

IWEA response to the Wind Dispatch-Down Reports

7th March 2016

IWEA welcomes the opportunity to comment on the "Wind Dispatch-Down Reports – Proposed Methodology for Calculating Curtailment and Constraint".

The dispatch down of wind energy, and the appropriate allocation between constraint and curtailment, is of significant importance to the wind industry. In particular in light of the SEM Committee Decision to remove compensation for curtailment from 2018, it is essential to ensure that there is no over-allocation of curtailment to dispatch down events. The decision to remove compensation for curtailment will have considerable implications for wind energy projects, in particular those out of support and in Northern Ireland, as well as a significant impact on the Public Service Obligation Levy. The RES Directive outlines a requirement to minimise curtailment of renewable generation. By removing compensation for curtailment, the signal to minimise curtailment is being removed from those best place to manage it. The incentive to reduce Dispatch Balancing Costs will then focus on the reducing constraints, and IWEA is concerned that the proposals outlined could have the impact of re-flagging constraint events as curtailment.

IWEA has the following general comments on the proposals:

- IWEA welcomes the proposal to provide reporting one month after the relevant quarter. It is important to ensure that these timelines are adhered to.
- IWEA welcomes the provision of additional information as outlined in Section 3.3.2 of the paper. The provision of raw data is critical for operators and is something which we had previously requested. The provision of the reason codes is welcomed. Clarity is required that the provision of Dispatch down instructions will also include the removal of a constraint/curtailment so that the start and end of each event is clear.
- IWEA welcomes the inclusion of DSO reductions and the Developer reductions in the new reporting format.
- IWEA request that, in addition to the Quarterly value columns at the end of the report, a current "Year-to-Date" column be added to the report.
- IWEA requests that the report caters for time spent in different categories. It is possible that over the period of a report, a windfarm could be in both category (1) and category (2), and the detail associated with each of these would be very useful and show the benefit of being in category (2) over category (1). Consideration could be given to having separate reports for each category where applicable.
- IWEA requests that the general All Island, ROI and NI information be made publicly available. This allows potential investors to view the real levels of constraint and curtailment which are on

the system and to take this into account in their investment decisions. It will also provide some evidence of the progress of the TSOs and DSOs ongoing efforts to minimise curtailment and constraint e.g. through DS3 and network developments.

• IWEA welcomes the commitment to reviewing the reporting methodology again in Q1 2017.

Comments on the Horizontal Slicing Approach

IWEA has concerns in relation to the Horizontal Slicing Approach put forward in the proposed methodology. In the <u>Annex – System Operator Ruleset distinguishing Constraint and Curtailment</u> the following application of dispatch down is outlined:

"For the avoidance of doubt, if there are multiple control decisions that need to be made, at a given point in time, for curtailment and constraint reasons, the constraint decisions must be dealt with first. When the constraint has been dealt with any remaining wind farms that need to have their output reduced will be curtailed."

Therefore, IWEA considers that where a constraint is applied, this takes precedent over the curtailment event and should be flagged as such. IWEA is of the view that, where a constraint is applied, even if curtailment has already been applied, the constraint becomes binding and the entire dispatch down should be treated as a constraint. This constraint would still need to be applied even if the curtailment instruction was removed, and therefore it should be flagged as such.

In the case of a curtailment being applied where a constraint is already in place, IWEA believes that the horizontal approach should be used in that instance. This takes into account that the constraint is applied first, as outlined in the System Operator Ruleset distinguishing Constraint and Curtailment, and is treated as such, while the additional dispatch down required for curtailment is minimised.

Using the example provided in the consultation document, the above approach would look as follows:



Time	Available Active Power	Dispatch Instruction	Total Constraint	Total Curtailment
15:00	47	NA	0	0
15:30	47	CURL 30	0	(47-30) = 17
16:00	47	LOCL 25	(47-25) = 22	0
16:30	47	CURL 20	(47-25) = 22	(25-20) = 5
17:00	47	LOCL 15	(47-15) = 32	0
20:30	47	LOCL 27	(47-27) = 30	0

When a curtailment is applied, the curtailment flag is applied for the portion which has not been constrained. When a constraint is applied, this overrides any existing curtailment flag.

IWEA has also given consideration to using a Vertical Slicing approach, however this comes with the similar issues to the Horizontal Slicing approach, where, in the event of a curtailment instruction following a constraint instruction, the constraint would not be counted as required in the System Operator Ruleset distinguishing Constraint and Curtailment. This also runs the risk of over allocating curtailment to the dispatch down quantities.

In particular the consultation document states that "a curtailment removal is limited by the lowest active constraint Dispatch Instruction, therefore this methodology **may calculate a volume of curtailment even though a curtailment has been removed**". This clearly outlines the potential for overestimation of curtailment. In the absence of compensation for curtailment, and the System Operator Ruleset distinguishing Constraint and Curtailment, IWEA notes that **this is wholly inappropriate**.

Constraints and Curtailments

There are a number of examples of current operational network constraints occurring where the assumptions made during constraints analysis were more optimistic than what is now applied in the operational phase. This is as a result of multiple margins for error being applied in real time. IWEA believes that smarter, more efficient use of the network could be made and requests that the system operators carry out a review of this to ensure that accurate constraints reports are issued, that the use of existing system assets is maximised and consequently unnecessary constraints are avoided.

Additional Comments

EirGrid have recently kicked off a piece of work to assess optimising the use of existing connections, this may result in a move away from assessing sites based on the minimum of installed capacity (MW) and Maximum Export Capacity (MW), this should be considered in this piece of work and Section 3.3.1 "Wind farm Capacity" should be open to adjustment in advance of next year if required.

- The consultation paper outlines that the one minute SCADA MW signal of the available active power (AAP) received from the windfarm will be used in the calculation as this real-time signal received from the windfarm is used by the Wind Dispatch Tool when calculating the level of prorata dispatch up to be applied to an individual windfarm. Confirmation is required that the real time data is used, and not the AAP at the time of original dispatch down.
- IWEA would like clarification around the raw data time periods, specifically we seek confirmation that the period for the raw data aligns with the current time period of 00:00 to 00:00 that is used in the SEMO report.
- IWEA seeks clarity on how the proposed reporting system reconciles a frequency dispatch event on a wind farm, particularly as a sample of one minute is being used for the Actual Output measure.
- In addition to the reconciliation calculation, IWEA seeks clarity on how regions will be used within the Wind Dispatch-Down Tool and how the general rulesets are deployed. We request more information on this, possibly through an explanatory document on the tool or a webex demonstration.

In summary, IWEA welcomes the opportunity to comment on the "Wind Dispatch-Down Reports – Proposed Methodology for Calculating Curtailment and Constraint". The dispatch down of wind energy, and the appropriate allocation between constraint and curtailment, is of significant importance to the wind industry. In particular in light of the SEM Committee Decision to remove compensation for curtailment from 2018, it is essential to ensure that there is no over-allocation of curtailment to dispatch down events. The provision of this information to industry is of utmost importance and it is essential that the information is provided in a reasonable timeframe and that the timelines outlined in the paper are adhered to.