

National Electricity Transmission System Security and Quality of Supply Standards GSR022

Review of Security and Economy Required Transfer Conditions TERMS OF REFERENCE

Governance

- 1. The "Security and Economy Required Transfer Conditions" Workgroup was established by the National Electricity Transmission System Security and Quality of Supply Standards (NETS SQSS) Review Panel at the August 2016 NETS SQSS Review Panel meeting.
- 2. The Workgroup shall formally report to the NETS SQSS Review Panel.

Membership

3. The Workgroup shall comprise a suitable and appropriate cross-section of experience and expertise from across the industry, which shall include:

Name	Role	Representing
Xiaoyao Zhou	Chair	-
Tingyan Guo	Technical Secretary	-
Bieshoy Awad	National Grid Representative	National Grid - SO
Richard Proctor	National Grid Representative	National Grid SO
Mihai Draganescu	National Grid Representative	National Grid TO
Bless Kuri	Industry Representative	SHET
Malcolm Barnacle	Industry Representative	SHET
Diyar Kadar	Industry Representative	SP Energy Network
Muhammad Ali	Industry Representative	TNEI
Dan Taylor	Industry Representative	Camborne Capital
Peter McGarly	Industry Representative	Dong Energy
Lynne Woodhouse	Industry Representative	SP Energy Network

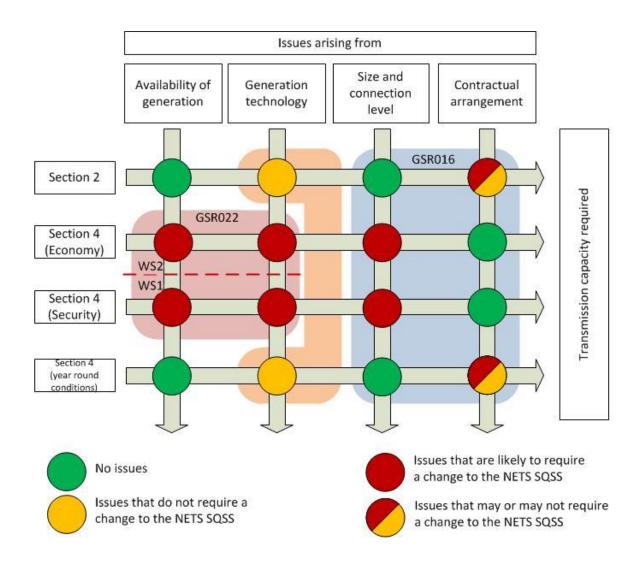
Meeting Administration

- 4. The frequency of Workgroup meetings shall be defined as necessary by the Workgroup chair to meet the scope and objectives of the work being undertaken at that time.
- 5. National Grid shall provide technical secretary resource to the Workgroup and handle administrative arrangements such as venue, agenda and minutes.
- 6. The Workgroup will have a dedicated section on the National Grid website to enable information such as minutes, papers and presentations to be available to a wider audience.

Scope

7. A pictorial representation of the issues covered by the scope of this workgroup is shown in the figure below. The workgroup will only be considering issues and interactions that arise when applying NETS SQSS Section 4 criteria due to the availability of generation

and due to generation technology. Other issues marked in the figure will be addressed via a different workgroup or in a different forum.



- 8. The Workgroup shall report on two separate work streams.
 - WS1: Review of the Security Required Transfer Conditions; and
 - WS2: Review of the Economy Required Transfer Conditions.
- 9. In relation to WS1: Review of the Security Required Transfer Conditions, The Workgroup shall consider and report on the following:

- The risks arising from the application of existing "Straight Scaling Techniques" due to the insufficient, or negative, plant margin;
- If necessary, a revision of the "Straight Scaling Techniques" or a proposal for another techniques to deal with low or negative plant margin;
- A review of the Availability Factors for different classes of power stations;
- A recommendation of whether to take into account potential Demand Side Management resources available to the System Operator when calculating the boundary requirements for the Security Planned Transfer conditions or not; and
- If necessary, a review of the methodology used to determine the Interconnection Allowance.
- 10. In relation to WS2: Review of the Economy Required Transfer Conditions, The Workgroup shall consider and report on the following:
 - A review of the assumptions made by GSR009 Workgroup to assess if these assumptions are still fit for purpose;
 - Identification of potential discrepancies between
 - the Cost Benefit Analysis methodology applied by the GSR009 Workgroup,
 - o the Network Options Assessment methodology, and
 - Cost Benefit Analysis methodologies used by different Transmission Licensees to support the need case for their wider works submissions;
 - A proposal on how to take into account new forms of generation, e.g. solar, battery storage, etc. when calculating required boundary transfer capability;
 - If required, an updated set of scaling factors to be used for different types of generation;
 - If required, a proposal to modify the methodology used to calculate the Boundary Allowance, and
 - A proposal on how to address scenarios when the output of directly scaled plant exceeds demand

Deliverables

11. The Workgroup shall provide updates and two Workgroup Reports (one report for each work stream) to the NETS SQSS Review Panel which will:

- Detail the findings of the Workgroup;
- Draft, prioritise and recommend changes to the NETS SQSS and any associated documents in order to implement the findings of the Workgroup; and
- Highlight any consequential changes which are or may be required.

Timescales

- 12. It is anticipated that this Workgroup shall provide an update to each NETS SQSS Review Panel meeting, present a Workgroup Report for WS1 to the August 2017 NETS SQSS Review Panel meeting, and present a Workgroup Report for WS2 to the August 2018 NETS SQSS Review Panel meeting.
- 13. The Workgroup shall produce a yearly update report, including but not limited to; current progress, reasons for any delays, next steps and likely conclusion dates.