

# Grid Supply Point Technical Limits for accelerated non-firm connections appendices

June 2024

## Appendices

### Appendix 1: Pre-requisites for use of GSP Technical Limits at a GSP

This appendix details the requirements that must be met by each respective party for a GSP Technical Limit to be implemented at a site.

Key:

	Qualification for GSP Technical Limits
	For delivery during rollout
	Run in parallel to rollout
	As above, but with mitigation if required at a site

Requirement No.	Requirement	Responsible Party	Reviewing/ Agreeing Party	Notes
1	An SQSS compliance assessment has been completed in accordance with relevant processes.	TO	ESO	
2	The output of (1) confirms that the GSP is 'full'.	TO	ESO	The definition of 'full' means that no more thermal 'firm' capacity is available and any further connectees will be required to be managed 'non-firm'.
3	Following output of (2), thermal Enabling Works are required before any more DER can connect.	TO	ESO	Delivery of the Enabling Works would facilitate connection.
4	A real-time management solution must be in place to maintain the limit. This should be in the form of an automated control schemes such as ANM or DERMS.	DNO	ESO/TO	This will be required ahead of the first connection under GSP Technical Limits and is hardwired into the offer.
5	A communication link and/or an acceptable route for ESO to instruct DER (via DNO) should be agreed and in place.	DNO	ESO	There may be operational scenarios where the GSP Technical Limits need to be adjusted due to unforeseen circumstances.
6	No works are required for eligible DER to resolve fault level issues (or are linked to future substation upgrades).	All		A process whereby the TOs/ESO assess fault levels when the headroom provided in the BCA technical appendices falls to a certain threshold, i.e., <1kA.

7	A capacity reallocation process.	All		A simplified queue management process needs to be in place whereby DNOs (through an application to the ESO or via an agreed materiality threshold), can reallocate 'firm' capacity freed up by customers terminating.
8	Individual DER Visibility and Control.	DNO/ESO		Where there is a requirement to go beyond an aggregated control at a GSP this will be developed and agreed between ESO and DNO – linked to requirement 12.
9	An agreed process and/ or operational solution must be in place to enable the ESO to access services at GSPs where limits are being enforced by an automated control scheme such as ANM or DERMS.	ESO/DNO		The ENA Primacy work will not have reached a conclusion on sufficient use cases that consider automated control scheme and ESO services by the time Phase 2 is due to roll-out. To ensure continued operability of the transmission system, a process to access existing and new service providers across these GSPs needs to be established.
10	ANM/automated control scheme Visibility.	DNO	ESO	The scheme controlling parties against a limit must be able to provide visibility back to the ESO. Data parameters include, but are not limited to: <ul style="list-style-type: none"> <li>• Total MW volume under ANM/automated control scheme management.</li> <li>• Current volume curtailed.</li> <li>• Forecast MW release per technology type.</li> </ul>
11	The GSP has a volume of Unconnected Unrestricted Customers/Capacity.	DNO/ESO		
12	Development of a process/service for access of downward regulation at T/D boundary.	DNO/ESO		

13	MVAr management at T/D boundary.	DNO/ESO		A minimum requirement would be put on customers to mitigate their own impact if sites with MVAr challenges are to be progressed.
14	ESO internal processes.	ESO	ESO	ESO to develop/evolve internal processes with operational and planning teams to facilitate inclusion of GSP Technical Limits in models.

## Appendix 2: DNO GSP Technical Limits rollout plans

### **Electricity North West**

<https://www.enwl.co.uk/get-connected/releasing-capacity-and-enabling-connections/>

### **National Grid Electricity Distribution**

<https://www.nationalgrid.co.uk/our-network/statement-of-works/technical-limits-and-expression-of-interest>

### **Northern Powergrid**

<https://northernpowergrid.opendatasoft.com/explore/dataset/technical-limits/table/?disjunctive.phases&disjunctive.gsp>

### **SP Energy Networks**

[https://www.spenergynetworks.co.uk/pages/accelerating\\_distribution\\_connections.aspx](https://www.spenergynetworks.co.uk/pages/accelerating_distribution_connections.aspx)

### **Scottish and Southern Electricity Networks**

<https://www.ssen.co.uk/about-ssen/our-works/technical-limits-at-gsps/>

### **UK Power Networks**

<https://www.ukpowernetworks.co.uk/our-connections-business/technical-limits>



**Energy Networks Association**

4 More London Riverside

London SE1 2AU

t. +44 (0)20 7706 5100

w. [energynetworks.org](http://energynetworks.org)

🐦 [@EnergyNetworks](https://twitter.com/EnergyNetworks)

Energy Networks Association Limited is a company registered in England & Wales No. 04832301  
Registered office: 4 More London Riverside, London, SE1 2AU

**The voice of the networks**