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</p>
 - 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