Open Networks WS1B
Product 1: Investment Planning

7 December 2020
Product Description & Background

Description
This aim of this 2020 product was continue further development of the Regional Network Options Assessment (NOA) methodology. This would build on learnings from both the market based trials initiated by the 2019 work and be informed by the outputs from the NGESO pathfinder projects in the Pennine and Mersey areas. These outputs would deliver an updated version of the CBA methodology included in 2019s Engineering Report. This would further facilitate the assessment of a full range of build, non-build and flexibility solutions.

The product also intended to track the work initiated by the 2019 product on funding mechanisms for whole system solutions. This work is being driven by Ofgem in collaboration with Regulation Managers from network operators across GB. The outcome from this will illustrate how costs can be transferred between parties, and inform the formation of adequate costing frameworks for a range of market and asset based solutions.
Background & Benefits

Background
The 2020 work looked to builds upon WS1B Product 1 work which started back in 2018 and underwent further development during 2019. This product aims to put in place a Whole System methodology for the delivery of efficient and economic investment planning across distribution and transmission networks.

Benefits
The ability to leverage a broader range of solutions to meet the needs of the electricity system and enable the most effective whole system solutions to be implemented.
Sub-deliverable 1A: Market Testing

Review learnings from Mersey & Pennine High Volts pathfinders

The pathfinder projects to date have had broad customer participation in providing a range of technical and commercial solutions to transmission issues that would, in the past, only have been resolved by transmission owner solutions. These developments have not been without challenges where we see the learning by doing approach of the Pathfinders teasing out specific issues. These issues are in two broad groups, ‘funding’ and ‘level playing field’, both of which arise for different participants due to a combination of licensing, frameworks and levies that exist within the industry. Throughout the coming months further feedback will be given on attempts to address the funding challenges and how ways to level the playing field are being addressed, seeking to generate the best possible outcome for consumers.
Sub-deliverable 1A: Market Testing

An overview of the charging challenges identified that they create a barrier to a level playing field for the NGESO NOA Pathfinder competitions. The majority of charging discrepancies are created where a new type of provider, 0MW connections (reactors/ sync comps, etc.), is participating. These assets would traditionally be TO owned infrastructure assets and have not been explicitly considered under existing charging arrangements. They have been treated as demand connections, meaning that demand TNUoS and BSUoS apply.

<table>
<thead>
<tr>
<th>Challenge to level playing field</th>
<th>ESO identified solution</th>
<th>Change process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted Charging Review implementation (impact on 0MW connections)</td>
<td>Modification(s) to remove 0MW connections from final demand definition and TDR liability</td>
<td>CUSC modification(s)</td>
</tr>
<tr>
<td>BSUoS Taskforce implementation</td>
<td>Same modifications as above could resolve this discrepancy</td>
<td>CUSC modification(s)</td>
</tr>
<tr>
<td>Retail vs Wholesale Cost of Energy</td>
<td>Identify process or modification to create process that removes energy position of 0MW connections</td>
<td>BSC or CUSC modification</td>
</tr>
<tr>
<td>Final Consumption Levies</td>
<td>Same solution as retail vs whole cost of energy</td>
<td>BSC or CUSC modification</td>
</tr>
<tr>
<td>Funding successful DNO solutions</td>
<td>Review of similar processes (directly remunerated services) followed by discussion with Ofgem</td>
<td>TBC</td>
</tr>
</tbody>
</table>
Sub-deliverable 1B: Whole System CBA

Update CBA to include market based solutions

In order to further inform the current CBA methodology there is a requirement for the current tender processes in the Pennine and Mersey areas to conclude. As per the previous slide due to ongoing challenges pertaining to ‘level playing field’ and ‘funding’ these initiatives these are taking longer than anticipated to conclude.

Lesson learnt have been developed from the 2019 Mersey voltage tender which will feed into the development of the Pennines voltage tender. The key lessons are detailed in the following slide and will inform areas for process improvement that will be seen in future tenders, in so doing improving the tender CBA.
Mersey Voltage Tender Lessons Learned

In November 2019, and as part of the ongoing Open Networks product development work, NGESO published a tender for the Mersey High Voltage pathfinder. This project which would compare commercial solutions with network owner solutions for the first time. The contract opportunity was for delivery of a reactive power service over a nine-year term starting in April 2022 and welcomed participation at both transmission and distribution levels. As part of that process there were a number of lessons learned, summarised as follows, with a full lessoned learnt document forthcoming on the completion of the contracting process.

For future pathfinders, NGESO will:

- Engage earlier with network owners to understand network limitations;
- Review the commercial assessment methodology between commercial providers and regulated network owners;
Sub-deliverable 1B: Whole System CBA

- Not supply extra information or update contract terms, tender principles, or assessment methodology after a certain date;
- Host opportunities for participants to engage throughout the process, including possible post tender discussions to clarify our expectations of what should be included in the tender submission;
- Be clear on what information will be shared and when, and what assumptions will be used, such as generic vs site-specific;
- Be clear on the costs and charges expected to be included by participants in their submitted bid; and
- Require participants to submit full and final bids, accounting for any reasonable potential cost exposure.
Sub-deliverable 1C: Industry dependent reviews

Changes/decisions on funding mechanisms to further inform the approach to costing solutions

Following the publication of the ED2 business plan guidance and the recent Sector Specific Methodology Consultation Ofgem have confirmed the use of a Coordination Adjustment Mechanism (CAM). This is currently being written into the licence for Gas Distribution & Transmission companies, with a plan to replicate this for Electricity Distribution.

It is anticipated that Ofgem will look to firm up arrangements and rules for the use of Directly Remunerated Services (DRS) mechanisms for RIIO2/ED2. We expect further engagements on this in early 2021 before a conclusion is reached and published later in the year.