

Super SEL

Interactive Guidance



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Version control

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1.0	21/02/18		

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:



- 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.

1. Super SEL
overview

2. Technical
requirements

3. How to
participate

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- Sections of the guidance are colour coded, for ease of use.
- Please contact commercial.operation@nationalgrid.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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1. Footroom overview

Determining the requirement for Super SEL

Most of the time the wholesale energy market delivers sufficient footroom. 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.

The total requirement met by Super SEL will depend on the cost of alternative actions including but not limited to Demand Turn Up services, Reposition Interconnector Flows, Repositioning BM Units, bids on wind generation and operation mode changes.

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1.1 Super SEL overview

Super SEL

- Super SEL is utilised to directly decrease the sum of the minimum MW level (SEL) of generators synchronised to the system by lowering the minimum generating level at a generator synchronised.
- 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.
- Dispatch will be via the Balancing Mechanism to reduce output to the new lower SEL if required.

Payment

- 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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1.2 Footroom requirement

- During 2018, the footroom requirement across all potential solutions is expected to range from 0 GW to 4.5 GW. Further details of the anticipated duration for the footroom range is given in the table below:

Requirement / GW	Percentage of Summer 2018
≥0	60%
≥0.5	50%
≥1.5	30%
≥3	10%
≥4.5	2%

We will determine how much of DTU is procured by stacking beneficial tenders in merit order with other alternative services to meet the footroom requirement.* Alternative services will include:

- Interconnector actions
- Demand Turn Up
- Repositioning BM Units
- Hydro overnight demand

*** We reserve the right to not procure any volume if it is deemed uneconomical in comparison to alternative services.**

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2. Technical requirements

Minimum size	<ul style="list-style-type: none">■ The service requires asset that can deliver a minimum of 10MW of Footroom.■ A maximum notice period of 12 hours before SEL reduction
SEL Reduction Capability	<ul style="list-style-type: none">■ The SEL Reduction Capability Range will be agreed at the time of contract.
Service Dispatch	<ul style="list-style-type: none">■ The Enactment of Super SEL will be done through a trading instruction. At the agreed point the lower SEL capability should be made available in the BM and the provider should take required actions to be capable of moving to the lower SEL. Instruction to reduce energy output would be done in real time through the BM.
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 Footroom service shall be deemed available for the whole of the trading day as specified in the last Availability Declaration.

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3. How to Participate

Interested Super SEL providers must submit an expression of interest with an outline of 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
- Maximum period reduced SEL can be sustained
- Impact on ancillary services
- Reactive Range of the machine between 'normal' SEL and new lower SEL

The deadline for submission of expression of interest is 5th March 2018. NGET will assess the submissions against the selection criteria and contact all parties by 9th March 2018 with the decision to either tender or directly contract. If you are interested in prequalifying please send you expression of interest via email to commercial.operation@nationalgrid.com no later than 10:00 on 5th March 2018.

If you have any questions please contact Emily Campion (emily.campion@nationalgrid.com 07929 058604)

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4. Super SEL Selection Criteria

The criteria for selection for prequalification include but are not limited to:

- The proposed service meet the minimum technical requirements
- Duration of the service
- Timeline for operation of the service
- The project can provide additional services
- Assessment of generation behaviour
- The value of the Super SEL service against other services, including but not limited to Demand Turn Up, Interconnector Actions, action on non synchronous machines, generation desynchronisation or operation mode changes

Once all agreement have been signed the Site and Utilisation Price will be published on the website.

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In 2017, 6 contracts were in place for Super SEL the details of these contracts on the website under Market Information.

The Super SEL contracts were used less than anticipated in Summer 2017, this was as a consequence of generation and demand profiles varying from what was anticipated. The current Super SEL contracts have been utilised 8 times in total since the contracts have been put in place. In Summer 2017 the reduced SEL contracts were utilised for 57.5 hours. In Summer 2016 the reduced SEL contract was utilised for 118 hours.

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