

# 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>	Friday, 15 September 2023
<b>Short issue title</b>	Implementation of the AEMC's Hydrogen review and DWGM Distribution Connected Facility rule change. 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
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#	Version	Presented to	Date
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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.

AEMO is amending the Wholesale Market Procedures as a consequence of the:

- (a) AEMC's review into extending regulatory frameworks to Hydrogen
- (b) DWGM Distribution Connected Facility rule change;
- (c) Minister's request to implement Zonal Heating Values in Victoria
- (d) Essential Services Commission review of the Gas Distribution System Code of Practice

Background on each of these changes are provided below.

##### 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.

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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.

### 1.1.2. Ministers request to implement Zonal Heating Values in Victoria

AEMO has received a request from the Victorian Minister Hon Lily D'Ambrosio (the Minister) requesting the Procedures be amended to implement zonal heating values (ZHV) for tariff V consumers and that these changes need to take effect before the Hydrogen Park Murray Valley project commences operation (Click [Minister's letter link](#)).

These changes require changes to the Energy Calculation Procedures detailed in chapter 3 of the Wholesale Market Metering Procedures to detail the operation and determination by AEMO of heating values for each heating value zones by the heating value allocation model. These changes are reflected in the 'Package 3A Retail Market PPC' document which provides detailed background on the proposed changes.

### 1.1.3. Essential Services Commission review of the Gas Distribution System Code of Practice

The Victorian Essential Service Commission's review of the Gas Distribution System Code of Practice, which require administrative changes to the Wholesale Market Distribution UAFG Procedure to be consistent with the Distribution Code.

## 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@aemo.com.au](mailto:gwcf@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>

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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).

## 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 Connection Approval Procedures (Victoria)</b>	Connection Approval Procedures (Victoria) required by rule 272(6) of the NGR.
<b>Wholesale Market Distribution Operation Procedures (Victoria)</b>	This Procedure contains the: <ul style="list-style-type: none"> <li>- Distribution Operational Coordination Procedures required by rule 317A(1) of the NGR.</li> <li>- Net Bidding Facility Procedures required by rule 204B(3) of the NGR.</li> </ul>
<b>Wholesale Market Management Procedures (Victoria)</b>	This Procedure contains the: <ul style="list-style-type: none"> <li>- Additional Reporting Procedures required by rule 324A(1) of the NGR.</li> <li>- Electronic Communication procedures required by rule 319(4) of the NGR.</li> <li>- Gas Ownership Rules required by clause 91BO of the NGL.</li> <li>- Rule Change Consultation Procedures required by rule 357(2) of the NGR.</li> </ul>
<b>Wholesale Market Metering Procedures (Victoria)</b>	This Procedure contains the: <ul style="list-style-type: none"> <li>- Metering Uncertainty Limits and Calibration Requirements Procedures (Victoria) made under rule 297 of the NGR.</li> <li>- Energy Calculation Procedures (Victoria) made under rule 303(6) of the NGR.</li> <li>- Metering Communications Procedures (Victoria) made under rule 308(4) of the NGR.</li> <li>- Installation Database Procedures (Victoria) made under rule 309(3) of the NGR.</li> <li>- Metering Installation Coordination Procedures made under rule 292A of the NGR.</li> <li>- Metering Register Procedures (Victoria) made under rule 311(4) of the NGR.</li> <li>- Data Validation Procedures (Victoria) made under rule 314(2) of the NGR.</li> </ul>
<b>Wholesale Market Operations Procedures (Victoria)</b>	This Procedure contains the: <ul style="list-style-type: none"> <li>- Accreditation Procedures required by rule 210(8) of the NGR.</li> <li>- Administered Pricing Procedures required by rule 224(1) of the NGR.</li> <li>- Capacity Certificates Auction Procedure required by rule 328D(1) of the NGR.</li> <li>- Capacity Certificates Transfer Procedure required by rule 331(2) of the NGR.</li> </ul>

Title	Legal Requirement
	<ul style="list-style-type: none"> <li>- LNG Reserve Procedures required by rule 286A(1) of the NGR.</li> <li>- Gas Scheduling Procedures required by rule 206(4) of the NGR.</li> </ul>
<b>Wholesale Market Settlement Procedures (Victoria)</b>	This Procedure contains the: <ul style="list-style-type: none"> <li>- Ancillary Payment Procedures required by rule 239(1) of the NGR</li> <li>- Uplift Payment Procedures required by rule 240(1) of the NGR</li> <li>- Distribution Unaccounted for Gas Procedures required by rule 317(1) of the NGR</li> <li>- Compensation Procedures required by rule 237(10) of the NGR</li> </ul>

The following procedures are being consulted on separately as part of 'PPC – DWGM Procedure changes for Hydrogen and DCF – Part 2' which will be published within two weeks.

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.

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

AEMO has made the following general amendments across the Procedures:

- 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 change.
- 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.

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- 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 Connection Approval Procedures

The **Connection Approval Procedures** amendments are scoped to:

- (a) reflect the terminology of the procedure in line with the rule terminology changes.
- (b) Improve the readability and usability of the procedure by restructuring and extending the document to include a:
  - (i) high level overview of the DTS connection application process.
  - (ii) summary of AEMO's information requirements when performing a connection approval.
  - (iii) the amendments to the Procedure have not been track changed.

AEMO considers the changes to the Procedure are consistent with the Rule requirements and provide clarity on the DTS connection process for Registered participants.

## 3.3. Wholesale Market Distribution Operation Procedures

This Procedure is composed of the two new Procedures that primarily apply to the operation of Distribution Connected Facilities, including:

- (a) **Distribution Operational Coordination Procedures:**
  - (i) How a Distributor is to submit a DDS constraint methodology;
  - (ii) AEMO's assessment of a proposed DDS constraint methodology;
  - (iii) Requirements for publishing an approved DDS constraint methodology on the Distributor website;
  - (iv) Process for a Registered participant to propose a review of the DDS constraint methodology.
  - (v) The information to be provided to the Distributor by AEMO including the new AEMO demand forecast by CTM which can be provided to Distributors for the purpose of determining constraints for distribution connected facilities.
  - (vi) The information to be provided to AEMO by the Distributor, which includes:
    - (A) A materiality threshold to be applied to constraints submitted between bid submission time and schedule publish time for each schedule of 5TJ/d. See question 1 for Registered participants below.

- (B) A materiality threshold to be applied if AEMO is to send a System Wide Notification if a constraint does not impact a schedule by more than 5TJ/d. See question 2 for Registered participants below.

**Question 1: Do participants consider the 5TJ/d constraint materiality threshold for inclusion of a constraint in the scheduling window?**

For the avoidance of doubt, this proposal applies to distribution connected facilities (under the distribution operational coordination procedure) and to DTS connected facilities (under the gas scheduling procedures).

This proposal was developed as:

- At the moment, AEMO's market processes for applying constraints are fit for purpose for the existing 10 DTS connected facilities that can submit constraints. This process requires AEMO to include all constraint if possible in an operating schedule, even if submitted late in the scheduling window (the period between bid submission time and schedule publish time).
- The inclusion of distribution connected facilities may mean there will be a substantial increase in the number of facilities that may submit constraints to AEMO. This has caused AEMO to revisit the efficiency of applying all constraints, if possible, during the scheduling window.
- AEMO considers that all constraint submitted prior to the bid submission time for each scheduling interval should be included in the schedule. However, for constraints submitted by facility operators in the scheduling window, AEMO considers that a materiality threshold should be applied.
- AEMO considers a 5TJ/d threshold is appropriate as a threshold for materiality of constraints requested in the scheduling window therefore the limitation means for intraday schedules:
  - o At 6AM a constraint impacting the forward hours of less than 208 GJ/hr would not need to be accounted for in the scheduling horizon.
  - o At 10PM a constraint impacting the forward hours of less than 625 GJ/hr would not need to be accounted for the scheduling horizon.

**Question 2: Do participants consider the 5TJ/d constraint materiality threshold for sending a SWN is appropriate as AEMO already publishes all constraints at schedule approval?**

For the avoidance of doubt, this proposal applies to distribution connected facilities (under the distribution operational coordination procedure) and to DTS connected facilities (under the gas scheduling procedures).

(a) AEMO has also considered the efficiency of sending SWNs for all constraints considering AEMO publishes the following public MIBB reports to inform the public of constraints used in a schedule at the approval of each Operating Schedule:

- (i) INT111 - Supply and Demand Point Constraint (SDPC) (which will include distribution supply and demand point constraints);
- (ii) INT112 - Directional Flow Point Constraints (DFPC);
- (iii) INT112b - Net Flow Transportation Constraints (NFTC); and
- (iv) INT112c - Supply Source Constraint (SSC).

(b) AEMO also considers it prudent to place a materiality threshold on when a SWN should be sent for a constraint application. AEMO considers a 5 TJ/d is also appropriate threshold for sending a SWN. AEMO considers this materiality threshold balances Market Participants need to be informed about material constraints during scheduling horizon and the information already published by AEMO at the approval of each schedule.

- (b) **Net Bidding Facility Procedures**, which is primarily required to allow for a net injection metering configuration for blend processing facilities. This procedure has been drafted to meet the rule requirement. The addition in the procedure is:



- (i) A default metering configuration (allowing a process for negative net injections to be incorporated in market systems) has been specified in addition to the allowance for the net bidding facility to propose an alternate metering configuration location.
- (ii) AEMO has clarified that:
  - (A) schedules and allocations are provided on an hourly basis for settlement during a scheduling interval.
  - (B) Ad hoc monitoring will be undertaken which may detect negative net injections and trigger the reclassification process from net bidding facility to blend processing facility.

### 3.4. Wholesale Market Gas Quality Monitoring Procedures

This procedure is being consulted on separately as part of ‘PPC – DWGM Procedure changes for Hydrogen and DCF – Part 2’ which will be published within two weeks.

The ‘DWGM – PPC response template’ includes section for all Procedures to be consulted on in this PPC and the future PPC Part 2.

AEMO is planning to incorporate this Procedure at the Impact and Implementation Report consultation stage. Therefore, Participants are recommended to prioritise the review of the Procedures provided in this proposed procedure change.

### 3.5. Wholesale Market Maintenance Planning Procedures

The maintenance planning procedures is being consulted on separately as part of ‘PPC – DWGM Procedure changes for Hydrogen and DCF – Part 2’ as discussed in section 3.4.

### 3.6. Wholesale Market Management Procedures

The Procedure has been developed to consolidate the existing Procedures that are related to how AEMO manages specific function in the market. The Procedures include minor editorial updates reflecting Rule terminology updates, updates reflecting consolidation of the Procedures and move to the new template. The amendments include:

- (a) **Additional Reporting Procedure:**
  - (i) A new Procedure detailing the classes of people and reporting entities, who are not Registered participants, that AEMO may seek information on to inform future Victorian Gas Planning Reports.
- (b) **Electronic Communication Procedures:**
  - (i) Align the Technical Document consultation process, defined in section 3.3.4 of the Procedure, to AEMO’s existing IT notification process used in the NEM. This process requires AEMO to send out a Technical Specification with at least the first preproduction release prior to a release being made into Production.



- (A) AEMO has also included a clause to allow for the update of the Technical Documents to account for “minor defect or documentation errors that do not otherwise alter the operation defined by the Technical Document” without consultation, 10 business days before the document is effective.
- (ii) Text concerning System Wide Notice have been:
  - (A) moved to a new section 3.4 of the Procedure from the electronic communication procedures and the gas scheduling procedures;
  - (B) the new Rule 318A requirement for AEMO to send System Wide Notices on behalf of the Responsible Person (for Metering Installations) has been detailed.
  - (C) the process for AEMO to send System Wide Notices on behalf of Registered participants have been detailed. This has been required a few times in recent years for AEMO to communicate on behalf of other companies about issues on their pipelines.
- (iii) AEMO has limited routine notifications for Responsible Persons to be sent up to once every three months. AEMO considers this reflects the existing quarterly metering calibration requirement.

**Question 3: Do Registered Participants agree that a 3 monthly communication limit is appropriate for routine notifications concerning Responsible Persons notifications under rules? If not please nominate a alternate timeframe (including a justification) for routine communications?**

AEMO’s interpretation of the rule requirements are detailed in rule 318A and in summary are:

- rule 293(3) – notification of planned testing of metering installations at settlement metering points would be a routine communication and would be communicated each quarter. Rule 293(3) requirement to send test results would be to specified contacts from each Registered participant that contacted the Responsible Person following the notification of planned metering installation testing. Further, if an issue was identified at a Settlement Metering Point, AEMO considers that additional processes, which may include settlement revisions, would be required that would result in separate communications.
- rule 293(5) – notification that a metering installation at a Settlement Metering Point is inaccurate is expected to be a non-routine email. The assumption is that metering calibrations under rule 299(9) would result in the metering installations at Settlement Metering Points meeting accuracy requirements.
- rule 293(7) – notification of any (including temporary) modification, adjustment, repair or replacement of any of the metering installation at a Settlement Metering Point. AEMO considers that majority of this work should be planned (as per Wholesale Market Maintenance Planning Procedure) and therefore should fit into the routine notification framework. However, unplanned work (which may or may not fit the Rule 293(7) definition) would require additional notifications to be sent.
- rule 299(9) – In AEMO’s view metering calibration, as currently undertaken, is a planned activity and therefore the quarterly communication of the planned metering calibration is a routine communication. AEMO considers a communication every three months to be appropriate; and
- rule 300(2) – In AEMO’s view tampering with a metering installation found by a responsible person or registered participant should not be occurring on a routine basis and therefore should not be considered a routine communication.

- (c) **Gas Ownership Rules:**
  - (i) Cross reference the gas ownership Rule provisions for the DTS and DDS, thereby aligning them with the regulatory instrument required by clause 91BO of the NGL.
  - (ii) Allow for gas ownership by:
    - (A) AEMO (when performing functions under Part 19); and

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- (B) Registered participants (that are not Market Participants) when they are directed to inject gas by AEMO.
  - (iii) Update the reference from the Clean Energy Act 2011 to the National Greenhouse and Energy Reporting Act 2007.
  - (iv) AEMO considers the changes to the Procedure are consistent with the Law and Rule requirements. AEMO also considers the updates remove ambiguity from this regulatory instrument in regards to gas ownership by AEMO and Registered participants (that are not Market Participants).
- (d) **Rule Consultation Procedures:**
- (i) Amend the procedure to better reflect the intention of the Rule to detail how AEMO considers a rule change proposed to it under this Procedure, prior to beginning consultation.
  - (ii) Remove repetition of the Rule requirements from Part 3 and Part 19 Division 8 (Rules 356 to 359) that had been previously included in this Procedure.
  - (iii) AEMO considers the changes to the Procedure does not impacts AEMO or Registered participant obligations under this Procedure.

### 3.7. Wholesale Market Metering Procedures

The Metering Procedures include minor editorial updates reflecting Rule terminology updates, updates reflecting consolidation of the Procedures and move to the new template. The amendments include:

- (a) **Metering uncertainty limits and calibration requirements procedure:**
- (i) For metering uncertainty changes:
    - (A) the industry standard AEMO has used to determine uncertainty limits.
    - (B) the uncertainty limits that apply for pure hydrogen.
  - (ii) For metering installation calibration requirements:
    - (A) Requirements for the responsible person for a metering installation to provide AEMO its calibration procedure within 3 months of the effective date of the Procedures and within 20 business days of each change after that date.
    - (B) AEMO also provides an summary of the requirements to be covered in the calibration procedure.
    - (C) Requirements around meter calibration reporting requirements are also specified.
  - (iii) For uncertainty limits for energy calculations, AEMO has incorporated a pure hydrogen uncertainty limit.
  - (iv) AEMO considers the changes are consistent with the Rule requirements.

**(b) Energy calculation procedures:**

- (i) Detail the industry standards to be applied to all metering installations in the market as require by the Rule.
- (ii) AEMO's processes for determining heating values at heating value zones via the heating value allocation model. The process includes:
  - (A) The requirements for AEMO to determine heating value zones for the DTS.
  - (B) The requirement for the Distributor to assign MIRNs to heating value zones based on primary supply.
  - (C) The requirement for a review of heating value zones if gas sampling determines the heating value of gas for a group of meters in a zone is inconsistent with the metering uncertainty limits for energy calculations.
- (iii) AEMO's determination of pressure correction factor's for each heating value zone, in consultation with the Distributor, on the basis of the gas blend provided within each heating value zone.
- (iv) AEMO's determination of the energy calculation to be applied at distribution delivery points for data logger meters (flow corrected), data logger meters (PCF energy calculation) and basic meters.
  - (A) AEMO has expanded the data logger meters (flow corrected) to incorporate the calculation of gas mass meters (eg Coriolis meters) in addition to the existing gas volume meter calculation.
- (v) AEMO considers the changes are consistent with the rule changes and also provide clarity on AEMO determination of heating values for each heating value zone.

**(c) Metering communications procedures:**

- (i) Editorial amendments, as a CTM is now defined as a settlement metering point.
- (ii) Meter time and time stamping of data requirements have been moved from the "Gas Metering – DM Data requirements" and "Gas Metering – CTM Data requirements" to the Procedure.
- (iii) Communication protocol has been amended to allow AEMO to agree an alternate communication protocol to RTUs for metering installations. This change has been included as the existing BSAP communication protocol is expected to be replaced within the next few years.
  - (A) AEMO considers further changes to the communication protocol are out of scope until a new communication standard is developed for inclusion in a future metering communication procedure consultation.
- (iv) AEMO has noted that the rule have changed the polling frequency and communication links of system injection points, DTS monitoring points, DDS transfer monitoring points and DDS injection points (which are colcated with gas quality monitoring points) now have to meet the continuous transmission of gas

quality data in real time to the metering database, as required by Rule 289G and the Wholesale Market Gas Quality Monitoring Procedures.

- (d) **Installation database procedures** : no substantive amendments were identified.
- (e) **Metering installation coordination procedures**:
  - (i) A new procedure that details how AEMO manages metering installations at settlement metering points.
  - (ii) The Procedure details processes for information require before a metering installation can undertake maintenance, including how AEMO will determine the substitution to be applied at the metering installation.
- (f) **Meter register procedures** : no substantive amendments were identified.
- (g) **Data Validation Procedures**:
  - (i) The acknowledgment in the Data Gas chromatographs that are monitoring primary gases (other than methane), such as Hydrogen or Biogas facilities, may have altered upper and lower parameters.
  - (ii) Allowing AEMO to utilise the heating value allocation model to determine the heating value and gas composition data at these locations.
  - (iii) The following change represents a process improvement AEMO is applying that allow some meter substitutions to be automated. This requires:
    - (A) The addition of a validation parameter “Tolerance” to be applied to settlement metering points by the MDA application. This tolerance parameters allows the automation of manual metering substitution. The tolerance parameter compares the meter read against the time-weighted average of periodic instantaneous values over the hour. If they are determined to be different this flags the meter reading for substitution.
    - (B) The Default substitution parameter has been superseded by the new “Calculation” substitution parameter as the final substitution rule. The Calculation rule is a time-weighted average of periodic instantaneous values over the hour.
- (h) Technical document, supporting the Wholesale Market Metering Procedure have also been amended, they include:
  - (i) “AEMO Victorian Pressure Correction Factors” has been amended to reflect updates to the Victorian Pressure Correction Factors using a 10 vol% hydrogen blend. A hydrogen blend below 10 vol% is not expected to result in a significantly different PCF factor.
  - (ii) “Gas Metering – CTM Data Requirements” has been updated to the new AEMO template. The time stamping of data has been moved to the Wholesale Market Metering Procedures.

- (iii) The information specified in the existing “Gas Metering – DM Data Requirements” has been incorporated into the Metering Communication Procedures as part of this Procedure update.

### 3.8. Wholesale Market Operation Procedures

The Procedure has been developed to consolidate the existing Procedures that are related to scheduling the DWGM. The specific Procedures include minor editorial updates reflecting Rule terminology updates, updates reflecting consolidation of the Procedures and move to the new template. The amendments include:

- (a) **Accreditation Procedures:**
  - (i) Improving the readability and usability by consolidating accreditation information from the Gas Scheduling Procedure to Accreditation Procedure regarding accreditation constraint parameters.
  - (ii) Minor editorial amendments to create the terms Accreditation Application and Deemed Accreditation Application, along with the removal of text that is redundant following the gas day harmonisation rule change.
- (b) **Administered Pricing Procedures:**
  - (i) Consequential amendment to the material curtailment text to reflect the change in the Gas Load Curtailment and Gas Rationing and Recovery Guidelines effective on 1 January 2023.
  - (ii) Consolidation of calculation terms, previously in the glossary, to a separate table below the administered price calculations.
  - (iii) Addition of a signpost in the Procedure directing Registered participants to the Compensation Procedures if they are impacted by an administered price cap and compensation is required.
- (c) **Capacity Certificates Auction Procedure:** the amendments allow AEMO to continue to determine capacity certificate zones and capacity certificates, by allowing AEMO to:
  - (i) assign distribution connected facilities to a capacity certificate zone and assign them capacity certificates.
  - (ii) have the Distributor determine values for use in determining capacity certificates.
  - (iii) account for distribution connected facilities in system capability modelling.
  - (iv) allow AEMO to request information on distribution connected facilities from Registered participants.
- (d) **Capacity Certificates Transfer Procedure:** no substantive amendments were identified.
- (e) **LNG Reserve Procedures:** no substantive amendments were identified.
- (f) **Gas Scheduling Procedures:**

- (i) The inclusion of a materiality clause for constraints, as a large number of distribution connected facilities may join the DWGM in coming years. The materiality threshold of 5TJ/d applies to:
  - (A) The application of SDPC, SSC and DFPC constraints that are submitted by DWGM facility operators between bid submission time and schedule publish time for each scheduling horizon. This is to be responded to under question 1 above.
  - (B) notification of a constraint that impacts the market by less 5TJ/d on the basis that AEMO reports all constraints applied at the approval of each operating schedule. This is to be responded to under question 2 above.
- (ii) Addition of a section for application of a distribution supply or demand point constraints, which is a special form of SDPC, determined by the Distributor under the distribution constraint methodology approved by AEMO under the distribution operational coordination procedure.
- (iii) Amendment to have a consistent table for explaining the constraint parameters for each constraint type (SDPC, DFPC, NFTC and SSC). A consistent Accreditation constraints parameters was applied in the Accreditation Procedure.
- (iv) Signposts added for:
  - (A) Market Notifications and Communications which summarised SWNs sent under the gas scheduling procedures has been moved to the electronic communication procedures.
  - (B) Compensation which provides direction for Registered participant to look at the compensation procedures in the event of an AEMO intervention or unintended scheduling result.

### 3.9. Wholesale Market Settlement Procedures

The Procedure has been developed to consolidate the existing Procedures that are related to AEMO providing a settlement statement line items for Market Participant. The specific Procedures include minor editorial updates reflecting Rule terminology updates, updates reflecting consolidation of the Procedures and move to the new template. The amendments include:

- (a) **Ancillary Payment Procedures:** no substantive amendments were identified.
- (b) **Uplift Payment Procedures:** no substantive amendments were identified.
- (c) **Distribution UAFG Procedures:**
  - (i) The Victorian Essential Service Commission's review of the Gas Distribution System Code of Practice, has required administrative changes to the Wholesale Market Distribution UAFG Procedure to be consistent with the Code.
  - (ii) The addition of Distribution Connected Facilities requiring a consequential change to the values AEMO supplies for CTM Injections to include distribution connected facilities market injection points and market withdrawal points.

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- (iii) The document has been restructured to improve readability and clarity on the Distribution UAFG process which has been separated from the Distribution UAFG transaction requirements. The restructured text has not been track changed.
  - (iv) Participant submissions relevant to the Wholesale Market Distribution UAFG Procedure may be shared by AEMO, where relevant, with the Essential Service Commission.
- (d) **Compensation Procedures:** no substantive amendments were identified.
- (i) The AEMC has announced on 31 August 2023, that the AEMC’s Compensation and Dispute Resolution Framework review would be extended to include the DWGM. The AEMC’s review may result in a consultation on the compensation procedure at a later date.

### 3.10. Wholesale Market System Security Procedures

The System Security Procedures are being consulted on separately as part of ‘PPC – DWGM Procedure changes for Hydrogen and DCF – Part 2’ as detailed in section 3.4.

## 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.

In addition, AEMO has received a request from the Victorian Minister requesting the Procedures be amended to implement ZHV for tariff V. If ZHV is not implemented then tariff V customers will continue to receive the statewide heating value. As hydrogen gas production facilities are integrated as distribution connected facilities, this will result in a greater divergence in heating values within those distribution systems to the disadvantage of tariff V customers.

The Victorian Essential Service Commission's review of the Gas Distribution System Code of Practice, which requires administrative changes to the Wholesale Market Distribution UAFG Procedure to be consistent with the Code. If the change is not implemented then Market Participants utilising the existing Procedure will face regulatory uncertainty due to inconsistency between the Code and the Wholesale Market Distribution UAFG Procedures.

## 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).

In addition, AEMO has received a request from the Victorian Minister Hon Lily D'Ambrosio (the Minister) requesting the Procedures be amended to implement ZHV for tariff V. AEMO notes this request will ensure more accurate billing for customers and therefore is consistent with the NGO.

The Victorian Essential Service Commission's review of the Gas Distribution System Code of Practice, which requires administrative changes to the Wholesale Market Distribution UAFG

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Procedure to be consistent with the Code. AEMO considers these administrative changes are consistent with 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 Attachment D 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: 15 September 2023
- PPC consultation submissions due: 16 October 2023
- Expected IIR publication date: 30 October 2023

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

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

- 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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Australian Energy Market Operator Ltd ABN 94 072 010 327

## Attachment A – Wholesale Market Procedure changes

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

- Wholesale Market Connection Approval Procedures (Victoria)
- Wholesale Market Distribution Operation Procedures (Victoria)
- Wholesale Market Management Procedures (Victoria)
- Wholesale Market Metering Procedures (Victoria)
- Wholesale Market Operation Procedures (Victoria)
- Wholesale Market Settlement Procedures (Victoria)

## Attachment B – Technical Documents Changes

The following technical documents are provided in track change and clean format. The changes to these documents represent AEMO's initial review of the technical document changes required for this rule change. Additional changes may be identified and consulted on with the connection of AGIG's HyP Murray Valley project, expected in early 2025.<sup>3</sup>

The version issued for this consultation is attached separately to this document:

- AEMO Victorian Pressure Correction Factors
- Gas Metering – CTM Data Requirements
- User Guide to MIBB Reports

AEMO is updating the User Guide to MIBB Reports as part of the consultation integrating finalised MIBB report updates. At the conclusion of this consultation AEMO will communicate additional MIBB report changes via the DWGM Technical Specification, as may be updated via the process outlined in the electronic communication procedures. The DWGM Technical Specification is summarised in Attachment C.

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<sup>3</sup> See <https://www.agig.com.au/hydrogen-park-murray-valley>, accessed 13 September 2023

## 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)