ELEXON

BSC SANDBOX IMPACT ASSESSMENT AND CONSULTATION FOR EMERGENT ENERGY

Elexon's Impact Assessment and a public consultation on Emergent Energy's BSC Sandbox application

Public

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Contents

Emergent Energy Proposal

Emergent Energy propose to employ proprietary technology to perform an ‘’on-site aggregation’ calculation on Private Wire Networks. Currently, the aggregate boundary meter reading for each Private Wire Network is submitted into settlement and allocated to the energy account of the registering Supplier. Some customers on the network have exercised their right to be supplied by a Third Party Supplier. The readings for these meters are submitted to settlement by the Third Party Supplier’s Agents, but also contribute to the aggregate boundary meter reading.

The effect of the current scenario is that consumption volumes are being double counted, because difference metering is not being applied to the Boundary Point Metering System. This means that the Supplier for the site’s boundary meter is being charged imbalance for energy they did not Supply. Additionally, the submitted data will be distorting GSP Group Take volumes, resulting in incorrect profiles being applied to the areas affected. The effect of each individual Private Wire will be small, but in aggregate the effect could become material.

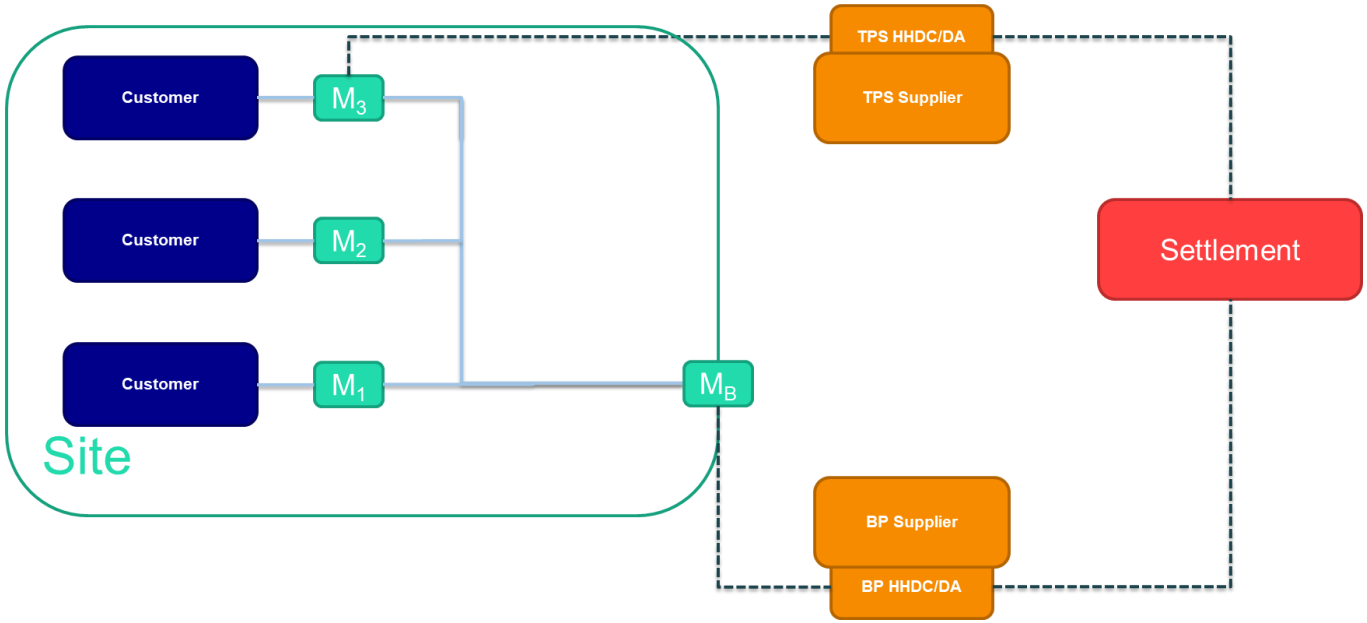
The existing BSC solution for this scenario is to establish a difference metering meter splitting arrangement via BSCP550, or to utilise a ‘full settlement’ metering solution. However, the BSCP550 difference metering solution is time consuming and expensive to set up. This is particularly the case where there are multiple Third Party Suppliers. It is also not of any direct benefit to the Third Party Suppliers, and therefore they are not incentivised to participate in the process. Additionally, customers would have to be settled Half-Hourly, reducing the choice of Suppliers and increasing costs prior to the implementation of Market-Wide Half Hourly Settlement. The ‘full settlement’ solution means that customers connected to the Private Wire Network cannot benefit from netting against on-site generation, and would have to pay system charges for that generation even though they are not using the Total System. Additionally, not all customers are currently using fully CoP10 compliant metering and would need to upgrade their metering equipment.

Each customer Supplied by the Private Wire Network’s boundary point Supplier has their own metering, with half-hourly consumption data available and currently used for retail billing. Emergent Energy propose to use this data to aggregate and submit into settlement, in lieu of the reading from the site’s boundary meter. This volume will therefore not include the volumes supplied by Third Party Suppliers, correcting the data submitted into settlement. Emergent Energy are effectively acting as a Data Retriever for the site, with DC functions provided by a qualified DC.

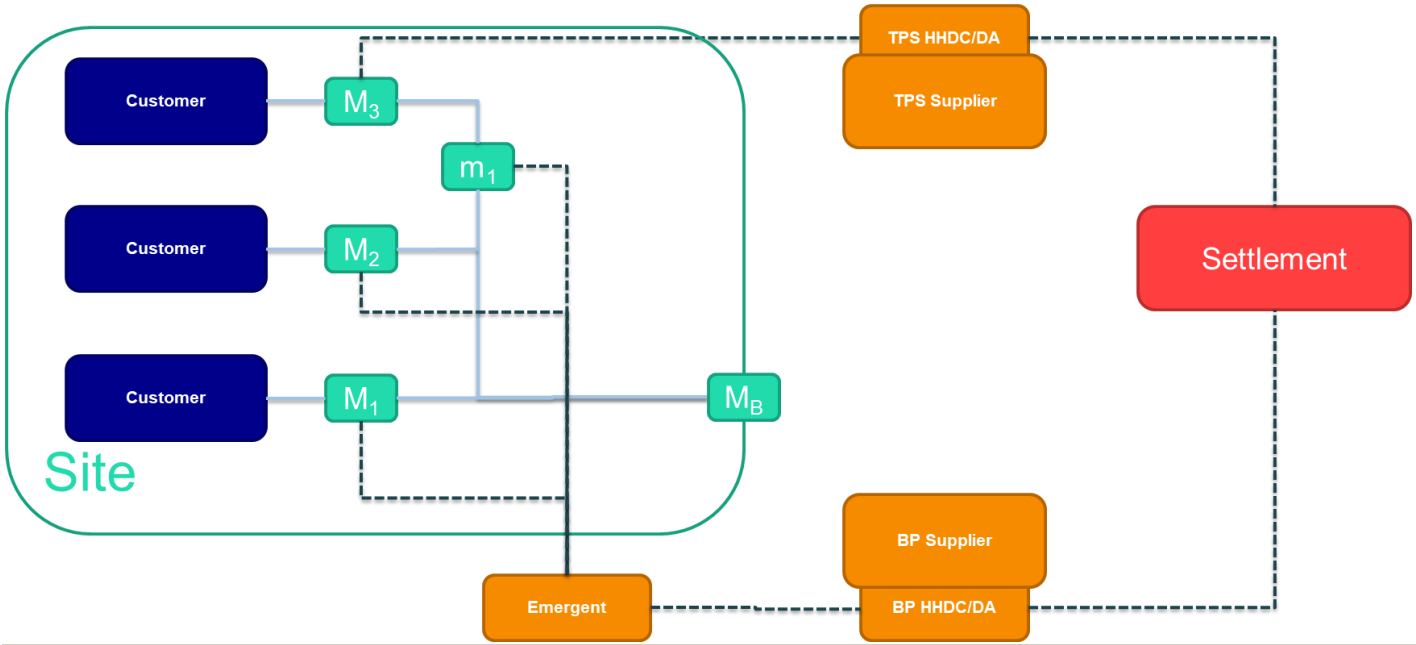
An enduring solution is likely to entail introducing a new type of differencing arrangement for private wire networks. This solution would permit the aggregation of consumer meters instead of a boundary meter readings or a ‘full settlement’ solution. The solution could be limited, based on the customer classes involved, the size of the site, and other such requirements. It may also introduce a new, formalised role for retrieval and processing of data for complex sites, which could have utility in applications beyond the one being trialled.

The next page contains a diagram illustrating the proposed arrangements. Customers are metered via meters M_1, M_2 and M_3 and the boundary is metered via M_B. The customer behind meter M_3 is supplied by a Third Party Supplier (TPS) while customers behind meters M_1 and M_2 are supplied by the Boundary Point Supplier (BP). Currently, the BP Supplier is submitting the reading from M_B into settlement, while the TPS is submitting the reading from M_3 into settlement, resulting in a total recorded settlement volume of $M_1+M_2+2xM_3$. Emergent Energy’s proposal is to collect data from meters M_1 and M_2 and submit them in aggregated form into settlement in lieu of the MB meter reading. For the purposes of the trial they will be conducting an initial proving test by obtaining data from M_3 directly from the meter or from an in-line measuring device (m_1). This will check that $M_1+M_2+m_1 = M_B$, which enables adjustments for losses and any unmetered landlord supplies on the site.

Current Arrangement



Proposed Arrangement



Draft Elexon consideration of Impacts on other Parties

Elexon are required to provide a view on the impacts that operating the derogation will have on other Parties. This consideration is distinct from our consideration of the risks to settlement of operating the derogation.

We understand that currently delivered electricity is being double counted on the sites in question. This results in minor deviations to GSP Group Correction Factors (GCF) and therefore a minor negative impact on all Parties. The operation of the derogation in accordance with our suggested monitoring will result in correct volumes being submitted to settlement. This will result in a minor positive impact on BSC Parties overall, as GCFs become more accurate.

We do not believe there will be any negative impact on any other Parties from the correct application of this derogation. The derogation does not result in any changes to any other Parties, nor does it affect the settlement volumes of any other Parties. The trial is effectively self-contained, affecting only the operations of the Supplier supplying the boundary point of the Private Wire Network. We do not believe it has any ability to impact on the operations of other Suppliers. One interaction we have identified is where other Suppliers operating as Third Party Suppliers at the site attempt to enter into a differencing arrangement for the purpose of Supplying a customer as a Third Party. As the differencing arrangement necessitates an interaction between the Third Party and the Boundary Point Supplier, the Third Party Supplier would at that point become aware of the derogation and be able to operate at the site without establishing a differencing arrangement.

We understand that the current Third-Party Suppliers of customers on the private networks may not be Supplying them in a way that is fully compliant with the BSC, in particular by failing to establish Difference Metering with the Private Network Operator to ensure that Settlement for the site as a whole is correct. We do not have sight of these arrangements or the lack thereof, and this trial does not propose to address any potential non-compliance in this area.

Consultation questions

1. How, if at all, will you be impacted by the operation of the proposed derogation outlined in this document? Please refer to the draft Elexon consideration of Impacts on Other Parties (in this document) and the draft Emergent Energy Elexon Risk Assessment.