

Public

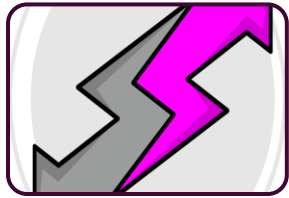
# Short-term (D-1) Reactive Power Market Update

10.03.2026

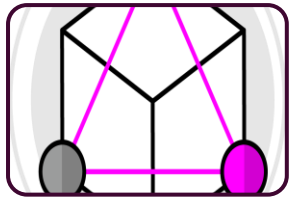
# Housekeeping



There is a Q&A session at the end, please submit questions through the teams Q&A function



We welcome constructive comments



We wish to collaborate



Please ensure cameras and microphones are disabled to protect the bandwidth quality

# Today's objectives



Provide an update on our Reactive Power Market work



Share our latest thinking on the Short-term Reactive Power Market



Signpost opportunities for market participants to provide feedback



Understand your thoughts

# Agenda



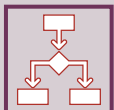
Intended function of each Reactive Power Market



Purpose of the Short-Term Reactive Power Market



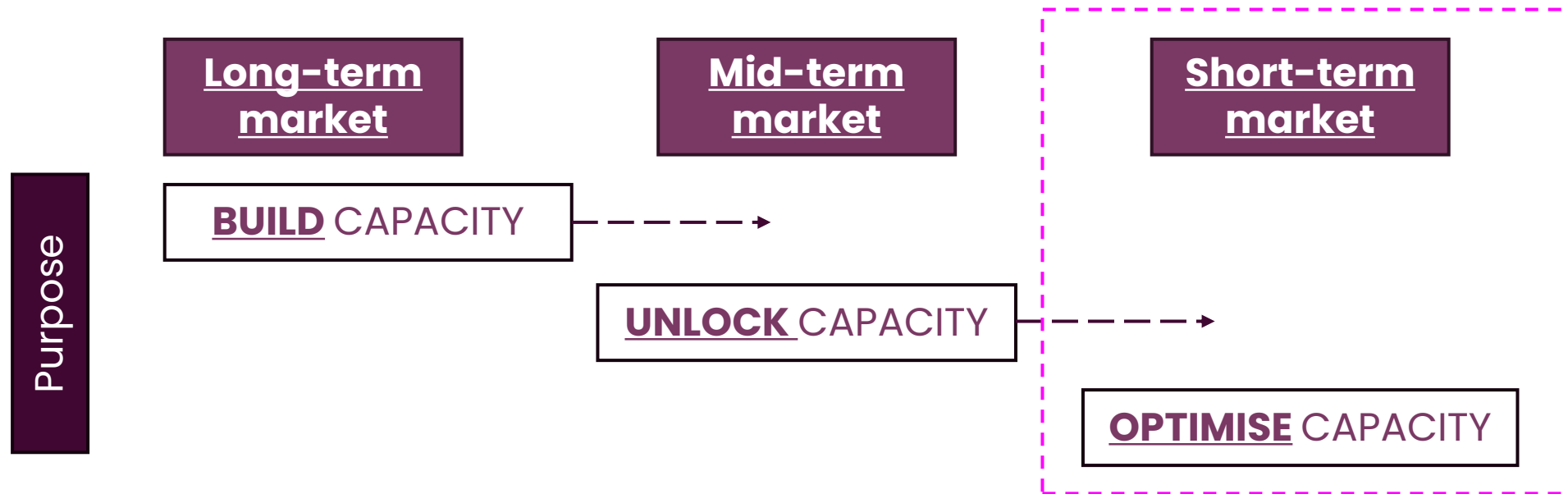
NESO's analysis on the Short-Term Reactive Power Market



Next steps

# What was the intended function of each Reactive Power Market?

Each market has its own discrete purpose:



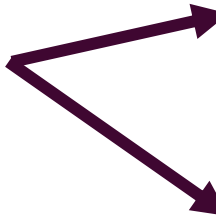
The Short-term market was designed for flexible assets that have the ability to optimise their reactive power capacity within day and move between markets based on price signals.

For more detail on our reactive power markets, please see our [website](#).

# Purpose of the Short-term Reactive Power Market

## Problem statement

1. Reactive power requirements are increasing
2. Requirements can fluctuate daily and we need tools to address this
3. The Balancing Mechanism can be high cost and high carbon



## Short-term solution

Secure additional MVar capability

Provide mechanism to 'fine tune' MVar requirements

Provide a competitive alternative to the Balancing Mechanism (BM)

Accessing MVars without active power (reducing need to rebalance the system)

# What has the analysis shown?

No net-consumer benefit, owing to limited liquidity

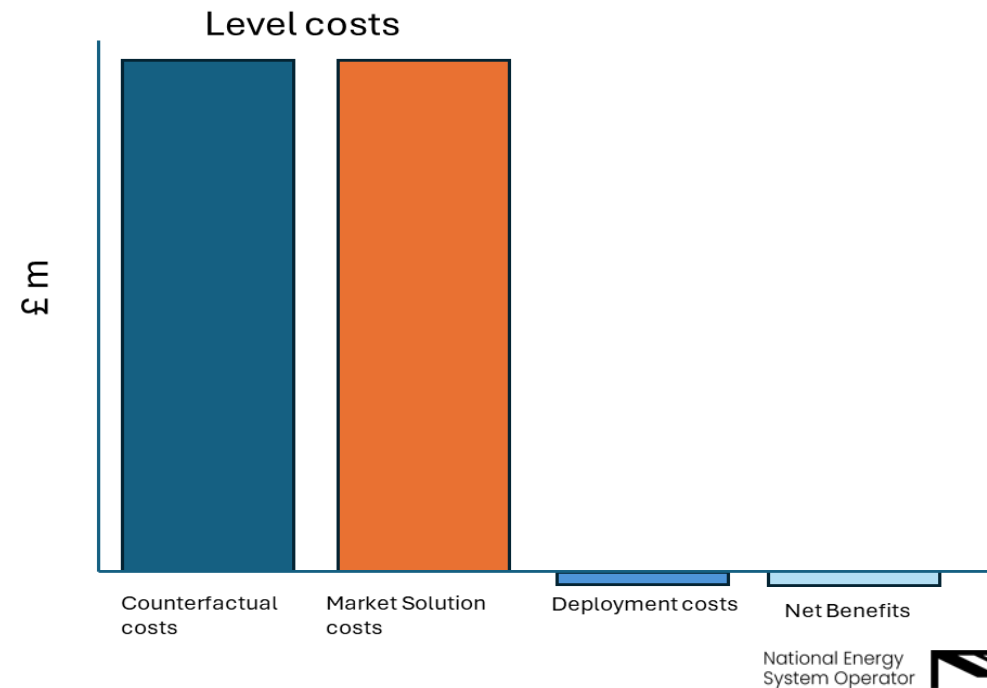
## Cost Benefit Analysis (CBA)\*

Total counterfactual cost — Implementation cost — Procurement cost = Economic benefit

### Assumptions

An optimistic assessment, consisting of:

- Best case scenario for BMU availability
- Assets located in high-cost locations
- Assets assumed willing to participate
- Assets assumed to submit prices lower than the counterfactual
- Implementation costs



\* Our CBA methodology can be found in the appendix

# What has the analysis shown?

## Limited net-consumer benefit, owing to limited liquidity

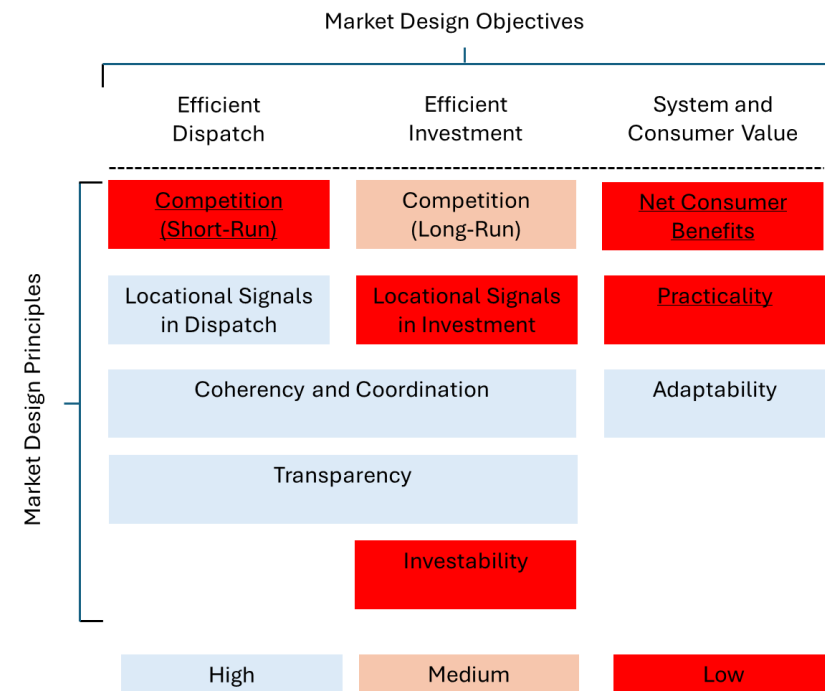
NESO has undertaken assessments to assess the efficacy of implementing a short-term reactive power market under the current market landscape

## Market Design Framework (MDF)

### Assessment

Qualitative and quantitative evidence used to determine scores:

- Whilst there were merits to the concept of a D-1 market, these were overshadowed by low scores.
- Low scoring on net consumer benefits, practicalities and competition (short-run)



# What has the analysis shown?

## No net-consumer benefit, owing to limited liquidity

NESO has undertaken assessments to assess the efficacy of implementing a short-term reactive power market under the current market landscape

### Results

Under present market conditions:

- The CBA demonstrates no net consumer benefit
- The MDF also demonstrates limited benefits

Nonetheless, it was shown that the concept could have value.



### Considerations

This decision causes no issue to system security despite the increasing reactive power need, as:

- D-1 market wouldn't unlock additional capacity
- The Long-term and Mid-term Reactive Power Markets, BM and Schedule 7a trades are all available to ensure requirements are met

Given that there may be value, we are proposing to re-visit our decision in 2027 at the earliest.

# Next steps

**Analysis has shown that now is not the optimal time to implement.  
We will revisit this decision in 2027 at the earliest.**

There are currently several programs which will influence our reactive power requirements.

These include, but are not limited to:

- The introduction of our Mid-term market
- Outcome of Ofgem's ED3 methodology
- Addition of new assets onto the network
- ORPS Code Modification Proposal (CMP457) and subsequent implementation



**Revisit the decision in 2027**

# Key indicators for a successful Short-term market

## What do we need to see in order to implement?

Theme	What does good look like?	How are we measuring this?
Market liquidity	High liquidity, competitive landscape and confidence in lower consumer costs	Connection tracker analysis
		Control room feedback
		Spend on synchronization costs
		ORPS Code Modification Proposal CMP 457
Reactive power requirements	Confidence in there being a requirement for a short-term reactive power market	Outcome of Ofgem's ED3 methodology
		Implementation of the Mid-term market

Sitting behind these key indicators are a range of detailed and measurable metrics.

If these are met, this will instigate a review of the implementation of the D-1 market.

We would welcome your views on these metrics – have we missed anything?

## Q & A

# Next Steps

Stakeholders are invited to:

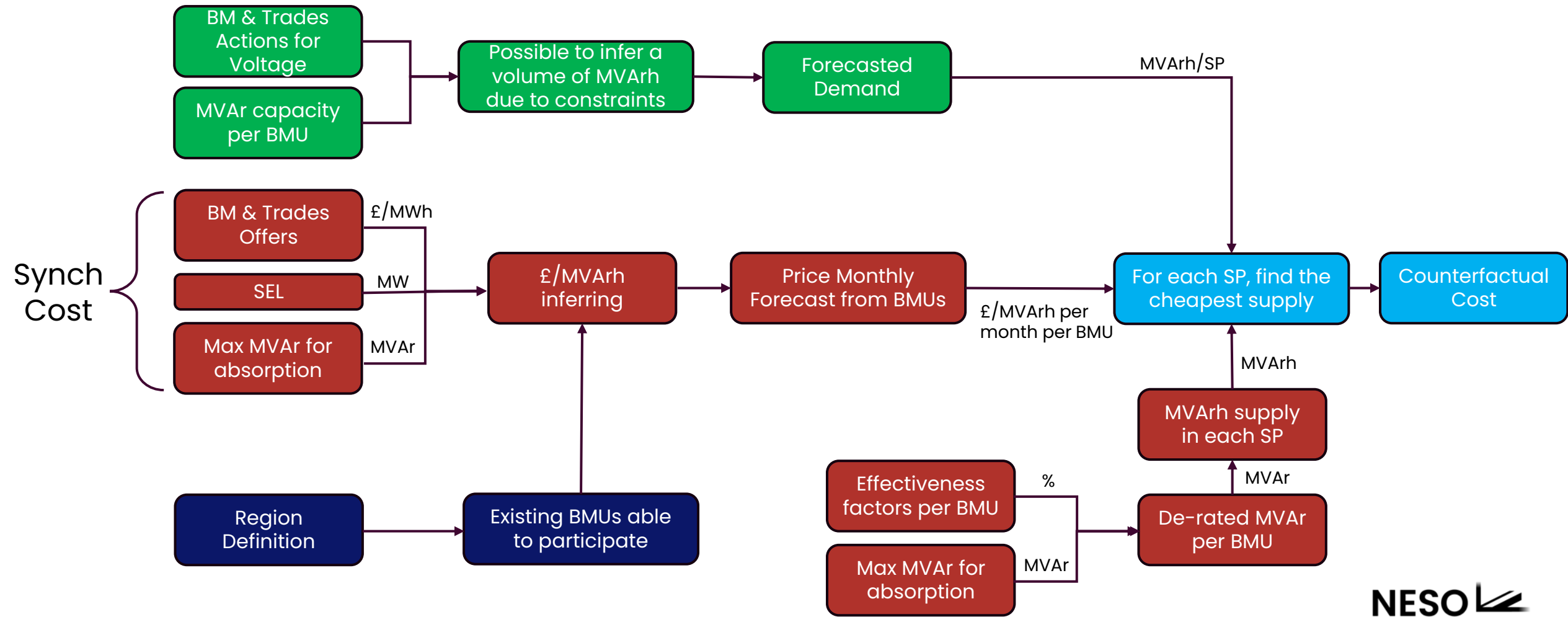
- Provide any feedback on the proposed metrics, either
  - On this call using the Q&A function
  - Or, email us at [box.futureofbalancingservices@neso.energy](mailto:box.futureofbalancingservices@neso.energy)
- In 2027, we'll be revisiting the short-term reactive power market and will update industry on our recommendation

# Thank you for joining the Short-term Reactive Power Market Webinar

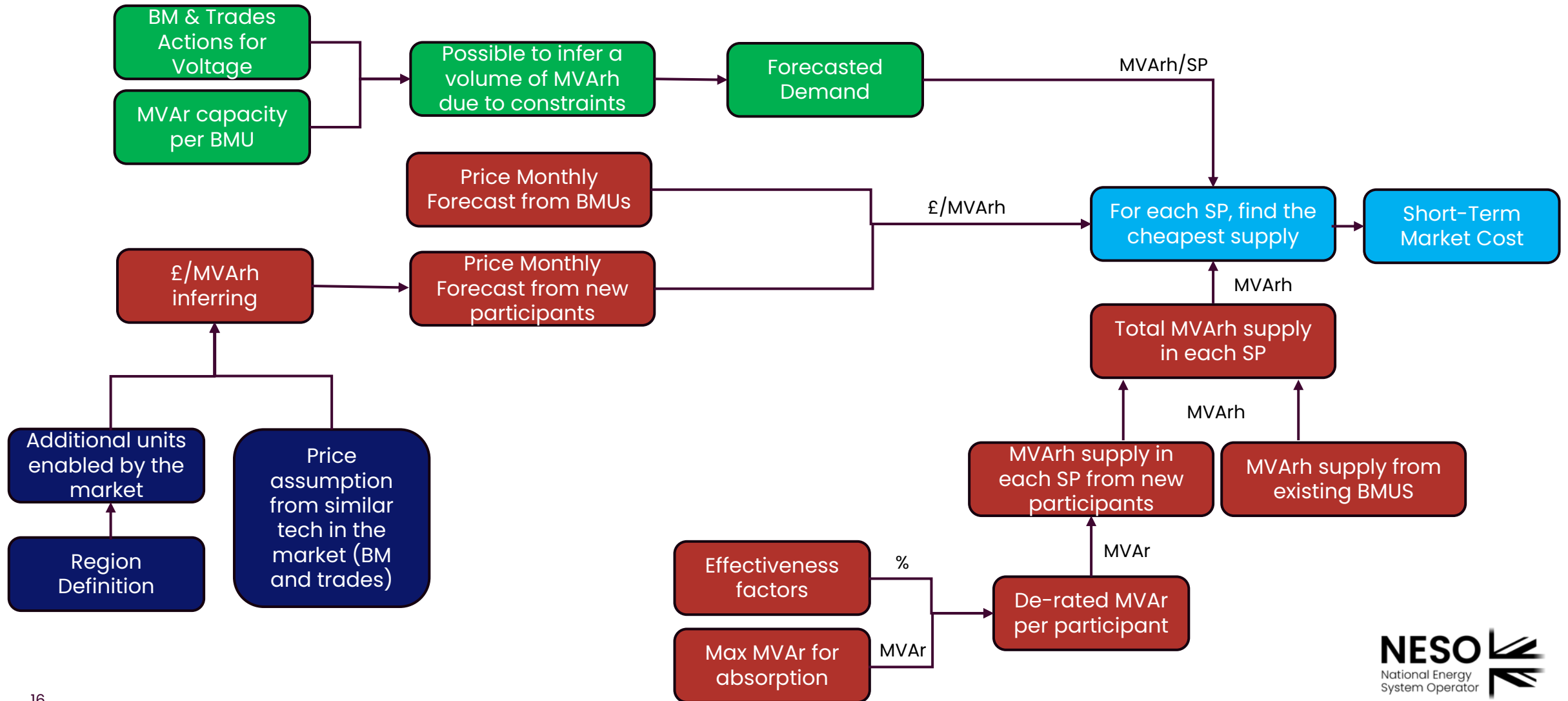


# Appendices

# Counterfactual Costs














# Short-Term Market Cost



# Future Reactive Power Market Design Overview

## Summary of proposed reactive power markets

		Long Term (Y-4)	Mid Term (Y-1)	Short Term (D-1)
 <p>Purpose</p>		<ul style="list-style-type: none"> <li>- Aims to secure new investment at locations where NESO has identified requirements</li> <li>- Procure capacity in advance and signal the need for new assets with long-term contracts</li> </ul>	<ul style="list-style-type: none"> <li>- Aims to secure additional MVAR capability from existing assets that have existing capability which is in excess of mandatory Grid Code obligations</li> </ul>	<ul style="list-style-type: none"> <li>- Aims to secure additional MVAR capability from existing assets that have existing capability which is in excess of mandatory Grid Code obligations</li> </ul>
 <p>Timeline</p>	Procurement lead time	- Y-4	- Y-1	- D-1
	Contract duration	- 10+ years	- 1 year	- Service windows
 <p>Product</p>	Contract type	- Baseload availability	- Baseload availability	- 4 h (EFA blocks)
	Contract obligations	- e.g. 90% availability	- e.g. 90% availability	- 100% availability
 <p>Eligibility</p>		 <b>Incremental investment</b>  New build dedicated plants	 <b>Incremental capability</b>  Enhanced capability	 <b>Incremental investment / existing capability</b>  Existing assets
 <p>Pricing</p>	Payment type	Availability payment £/MVAR/SP	Availability payment £/MVAR/SP	Availability payment £/MVAR/SP availability + utilisation £/MVAR/SP at ORPS
	Price mechanism	- Pay-as-bid	- Pay-as-bid	payment rate - Pay-as-bid

# Reactive Power: The Wider Landscape

## Meeting our reactive power requirements

