

# POLICY ON THE ACTIVE MANAGEMENT OF CONNECTION APPLICATIONS IN VICTORIA

PREPARED BY: Transmission Services

VERSION: 1.0

RELEASE DATE: 14 December 2011

FINAL

## Version Release History

Version	Date	Approved
1	14 Dec 11	Transmission Services

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## 1 Purpose

This Policy has been developed to assist AEMO in applying a fair and transparent approach to determining the order for the connection of interacting applications to the Victorian Declared Shared Network (DSN). Interacting applications are two or more connection applications (for generator connections) that are being processed concurrently and have a material physical, technical or financial impact on each other. This Policy supplements Clause 5.3.4 of the National Electricity Rules (Rules).

## 2 Background

The need for a policy on interacting connection applications has arisen from a substantial increase in the number of connection enquiries in Victoria in recent years. Government incentives to encourage new low-emissions generation, such as the Australian Government's Renewable Energy Target, are expected to further increase the number of interacting applications.

Interacting applications may impact the level of available capacity for connection to the network, the ability of a generator to meet a performance standard and the financial obligations of the generator. More specifically, these impacts may include the following:

- A later connection may require higher performance standards in order for AEMO to maintain power system security and reliability as the number and capacity of connections increases.
- If existing plant ratings are exceeded by a second connection, then that connection may experience less favourable network conditions than the first connection.
- The Rules do not guarantee firm access for generators operating in the NEM (National Electricity Market). Therefore, limited power transfer capability may reduce the ability of both first and subsequent connecting parties to export power to the DSN.

## 3 Application

This policy is intended to apply to interacting connection applications. These are two or more connection applications (for generator connections) that are being processed concurrently and have a material physical, technical or financial impact on one another.

The connection of load is captured in the joint planning process between AEMO and the Victorian distribution businesses (DBs). Each year, the Victorian DBs publish a Transmission Connection Planning Report, which identifies any required augmentation to the DSN to meet distribution load. Through this report and subsequent communication, AEMO becomes aware of the load-driven augmentations required. Any issues associated with interacting load-driven connection applications are likely to be addressed prior to AEMO's receipt of a connection application.

## 4 Legal and Regulatory Framework

Clause 5.3 of the Rules outlines the process for establishing or modifying a connection to the NEM. In particular, it sets out the information that AEMO requires to process a connection enquiry and assess a connection application, as well as the information that AEMO must provide to the connection applicant.

Following receipt of a complete connection application, AEMO can commence assessment and negotiation of the proposed performance standards. Once performance standards have been negotiated and agreed (under clause 5.3.6 of the Rules), AEMO can make the applicant an offer to connect and issue a Use of System Agreement (UoSA) within the time period specified in the agreed work program. Appendix A provides an overview of the provisions in the Rules that are relevant to this policy.

## 5 Related Policies and Procedures

This Policy is related to, and should be read in conjunction with, the following AEMO policies, procedures and guidelines:

- Guidelines for Establishing Terminal Stations in Victoria
- Guidelines for Shared Transmission Connections in Victoria
- Cost Allocation Policy in Victoria.
- Connecting Victoria: Transmission Project Development Protocol

## 6 Principles

This policy seeks to promote an approach that is transparent, collaborative, holistic, straightforward, flexible and fair.

### 6.1 Transparent

Accountabilities, expected deliverables and timeframes will be clear. The consequences of not satisfying the relevant accountabilities, submitting substandard deliverables, and delaying timeframes are to be made clear.

### 6.2 Collaborative

Deliverables and timeframes will be structured to meet the needs of applicants to the extent that it is practicable, and in accordance with the Rules and AEMO's other obligations.

### 6.3 Holistic

It is acknowledged that parties may not be able to satisfy their obligations without timely input from other parties involved in the process.

### 6.4 Straightforward

The process is easy to understand.

### 6.5 Flexible

The requirements imposed on connection projects can be reassessed based on the relative timing of the connection and associated changes, or expected changes, to the DSN.

### 6.6 Fair

Applicants will not be burdened with excessive requirements or be able to avoid relevant requirements due to legacy arrangements that are no longer appropriate.

## 7 Approach

AEMO's approach to determining the order in which interacting connection applications connect is based on the connection application process as prescribed in the Rules. The key tool used by AEMO to determine the order is the work program. The work program is effectively a project schedule that reflects the different steps in the connection application process. It specifies the key technical and commercial milestones the applicant must achieve to fulfil the connection requirements. An applicant's progress will be assessed against achievement of these milestones, taking into account any delays caused or contributed to by AEMO.

The achievement of the milestones culminates in the signing of the UoSA, the execution of which will ultimately determine the order of connection among interacting applicants. The applicant that first signs the UoSA will be the first of the interacting applicants scheduled by AEMO to connect. Following execution of the UoSA, the applicant must still progress towards connection or augmentation (including commencing construction) within twelve months. Otherwise, the order of interacting applications will lapse and will need to be reconsidered.

## 7.1 Preliminary Program

An applicant's connection enquiry is the first stage in the connection process. Following receipt of a complete connection enquiry, AEMO will provide the applicant with a preliminary work program. As required by Clause 5.3.3(b)(6) of the Rules, AEMO will provide the applicant with a Preliminary Program showing proposed milestones for connection and access activities. This initial Preliminary Program is provisional and will incorporate, where possible, the proposed milestones from the applicant's connection enquiry. It will be finalised at the connection application stage. It is subject to change, based on changing data and timeframes. AEMO's generic Preliminary Program can be accessed through AEMO's [Victorian Network Connections](#) Information Kit on AEMO's web site.

Appendix A provides details of the relevant Rules requirements, that AEMO and the applicant must meet, and the associated timeframes.

## 7.2 Technical Requirements

AEMO then provides the following to the applicant:

- Details of the relevant technical requirements (from the Rules).
- Information required pursuant to making an application to connect.
- Information on the fees that are required to commence review and negotiation of the access standards, which AEMO registers as performance standards when finalised.

## 7.3 Connection Application

AEMO will commence assessment of the connection application, including a review of proposed performance standards once the applicant has provided the necessary information and data and has paid the required fee. This will follow communication between AEMO and the applicant to outline the information AEMO needs to commence this assessment.

AEMO will share information with applicants about relevant interacting applications within the confidentiality boundaries laid out in the Rules. If AEMO gains consent from all affected generators (some relevant information about the project will already be publicly available), then AEMO may advise an applicant if there is an interacting application that may impact them, and the nature of the impact.

## 7.4 Agreed Work Program

Following receipt of the connection application, associated preliminary technical data and payment of the application fee, the applicant and AEMO will work together to develop an agreed work program, based on the generic Preliminary Program.

The purpose of the agreed work program is to identify the responsibilities of each party and the deadlines each party must meet to deliver the project within the required connection timeframe, while providing a benchmark against which the progress of the application can be assessed.

This program will cover the milestones required to progress the application to the stage at which AEMO can make the applicant an appropriate offer to connect (and issue the UoSA). Other Network Service Providers (NSPs) may also provide input to the work program. The program is subject to change (following discussions between AEMO and the applicant) to reflect changing data

and timeframes. Any changes to the agreed work program will be made as required on a fair and reasonable basis.

#### **7.4.1 Contents of the Agreed Work program**

The agreed work program will contain a series of technical, commercial and legal milestones. The milestones will vary according to the project and the procurement option; however, the following milestones are likely to be included:

##### **Technical milestones**

- Applicant provides preliminary technical data.
- AEMO reviews initial data.
- Applicant provides complete set of technical data.
- AEMO considers applicant's proposal.
- AEMO and applicant finalise connection arrangement.
- AEMO finalises ultimate station configuration (if a new terminal station is required).
- AEMO finalises primary and secondary functional specifications.
- Applicant provides final technical data (if different to preliminary data).
- AEMO completes final technical report.
- AEMO and applicant agree performance standards.

##### **Commercial and legal milestones**

- Secure land, including necessary easements.
- Achieve all required planning and environmental approvals.
- Provide a geotechnical report, if required.
- Classify augmentation works into contestable and non-contestable.
- For contestable augmentations:
  - Applicant has input to AEMO's invitation to tender.
  - Applicant gives final approval for project to proceed.
  - AEMO releases the invitation to tender.
  - Applicant has input into selection of preferred tenderer.
  - AEMO selects preferred tenderer.
- For non-contestable augmentations:
  - Applicant has input to AEMO on nature of required augmentations.
  - AEMO requests a firm offer of works from SP AusNet.
  - SP AusNet submits firm offer to AEMO.
- Finalise augmentation agreement(s) between AEMO and DTSO(s).
- Agree type and provision of the prudential requirements.
- Finalise connection agreement between applicant and AEMO.
- AEMO issues offer to connect to the applicant (UoSA).
- Applicant provides agreed prudential support.

- Applicant accepts offer to connect (executes UoSA).
- Execute network services agreement(s) between AEMO and DTSO(s), and other related agreements (as required).

#### **7.4.2 Hold Points**

AEMO will clearly identify 'hold' points in the agreed work program, indicating where the achievement of particular milestones and submission of selected deliverables will be necessary to enable the application to progress to the next stage. AEMO will develop these hold points on a fair and reasonable basis, and in consultation with the applicant.

#### **7.4.3 Validity Periods**

AEMO will, on a fair and reasonable basis, assign validity periods to deliverables where AEMO has confirmed technical requirements or commercial terms and conditions for the connection application. The purpose of validity periods is to provide a finite period for the delivery of a milestone (during which the agreement for delivery between AEMO and the applicant stands). If the validity period passes, the application will be reviewed in the context of any known or expected changes to network conditions. Validity periods will be assigned to:

- Performance standards negotiated with the applicant.
- AEMO's primary and secondary functional specifications.
- AEMO's offer to connect (UoSA).

Validity periods will be established for each project based on a realistic expected time to prepare an offer to connect and reach agreement on it.

Validity periods will allow AEMO to review its requirements based on changes to the configuration or operation of the DSN, changes to the status of interacting applications, and changes in financial markets (if a connection application is not progressing in line with its agreed work program).

### **7.5 Offer to connect**

The UoSA constitutes AEMO's offer to connect in Victoria. It includes the technical and financial terms and conditions negotiated and agreed between AEMO and the applicant for connection to the DSN.

AEMO will issue an offer to connect upon completion of the technical assessment and negotiation of proposed performance standards. This will include the technical obligations for the connection and any commercial terms and conditions that have been agreed between AEMO and the applicant at that time. It is expected that negotiations will continue beyond the initial release of an offer to connect. These negotiations will continue until the UoSA is agreed.

The offer to connect is generally given to the applicant 10 days prior to the expiry of the validity period by the AEMO. AEMO may reconsider all the terms and conditions of the UoSA if the agreement is not executed by the end of the validity period. This is particularly relevant for the proposed switching configuration and agreed performance standards.

## **8 Additional Measures for Interacting Applications**

### **8.1 Connection Progress**

The potential for significant technical and financial interdependencies to arise between interacting applications highlights the importance of any assumptions made by AEMO about the order in which connections are expected to occur. The expected commissioning date of a connection provides an indication of when it will connect relative to other interacting connection applications.

The expected commissioning date of a project will be based on AEMO's analysis of when commissioning is likely to occur based on the current status of the project and how realistic the planned dates for meeting future milestones are. The criteria against which this will be assessed are directly linked to the milestones in an applicant's agreed work program. For example, AEMO will assess whether an applicant has satisfied a 'securing land' milestone according to whether the applicant has secured the land or commenced legal proceedings to acquire land.

The first assessment would be made during or immediately following the formulation of an agreed work plan. Subsequent assessments will be triggered by any of the following events:

- An agreed work program is defined for another potentially interacting application with an expected commissioning date prior to, or within six months of, the expected commissioning date of the initial application.
- The initial application is more than six months late in meeting a key milestone. This trigger would be adjusted to reflect any delays caused by AEMO.
- A material change in the configuration or operation of the DSN, which is likely to affect the technical or financial requirements for the connection.
- A material change in any other connection application, which is interacting or likely to interact with another proposal.

AEMO will communicate to the applicant that the status of the its connection application has been adjusted to reflect the applicant's actual progress against the agreed work program; and whether the adjustment in status is expected to change the technical and/or financial conditions for the application.

## 8.2 Criteria for Determining Progress Status

The following criteria will be applied to interacting applications in order to assess their progress status. All criteria are intended to relate to one or more of the milestones in the agreed work program:

1. The connection application is complete: AEMO accepts that the connection application fully complies with Rules requirements and the appropriate application fee has been paid.
2. Land has been secured: the applicant has secured all required land for construction of the proposed development including the land required to accommodate any ultimate station configuration (if required).
3. Land has been secured to access the proposed point of connection: the applicant has secured all land required to connect the generation assets to the proposed point of connection to the DSN.
4. Planning approvals have been granted: the applicant has obtained all required planning consents, construction approvals and licences, including completion and acceptance of any necessary environmental impact statement.
5. Geotechnical studies are completed: the applicant has completed geotechnical studies in relation to any and all identified land for the location of the terminal station, including any required overhead line towers.
6. The technical assessment is complete: AEMO has assessed the proposed performance standards, following receipt of a complete set of all relevant technical information (based on but not limited to the requirements in the Generating System Design Data Sheets and Generating System Setting Data Sheets, which are available at AEMO's website) and presented in an accessible form, with no material issues associated with the generator models.
7. The complete set of performance standards is agreed: the negotiation of any performance standards that differ from the automatic access level have been agreed and all performance standards are agreed by AEMO and the applicant.

8. Construction tender has commenced: the tender for the construction of the transmission connection has commenced.
9. Prudential requirements: bank guarantee or the parent company guarantee are provided to AEMO.
10. Connection and construction contracts are executed: any and all contracts required, including but not limited to the UoSA are executed by AEMO and the applicant.

### 8.3 Assessment Against Criteria

When events such as those specified in Section 8.1 of this Policy trigger the need to review the status of a connection application, AEMO will review how an applicant's project is progressing against the criteria specified in Section 8.2 of this Policy. This may result in a change to the agreed work program that shows how the UoSA execution date has been affected, with potential implications for the commissioning date. This assessment will be carried out for each project and will be compared to the assessments of all other applications deemed to be interacting.

### 8.4 Implications of Changed Relative Progress Status

If there is a change in the status of an applicant's project, the following will apply:

1. The agreed work program will be reviewed and amended accordingly to establish a realistic UoSA execution date.
2. AEMO will meet with the applicant and review changes to the agreed work program. Once the applicant updates the timeframes of the deliverables, AEMO will re-schedule the deliverables for which AEMO is responsible, if the applicant is more than three months behind schedule. Once this is complete, a new UoSA execution date will be established.
3. Following execution of the UoSA, the applicant must still progress towards connection (or augmentation) within 12 months, providing regular updates to AEMO. If no progress is made, AEMO will reconsider the order of connections.
4. AEMO will compare the new UoSA execution date to the UoSA execution dates of any and all other interacting connection applications.
5. AEMO will determine the technical and financial impacts, if any, of the change.
6. A change in status may result in an applicant's project triggering a technical issue that could compromise the security and reliability of the DSN. If this occurs, AEMO will review the proposed connection configuration of the interacting projects, as well as any other network issues. Unless AEMO considers it reasonably required for power system security or safety reasons, reviews and changes will not occur within the six months prior to UoSA execution.
7. AEMO will change the conditions of the offer to connect, as required for power system security or safety reasons. In this circumstance, the applicant may need to alter the design of the proposed project to alleviate the issue and/or fund an alternative means to address the technical issue, if reasonably required.
8. If AEMO changes relative status so that the expected UoSA execution dates are within six months of one another then they will be treated as occurring at the same time for the purposes of determining an applicant's technical and financial obligations. This avoids the need to reassess an applicants' status following relatively small changes in the expected UoSA execution dates of interacting applications, and it avoids creating artificial incentives for applicants to distort the status of their applications to gain advantage over interacting applications and, hence, avoid facing more onerous technical or financial obligations when they are effectively connecting at the same time.

## Appendix A: AEMO's Obligations under the Rules

The Rules outline the connection application process that AEMO follows to facilitate connections and augmentations to the DSN. Table A1 identifies the clauses that are relevant to this policy, and explains the associated obligations on AEMO. Readers should refer to the Rules for the exact wording of the clauses.

Clause	AEMO' obligations
<b>Clause 5.3.2</b> <b>Connection enquiry</b>	Connection applicant to submit a connection enquiry to AEMO that details the type, size and timing of a proposed connection. If this enquiry is incomplete, AEMO must advise the applicant of the necessary preliminary information within five business days.
<b>Clause 5.3.3</b> <b>Response to connection enquiry</b>	<p>Within 10 business days of receipt of an enquiry, AEMO must also advise the applicant the following in writing:</p> <ul style="list-style-type: none"> <li>• which parties will need to be involved in planning to make the connection and which must be paid for transmission services or distribution services in Victoria;</li> <li>• whether any of these parties will need to enter into an agreement with the applicant in respect of the provision of connection or other transmission or distribution services to the applicant;</li> <li>• whether any service that AEMO proposes to provide is contestable; and,</li> <li>• a Preliminary Program showing proposed milestones for connection and access activities.</li> </ul> <p>Within 20 business days of receipt of an enquiry and accompanying information, AEMO must provide the applicant with the following written technical information relevant to the proposed plant:</p> <ul style="list-style-type: none"> <li>• automatic access standards;</li> <li>• minimum access standards;</li> <li>• applicable plant standards;</li> <li>• negotiated access standards that will require AEMO's involvement in accordance with Clause 5.3.4A(c); and</li> <li>• the normal voltage level, if that is to change from the nominal voltage level.</li> </ul> <p>Within 20 business days of receipt on an enquiry, AEMO must advise the applicant in writing of all further information the applicant must prepare to enable AEMO to assess the application, including details of:</p> <ul style="list-style-type: none"> <li>• the connection requirements and the facility to be connected;</li> <li>• the applicant's reasonable expectations of the level and standard of power transfer capability that the network should provide;</li> <li>• technical data to be included with the application;</li> <li>• commercial information required to assess the ability of the applicant to meet prudential requirements established in Clauses 6.6 and 6.7 of the Rules; and</li> </ul>

	<ul style="list-style-type: none"> <li>the nominated application fee.</li> </ul>
<b>Clause 5.3.4 Application for connection</b>	<p>The Rules enable a person who has submitted an enquiry, following receipt of AEMO’s response, to apply to connect. Their application should contain the above information, accompanied by the specified application fee.</p> <p>Where the proposed arrangement will not meet the automatic access standards nominated by AEMO, the applicant must submit with the connection application a proposal for a negotiated access standard for each requirement to be determined in accordance with 5.3.4A.</p>
<b>Clause 5.3.4A Negotiated access standards</b>	<p>Clause 5.3.4A guides how a negotiated access standard must be set and the parameters within which it should be set. AEMO must, within 30 days of the receipt of a proposed negotiated access standard, accept or reject it.</p> <p>This clause also sets out the situations in which AEMO, as the NSP in Victoria, must reject the proposed negotiated access standard, including when:</p> <ul style="list-style-type: none"> <li>on AEMO’s reasonable advice, it will adversely affect power system security; and</li> <li>it will adversely affect quality of supply for other network users.</li> </ul> <p>This clause goes on to provide the options that an applicant has with regard to negotiated access standards – accepting, rejecting, proposing an alternative, or electing to adopt the relevant automatic access standard or a corresponding plant standard.</p>
<b>Clause 5.3.5 Preparation of offer to connect</b>	<p>Clause 5.3.5 presents the requirements on the part of AEMO and the Applicant to prepare an offer to connect, including the information that both parties must provide to each other. For example, AEMO must use its reasonable endeavours to advise the applicant of all risks associated with planning and environmental law not contained in the Rules, in respect of the proposed connection. The applicant must provide other information relevant to the application as AEMO reasonably requires to assess the technical performance and costs of the required connection and to enable AEMO to prepare the offer.</p>
<b>Clause 5.3.6 Other to connect</b>	<p>Clause 5.3.6 requires AEMO to make an offer to connect to the applicant within the time specified in the Preliminary Program. The offer must contain the proposed terms and conditions for connection to the network, including:</p> <ul style="list-style-type: none"> <li>the automatic access standard or negotiated access standard; and</li> <li>the terms and conditions of the kind set out in Schedule 6.5 of the Rules.</li> </ul> <p>In Victoria, the UoSA constitutes the offer to connect.</p> <p>The Rules provide that the offer to connect must be fair and reasonable and consistent with the safe and reliable operation of the power system, in accordance with the Rules.</p>

*Table A1: AEMO’s obligations under the Rules*