

Super SEL

Interactive Guidance



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Version control

Version	Date published	Page No.	Comments
1.0	21/02/18		
1.1	15/04/2020	8 9	Update to forecast requirement for this summer Max notice time of 6 hours, additional technical capability at Super SEL level

How to use this guide

- This document provides current and potential Super SEL providers with clear, simple and transparent guidance on the service. It pulls together FAQs on the service and provides links to related documents.
- A menu button on each page allows access back to the main menu, or section menu where required:



Return to main menu



Return to section 3.2

- A toolbar runs along the bottom of every page, allowing for quick navigation to section menus. Coloured icons allow navigation to relevant sections of the document.

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2. Technical requirements

3. How to participate

4. Market Information

- Sections of the guidance are colour coded, for ease of use.
- Please contact commercial.operation@nationalgrideso.com if you have any questions or feedback.

Note: icons on this page are for illustration only - links do not work.

Main menu

Select icons to navigate to relevant sections of this document:

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Footroom overview

Determining the requirement for Super SEL

Footroom is the ability to reduce generation output/increase demand on units to balance the electricity system.

In most cases, the wholesale energy market delivers sufficient footroom based on the generation of self-dispatching units.

When demand on the system is very low, however, it is more likely that actions will be required to manage the footroom requirement.

The footroom challenge is exacerbated by the requirement to have conventional generation synchronised and generating in order to fulfil other requirements on the system such as voltage and inertia.

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Super SEL overview

<h3>Super SEL</h3>	<ul style="list-style-type: none">• Super SEL is utilised to directly decrease the sum of the minimum MW level (SEL) of generators synchronised to the system.• Super SEL service does not require a change in energy output of the generation, it is to give access to a reduced minimum active power level.• Super SEL contract enactment will be a through a trading instruction.• A separate instruction will be issues via the Balancing Mechanism to reduce output to the new lower SEL if required.
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<h3>Payment</h3>	<ul style="list-style-type: none">• The service will be paid on utilisation of lower SEL capability (£/MW/hr) for the periods between Start Up Period and End Time.• Providers may submit price change at week ahead by Tuesday 5pm as applicable for the following Monday – Sunday. A nil return would indicate no change to utilisation pricing.
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Footroom requirement

- During 2020, the additional footroom requirement across all potential solutions is expected to range from 0 GW to 3 GW. Further details of the anticipated duration for the additional footroom range is given in the table below:

Additional Requirement (GW)	Percentage of Summer 2020
≥0	34%
≥0.5	28%
≥1.0	26%
≥1.5	20%
≥2.0	13%
≥2.5	8%

Technical requirements

Minimum size	<ul style="list-style-type: none">The service requires asset that can deliver a minimum of 10MW of Footroom.
SEL Reduction Capability	<ul style="list-style-type: none">A maximum notice period of 6 hours before SEL reduction – with a preference for close to real timeThe SEL Reduction Capability Range will be agreed at the time of contract.The actual amount of SEL Reduction will be included in the Availability Declaration
Other Technical Capability	<p>For operational planning, it would also be useful to know the following capabilities of units at their Super SEL level:</p> <ul style="list-style-type: none">InertiaReactive RangeResponse - Primary, Secondary and High
Availability	<ul style="list-style-type: none">No later than 14:00 hours each Day the generator can submit availability to provide the Super SEL service. If no availability declaration is submitted, the previous Availability Declaration shall be deemed to apply.

How to Participate

Interested Super SEL providers should contact commercial.operation@nationalgrideso.com and outline their capability to provide the footroom service including but not limited to:

- Technical description of the assets
- SEL reduction volumes which can be achieved where applicable including different operating mode configurations
- Date from which SEL reduction option is valid
- Minimum notice period required to achieve SEL reduction, noting we have set a maximum period of 6 hours
- Maximum period reduced SEL can be sustained
- Impact on ancillary services the unit(s) may be providing
- Impact on reactive power range, inertia and response capability of the machine between 'normal' SEL and new lower SEL

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How to Participate (cont)

Draft contract terms will be shared in coming days, though will be similar to [previous terms](#) used in 2018.

Contracts will be agreed on a bilateral basis against a set of standard contract terms.

Once all agreement have been signed, the site and utilisation price will be published on the NGENSO website.

Enactment of the Super SEL service will be dependant on the cost of alternative actions, including but not limited to Interconnector Actions, action on non-synchronous machines, generation desynchronisation or operation mode changes

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Market Information

After running procurement exercises in 2017 and 2018, we currently have 8 stations contracted for Super SEL.

The list of contracted units can be found on the [Market Information](#) tab of the Super SEL webpage.

Any new contracts that are agreed this year, will be listed on the same page.

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