

## **Distribution Code Review Panel**

### **Meeting 70 – 7 June 2018**

#### **Update on DC0079 RoCoF Protection Changes**

##### **Paper by Code Administrator**

### **1 Current Status**

Ofgem approved the changes to G59 and G83 that apply the revised  $1\text{Hzs}^{-1}$  settings and ban on the use of vector shift protection on 3 May, to take effect from 1 July 2019 for all type tested generation. This means that from 1 July all new generation connecting to the distribution network in GB, whether type tested or not, needs to conform to the new protection settings.

### **2 Retrospective Application**

The DC0079 WG's analysis shows that there is a considerable cost benefit in applying the new settings to all existing distributed generation. However, as has been reported before to the Panel, there are challenges associated with deciding who should fund such work, and how the programme should be implemented. National Grid is taking the lead in resolving the funding route through appropriate amendments to industry arrangements and is having positive discussions with Ofgem on this point. The network licensees collectively recognize the role they will have to play in delivering the programme and discussions on the details of how to achieve this efficiently are ongoing between the network licensees (ie DNOs and NG).

### **3 Targetted Vector Shift Programme**

In parallel with DC0079's work, the 2016 Landulph-Langage incident has shown that vector shift protection presents an operational risk for NG in that some transmission faults can cause widespread tripping of vector shift protection. NG is therefore engaged on a programme in the early summer of 2018 to replace vector shift protection on the most sensitive sites in the south of England. The driver for this programme is independent of the DC0079 work; the vector shift programme is driven by a fault ride through requirement, whereas the DC0079 programme is driven by frequency excursions. However the vector shift programme will mean that a portion of the DC0079 programme is completed early.

### **4 Retrospective Application Programme**

The network licensees hope to be in a position to start the DC0079 programme towards the end of 2018. Clearly all the funding and implementation questions need to have been resolved by then, and the required changes to the Distribution Code formally consulted on and approved. The next key formal step is to consult on the Distribution Code changes. The consultation will explain the background, and critically the cost benefit analysis supporting the proposal. As funding and implementation is not within the DC0079 terms of reference, these can only be described as general proposals in the consultation paper. It is therefore timely to consult on the cost-benefit analysis and the implications for customers in the revised legal text in the Distribution Code. Actually the revised settings and compliance requirements will be contained in EREC G59, as following the amendments to the Distribution Code for the EU Network Code Requirements for Generators, all the principal requirements for existing distributed generation are contained in EREC G59.

As the programme will have a significant effect on a large number of generation customers (upwards of 40 000) there is quite a challenge to communicate the proposals appropriately. A general stakeholder briefing event has been arranged, with space for an audience of 80, for 15 June at the ENA in London. Depending on take up a further event is pencilled in for 6 July.

Futher outreach to affected parties is being considered over the summer and autumn.

Following consultation, and the resolution of any issues arising therefrom, the DNOs will marry up the Distribution Code proposals with the network licensees' position on funding and implementation in a report to the Authority later in the year.

## **5 Recommendation**

The Panel is asked to note progress with the DC0079 work and the intent to formally consult on the implications and legal text changes in the near future.

The Panel is invited to offer any suggestions as to engagement with the large and disparate number of affected customers.