



# STOR 6.9 Requirements

29 September 2020

- The webinar will start shortly
- Please make sure your microphone is muted and your camera is turned off
- Please submit any questions by going to <http://sli.do> and using the code at the bottom of each slide
  - **Please note the webinar will be recorded**

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# Agenda

	Team member	Team
Key Drivers for STOR Day Ahead Procurement	Yuting Dai	Market Change Delivery
System Requirement for STOR Service	Richard Price	Market Requirements
Service Requirements	Steve Dugmore	Market Services, Contracts
Procurement Strategy	Becky Whiteman	Structuring & Optimisation
Assessment Principles, including Availability Payments	Becky Whiteman	Structuring & Optimisation
IT System Development Update	Matthew Hopkins	National Control
Question and Answer Session	Vicci Page	Market Change Delivery
Summary and Next Steps	Yuting Dai	Market Change Delivery

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# Key Drivers for STOR Day Ahead Procurement

- The STOR service is valuable to the ESO to procure as balancing capacity, ensuring there is sufficient energy to meet our short term reserve requirement
- CEP Article 6(9) set the obligations to procure the STOR product at day-ahead, which aims to reduce market barriers to enable easy access from all players and to maximise competition
- The IT supported market platform is critical to enable NGESO to manage the daily procurement process while maintaining quality of standard, which will be used as a stepping stone to a single market platform for the future reserve and response products to be procured closer to real time

The document explaining the high level requirements was published in our “ESO Initial Proposals for Industry Engagement” document on our website here: (11th Sep)

<https://www.nationalgrideso.com/industry-information/balancing-services/reserve-services/short-term-operating-reserve-stor>

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A landscape photograph of a rolling field at sunset. The foreground is a field of dry, golden-brown grass. In the middle ground, a large, dark, leafy tree stands on a small hill. The background shows rolling hills under a sky with scattered clouds, illuminated by the warm light of the setting sun.

# System Requirement for STOR Service - Richard Price

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# System Requirement for STOR Service

- We require reserve to provide contingency for plant losses, market imbalance and demand forecast errors. Currently STOR meets a large part of this requirement.
- In the next few years this will change as new reserve products are developed to meet changing operating conditions. However, the requirement for reserve to maintain the balance between supply and demand of electricity will continue.
- The volume of STOR we need is primarily driven by the largest loss on the system, and we also take account historic dispatch reliability.
- Based on our latest analysis, we are expecting to have a requirement for 1700MW of STOR.
- Our proposal is to keep the initial requirement as simple as possible when moving to day ahead procurement
- So in terms of granularity we are proposing a single daily requirement value, rather than two values for the separate windows.



A landscape photograph of a rolling hill under a dramatic sky at sunset or sunrise. The foreground is a field of dry, golden-brown grass or stubble. A large, dark, leafy tree stands prominently on the right side of the hill. The sky is filled with soft, golden clouds, and the sun is visible on the right horizon, casting a warm glow over the scene.

# Service Requirements – Steve Dugmore

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# Service Requirements – What's Not Changing

- No change to the existing minimum service requirements:
  - minimum of 3 MW of generation/demand reduction
  - 20 minute response time
  - Response sustained for a minimum of two hours.
- No change to existing approach for seasons and availability windows which we'll continue to publish in advance. This will predefine the STOR day availability windows applicable for each day-ahead tender.
  - 6 Seasons (April to April)
  - Working and Non-Working Days - broken down into individual daily hours (typically two periods in each day).
- Each day-ahead tender will apply to the following STOR day, which runs from 05:00 – 05:00 (GMT), and all availability windows within the STOR day must form part of a single tender. The start, end and publication of results for each tender has yet to be finalised.
- STOR providers will still only be able to submit a day-ahead tender if their unit/s are pre-qualified in accordance with the STOR registration procedure.
- Contract transfers (EBGL Article 34) will remain allowing STOR contracts to be transferred between STOR providers.
- Optional service (Non-BM) will remain.
- All other standard contract terms and service requirements will remain unchanged unless they become obsolete due to the revised tender/contract duration.

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# Service Requirements – what is changing

- Individual unit parameters will not be required for each day ahead tender. These parameters will be set as those detailed within the Framework Agreement. This will allow for a more automated and simplified tender, assessment and settlement process.
- The tender submission itself will only require availability price £/MW/h and the MW (up to the pre-qualified MW). There will be no requirement for any other technical parameters.
- Each STOR unit will be allocated a unique contract number to be used/reused for all contracts awarded and the same unique contract number will be linked to the Framework Agreement technical parameters. Any change to technical parameters (via amending the Framework Agreement) will allocate a new unique contract number.
- The requirement for weekly availability declarations will be removed.
- Service delivery penalties and Event of Default (EOD) will be reviewed and simplified to align with single STOR day contracts. Further consideration and joint discussion with STOR providers will be required before this is finalised.
- Flexible STOR service will be removed.

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# Procurement Strategy – Becky Whiteman

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# Procurement Strategy

- We are committed to 100% procurement of the firm STOR product at day-ahead from 1 April 2021.
- Total daily requirement for STOR will be 1700MW.
- We will continue to seek a derogation (aligned to the regulation for a minimum of 30% day ahead and 70% at month ahead) to allow us some flexibility with procurement as we transition to day-ahead
- As we transition to day ahead we will look to use the Optional STOR service and the Balancing Mechanism to meet any shortfall in the event of insufficient volume being available
- Further development of new reserve services, aligned to our ambitions for simple and transparent services procured closer to real-time, will be captured through our reserve reform programme

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# Assessment Principles – Becky Whiteman

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# High Level Principles

All compliant bids will be assessed in the same way using the following criteria:

- Providers will submit an availability price (£/MW/hr) and megawatt (MW) capacity
- Bids are sorted from lowest to highest availability price
- Determine if the marginal bid can be accepted based on the buy curve
  - If it can then accept marginal unit
  - If not, then reject the marginal and repeat until the marginal unit is found
- The marginal unit's price sets the clearing price and all parties receive the same price for their volume

# Availability Payment – Pay as Clear

- All availability prices for firm STOR will be settled using pay-as-clear mechanism.
- Moving the availability price to pay-as-clear incentivises STOR providers to submit their marginal price and is believed will have a downward pressure on overall balancing costs.
- All utilisation prices for instructed STOR will continue to be settled using a pay-as-bid mechanism and submitted closer to real time and not fixed during the auction.
- The utilisation of STOR in real time is dependent on both economic and technical parameters, and therefore remaining with the pay-as-bid mechanism is more appropriate.
- We have requested a derogation to allow utilisation to remain pay-as-bid for 2 years.



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# IS System Development Update – Matt Hopkins

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# Key Features

We intend to develop a solution using the Salesforce system which many providers already have access to for Prequalification, Transfers and P354 (ABSVD) processes. Providers will be able to:

- Receive notification and view upcoming tenders
- Submit tenders for a single unit via a GUI
  - The ESO will validate submissions upfront, so providers will know immediately if the bid is valid or needs to be resubmitted
- Bulk upload tenders for multiple units via a GUI
- Withdraw tenders
- Receive notification and view tender results.

The following slides are examples of what a Service Provider's would see when logging into the ESO portal \* and are for illustration purposes only.

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# Examples of Functionality

## View Upcoming Tenders

<div>Search Tenders</div>							Tender information
Service Name	Tender ID	Tender Period From	Tender Period To	Tender Open Date	Tender Close Date	Status	
Committed STOR	TR2672AUG	06/08/2020 05:00	07/08/2021 05:00	02/08/2020 00:01	05/08/2020 00:01	Open	i
Committed STOR	TR1233AUG	07/08/2020 05:00	08/08/2021 05:00	03/08/2020 00:01	06/08/2020 00:01	Open	i
Committed STOR	TR1453AUG	09/08/2020 05:00	10/08/2021 05:00	05/08/2020 00:01	08/08/2020 00:01	Upcoming	i
Committed STOR	TR3893AUG	10/08/2020 05:00	11/08/2021 05:00	06/08/2020 00:01	09/08/2020 00:01	Upcoming	i
Committed STOR	TR1232JUL	24/07/2020 05:00	25/07/2020 05:00	20/07/2020 00:01	23/07/2020 00:01	Closed	i
Committed STOR	TR1231JUL	25/07/2020 05:00	26/07/2020 05:00	21/07/2020 00:01	24/07/2020 00:01	Closed	i

\*This is for illustration only

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# Examples of Functionality

## Submit Tenders

### Tender Submission

#### Tender Summary

Tender ID	TR1234JUL
Service Name	Committed STOR
Tender Period From	29/07/2020 05:00
Tender Period To	30/07/2020 05:00


#### Tender Data (single unit)

Unit ID	<input type="text" value="Unit ID 1"/>
MW	<input type="text" value="Provide MW input"/>
Availability Price	<input type="text" value="Provide Availability Price (£/MW/hr)"/>

Submit

#### Tender Data (multiple units)

To input tender data for multiple units in a single tender submission please fill in the details in the spreadsheet below and upload to the portal

Tender data Spreadsheet 

Download

Upload

\*This is for illustration only

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# Examples of Functionality

## View Results

Search Tender Results

Service Name	Tender ID	Tender Sub ID	Tender Period From	Tender Period To	Unit ID	Contract Num	MW	Availability Price	Tender Results
Committed STOR	TR2672AUG	SBAUG01	06/08/2020 05:00	07/08/2020 05:00	Unit ID 1	32.24	40	15.00	Accepted ⓘ
Committed STOR	TR2672AUG	SBAUG02	06/08/2020 05:00	07/08/2020 05:00	Unit ID 2	32.25	35	10.00	Accepted ⓘ
Committed STOR	TR2672AUG	SBAUG03	06/08/2020 05:00	07/08/2020 05:00	Unit ID 3	32.26	50	18.00	Rejected ⓘ
Committed STOR	TR1233AUG	MSBAUG99	07/08/2020 05:00	08/08/2020 05:00	Unit ID A	45.10	12	11.00	Accepted ⓘ
Committed STOR	TR1233AUG	MSBAUG99	07/08/2020 05:00	08/08/2020 05:00	Unit ID B	45.11	18	16.00	Rejected ⓘ
Committed STOR	TR1233AUG	MSBAUG99	07/08/2020 05:00	08/08/2020 05:00	Unit ID C	45.12	20	20.00	Rejected ⓘ
Committed STOR	TR1233AUG	MSBAUG99	07/08/2020 05:00	08/08/2020 05:00	Unit ID D	45.13	10	10.00	Accepted ⓘ

\*This is for illustration only

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# API Integration Feedback Request

The ESO is exploring API integration allowing 'Tender Submission' and 'Receive Results' to be done without manual intervention.

Although this is not expected to be live in the first release, we would like feedback if this capability would be welcomed by industry so it can be prioritised accordingly.

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# Questions and Answers – Vicci Page

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**nationalgrid**ESO





# Summary and Next Steps – Yuting Dai

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# Summary and Next Steps

- Survey is available in Slido until 4th Oct
- Slido event is opening until 4th Oct to receive any further questions
- FAQ documents will be published after webinar and updated
- Next engagement activities will be shared later once confirmed, which will also include the contractual arrangement update and consultation plan
- Any further feedback please send to  
[commercial.operation@nationalgrideso.com](mailto:commercial.operation@nationalgrideso.com)

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# Thank you

**Contact us:**

**SLI.DO**

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ESO website: [www.nationalgrideso.com](http://www.nationalgrideso.com)

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