

PROPOSED PROCEDURE CHANGE (PPC)

Issue Number	Package 2 – 2023 (IN001/23 IN005/23)		
Impacted Jurisdiction(s)	Victoria (VIC), Queensland (QLD), New South Wales/Australian Capital Territory (NSW/ACT) and South Australia (SA)		
Proponent	See table in section 3.1	Company	
Proponent e-mail	grcf@aemo.com.au	Proponent phone #	
Affected Gas Market(s)	• Retail	Date proposal sent to AEMO	Thursday, 1 September 2022
Short Issue Title	Allow market participants to self-manage their Transport Layer Security (TLS) Certificates that are used to connect to many AEMO electricity and gas systems; and Add SA specific details from SAWA system architecture/specification to PBP3 system architecture/specification.		

VERSION #	PRESENTED TO	DATE
1	GRCF	13 December 2022



PROPOSED PROCEDURE CHANGE (PPC) – DETAILED REPORT SECTION

1. DESCRIPTION OF ISSUES

The following is a description of issues for each of the initiatives that form part of the Package 2 – 2023 consultation.

IN001/23¹

Electricity and Gas market participants connect to many of AEMO's systems securely using TLS certificates supplied by AEMO.

TLS Certificates are only required by participants for application-to-application (also known as system-to-system) communications (user Interfaces do not use AEMO-supplied TLS certificates).

The Gas Supply Hub FRC, also known as the FRC Hub² (Gas Retail B2B, and B2M, traffic using ebXML) requires the use of TLS certificates to authenticate through AEMO's network.

The eHub, also known as the Energy Hub, also requires the use of TLS certificates to authenticate through AEMO's network.

These TLS certificates must be replaced every 3 years. Today, the replacement process is manual and can take weeks. Most participant TLS certificates will start expiring from June 2023 and participants must replace expiring certificates with new ones to avoid disconnection from AEMO systems.

As part of improving market security and empowering market participants to self-manage their connections to AEMO systems, AEMO is:

- upgrading the network to allow newer and more secure TLS versions and deprecate old and less secure versions; and
- providing a better way than the current manual approach to TLS certificate management, allowing participants to self-manage their AEMO-supplied TLS certificate through a TLS Certificate Management interface.

The older technology Secured Socket Layer (SSLv3, or less), TLS v1.0 and TLS v1.1 is still in use by a few participants. AEMO will continue to accept the SSL and TLS v1.0/v1.1 connections until the changes to Technical Protocol (TP) documents being consulted become effective, which is expected to be 30 June 2023. AEMO will not accept the SSL and TLSv1.0/v1.1 connections after this date.

Technical advice about the above changes was circulated to the Gas Retail Consultative Forum (GRCF) in October 2022.

Because of the above technical changes, some of the TPs will require minor amendments in order maintain alignment with new self-managed process.

IN005/23

Add South Australian (SA) specific details from SAWA system architecture/specification to PBP3 system architecture/specification. This is a further opportunity to harmonise SA documentation with other east coast documents, like what occurred for IN006/21 whereby some SA some sections of the Specification Pack (SP) moved across to Participant Build Pack (PBP)).

¹ For the avoidance of doubt the proposed changes in relation to IN001/23 are not limited to eastern states. The same changes proposed in this consultation apply in Western Australia (See IN001/23W)

² FRC Hub is the term used in the Retail Market Procedure (RMP)



1.1. Pre-consultation outcomes

At the Gas Retail Consultative Forum (GRCF) prioritisation session held in November 2022, participants supported AEMO's proposal to initiatives IN001/23 to a consultation package.

In relation to IN005/23, AEMO added this initiative to the register and Package 2 -2023 post the November 2022 meeting. This is due to the changes for IN001/23 providing an opportunity to further align SA documents with existing east coast documentation given the fact that the TP documentation³ is largely the same.

1.2. Invitation to provide feedback. Scope of changes.

Anyone wishing to make a submission for this first stage consultation stage are requested to use the response template provided in Attachment B. Submissions close COB 17 January 2023 and should be e-mailed to grcf@aemo.com.au.

IMPORTANT: The scope of works is limited to the initiatives described above. The scope maybe expanded to pick up other minor typographical errors that are identified. A more thorough review of the other sections of the TPs is out of scope for this consultation.

2. REFERENCE DOCUMENTATION

- Participant Build Pack 3 – System Architecture v3.2
- Participant Build Pack 3 – System Specification v3.1
- FRC B2M – B2B Hub System Architecture v3.6
- FRC B2M – B2B Hub System Specifications v3.9
- Gas FRC B2B Connectivity Testing and Sys Certification v1.10
- FRC HUB Operational Terms and Conditions v9.0
- Gas Interface Protocol (Victoria) v26.0
- Gas Interface Protocol (Queensland) v24.0
- Specification Pack Usage Guide v8.5

3. OVERVIEW OF CHANGES

As outlined in Section 1, this PPC is made up of two existing initiatives, each having their own specific change as described in Attachment A. It is AEMO's view that none of these changes significantly alter any of the existing obligations placed on participants. It is envisaged that the above should contribute to improving the user experience in accessing AEMO's systems and provide further clarity towards participating in eastern states retail gas market.

AEMO is targeting to have the formal consultation processes concluded in the first half of 2023 with the proposed effective date of 30 June 2023.

³ Participant Build Pack 3 – System Architecture and FRC B2M – B2B Hub System Architecture. Participant Build Pack 3 – System Specification and FRC B2M – B2B Hub System Specifications.



3.1. Proposed changes

The following table indicates which initiative affects which TP⁴. The clauses of each document that have been updated have had a change id comment applied to them indicating which initiative is related to which change of drafting.

Change ID	Title	Proponent	Documents affected
IN001/23	Participant Certificate Automation	AEMO	Participant Build Pack 3 – System Architecture Participant Build Pack 3 – System Specification FRC B2M – B2B Hub System Architecture FRC B2M – B2B Hub System Specifications Gas FRC B2B Connectivity Testing and Sys Certification FRC HUB Operational Terms and Conditions Gas Interface Protocol (Victoria) Gas Interface Protocol (Queensland)
IN005/23	Add SA specific details from SAWA system architecture/specification to PBP3 system architecture/specification	AEMO	Participant Build Pack 3 – System Architecture Participant Build Pack 3 – System Specification Specification Pack Usage Guide

The proposed changes are:

Participant Certificate Automation (IN001/23).

- Replacing SSL, TLSv1.0 and TLS v1.1 to TLS v1.2 and encryption from 128 to 2048 where applicable in the documents mentioned above.
- Include a new clause in FRC HUB Operational Terms and Conditions that requires Subscribers to ensure the currency of their AEMO-issued digital certificates and request AEMO for re-issues and renewals when required.
- A new interface for Participants to self-manage their AEMO-supplied TLS certificates. Market participants will be required to ensure their own TLS certificate currency and self-manage their TLS certificates,
 - The solution will allow participants to retrieve their existing AEMO-supplied TLS certificates, create new TLS certificates, and renew, reissue or revoke existing certificates
 - The solution will send notifications to Participants prior to the expiry of the TLS certificate to remind them to replace their soon-to-expire certificate.
 - AEMO will monitor the replacement of expiring certificates to ensure participants are self-managing the replacement of their TLS certificates prior to expiry.

Add SA specific details from SAWA system architecture/specification to PBP3 system architecture/specification (IN005/23).

- The changes are just documentation changes. None of the existing obligations are changing (i.e. no obligations added and no obligations removed).

See Attachment A for further information about these changes.

4. LIKELY IMPLEMENTATION REQUIREMENTS AND EFFECTS

IN001/23

⁴ Includes FRC Hub Operational Terms and Conditions



Subscribers will be required to ensure the currency of their AEMO-issued digital certificates and request AEMO for re-issues and renewals when required.

Subscribers using the SSLv3, TLS v1.0 or TLS v1.1 to connect with AEMO will be required to transition over to using TLSv1.2.

IN005/23

SA participants now need to refer to Participant Build Pack 3 documents. This will therefore result in consistency between the regulatory frameworks for all east coast retail gas markets.

5. IMPACT OF ISSUE NOT PROCEEDING

IN001/23

The current situation leads to:

1. A lower level of security than required on AEMO's network and systems, leading to a greater risk of security incidents on GHUB FRC and eHub systems.
2. A higher manual overhead of TLS certificate management on both AEMO and participants.

IN005/23

If the changes identified in this PPC do not proceed, it means that operational process improvements such as harmonising the documentation will not be attained, and as such, the benefit of more streamlined TP will not be realised.

6. OVERALL COSTS, BENEFITS, AND MAGNITUDE OF THE CHANGES

AEMO expects there will be negligible implementation costs since none of the changes proposed in this PPC require substantial process changes and considers this change to be non-material. If a participant believes that any of the proposed changes are material, this feedback needs to be included in the Attachment B response template.

Implementation of Participant Certification Automation is expected to deliver the following benefits:

- Empowers the participants self-manage their connection and TLS Certificates to AEMO systems.
- TLS technology uses 2048 bits encryption and a higher TLS version, making the connection more secure.
- Reduces the risk of participants being disconnected from MTLS-authenticated systems due to expired certificates.

AEMO considers this initiative will require minor process change for the Subscribers to use the self-managed TLS Certificate Management solution for managing their TLS certificates used for TLS connection to AEMO systems.

Inclusion of SA specific details from SAWA to PBP3 means more uniform TPs across all jurisdictions which will reduce the complexities normally associated with entering gas retail markets, particularly for those retailers wanting to operate in more than one jurisdiction.

7. CONSISTENCY WITH NATIONAL GAS RULES (NGR) AND NATIONAL GAS OBJECTIVE (NGO)

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



Consistency with National Gas Law (NGL) and NGR	AEMO's view is that the proposed change is consistent with the NGL and NGR because the proposed changes properly reflects operational practices and promotes consistency across the jurisdictions.
National Gas Objective	As outlined in Section 6, it is AEMO's view that this change removes any costs associated with unnecessary differences in process and procedures and is in the long-term interests of consumers as it promotes clarity and consistency for gas retail market participants.
Any applicable access arrangements	AEMO's view is that the proposed change is not in conflict with existing Access Arrangements.

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

8. SUPPORTING DOCUMENTATION

Attachment A Proposed Changes to Procedures

Attachment B PPC Response Template.

9. PROPOSED TIMELINES

Subject to all necessary approvals, AEMO is targeting to implement this change by 30 June 2023.

In order to achieve this timeline, AEMO proposes the following key milestones:

- Issue PPC on 13 December 2022
- Submissions on PPC close 17 January 2023
- Issue Impact and Implementation Report (IIR) on 30 January 2023
- Submission on IIR close 27 February 2023
- Publish AEMO decision 17 March 2023
- Target effective date 30 June 2023



ATTACHMENT A – MARKED UP CHANGES (SEE SECTION 3)

Draft versions of the RMPs showing tracked changes between the current version and the proposed changes are attached separately to this document. Blue underline means addition and ~~red-strikeout~~ means delete.

- Participant Build Pack 3 – System Architecture
- Participant Build Pack 3 – System Specification
- FRC B2M – B2B Hub System Architecture
- FRC B2M – B2B Hub System Specifications
- Gas FRC B2B Connectivity Testing and Sys Certification
- FRC HUB Operational Terms and Conditions
- Gas Interface Protocol (Victoria)
- Gas Interface Protocol (Queensland)
- Specification Pack Usage Guide

ATTACHMENT B – PPC RESPONSE TEMPLATE

The PPC response template has been attached separately to this document. There are two sections in the template:

- Section 1 seeks feedback on AEMO's examination of the proposal in Sections 1–9 (i.e., whether AEMO has correctly captured the requirements and surrounding context of the proposal)
- Section 2 seeks feedback on the proposed changes listed in attachment A.

Anyone wishing to make a submission to this PPC consultation are to use this response template. Submissions close COB 17 January 2023 and should be emailed to grcf@aemo.com.au.