

Impact & Implementation Report (IIR)

Summary Section

Ref# (if applicable)	IN008/24		
Impacted jurisdiction(s)	All Retail Gas Market		
Proponent		Company	AEMO
Proponent email	grcf@aemo.com.au		
Affected Gas Market(s)	Retail	Consultation process (ordinary or expedited)	Ordinary
Industry consultative forum(s) used	GRCF	Date industry consultative forum(s) consultation concluded	29/10/2024
Short issue title	Transport Layer Security (TLS) documents.	update and amendments to other	Technical Protocol (TP)
Procedure(s) or Documentation impacted	Refer to Section 2 of the IIR		
IIR prepared by	Nandu Datar	Approved by	Meghan Bibby
Date IIR published	4 November 2024	Date consultation concludes	3 December 2024
Other key contact information			

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New South Wales | Queensland | South Australia | Victoria | Australian Capital Territory | Tasmania | Western Australia Australian Energy Market Operator Ltd ABN 94 072 010 327

Impact & Implementation Report (IIR) – Detailed Report Section

Critical Examination of Proposal

1. Description of issue

1.1. Transport Layer Security (TLS). Amendments to Technical Protocol (TP) documents

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 Hub (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.

Back in June 2023, AEMO implemented the current TLS version 1.2 certificates and the self-service certificate management tool to manage the AEMO supplied TLS certificates.

These changes were reflected in the gas retail market Technical Protocol (TP) documents.

AEMO will soon move to next version (1.3) of the TLS certificate which will require updating the TP documents. AEMO notes that updating the TP documents for each new release of TLS certificates is not the most efficient use of resources. AEMO is proposing to create a webpage that will contain all details about the TLS certificates required by participants to access AEMO's systems. This will require a one-time change to the TP documents to refer to the webpage about the TLS certificates. All subsequent updates to the TLS certificates will be reflected on the webpage only.

1.2. How to make a submission

Anyone wishing to make a submission for this second stage consultation are requested to use the response template provided in Attachment B. Submissions close COB 3 December 2024 and should be e-mailed to grcf@aemo.com.au.

2. Reference documentation

Participant Build Pack 3 – System Specification v3.2 FRC B2M – B2B Hub System Specifications (WA Only) v4.0 Gas FRC B2B Connectivity Testing and Sys Certification v1.11 Retail Market Procedures (RMP) (Western Australia) v9.0

Gas Interface Protocol (Victoria) v29.0

Gas Interface Protocol (Queensland) v27.0

Gas Interface Protocol (NSW-ACT) v15.0

Specification Pack Usage Guide v8.8

Digital Certificate Webpage (this document contains the text for a new sub webpage on the current webpage <u>TLSCertificateManagement (aemo.com.au)</u>)

Guidelines for Development of A Standard for Energy Transactions in XML (aseXML) v4.1 - Link

3. Overview of changes

The proposed changes are,

- In relation to TLS certificates:
 - Amend the TP documents Participant Build Pack 3 System Specification and FRC B2M – B2B Hub System Specifications to provide details about how a participant can determine the currently supported TLS certificate for connecting to AEMO systems.
 - Create a new sub webpage "TLS Certificate for connecting to FRC HUB" on the webpage <u>TLSCertificateManagement (aemo.com.au)</u> after the sub webpage titled "CSR Requirements".
- In relation to the other minor amendments:
 - Fix the text of the heading for section 5.3 in Participant Build Pack 3 System Specification. The body text from section 5.2 accidently became the heading for section 5.3.
 - Amend the link for the Form of AEMO Certification Checklist to the current checklist in Gas FRC B2B Connectivity Testing and Sys Certification document.
 - Amend the GIP documents for VIC, QLD and NSW/ACT to remove the reference to 'Guidelines for Development of a Standard for Energy Transactions in XML (aseXML)'.
 - Amend the AEMO Specification Pack document to remove reference to 'Connectivity Testing and Technical Certification (WA Only)'.
 - Amend the RMP WA to remove reference to the AEMO Specification Pack in the definition for fields 'FRC Hub certification criteria' and 'FRC Hub certification process' and also in clause 21A(4) since the reference to Connectivity Testing and Technical Certification (WA Only) document is proposed to be removed from the AEMO Specification Pack.

4. Likely implementation requirements and effects

AEMO to create a webpage that provides the current status of TLS certificate and the requirements for AEMO to notify GRCF when there is going to be a new version of the TLS certificate.

Participants will need to transition over to the latest certificate as soon as they can.

5. Overall cost and benefits

AEMO expects there will be negligible implementation costs since none of the changes proposed in this IIR require substantial process changes.

For AEMO and the participants, this will result in improved efficiency as a formal GRCF consultation will not be required for future upgrades to the TLS certificate.

This will provide a central location for all information related to TLS certificate.

Harmonisation across all jurisdictions in GIP and Specification Pack documents.

6. Magnitude of the changes

Since this initiative involves negligible implementation costs, AEMO considers this change to be nonmaterial. If a participant believes that any of the proposed changes are material, this feedback needs to be included in the Attachment B response template.

7. AEMO'S preliminary assessment of the proposal's compliance with Section 135EB

As part of the first-round consultation (PPC), AEMO put forward the following assessment regarding compliance with section 135EB of the National Gas Rules:

Requirement	AEMO's Preliminary Assessment
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 reflect operational practices and promotes consistency across the jurisdictions.
National Gas Objective (NGO)	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.

No participant submitted any opposing views in relation to AEMO's assessment during the first-round consultation. AEMO therefore maintains its original assessment as described above.

8. AEMO's preliminary assessment of the proposal's compliance with clause 378 of the RMP WA

Regarding the changes in WA, AEMO's preliminary assessment of the proposal's compliance with clause 378 of the RMP (WA) is:

Requirement	AEMO's Preliminary Assessment
Ensure that the retail gas market operates and is governed in a manner that is, (i) open and competitive; (ii) efficient; and (iii) fair to participants and their customers	AEMO's view is that the proposed change will continue to promote competition, properly reflects operational practices and will not disadvantage participants or their customers.
Ensure compliance with all applicable laws	AEMO's view is that the proposed changes are consistent with the applicable laws, and participants will be given an opportunity during this IIR consultation to inform AEMO if they believe the proposed change conflicts with any applicable laws.
Ensure effective consultation occurs and gives stakeholder's opportunities to provide feedback of the proposed changes	AEMO's view is that this IIR consultation and the previous PPC consultation, in addition to the discussions at the GRCF, have provided adequate opportunities for participants to provide feedback on the proposed changes.

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.

9. Consultation forum outcomes

On 15 October 2024, a Proposed Procedure Change (PPC) that provided details about the proposal including drafting changes to the TP was submitted to the GRCF participants.

Submissions on the PPC closed on the 29 October 2024. AGL, AGN and Alinta submitted feedback to the PPC supporting the proposal. Participant feedback and AEMO's response to the feedback has been included in Attachment C.

AGL's feedback noted the need for including the notification of upcoming TLS certificate version change in the Procedures. AEMO considers that this requirement is already included in the TP documents which have the head of power same as the Procedures and that AEMO continues to support the previous version which should provide sufficient time for the participant to upgrade to the new version.

Impact & Implementation Report – Recommendation(s)

10. Should the proposed procedures be made)?

AEMO recommends making the changes proposed in Attachment A.

11. Proposed timelines

Subject to all necessary approvals, AEMO is targeting to implement this change by early April 2025.

To achieve this timeline, AEMO proposes the following key milestones:

- Issue Impact and Implementation Report (IIR) on 4 November 2024
- Submission on IIR close 3 December 2024
- ERA submission issued 13 January 2025
- ERA decision expected mid March 2025
- Publish AEMO decision (east coast only) 13 January 2025
- Target effective date early April 2025

Attachment A – Documentation Amendments (see section 3)

Excerpts from draft versions of the RMP and or Technical Protocols showing tracked changes between the current version and the proposed changes are shown below. <u>Blue underline</u> means addition and red strikeout means delete. **Green** shaded refers to changes following GMI consultation.

Retail Market Procedures – Western Australia

2. Definitions

FRC·Hub· certification·criteria¤	means·the·criteria·specified·in·the·Connectivity·Testing· and·Technical·Certification·document <u>··within·the·AEMO</u> · <u>Specification·Pack</u> .¤	¤
FRC·Hub· certification·process¤	means the testing process set out in the Connectivity Testing and Technical Certification document within the <u>AEMO-Specification Pack</u> to ensure that a person's information system complies with the requirements of the FRC Hub Operational Terms and Conditions.¤	¤

21A.·FRC·Hub·certification¶

- (1) → Each · person · required, · or · who · has · agreed, · to · comply · with · some · or · all · of · these · procedures · (as · applicable), · must · participate · in · the · FRC · Hub · certification · process · and · must · satisfy · the · FRC · Hub · certification · criteria · prior · to · the · date · they · are · required · to · comply · with · these · procedures · ¶
- (2) → Prior to AEMO issuing a GBO identification under clause 22(2), AEMO must determine as a reasonable and prudent operator whether a person referred to under clause 21A(1) has satisfied the FRC Hub certification criteria.¶
- $(3) \rightarrow Upon \cdot satisfaction \cdot of \cdot the \cdot FRC \cdot Hub \cdot certification \cdot criteria \cdot under \cdot clause \cdot 21A(2), \cdot AEMO \cdot must \cdot issue \cdot a \cdot FRC \cdot Hub \cdot compliance \cdot certificate \cdot to \cdot the \cdot person.$
- (4) → AEMO·may·immediately·cancel·a·FRC·Hub·compliance·certificate·if,·in·AEMO's· opinion·as·a·reasonable·and·prudent·person·and·having·regard·to·the·FRC·Hub· certification·criteria, the holder of the FRC·Hub·compliance·certificate·breaches·its· obligations·under·the·FRC·Hub·Conditions·and/or·the·Connectivity·Testing·and· Technical·Certification·document·within·the·AEMO·Specification·Pack·in·such·a· manner·that·the·integrity·of·the·FRC·Hub·is·jeopardised.··¶

Participant Build Pack 3 – System Specification

• 5.2. → Obtaining certificates¶

Obtaining·X509·certificates·for·use·with·TLS·and·digital·signatures·in·the·FBS·is·achieved·by· following·the·TLSCertificateManagement·(aemo.com.au)·online-instruction.¶

5.3. → Obtaining X509 certificates for use with TLS and digital · signatures in the FBS is achieved by following the · <u>TLSCertificateManagement (aemo.com.au)</u> online instruction · {Placeholder TBA}. FRC Hub Security Services¶

 $\label{eq:linear} In \cdot order \cdot to \cdot solve \cdot the \cdot ``many \cdot to \cdot many ``problem \cdot with \cdot regard \cdot to \cdot certificate \cdot distribution \cdot and \cdot revocation, \cdot participants \cdot in \cdot the \cdot FBS, \cdot the \cdot hub \cdot will \cdot provide \cdot security \cdot services. \cdot For \cdot each \cdot environment - \cdot Pre-Production \cdot and \cdot production \cdot - \cdot participants \cdot will \cdot only \cdot need \cdot one \cdot certificate \cdot - \cdot that \cdot of \cdot the \cdot applicable \cdot FRC \cdot Hub \cdot for \cdot TLS \cdot and \cdot digital \cdot signature \cdot services \cdot \P$

• **5.4**. →**TLS**¶

• 1

The FRC Hub is capable of <u>TLS Certificates required for connection to AEMO Systems.</u> <u>connectivity in compliance with TLS v1.2.</u><u>-TLS v1.2</u><u>-is based on RFC5296</u>:

https://www.ietf.org/rfc/rfc5246.txt·¶

A table containing the supported protocols enabling connection to AEMO Systems can be found under the section 'Digital Certificate for connecting to FRC HUB' on AEMO webpage TLSCertificateManagement (aemo.com.au). AEMO may amend the protocols (including amending version numbers, effective date and expiry date and introducing a new protocol) by amending the table on the AEMO webpage and notifying GRCF participants of the change. This webpage also contains information about the notification period AEMO is required to give to GRCF participants when AEMO intends to introduce amend a new protocol. If

The-pParticipants-willmust-update-their-certificates-via-the-self-service-certificate-management.

 $The \cdot certificates \cdot used \cdot in \cdot the \cdot FBS \cdot will \cdot not \cdot employ \cdot any \cdot extensions \cdot Sometimes \cdot these \cdot certificates \cdot extensions \cdot are \cdot referred \cdot to \cdot as \cdot server \cdot certificates \cdot by \cdot certain \cdot vendors \cdot Certificates \cdot without \cdot extensions \cdot are \cdot sometimes \cdot referred \cdot to \cdot as \cdot client \cdot certificates \cdot by \cdot certain \cdot vendors .$

FRC B2M – B2B Hub System Specifications

• 5.2. → Obtaining certificates¶

Obtaining·X509·certificates·for·use·with·TLS·and·digital·signatures·in·the·FBS·is·achieved·by· following·the·<u>TLSCertificateManagement·(aemo.com.au)</u>Manage·TLS·Certificates·online· instruction-{Placeholder·TBA}. ·¶

• 5.4. →TLS¶

1

 $\label{eq:theta:$

A-table-containing-the-supported-protocols-enabling-connection-to-AEMO-Systems-can-befound-under-the-section-'Digital-Certificate-for-connecting-to-FRC-HUB'-on-AEMO-webpage-TLSCertificateManagement-(aemo.com.au).-AEMO-may-amend-the-protocols-(includingamending-version-numbers, effective-date-and-expiry-date-and-introducing-a-new-protocol)-byamending-the-table-on-the-AEMO-webpage-and-notifying-GRCF-participants-of-the-change-Thiswebpage-also-contains-information-about-the-notification-period-AEMO-is-required-to-give-to-GRCF-participants-when-AEMO-intends-to-introduce-amend-a-protocol.-¶

The-pParticipants-willmust-update-their-certificates-via-the-self-service-certificate-management.

•https://www.ietf.org/rfc/rfc5246.txtThe·certificates·used·in·the·FBS·will·not·employ·any· extensions.·Sometimes·these·certificates·extensions·are·referred·to·as·server·certificates·by· certain·vendors.·Certificates·without·extensions·are·sometimes·referred·to·as·client·certificates· by·certain·vendors.¶

Gas FRC B2B Connectivity Testing and Sys Certification

Appendix · E · – · Form · of · AEMO · Certification · Checklist¶

Checklist·attached·can·be·accessed:·¶ <u>http://www.aemo.com.au/Gas/-</u> <u>/media/F51E518A3AE146B89A529CA68822FFAC.ashx</u>·¶ <u>https://aemo.com.au/-/media/files/gas/it_systems/gas-frc-certificationchecklist.docx?la=en</u>¶

¶

Gas Interface Protocol (Victoria)

Gas Interface Protocol artefacts to take effect as of ← <u>1-May-2024</u><u>3-Mar-2025</u>.¶

REQUIREMENT¤	DOCUMENTS¤	VERSION¤
Retail·Market∙ Procedures∙¤	Retail·Market·Procedures·(Victoria)·¤	18.0·(authorised under·the·NGL·and· NGR·effective)¤
Participant⋅Build⋅Pack⋅ 1¤	Process·Flow·Table·of·Transactions··· This·contains:·Table·of·Transactions,·Table·of· Elements,·List·of·Job·Enquiry·Codes,·Address· Elements·and·MIRN·and·Meter·states.¤	4.0¤
	Process·Flow·Diagrams··¤	3.9¤
	CSV·Data·Format·Specification··¤	3.8¤
Participant·Build·Pack· 2¤	Participant·Build·Pack·2·Interface·Definitions··¤	3.6¤
ζ ^μ	Participant·Build·Pack·2·Usage·Guide···¤	3.1¤
	Participant·Build·Pack·2·Glossary·¤	3.1¤
Participant⋅Build⋅Pack⋅ 3¤	Participant·Build·Pack·3·FRC·B2B·System· Specification·¤	3.2¤
	Participant·Build·Pack·3·FRC·B2B·System· Architecture·¤	3.3¤
	Participant·Build·Pack·3·Interface·Definitions···¤	4.0¶ ¶ ¤
Guidelines-for· Development-of·A· Standard-for-Energy· Transactions-in-XML· (aseXML)¤	The Guidelines for Development of A Standard for Energy Transactions in XML (aseXML) which participants have subscribed to for Victorian Gas is available from www.aemo.com.au/asexml	4.1¤

Gas Interface Protocol (Queensland)

Gas·Interface·Protocol·artefacts·to·take·effect·as·of·← <u>1·May·2024</u><u>3·March·2025</u>.¶

GIP·ltem·#¤	Category⋅¤	Documents¤	Version¤
1¤	Retail·Market·Procedures· (Queensland)¤	Queensland Retail Market Procedures a	2 <mark>1</mark> 2.0∙¤
2¤	Participants·Build·Pack·4¤	The Queensland Specific Participant Build Pack 4.¤	1 <mark>42</mark> .0¤
3¤	Deleted¤	¤	¤
4¤	Participant·Build·Pack·1¤	AEMO Process Flow Table of Transactions This contains: Table of Transactions, Table of Elements, List of Job Enquiry Codes, Address Elements and MIRN and Meter states.¤	4.0¤
5¤	Participant·Build·Pack·1¤	Process·Flow·Diagrams·¤	3.9¤
6¤	Participant·Build·Pack·1¤	CSV·Data·Format·Specification·¤	3.8¤
7¤	Participant·Build·Pack·2¤	Participant·Build·Pack·2·Interface·Definitions·¤	3.6¤
8¤	Participant·Build·Pack·2¤	Participant·Build·Pack·2·Usage·Guide·¤	3.1¤
9¤	Participant·Build·Pack·2¤	Participant·Build·Pack·2·Glossary·¤	3.1¤
10¤	Participant·Build·Pack·3¤	FRC·B2B·System·Specification·¤	3.2¤
11¤	Participant·Build·Pack·3¤	FRC·B2B·System·Architecture·¤	3.3¤
12¤	Participant·Build·Pack·3¤	Interface Definitions · ¤	4.0¤
13¤	Guidelines-for-Development-of- A-Standard-for-Energy- Transactions-in-XML- (aseXML) [¤]	The-Guidelines-for-Development of A-Standard for-Energy-Transactions-in-XML-(aseXML) which-participants-have-subscribed-to-for Victorian-Gas-is-available-from http://www.aemo.com.au/asexml/·¤	4.1¤

Gas Interface Protocol (NSW-ACT)

Gas·Interface·Protocol·artefacts·to·take·effect·as·of·← <u>31·March·2023</u>3·March·2025¶

GIP·Item·#¤	Category⋅¤	Documents¤	Version¤	¤
1¤	Retail·Market·Procedures· (NSW/ACT)¤	NSW/ACT·Retail·Market·Procedures·¤	<mark>29<u>30</u>.0¤</mark>	¤
2¤	Participants·Build·Pack·5¤	The NSW/ACT specific Participant Build Pack 5 ^{, p}	<u>9</u> 8.0¤	¤
3¤	Participants·Build·Pack·6¤	The·NSW/ACT·Wagga·Wagga [¶] ··and·Tamworth· specific·Participant·Build·Pack·6·¤	<u>7</u> 6.0¤	¤
4¤	Guidelines-for-Development-of- A-Standard-for-Energy- Transactions-in-XML-(aseXML)¤	The-Guidelines-for-Development-of-A-Standard- for-Energy-Transactions-in-XML-(aseXML)- which-participants-have-subscribed-to-for- NSW/ACT-Gas-is-available-from- http://www.aemo.com.au/About-the- Industry/Information-Systems/aseXML- Standards/aseXML-Guidelines [¤]	4 <u>.</u> 1¤	¤

Specification Pack Usage Guide

■ 2.→Overview of the AEMO Specification Pack¶

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 $\label{eq:construction} The \mbox{-} following \mbox{-} table \mbox{-} provides \mbox{-} an \mbox{-} overview \mbox{-} of \mbox{-} the \mbox{-} AEMO \mbox{-} Specification \mbox{-} Pack \mbox{-} \mbox{-} The \mbox{-} documents \mbox{-} are \mbox{-} provided \mbox{-} in \mbox{-} a \mbox{-} directory \mbox{-} structure \mbox{-} as \mbox{-} follows: \box{-} foll$

\P_{-}

Main∙ Directory¤	Sub-Directory¤	Documents¤	Version¤	¤
Specification [.] Pack¤	1.·Usage·Guidelines¤	Specification Pack Usage · Guidelines¤	¤ <mark>9</mark> 8.8	a
	2. ·Interface ·Control · Document ·(ICD)¤	Interface·Control·Document·¤	5.3 <u>4</u> ¤	¤
	3.⋅B2B⋅System⋅ Interface⋅Definitions¤	FRC·B2B·System·Interface· Definitions¤	5.2 <u>3</u> ¤	a
	4.·Transport·Layer¤	FRC·B2M-B2B·Hub·System· Specifications·(WA·only)¶ FRC·B2M-B2B·Hub·System· Architecture·(WA·only)¶ For·SA·see·Participant·Build· Pack·3··FRC·B2B·System· Specification¶ For·SA·see·Participant·Build· Pack·3··FRC·B2B·System· Architecture¤	4.0¶ ¶ 3.7¶ ¤	¤
	5.·CSV·File·Format¤	FRC·CSV·Data·Format· Specification¤	3.3¤	a
	6. Connectivity and Technical Certification (WA Only)¤	Connectivity-Testing-and- Technical-Certification-(WA- Only)¤	3.8¤	¤

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Digital Certificate Webpage

Create a new sub webpage "TLS Certificate for connecting to FRC HUB" on the webpage <u>TLSCertificateManagement (aemo.com.au)</u> after the sub webpage titled "CSR Requirements"

The following is the new sub heading and text,

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TLS Certificate for connecting to FRC HUB

As described in section 5.4 of the Participant Build Pack 3 - FRC B2B System Specifications document and section 5.4 of the FRC B2M-B2B Hub System Specifications for the WA Gas Retail Market document the FRC HUB requires digital certificate connectivity. The following table contains a list of protocols including their version number, effective date and expiry date (if appliable).

Table 1.

Protocol	Version No	Effective Date	Expiry Date
Transport Layer Security (TLS)	1.3	1 Dec 2024 (Likely)	
TLS	1.2	1 Apr 2023	
TLS	1.1		1 Dec 2024
TLS	1.0		1 Dec 2024
Secured Socket Layer (SSL)			Expired

Participants are required to ensure currency of their TLS certificates needed to connect to AEMO Systems.

At least 90 business days prior to making any amendment to table 1, AEMO will inform the Gas Retail Consultative Forum (GRCF) or its successor of the proposed change to table 1. Any update to the expiry date will be at least 90 business days from the date that GRCF were informed of the expiry.

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Attachment B – IIR RESPONSE TEMPLATE

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

- Section 1 seeks general feedback on AEMO's examination of the proposal in sections 1–10 of this IIR.
- Section 2 seeks feedback on the proposed changes listed in Attachment A.

Anyone wishing to make a submission to this IIR consultation are to use this response template. Submissions close **COB 3 December 2024** and should be emailed to <u>grcf@aemo.com.au</u>



Attachment C – Proposed Procedure Change (PPC) collated responses for TLS Updates and TP Updates.

Section 1 - General Comments on the Proposed Procedure Change

Sections 1 to 10 of the PPC sets out details of the proposal.

Does your organisation support AEMO's assessment of the proposal?

If no, please specify areas in which your organisation disputes AEMO's assessment (include PPC section reference number) of the proposal and include information that supports your organisation's rationale why you do not support AEMO's assessment.

Ref	Respondent	Participant Response	AEMO Response
1	AGL	AGL considers that AEMO has generally assessed the issue. AGL still has concerns over participant notification and action, and considers that AEMO will need to monitor the certificate release post these procedure changes to determine the effectiveness of the process. Failure of a Participant to take action in a timely manner could lead to unintended outcomes affecting the market and other participants. AGL notes AEMO's comments about AEMO's requirements to notify participants being published on the webpage, however, the webpage is not a procedure, has no head of power and therefore has no real standing or applicable obligation. Given the importance of these updates, AGL considers these need to be scheduled and managed effectively to ensure the smooth operation of the market, and thus considers the obligations should	 AEMO notes AGL's comment about AEMO's assessment of the issue and other comments. AEMO notes that the webpage with security certificate requirements is referred in the TP documents Participant Build Pack 3 System Specification and FRC B2M-B2B Hub System Specification. These documents provide head of power same as the Procedures and effectively have the same status as the Procedures. AEMO has amended the section '5.4 TLS' in the TP documents mentioned above to provide further clarity.



Ref	Respondent	Participant Response	AEMO Response
		be embedded in a procedure, to ensure the obligation is tracked and managed.	
2	APA/AGN	APA/AGN supports this proposal.	AEMO notes APA/AGN's support for the proposal.
3	Alinta	 Alinta Energy supports the PPC, which proposes: To create a webpage that will contain all details about Transport Layer Security (TLS) certificates required by participants to access AEMO's systems; and To amend the Technical Protocol (TP) documents so they are agnostic to the TLS certificate version, thereby removing the requirement for formal consultation for future TLS certificate updates. 	AEMO notes Alinta Energy's support for the proposal.



Section 2 - Feedback on the documentation changes in the Attachments B.

		Retail Mark	Retail Market Procedures (Western Australia)		
Ref #	Organisation	Clause #	Issue / Comment	Proposed text Red strikeout means delete and blue underline means insert	AEMO Response (AEMO only)
4	AGL		Change noted. No further comment.		
		Participant	Participant Build Pack 3 – System Specifications		
Ref #	Organisation	Clause #	Issue / Comment	Proposed text Red strikeout means delete and blue underline means insert	AEMO Response (AEMO only)
5	AGL		Change noted. No further comment.		
		FRC B2M -	B2B Hub System Specifications		
Ref #	Organisation	Clause #	Issue / Comment	Proposed text	AEMO Response
				Red strikeout means delete and blue underline means insert	(AEMO only)
6	AGL		Change noted. No further comment.		(AEMO only)
6	AGL	Gas FRC B	Change noted. No further comment. 2B Connectivity Testing and Sys Certi	<u>blue underline</u> means insert	(AEMO only)
6 Ref #	AGL Organisation	Gas FRC B Clause #		<u>blue underline</u> means insert	(AEMO only) AEMO Response (AEMO only)



		Gas Interface Protocol (Victoria)						
Ref #	Organisation	Clause #	Issue / Comment	Proposed text Red strikeout means delete and blue underline means insert	AEMO Response (AEMO only)			
8	AGL		Change noted. No further comment.					
		Gas Interface Protocol (Queensland)						
Ref #	Organisation	Clause #	Issue / Comment	Proposed text Red strikeout means delete and blue underline means insert	AEMO Response (AEMO only)			
9	AGL		Change noted. No further comment.					
		Gas Interface Protocol (NSW-ACT)						
Ref #	Organisation	Clause #	Issue / Comment	Proposed text Red strikeout means delete and blue underline means insert	AEMO Response (AEMO only)			
10	AGL		Change noted. No further comment.					
		Specification Pack Usage Guide						
Ref #	Organisation	Clause #	Issue / Comment	Proposed text Red strikeout means delete and blue underline means insert	AEMO Response (AEMO only)			
11	AGL		Change noted. No further comment.					
		Digital Certificate Webpage						



In	AEMO				
Ref #	Organisation	Clause #	Issue / Comment	Proposed text Red strikeout means delete and blue underline means insert	AEMO Response (AEMO only)
	AGL		Change noted. No further comment.		

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