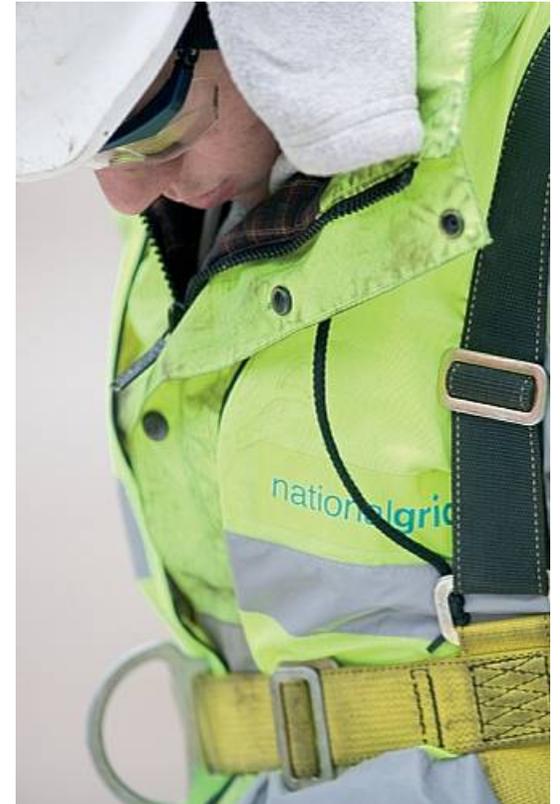# Frequency Response Options

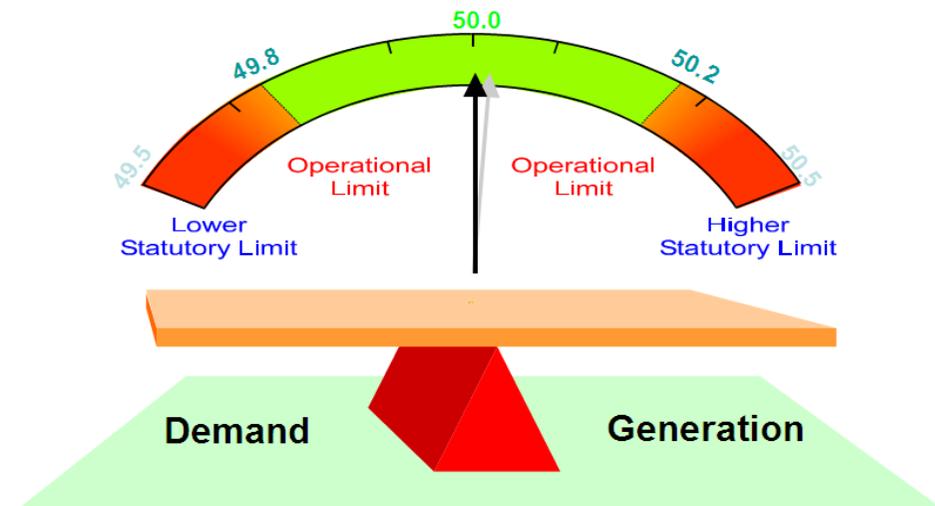**Malcolm Arthur, 8th July 2010**

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Main themes of options

◆   Responsibility for maintaining system frequency

◆   Is an obligation required?

◆   Should requirements be tradable?

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Responsibility for maintaining system frequency

◆ Current obligation to maintain frequency is with the SO

◆ How can this obligation be in place without the ability to provide response volumes?

◆ Could maintaining frequency levels obligation be transferred to other party / parties?

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Is a Grid Code obligation required?

- How does the SO maintain frequency without Grid Code obligation on system users?

  - Remove / move obligation i.e. obligation is a reasonable endeavours to maintain

  - Self provide response

- No obligation has a much higher potential to result in response volume deficit resulting in security issues

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Should requirements be tradable?

- Some benefits to providers

- Requires improved monitoring of response delivery

- Requires improved 'market' management tools

  - Who is providing on behalf of who?

  - Who is in 'response imbalance'?

  - Who is residual response balancer?

  - What would happen to costs?

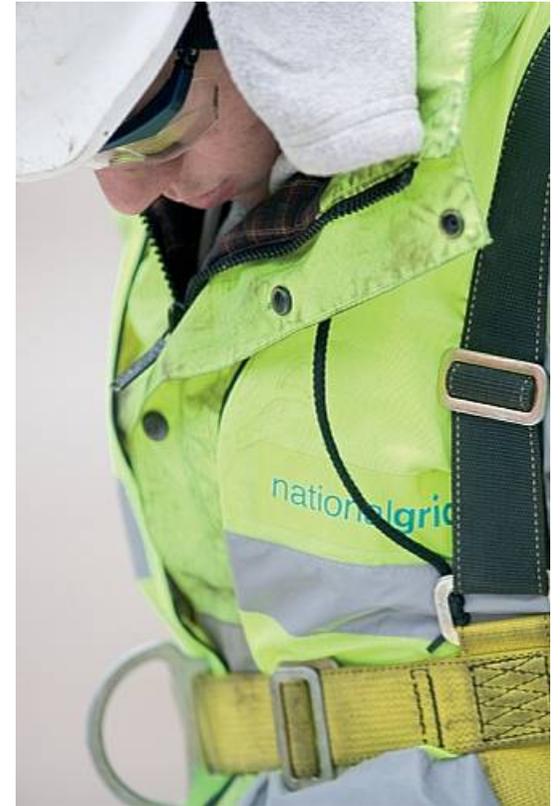**nationalgrid**
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My Conclusion

As long as SO has an obligation to maintain frequency, Grid Code obligation is required

Alternative is for SO to self provide response volumes

Tradable capability / delivery can provide some benefits but also requires an increase in monitoring and market complexity

6

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