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Further guidance on representing BOAs in performance baselines

This document explains how providers should incorporate BM BOAs into their performance data baseline submissions to the ESO.

The issue

Some providers of DC are incorporating BM BOA adjustments to their baseline in a way that results in performance monitoring scores that do not reflect the actual DC performance of the unit.

Section 4 of the BM stacking document (included at the end of this document) anticipated this issue and suggested that providers use their 'discretion' when incorporating BOAs into their baseline.

Provider interpretation of this optional 'discretion' differs, and this document aims to clarify.

The key principles:

- Baselines (both Operational and Performance) should accurately represent the natural state of the unit without delivery of DC (e.g. assuming frequency is at 50Hz +/- 0.015Hz)
- Performance monitoring will be based on the BM-adjusted baseline e.g. the PN + any BOA
- ESO reserves the right to investigate any differences between Operational and Performance baselines and any suspected unwarranted manipulation of Performance data

Advice for incorporating BOAs

Providers are permitted to pre-process or clean their Performance Data before submission to ESO.

This means that the Performance baseline can and should reflect the actual delivery and deviation from any BOA, not just the BOA instruction.

For example, a unit may experience a lag between the time-stamp of a BOA instruction and the unit's actual change in active power. In this case the actual delivery of the BOA (i.e. including the lag) should be represented in the Performance Data baseline submission to ESO.

Providers should not use pre-processing to artificially increase their apparent performance in delivery of DC or mask any underperformance.

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Performance data submissions

Performance data is submitted through an API service as CSV files. The operational baseline needs to be adjusted to reflect the BOA. Providers should add/subtract the BOA quantity from their original operational baseline.

In the future, we intend to add an additional column to the performance reporting file specifically to record delivered BOA quantities. Any changes such as this will follow the normal consultation approach before being implemented.

The table below illustrates how an operational baseline of 0MW may be updated to reflect a BOA acceptance. The unadjusted baseline would normally be flat at 0MW.

unit	t	f_hz	baseline_mw	p_mw	soe_import_mwh	soe_export_mwh	availability
ABCDE	2020-08-04T12:29:00.850Z	50.0	0	0	25.0000	25.0000	1
ABCDE	2020-08-04T12:29:00.900Z	50.0	0	0	25.0000	25.0000	1
ABCDE	2020-08-04T12:29:00.950Z	50.0	0	0	25.0000	25.0000	1
ABCDE	2020-08-04T12:30:00.000Z	50.0	0	0	25.0000	25.0000	1
ABCDE	2020-08-04T12:30:00.050Z	50.0	-0.0208	-0.0208	25.0000	25.0000	1
ABCDE	2020-08-04T12:30:00.100Z	50.0	-0.0416	-0.0416	25.0000	25.0000	1
ABCDE	2020-08-04T12:30:00.150Z	50.0	-0.0624	-0.0624	25.0000	25.0000	1
ABCDE	2020-08-04T12:30:00.200Z	50.0	-0.0832	-0.0832	25.0000	25.0000	1
ABCDE	2020-08-04T12:30:00.250Z	50.0	-0.1040	-0.1040	25.0000	25.0000	1

Point of instruction

BM BOA instructions are timestamped with a granularity of minutes. However, we acknowledge that units with 0 or 1-minute NDZ can receive a BOA after its point of instruction. E.g. a BOA with an instruction to start at 12:01:00 may be received anywhere up to 12:01:59. For this reason, and to encourage the use of 0 and 1-minute NDZs which provides value to ESO, we propose that providers use their discretion when incorporating the BOA into their baseline. The guiding principle should be that the reported baseline is an accurate representation of what the asset was doing without any response provision.

In the case where a BOA stamped to start at 14:02:00 was received at 14:02:37 (for example), we would accept an operational baseline that included this BOA change at any point between 14:02:00 and 14:03:00 - not constrained only to the minute boundary. The BOA will be submitted by NGESO in-line with the unit's run-up and run-down rate parameters, the adjusted baseline should reflect this. Imbalance arising from not following a BOA will be treated in the normal way - providers may wish to consider this when following a BOA instruction and representing this in their operational baseline. As it stands with regards to performance monitoring, we will not penalise any small differences between the operational baseline and the BOA-adjusted FPN.