

WHOLESALE MARKET CONNECTION APPROVAL PROCEDURES (VICTORIA)

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CHAPTER 1 - PRELIMINARY

1.1 Introduction

These procedures set out the standards, criteria and processes that AEMO will use to assess new or modified connections to the declared transmission system as required by rule 272(6) of the National Gas Rules (**Rules**).

The framework for connection to the declared transmission system is presented in Subdivision 1 of Division 3, Part 19 of the Rules detailing the obligations of the Connection Applicant, the declared transmission system service provider, and AEMO. A flowchart of the process is provided in Appendix A. The flowchart is provided for illustrative purposes only, and does not affect or take priority over the provisions in the Rules or the National Gas Law.

1.2 Definitions

Terms defined in the Law and Part 19 of the Rules have the same meaning in these procedures unless defined in these procedures or the context otherwise requires.

CHAPTER 2 – PRINCIPLES

AEMO's assessment of new or modified connections to the declared transmission system is guided by the following principles:

- the new connection or modified connection must not have a material adverse effect on the operation or the security of the declared transmission system;
- the new connection or modified connection must comply with and be consistent with the provisions of Division 3, Part 19 of the Rules;
- reliability¹ of supply to uninterruptible gas customers comprising the residential, small industrial and commercial sectors and essential services such as hospitals and homes for the aged and infirm must be maintained; and
- the new connection or modified connection must not materially reduce the firmness of capacity to gas customers with authorised MDQ or AMDQ certificates.

¹ The reliability of supply assumes the extra level of protection afforded by the use of emergency curtailment of large gas users under emergency situations.

CHAPTER 3 – ASSESSMENT OF IMPACT ON SYSTEM OPERATION AND SYSTEM SECURITY

AEMO will assess the effect of the new or modified connection based on the system security procedures and 1 in 20 peak day planning standards.

These are described in further detail below.

3.1 Compliance with system security procedures

The new or modified connection should not have a material adverse effect on the operation of the declared transmission system in accordance with the system security procedures. In particular, the connection should not impact the ability of AEMO or the declared transmission system Service Provider to maintain the declared transmission system within the conditions (provided for in the system security procedures) in which the declared transmission system operates in a safe and reliable manner.

3.2 1 in 20 peak day planning standard

The new or modified connection should not have a material adverse effect on the ability to operate the declared transmission system so as to maintain security of supply to all uninterruptible² customers with authorised MDQ or AMDQ certificates during a period of 1 in 20 peak day demand (as explained below).


The '1 in 20 winter peak day' is a forecast of coincident peak demand³ of all industrial, commercial, and residential demand on the gas transmission system under 1 in 20 years severe weather conditions in the winter months. It excludes gas fired power generation, exports to interconnecting pipelines and injections into storage. Additional demand will be included in the scenarios over and above the peak day demand to represent other authorised load such as authorised exports and authorised use by gas fired power generators. In a given winter, the actual peak day demand has a 5% probability of exceeding the '1 in 20 winter peak day'.

Scenarios will use forecasts of 1 in 20 peak demand for the two winters following the proposed commissioning date to allow lead time for potential system augmentation.

Forecast 1 in 20 peak day demand for non-winter months will also be used to assess new connections that have the potential to affect the operation or the security of the

² Uninterruptible customers includes all residential and small industrial or commercial gas customers as well as essential services such as hospitals and homes for the aged and infirm.

³ The forecast collective load reflected by the level of authorised MDQ assuming normal load diversity.



declared transmission system during October to April. Low demand scenarios may be also used to assess specific cases where relevant.

CHAPTER 4 – TEST SCENARIO MODELLING ASSUMPTIONS

If AEMO considers that the new or modified connection has the potential to adversely affect the operation or the security of the declared transmission system, AEMO must use the common computer model of the declared transmission system as referred to in the service envelope agreement to assess the possible extent of the impact of that connection. The new or modified connection will be incorporated in the common computer model.

The key modelling assumptions are as follows:

- forecast 1 in 20 winter peak day demand for the two winters after the proposed commissioning date of the new or modified connection;
- flat injection profiles from primary injection points;
- no linepack mining;
- standard heating value 38.7 MJ/scm;
- maximum and minimum pressure obligations under the system security procedures;
- forecast authorised Tariff D load and unauthorised load;
- use of LNG to capacity given adequate projected inventory;
- prospective supply capacity at each primary system injection point as published in the most recent annual planning review under rule 323 of the Rules;
- flows at interconnected pipelines and storage facilities are consistent with authorised capacity;
- demand assumptions for the proposed connection as provided by the Connection Applicant;
- additional supply assumptions for the proposed connection as provided by the Connection Applicant⁴;
- demand and ramping rate assumptions for connections that offer commercial interruption as provided by the Connection Applicant;
- forecast commercial interruption;

⁴ This could apply to supply assumptions for the NSW interconnect given there could be net imports or exports.

- forecast curtailment yields and rates⁵; and
- other relevant information from the applicant requested by AEMO.

Where AEMO considers that it is necessary for a proper assessment of a new or modified connection, alternative assumptions may be used to test scenarios in the common computer model as follows:

- forecast 1 in 20 peak day demand for non-winter months (October to April); and
- low demand summer scenarios to assess risk to maximum pressure limits by a new or modified connection that is a system injection point or a transfer point to an interconnected transmission pipeline.

AEMO will assess the adequacy of system capacity to supply uninterruptible load and authorised loads while maintaining system security. Curtailment of unauthorised load other than that due to uninterruptible customers is acceptable under the scenario if it is required to maintain system security.

⁵ AEMO has analysed curtailment response during the Longford supply emergency in Sep 1998 that can be used as a basis for assessment in conjunction with information provided by the Connection Applicant.

CHAPTER 5 – APPROVAL OF NEW OR MODIFIED CONNECTIONS

AEMO will approve a new or modified connection to the declared transmission system if:

- the tests outlined in Chapter 4 above show that the new or modified connection would not:
 - result in a reduction of system adequacy; or
 - affect the ability to maintain system security in accordance with the system security procedures;
- the requirements of Division 3 of Part 19 of the Rules are (or will be) met in relation to the connection point; and
- if required by AEMO under section 91BG of the National Gas Law, the facility owner at the connection point enters into an operating agreement with AEMO.

APPENDIX A

