ERCF Monthly Meeting

25 March 2024

NOTES

This meeting is being recorded for the purpose of minute taking.

Online forum housekeeping

1. Please mute your microphone, this helps with audio quality as background noises distract from the information being shared.
2. Video is optional, but having it turned off helps with performance and minimises distractions.
3. We ask that you utilise the Chat function for any questions or comments you may have. This aids note keeping and keeps discussions flowing smoothly.
4. Raise your hand if you wish to speak to an item. This keeps conversations orderly.
5. **In attending this meeting, you are expected to:**
   - Not only represent your organisation's interests but also the interests of Industry and its customers
   - Have an open mindset
   - Contribute constructively
   - Be respectful, both on the call and in the chat

AEMO Competition Law Meeting Protocol

- AEMO is committed to complying with all applicable laws, including the Competition and Consumer Act 2010 (CCA). In any dealings with AEMO, all participants agree to adhere to the CCA at all times and to comply with appropriate protocols where required to do so.
- AEMO has developed meeting protocols to support compliance with the CCA in working groups and other forums with energy stakeholders
- The AEMO Competition Law Meeting Protocol can be viewed and downloaded from AEMO's website
    - https://aemo.com.au/-/media/files/stakeholder_consultation/working_groups/aemo-competition-law-meeting-protocol/aemo-competition-law-meeting-protocol---october-2022.pdf?la=en

Agenda

1. Welcome
2. Subgroup Update
   - Open ICF Summary
   - Recommended ICF Inclusions for the May 2024 REMP Consultation
   - ICF Register Update
3. Unlocking CER benefits through Flexible Trading
4. Items of Interest
   - Shortening the settlement cycle
   - IDX, IDAM & PC Update
5. General Business and Next Steps
6. Appendix
   - ERCF Subgroup membership
   - ICFs Awaiting Implementation
   - Forward Schedule of Change (MSATS Releases)

Notes

- Blaine Miner (AEMO) welcomed members and spoke to the proposed agenda
- Blaine mentioned that some of the slides had changed since were originally distributed
    - Blaine distributed the updated slides to the ERCF after the meeting
- No other comments or actions were raised

Subgroup Update

Noura Elhawary (AEMO)

Open ICF Summary

Assessment Stage	#	ICF Titles	Next Steps
Initial assessment	0		
Detailed analysis	8	ICF 017 - Updating the existing ADWNAN_INTERVAL report for LNSPs ICF 067 - Reviewing and updating file examples in the MDFF Specification document. ICF 076 - Magnitude of generation and consumption at a NMI MSATS fields ICF 077 - Auto population of the LCCD based on NMI status ICF 078 - Alignment of Addressing in B2M Procedures to AS4590.1.2017 ICF 079 - NEM 12 MDFF Inconsistencies ICF 080 - SDQ Information Availability ICF 081 - New ADWNAN_INTERVAL report for MDPs	• ICF 017: Confirming impact to MDP compliance • ICF 067: Recommending for this ICF to be withdrawn • ICF 076: Options analysis in progress • ICF 077: Recommended for May REMP inclusion • ICF 078: Recommended for May REMP inclusion • ICF 079: Recommended for May REMP inclusion • ICF 080: Options analysis in progress • ICF 081: Analysis in progress
Under Consultation	0		
Awaiting Implementation	3	ICF 054 - Substitution Type Review ICF 072 - NSLP Longer-term Methodology ICF 073 - Metrology Part A - Summation Metering Changes	• ICF 054: Effective 4 November 2024 • ICF 054: Effective 29 September 2024 • ICF 054: Effective 13 May 2024
On Hold	1	ICF 056 - Clarification of End Date in Inventory Table (being considered by the B2B-WG)	• On hold, pending discussions at the B2B WG

Recommended ICF Inclusions for the May 2024 REMP Consultation

Noura Elhawary (AEMO)

Auto population of the LCCD based on NMI status (ICF_077)

Noura Elhawary (AEMO)

Auto population of the LCCD based on NMI status (ICF 077)

Proponent: Mark Riley (AGL)

Description:

- From 1 Nov 2023, all Current FRMPs will have obligations to maintain the Last Consumer Change Date (LCCD) field within MSATS as per the CATS Procedures. The LCCD field is being introduced by AEMO to better support the intent of the CDR Rule i.e. for customers to have access to data which spans multiple retailers.
- For newly created NMIs, the Current FRMP will have an obligation to populate the LCCD, even though this date is easily identifiable and could be automatically populated by AEMO as part of the NMI create process, thus removing the requirement for every Retailer to build the same system/process logic to populate these NMIs.

ERCF-SG considerations:

- Over 300,000 new NMIs are connected annually, necessitating updates as they transition from 'Greenfield' to 'Active'.
- Retailers must independently update the LCCD for new NMIs, leading to industry-wide redundancy.
- The requirement involves significant transactional volume and manual processing, particularly impacting smaller retailers

Auto population of the LCCD based on NMI status (ICF 077)

Potential Solution(s):

Procedure Changes	System Changes

MSATS CATS Procedure update to add a new obligation on AEMO to auto populate the LCCD field when NMI is activated from Greenfield status to Active status.	• Automate LCCD Updates:
	  ○ Auto-populate the LCCD when an NMI's status changes from 'Greenfield' to 'Active'.
	  ▪ For series 5050/1 CRs.
	  ▪ For series 5060/1 CRs.
	  ○ Apply the Actual Change Date (ACD) of the CR as the LCCD for direct transitions from 'Greenfield' to 'Active'.
	• Streamlined Notification Process:
	  ○ Automatically send the updated LCCD to all relevant parties entitled to a CATS Notification.
	• Targeted Application:
	  ○ The automation applies only to NMIs moving from 'G' directly to 'A'.
	• No schema change is identified.

Subgroup Feedback:

Supportive	Not Supportive	No Preference
14		2

Alignment of Addressing in B2M Procedures to AS4590.1.2017 (ICF_078)

Simon Tu(AEMO)

Alignment of Addressing in B2M Procedures to AS4590.1.2017 (ICF_078)

Proponent: Simon Tu (AEMO)

Description:

- This ICF seeks to align NEM B2M Procedures' address standard with AS4590.1:2017
- NEM addressing is currently based on the AS4590:1999 standard. However, this standard has been replaced by AS4590.1:2017, reflecting an advancement in address standardisation.
- For this ICF, AEMO undertook an audit of the current NEM address standard against AS4590.1:2017

Recommendation to ERCF: ICF will be recommended to the ERCF for inclusion in May 2024 consultation.

Alignment of Addressing in B2M Procedures to AS4590.1.2017 (ICF_078)

- Detailed analysis of the B2M Procedural and aseXML schema impacts is currently underway.
- The analysis also includes B2B Procedural impacts to provide a full view of the scope of change.
- As per industry feedback, this analysis focuses only on the highlighted discrepancy
  - Category 1 - NEM Only - Some NEM addressing elements sit outside of AS standards.
  - Category 2 - Minor Discrepancies - Instances of either no discrepancy or minor changes in field names, where the core concepts, meanings, character lengths, data types, and usage rules remain consistent with NEM standards.
  - Category 3 - Methodology Variances - Different methods used to assemble individual address elements. Despite these variances, the final structure of the addresses aligns well, with no significant impact on the result.
  - Category 4 - Field Length Discrepancies - Changes in the field length of address elements within AS4590.1:2017. Such modifications may lead to truncated address information during data exchanges between systems following NEM and AS4590.1:2017 standards.
  - Category 5 - Enumerated Value Inconsistencies - Discrepancies in enumerated values for address elements could introduce data constraints. This may result in the non-acceptance of AS4590.1:2017 compliant addresses in the NEM B2M system

Alignment of Addressing in B2M Procedures to AS4590.1.2017 (ICF_078)

- When considering recommended changes, AEMO followed the following principles:
  - Field length discrepancies are AS4590 maximum field lengths have increased, not decreased, from the current B2M definition.
  - Keep field names and types unchanged to minimise system changes. This stability is crucial for implementing the latest aseXML schema without affecting the timeline for any required updates to Gas procedures.
  - Limit changes to Proceduralised definitions to those necessary, preserving the original interpretation and application of field usage. This approach prevents misunderstandings and maintains procedural clarity.
  - Update generic references to AS4590 to a specific version reference (e.g. AS4590 > AS4590.1:2017) only when discrepancies identified by ICF_078 necessitate the field be changed. AEMO is, however, pursuing advice from its legal team on whether all generic references to AS4590 need to be addressed.
  - Address newly added enumerated codes from the AS4590.1:2017 standard, ensuring aseXML remains current. For discrepancies in abbreviations (e.g., "Avenue" as "AVE" in AS4590 vs. "AV" in aseXML), publish a mapping rather than altering the aseXML, which in turn would require the mass data cleansing of existing standing data.

Alignment of Addressing in B2M Procedures to AS4590.1.2017 (ICF_078)

- AEMO shall share the analysis by the end of the week; however, here's the summary.
- Category 4 - Field Length Discrepancies:

NEM Addressing Field Name	Recommendation
BuildingOrPropertyName	CHANGE Field length from 30 to 50 characters in Standing Data for MSATS v5.6n and schema
BuildingOrPropertyName2	ADD Secondary Building / Property with 50 characters to Standing Data for MSATS v5.6n
FloorOrLevelType	CHANGE Field length from 2 to 4 characters in Standing Data for MSATS v5.6n and schema
StreetName	CHANGE Field length from 30 to 45 characters in Standing Data for MSATS v5.6n and schema

- Category 5 - Enumerated Value Inconsistencies:

NEM Addressing Field Name	Recommendation
FloorOrLevelType	ADD four new enumerations to the schema.
FlatOrUnitType	ADD to the comments in the schema to describe the name mapping from AS4590.1:2017 to the aseXML
StreetType	ADD one enumeration to the schema. ADD to the comments in the schema to describe the name mapping from AS4590.1:2017 to the aseXML

NEM 12 MDFF Inconsistencies (ICF 079)

Noura Elhawary (AEMO)

NEM 12 MDFF Inconsistencies

- **Recommendation to ERCF**: ICF will be recommended to the ERCF for inclusion in May 24 consultation.
- **Proponent**: Mark Riley (AGL)
- **Description**
  - The NEM 12 MDFF has an inconsistent obligation relating to the provision of 400 block data for Actual reads. Advice from AEMO clearly identifies the inconsistency between clauses **4.4** and **4.5** of the "Meter Data File Format Specification NEM12 & NEM13".
- **Proposed Changes**

4.4. Interval data record (300)

Example: *RecordIndicator,IntervalDate,IntervalValue1 . . . IntervalValueN, QualityMethod,ReasonCode,ReasonDescription,UpdateDateTime,MSATSLoadDateTime*

300,20030501,50.1, . . . ,21.5,V,,,20030101153445,20030102023012

300 records must be presented in date sequential order. For example, with a series of Meter Readings for a period, the current record is the next incremental *IntervalDate* after the previous record. Or, where data for individual, non-consecutive *days* is sent, the *IntervalDate* for each 300 record is later than the previous one.

Where the same *QualityMethod* and *ReasonCode* apply to all *IntervalValues* in the 300 record, the *QualityMethod*, *ReasonCode* and *ReasonDescription* in the 300 Record must be used. If either of these fields contains multiple values for the *IntervalValues*, the *QualityMethod* in the 300 record must be set to "V" and the 400 record must be provided.

The use of 'V' as the quality method in this example indicates the *QualityMethod*, *ReasonCode* or *ReasonDescription* vary across the *day* and will be provided, for each Interval, in the 400 records that would immediately follow this record.

Where the quality flag is 'A' and reason codes 61, 79 or 89 are used the 400 record must be provided. Refer to 4.5 for details on the use of the 400 records.

NEM 12 MDFF Inconsistencies

4.5. Interval event record (400)

Example:
RecordIndicator,StartInterval,EndInterval,QualityMethod,ReasonCode,ReasonDescription

400,1,28,S14,32,

This record is mandatory where the *QualityFlag* is 'V' in the 300 record or where the quality flag is 'A' and reason codes 61, 79 or 89 ~~79, 89, and 61~~ are used.

The *StartInterval*/*EndInterval* pairs must be presented in ascending record order. The *StartInterval*/*EndInterval* period must cover an entire *day* without gaps or overlaps. For example, (based on a 30-minute Interval):

400,***1,26***,A,,
400,***27,31***,S53,9,
400,***32,48***,E52,,

Refer section 2 (c) for further rules regarding the use of this record.

Recommended ICF Inclusions for the May 2024 REMP Consultation - Summary

ICF
ICF 077 - Auto population of the LCCD based on NMI status
ICF 078 - Alignment of Addressing in B2M Procedures to AS4590.1.2017
ICF 079 - NEM 12 MDFF Inconsistencies

ICF Register Update

Noura Elhawary (AEMO)

ICF Register Update

(Detailed analysis)

Issue/Change Title	Short Description	Proponent	ICF Ref#	Month ICF Raised	Current Status/Update
ADWNAN Reporting changes	Assignment of Interval ADWNANs to MDP in AEMO Performance Reports	Jane Hutson (EQL)	017	Sept 2019	Confirming impact to MDP compliance prior to determining implementation
Clarification of End Date in Inventory Table	Some MDPs are using NCONUML Inventory Table End Date to identify when the metering data is last calculated, updating it each month. Proposal is to clarify the end-date be when there is a change to consumption or abolishment. If not, the End Date should be reflected as 31.12.9999.	Mark Riley (AGL)	056	Jan 2022	On hold, pending discussions at the B2B WG
Reviewing and updating file examples in the MDFF Specification document.	The MDFF document includes example files. Some of these files have not been updated to incorporate changes in the industry including 5MS and Global Settlements. AEMO Metering to review and update where required the examples in Appendix H of the MDFF Specification.	(Essential Energy)	067	Aug 2022	Recommending for this ICF to be withdrawn
Magnitude of generation and consumption at a NMI MSATS fields	Participants cannot easily identify and determine the magnitude of export/consumption and import/generation as part of their onboarding processes.	Mark Riley (AGL)	076	July 2023	Options analysis in progress. Not recommended for May 2024 REMP consultation inclusion.
Auto population of the LCCD based on NMI status	Auto population of the LCCD field by AEMO when the NMI Status gets updated from 'Greenfield' to 'Active'	Mark Riley (AGL)	077	August 2023	Recommended for inclusion into the May 2024 REMP Consultation

ICF Register Update
(Detailed analysis)

Issue/Change Title	Short Description	Proponent	ICF Ref#	Month ICF Raised	Current Status/Update
Alignment of Addressing in B2M Procedures to AS4590.1.2017	To align B2M procedures' address standards with AS4590.1:2017, replacing the superseded AS4590-1999.	AEMO	078	Oct 2023	Recommended for inclusion into the May 2024 REMP Consultation
NEM 12 MDFF Inconsistencies	The NEM 12 MDFF has a inconsistent obligation relating to the provision of 400 block data for Actual reads.	Mark Riley (AGL)	079	November 2023	Recommended for inclusion into the May 2024 REMP Consultation
SDQ Information Availability	All externally facing Retail and Metering report details and specifications e.g. Cx, RMxx, etc. should be formally documented and published to the AEMO website for stakeholder access	CitiPower Powercor United Energy	080	December 2023	Options analysis in progress
New ADWNAN_INTERVAL report for MDPs	A new ICF has been introduced by AEMO during the detailed analysis of "ICF_017 ADWNAN Reporting Changes", the new ICF proposes the following: • Create a new RM29 data report ADWNAN_INTERVAL_DAILY_AGG delving into data stream level details. The value and scope of this report is to be examined and determined. • Electronic meter creep threshold to be included in the new report.	AEMO	081	January 2024	Options analysis in progress

Notes

- Noura Elhawary (AEMO) and Simon Tu (AEMO) spoke to the 'Subgroup Update' slides
- As part of the 'Open ICF Summary' update, Noura mentioned that ICF 067 (Reviewing and updating file examples in the MDFF Specification document) was being proposed to be withdrawn, as there is currently insufficient content in the ICF to understand the proposed issue/change
    - The ERCF did not object to ICF-067 being withdrawn
- Noura and Simon went through the analysis, considerations and recommendations associated to potential ICFs for May 2024 REMP consultation
    - The ERCF subgroup recommended that ICF-077, 078 and 079 should be included in the May 2024 REMP consultation
        - No objections were raised regarding this recommendation
    - Note, ICFs 017, 076, 080 and 081 were not recommended for inclusion in the May 2024 REMP consultation as the associated solutions were not expected to impact AEMO's Procedures and therefore would follow BAU change processes
- An ERCF member mentioned re ICF-078, that the ERCF subgroup may want to consider the harmonisation which is occurring between the International Standards and the Australian Standards
    - Action: AEMO and the ERCF subgroup to consider the harmonisation which is occurring between the International Standards and the Australian Standards re proposed changes supporting ICF-078
- Action: AEMO to circulate the ICF-078 AEMO recommendations, which includes B2M, B2B and associated schema changes, previously provided to the ERCF Subgroup
- An ERCF member raised the matter of not being able to nullify optional addressing fields in MSATS today
    - Action: AEMO to confirm how optional addressing fields can be nulled where incorrect data is populated
- In response to a question asked, Blaine confirmed that proposed changes to addressing fields are being considered from an Electricity and Gas perspective, noting that the governance supporting the B2M and B2B Procedures in Electricity and Gas are different

Notes

- ICF-079
  - Alternative proposed wording to section 4.5 was put forward by an ERCF member in the Chat
    - ‘This record is mandatory where the QualityFlag is ‘A’ or ‘V’ in the 300 record and the quality or reason codes are not the same across the entire day, then the 400 line must be provided.’
  - ERCF members and AEMO supported the alternative wording, and will be formally consulting on that basis
- Blaine reiterated that the May 2024 REMP Consultation is expected to include the following items:
  - Changes supporting the implementation of the Metering Services Review Rule change
  - Changes supporting Retailer of Last Resort (RoLR) process improvements
  - ICFs 077, 078 and 079

Unlocking CER benefits through Flexible Trading

The following slides contain excerpts from the AEMC's Draft rule determination - Market Commission Unlocking CER Benefits rule change 29 February 2024.

They are being provided to stimulate consideration by the ERCF in identifying potential Procedural impacts only.

Key Timings

Table 1: Timetable for the rule change and points of stakeholder consultation

Stage	Timeline
Commission publishes Draft Determination and more preferable draft rules	29 February 2024
Stakeholder submissions due	11 April 2024
Stakeholder consultation	March - April 2024
Commission publishes Final Determination and more preferable final rules	July 2024
Proposed implementation date for the rules	2 February 2026

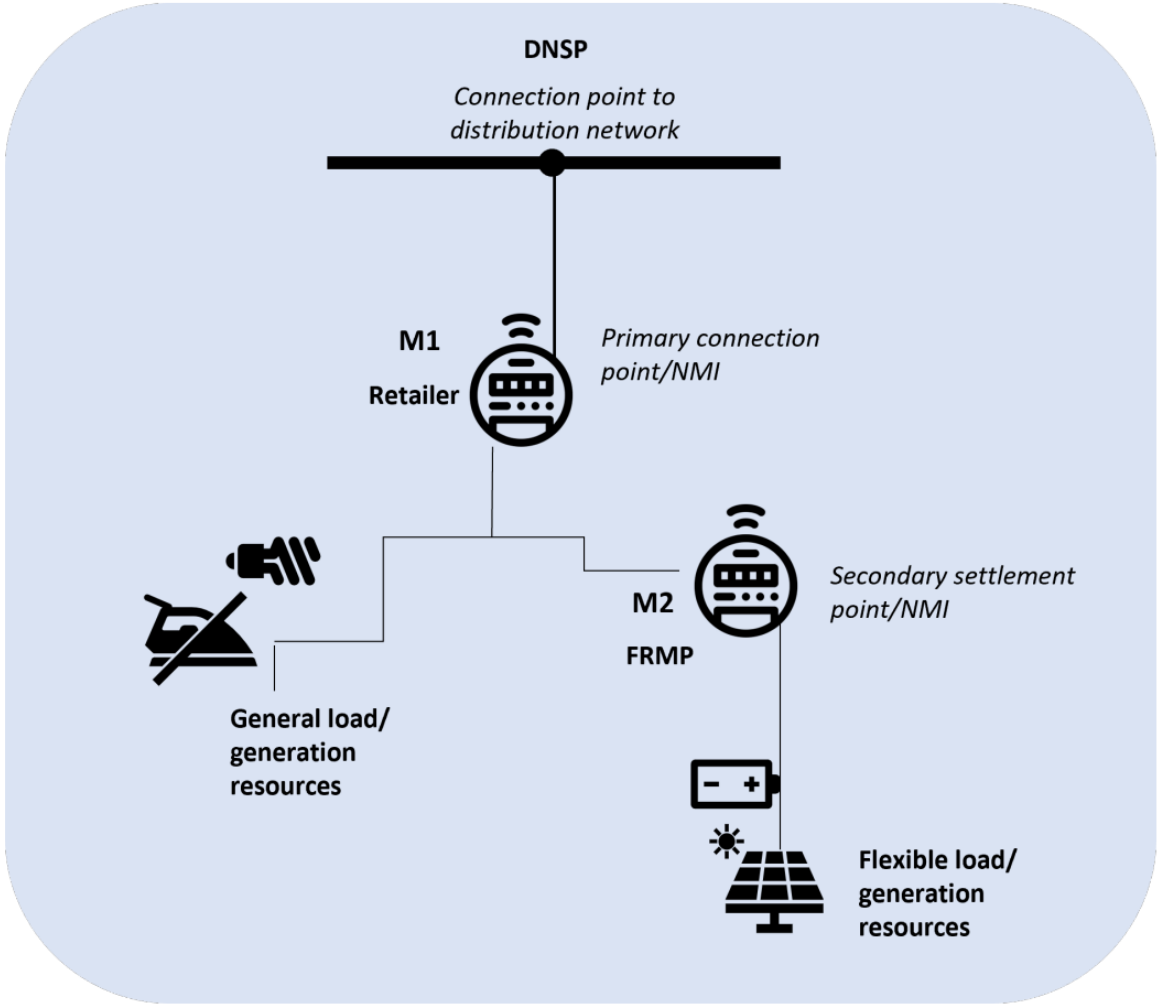
AEMO is proposing to present a High-Level Design in April 2024

Key features of the proposed framework

- The proposed framework for flexible trading would enable large customers to establish secondary settlement points and engage multiple energy service providers to manage flexible resources at these points. The key features of this framework are:
    - It would be voluntary.
    - It would enable a large customer to establish secondary settlement points and engage multiple FRMPs at their premises (s3.2.1).
    - The relationship between FRMPs would be governed by existing regulatory arrangements and contractual arrangements (s3.2.2).
    - DNSPs would be responsible for establishing and maintaining secondary NMIs (s 3.3.1)
    - It would leverage existing subtractive settlement arrangements to minimise implementation costs (s 3.4.1), and
    - Distribution network tariffs would be levied to the primary FRMP (s 3.3.3).

Key features of the proposed framework

Figure 3.1: Flexible trading with multiple energy service providers at large customer premises



Source: AEMC

Minimal eligibility requirements

- The draft rules provide the following eligibility requirements that would apply for large customers to establish secondary NMIs and have multiple FRMPs. For a customer to have secondary NMIs:
    - **There must be only one customer at the connection point.** This differs from the embedded network framework, where several customers may be connected to child connection points behind a single parent connection point. A business customer with several connection points may choose to aggregate their load across the different connection points to meet the threshold of a large customer in order to participate in flexible trading. That is, a business customer who meets the threshold could then engage multiple energy service providers and establish secondary settlement points(s) at these connection points.
    - **The secondary NMI needs to be established downstream of a transmission or distribution network connection point.** These requirements would be provided as amendments to chapters 2, 7 and 10 of the NER (see draft rules Ch 2 (2.3.4), Ch 7 (7.2.6), and Ch 10- definitions of market connection point, secondary settlement point). For a large customer to engage multiple FRMPs at one premises:
    - **The customer must meet the definition of a large customer as per the NERL or jurisdictional legislation.** Under the NERL, a larger customer is a business customer that consumes above the upper consumption thresholds defined in the NERL regulation as 100MWh per year. [NERL section 5(3) and National Energy Retail Regulations section 7 (b)].
    - **The possibility of a large customer falling below the consumption threshold for a large customer (as to become a small customer) would be managed through a new clause 2.3.2 in the NER.**
    - **The secondary FRMP must be registered as a Customer or an Integrated Resource Provider (in its capacity as a Market Customer or an SGA and must classify the secondary settlement point as one of its market connection points.55**
- These requirements would be provided as amendments to chapters 2 and 10 of the NER (see draft rules, Chapter 2 - s2.1B.1, s2.1B.2, 2.2.2, 2.2.8, 2.3.2; Chapter 10 - definitions for scheduled generating unit, scheduled bidirectional unit or scheduled network service). Existing roles and responsibilities of FRMPs provided in the NER and NERR would apply to secondary FRMPs. For example, the requirement for FRMPs to obtain retailer authorisation would apply to secondary FRMPs (e.g. where secondary FRMPs are on-selling energy to the customer).

Disconnection for non-payment

- If the primary retailer disconnects, existing arrangements for large customer disconnections would apply.
- In a scenario where there is a second settlement point behind the primary connection point and the primary connection point is disconnected, the customer would also lose supply at the secondary NMI and de-energisation would occur at both points.
- Similarly, the existing approach to re-energisation would apply, in that **each retailer must apply for re-energisation** (that is, the secondary settlement point would not automatically be re-energised when the primary connection point is re-energised). As noted above, obligations to notify about disconnection could be included in contractual arrangements between the customer and FRMPs.
- **For the purposes of settlement, AEMO metrology procedures would specify that when metering data providers (MDPs) 'flag' to AEMO when there is a disconnection or network outage at the connection point, AEMO can then use that flag when processing the metering data for the secondary settlement points (and revert the value to zero).** This will then flow through to existing arrangements for settlement under Chapter 3 of the NER. The Commission considers that retailers at primary connection points and the customer (and therefore secondary FRMP) would be able to agree terms relating to the treatment of any energy flows at times of a supply outage on the network without the assistance of additional market processes. This approach acknowledges that large customers have unique arrangements and complex contractual arrangements governing matters with and between their retailers. These requirements would be provided as amendments to Div 5 of the NERR (s104, 106A, s111, s113, 116, 119).

Assets and Secondary NMI Establishment

- 3.2.3 Switching of assets across FRMPs

- The Commission notes that there are risks to primary retailers posed by switching of resources between the primary and secondary NMIs. Switching could undermine the hedging positions of retailers and, thereby, their ability to offer customers hedged products. We also note some jurisdictions impose restrictions on switching between points in service installation rules, and that customers and FRMPs will take these rules into account when choosing arrangements that best suit their business model. Given this, **the Commission considers that the choice to switch and any risks posed by customer switching could be managed by contractual arrangements between the customer and FRMPs, and we do not propose to regulate this activity in the NER.**

- 3.3.1 DNSPs would be responsible for establishing and maintaining secondary NMIs

- The Commission has determined that **the role of establishing and maintaining NMIs should sit with the DNSPs**, consistent with arrangements for establishing and maintaining NMIs at the primary connection point. The Commission's draft rule provides that these responsibilities and processes would extend to secondary settlement points. These responsibilities include:

    - creating a NMI for a secondary settlement point at small customer premises (at the request of the customer or the customer's retailer)

    - linking the NMI at the secondary settlement point to the NMI at the primary connection point (that identifies the main metering installation at the premises), and

    - maintaining NMI standing data at secondary settlement points.

Settlement and metering arrangements

- 3.4.1 Settlement and metering arrangements
- The draft rules provide that **subtractive settlement arrangements would apply between the primary connection point and secondary settlement point(s) at large customer premises**. This would minimise the need for upgrade to systems currently used by market participants and AEMO.
- This approach also **reflects well-established arrangements used by market participants under the embedded network framework**, thereby reducing transaction and system change costs. **DNSP billing would remain unaffected by the approach in the draft rules**, as they would continue to bill the retailer at the primary connection point based on total usage at the premises.
- These arrangements would be provided for in amendments to AEMO procedures. The Commission notes that we considered alternative approaches and **do not propose to introduce other metering arrangements for settlement, such as multi-element or parallel metering.**
- New meter type 9 could be used at primary connection point and secondary settlement point at large customer premises
- The draft rules provide that **large customers could use the new meter type 9 at the primary connection point and secondary settlement point**. This would enable large customers to use technology with in-built measurement capability at these points, such as EV chargers. The main benefits for large customers associated with this change would be reduced metering costs (it would avoid the need to install a separate meter alongside the technology). **Customers could still choose to use a type 4 meter at these points if they prefer.** The arrangements for the proposed meter type 9 are described in detail at Chapter five.

Arrangements when the secondary NMI becomes inactive

- **The draft rules and AEMO procedures would determine arrangements for when secondary NMIs become inactive.** Where appropriate, these leverage existing arrangements used under the embedded network framework.

- **Secondary FRMPs could choose to cease being a FRMP by declaring the NMI to be inactive** AEMO procedures would provide that where a secondary FRMP chooses to cease being a FRMP by declaring the NMI to be inactive, the inactive NMI would automatically revert to the primary.

- **As per existing arrangements for inactive NMIs, data would still be collected and all metering roles would stay in place, but would not be ''turned on.''** If the customer doesn't use the secondary settlement point/NMI, the roles remains inactive. If the customer opts back in, the metering roles become active again. This approach is well understood and used under the embedded network framework. These requirements would be provided in AEMO procedures and in amendments to Chapter 2 of the NER (see draft rules, Ch 2- s2.10.1) and in AEMO procedures.

- **Onus on the second FRMP to deactivate NMI where a large customer changes status to a small customer**

- Some stakeholders noted that there are situations where large customers fall below the threshold for this status and need to be classified as small customers. If the large customer was using the draft framework for flexible trading and **its status changed to a small customer**, the draft rules and AEMO procedures would provide that **the onus is on the secondary FRMP to deactivate the NMI at the secondary settlement point**. This approach would reduce burden on AEMO and metering service providers and allocate the responsibility to the party with an existing contractual relationship with the customer. These requirements would be provided as amendments to chapter 2 of the NER (see draft rules, Ch 2- s2.3.2) and in AEMO procedures.

AEMC Implementation considerations

- 3.5 Implementation considerations
- As noted throughout this chapter, a range of changes will be required to implement the framework in the draft rules. Key changes required to implement this draft framework include:
    - Updates to AEMO's MSATS system, primarily related to the proposed secondary NMIs.
    - Changes to retailer billing systems to account for the existence of secondary settlement points.
    - Updates to DNSP systems to enable establishment and maintenance of secondary NMIs.
    - Updates to AEMO procedures, primarily MSATS Procedures, Metrology Procedures, and Service Level Procedures*, and
    - Updates to AER guidelines related to embedded network arrangements, including the Network Exemption Guidelines and Retail Exemption Guidelines.
- See further information about implementation considerations at Chapter seven. The costs associated with changes that would have the greatest impact are detailed in Chapter six and in Energeia's draft report.

*Indicative assessment is a substantial impact to Retail and Metering procedures

Subtractive settlement arrangements

- Subtractive settlement arrangements would apply
- As with large customer premises with secondary settlement points (Section 3.3), subtractive settlement arrangements would apply between the primary connection point and secondary settlement point(s) at small customer premises.
- The Commission considers that this approach would minimise the need for upgrades to systems currently used by market participants and AEMO. This approach also reflects well-established arrangements used by market participants under the embedded network framework, thereby reducing transaction and system change costs. These arrangements would be provided for in amendments to AEMO procedures.

Technical arrangements for Small Customers

- 4.2.3 Technical arrangements for secondary settlement points **- secondary metering arrangements for small customers**
- **New meter type 8 would be able to be used at the secondary settlement point**
- The draft rules provide that the new meter type (type 8, described in detail in Chapter five) could be used at secondary settlement points at small customer premises. **This would enable small customers to use technology with in-built measurement capability at secondary settlement points**, such as behind the meter batteries or EV chargers.
- As indicated in Section 5.2.3, type 8 meters would need to obtain pattern approval from the National Measurement Institute to give industry and consumers alike confidence in the meter accuracy. However, to introduce flexibility for these metering arrangements and lower metering costs, the draft rules would require AEMO procedures to set out the meter specifications and minimum service specifications for type 8 meters (instead of having the NER define those specifications).
- By reducing metering costs associated with the CER device, the Commission considers that this will make it easier for small customers to use their CER flexibly and access new value streams. These benefits are described in more detail at Section 6.2.2. These arrangements would be provided for in amendments to NER Chapter 7 for the purpose of creating a new meter type and specifying which meter type can be used for second settlement points (see Appendix E - Summary of draft rules, E.3.6).

Market Arrangements

- **The Commission has determined to introduce two meter types in the NER** as shown in Figure 5.1 to accommodate differences in accuracy (as outlined below in Section 5.2.3) and type 8 and type 9 meters can be used in more circumstances than the proposed MEFM.124 These arrangements would be provided for in amendments to Chapter 7 of the NER. Figure 5.1 shows that:

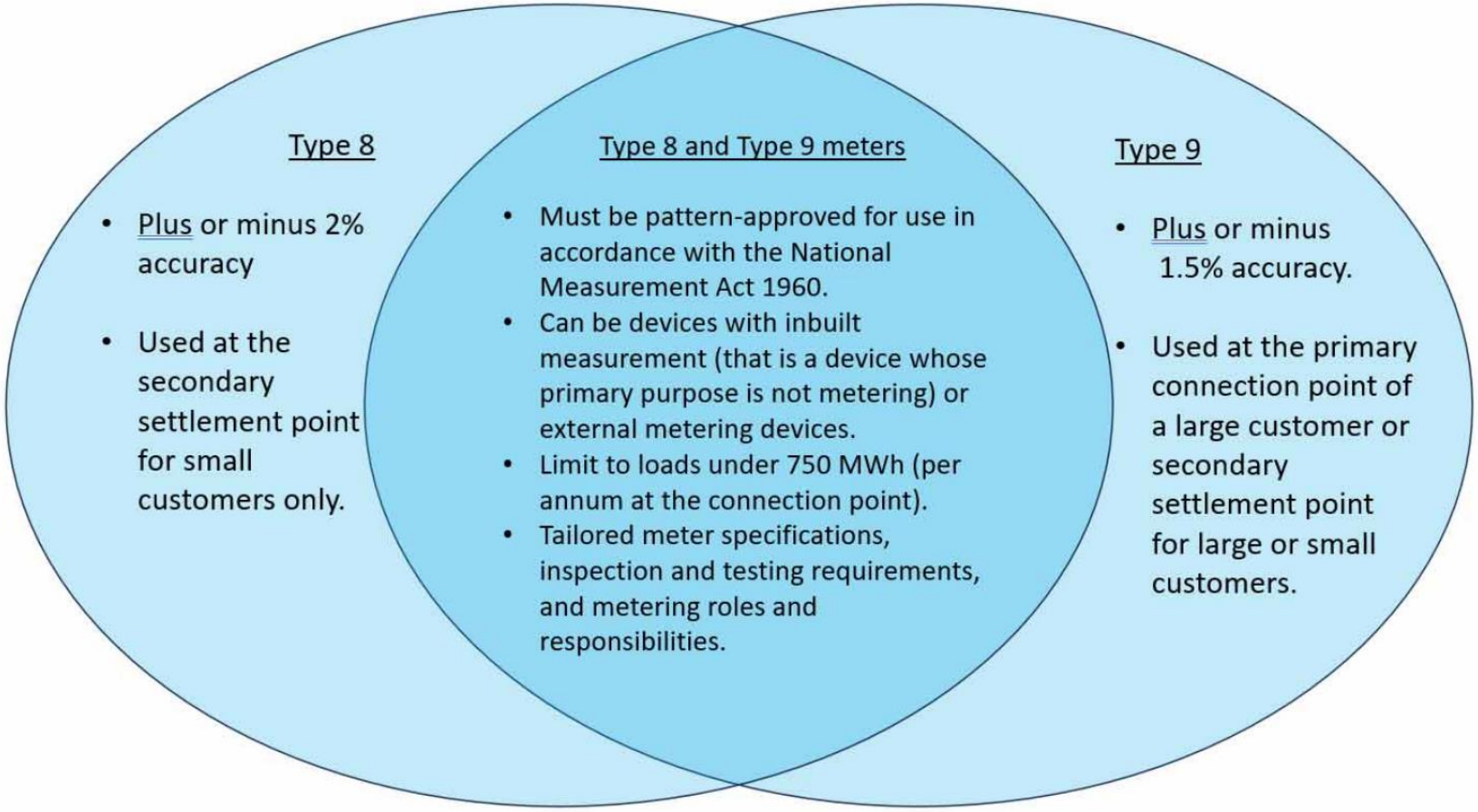
- **Type 8 meters would have the following characteristics:**
    - Permitted for use at second settlement points in small customer premises e.g. EV charger at a second settlement point.
    - In-built measurement devices and external measurement devices would be considered a meter for the purposes of this meter type (if they meet requirements set out in the NER, including pattern approval by the National Measurement Institute).
    - Accuracy limit of plus or minus 2 percent.
    - Volume limit of 750 MWh125 per annum at the connection point (to use their in-built functions for measuring energy flow, data storage, remote communications, and time as metered data for settlement in MSATS).

Market Arrangements

- **Type 9 meters would have the following characteristics:**
  - Permitted for primary connection points other than at small customer premises (e.g. public lighting, street furniture and kerbside charging) and large customer secondary settlement points.
  - In-built measurement devices and external measurement devices would be considered a meter for the purposes of this meter type (if they meet requirements set out in the NER, including pattern approval by the National Measurement Institute).
  - For example, meters may be used for flows that are not considered 'minor,' such as NBN cabinets and EV chargers. 125 This is consistent with the annual volume limit for a Type 4 meter. 126 We note that some stakeholders suggested that other small loads such as parking sensors and CCTV cameras could be included in the new metering arrangements. The Commission notes that devices that meet the meter specifications, are pattern approved and function in accordance with Chapter 7 could indeed be considered a type 9 meter for settlement purposes. 40 0 Australian Energy Draft rule determination Market Commission Unlocking CER Benefits rule change 29 February 2024
  - Accuracy limit of plus or minus 1.5 percent.
  - Volume limit of 750MWh per annum at the connection point (to use their in-built functions for measuring energy flow, data storage, remote communications, and time as metered data for settlement in MSATS).

Market Arrangements

Figure 5.1: Type 8 and Type 9 similarities



Source: AEMC

Market functionality (roles and responsibilities)

- 5.2.2 Market functionality (roles and responsibilities)

- **The draft rule proposes changes to the accreditation requirements for MPs and MDPs.** In its rule change request, AEMO proposed establishing new accreditation categories for MPs and MDPs for the provision of services within private metering arrangements and minor energy flow metering installations. This included providing a mechanism for the MP to enable the assessment and application of an equivalently accessible display as contemplated by NER clause 7.8.2(a). AEMO also stated that DNSPs should not be excluded from acting in the role of MC, MDP and MP for street furniture minor energy flow metering installations given these assets are often maintained by DNSPs and housed within DNSP infrastructure. During consultation, stakeholders noted the following:
    - Many MPs sub-contract other parties for the installation of meters.
    - Some electric vehicle supply equipment installers have relationships with providers of MP and MDP services, but few of them are accredited to provide this service themselves.
    - The MP role is important to ensure that meters are installed correctly and that data is being transmitted to AEMO appropriately.
    - The MC has the ultimate responsibility for the metering installation, including inspection and testing.

- However, the MC may not have the same skills and expertise that an MP has.
    - MDPs have their own systems which may not operate with the new in-built measurement technology.
    - Requiring an MP to oversee the installation of lights with measurement capability may not be necessary given the measurement technology is in-built and can be monitored remotely through a Central Management System (CMS).
    - The cost of metering services, including having an MDP and MP, may be more than initial meter installation costs and could impact the cost benefits of measuring energy flows in street lights.

Market functionality (roles and responsibilities)

- Minor changes to the MP responsibilities

- The draft rule includes amendments to NER clauses 7.3.2 and S7.2.2(a) to reflect that customers may provide type 8 metering installations such as EV chargers themselves (including legacy devices), in which case the Metering Provider will be responsible for commissioning and maintaining the installation, but not providing or installing it.

7.8.1 Metering installation requirements

(d) Installation of a type 8 *metering installation* for a *secondary settlement point* may be carried out by any person qualified under applicable law to install the relevant *metering installation*.

(e) The *Metering Coordinator* at a *connection point* must ensure that there is not a type 8 *metering installation* at the connection point unless it is a *secondary settlement point* within the premises of a *small customer*.

Contestability for type 8 and type 9 meters

- **The MC, MDP, and MP roles are contestable for type 8 and type 9 meters**

- **The draft rule provides for type 8 and type 9 meters to have some different arrangements for metering roles and responsibilities compared to other meter types** (notably when compared to Type 4 or Type 7). Under Type 7 or non-contested unmetered loads, DNSPs act as the MC and undertake calculations to determine the electricity usage for settlement purposes. As noted, a number of submissions supporting the MC role being contestable, noting that many stakeholders agreed it may be most practical for DNSPs to do the role. Energy Queensland Limited noted that it is "important for DNSPs to have the option to perform the MC, MP, MDP functions, but we would not support a mandatory obligation to do so." Some DNSPs noted that they are trying to move away from providing metering services and as such, allowing other providers to function in the MC role may assist in circumstances where the DNSP does not wish to take on the MC role for Type 9 meters (notably for street lights). Based on stakeholder feedback and the Commission's assessment criteria, the Commission has determined to make the MP, MC, and MDP roles contestable for type 8 and type 9 metering installations (including smart street lighting). **DNSPs could offer this service through their ringfenced contestable service provider.** This approach would enable street lighting customers, namely councils, to benefit from the new meter type without the DNSP needing to provide MC services. Where DNSPs wish to serve in the role of MC for type 9 metering installation (notably street lights) the Commission is advised that DNSPs can apply to the AER for a ring-fencing exemption.

Contestability for type 8 and type 9 meters

- **The draft rule proposes that the responsibility for setting metering specifications, inspection and testing requirements (under an asset management plan), and procedures for meter installation and maintenance is placed with AEMO**. The draft rule, however, includes a minimum standard for type 8 and type 9 meters, including for these meters to be pattern-approved. Likewise, requirements for electronic data transfer facilities and facilities for storing interval energy data under clause 7.8.2 of the NER have been extended to type 8 and type 9 meters in the draft rule. The draft rule would require AEMO to set out the minimum service specifications in their procedures for type 8 and type 9 meters. AEMO must have regard to the principle that a service provided by a type 8 or 9 metering installation must:
    - comply with any applicable requirements of the NMA
    - provide for the recording of sufficient historical data consistent with current requirements of the NER
    - provide for the remote retrieval of metering data
    - provide for interval energy data to be prepared and recorded in intervals which correspond to a trading interval.
- The Commission expects AEMO will also take into account international standards, consumer and manufacturer cost impacts, and flexibility for the inclusion of new and emerging technologies. We anticipate this approach will make it easier for minimum service specifications to respond to advancements in measurement capability in technology over time. Furthermore, this allows for further consultation with original equipment

Alternative inspection and testing requirements

- AEMO's rule change request proposed that minor energy flow metering installations be subject to less onerous inspection and testing requirements than other meter types.
- Specifically, AEMO proposed that Chapter 7 be amended to clarify the ability of MCs to propose bespoke arrangements for the testing and inspection of existing, new, and emerging metering devices, technologies, and systems.
- Stakeholders supported tailored inspection and testing requirements citing costs, practicality, and the likely variation between CER devices with in-built measurement capability.
- For street lights, the IPWEA noted that physical inspection requirements would be particularly impractical and, thus, should be rejected. Rather, 'inspection of performance should more appropriately take place via the central management.'
- The draft rule allows the MC for type 8 and type 9 meters to propose alternative testing and inspection arrangements to AEMO for approval through an asset management strategy.
- If the relevant MC does not have an asset management strategy approved by AEMO, it must comply with the testing and inspection requirements for type 8 and 9 meters outlined in Schedule 7.6 of the NER.

Key Energia Findings and Estimates

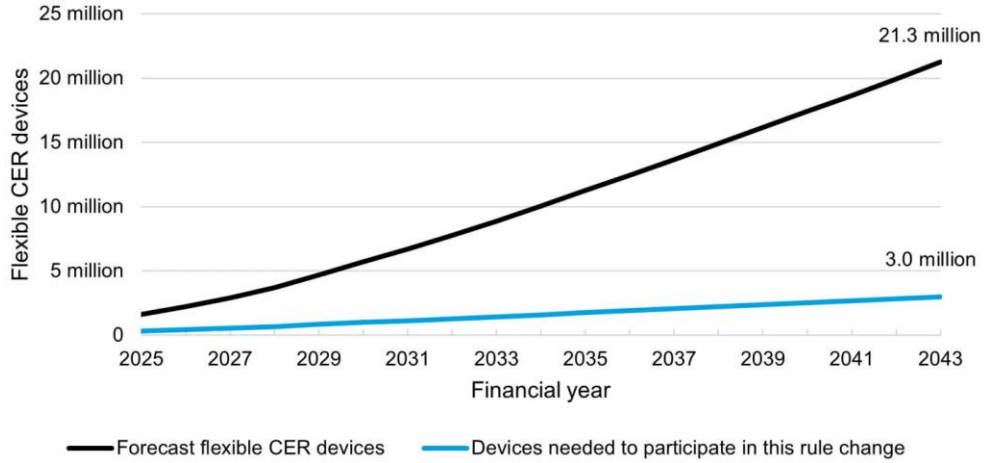
Table 6.3: Energeia draft findings - costs of implementation - draft rules for flexible trading at large customer premises and optimising CER at residential premises.

Action	Who bears the cost	Annualised cost per device
Updating AEMO systems	All customers	$0.49
Updating retailer/metering coordinator systems	All customers	$0.49
Updating network systems	All customers	Negligible
NMI allocation	Shared by retailer and CER device owner	$8.42
Device certification	CER device owner	Negligible
Device system changes	CER device owner	Negligible

Source: Benefit Analysis of Load-Flexibility from Consumer Energy Resources - Draft Report, 29 Feb 2024, p 20.

Note: We have only included the portion of device certification costs and device system changes incurred by market participants, in this case the purchasers of CER devices. Manufacturers and installers bear any remaining costs. Additionally, Energeia found the costs of system changes to networks are negligible as they can already apply sub-metering arrangements to multi-element meters.

Figure 6.3: Break even estimates for flexible CER devices needed to participate in the rule changes



Source: Benefit Analysis of Load-Flexibility from Consumer Energy Resources - Draft Report, 29 Feb 2024, p 39.

Notes

- Blaine Miner (AEMO) spoke to the ‘Unlocking CER benefits through Flexible Trading’ slides
- Blaine mentioned that the slides were direct excerpts from the AEMC’s Draft Determination and that they were being provided to stimulate consideration by the ERCF in identifying potential Procedural impacts
- Blaine mentioned that the AEMC was open to receiving specific submissions regarding the preferred effective date only of the Rule between 11-25 April 2024
- ‘General’ submissions, including preferred effective date content if you so choose, to the Draft Determination closes 11 April 2024
- Topics touched on/discussed during the ERCF meeting included:
    - Key features of the proposed framework
    - References to DNSPs needing to be considered as LNSPs, to allow for both transmission and distribution NMIs/connection points
    - Small customers being allowed for in the Draft Rule, however, they are not allowed to have a different FRMP for the Parent NMI vs the secondary settlement point
    - Disconnections and network outages
    - Switching assets across FRMPs
    - NMI establishment and maintenance by LNSPs
    - New metering arrangement, type 8 and type 9 meters
    - Inactivation of the secondary settlement points by FRMPs and the consequence of that inactivation
    - Energia analysis re the number of devices needing to participate in the rule change for it to ‘break even’ by 2043
- Blaine did mention that AEMO has scheduled an Industry briefing for 5 April 2024 to share its high-level implementation design based on its understanding of the AEMC’s Draft Rule

Items of Interest

Blaine Miner (AEMO)

Shortening the settlement cycle

David Ripper (AEMO)

The AEMC received a rule change request in December '23 from GloBird Energy and have commenced Initial consultation, titled "Shortening the settlement cycle", on 22 February '24.

The following is provided for information purposes only.

Key proposal and consultation timing

- The proposal seeks to alter the timing for Preliminary and Final settlement as follows:
    - Preliminary settlement statements would move from being delivered within 5 business days after the end of each billing period to 3 business days.
    - Final settlement statements would move from being delivered no later than 18 business days after the end of each billing period to 8 business days.
    - The payment date would move from the 20th to the 10th business day after the end of a billing period, or 2 business days after receiving a final statement, whichever is the later.
- The case supporting the change is provided in the rule change request.
- Submissions to the AEMC close on 4 April 2024
- Link: https://www.aemc.gov.au/rule-changes/shortening-settlement-cycle

Notes

- David Ripper (AEMO) spoke to the ‘Shortening the settlement cycle’ slide
- No further comments or actions were raised

IDX, IDAM & PC Update

Blaine Miner (AEMO)

IDX, IDAM & PC Update

Recommendation Summary

Compelling drivers exist to develop new foundational capability across IDAM, IDX and PC areas. Given short term reform roadmap congestion & need for fiscal prudency, *AEMO recommends a phased investment approach for IDX* to address critical security needs, support near-term NEM reforms, provide flexibility for the future & address priority industry pain points.

Identity and Access Management	**PROCEED** with a Strategic target state, AEMO investment of **$21M**[1] over 2 years	• Address key security vulnerabilities and reduce attack surface area – identity management is the most impactful "weak link" in the cyber security chain • Manage expected increase in identities for management: DERs, small generators • AEMO TCO cost differential of **$8M** & total Industry costs of **$38M** are smaller than the potential cost and customer impact of security breaches
Industry Data Exchange	**PROCEED** with a Strategic target state Foundation phase, AEMO investment of **$20M** over 2 years **DEFER** decision on Transition phase to Q4 2025.	• As the grid becomes digitised, data exchanged is increasing in volume, frequency and requires lower latency • IDX Foundation phase represents an efficient and unified implementation of data exchange capabilities across multiple reforms requiring it (AEMO costs are **$20M** compared to **$29M** if done initiative by initiative, and participants also see a cost efficiency) • Migrating legacy services is difficult to assess at this stage given the cost uncertainty and value uncertainty. Deferring the decision point on migrating legacy services – IDX Transition phase – allows for more certainty on cost and value estimates and more information to guide optimising the transition approach.
Portal Consolidation	**PROCEED** with a strategic target state, AEMO investment of **$6M** over 2 years	• Portal Consolidation Strategic target state delivers benefits to address identified industry pain points for a TCO cost differential of **$6M** for AEMO and **$13M** for industry • Reduces AEMO's attack surface area in the most common 'entry point' for bad actors

1. All financial figures presented on this slide have a +/- of 40%

Next Steps: Key Milestones

Date	Key Milestones
Tuesday 19 December 2023	Release of draft business case package
Monday 22 January 2024	Draft business plan walk through session with stakeholders
Tuesday 23 January to Thursday 8 February 2024	Additional 1 on 1 meetings with stakeholders – contact NEMReform@aemo.com.au to arrange
Friday 9 February 2024	Stakeholder submissions due on draft business case package NEMReform@aemo.com.au
Wednesday 14 February 2024	Program Consultative Forum (PCF) meeting update
Monday 26 February 2024 (TBC)	Publish "Business Case – Draft"
Tuesday 12 March 2024	Second / final stakeholder session – walk through of updates, next steps, closure of working group
Thursday 28 March 2024	Present at NEM Reform Executive Forum "Business Case – Draft"
End April 2024 (TBC)	Issue final Business Case and confirm Decision.

Items of Interest

Title	Description/Objective	Comments/Links
MSATS Enumerations Notice	Notices published to the ERCF regarding proposed changes to 'Valid Transformer Fields values' associated to Table 27 in the Standing Data for MSATS procedure	No outstanding notices as at 25 March 2024
Metering Exemption Automation	During the development and testing of the Application Process Automation, AEMO identified required changes to the metering installation malfunction exemption fields in the B2M XML schema.	Metering Exemption Automation went live 4 March 2024
Information Data Exchange (IDX)	To enable unified access to AEMO services across all markets, using modern authentication and communication protocols, facilitating a cohesive approach to industry data exchange. This will leverage IDAM	'Business case' sessions have now been completed
Identity and Access Mgt (IDAM)	To establish a unified mechanism to authenticate participant users and applications when accessing AEMO services.	'Business case' sessions have now been completed
Portal Consolidation (PC)	To create a 'single pane of glass' user experience for participants accessing all AEMO browser based services	'Business case' sessions have now been completed
Unlocking Consumer Energy Resources (CER) Benefits through Flexible Trading	Rule change request that aims to unlock consumer energy resources (CER) benefits through flexible trading arrangements.	AEMC Draft Determination published 29 February 2024 https://www.aemc.gov.au/rule-changes/unlocking-CER-benefits-through-flexible-trading
Review of the regulatory framework for metering services	Seeking to identify options to accelerate the deployment of smart meters in the National Electricity Market (NEM).	Focus is currently on analysing various options supporting Package 1 topics in preparation for the AEMC Draft Rule being published on 4 April 2024 https://www.aemc.gov.au/market-reviews-advice/review-regulatory-framework-metering-services

Items of Interest

Title	Short Description	Indictive commencement	Comments/Links
Consultations	• Anticipated • 2 June Minor Amendment/Procedure consolidation • May 2024 REMP (B2M) consultation, including changes supporting: • MSR Package 1 (Accelerated Rollout) • RoLR Review • Various ERCF ICFs (specific ICFs TBD) • B2B v3.9 (May 2024) consultation, including changes supporting: • MSR Package 1 (Accelerated Rollout) • RoLR Review • Various IEC ICFs (specific ICFs TBD) • MSR Package 2 (Testing/Inspections/Exemptions) • MSR Package 3 (Power Quality Data) • Unlocking Consumer Energy Resources (CER) Benefits through Flexible Trading	• April 2024 • Late May 2024 • Late May 2024 • TBD, dependent on Final Rule • TBD, dependent on Final Rule • TBD, dependent on Final Rule	• Schema change highly likely in May 2025, to support MSR and ICF initiatives

Notes

- Blaine Miner (AEMO) spoke to the IDX, IDAM & PC Update and Items of Interest slides
- Blaine mentioned that MSR-WG meetings are scheduled for 12 April and the 23/24 April 2024 to consider the AEMC Draft Determination and Rule
    - Note, MSR Package 2 and 3 consultation provisions will be reassessed once the AEMC's Draft Determination and Rule has been published

General Business and Next Steps

Blaine Miner (AEMO)

General Business & Next Steps

- Actions and notes to be circulated asap
- Next meeting scheduled for Monday 22 April 2024
- Are there any other general business items members wish to raise?
- Please send through any proposed agenda items, questions or suggested meeting improvements to ERCF@aemo.com.au

Notes

- Simon Tu (AEMO) spoke to the Forward Schedule of Change slide in the Appendix
- Simon mentioned that this slide would be included in subsequent slide pack appendix's going forward, to provide better visibility and details supporting AEMO MSATS maintenance and Procedure change releases
- An ERCF member requested for outage details (e.g. length and indicative timings) being added would be quite valuable

Appendix

ERCF Subgroup Membership

Name	Organisation	Market Sector
Robert Lo Giudice	Alinta Energy	Retailer
Jo Sullivan	Energy Australia	Retailer
Jordan Rigby	Red/Lumo	Retailer
Aakash Sembey	Origin	Retailer
Chris Murphy	Telstra	Retailer
Sagar Shah	Hansen Technologies	Vendor for Retailers
Dino Ou	Intellihub	Metering
Helen Vassos	PlusES	Metering
Paul Greenwood	Vector Metering	Metering
Wayne Farrell	Yurika	Metering
Wayne Turner	Ausgrid	Networks
Tennille Pownceby	CitiPower Powercor	Networks
Christine Ward	EQL	Networks
Michael Zhang	SAPN	Networks
Adrian Honey	TasNetworks	Networks
Laura Peirano	United Energy	Networks

ICFs Awaiting Implementation

(In chronologic order)

ICF ID	Description	AEMO Impact	Scheduled Release Date
073	Summation Metering Changes	• Procedures only	• 13 May 2024
072	Net System Load Profile (NSLP) Methodology	• System and procedures	• 29 Sept 2024
054	Substitution Types review	• System and procedures	• 4 Nov 2024

Forward Schedule of Change

(In chronologic order)

Version	Release Type	Description	Release date	Effective Date	Schema Change?
MSATS Release 52.0	Maintenance	This maintenance update ensures that the MSATS environment remains up-to-date and fully supported.	Apr 14, 2024	n/a	No
MSATS Release 53.1	Maintenance	A routine maintenance release, addressing specific issues with Metering Exemptions (ME) and other minor incidents.	Jul 14, 2024	n/a	No
MSATS Release 53.0	Rule and Procedural Change	This release introduces new features required by the IESS rule changes, enhancing system compliance and functionality.	May 13, 2024	n/a	No
MSATS Release 54.0	Procedural Change	This update, focused on Retail Market Improvement (RMI), facilitates NSLP changes (ICF-072) and the Substitution Review (ICF-054).	Sep 29, 2024	ICF_072 Sept 29, 2024 ICF_054 Nov 04, 2024	No
MSATS Release 54.1	Maintenance	A routine maintenance release, addressing specific issues with IESS, ME, RMI and other minor incidents.	Nov 03, 2024	n/a	No

Note: Dates may change, and releases will be announced via the existing change notice process.

For more information visit

aemo.com.au