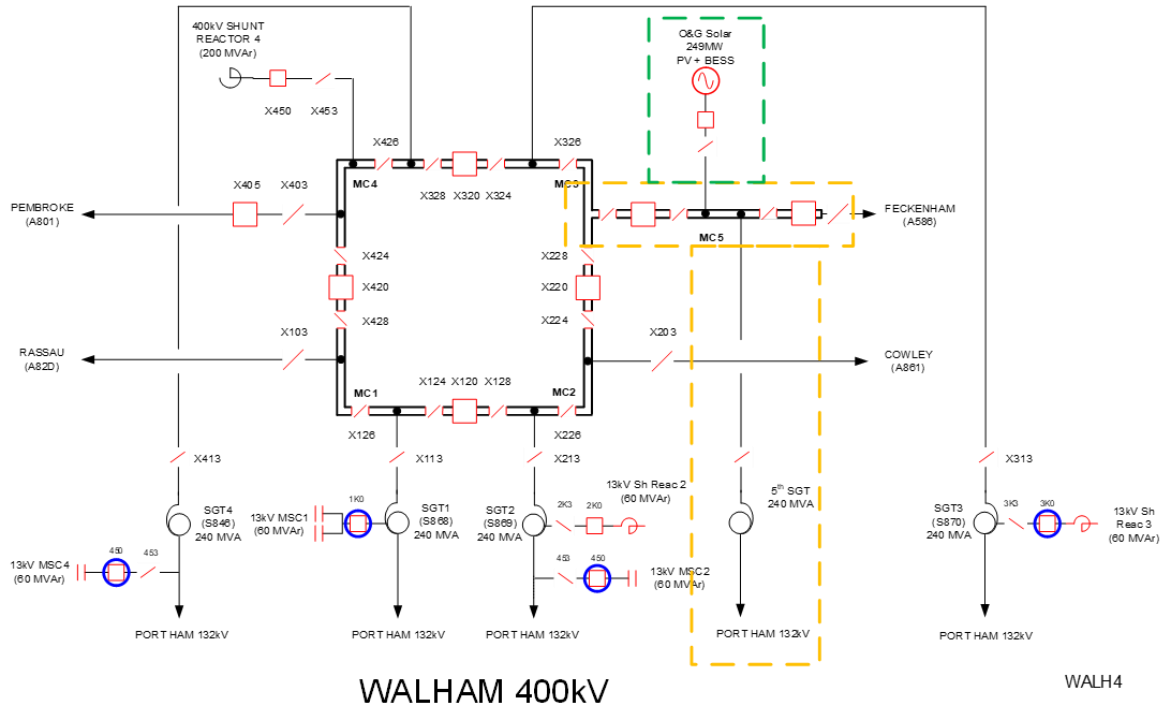


South Wales and the South West regional update

- Immediate focus to reduce constraints and improve connection timescales requires uprating of the Bramley – Melksham, Exeter – Taunton – Hinkley Point and Cowley-Walham and Cowley – Minety circuitis.
- Accelerating these reinforcements can help existing contracted customers connect earlier, but does not free up capacity for new generation applications.
- These restrictions apply to Embedded Generation customers (those connected to the DNO network) in addition to directly connected customers.



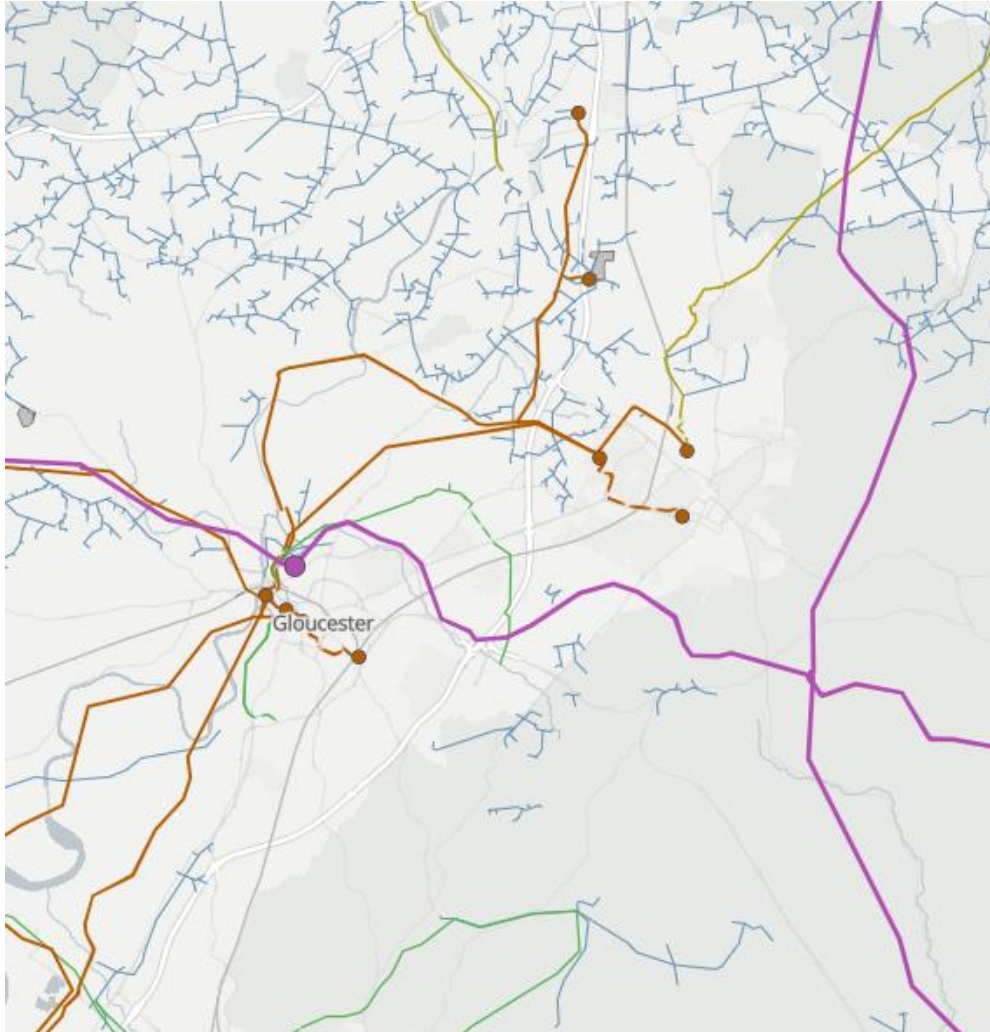
Walham 400kV Substation



- Provisions are in place for the installation of a 5th SGT to supply the DNO – however this is triggered by additional Embedded Generation and not growth in forecast Demand. This is also due to complete in 2033.

- The only 400kV NGET substation within the Gloucestershire area is Walham 400kV substation, located to the North-West of Gloucester
- Walham substation has a signed Connection Offer for a new Solar PV and Bess connection with a contracted date in 2033. This application is on the TEC register, and therefore in the public domain.
- Walham substation now has no additional capacity for new connections and is considered electrically and physically full. Any additional connections to the transmission network would require a new 400kV substation to be constructed.

Local Network



- The local area is predominantly serviced by the 132kV network which is managed by NGED (National Grid Electricity Distribution) West Midlands
- NGET have not had significant interest in Walham substation specifically, and there are currently no drivers or triggers for additional Transmission Infrastructure in the region.
- NGET are not aware of any restrictions or constraints on Demand connections, therefore residential and business expansion in the region (other than as directly related to generation) are not currently constrained by NGET.

Links and Additional Information

Connections Reform

<https://www.nationalgrideso.com/industry-information/connections/connections-reform>

Connections challenges: what are we doing now?

<https://www.nationalgrideso.com/industry-information/connections/connections-challenges-what-are-we-doing-now>

Two-Step Offer Process

<https://www.nationalgrideso.com/industry-information/connections/two-step-offer-process>

NGET ConnectNow Portal

<https://customer.nationalgridet.com/s/pre-application>

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