Emergency STOR



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Emergency STOR

Volume Requirements – Up to 20% of overall demand 24/7

■ Minimum demand level ≈ 20 GW ≈ 4GW

■ Maximum demand level \approx 60GW \approx 12GW

■ Availability Cost of existing STOR service ≈ £6/MW/hr

Minimum Requirement \approx 6 x 4000 x 24 x 365 \approx £210m/year

■ Maximum Requirement \approx 6 x 12000 x 24 x 365 \approx £630m/year

Providers may be willing to accept a significant reduction in the availability rate for a service that is only utilised during emergency conditions, but even an availability rate of $\frac{1}{MW}$ would give a cost range of $\frac{535m}{105m}$ per year.

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- Would there be sufficient volumes available on a 24/7 basis?
 - A provider would need approx £2.60/MW/hr for 24/7 availability for the same level of income as the current STOR service, so unlikely that existing providers would "swap" to this service due to the potential lower income levels
 - The current tendered volume is less than 6GW.
 - Of the 2.8GW currently contracted only approx 45% (1250MW) are "Demand Side"; only 5% (140MW) are true load reduction.
 - Many existing providers would not be available 24/7
 - An increase to the current availability price may be required to attract the additional volumes required.

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- Conclusions
 - Significant year-on-year cost implications.
 - Unlikely to be sufficient providers available.