

VICTORIAN CONNECTIONS: CUSTOMER CONNECTION APPLICATION CHECKLIST

PREPARED BY: Victorian Connections
VERSION: 1.0
EFFECTIVE DATE: November 2021
STATUS: FINAL

Approved for distribution and use by:

APPROVED BY: M Pimentel
TITLE: General Manager – Victorian Connections

DATE: 21 / 11 / 2021

PURPOSE

This document has been prepared by AEMO's Victorian Connections team to provide guidance to *Applicants* about the **minimum** information and documents to be submitted with a connection application, to enable AEMO to undertake its assessment under Chapter 5 of the National Electricity Rules.

DISCLAIMER

This document may be subsequently updated or amended.

This document does not constitute legal or business advice, and should not be relied on as a substitute for obtaining detailed advice about the National Electricity Law, the National Electricity Rules, or any other applicable laws, procedures or policies. AEMO has made every effort to ensure the quality of the information in this document but cannot guarantee its accuracy or completeness.

Accordingly, to the maximum extent permitted by law, AEMO and its officers, employees and consultants involved in the preparation of this document:

- make no representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of the information in this document; and
- are not liable (whether by reason of negligence or otherwise) for any statements or representations in this document, or any omissions from it, or for any use or reliance on the information in it.

© 2021 Australian Energy Market Operator Limited. The material in this publication may be used in accordance with the [copyright permissions on AEMO's website](#).

VERSION RELEASE HISTORY

| Version | Effective Date | Summary of Changes |
|---------|------------------|--------------------|
| 1.0 | 21 November 2021 | First Issue |
| | | |
| | | |

CONTENTS

| | | |
|--------------------|---|----------|
| 1. | INTRODUCTION | 4 |
| 1.1. | Purpose and scope | 4 |
| 1.2. | Definitions and interpretation | 4 |
| 1.3. | Related documents | 4 |
| 2. | USING THIS DOCUMENT | 5 |
| 3. | THE CHECKLIST | 5 |
| 4. | CONFIDENTIALITY | 5 |
| 5. | ADDITIONAL INFORMATION REQUESTS | 5 |
| 6. | TRANSMITTAL | 5 |
| APPENDIX A. | DOCUMENTATION COMPLETENESS CHECKLIST | 6 |

1. INTRODUCTION

1.1. Purpose and scope

This document contains a checklist designed to assist Applicants to ensure that an *application to connect* under clause 5.3.4 of the National Electricity Rules (**NER**) contains all relevant and necessary information to enable AEMO's Victorian Connections team to complete its assessment of the Application,.

The NER and the National Electricity Law (**NEL**) prevail over this document to the extent of any inconsistency.

1.2. Definitions and interpretation

1.2.1. Glossary

Terms defined in the NEL and the NER have the same meanings in this document unless otherwise specified.

Terms defined in the NER are intended to be identified in this document by italicising them, but failure to italicise a defined term does not affect their meaning.

The words, phrases and abbreviations in the table below have the meanings set out opposite them when used in these Procedures.

| Term | Definition |
|---------------|--|
| Applicant | A person seeking to connect a new <i>load</i> to the <i>declared transmission system</i> or modify any <i>load connecting</i> to the <i>declared transmission system</i> |
| Application | An <i>application to connect a load</i> under clause 5.3.4 of the NER. |
| NEL | National Electricity Law |
| NER | National Electricity Rules |
| PSCAD™/EMTDC™ | Power Systems Computer Aided Design / Electromagnetic Transient with Direct Current |
| PSS®E | Power System Simulator for Engineering |
| SLD | Single line diagram |

1.2.2. Interpretation

This document is subject to the principles of interpretation set out in Schedule 2 of the National Electricity Law.

1.3. Related documents

This document does not supersede or replace any other documents published by AEMO in accordance with the NER that relate its subject matter. The list below set out these and other related documents that Applicants should be familiar with when submitting their Applications.

- [Customer Performance Standards template](#)
- [Power System Design and Setting Data Sheets](#)
- [Power System Model Guidelines](#)

2. USING THIS DOCUMENT

The Appendix contains a checklist for use by Applicants when submitting an *application to connect*.

The purpose of the checklist is to ensure that all necessary and relevant information and data is submitted to AEMO to facilitate the timely assessment of the application or proposal.

3. THE CHECKLIST

Applicants must complete the Documentation Completeness checklist and submit it at the appropriate time during the submission or assessment of an Application.

The listed documents and other information to be submitted is the minimum that must be submitted. Where an Applicant considers that more information would assist in the assessment of their Application, they should provide it.

4. CONFIDENTIALITY

AEMO will manage the model, data and information provided by Applicants for AEMO to assess their Application in accordance with the confidentiality requirements in clauses 5.2.4(e) and 5.3.8, of the NER.

5. ADDITIONAL INFORMATION REQUESTS

AEMO may request further or additional information at any time during the assessment of an *application to connect* and the Applicant is required to respond within the time specified by the request.

6. TRANSMITTAL

Applicants must accompany any models, data or other information submitted to AEMO with a transmittal describing the model, data or other information submitted and include a date, model number or version number, as applicable.

APPENDIX A. DOCUMENTATION COMPLETENESS CHECKLIST

| Requirement | Comment / file name / reference [Applicant to complete] |
|---|--|
| Expected load profile (24hr and annual) | |
| Minimum and maximum demand forecast (5 years) | |
| Proposed Performance Standards in AEMO's Customer Performance Standards Template. | |
| Design reports and supporting documentation demonstrating compliance with the Technical Requirements of NER Schedule 5.3 including: <ul style="list-style-type: none"> • Primary plant details (e.g. manufacturer, nameplate ratings, rated voltage); • Protection and control design philosophy document; • Fault level study report; and • Power quality study report. | |
| Single line diagrams (SLD) of the proposed installation including: <ul style="list-style-type: none"> • Connection arrangement clearly showing the connection point, including primary electrical SLD for all HV reticulation circuits showing switching arrangements for significant plant items (including generation, UPS, large motor drives, reactive plant and harmonic filters). • Protection and control details. • Revenue <i>meters</i> and <i>power quality meters</i> (complete to the extent details are available). | |
| General arrangement drawings: <ul style="list-style-type: none"> • locating all equipment on site • new or altered substations showing all exits and position of all electrical equipment. | |
| Site specific PSS®E load flow model (.sav, .seq and .raw files) representing the customer installation including HV reticulation and load composition details. Model must include and sequence component data and connection numbers for transformer group orientation. PSS®E dynamic models (.dyr and .DLL files) for dynamic reactive plant (i.e. SVC, STATCOM etc.), synchronous machines and motor drives (if available). | |

| Requirement | Comment / file name / reference [Applicant to complete] |
|---|--|
| <p><u>Power System Design and Setting Data Sheets</u>, including all referenced documents within each data sheet (See Schedule 5.5 of the NER).</p> <p>Note: Inapplicable data sheets should be greyed out and not removed from the document prior to AEMO's review and acceptance as "not applicable".</p> | |
| <p>Type test certificates for all new switchgear and transformers including instrument transformers.</p> <p>Please provide when available and note that these will be required prior to energisation.</p> | |
| <p>Earthing details including:</p> <ul style="list-style-type: none"> • proposed methods of earthing cables of other equipment; • plant and earth grid test certificates; <p>Please provide when available and note that these will be required prior to energisation.</p> | |
| <p>Additional information requested by AEMO in its response to the Applicant's <i>connection enquiry</i>.</p> | |