# WPD South West 132kV network capacity restriction UPDATE March 2016

# Background of generation connections in the South West

Over the last 3-4 years, WPD South West plc has seen a large number of requests for the connection of embedded generation schemes. The current position is:

- Connected generation of 1.95GW
- Generation with accepted offers but not yet connected 1.35GW
- Generation capacity currently offered but not yet accepted 0.3GW
- Winter maximum demand in the S West is 2.53GW
- Summer minimum demand in the S West is 0.98GW

In March 2015 we provided a statement on restrictions on our 132kV network, including the F-route which had widespread implications for generator connections across much of the South West. This restriction had interaction, both with the planning and delivery of the proposed National Grid Electricity Transmission (NGET) 400kV works associated with the connection of Hinkley Point C nuclear generator, and as a result our connection offers from that time included a delay of 3-6 years.

This previous statement may be found <u>here</u>.

#### F-route Update

WPD had considered increasing the capacity of F route by reconductoring all or part of the line. This 82km line extends from Bridgwater through to Avonmouth and the reinforcement works required were estimated to be £15million.

This proposal has been discounted on two grounds:

- 1. The 132kV line will be taken down and replaced with a new 400kV line as part of NGET proposals for Hinkley Point C connection proposal.
- 2. The reconductoring of F route does not substantially increase the export capacity for the S West, due to other limitations on the NGET system.

We have been working closely with NGET for a solution, as there is a high level of interaction with the Hinkley C connection works. An alternative 132kV network arrangement which involves breaking the F route connection between the two Grid sites of Bridgwater and Seabank (near Avonmouth) is now proposed. In addition to ensure that the network remains secure we need to connect our substation at Churchill to our Y route which runs from Seabank to Radstock and passes close by Churchill.

# This solution:

- removes the restriction that the F route has imposed
- ensures available capacity on the NGET network can be utilised
- saves considerable reinforcement cost that would have been payable by contectees for an asset that would then be dismantled as part of the proposed 400kV Hinkley Point C works



# Lifting of the F route capacity restriction

WPD have committed to undertake the works described above by October 2017, which will remove the F route restriction. We will be writing to customers with existing offers affected by the F route to remove this restriction and agree a programme of works for the connection of their site. New offers that we issue will no longer include this restriction.

# **National Grid Transmission System**

Please note that WPD are continuing to work with NGET to assess the impact of embedded generation on their Transmission System through the Statement of Works process. This process has identified a number of restrictions that continue to affect the connection of further embedded generation. The latest information detailing these restrictions and requirements may be found on our website <a href="here">here</a>.

