Grid Code Review Panel

Consequential Change Resulting from STC Modification CA049

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GCRP Ref: pp12/53[1]

A Panel Paper by Audrey Ramsay

National Grid

Summary
As a result of amendments to STC Section K and STCP 01-1 the Grid Code requires an amendment to ensure that User's building offshore networks under transitional or OTSDUW arrangements build the networks with the same capability.

Users Impacted
High
Offshore Transmission Systems
Medium
Low

Description & Background
As the capacity of offshore transmission networks increases it will displace onshore generation and the reactive compensation it provides to the onshore network. This compensation will be replaced by the compensation provided by OFTOs at the onshore to offshore interface and should have the capability to be varied by the OFTO within 2minutes of receiving an instruction from NGET. Amendments STCP 01-1 and the STC Section K are underway to oblige OFTO's to respond to instructions within 2minutes and to build offshore networks with the capability to meet this objective. The Grid Code requires an amendment to ensure that User's building offshore networks under transitional or OTSDUW arrangements build the networks with the same capability.

[1] The Code Administrator will provide the paper reference following submission to National Grid.

Proposed Solution

Amendment to Planning Code Appendix E – Offshore Transmission System and OTSDUW Plant and Apparatus Technical and Design Criteria

Item No	Document	Reference no
1	National Electricity Transmission System Security and Quality of Supply Standard	Version [ ]
2*	Planning Limits for Voltage Fluctuations Caused by Industrial, Commercial and Domestic Equipment in the United Kingdom	ER P28
3*	Planning Levels for Harmonic Voltage Distortion and the Connection of Non-Linear Loads to Transmission Systems and Public Electricity	ER G5/4
4*	Planning Limits for Voltage Unbalance in the United Kingdom	ER P29
5	*STC Section K*	

Assessment against Grid Code Objectives

(i) to permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity;

The modification will ensure that offshore transmission networks are built in way which will enable NGET to use the reactive capability at the interface point in a timely manner for the purpose of managing voltages on the onshore network. This will mitigate the cost of managing onshore voltages by avoiding:-

- Running generation for voltage control
- Installing additional compensation equipment onshore

Impact & Assessment

Impact on the National Electricity Transmission System (NETS)

No

Impact on Greenhouse Gas Emissions

No

Impact on core industry documents

STC Section K

Impact on other industry documents

Supporting Documentation

Have you attached any supporting documentation NO

If Yes, please provide the title of the attachment:

Recommendation
The Grid Code Review Panel is invited to: Progress this issue to Industry Consultation