Public

STOR to Slow Reserve Transition Plan

Date: July 2025

Version

Version	Update	Published
1.0	N/A	May 2025
2.0	Update to the 'hard-stop' approach to allow for a 6-hour overlap of STOR and Slow Reserve, as a result of differing service day timings.	July 2025

Note

Delivery dates provided in this plan reflect the NESO ambition. Confirmed dates will be communicated to industry in due course.

Purpose

This document is intended to detail how National Energy System Operator (NESO) proposes to transition market participants from the existing Short Term Operating Reserve (STOR) service to the new Slow Reserve (SR) service in October 2025. Included in this plan is:

- the approach and the relevant justifications.
- expected market participant impact.
- our contingency plan should there be an initial shortfall in registered SR volume.

Introduction

The new Slow Reserve service will replace the STOR service. The introduction of Slow Reserve will support the regulatory requirement on NESO to restore frequency deviations within 15-minutes.

NESO's intention is to commence procurement and utilisation of the new Slow Reserve service in October 2025. Originally, the intention had been to phase out STOR gradually and retire the service/cease its procurement and utilisation with both STOR and Slow Reserve therefore procured and utilised in parallel (as described in Appendix 1).

Following a wider assessment highlighted further in this document, and support from industry, NESO now consider it appropriate to cease the procurement of STOR at the point of introducing Slow Reserve. This is a step we're referring to as 'a hard-stop'.

Via this transition plan NESO explain (with justification):

- why the hard-stop approach is optimal
- highlight support from industry for this approach following active engagement.
- detail (with proposed timings) how the transition from STOR to Slow Reserve will emerge.
- highlight necessary provider provisions to transition to the new IT interfaces such as Open Balancing Platform (OBP).
- assess the impact to current STOR providers and options for their continued delivery of services.

As we progress with the implementation of Slow Reserve, we have set out the key principles for how we intend to transition away from the existing STOR service:

- Remove complexity where possible for providers/units moving from STOR to Slow Reserve.
- Ensure that providers are given ample time to prepare for onboarding and complete the pre-qualification checks.
- Remove complexity of valuing STOR and Slow Reserve in terms of pricing for both NESO and the market participant where possible.
- Ensure market information across the two services cannot be leveraged.
- We believe all existing STOR providers will be able to meet the technical requirements to provide Slow Reserve and we would expect all currently active STOR providers to transition over to the new service.

Transition Plan Summary

- NESO intends to transition all capacity from the existing STOR service to the new Slow Reserve service via a hard-stop in **October 2025**. This means STOR procurement will cease entirely at the point in which the full procurement of positive and negative Slow Reserve commences.
- This approach is proposed following consultation with industry of which the majority of respondents (70%) support the 'hard-stop' approach over a phased transition.
- The hard-stop option enables a clean, efficient switch to the new service and avoids the complexity of running two similar services concurrently with overlapping requirements and auction timings.
- The STOR and Slow Reserve service day timings are not aligned. STOR runs from 05:00 – 05:00 each day, whilst the Slow Reserve service day is proposed to run from 23:00 – 23:00,

to align with other Ancillary Services. As a result, the 'hard-stop' approach will include a 6-hour overlap at the end of the final STOR day (23:00 – 05:00). Further details in the 'Transition Plan Detail' section below.

Target End State:

- **13th October 2025** – final auction date to procure day-ahead STOR.
- **14th October 2025** – final operational day for STOR including receipt of optional declarations.
- **14th October 2025** – first auction day to procure firm day-ahead positive and negative Slow Reserve (co-optimised with other reserve services).
- **15th October 2025** – first operational day for Slow Reserve.

STOR Provider Impact:

- There will be no "lift and shift" of the STOR portfolio into SMP due to legacy system constraints.
- There are new system integration requirements for Slow Reserve, in particular with Balancing and Settlements systems. Requirements differ across BM and non-BM units and integrations will require testing and approval with NESO before full onboarding is confirmed.
- We believe all existing STOR providers will be able to meet the technical requirements to provide Slow Reserve and we would expect all currently active STOR providers to transition over to the new service.

Transition Plan Detail

Factors influencing the Transition Plan

Service	Service Day Timings
STOR	**(for STOR season 19.4)** **Firm:** • 06:00 – 13:00 • 17:00 – 22:00 **Optional:** • 05:00 – 05:00
Slow Reserve	**Firm:** • 23:00 – 23:00 **Optional:** • 23:00 – 23:00

As part of our delivery plan to implement Slow Reserve and replace the existing STOR service, we intend to cease procurement of STOR via day-ahead auctions on the day immediately before the first Slow Reserve auction, effectively creating a 'hard-stop' of STOR procurement. Therefore, unlike the transition from Optional Fast Reserve to Quick Reserve, there will be no phased approach whereby the STOR and Slow Reserve will be procured or utilised in parallel (other than a 6-hour overlap at the end of the final STOR day where optional STOR will still be in operation from 23:00 – 05:00). This will enable NESO to:

- Reduce complexity when setting its buy-order for slow acting response
- Avoid setting uneconomic market signals from the two staggered auctions

Following positive feedback received from market participants, NESO has made a definitive decision regarding the transition from STOR to Slow Reserve. NESO propose to:

- Cease procuring STOR on 13th October 2025, resulting in a final operational day of 14th October 2025.
- Commence procurement of Slow Reserve from 14th October 2025 through the day-ahead EAC auction, with the first operational day being 15th October 2025.

Therefore, from 15th October, Slow Reserve will fully replace STOR requirements, ensuring a seamless transition without overlapping service delivery windows. The final procurement volumes will be communicated through the Slow Reserve Requirement Forecast dataset on the NESO Data Portal, in accordance with NESO's established protocols for Ancillary Services.

Target End State: The desired end state is to have Slow Reserve fully implemented across both BM and non-BM participants by October 2025, and to immediately cease the procurement and utilisation of STOR upon the go-live of Slow Reserve.

Volume Procurement (Positive STOR and Slow Reserve)

Our approach would mean that the final 1,700MW procurement of positive firm STOR would take place in the 05:00 STOR auction on 13th October. Slow Reserve firm procurement will subsequently commence with the first auction at 14:00 on 14th October for the following operational day. This will be where the transition to positive SR happens with the full requirement effective from the service day of 15th October 2025 (from 23:00 on 14th October) onwards. It eliminates the complexity of managing two procurement events for very similar services with similar buy orders but different auction timings.

Fig 1 and Table 1 (below) illustrate relevant volumes to be procured across specific dates that will continue to provide NESO with the required capacity. Note, positive Slow Reserve volumes are still to be determined, and therefore volumes highlighted in the following examples are for illustrative purposes only.

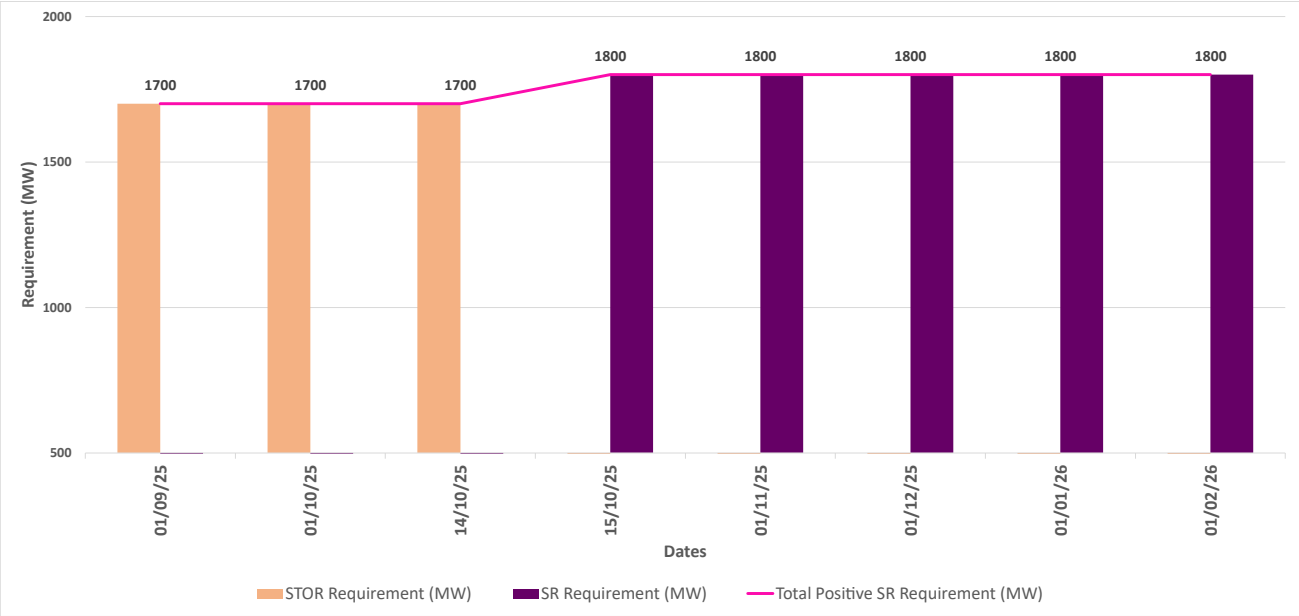

Fig. 1 – Positive Slow Reserve and STOR Requirement and Planned Procurement

Table 1 – STOR and Slow Reserve Volumes by Date

Period		Requirement (MW)		Total Positive Requirement (MW)
		STOR	SR	
September	01/09/25	1700	0	1700
October	**12/10/25**	**1700**	**0**	**1700**
	13/10/25	**1700**	**0**	**1700**
	Hard Stop (of Firm Procurement)			
	14/10/25	**1700**	**0**	**1700**
	15/10/25	**0**	**1800**	**1800**
November	01/11/25	0	1800	1800
December	01/12/25	0	1800	1800
January	01/01/26	0	1800	1800
February	01/02/26	0	1800	1800

Volume Procurement (Negative Slow Reserve)

Since there is no negative STOR, there is no transition to consider, and the full negative Slow Reserve requirement will be procured from day 1 (for the service day of 15th October). Note, negative Slow Reserve volumes are to be determined and only highlighted in the following examples for illustrative purposes.

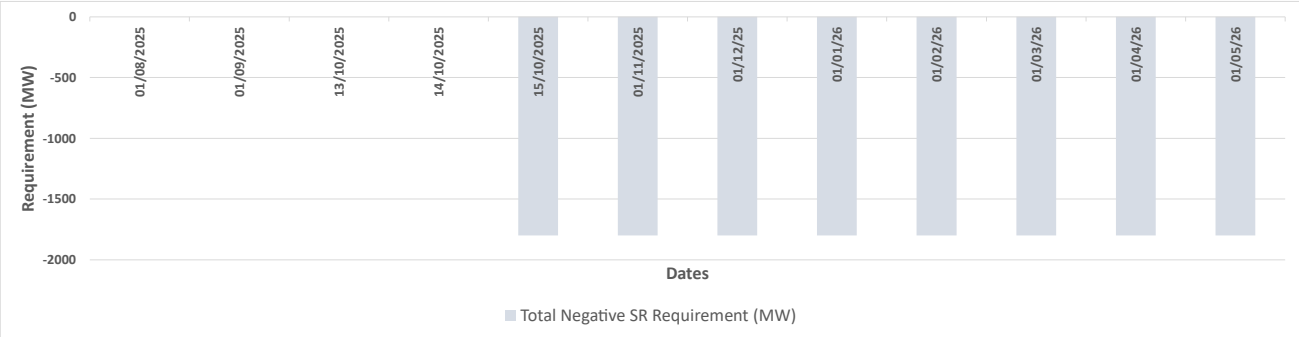

Fig. 2 – Negative Slow Reserve Requirement and Planned Procurement

Table 2 – Slow Reserve Volumes by Date/Month and Clock Change

GMT/BST	Period	Total Negative SR Requirement (MW)
BST	August 2025	0
	September 2025	0
GMT	13/10/2025	0
	14/10/2025	**0**
	15/10/2025	**-1800**
	November 2025	**-1800**
	December 2025	**-1800**
	January 2026	**-1800**
	February 2026	**-1800**
	March 2026	**-1800**
BST	April 2026	**-1800**
	May 2026	**-1800**

NESO will publish the updated requirement, procurement strategy and dates to the industries closer to the pre-launch of Slow Reserve.

Transitioning Period: Unlike the transition from Optional Fast Reserve to Quick Reserve, Slow Reserve and STOR will not be operational together, and therefore providers will not be eligible for the two services simultaneously (other than a 6-hour overlap at the end of the final STOR day where optional STOR will still be in operation from 23:00 – 05:00). NESO intend to commence early onboarding of Slow Reserve providers, where possible, ahead of Ofgem's anticipated A18 decision in August.

Whilst full onboarding (acceptance of Service Terms and Procurement Rules) will not be possible prior to Ofgem's A18 decision, NESO plan to assist providers through system testing (including

Open Balancing Platform (OBP), Auction Platform, Operational Metering, Performance Metering, and Settlements) ahead of this. More detail will be circulated in due course.

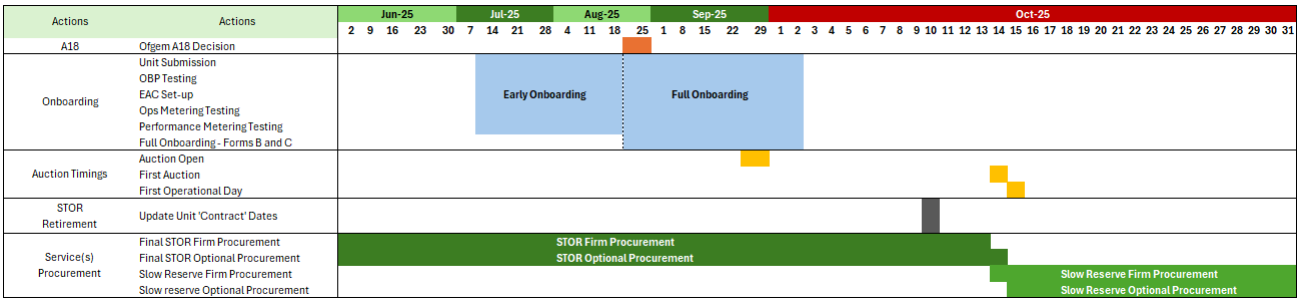

Fig. 3 – Transition Timings and onboarding

Route to Market for STOR units - It is expected that all existing units will be able to transition to Slow Reserve should they wish. NESO wish to ensure as many providers as possible (STOR and non-STOR) are able to participate in Slow Reserve from day 1 to ensure that the requirement for slow acting reserve, typically against the largest loss is met. Where the requirement cannot be met through procurement of Slow Reserve, our contingency is discussed later in this paper. Please also see 'Effect on market participants of STOR' and 'Provider Onboarding' sections of this paper for more details on eligibility and transitioning units.

Table of Dates and Events

Phase	Item	Date	Summary
Service Delivery	Early SR Onboarding	Jul/Aug	To ensure all potential providers able to participate in Slow Reserve from Day 1 and are set-up and ready for the first auction, NESO propose a phase of early onboarding to include any non-contractual activities, including SMP/unit registration, EAC set-up, OBP and STAR registration and testing, and Ops metering and Settlement metering testing, from early July.
	Full SR Onboarding	Aug - Oct	Full onboarding of the service (i.e. submission and acceptance of Forms B and C) is unable to commence until the Slow Reserve EBR A18 consultation has concluded and a decision by the regulator has been published. Our expectation is to receive a decision, week commencing 25th August, at which point full on-boarding can commence.
	A18 Decision	w/c 25th August 2025	
	SR Auction Open	30-Sep-25	NESO plan to open the Slow Reserve auction to accept sell orders via the EAC platform, week commencing 29th September.
Service Transition	Last STOR Day Ahead Auction	13-Oct-25	To align with the proposed Slow Reserve auction timings, the final procurement of firm day ahead STOR is proposed for the 05:00 auction on 13th October, with the final utilisation of the service with ENCC (including the acceptance of optional STOR declarations) to conclude at 05:00 on 15th of October.
	Last STOR Operational Day	14-Oct-25	

	Hard Stop		
	First Slow Reserve Auction	14-Oct-25	NESO to submit first Slow Reserve buy-order, and the first auction to take place on the EAC platform 14 days after auction opening. First auction to take place at 14:00, 14th October.
	First Operational Day	15-Oct-25	First Slow Reserve operational day (15th October, commencing at 23:00 on 14th October). Utilisation of firm capacity procured in day ahead auction and receipt of optional declarations.

6-Hour Overlap Explained

The mis-alignment of STOR and Slow Reserve service day timings creates a minor challenge to the 'hard-stop' approach, whereby STOR and Slow Reserve will, in actual fact, overlap by 6-hours (from 23:00 on 14th October to 05:00 on 15th October). However, during this period, Slow Reserve will only overlap with **optional** STOR. This is due to the firm windows in STOR season 19.4 running from 06:00 – 13:00, and 17:00 – 22:00, with the optional STOR service for all periods throughout the service day (05:00 – 05:00).

As the firm STOR window ceases at 22:00 (1-hour before Slow Reserve begins) there could be a requirement for optional STOR for the hour between 22:00 and 23:00. Given that STOR declarations need to be given for the entire window, it reduces complexity to natually cease STOR at the end of the last service day, again with the final window being optional only.

Justification of Approach

The transition from STOR to Slow Reserve is necessary to move towards the future of co-optimised response and reserve auctions. This will lead to flexibility of participating in multiple services across various windows and creating a better use case scenario for maximising asset utilisation, lower procurement cost, and cost-effective energy supply for consumers.

Key to considering the design our transition from STOR to Slow Reserve has been auction timings. STOR is currently procured at 05:00 in the morning where NESO are committed to providing a buy-order before 05:00.
In contrast, the daily Slow Reserve auction is proposed for 14:00 to enable more economic, cooptimised auctioning with Response, Quick Reserve and Balancing Reserve. The buy-order for the 14:00 is therefore committed before 14:00 gate closure.

Requirement Complexity and Market Signals

The decision to implement a hard-stop simplifies processes, such as procuring similar services twice on the same day (STOR at 5 am and the Slow Reserve at 2 pm). Furthermore, it removes the complexity of valuing these services in terms of pricing. Pricing Slow Reserve becomes problematic when STOR clears in the morning auction, giving market participants insight into their position and enabling them to potentially increase their sell order prices, thus raising the clearing price for SR. Market participants can leverage the Enduring Auction Capability (EAC), allowing flexibility in splitting sell orders. Detailed information about the EAC algorithm is available here. There is also additional time for transitioning to the new service where NESO will ensure that providers are given ample time to prepare for onboarding and complete the pre-qualification checks.

Industry Engagement and Support

NESO proposed two transition options to market participants earlier for transitioning from STOR to Slow Reserve namely: a 'Hard Stop' and a 'Phase Out' approach. We presented and published the MW requirement, procurement strategy for the transitioning options, as well as circulated the feedback survey form on the NESO's Slow Reserve Webpage. We invited market participants to share their views on the transition plans to support NESO in adopting the most appropriate transition plan.

As per the conducted market survey, 70% of the market participants preferred the hard stop approach because of cleaner transition, more transparency and simplified work. 60% participants are considering moving from STOR to Slow Reserve. Out of the remaining 40%, 20% of participants do not take part in STOR auction.

The 'Phased Out' approach is detailed in Appendix 1.

Effect on market participants of STOR

Slow Reserve is designed to restore system frequency within operational limits as quickly as possible following a significant loss. In line with European-derived legislation (System Operator Guidelines - SOGL), frequency must be recovered to within ±0.2Hz of nominal within 15 minutes of a loss event. As a result, Slow Reserve introduces a firm requirement for all providers to meet a ≤15 minute Time to Full Delivery (TTFD).

We recognise that this updated requirement will have an impact on some market participants. The chart below illustrates theoretical STOR capacity against Recovery Period, broken down by providers' Time to Full Delivery capabilities. The green bars represent capacity that meets the TTFD requirement whereas blue represents capacity with a > 15 Time to Full Delivery.

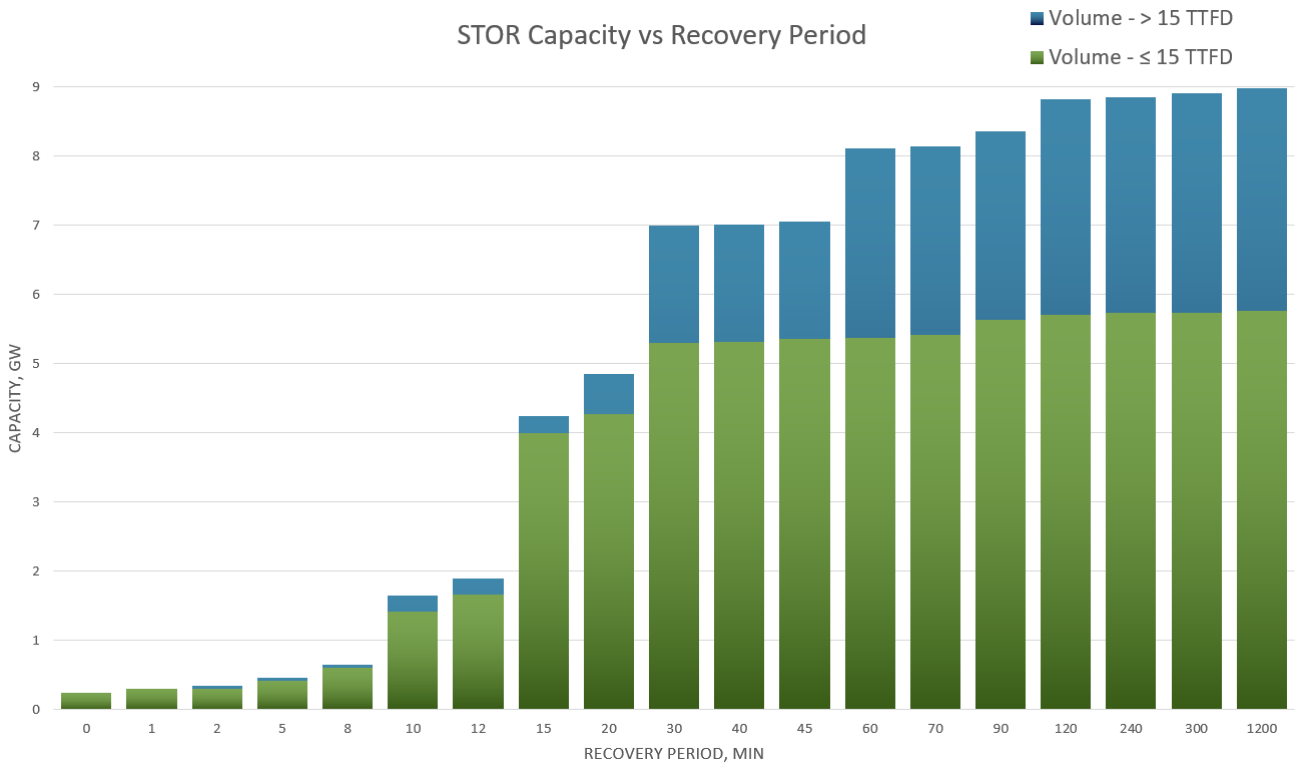

Fig 4 – STOR volume capable of providing Slow Reserve.

The above Figure 4 shows data taken from STOR contracts as of Sept 2024. As a summary of Slow Reserve capable units:

- ≤ 15 min TTFD & ≤ 60 min RP: 196 units totalling 5.4GW
- > 15 min TTFD & ≤ 60 min RP: 50 units totalling 2.7GW
- > 15 min TTFD & > 60 min RP: 21 units totalling 0.48GW

The blue overlay shows units that are currently disqualified from Slow Reserve eligibility due to exceeding the 15-minute delivery window. There are also several units which have a > 60-minute Recovery Period which are also technically excluded. Notably, many fall just outside the 15-minute delivery threshold, with a significant number around the 16–19-minute range, however these providers should still be able to deliver a meaningful proportion of their capacity within the requirements. It should also be noted that the above analysis is a worst-case scenario, as it does not consider whether units actively participate in the STOR market – simply, what is currently registered as a STOR provider.

To support a smoother transition, we have extended the Recovery Period (RP) following feedback from industry and stakeholders during early consultation from 30-minutes to 60 minutes. This change allows greater flexibility while maintaining the critical 15-minute TTFD requirement.

We understand this is a step change for many providers, and we are committed to supporting the industry through this transition. Providers currently just outside the TTFD requirement may consider optimisation or technology upgrades to meet the new threshold. NESO will continue to

engage with stakeholders to ensure that barriers to participation are understood and, where appropriate, addressed through future service refinements.

It should also be noted that NESO have assessed active STOR providers based on utilisation and found that only ~4% of active STOR providers (BM and non-BM) do not meet the Slow Reserve requirements. This is further evidenced by the informal Slow Reserve consultation responses where we only received 2 comments asking for an extension of the Recovery Period from the then-proposed 30 minutes to 60 minutes.

Contingency Plan

If there are not enough pre-qualified providers for Slow Reserve by 14th October 2025, then NESO will procure volume first through the Slow Reserve auction and any remaining volume in the BM market. This won't delay the go-live of Slow Reserve. Having communicated to the Hard Stop approach to industry, subsequently keeping the STOR market open would not provide the right signals and incentive for provider to transition. NESO will ensure that providers are given ample time to prepare for onboarding and complete the pre-qualification checks. However, if there is a delay due to technical reasons from NESO, this will be communicated via appropriate NESO's channels.

Provider Onboarding

All STOR providers looking to participate in Slow Reserve will need to register in SMP and prequalify their units in the same way as all our other services. Pre-qualification will include full end to end testing covering OBP, settlement data and API integration.

There will be no "lift and shift" of the STOR portfolio into SMP due to legacy system constraints. This will be a good exercise for all existing STOR providers to revisit the parameters of their units and ensure they are up to date and are compliant with service parameters.

Testing and onboarding for OBP and settlement API will follow the same process as Quick Reserve Phase 2. (Further clarification to be updated on exact process flow)

There are however different onboarding obligations for BM and non-BM providers to adhere to:

BM units

- **Registration** - through the NESO Single Market Platform (SMP).
- **Performance Metering** - BM units are required to satisfy the requirements for the submission of new Performance Metering data specification through a new API interface with NESO, Details will published to the NESO website as soon as these are available. **Provider testing required.**

- **Balancing Systems** – no additional systems integrations are required. Operational Data submissions (including Operational Metering) are as per existing BM data exchanges (e.g. EDL/EDT).
- **Auction Platform (EAC)** – Upon successful onboarding provider are granted to the EAC Platform via SMP.

Non-BM units

- **Registration** - through the NESO Single Market Platform (SMP).
- **Performance Metering** - BM units are required to satisfy the requirements for the submission of new Performance Metering data specification through a new API interface with NESO, Details will published to the NESO website as soon as these are available. **Provider testing required.**
- **Balancing Systems** – non-BM provider are required to interface with NESO's Open Balancing Platform (OBP). **Provider testing required.**
- **Operational Metering** – non-BM providers are required to submit Operational Metering via the existing iEMS/iHost interface. Details as published on the NESO website. **Provider testing required.**
- **Auction Platform (EAC)** – Upon successful onboarding provider are granted to the EAC Platform via SMP.

Provider Testing

Providers are encouraged to engage early with NESO, as testing will typically take place on a first come, first served basis. System testing is expected to take a number of weeks. However, during busier periods such as service go-live, end-to-end testing could be expected to take longer.

STOR Provider Eligibility

We don't believe that existing STOR providers are impacted by the transition to the Slow Reserve service as long as appropriate steps are taken to transition for day 1. Despite enhanced parameters (detailed in the Slow Reserve Design document published on the Slow Reserve webpage), no existing units participating in slow acting Reserve services are precluded from participation. See **'Effect on Market Participants of STOR**' for more details.

Communication and NESO Support

NESO will provide drop-in sessions and proactively work with STOR providers to understand their intentions to move from STOR to Slow Reserve. Introducing the prequalification process as soon

as possible will be paramount as this will provide a clearer view on volume going into the SR prior to transition.
During the onboarding process we will be monitoring the successful providers and units closely to feed into the go-live decisions.

Appendix 1: Alternative Approach: STOR Phase Out

Whilst not NESO's preferred approach, or supported by the majority of industry feedback received, NESO consider the following alternative approach (STOR Phase Out) to the 'hard-stop' laid out in this paper. Below highlights the alternative approach and its impacts.

Phase Out of STOR to Slow Reserve (Positive):

This approach would mean procuring positive STOR until August 2025. NESO would implement a transition strategy with step change starting from September 2025 with, for example, 900MW which would involve fixing the STOR buy-order and gradually decreasing the quantity and price for STOR before the GMT 2025 Clock change. The positive Slow Reserve service would transition from September 2025 with initial 900MW and the full volume requirement delivery after the GMT 2025 Clock change, as detailed in Fig. 4 and Table 5.

Based on the review of operational and historical STOR provider delivery insights, an additional increase of 100MW is required during the phased transition period. This measure is intended to ensure that there is adequate capacity to address any shortfalls in either STOR or Slow Reserve Requirements. Note, positive Slow Reserve volumes are to be determined and only highlighted in the following examples for illustrative purposes.

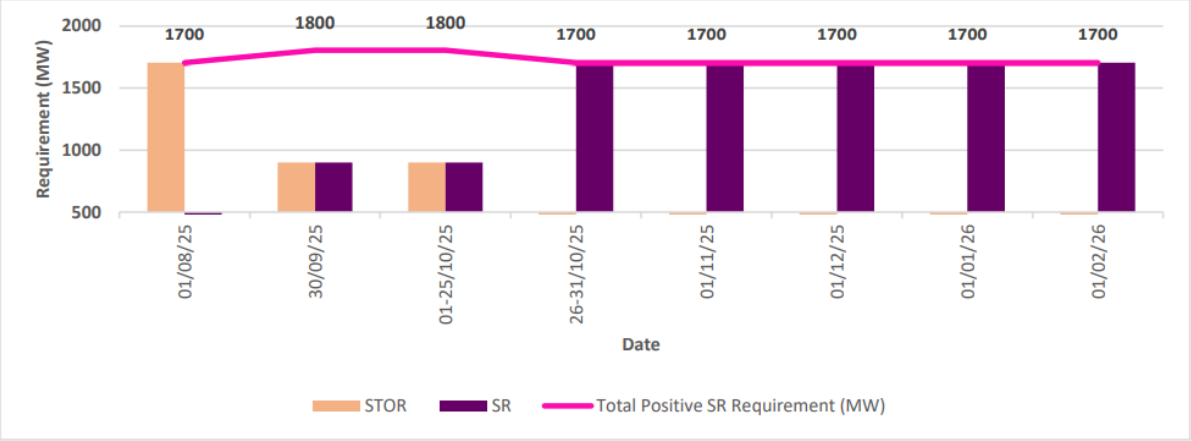

Fig. 4 – Positive Slow Reserve and STOR Requirement and Alternative Procurement Approach

Table 5 – STOR and Slow Reserve Volumes by Date

Period		Requirement (MW)		Total Positive Requirement (MW)
		STOR	SR	
August	01/08/2025	1700	0	1700
September & October (Phased Transition Period)	**30/09/2025**	**900**	**900**	**1800**
	01 - 25/10/25	**900**	**900**	**1800**
	26 - 31/10/25	**0**	**1700**	**1700**
November	01/11/2025	0	1700	1700
December	01/12/2025	0	1700	1700
January	01/01/2026	0	1700	1700

Impacts

- Market participants can benefit from EAC with flexibilities around splitting sell orders. The information about EAC algorithm is available here and please click here for the main information about EAC.
- Complexity around moving requirement across two different services within day ahead timeframe if STOR does not clear its set requirement.
- Managing two similar services at two different procurement events with different parameters (service windows, auction timings) is complex.

Negative Slow Reserve for Hard Stop and Phase Out

Since there is no negative STOR, the negative SR requirement will be applied in accordance with the full positive SR go live from September 2025. Note, negative Slow Reserve volumes are to be determined and only highlighted in the following examples for illustrative purposes.

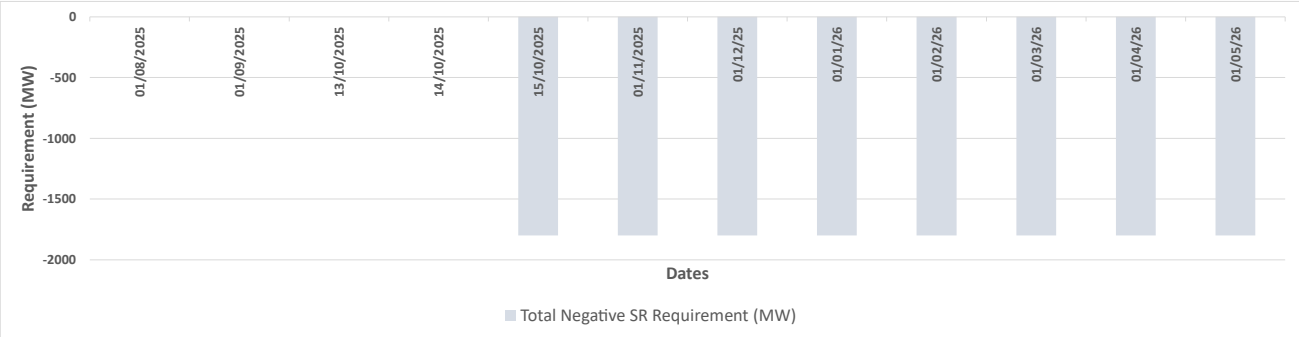

Fig. 5 – Negative Slow Reserve Requirement and Planned Procurement

Table 6 – Slow Reserve Volumes by Date/Month and Clock Change

GMT/BST	Period	Total Negative SR Requirement (MW)
BST	August 2025	0
	September 2025	0
GMT	13/10/2025	0
	14/10/2025	**0**
	15/10/2025	**-1800**
	November 2025	**-1800**
	December 2025	**-1800**
	January 2026	**-1800**
	February 2026	**-1800**
	March 2026	**-1800**
BST	April 2026	**-1800**
	May 2026	**-1800**