BSSG – 15 April 2008

Agenda

- Introductions
- Recap
- Frequency Response
    - Draft CUSC modification - Definition of response payment calculation
        - Impact on industry
    - Publication of capability matrices
    - Publication of excluded / included providers
    - Grid Code clarification change with primary response
    - Commercial information provision
- Reactive
    - Update
    - Grid Code definition for new providers
    - Next steps

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BSSG – Frequency Response HF at SEL

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Frequency Response – HF at SEL capability

- Response capability curves are based on deload from MEL according to the CUSC

- For HF response where capability tends to zero at SEL this results in an incorrect capability when MEL is reduced.

- During periods of low demand (i.e. overnight) we find that if MEL is redeclared the HF curve is pushed through SEL resulting in an artificially high HF capability.

- Next slide shows an example:

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Frequency Response – HF at SEL capability

♦ This shows a typical response capability curve. The P, S, H capabilities are anchored at MEL. This means that as MEL moves downwards the curves also move downwards. Next slide shows what happens to HF as MEL moves downwards….

Typical 0.5 Hz Mode A Response Capability (x axis by MW Level)

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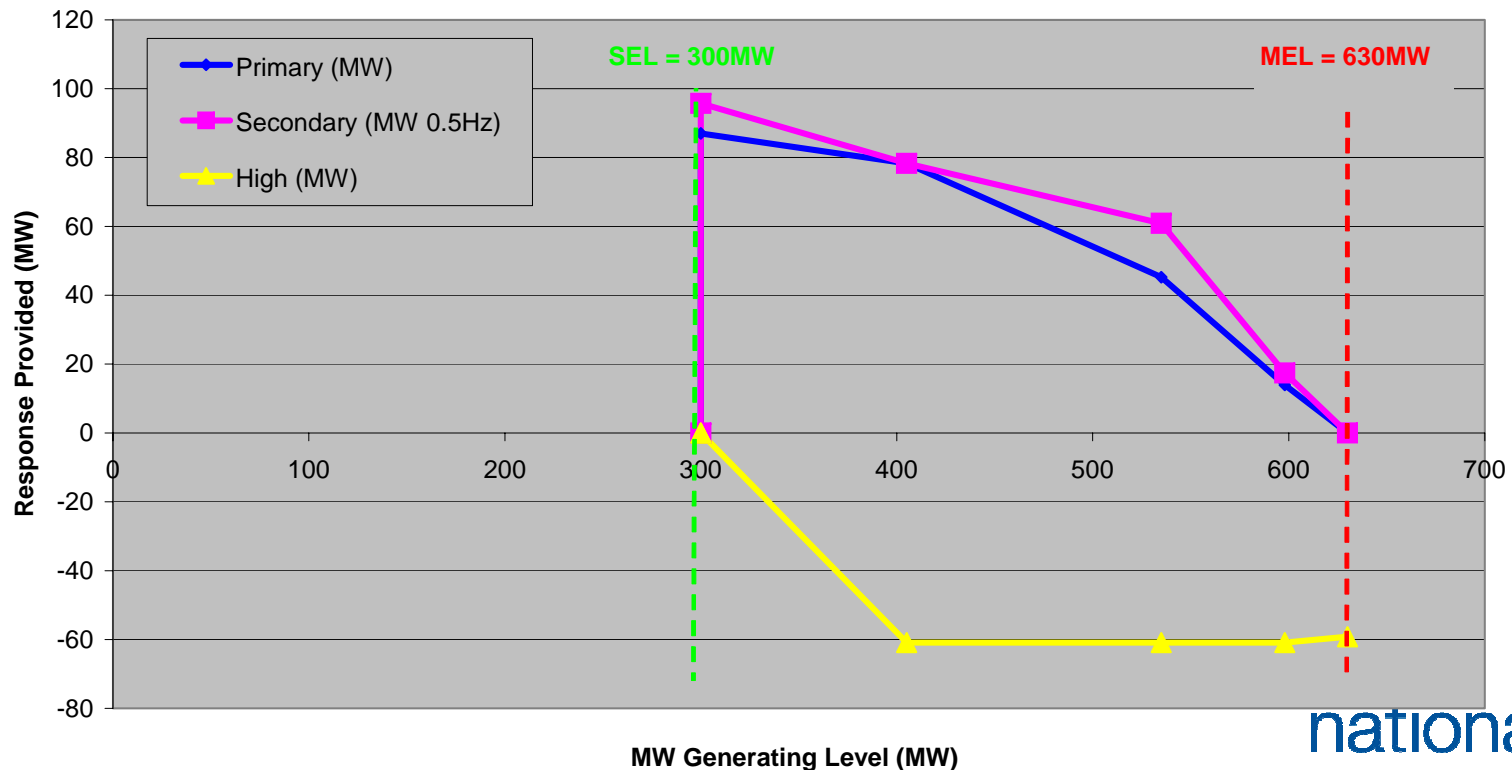
Frequency Response – HF at SEL capability

- ◆ This graph shows what happens to the yellow HF curve as MEL is redeclared 100MW downwards. For an operating point of about 325MW the capability with MEL at 630 is the true 10MW. As MEL is redeclared the capability increases from 10MW to 60MW (the true HF capability is 10MW).

Typical Mode A Response Characteristic by MW Level
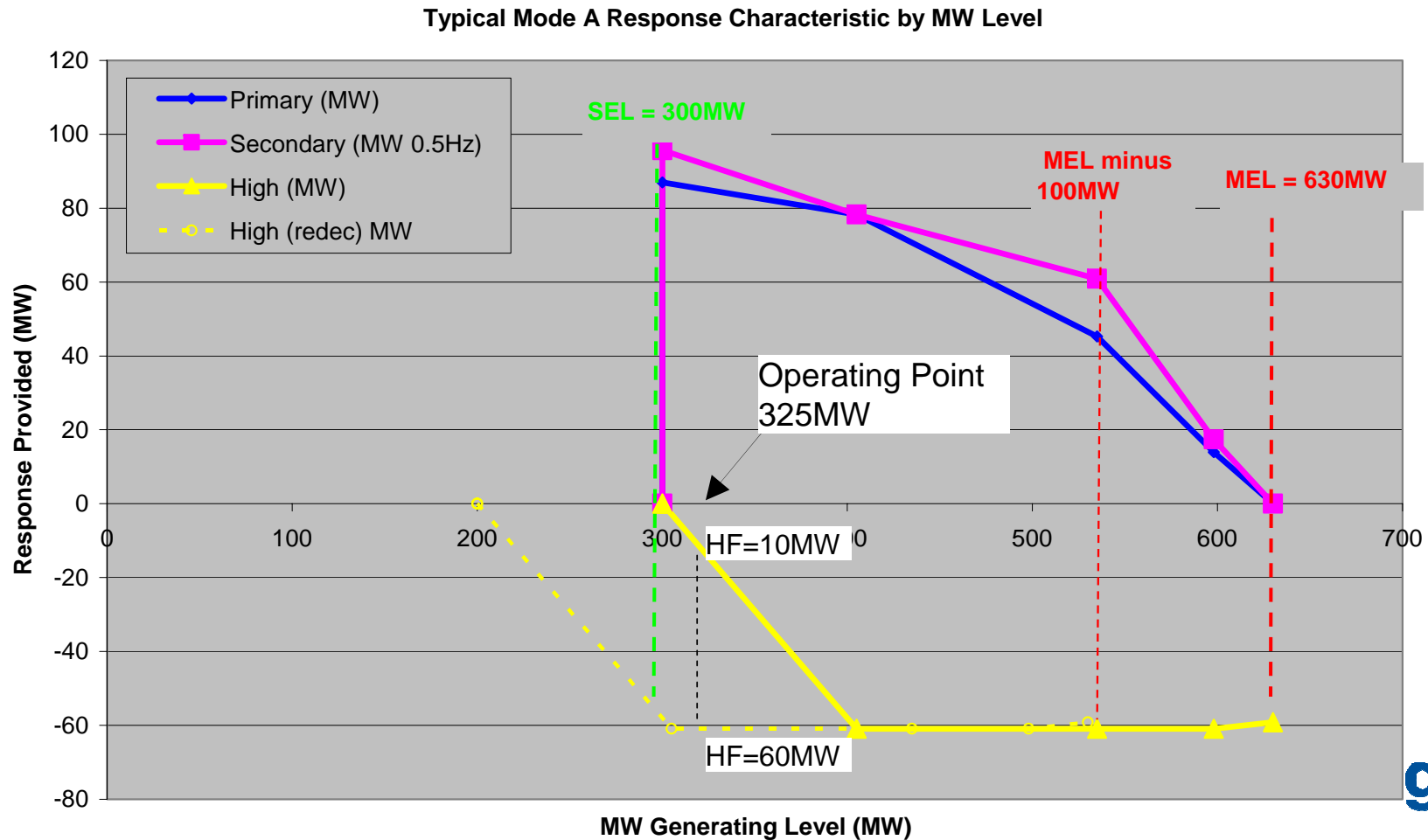
Frequency Response – HF at SEL capability CUSC Financial Implications

- Financial Implications
    - Using post Cap047 information
    - Based on settlement payments where the load point is within 10MW of SEL (green in table below)
    - Sensitivity to load point has been checked
- In the last full financial year 06-07, it has been calculated that £2.65M of payments were made due to this issue

Range	At SEL £M	Central (10MW) £M	Upper (20MW) £M
1 Nov 05 to 30 Sep 07	4.31	5.39	6.74
06-07 BSIS year	2.12	2.65	3.31
07-08 BSIS year (forecast Oct 07-Mar 08)	1.96	2.45	3.06

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Frequency Response – HF at SEL capability

- Draft CUSC proposal anchors the HF curve only (not LF) to SEL rather than MEL.

- This would require a CUSC modification to Section 3.2.4 Balancing Services.

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Frequency Response – HF at SEL capability

- Impact on industry participants
    - Impact on settlement systems
    - Impact on generator control system?

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Frequency Response

- Information
  - Capability matrices
    - Process being considered internally
    - Internal review of the information provided
    - Looking to get consistency across all services
  - List of providers 'included' in FR assessment
    - Develop list of providers who are 'considered' when calculating FR requirements
    - Issues being considered internally – some concerns with current process limitations

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Frequency Response

- Information
  - Reporting of BOA costs
    - Request to publish BOA costs for the month
    - Costs reported in the FFR Market Report

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Reactive

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Reactive Power

- The Grid Code Rated MW Working Group would formally request that the BSSG considers the following questions:
  - If there was a reduction in the technical requirements for the mandatory provision of Reactive Power, from 0.85 to 0.90 on the lagging side, could the market support the procurement of the 'shortfall' of MVArs via an appropriate 'commercial/market mechanism'?
  - Could the market support the procurement of MVArs for a 0.85 lagging transient (post fault) requirement? If yes, what would be the market arrangements?
  - Consider any other commercial arrangements that would permit generating units to operate above Rated MW whilst not having an obligation to operate outside of the envelope defined by the current performance chart (e.g. MW de-load contract)
- It would be appreciated if the Grid Code Working Group could receive confirmation as to whether the BSSG will be able to instigate a formal review to answer the questions posed and (if yes) an indicative timescales for the progress of such a review.

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AOB

- BSSG ToR
  - Mandatory only
  - Is there a case to extend the ToR to commercial procurement?
  - How will this effect the governance?
  - Are there any other relevant forums?

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