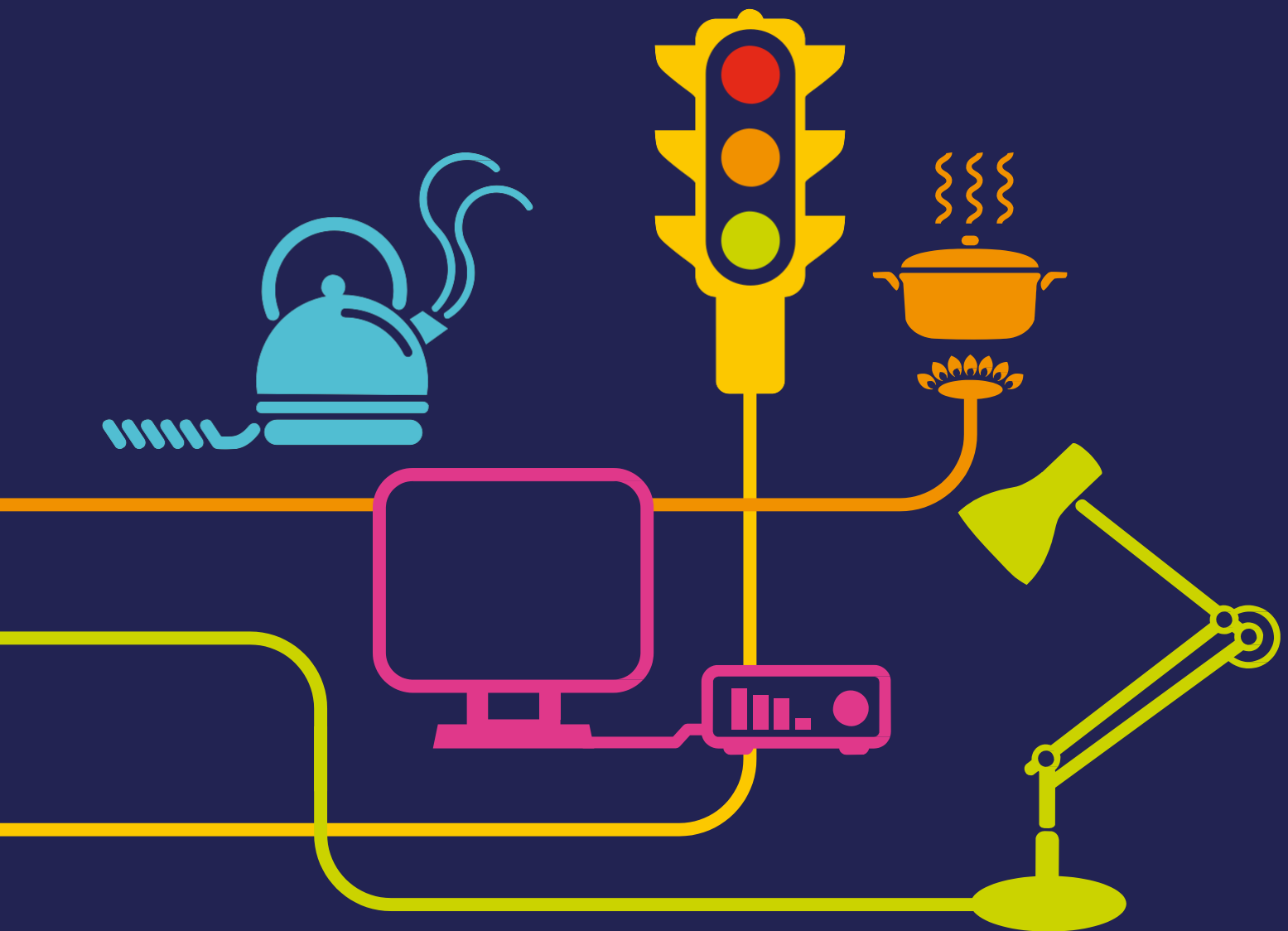


Short Term Operating Reserve (STOR)



A guide to the services procured by
National Grid to manage reserve on
the Transmission System

“National Grid is an international electricity and gas company responsible for operating the electricity and gas transmission systems across Great Britain”

What is Reserve?

Electricity cannot be stored in large amounts so the supply needs to be balanced with demand on a second by second basis. However, there can be times when unexpected events occur such as generator faults or excessive demand. In order to mitigate these events, National Grid requires either additional generation to run as back up, or a reduction in electricity demand to ensure the system remains balanced. Such generation is commonly referred to as “Reserve”.

As there are different types of generation technologies which can provide reserve, each of these will have different lead times for the generation or reduction of power.



What is the service?

Short Term Operating Reserve (STOR) is a service which customers (service providers) can provide to National Grid to deliver either a specific level of power from their generators or a reduction of demand. The service is limited to the timings that are agreed in the contract. Such timings are known as the “Availability Windows” which are the periods where the provider is obliged to deliver the specified power. This is generally carried out via electronic instructions from National Grid to the provider.

This service can be provided by Balancing Mechanism (BM) service providers and non-BM service providers. BM providers are those parties who have a generation contract with National Grid and are able to participate in the Balancing Mechanism.

There are three types of service:

1. **Committed** - a service provider must make the service available for all Availability Windows within the contract
2. **Flexible** - this is only open to non-BM service providers and allows greater flexibility on how many hours are made available and when that is offered.
3. **Premium Flexible** – Similar to the Flexible service, although when a service provider offers availability in a ‘premium’ availability window, National Grid guarantees to accept a large percentage of these.

How is the service procured?

The service is procured via a competitive tender process, whereby each prospective provider can submit their prices for which they are willing to provide the STOR service. In order to participate in the tender, providers must first enter into a STOR Framework Agreement with National Grid which sets out the standard contract terms that both parties are subject to.

Tender rounds are run three times each year and the minimum requirements apply:

- Offer a minimum of 3MW generation or steady demand reduction
- Maximum response time for delivery of 240 minutes following instruction from National Grid, although we typically contract for 20 minutes or less
- Ability to deliver the contracted MW continuously for a minimum of 120 minutes
- Have a recovery period after provision of reserve of not more than 1200 minutes
- Be able to deliver at least 3 times per week.

Smaller providers under 3MW may also participate via an aggregator.

Payments

The payments are split between the following:

1. **Availability** – the provider is paid (£/MW/h) during the periods that they make themselves available within the availability window
2. **Utilisation** – where energy is delivered in response to an instruction from National Grid, payment is made on the volume delivered on a £/MWh basis



Contact:

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Information:

For more information on Balancing Services please visit:

<http://www2.nationalgrid.com/uk/services/balancing-services/reserve-services/short-term-operating-reserve/>

<http://www2.nationalgrid.com/UK/Services/Balancing-services/Demand-Side-Aggregators/>

STOR FAQs:

<http://www.nationalgrid.com/NR/rdonlyres/F393E0E3-26B2-49D5-80BD-409CE2093B4E/59391/ShortTermOperatingReserveSTORFAQ.pdf>