

## **Power Available Options Discussion**

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# What a system operator needs to know from a generator

- Information required from a generator to manage real-time scheduling and despatch
  - Forecast Power Output
    - Needed to manage 'short term' balancing
    - Sets baseline for balancing services (eg frequency response)
    - Error impacts on efficiency of balancing process
  - Regulating Range
    - Maximum and minimum output
    - Baseline for Reserve (upwards and downwards)
    - Forecast error impacts on reserve
  - Regulating rates
  - Prices
  - Actual Output

#### What we get now...

- Physical Notifications MW and Times
- Maximum Export Limits MW and Times
- Dynamic Parameters (static data)
  - Stable Export Limits
  - Run Up Rate/Run Down Rate etc
- Bid/Offer Data
- Power vs Windspeed Curve
- Wind Speed
- Metered Output

#### **Option – No Change**

- Physical Notification (PN)
  - Can be no less than 60 minutes old
  - Data format is restricted to MW and spot times
    - Can this represent wind based PPM output?
    - How significant is the timing induced error?
- Maximum Export Limit (MEL)
  - Can be varied in shorter timescales
  - Can be used to 'cap' PNs
  - Obscures balancing service capability
  - Bid/Offer volume potentially unrepresentative
  - Same data format restriction as PN is this relevant?
- Technical and Commercial rules understood
- PNs cannot be revised within gate
- Capping with MEL does not convey the information required
- Could PNs and MELs provide adequate information with a change of mindset in data submission (ie more frequent changes)?

#### **Option – Power Available**

- First question, 'what is it?'
- Indication of maximum <u>achievable</u> output
  - Variation 1 real-time or forecast plus real-time
  - Variation 2 distributed or centrally processed
- Potential replacement (supplement?) for MEL parameter
- Facilitating changes within gate minimises forecast error (MEL can already do this!)
- Gives a good upper measure of headroom for reserve and balancing service purposes (ditto)
- Opportunity to address limitations of current data format
- Indication of planned deviation from MEL still required
  - PN still needed?
  - PN only needed on occasion?
  - PN deemed equal to Power Available unless otherwise submitted?
  - Key parameter for balancing services

#### **Option – Shorter BM Window**

- Current rules apply with the exception of timescales
- BM window still of finite length
- Impact on fundamentals of schedule and despatch processes
- Variations PN redecs, different windows for different technologies etc