

# Wholesale Proposed Procedure Change (PPC) – Hydrogen and Distribution Connected Facilities rule changes



<b>Impacted jurisdiction(s)</b>	Victoria Only
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<b>Affected Gas Market(s)</b>	Declared Wholesale Gas Market (DWGM) and Victorian Gas Retail Market
<b>Date proposal published by AEMO</b>	Tuesday, 26 September 2023
<b>Short issue title</b>	Implementation of the AEMC's Hydrogen review and DWGM Distribution Connected Facility rule changes. In addition, implementing the Minister's request to move from a statewide heating value zone to a zonal heating value for customers.
<b>Procedure(s) or Documentation impacted</b>	Wholesale Market Procedures as listed in section 2
<b>Other key contact information</b>	<a href="mailto:GWCF_Correspondence@aemo.com.au">GWCF_Correspondence@aemo.com.au</a>

#	Version	Presented to	Date
1.0		GWCF	26 September 2023

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Australian Energy Market Operator Ltd ABN 94 072 010 327

# Proposed Procedure Change – Detailed Report Section

## Critical Examination of Proposal

### 1. Description of issue

#### 1.1. Background.

##### 1.1.1. AEMC's Hydrogen and DWGM Distribution Connected Facility rule changes

In August 2021, Energy Ministers agreed that the national gas regulatory framework be reviewed and extended to accommodate hydrogen, biomethane and other renewable gases. This agreement meant that changes would need to be made to documents that underpin the framework so that they recognise and facilitate natural gas equivalents. This also meant that:

- (a) Jurisdictional officials would review the National Gas Law (NGL), National Energy Retail Law and National Energy Retail Regulations;
- (b) AEMC would review the arrangements in the National Gas Rules (NGR) which include a request to incorporate distribution connected facilities (DCF) into the Victorian declared wholesale gas market (DWGM); and
- (c) AEMO would review its market Procedures for the DWGM, Short Term Trading Market (STTM) and Retail Market (excluding Western Australia).

Those reviews concluded in September 2022 whereby AEMC and AEMO published final recommended changes to their respective regulator instruments. AEMO's final recommendation report outlines AEMO's final recommended changes to the each of the above procedures.

In October 2022 the Energy Ministers agreed to amendments to extend the NGL and NERL to hydrogen and other renewable gases.

AEMO is undertaking a consultation on the DWGM's Wholesale Market Procedures and the Retail Market Procedures (Victoria) required as a result of the AEMC's [review into extending the regulatory frameworks to hydrogen and renewable gases](#) and the AEMC's [DWGM distribution connected facilities](#) rule change.

Having considered the recommendation contained in section 2 of [AEMO's final recommendation report](#), the recommended changes have been made to Wholesale Market Procedures. Section 3 of this PPC provides a summary of these proposed amendments.

AEMO is undertaking this Procedure consultation on the basis that the draft National Energy Laws Amendment (Other Gases) Bill 2022 and the AEMC's recommended Rules for extending the regulatory frameworks to hydrogen and renewable gases (including the recommended transitional rules) are made as published.

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## 1.2. How to make a submission

Anyone wanting to make a submission for this first stage consultation stage (Wholesale Proposed Procedure Change (PPC)) are requested to use the response template provided in Attachment D. Submissions are due **COB 16 October 2023** and should be e-mailed to [GWCF\\_Correspondence@aemo.com.au](mailto:GWCF_Correspondence@aemo.com.au).

In relation to the ZHV changes, the Wholesale Market Procedure changes overlaps with the Retail Market Procedure (RMP) changes. Details about the RMP changes are described Package 3A Retail Market PPC. In relation to feedback on the proposed amendments to the RMP changes, please use the Retail Market PPC responses template.<sup>1</sup>

## 2. Reference documentation

The following Procedures, provided in Attachment A, are being consulted on as part of this Procedure change process.

AEMO is also making changes to technical documents, as detailed in Attachment B. AEMO will only republish documents that change at each stage of the Procedure consultation.

Title	Legal Requirement
<b>Wholesale Market Gas Quality Monitoring Procedures (Victoria)</b>	This is a new Procedure, required by rule 289B(1) of the NGR that contains the content from the existing: <ul style="list-style-type: none"><li>- Gas Quality Guidelines Version 10</li><li>- Gas Quality Standard and Monitoring Guidelines Declared Transmission Systems</li></ul>
<b>Wholesale Market Maintenance Planning Procedures (Victoria)</b>	Maintenance Planning Procedures (Victoria) required by rule 326(2) of the NGR.
<b>Wholesale Market System Security Procedures (Victoria)</b>	Wholesale Market System Security Procedures (Victoria) required by rule 205(1) of the NGR

## 3. Overview of changes

The marked up Procedure changes are provided in Attachment A of this document. AEMO has provided the DWGM PPC response template for participants to make their submissions in response to this consultation.

AEMO is planning to incorporate the Wholesale Market Gas Quality Monitoring Procedures and the Wholesale Market Maintenance Planning Procedure at the Impact and Implementation Report consultation stage of the “Amendments to Victorian Declared Wholesale Gas Market and Retail Market – 1 May 2024 release”.

### 3.1. General changes to the Wholesale Market Procedures

AEMO has made the following general amendments across the Procedures:

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<sup>1</sup> Submissions close **COB 16 October 2023** and should be e-mailed to [grcf@aemo.com.au](mailto:grcf@aemo.com.au).

- Updated the Procedures to use AEMO’s latest template.
- Updated the Procedures to reflect the changes in terminology required by the AEMC’s review into extending the regulatory frameworks to hydrogen and renewable gases and the AEMC’s DWGM distribution connected facilities rule changes.
- Aggregated the 27 new and existing Procedures required by the Rules and Law, into nine consolidated Wholesale Market Procedures. In regards to the Procedure consolidation:
  - The process seeks to somewhat align the DWGM with the other gas markets (ie STTM, GBB, GSH) by having consolidated Procedure documentation.
  - The Procedures have been aggregated into themes including Market Operations, Settlements, Metering and Market Management.
  - The purpose of this change was to make the management of these Procedures easier and improve the readability of these documents for the users.
  - In future, AEMO expects it would be easier to undertake minor editorial amendments and fixes to Procedures as part of larger Rule changes.

## 3.2. Wholesale Market Gas Quality Monitoring Procedures

The **Gas Quality Monitoring Procedures** incorporates and replaces the existing Gas Quality Guidelines and Gas Quality Standard and Monitoring Guidelines Declared Transmission System. The Procedure has been developed to meet the requirements of rule 289B of the NGR and reflects AEMO’s role as Victorian DTS operator responsible for gas quality monitoring in the DTS.

AEMO notes that this update to the Gas Quality Monitoring Procedures is an interim update to incorporate primary gases (e.g. Hydrogen) that are not part of the standard gas quality specifications. Participants should be aware that an updated to the standard gas quality specifications (including by an update to AS 4564 or modification by a regulatory instrument) is to incorporate primary gases that may require further consultation and update to these Procedures.

AEMO has made best endeavours to take into consideration potential changes to Industry Standards based on information provided from industry and the Future Fuels CRC. However, as Industry Standards are changed this may require changes to these Procedures, that may impact gas quality monitoring systems.

AEMO has incorporated section 2.3.2 for Hydrogen gas production facility and blend processing facility and section 2.3.3 for Biomethane gas production facility to have gas quality standards developed if a facility is connected to the DTS. The assessment of these facilities will be done on a case-by-case basis by AEMO in consultation with the DTS Service Provider APA GasNet and the ESV.

Technical document changes:

- (a) The existing “Heating Value and Gas Composition Data Sources” document published on AEMO’s website has been renamed the “DWGM Heating Value and Gas Composition Data Sources”, updated to the new AEMO template and published as part of the

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consultation as a technical document supporting the Wholesale Market Gas Quality Monitoring Procedures. This document is not track changed.

### 3.3. Wholesale Market Maintenance Planning Procedures

The **Maintenance Planning Procedure** the amendments include:

- (a) Align the terminology used in the Procedure with the Competition and Consumer Act. The ACCC has raised concerns with language used in the Procedure and therefore the processes embodied in the Procedure have been clarified.
- (b) Align the terminology of the Procedure with the rule changes, in particular:
  - (i) AEMO has incorporated distribution connected facility operators (as required by Rule 326A), Responsible person for metering installations and the Responsible Gas Quality Monitoring Provider in the definition of facility operator used in the Procedure.
- (c) Improve the readability and usability of the procedure by restructuring the document (this is not track changed) to reflect the separate:
  - (i) maintenance planning review process that ensures the aggregate impact of all maintenance performed on a gas day will be minimise the likelihood of a threat to system security; and
  - (ii) undertaking maintenance process which facilitates the facility release for a facility operator to undertake maintenance on the gas day. This process only applies to the DTS Service Provider, Responsible person for metering installations and responsible gas quality monitoring providers for monitoring points.
- (d) The Procedure has also expressly linked the Wholesale Market Maintenance Planning Procedure process to the East Coast Gas System reliability and supply adequacy function, the Victorian Gas Planning and Gas Statement of Opportunities function along with the Gas Bulletin Board reporting function, which requires reporting of capacity impacting maintenance in the short-term capacity outlook and the medium-term capacity outlook.

### 3.4. Wholesale Market System Security Procedures

The **System Security Procedure** has primarily editorial amendments to:

- (a) Update the System Withdrawal Zones identified in the procedure to include:
  - (i) Lurgi System Withdrawal Zone has been added to the Gippsland System Withdrawal Zones. The Lurgi Zone was separated from the Gippsland zone due to a specific threat to system security that has since been resolved. AEMO considers it appropriate to consolidate these zones.
  - (ii) The new Western Outer Ring Main pipeline has been added to the Melbourne System Withdrawal Zone.

- (b) Update the DTS diagram to incorporate a version which includes the Western Outer Ring Main.
- (c) Add a high level overview of AEMO’s monitoring of storage facility capacity utilisation level during the winter period, which has become a critical process in recent years.
- (d) Add a short description of Distributors role in operating and managing threat to system security in each Declared Distribution Systems was also included.

Technical document supporting the Wholesale Market System Security Procedure is the:

- (i) Wholesale Market Critical Locations Pressure technical document is expected to be updated and published with the commissioning of the Western Outer Ring Main pipeline project. This document is not published with this Procedure change.

## 4. Likely implementation requirements and effects

The implementation plan required for this project will deliver the following:

- (a) AEMO published AEMO Help Desk Bulletin No. 3010 - [DWGM Technical Specification](#) on 11 August 2023. The document can be found [here](#).
  - (i) The Technical Specification may be superseded by a future AEMO Help Desk Bulletin, as additional MIBB report requirements are finalised.
  - (ii) This Technical Specification provides the report definitions required to meet the requirements of the Minister’s Request. In particular:
    - (A) INT139A Daily Zonal Heating Value  
A report providing the heating value for each heating value zone used to determine the energy content of gas consumed within Victoria. This is consistent with the Energy Calculation Procedures and part of the Wholesale Market Metering Procedures (Victoria).
    - (B) INT188 CTM to Heating Value Zone Mapping  
A report containing the DWGM’s Custody Transfer Meter (CTM) to Heating Value Zone mapping. This report is a register of all commissioned CTMs in the market that are the physical meters that exist at transfer points, transmission delivery points or receipt points for gas within the Markets.
    - (C) INT140 Gas Quality  
The report has been enhanced to have a Hydrogen parameter.
    - (D) INT176 Gas Composition Data  
The report has been enhanced to have a Hydrogen parameter.
  - (iii) The purpose of the early publication of this Technical Specification is to allow sufficient time for the Distributors to redesign their settlement systems to account for the larger number of heating value zones that will be used in Victoria.

- (iv) The changes will be released to AEMO's Preproduction DWGM market systems on 16 October 2023.
  - (v) The changes will be released to AEMO's Production DWGM market systems on 1 February 2024.
  - (vi) The changes will be effective from 1 May 2024.
- (b) A revised DWGM - Technical Specification will be released shortly, that will specify the additional reports required by the Wholesale Market Distribution Coordination Procedures. The draft reports are:
- (i) INT240 Disaggregated Demand Forecasts
    - (A) This report is created at 10 minutes past the hour. The report provides an hourly demand forecast by CTM or CTM group, as required under the Wholesale Market Distribution Operation Procedures. Refer to INT241 for specification of the Disaggregated Demand Forecast CTM Groups.
    - (B) Distributors use these demand forecasts to inform DDS constraints.
  - (ii) INT241 Disaggregated Demand Forecasts CTM Groups
    - (A) Multiple meters feeding a single distribution network are forecast as a group. This report identifies the CTMs used in each of the forecasting CTM groups. This report is updated when there is a change to the CTMs in the forecasting groups. The report provides mapping of individual CTMs to CTM group.
  - (iii) The changes will be released to AEMO's Preproduction DWGM market systems on 3 April 2023.
  - (iv) The changes will be released to AEMO's Production DWGM market systems on the effective date 1 May 2024.

In the DWGM context, for Registered participants the proposed changes, above, represent documentation and system changes for AEMO. AEMO has not identified any existing Registered participants that will be required to make any modifications to their IT systems or business processes, except:

- (a) The change to the energy calculation procedures requires Distributors to update each customers metering installation heating value zone assignment. The initial step of this change is to move from the existing 34 heating value zones to ~140 heating value zones (e.g. a heating value zone per CTM).
  - (i) AEMO notes this move will reduce the long-term impact of new distribution connected facilities on customers supplied by each distribution system.
  - (ii) A new connection by distribution connected facility, after 1 May 2023, will only require the heating value zone of those impact customers downstream of that facility to have their heating value zone changed.

- (iii) The 'Package 3A Retail PPC – Zonal Heating Value' considers the IT system and business process impact of the move from statewide heating value to zonal heating value on the Retail Market.
- (b) Responsible persons for metering installations will be required to provide AEMO their existing calibration procedures by 1 May 2024 and within 20 business days of these documents changing after this.

## 5. Impact of issue not proceeding

In relation to Victorian Hydrogen initiative, these changes are to be made on the basis that the draft National Energy Laws Amendment (Other Gases) Bill 2022 and the AEMC's recommended Rules for extending the regulatory frameworks to hydrogen and renewable gases will be made as published. The consequence for not making the proposed changes will result in the Wholesale and Retail Market Procedures to be misaligned with the new Law and Rules.

## 6. Overall cost, benefits and magnitude of the changes

AEMO considers that the AEMC's [review into extending the regulatory frameworks to hydrogen and renewable gases](#) and the AEMC's [DWGM distribution connected facilities](#) rule change provides the assessment of cost and benefits of the rule changes as required by the National Gas Objective (NGO).

## 7. Consistency with the National Gas Rules and National Gas Objective

Regarding these changes, AEMO's preliminary assessment of the proposal's consistency with the NGR and NGO is:

Requirement	AEMO's Preliminary Assessment
<b>Consistency with National Gas Law (NGL) and NGR</b>	AEMO's view is that the proposed procedure change is consistent with the NGL as required by the Energy Ministers and NGR as amended in the AEMC's rule changes.
<b>National Gas Objective</b>	It is AEMO view's that the changes are expected to contribute to the achievement of the NGO by promoting efficient investment in the safe and efficient operation and use of covered gas services for the long term interests of consumers.

If any participant believes that any of the above AEMO views are contentious, this feedback needs to be included in the DWGM PPC response template.



## 8. Supporting Documentation

The documents can be found in:

- Attachment A – Wholesale Market Procedure changes
- Attachment B – DWGM technical document changes
- Attachment C – DWGM Technical Specifications
- Attachment D – DWGM PPC response

## 9. Proposed timelines

The AEMC's rule change requires AEMO to have published the Wholesale Market to take into account the amending rule by no later than 1 February 2024.<sup>2</sup> The Procedure consultation process is as follows:

- PPC published: 26 September 2023
- PPC consultation submissions due: 16 October 2023
- Expected IIR publication date: 30 October 2023
- Expected IIR consultation submissions due: 28 November 2023
- Expected Decision published: 15 December 2023
- Effective Date of Procedures: 1 May 2024

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<sup>2</sup> AEMC Final Rules Report, 24 November 2022, pg. 148

## Attachment A – Wholesale Market Procedure changes

The following Procedures are provided in track change and clean format. The version issued for this consultation is attached separately to this document:

- Wholesale Market Gas Quality Procedures (Victoria)
- Wholesale Market Maintenance Planning Procedures (Victoria)
- Wholesale Market System Security Procedures (Victoria)

## Attachment B – Technical Documents Changes

The following technical documents are provided in track change and clean format. The version issued for this consultation is attached separately to this document:

- DWGM Heating Value and Gas Composition Data Sources

## Attachment C – DWGM Technical Specifications

The Wholesale Market Electronic Communication Procedure has proposed that changes to the User Guide to MIBB Reports will be performed via AEMO releasing updates to the DWGM Technical Specifications, periodically published as part of the project.

These DWGM Technical Specifications can be found on AEMO's webpage: [IT change and release management](#) under the heading "Gas Markets and Systems" under the "Declared Wholesale Gas Market (DWGM)" heading.

This will be the primary communication forum for DWGM IT releases in future. These changes notifications are sent to Gas Wholesale Consultative Forum contacts along with with Gas IT Development Forum contacts. The DWGM Technical Specification for this IT change can be found on the link: [DWGM Technical Specification](#).

This document will be updated from time to time.

## Attachment D – DWGM – PPC Consultation Response

The 'DWGM – PPC response template' has been attached separately to this document. There are three sections in the template:

- Section 1 seeks general feedback on AEMO's examination of the proposal and each Procedures.
- Section 2 seeks feedback on specific questions related to the Procedure change.
- Section 3 seeks specific drafting proposals for the Procedure change.

Anyone wanting to make a submission for this first stage consultation stage (Wholesale Proposed Procedure Change (PPC)) are requested to use the response template provided in Attachment D. Submissions are due **COB 16 October 2023** and should be emailed to [GWCF\\_Correspondence@aemo.com.au](mailto:GWCF_Correspondence@aemo.com.au).

In relation to the ZHV changes, the Wholesale Market Procedure changes overlaps with the Retail Market Procedure (RMP) changes. Details about the RMP changes are described Package 3A Retail Market PPC. In relation to feedback on the proposed amendments to the RMP changes, please use the PPC Retail procedure response template.

Anyone wanting to make a submission for this first stage consultation stage (Retail Proposed Procedure Change (PPC)) are requested to use the response template provided. Submissions are due **COB 16 October 2023** and should be emailed to [grcf@aemo.com.au](mailto:grcf@aemo.com.au)