

P376 WORKGROUP 3 SUMMARY – 3 MAY 2019

Summary

Baseline characteristics

The Workgroup considered some baseline examples given by the Proposer. It noted that often balancing service instructions are given ahead of time and so providers will begin adjusting volumes before the start of the delivery window. The Workgroup noted that TERRE does not include provisions for providers to be paid ramping costs, but commented that the effect of volumes delivered outside of the window should be considered as it could have an unintended impact on the Net Imbalance Volume (NIV) by lengthening the market. Some Workgroup members questioned whether this was an issue related to P376, as P376 was concerned about creating expected usage, rather than delivered volumes which would be outside of scope. It was noted however that ramping and preparing for delivery would contaminate settlement periods so would need to be taken into account in certain baselining methodologies. The subject of ramping was agreed to be looked into in more detail at the next Workgroup meeting.

A Workgroup Member questioned whether it would be appropriate to apply baselines to export Meters, or whether it should be restricted to import Meters, as this could result in inconsistent treatment of generation. The Proposer believed that the same principles would apply, and that there should be nothing to prevent a baseline flipping between import and export when considering the site as a whole. The Workgroup considered that very few sites would face this problem, but that any solution shouldn't be restrictive and should be given further consideration.

The Workgroup considered the different characteristics exhibited by different methodologies and noted that some are biased towards demand reduction. It therefore commented that bias and product types should be considered when choosing the preferred baseline. One Member commented that the assumption that days with the highest usage would be reflective of event days would need to be confirmed and commented that high prices when margins were tight may result in reduced volumes. The Workgroup should consider how event days are calculated and what other factors may result in Parties amending their usage outside of normal patterns and if event days cover this.

The Workgroup discussed the consequence of a site not returning to its expected usage for significant periods of time after providing a balancing service (or for example it shifts its demand to a following day). It was suggested that Settlement should only be concerned with the delivery window and ramping periods, but there was no certainty on how to define when the post period ramp. As it was unlikely that ELEXON would have access to data more granular than Half Hourly (HH), it would need to consider these ramping periods that may be much shorter. The Workgroup noted that baselines were used under the Capacity Market and commented that ELEXON should further investigate the justification for using that particular methodology. It also commented that robustness would be more critical to the P376 solution as it was likely that the baselines would be used more often as it expected the balancing services to be called upon more frequently.

The Workgroup looked at the results of the [KEMA investigation into baselines](#). It noted that the report identified four methodologies and 3 adjustment techniques that were comparable and effective. The Proposer suggested that one of these be used as the default baseline, and expressed a preference for the 10 of 10 method as this is shown to be accurate and robust while being appropriate to both load decreases and increases. The Proposer highlighted that this detailed report identified limited differences between the methodologies and all were shown to be robust.

Ensuring robustness

The Workgroup heard two examples of gaming in other markets that used baselines, but was given assurance that most existing baselines have been set up to mitigate this risk. For this reason, the Proposer would prefer to adopt an existing tested baseline rather than defining a new baseline methodology. Another way to ensure robustness is to test that a baseline can accurately reflect a site's usage using root mean squared analysis. Typically this would look at a year's worth of data, but the Workgroup considered that where this quantity was not available, a shorter period could be used, with regular checks to provide assurance, so as to not delay participation. A Workgroup Member thought that if a participant wanted to use a baseline solution, then the onus should be on them to demonstrate that such a baseline accurately reflects typical usage. The Workgroup noted that all the baselines considered in the workgroup had been used and assessed in other markets, but questioned whether it was possible

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for ELEXON to undertake any analysis to demonstrate that the same was true under GB arrangements. ELEXON agreed to investigate what the availability of necessary data and baselining models which would be required to undertake the evaluation of baselining methodologies.

Administration processes

The Workgroup considered what registration processes would be needed for using baselines. One Member commented that there should be tests as part of registration to provide assurance that a baseline accurately represented a sites typical usage. Would this be done as part of the registration process or could a user select a methodology and its accuracy is assessed after the event? The same applies for existing sites moving to a different methodology. It was also suggested that dynamic parameters would need to be provided as responding to one event may affect a provider's ability to respond to a subsequent event.

The Workgroup agreed that allowable baselines should be written in a subsidiary document with a prescribed governance process for sites that wish to use a bespoke baseline. It agreed that there should be a default baseline that would apply to most sites. The Workgroup also thought it would be useful to produce general guidance on what sort of sites typically suit a particular baseline.

There was discussion around whether baselines should be calculated at asset or BM Unit level. In other markets general consensus is that it is better to baseline at meter level and aggregate to form a BM Unit baseline, but one Member argued that where assets were of the same type (e.g. EV), it would seem reasonable to create the baseline at BM Unit level, arguing that if a specific site had an erratic load, this would be smoothed out across a large enough sample. The Proposer expressed caution in this approach, believing it to be unique.

The Workgroup questioned whether baselines could only be applied to Boundary Meters, or whether P375 would enable baselining for asset level metering. It was agreed that it could apply for both, and baselining could be used to provide assurance for the asset metering solution under P375.

The Workgroup noted that ELEXON would need data on when balancing services were provided and by whom, so that these days could be omitted from baseline calculations as they would not be representative of 'normal' operations. ELEXON agreed to look into how it could obtain this data.

The Workgroup noted that other markets use baselines as the default position, with people wanting to submit FPNs being required to demonstrate that they are able to submit accurate FPNs for a period before they can use this method. The Workgroup did not consider that this approach should be adopted, but commented that a consultation could seek views on this.

The Workgroup noted that creation of baseline values was typically done by the Market operator, and that it would be relatively straightforward to write this into the SAA systems. If multiple baselines were permitted then there may need to be thought over how this would be indicated.

Outstanding questions to answer (actions)

What period should ramping extend to and how should these volumes be considered for Settlement?

What adjustment window will ensure accurate baselines while preventing gaming?

Can the baseline solution be applied to export volumes, or will the solution be limited to demand reduction?

What dynamic data will participants need to provide as part of the registration process to allow the solution to work efficiently?

What analysis can ELEXON do to provide additional assurance that any chosen baseline will provide accurate data?

What will be the governance process for approving additional baseline methodologies?