

National Electricity Transmission System Security and Quality of Supply Standards
GSR016
Small and Medium Embedded Generation Assumptions
TERMS OF REFERENCE

Governance

1. The “Embedded Generation Assumptions” Workgroup was established by the National Electricity Transmission System Security and Quality of Supply Standards (NETS SQSS) Review Panel at the October 2013 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	SO Representative	National Grid - SO
Richard Proctor	SO Representative	National Grid - SO
Peter Stanton	TO Representative	National Grid - TO
Bless Kuri	TO Representative	Scottish Hydro Electric Transmission
David Adam	TO Representative	Scottish Power Transmission
Alan Creighton	DNO Representative	Northern Power Grid
	Authority Representative	Ofgem
	Observer	

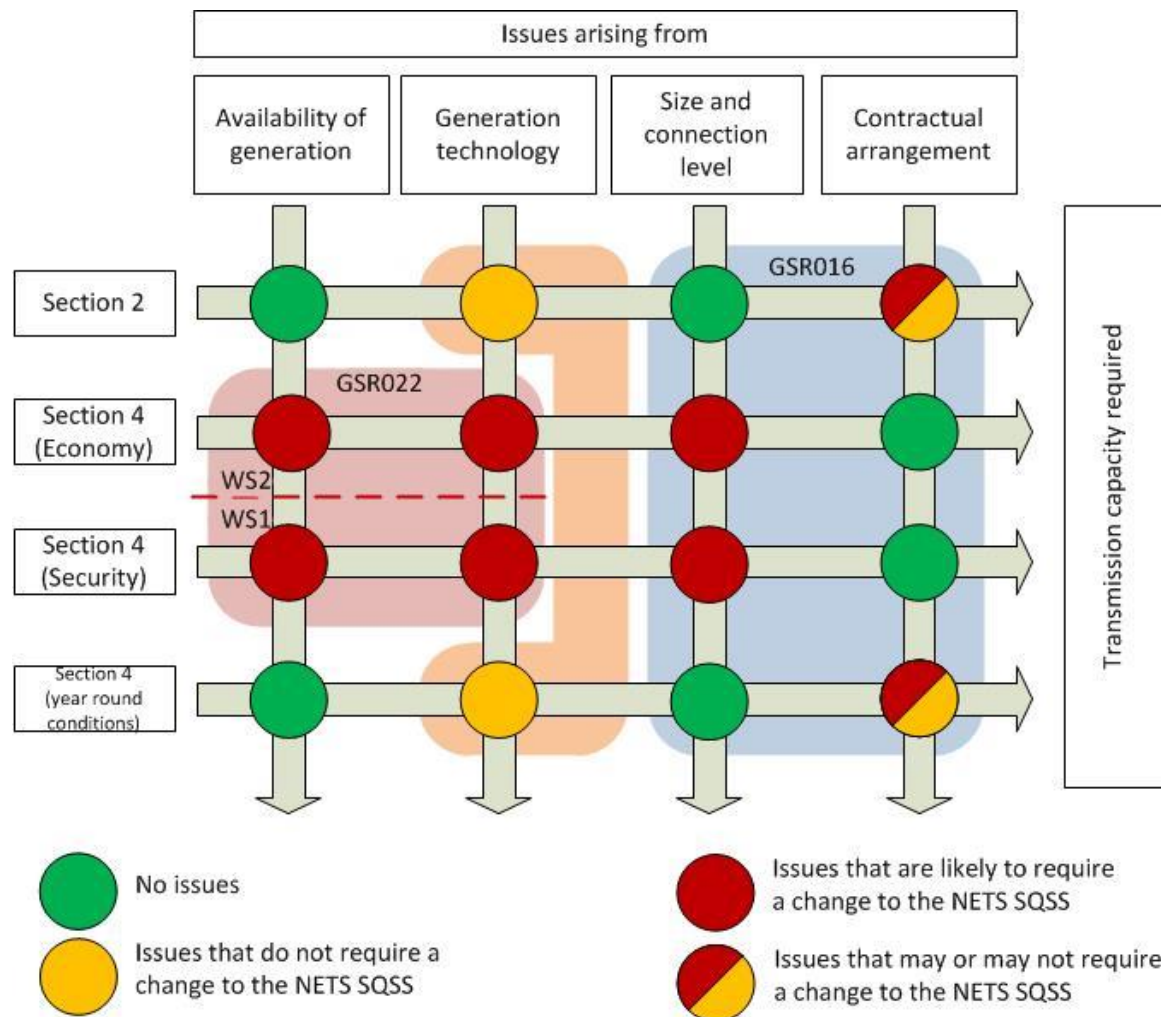
Meeting Administration

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 2 and Section 4 criteria due to the size of the connection (small and medium vs large), the connection point (transmission vs embedded), and the contractual arrangement (BM Participant vs Non-BM Participant).

Other issues marked in the figure will be addressed via a different workgroup or in a different forum.



8. The Workgroup shall consider and report on the following

- the extent to which embedded generation is currently taken into account in NETS SQSS Section 2 and Section 4 studies;
- the risks arising from this approach;
- potential modifications to NETS SQSS Section 2 and Section 4, including the relevant appendices and definitions, to ensure that all generation is adequately accounted for;
- potential risks of non-compliance with Post Fault Criteria in NETS SQSS Sections 2 and 4 in general and Clauses 2.12 and 4.9 of the NETS SQSS in particular due to the System Operator's restricted ability to constrain some embedded generation;
- general outline for the scenarios that need to be studied to identify such risks;
- potential solutions, including transmission reinforcements and operational measures, that can be implemented to mitigate these risks;
- criteria to determine the preferred solution;

- where necessary, proposals to modify the NETS SQSS to allow the scenarios outlined to be studied and the solutions identified to be implemented;
- opportunities for achieving some benefits from any modifications to the NETS SQSS that the workgroup proposes using the datasets that are currently being exchanged between DNOs, the SO, and the TOs; and

the changes to these datasets that are necessary to exploit the full benefit if the modifications proposed.

9. The scope of the Workgroup shall not include:

- Any modifications to the methodology applied to calculate the Economy Planned Transfer conditions or the Security Planned Transfer conditions other than what is required to ensure that embedded generation is correctly accounted for.
- Any revision to the scaling factors and/or the availability factors that are currently defined under Appendix C and Appendix E of the NETS SQSS.

Deliverables

10. The Workgroup shall provide updates and a Workgroup Report to the NETS SQSS Review Panel which will:

- Detail the findings of the Workgroup;
- Draft, prioritise and recommend any changes required 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

11. It is anticipated that this Workgroup shall provide an update to each NETS SQSS Review Panel meeting and present a Workgroup Report to the August 2016 NETS SQSS Review Panel meeting.

12. If for any reason the Workgroup is in existence for more than one year, there is a responsibility for the Workgroup to produce a yearly update report, including but not limited to; current progress, reasons for any delays, next steps and likely conclusion dates.