

## Distribution Code Review Panel

### Meeting 61 – Thursday 8 September 2016

Paper by Secretary

#### Phase 1 - DNO progress reporting on changes to RoCoF settings on sites with Power Stations > 5MW

This short report highlights the DNOs 2016 progress as of 5<sup>th</sup> August 2016 (Target date for completion was 1/8/16) with regards to the required changes to the RoCoF settings on sites with Power Stations > 5MW. It also includes a short update on the progress of the phase 2 work.

#### >5MW Power Stations – All Connections

	Total MW	MW of changed settings	MW not applicable	MW WiP
<b>ENW</b>	<b>507.1</b> (507.1)	<b>270.55</b> (106.0)	<b>153.8</b> (153.8)	<b>82.75</b> (239.)
<b>NPg</b>	<b>2471.7</b> (2937.6)	<b>217</b> (69.5)	<b>1971.3</b> (1316.8)	<b>282.7</b> (1551.3)
<b>SPEN</b>	<b>1911.43</b> (1186.5)	<b>815.3</b> (292.4)	<b>697.43</b> (468.6)	<b>398.7</b> (1142.2)
<b>SSEPD</b>	<b>2143.99</b> (2134.3)	<b>629.35</b> (338.7)	<b>1142.64</b> (816.0)	<b>372.0</b> (955.0)
<b>UKPN</b>	<b>1502.99</b> (808.7)	<b>523.8</b> (147.0)	<b>628.81</b> (22.9)	<b>352.37</b> (637.2)
<b>WPD</b>	<b>2431.87</b> (2582.0)	<b>1141.54</b> (635.0)	<b>1290.33</b> (1166.7)	<b>0</b>
<b>15/8/16 (Q2 2016)</b>	<b>10969.08</b> (10156.2)	<b>3597.54</b> (1588.6)	<b>5884.31</b> (3944.8)	<b>1488.52</b> (5168.4)

#### Notes that accompanied the DNO submissions.

##### ENW

2 x Sites contact ongoing 22.75 MW  
1 x Site WIP with ENW 60.00 MW

##### NPg

25 Generators to complete (23.1%) 282.7 MW (11.4%)

##### SPEN

SPD have 7 generators who have not yet made the changes. 4 of these are planned in August and the remaining 3 proposed settings which were different to those requested. They are currently in the process of informing these generators that proposed setting are acceptable and would expect these to be changed over August/September period.

SPM have 7 sites. Of these sites, 3 are planned to make the necessary changes in August, 2 are planned in September, 1 is awaiting internal financing to make the changes and the remaining 1, following a risk assessment has requested alternative solutions to be identified which are likely to require work on the Distribution network. A quote for this work is currently in development.  
SP do not have any generators that have not responded.

##### SSEPD

Generation at Flotta Terminal has been disconnected; RoCof settings are still be to changed, however the generation will not be re-connected until changes are complete.

## WPD

WPD has completed the changes on its one remaining generator and has now completed its programme of changes.

### **Phase 2 -DNO progress reporting on changes to RoCoF settings on sites with Power Stations < 5MW**

The phase 2 work is still progressing. The joint panel WG GC0079 believes that there is an economic case to seek to make changes to RoCoF settings on all generation. This covers all generation <5MW in addition to >5MW generation included in GC0035. GC0079 believes that there is no reason to include domestic scale PV in these changes, as from tests performed for GC0079 by the Power Network Development Centre, there is no RoCoF sensitive control or protection equipment in the inverters used in these applications for the ranges of RoCoF envisaged.

As with GC0035 findings, it is synchronous generators who have the only possibly significant change in risk from revised RoCoF settings. GC0079 has identified a similar set of mitigations for those cases where the risk is adjudged to merit mitigating actions. GC0079 is expected to recommend that owners of synchronous machines should undertake a risk assessment as part of the change exercise. GC0079 is currently still considering what should be recommended for such risk assessment, and where necessary, mitigation, can be best managed and, importantly, funded. It is expected that GC0079 will consult on its thinking, findings and recommendation in late winter 2016.

Full details of this work and progress can be found at:

<http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Grid-code/Modifications/GC0035-GC0079/>