SP Energy Networks Design Approval Template Guidance for ICPs

Introduction

The design approval template has been created to help ICP's understand the information required for an LV or HV design approval submission. For EHV design approvals continue to follow the process outlined in CON-04-003 RAdAR Process for Phased Design Approvals.

The template consists of 5 separate worksheets on a Microsoft Excel Workbook with the following tab names:

1. Contents
2. General Information
3. Cables, OHL and LV Services
4. Substation Civils
5. Substation Equipment
6. IDNO Contact Details

1. Contents

Tab 1 contains a basic overview of the template contents and hyperlinks to each tab. **Tabs 2 and 3** are required for all project types. **Tabs 4 and 5** and required where substations are to be installed. **Tab 6** is required where an IDNO will adopt assets.

On the far-right column of **Tabs 2-5** please note the additional embedded guidance documents which have been included to provide further advice and support. These document icons can be double clicked from the worksheet to open. The tabs also contain a list of items we require and the reasons we need them.

The new template allows the SP Energy Networks designer to automatically generate a rejection report by marking items as missing or requiring modification. This will provide you with a consistent format regardless of the designer carrying out the approval. Please note that in the event a design is rejected we would expect to see a copy of this report uploaded with a subsequent design submission. Your comments on actions taken to address the rejection points should be noted against each item. Following this process will help us efficiently review any modified submissions as we'll only need to check the items requiring attention unless you've confirmed other changes have been made. Missing information section headings will be highlighted in yellow and rejection comments section headings will be highlighted in blue.

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2. General Information

An important part of a design submission will be your engineering report. This should ideally be submitted in pdf format and contain the information listed in the General Information tab. To help us achieve the fastest possible turnaround time on checking submissions, please aim to provide all the information requested and state explicitly in your report where items listed are not applicable. Please note that the letter of appointment check detailed in this section will be confirmed at design approval stage, but this letter should be uploaded to RADAR with your POC acceptance as required in CON-04-005 section 11.12.

3. Cables, OHL and LV Services

This tab lists the items of information we require relating to your cables or overhead line routes between the point of connection (POC) and the Point of Supply (POS) which SP Energy Networks will adopt. Details of any assets which form part of associated diversions should also be included. It also outlines the information required for LV services to be adopted by SP Energy Networks.

4. Substation Civils (Projects with Substations)

This tab list several items we require regarding the substation building.

Please note the Civils Design Checklist embedded document which provides additional detailed information. This document should be completed and returned as part of your design submission. If you use standard substation construction specifications, this should only need to be completed once and tweaked for minor changes between projects unless SP Energy Networks' policy changes in the future.

5. Substation Equipment

This tab contains a list of information required to approve the electrical equipment installed inside the new substation building.

Please note that RMU type switchgear will only require a single line diagram (SLD) whereas a panel board design will also require a general arrangement drawing. An example of this is shown on the right-hand side of the worksheet in the examples / supporting guidance column. The process we want to follow is that SP Energy Networks has already approved panel boards with suppliers and the designs / wiring diagrams for this equipment is already approved in principle. Therefore, if you include the SP Energy Networks approved drawing numbers and latest revision number in an information on the general arrangement drawing, this will be sufficient for us to approve the design. We do not need to review bespoke panel / wiring diagrams as these already exist and are in the manufacturer's possession.

NB – If you choose to select a switchgear type which is not listed in the SP Energy Networks approved equipment register, please note that this would not fall under the standard design approval timescales and would need to be referred to the SP Energy Networks Engineering Standards team for approval. This is likely to introduce significant delays to the approval process and subsequent connection in delivery.

6. IDNO Contact Details

This tab contains the IDNO information we require to complete a connection agreement. It won't be applicable if all assets are adopted by SP Energy Networks. If you commonly use certain IDNO's, the information can be populated once and reused for future submissions.