

Rapid Frequency Response



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Rapid Frequency Response

- What is RFR?
 - Capability delivered within 5 seconds
 - Can be Static or Dynamic Low Frequency response
 - Rapid High Frequency response could also be of benefit
- When is it Required?
 - Total demand <30GW
 - High levels of asynchronous generation
 - Largest generation loss = 1800MW

Rapid Frequency Response

- How much do we need?
 - Analysis is ongoing
 - Calculated using offline spreadsheet
 - Increasing asynchronous generation means an increasing requirement that is likely to require dynamic modeling
- How do we procure RFR?
 - Mandatory Market using FRPS
 - Firm Frequency Response tendered service
 - Bilateral contracts

Rapid Frequency Response

■ Other Considerations

- Interaction with current primary frequency response
- Impact on Inertia requirements and effectiveness against RoCoF issue
- Economic despatch – impact on control room systems

■ Next Steps

- Procurement and despatch of Mandatory RFR to be developed in conjunction with the BSSG ahead of Grid Code Obligations
- Procurement options for Commercial RFR to be developed by National Grid and presented to the CBSG