Chapter 5: Non-Marginal Flagging

Non-Marginal Flagging

- Non Marginal Flags (FNMs) are determined by testing if a unit is against its physical output limits;

- Similar to SO Flags, Unit level NM Flags are determined by the System Operator at the end of the Indicative Operations Schedule process:

  - These are then sent to the MO who maps the unit level flags to the bids and offers of the unit.

- The Market Operator also applies FNMs to all but the latest action for the unit:

  - The marginal energy action represents the last action taken by the System Operator to balance the system. Therefore, earlier actions on units cannot be the marginal energy action.

Non-Marginal Flagging

- A Plain-English explanation of these tests is as follows:
  - For each unit:
    - If the unit's scheduled output is at its Minimum Stable Generation; or
    - If the unit's scheduled output is at its Maximum Generation; or
    - The unit's scheduled output is at a level which represents the maximum change possible when ramping from the scheduled output in the previous period;
  - Then the unit is NM Flagged.

- "Flagged" means the value for FNM is zero;

- If the unit is flagged, then all of its Bid Offer Acceptances are flagged. If the unit is not flagged, then all but the latest of the Bid Offer Acceptances are flagged.

Non-Marginal Flagging

- The marginal action is action that satisfies the rule:
  - Cost of Next Action = Cost of Action Taken (Assuming the Net Imbalance Volume does not occur at a breakpoint, which is extremely unlikely);
  - Actions at system or unit limits are not the marginal action.
- Example:
  - Net Imbalance Volume of 80MWh,
  - Unit A inc'd to Min Stable Gen of 100MWh @ 100 €/MWh,
  - Unit B dec'd from Max Availability by 20MWh @ 60 €/MWh
  - If NIV went up or down, Unit B would move.
  - Unit B satisfies the rule cost of next action = cost of action taken
- **Rules: Flag all actions at unit limits i.e. Min Stable Generation, Max Availability or Ramping Limits.**
- Non-Marginal Flagging Rules intend to capture all instances where the cost of the action taken ≠ cost of the next action, based on unit constraints:
  - A unit with a scheduled output at its Minimum Stable Generation, Maximum Generation, or at a certain level due to being constrained by its ramp rates Non-Marginal Flagged;
  - This is captured through rules which test the unit's Lower and Higher Operating Limit Quantities in the schedule. HOL and LOL are the minimum or maximum level of scheduled output possible for the unit considering its output position in previous periods and the unit limits, including its ramp rates.

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