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8th June, 2012

National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS): Proposed Modification (GSR008) - Regional Variations and wider issues May 2012

Dear Sheona,

Thank you for the opportunity to respond to this open letter. The following comments are provided on behalf of the RWE group of companies, including RWE Npower plc, RWE Npower Renewables Limited and RWE Supply & Trading GmbH.

Special Licence Conditions set out by Ofgem require Owners of the Transmission Systems and Operators of Onshore and Offshore Transmission Systems to plan and operate the transmission systems in accordance with the NETS SQSS. This is a very substantial requirement and determines largely all the costs imposed on Users of the Transmission systems.

The Fundamental Review which comprise GSR008 (Regional Variations and Wider Issues) and GSR009 (Intermittent Generation) proposes changes that represent a major shift from the original GB SQSS and will explicitly and implicitly impose greater costs on Users without

necessarily increasing or even maintaining the level of security on the Electricity systems.

Our comments on the individual aspects of the proposals, both the current we modification and the general NETS SQSS, are set out below. Based on these comments, we strongly believe that that costs to Users will rise significantly. We therefore disagree with Ofgem's conclusion that an Impact Assessment is not necessary and would argue that an Impact Assessment be undertaken to understand fully the impact of these proposals.

Comments by Theme

An **RWE** company

Removal of Regional Variations

 <u>Assumed Reactive Power output of generators</u>: For system studies, both steady state load flows and Stability studies, the full range of the reactive capability of generating Units should be used in the studies. For high demand conditions, we would expect the generating units to be operating

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close to their full lag range providing voltage support to the system. The GSR008 proposal to enable planners "reasonable discretion" in setting reactive power output would mean that system designers would have more scope for adding other forms of reactive compensation equipment on the system at an increased cost. In the planning horizon, reactive power from generating units should be assumed as firm, as this is a Grid Code requirement and the incremental costs of reactive power and voltage support is lowest from generators. Where the system designers are allowed to justify the use of other reactive sources, e.g. MSCs and SVCs, this can only increase costs. We believe that what appears to be "a relatively minor change" and Ofgem's conclusion that this process in unlikely to have any material impact on users is not robust. We would like to see the costs of reactive equipment and other devices embedded in the main transmission system to enable the transfer of power across the network fully accounted for in all the methodologies, both for planning and for charging. This would provide the full cost signals and should ultimately lead to satisfying the "Relevant principles of the Review Group", listed on page 3 of Ofgem's letter.

2. <u>Double Circuit line faults</u>: Whilst harmonising the way double circuit faults are handled in different areas of the network, i.e. Scotland and England and Wales, appears to be a desired outcome, we believe that the nature of the two systems should be recognised. In the SPT area, the main routes for large scale power transfer in still the 275kV and 400kV networks. We believe that imposing a double circuit criterion on the 132kV system would lead to a significant cost increase for network users and we welcome the review group recommendation that removing the regional variation in Chapter 4 of the SQSS would be assessed.

Clarifications

Use of Dynamic Ratings: We welcome the use of dynamic ratings together with the well known seasonal ratings of equipment which make up the MITS. However, we note that all the justification for investment on the wider interconnected system is demonstrated by use of the Boundary power flow models, which has a very limited representation of the transmission system. In fact, this boundary flow method is used to derive the pseudo cost benefit approach of the amendments to the NETS SQSS. We believe that in this boundary flow method, the advantages of using dynamic ratings of elements of the system are lost. We believe that the result is a network which exceeds that which would arise if dynamic ratings and advanced system configuration, e.g. running sub-station solid when conditions allow, are used.

The proposed clarifications for "Applicability of generation connection criteria" and the "overlap of generation and demand criteria" are welcomed. We note that further work will be undertaken on the area of generation and demand overlap; we would suggest this be extended to work on embedded generation as a whole as efficiencies of locating generation in the distribution system is not fully recognised.

Consistency with ER P2/6

Contribution of Embedded Generation to Demand Security: The SQSS review group report suggests that the contribution of embedded generation (EG) should be reviewed pending further experience in this area, but this consultation does not reflect this. We believe that the contribution of EG is an important issue and should be reviewed as it has a large implication on the cost of the overall network investments.

Other Changes

We welcome the majority of the proposed changes in this section, but we have some comments on the "Revised voltage standards" and "Voltage step change criteria". We note that Ofgem recognises

that there should be "no overall change to the voltage limits, but the proposals would give more flexibility in design potentially allowing efficiencies to be gained". We agree that flexibility to relax the hard limits can provide cost benefits, and other measures which involve reducing the voltage throughout a DNO area at times of system stress can lead to efficiencies in system costs. The cost savings from these measures are hard to quantify and OFGEM would have to be sure that the TOs are passing the benefits of these savings to users. We are not convinced that the Users see enough benefits from all these potential measures.

We hope these views are helpful and if you wish to discuss any aspect of them in further detail, please do not hesitate to contact me on the contact number above or Frank Prashad on 01793 89 2368

Yours sincerely,

By email so unsigned

Charles Ruffell Economic Regulation