

## **WPD South West Statement of Works Update March 2016**

### **Background**

Western Power Distribution (WPD) are required under the Connection and Use of System Code to make a request for a Statement of Works (SoW) to National Grid Electricity Transmission plc (NGET) in relation to the potential impact of connection of embedded generation on the National Electricity Transmission System.

In certain areas NGET have indicated through their SoW response that they require WPD to impose conditions on generator sites, which may include, a requirement to operate at a specific power factor, to have the capability of operating within a power factor range and/or to constrain the export capability to zero at certain times or network conditions. In addition, and due to the cumulative impact of connecting new generation, NGET had also indicated through their SoW response that they will have to reinforce/upgrade parts of the transmission network prior to the connection of any further generation. The following constraints had been identified:

1. Wider 400kV system restriction
2. South West Peninsular 400kV restriction
3. Alverdiscott Supergrid Transformer restriction
4. Landulph/Exeter fault level restriction

Where these restrictions had been identified, WPD made formal Modification Applications to identify the detail, scope and costs of any reinforcement or upgrade works.

### **Update**

On the 27<sup>th</sup> January 2016 WPD received Modification Offers from NGET, detailing the work and/or conditions that must be met prior to the connection of generation identified in our SoW submission. Since that time we have been working closely with NGET to identify the specific requirements for each individual generation customer.

The Modification Offers have identified the following requirements:

- The creation and installation of a South West Operational Tripping scheme
- Hot wiring of the Hinckley Point/Melksham 400kV circuits
- Re-conductor the Fleet/Lovedean 400kV circuits
- Re-conductor the Bramley/Fleet 400kV circuits
- Alverdiscott Supergrid overload intertripping scheme
- Landulph/Exeter fault level restriction (now removed)

We have now identified the level of works required and are/will be communicating the outcome of the Modification Offers to all WPD customers affected on a site by site basis.

The communication will detail site operating conditions that need to be put in place and, where applicable, any associated network constraint, cost or timescale required before connection can take place.

Presently WPD Offers for connection fed from Iron Acton, Seabank and Melksham GSPs are not restricted for transmission network conditions and therefore currently NGET restrictions are only likely to require specific power factor operating regime (0.95 for non PV and 0.98 for PV), power factor operating capability between 0.95 lead and 0.95 lag, and a requirement for disconnection under emergency conditions.

All other GSP's in the WPD South West region are impacted upon by wider transmission network restrictions which will be managed by inclusion of sites within an Active Network Management system. NGET will provide signals at every GSP for WPD to pass on to generator sites as part of an overall South West Operational tripping scheme.

As more sites look to connect to WPDs network there will be a requirement for inclusion in this scheme until such time that NGET deem further reinforcement is required.

WPD will be issuing a new policy on how we intend to manage the process for Statement of Works submissions and Modification Applications. This will be published at the beginning of April 2016.

Please note that any restrictions or constraints on WPD's distribution network will continue to be included as part of our connection offer. Please refer to our constraint maps.