DSM Dispatch Conditions

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Introduction

- Proposals in place affecting the dispatch of DSM
- Most notably, shift to unlimited hours of dispatch per year
- Also of relevance
  - Minimum notice period of dispatch: 4 hrs to 2 hrs + day before notice (best endeavours) of probable dispatch

Agenda

- Conditions for dispatching DSM as a class
- The order of individual DSP dispatch
- Implications of moving to unlimited availability

What are ‘reasonable grounds’

Identified cases

- Maintaining the Spinning Reserve Standard
  - In effect 70% of largest unit Ò240MW
  - A high risk state automatic if Spinning Reserve Standard not met
  - Ready Reserve Standard may be important – but may be met by DSPs
- A fuel supply disruption whereby:
  - Its anticipated that later all available resources will be required
  - DSPs are dispatched ahead of Generators to preserve fuel stocks
- Notice periods
  - DSPs dispatched prior to Scheduled Generators with shorter lead times.

Not a significant change to order - All situations coincide with, or precede times, when all other resources may be exhausted

Problem of short-term uncertainty

- At time of dispatch (e.g. 2 hrs before required) there is uncertainty as to if, and how much, DSM required
- If DSM dispatched and there is subsequently an oversupply, then likely Scheduled Generators used to balance
- Currently – no rules that limit dispatch of DSM for this uncertainty

Proposal:

Agenda

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The order of individual DSP dispatch

Harmonisation proposals make individual DSP dispatch more important

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Currently

- Order determined by Non-Balancing Dispatch Merit Order (NBDMO)

- Rules require NBDMO determined by IMO according to:
  1. Lowest Consumption Decrease Price (which is nominated by DSP)
  2. Largest load registered in Standing Data
  3. In case of a tie a random allocation

- Additional rule
  - System Management selects Non-Balancing Facilities in accordance with the Power System Operation Procedure (PSOP)

Rank based on registered load problematic

- Some perverse effects
  - Could result in larger facilities being dispatched more often
  - May give incentive to split DSPs to reduce load size

- No benefit. Load size of little importance
  - Since RC_2010_29 loads aggregated into DSPs
  - Improved dispatch telemetry and dispatch processes should make load size less relevant

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Implications of moving to unlimited availability

- As DSPs last on dispatch order, unlimited availability doesn't change the likelihood DSPs will be required
- By design unlikely that in any single year all available capacity resources will be required to meet security
- Significant dispatch of DSPs dependent on coincident forced outages e.g. Feb 2011 but bigger scale.

In the unlikely disaster scenario

- For DSPs to be called a large number of hours
  - Disaster would need to be significant
  - Due to the nature of demand, a disaster so large as to caused forced curtailments during peaks

In the unlikely disaster scenario (continued)