













| CUSC Modification Proposal Form | | At what stage is this document in the process? | | | | | | | | | | | | |
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| <h1 style="color: #00a651; margin: 0;">CMP298</h1> <h2 style="margin: 0;">Updating the Statement of Works process to facilitate aggregated assessment of relevant and collectively relevant embedded generation.</h2> | <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid #ccc; border-radius: 5px; width: 30px; text-align: center; background-color: #00a651; color: white;">01</td> <td style="border: 1px solid #ccc; border-radius: 5px; background-color: #00a651; color: white; padding: 5px;">Proposal Form</td> </tr> <tr> <td style="border: 1px solid #ccc; border-radius: 5px; width: 30px; text-align: center;">02</td> <td style="border: 1px solid #ccc; border-radius: 5px; padding: 5px;">Workgroup Consultation</td> </tr> <tr> <td style="border: 1px solid #ccc; border-radius: 5px; width: 30px; text-align: center;">03</td> <td style="border: 1px solid #ccc; border-radius: 5px; padding: 5px;">Workgroup Report</td> </tr> <tr> <td style="border: 1px solid #ccc; border-radius: 5px; width: 30px; text-align: center;">04</td> <td style="border: 1px solid #ccc; border-radius: 5px; padding: 5px;">Code Administrator Consultation</td> </tr> <tr> <td style="border: 1px solid #ccc; border-radius: 5px; width: 30px; text-align: center;">05</td> <td style="border: 1px solid #ccc; border-radius: 5px; padding: 5px;">Draft CUSC Modification Report</td> </tr> <tr> <td style="border: 1px solid #ccc; border-radius: 5px; width: 30px; text-align: center;">06</td> <td style="border: 1px solid #ccc; border-radius: 5px; padding: 5px;">Final CUSC Modification Report</td> </tr> </table> | | 01 | Proposal Form | 02 | Workgroup Consultation | 03 | Workgroup Report | 04 | Code Administrator Consultation | 05 | Draft CUSC Modification Report | 06 | Final CUSC Modification Report |
| 01 | Proposal Form | | | | | | | | | | | | | |
| 02 | Workgroup Consultation | | | | | | | | | | | | | |
| 03 | Workgroup Report | | | | | | | | | | | | | |
| 04 | Code Administrator Consultation | | | | | | | | | | | | | |
| 05 | Draft CUSC Modification Report | | | | | | | | | | | | | |
| 06 | Final CUSC Modification Report | | | | | | | | | | | | | |
| <p>Purpose of Modification: Due to increasing levels of embedded generation connections the process for assessing their overall impact on the transmission system needs to be revised allowing the System Operator to recognise the changes caused by multiple small scale connections and plan accordingly.</p> | | | | | | | | | | | | | | |
|  | <p>The Proposer recommends that this modification should be:</p> <ul style="list-style-type: none"> assessed by a Workgroup and determined by the Authority <p>This modification was raised on 19 April 2018 and will be presented by the Proposer to the Panel on 27 April 2018. The Panel will consider the Proposer’s recommendation and determine the appropriate route.</p> | | | | | | | | | | | | | |
|  | <p>High Impact: None</p> | | | | | | | | | | | | | |
|  | <p>Medium Impact: DNO's, TO's, embedded generators and the System Operator</p> | | | | | | | | | | | | | |
|  | <p>Low Impact: None</p> | | | | | | | | | | | | | |

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| Draft Timetable | |  Any questions? Contact: Joseph Henry  joseph.henry2@nationalgrid.com  07970673220 Proposer: Rachel Tullis  email address Rachel.tullis@nationalgrid.com  telephone 01926 656 660 National Grid Representative: Rachel Tullis  email address Rachel.tullis@nationalgrid.com  telephone 01926 656 660 |
| <p><i>The Code Administrator will update the timetable.</i></p> <p>The Code Administrator <i>will present a timetable to CUSC Panel on 27 April 2018 for their approval.</i></p> | | |
| Initial consideration by Workgroup | xx/xx/2018 | |
| Workgroup Consultation issued to the Industry (15 WD) | xx/xx/2018 | |
| Modification concluded by Workgroup | xx/xx/2018 | |
| Workgroup Report presented to Panel | xx/xx/2018 | |
| Code Administration Consultation Report issued to the Industry (15 WD) | xx/xx/2018 | |
| Draft Final Modification Report presented to Panel | xx/xx/2018 | |
| Modification Panel decision | xx/xx/2018 | |
| Final Modification Report issued the Authority | xx/xx/2018 | |
| Indicative Authority Decision Date | xx/xx/2018 | |
| Decision implemented in CUSC | 01/04/2019 | |

Proposer Details

| | |
|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Details of Proposer: (Organisation Name) | National Grid Electricity Transmission |
| Capacity in which the CUSC Modification Proposal is being proposed: (i.e. CUSC Party, BSC Party or “National Consumer Council”) | CUSC Party |
| Details of Proposer’s Representative: Name: Organisation: Telephone Number: Email Address: | Rachel Tullis National Grid 07919 394 017 rachel.tullis@nationalgrid.com |
| Details of Representative’s Alternate: Name: Organisation: Telephone Number: Email Address: | Harriet Harmon National Grid National Grid 07970 458456 harriet.harmon@nationalgrid.com |
| Attachments (Yes/No): If Yes, Title and No. of pages of each Attachment: | |

Impact on Core Industry Documentation.

Please mark the relevant boxes with an “x” and provide any supporting information

| | |
|------------------|-------------------------------------|
| BSC | <input type="checkbox"/> |
| Grid Code | <input type="checkbox"/> |
| STC | <input checked="" type="checkbox"/> |
| Other | <input type="checkbox"/> |

It is anticipated that the STC will need to be modified to reflect the changes to CUSC. Possible changes include a revision to Section D, a new schedule and a new STCP. A working group consisting of National Grid SO and the three onshore TO's is to be established and recommend changes to the STC Panel.

1 Summary

Defect

Section 6.5 of the CUSC gives obligations to Users that operate Distribution Systems when connecting Relevant Embedded Small or Relevant Embedded Medium Power Stations. The definition of Relevant Embedded Small (and Relevant Embedded Medium) Power Station currently refers to individual power stations which may have a significant system effect on the NETS with such significant impact being identified as an expenditure of more than £10,000. This reflects single connections, viewed in isolation. Aggregated assessment enables The Company to consider the cumulative effect of multiple embedded power stations which might not, on their own, carry a significant impact to the NETS but when viewed collectively will do so. Following a successful trial – by The Company and relevant DNOs - of aggregated assessment, the CUSC should be updated to introduce this new process, and to expand the concept of 'relevant' to 'collectively relevant' to reflect that embedded power stations may be 'relevant' when considered with other similar power stations. The definition does not explicitly refer to 'no-build' options as potentially being the source of such expenditure, so this would also benefit from clarification.

Separately, there are two erroneous references to "Exhibit S" in relation to Statement of Works in the CUSC currently, specifically in Section 11 definition of "Request for a Statement of Works" and at the End of Exhibit U. These should be corrected.

What

Update Section 6.5 and relevant definitions to facilitate assessment of relevant embedded small, relevant embedded medium, or 'collectively relevant' power stations on an aggregated basis in line with the Transmission Impact Assessment (Appendix G) trials which are currently underway.

Correct the two erroneous references to "Exhibit S" in relation to Statement of Works in the CUSC outlined above.

Why

To allow more efficient operation and management of the system reducing costs to consumers.

How

We propose that amendments are made to Section 6.5 to introduce the option for aggregated applications as per industry Transmission Impact Assessment (Appendix G) trials, introducing a new definition for what is currently known in industry as the 'Appendix G process'. We also suggest that CUSC exhibits currently used for the Statement of Works (and Project Progression) process are reviewed and updated as

required to facilitate the aggregated application and assessment process to be introduced. This may also require clarification of the application fees associated.

We plan to circulate suggested legal text ahead of first workgroup meeting to support discussions.

2 Governance

Justification for Normal Procedures

Normal procedures should apply to this modification as:

1. There is a material impact on The Company who must administer contracts entered into under the CUSC – business practices will be impacted if the trials are to become business as usual.
2. Similarly, there is a material impact on other CUSC parties, particularly Distribution Network Operators, as this process will introduce new obligations and impact business practices.
3. The proposed solution is seeking to expand the concept of ‘relevant’ to embedded power stations which may not have been considered to be ‘relevant’ previously.

Requested Next Steps

This modification should be assessed by a Workgroup.

3 Why Change?

- Embedded Generation (EG) Customers of DNOs have for some time expressed dissatisfaction with the timeliness of information on the transmission impact (both cost and timescales) of their connection applications. This results in them not getting the right information in a timely manner to make an investment decision.
- DNOs have told us that they are not in possession of sufficient information in a timely manner to allow them to provide their customers with a full offer.
- The existing clause was written to allow for low volumes of singular Embedded Generation connections impacting on the transmission system.
- Rapid changes in the industry have led to high volumes of Embedded Generation of varying sizes collectively impacting on the transmission system.
- To assess individual small Embedded Generation in high volumes is both resource intensive and impractical as assessing a new EG whilst many are still in flight in the process leads to difficulty in creating a benchmark background.
- The existing process is not providing the SO and TOs with sufficient visibility of what EG is connecting to DNO networks. This impacts on both investment decisions and also system operability.
- The existing process is built around the assumption that the transmission system will require works (e.g. reinforcement) to accommodate increasing volumes of EG. In working across the SO, TO and DNOs, we are often exploring alternative options

such as operation or technical measures (e.g. ANMs, pf settings etc) to reduce the reinforcement required.

4 Code Specific Matters

Technical Skillsets

Detailed knowledge of the current Statement of Works (and Project Progression) process and Transmission Impact Assessment (Appendix G) trials.

Reference Documents

[Link to ENA Statement of Works Focus Group Presentation on Transmission Impact Assessment \(23 March 2018\)](#)

5 Solution

Given the issue outlined in section 1 of this form we are proposing the following solution:

- CUSC Section 6.5 is to be updated to facilitate assessment of relevant embedded small or medium power stations or ‘collectively relevant’ power stations on an aggregated basis in line with the Appendix G trials which are currently underway:
 - Retaining existing SoW & Project Progression process for where single applications are still required
 - Introducing option for aggregated applications as per Appendix G trials and addressing the current definition of ‘relevant’ which applies to single connections
 - Introducing the high level process between National Grid and DNOs for Appendix G updates (currently outlined in the BCAs for GSPs involved in the trials) i.e. request for assessment, timescales for response and ongoing requirements and timescales for updates and confirmation
- This will require text which facilitates the bypass of the existing process in cases where aggregated applications are sought, but will not amend the existing process given single applications may still be appropriate in some cases. We anticipate that the definition of Relevant will need to be updated to facilitate this such that embedded generation can be ‘collectively relevant’ and added to the Embedded Generation Register. We also propose that CUSC exhibits are reviewed and amended as required to facilitate aggregated applications and assessment.
- CUSC section 6.5 to be updated to make it explicit that the impact of EG may be managed by non-build options.
- Our proposal seeks a solution which has a level of detail on the process between National Grid and DNO users such that responsibilities are clear but does not include unnecessary details of internal processes such that the Transmission Impact Assessment / Appendix G process can continue to improve and evolve without creating the need for regular updates to the CUSC which we would consider onerous for industry.

- Through discussions in the workgroup we would like to ensure that the CUSC solution does not disadvantage any other embedded or directly connected parties.

6 Impacts & Other Considerations

There is potential cross code impact as it is anticipated that there are likely to be impacts to processes governed under the STC. As outlined above possible changes include a revision to Section D, a new schedule and a new STCP. A working group consisting of National Grid as SO and the onshore TOs is to be established and recommend changes to the STC Panel.

Does this modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

We do not believe this modification impacts any areas within the scope of the current SCRs.

Consumer Impacts

A positive consumer impact is anticipated as more efficient process in the operation and management of the system should – all other things being equal - reduce costs to consumers.

7 Relevant Objectives

| Impact of the modification on the Applicable CUSC Objectives (Standard): | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Relevant Objective | Identified impact |
| (a) The efficient discharge by the Licensee of the obligations imposed on it by the Act and the Transmission Licence; | <u>Positive</u> |
| (b) Facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity; | <u>Positive</u> |
| (c) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency; and | <u>None</u> |

(d) Promoting efficiency in the implementation and administration of the CUSC arrangements.

Positive

We believe that, overall, the proposed change will positively impact the relevant code objectives for the following reasons:

- A more efficient process should help the efficient discharge of National Grid’s obligations
- A more efficient process should result in a more timely understanding of transmission impact such that embedded generation have information required to make investment decisions which helps to facilitate effective competition
- This proposal recognises that the process will continue to be refined for some time and as such the suggested solution is one that will not require to be updated often - promoting efficiency in the implementation and administration of the CUSC arrangements.

8 Implementation

As the Appendix G trial is currently underway, and the existing process is to remain in the CUSC, implementation of the change can be done immediately from the decision being made. Costs will be recovered via the application / request process which, as identified above, may require updates to existing CUSC exhibits to facilitate and also clarification of costs prior to implementation.

9 Legal Text

Text Commentary

Suggested legal text for this modification will be circulated ahead of the first workgroup meeting to support discussions.

There are also two erroneous references to Exhibit S in relation to Statement of Works in the CUSC currently that we would also seek to correct:

1. “Request for a Statement of Works” definition in Section 11 refers to Exhibit S instead of Exhibit U so suggest this is changed to

"Request for a Statement of Works" a request in the form or substantially in the form set out in Exhibit U to the **CUSC**;

2. Exhibit U states “End of Exhibit S” instead of “End of Exhibit U” at the end of the document so this should also be corrected.

10 Recommendations

Proposer's Recommendation to Panel

Panel is asked to:

- Agree that Normal governance procedures should apply
- Refer this proposal to a Workgroup for assessment.