Pre Energisation Data – Information Note

Introduction

When a customer submits an application for connection to the electricity system the information provided generally relates to a project at an early stage in its development which is likely to undergo changes as the project progresses towards energisation. In addition, in many cases since the start of Gate 3, applications have been based on "Assumed Data" only with "Applicant Specific Data" being submitted prior to energisation.

EirGrid carries out a range of detailed studies, such as voltage, short circuit and dynamics studies, before a customer can connect to the Transmission System either directly or via a connection to the Distribution System. The purpose of these studies is to ensure that the connection of that generator will not cause any technical or safety issues. The Applicant Specific Data which is required to complete these studies is known as "Pre Energisation Data" ("PED").

This information note has been developed by EirGrid and ESB Networks Limited (the System Operator(s)) to set out the key principles and process for handling PED to facilitate the customer in complying with their contractual obligations to provide PED in a timely manner. The aim is to clarify for the customer what information the System Operators (SOs) require and what information the SOs shall provide to the customer. This applies to all generating customers.

Key Principals

1. What information is required?

The customer is required to submit accurate technical details for their facility prior to energisation to enable the SOs to conduct their studies. For TSO Customers, the required information is outlined in the "Full Technical Criteria Generation Application Form". For DSO Customers, the required information is outlined in the NC5 Form. Where additional information is required, the SO shall communicate this to their customer at the appropriate time.

EirGrid's requirements for the performance of dynamic models (i.e. to avoid coding problems, etc.) and a description of how these dynamic models are used by EirGrid are available on EirGrid's website.

2. When is PED required?

- Each customer is contractually obliged to provide PED in line with the timeline set out in their Offer Letter or Quotation Letter which forms part of their Connection Agreement. This timeline is generally at least 240 Business Days (one (1) year)[1] prior to the expected energisation date ("Expected Energisation Date"). The customer will notify the SO if they become aware that the Expected Energisation Date is not accurate.
- The project program – including Outage Schedules and Expected Energisation Date – will be advised to and agreed with the customer as part of their individual project meetings
- The Expected Energisation Dates are updated on a quarterly basis per the report published by EirGrid[2] and ESBN[3].
- It is the intention of both SOs to remind the customer of their obligation to provide PED. For the avoidance of doubt, the absence of this reminder does not relieve the customer of their obligation to provide the PED information in line with the timeline set out in the Offer Letter or Quotation Letter.
- In the event that a project was originally assessed based on Applicant Specific Data, the customer is required to confirm that this data still remains valid. If the customer does not provide an update, the SOs will assume that there is no change to this data on which the Connection Agreement was based and it will be used for the studies and a modification to the Connection Agreement is not required.
- In the event that there is a change to the Applicant Specific Data contained in the Connection Agreement, then up-to-date PED is required and the Connection Agreement will have to be modified accordingly.
- In the event that the PED is not provided in line with the customer's contractual obligations, i.e. on time and accurate, or the customer does not advise that the Applicant Specific Data previously submitted should not be used, then this will need to be remedied by the customer as a matter of priority in order for the customer to meet their contractual obligation. In the event that the PED is not provided on time, or is inaccurate, the customer bears the risk of connection delays arising from the outcome of the studies.

3. Modifications

- The SOs shall modify the Connection Agreement to reflect PED free of charge when it is provided on time and is accurate. Where a customer is late in providing PED, or submits inaccurate data that has to be revised later, the modification fee for assessing this 'Applicant

[1] In some cases the specified lead time for providing information is less than 12 months however in the interest of improving the process EirGrid will be seeking the PED earlier. However, in relation to charges and breach of contacts, the contractual leadtimes will be followed.

[2] Available at http://www.eirgrid.com/customers/gridconnections/listofconnectedandcontractedgenerators/

[3] Available at http://www.esb.ie/esbnetworks/en/generator-connections/Connected-Contracted-Generators.jsp

Specific Data' as set out in the schedule of Modification Fees[4] will be applied to the customer even if it is the first submission of Applicant Specific Data.

- PED shall be considered to be provided late where it is not provided at least twelve (12) months[5] prior to the Expected Energisation Date that is in use by the SOs, and published on the SOs websites at the time that the customer submits their PED.
- Any issue with PED, e.g. submission of inaccurate data or late submission of data, can result in delays in energisation and is at the customer's sole risk.
- A customer that is submitting a late PED application or has to resubmit due to inaccurate data must provide the initial modification fee in the same manner as any other modification application. The balance of the modification fee will be invoiced by the relevant System Operator once the application has been assessed. Any fee requested should be paid within one (1) month of being requested (rather than the standard three (3) months). In any event, the connection will not be energised where any payments – including payment of modification fees – are outstanding.

4. Customer Responsibility

The customer is solely responsible for the submission of accurate PED at least twelve (12) months[5] prior to energisation. Whilst the SOs shall make reasonable endeavours to remind customers of their obligation, when it is expected that the deadline is approaching, any fees, impacts on energisations dates, etc. are solely to the customer's account regardless of whether the SO has provided a reminder to a customer that PED is due or not.

[5] Unless the contractual obligation is less. Typically 6 months for pre Gate 3 applicants.

Process Summary

Timeline	Action
>12 months Before Energisation	The SOs intend to remind customers of their obligation to provide PED, clarifying when it is due and the risks / consequences for late submission..
12 Months Before Energisation	Applicant submits PED. Once received, the SO shall confirm with the customer if the data is sufficient or not and, if everything is in order, it shall enter the standard modification process.
Studies Complete	The SO shall confirm study results and modify the connection offer accordingly. Any impacts on costs, leadtimes or other areas of the offer shall be confirmed as part of the modified contract.

Glossary

Term	Definition
Pre Energisation Data	Any data required to perform pre-energisation studies. A dynamic model is part of the Pre Energisation Data required from the applicant but it is not the complete set of Pre Energisation Data.
Pre Energisation Studies	EirGrid shall complete pre-energisation analysis for generation connections to determine if there is any reason to delay an energisation. Studies include; Voltage, Short Circuit and Dynamics Studies. These studies are used to resolve any technically complex issues.
Assumed Data	This is the basic information provided by a customer on initial application.
Applicant Specific Data / Submitted Data	This is the full set of technical information provided by a customer including parameters for turbines, transformers, internal networks, etc.
Reactive Power and Voltage Regulation	Included in the Pre Energisation Testing is Reactive Power and Voltage Analysis. The new connection must be compliant with the automatic voltage regulation and reactive power requirements as set out in Grid Code. If it is determined that there is an issue, a reactive power compensation devices needs to be installed. Prior to this installation the applicant must submit the most up to date full reactive power solution for the Facility. The timeline and other details are outlined in the Offer Letter or Quotation Letter.
Dynamic Studies	This analysis aims to identify areas of instability. Transmission System stability is assessed in terms of Voltage, Transient and Frequency stability as well as Fault Ride Through compliance.