

ERCF Meeting #11 - Notes

24 November 2022

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. If you have dialled in via phone, please email ERCF@aemo.com.au your name and organisation for our records.
6. If your name appears abbreviated on Teams, please add your name and organisation to the chat for our records.
7. Be respectful of all participants and the process.
 - This includes 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. IESS Pre-consultation
3. ICF_032
 - Child NMI standing data quality - TNI and DLF
4. ICF_069
 - Standing Data MSATS Field Names (TasNetworks ICF)
5. ICF Register Update
6. Subgroup Updates
7. Consultations Update
8. General Business and Next Steps





IESS Pre-consultation

David Ripper (AEMO), Glenn Wrest (AEMO), May Cotoner (AEMO)

NMI Classification Codes

Questions from last ERCF



- Responses to questions asked at the last ERCF have been provided in the Appendix.
- Are there any questions about these responses or are there any further NCC related questions at this stage?

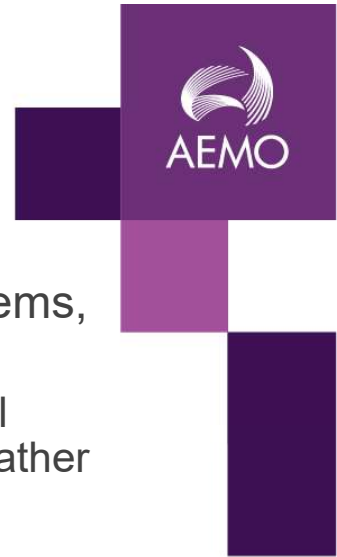
Notes

- David Ripper (AEMO) spoke to slides 7 IESS Pre-consultation NMI Classification Codes
 - Referring to Questions and Responses:
 - Re Q1 - Chris Murphy queried AEMO's response regarding existence of a Market Generators existing within embedded networks. Chris raised South Bank Institute of Technology as an example. **Further discussions to take place offline.**
 - Re Q10 – NREG DER Provider Definition (previously known as non-registered embedded generator)
 - Definition of NREG (>200kVA and <5MW) (Mark Riley)
 - NREG generator >200kVA and <5MW (Mark Riley)
 - NREG can also be 5 - 30MW (David Ripper)
 - If not registered the generator is classified as DGEN
 - Micro generators <200kVA, NREG > 200kVA as per AS4777 compliance. Note: A generator can be <200kVA and be non-compliant with AS4777 i.e. NREG
 - Mark Riley raised issue that generator <30MW (not registered and not classified) doesn't exist
 - Relying on distributors to identify and classify as NREG
 - David Ripper reconfirmed that *"The addition of 2 subclauses that relate to Chapter 5 and Chapter 5A were included on the basis that the only party who actually knows about the 2 non-registered facilities is the distributor. So that was the reason for calling out those particular sets of rule obligations given the distributors must identify on an annual basis, published lists of not-registered facilities."*
 - NREG can be on embedded networks. How does distributor know this and where is it published? It won't. Does the definition need to be broadened to the embedded network manager. Note some embedded networks don't have embedded network managers. **Discussion to be taken offline.**
 - Appendix Slide 40 - Diagram
 - Suggested improvements – addition of NMI codes, include worked examples, not all on one page to avoid 'monster' diagrams (slide pack ideal)

Embedded network calculations & reporting changes



Overview of changes (1)



- AEMO is changing the order and location of embedded network processing in its systems, to comply with changes to non-energy cost recovery (NECR) in the IESS rule.
 - IESS requires NECR to be calculated on the share of consumed and sent-out energy for all participant categories. This requires NECR calculations to be performed at the NMI level (rather than in aggregate) to be settled accurately.
 - The embedded network calculation itself is not changing, only the order and location of the processing.
- Currently, embedded network energy flow allocation and aggregation is performed in AEMO's settlements system, after processing by retail systems (additional to the aggregation already performed in retail systems).
- Under IESS, the embedded network processing will be performed in AEMO's retail systems, impacting the underlying data used for some RM reports.

Overview of changes (2)



- These changes will result in minor changes to the data in the RM16 report as it will now show the net of the embedded network parent NMI
 - The format/structure of all RM reports, including the RM16, will not change
 - The data within the RM17 and RM27/21 reports will not change, as they are based on metering data.
- **Impact for retail participants:** There may be implications for participant reconciliation processes.
 - Participants will be able to reconcile RM16 with settlements values but will no longer be able to easily reconcile RM16 against RM27/21 without first performing the embedded network calculations undertaken by AEMO.
- This will **only impact participants who are parents of on-market children in embedded networks.**
- *Note AEMO is still working through implementation detail.*

Example of change

Note embedded network calculation is settlement by difference:
PARENT minus CHILD.

BEFORE IESS

Values are included in RM 16 before the embedded network calculation is performed

	FRMP	LR	PERIODID	import_value	export_value	calculation
Parent NMI	EnergyA	LR1	1	-30	20	A
Child NMI	EnergyB	EnergyA	1	-15	3	B
Child NMI	EnergyC	EnergyA	1	-17	7	C

	FRMP	LR	PERIODID	import_value	export_value	calculation	net
Pre-IESS	Parent NMI	EnergyA	LR1	1	-30	20	=A
							-10

pre PARENT-CHILD calculation

For Parent	RM16	FRMP	LR	Period001	Settlement Component	ParticipantID	IGENERGY	XGENERGY
		EnergyA	LR1	-10		EnergyA	-30	20

	FRMP	LR	PERIODID	import_value	export_value	calculation	net
Post-IESS	Parent NMI	EnergyA	LR1	1	0	12	A-(B+C), negative values shift to EXP
							12

post PARENT-CHILD calculation

AFTER IESS

Values are included in RM 16 after the embedded network calculation is performed

For Parent	RM16	FRMP	LR	Period001	Settlement Component	ParticipantID	IGENERGY	XGENERGY
		EnergyA	LR1	12		EnergyA	0	12



Example of RM 16 report

```
<?xml version="1.0" encoding="UTF-8"?>
<ase:aseXML xsi:schemaLocation="urn:aseXML:r39_p1 http://www.nemmo.com.au/aseXML/schemas/r39_p1/aseXML_r39_p1.xsd" xmlns:ase="urn:aseXML:r39_p1" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <Header>
    <From>NEMMCO</From>
    <To>FRMP1</To>
    <MessageID>NEMMCO_MSG_2122102511010101010_830927</MessageID>
    <MessageDate>2122-10-25T13:03:55+10:00</MessageDate>
    <TransactionGroup>MDMT</TransactionGroup>
    <Priority>Medium</Priority>
    <SecurityContext>NEMMCOBATCH</SecurityContext>
    <Market>NEM</Market>
  </Header>
  <Transactions>
    <Transaction initiatingTransactionID="B2M-2511010101010158-1010101011-1" transactionID="MDMT-20221010101010101622-833306" transactionDate="2122-10-25T13:03:55+10:00">
      <ReportResponse version="r39">
        <ReportParameters xsi:type="ase:MDMTSettlementCaseDateRangeReportParameters">
          <ReportName>Level1SettlementReconciliation</ReportName>
          <SettlementCase>9xxx</SettlementCase>
          <FromDate>2122-09-25</FromDate>
          <ToDate>2122-10-01</ToDate>
          <LastSequenceNumber>0</LastSequenceNumber>
          <SettlementRun>FINAL</SettlementRun>
        </ReportParameters>
        <ResultBlock>
          <TotalBlockNumber>1</TotalBlockNumber>
          <CurrentBlockNumber>1</CurrentBlockNumber>
        </ResultBlock>
        <ReportResults xsi:type="ase:CSVReportFormat">
          <CSVData>
            <TNI,DataTypes,FRMP,LR,MDP,CreationDT,SettlementDate,Period001,Period002,Period003,Period004,Period005,Period006,Period007,Period008,Period009,Period010,Period011,Period012,Period013,Period014,Period015,Period016,Period017,Period018,Period019,P
            TNI1,C,FRMP1,GLOPOOL,MDP1,2022/10/20 22:00:00,2022/09/25,2.249,2.231,2.216,2.190,2.179,2.170,2.151,2.138,2.121,2.107,2.099,2.093,2.083,2.078,2.069,2.053,2.048,2.046,2.043,2.019,2.013,2.015,2.009,1.998,1.997,2.004,2.001,2.002,1.998,1.995,1.989,
            TNI1,C,FRMP1,GLOPOOL,MDP1,2022/10/20 22:00:00,2022/09/26,2.036,2.017,2.009,1.983,1.970,1.958,1.939,1.927,1.922,1.908,1.905,1.897,1.884,1.878,1.875,1.863,1.856,1.853,1.847,1.845,1.844,1.838,1.833,1.828,1.828,1.831,1.819,1.808,1.805,1.808,1.811,1.821,1.813,1.811,
            TNI1,C,FRMP1,GLOPOOL,MDP1,2022/10/20 22:00:00,2022/09/27,1.806,1.793,1.780,1.750,1.734,1.716,1.701,1.689,1.681,1.661,1.653,1.646,1.645,1.645,1.636,1.623,1.621,1.610,1.604,1.603,1.596,1.583,1.586,1.587,1.580,1.579,1.573,1.576,1.570,1.571,1.568,1.560,1.558,1.560,
            TNI1,C,FRMP1,GLOPOOL,MDP1,2022/10/20 22:00:00,2022/09/28,1.768,1.753,1.743,1.712,1.698,1.696,1.683,1.666,1.656,1.647,1.647,1.645,1.630,1.618,1.621,1.615,1.608,1.604,1.603,1.606,1.607,1.594,1.590,1.588,1.592,1.593,1.585,1.586,1.591,1.585,1.588,1.586,1.587,1.588,
            TNI1,C,FRMP1,GLOPOOL,MDP1,2022/10/20 22:00:00,2022/09/29,1.803,1.790,1.778,1.754,1.737,1.725,1.697,1.689,1.674,1.662,1.656,1.645,1.634,1.629,1.624,1.600,1.598,1.596,1.586,1.575,1.576,1.567,1.566,1.564,1.566,1.561,1.558,1.557,1.553,1.549,1.546,1.549,1.545,1.535,
            TNI1,C,FRMP1,GLOPOOL,MDP1,2022/10/20 22:00:00,2022/09/30,2.070,2.056,2.047,2.016,2.008,1.992,1.989,1.970,1.961,1.944,1.929,1.921,1.912,1.907,1.899,1.890,1.884,1.880,1.869,1.870,1.864,1.857,1.852,1.847,1.843,1.843,1.844,1.845,1.842,1.838,1.843,1.843,1.846,1.845,
            TNI1,C,FRMP1,GLOPOOL,MDP1,2022/10/20 22:00:00,2022/10/01,2.166,2.146,2.127,2.112,2.100,2.086,2.072,2.059,2.045,2.031,2.021,2.016,2.004,1.997,1.986,1.972,1.971,1.971,1.969,1.959,1.956,1.948,1.946,1.943,1.947,1.943,1.938,1.943,1.942,1.942,1.941,1.946,1.944,1.939,
            TNI2,C,FRMP1,GLOPOOL,MDP1,2022/10/20 22:00:00,2022/09/25,40.118,39.793,39.520,39.061,38.861,38.701,38.355,38.123,37.824,37.579,37.439,37.337,37.154,37.056,36.897,36.610,36.525,36.486,36.430,36.212,36.119,36.017,35.897,36.003,35.932,35.837,35.626,35.621,35.741,3
            TNI2,C,FRMP1,GLOPOOL,MDP1,2022/10/20 22:00:00,2022/09/26,36.288,35.950,35.814,35.349,35.111,34.896,34.569,34.342,34.258,34.013,33.955,33.817,33.578,33.483,33.418,33.201,33.086,33.032,32.933,32.882,32.866,32.758,32.666,32.590,32.645,32.432,32.233,32.182,3
            TNI2,C,FRMP1,GLOPOOL,MDP1,2022/10/20 22:00:00,2022/09/27,32.195,31.964,31.724,31.200,30.912,30.590,30.322,30.112,29.969,29.615,29.465,29.347,29.316,29.321,29.168,28.938,28.898,28.705,28.589,28.570,28.448,28.225,28.266,28.297,28.168,28.153,28.044,28.096,27.984,2
            TNI2,C,FRMP1,GLOPOOL,MDP1,2022/10/20 22:00:00,2022/09/28,33.861,33.575,33.371,32.793,32.511,32.484,32.235,31.898,31.705,31.543,31.535,31.502,31.210,30.986,31.040,30.927,30.788,30.713,30.704,30.758,30.771,30.520,30.457,30.415,30.486,30.511,30.347,30.382,30.471,3
            TNI2,C,FRMP1,GLOPOOL,MDP1,2022/10/20 22:00:00,2022/09/29,36.053,35.792,35.546,35.073,34.735,34.488,33.931,33.776,33.478,33.235,33.123,32.901,32.667,32.582,32.464,31.989,31.944,31.924,31.711,31.499,31.506,31.337,31.311,31.265,31.316,31.206,31.162,31.143,31.050,3
            TNI2,C,FRMP1,GLOPOOL,MDP1,2022/10/20 22:00:00,2022/09/30,41.392,41.102,40.930,40.321,40.161,39.827,39.767,39.397,39.217,38.869,38.578,38.418,38.234,38.123,37.969,37.783,37.680,37.590,37.377,37.394,37.271,37.127,37.034,36.935,36.853,36.857,36.876,36.888,36.834,3
            TNI2,C,FRMP1,GLOPOOL,MDP1,2022
```

Changes to RM 16:

- Participants will now see the output of the embedded network settlement by difference calculation (PARENT minus CHILD) in RM 16.
- Calculation is run every interval.
- Data changes will impact PARENTS of on-market CHILDREN. No impacts for CHILDREN's data.

Notes

- May Cotoner (AEMO) spoke to slides 10 – 14 Embedded Network Calculations
 - IESS rule changes require NECR (Non-energy cost recovery) to be calculated on share of consumed and sent-out energy at NMI level for accuracy. Note calculations are not changing.
 - Embedded network processing (energy flow allocation and aggregation) will be performed in AEMO's retail systems (currently AEMO's settlement system) impacting the underlying data used in some reports.
 - Report RM16 –will include values **AFTER** the embedded network calculation is performed. Format/structure of report will NOT change.
 - Reports RM17 and RM27/21, used to get children data, will not change.
 - Retail participants who are parents of on-market children in embedded networks, will no longer be able to reconcile RM16 settlement values against RM27/21 without performing AEMO's embedded network calculations.
 - No impacts to AEMO Procedures have been identified and as a result will not be part of AEMO's consultations next year.
 - Parent of an embedded network NMI will be informed of child/children NMIs become 'on market'. FRMP of parent has a role against the children's NMIs and will be notified through that process.
 - In Summary, metering data flowing between various participants to support embedded networks - remains the same. Visibility of standing data for parent FRMP and children FRMP remain the same. The calculation to 'net-off' the child/children from a parent NMI from an export/import perspective will be performed in AEMO's retail systems rather than its settlement systems, which has a flow-on impact to the RM16 Report.
 - Mark Riley highlighted that while the type of data is not changing, the context and meaning of the data is
 - Note: This change will not be consulted on next year as it does not impact AEMO procedures
- **Action:**
 - Participants to consider the potential impacts of RM16 reports no longer being able to be easily reconciled with RM27/21 reports without first performing the embedded network calculations undertaken by AEMO.

ICF_032 Child NMI standing data quality - TNI and DLF

Simon Tu (AEMO)

ICF_032 Child NMI standing data quality - TNI and DLF

- Problem statement
 - Embedded Network Managers don't know when a TNI and DLF have changed on a Parent NMI preventing them from meeting their compliance requirement by maintaining the Standing Data of Child NMIs.
 - Where the TNI and DLF of the child NMI are out of sync with the parent, the child NMI billing of consumers in the market can be incorrect.
- Situation
 - Child NMI TNI and DLF are directly inherited from parent NMI TNI and DLF for all child NMIs except Child NMIs with site-specific TNIs.
 - ENM compliance requirement includes maintenance of standing data of Child NMIs – TNI and DLF.
 - ENMs receive two weekly PMS reports to support their compliance requirements:
 1. DLFERR_CHILD: Identifies where the DLF code assigned to the Child NMI is incorrect.
 2. TNIERR_CHILD: Identifies where an incorrect TNI has been assigned to an Embedded Network NMI.
 - The DLFERR_CHILD and TNIERR_CHILD reports do not provide ENMs details of the parent NMI; rather, they rely on the ENC Code table to provide them with the parent TNI and DLF.
- Complication
 - The TNI and DLF of Parent NMIs, as populated in the ENC Code table, do not get updated since the code's creation.
 - ENMs currently do not have visibility on parent NMI standing data nor any changes made on the parent NMI standing data (CRs raised on Parent NMIs).

ICF_032 Child NMI standing data quality - TNI and DLF

- AEMO Proposal:
 - AEMO proposes updating existing PMS reports to achieve the Industry requested requirement
 - Update weekly PMS reports DLFERR_CHILD and TNIERR_CHILD error to include the Parent NMI and PARENT DLF or TNI based on the error.

DLFERR_CHILD Report: Identifies where the DLF code assigned to the Child NMI is incorrect.

Field	Details
Query Id	DLFERR_CHILD
Short Description	INCORRECT DLFs FOR Child NMIs CREATED WITHIN MSATS
Long Description	List of Child NMIs created within MSATS that are believed to have an incorrect DLF Code. Please investigate and correct the DLF code where applicable.
Data Source	CATS
Header Values	QueryId,Stat_Date,ParticipantId,RoleId,Source,Table,NMI,TNI,CODE,Start_Date,End_Date,Field,DLFVALUE,ParentNMI,ParentDLF
Status	Active

TNIERR_CHILD Report: Identifies where an incorrect TNI has been assigned to an Embedded Network NMI.

Field	Details
Query Id	TNIERR_CHILD
Short Description	INCORRECT TNIs FOR Child NMIs CREATED WITHIN MSATS
Long Description	List of Child NMIs created within MSATS that are believed to have an incorrect TNI Code. Please investigate and correct the TNI Code.
Data Source	CATS
Header Values	QueryId,Stat_Date,ParticipantId,RoleId,Source,Table,NMI,SDR_Key2,SDR_Key3,Start_Date,End_Date,Field,NMI_Class,TNI,State,ParentNMI,ParentTNI
Status	Active

ICF_032 Child NMI standing data quality - TNI and DLF



- For the update DLFERR_CHILD and TNIERR_CHILD reports:
 - AEMO will maintain a child exclusion list where a child NMI has:
 - The child is meant to have a different TNI or DLF from one or more of the parents
 - Start and End Date of the report will intersect the Stand and End dates of the Parent and the Child.
 - NMI status of A and D
 - As per the existing report, there is no link to the data stream table

Notes

- Simon Tu (AEMO) spoke to slides 15 – 18 ICF_032
 - Embedded Network Managers (ENM) are required to maintain TNIs and DLFs of Child NMIs but don't have visibility of when these fields change in the Parent NMI
 - Current PMS reports on compliance requirements by ENMs highlight mismatched TNI and DLF values between Parent and Child without including the Parent NMI, TNI and DLF values.
 - The PMS reports will be updated to include the parent NMI with either TNI for TNIERR_Child Report or DLF for DLFERR_Child Report.
 - All existing selection criteria will remain



ICF_069 - Standing Data MSATS Field Names

Simon Tu (AEMO)

ICF_069 - Standing Data MSATS Field Names



- Problem statement
 - To assist Participants (and their software vendors) whose market systems are based on the MSATS database schema, mapping the Procedural name to the MSATS database table/field name would assist with implementing technical changes.
- Situation
 - The C1 Replication Data report for CATS_TRANS_FIELD_VALIDATION allows Participants to view a CR-specific report that lists every MSATS Database table and column linked to a Change Reason code.
 - Several Participants have used this report to create market replicas of the CATS Standing Data tables and require an understanding of what changes AEMO makes before they make their system changes.
- Complication
 - Participants using the C1 CATS_TRANS_FIELD_VALIDATION for their builds don't have a view of what's changed until an MSATS release hits PreProd. This doesn't give them much time to perform their updates.
 - AEMO does not support Participants building their systems based on the MSATS Oracle database schema; this is a technology-driven approach; instead, Participants must build their systems off Procedural requirements.
 - AEMO may choose to move to new database technology and needs the flexibility to change the table relations and table/field names per its own needs.

ICF_069 - Standing Data MSATS Field Names



- While AEMO does not support Participants building their systems based on the MSATS Oracle database schema, as several Participants have already done so, AEMO is sympathetic to their needs.
- AEMO Proposal:
 - In the published MSATS Technical Specification, AEMO shall publish CATS_TRANS_FIELD_VALIDATION TableName and FieldName to aseXML mappings.
 - To support ongoing visibility of the CATS_TRANS_FIELD_VALIDATION TableName and FieldName to aseXML mapping:
 - AEMO shall introduce new C1 aseXML replication data structures to support disseminating various data sets such as enumerations and other configured data.
 - The CATS_TRANS_FIELD_VALIDATION to aseXML mappings will use one of these new C1 aseXML replication data structures.
 - As this extension to the C1 process firms up, further details will be released.
 - AEMO will maintain the principle that it does not support Participants building their systems based on the MSATS Oracle database schema and that table/field names may change without going through a formal consultation process.

Notes

- Simon Tu (AEMO) spoke to slides 20 – 23 ICF_069
 - Simon highlighted issues in participants building their software solutions off anything other than CATS Procedures explaining that AEMO needs the flexibility to change MSATS database schemas and/or database technologies at their discretion.
 - ICF_069 has been raised by a market participant who based their systems off the version of AEMO's MSATS Schema once it reaches Preprod using the C1 Replication Data Report for CATS_TRANS_FIELD_VALIDATION that highlights every MSAPS Database table and column linked to a Change Reason Code. Participants are looking for earlier notice of field name changes.
 - AEMO proposes to publish the MSATS Technical Specification inclusive of CATS_TRANS_FIELD_VALIDATION TableName and FieldName to **aseXML mappings** (not procedure names)
 - AEMO will add a new column - the aseXML field - to the C1 Trans_Field_Validation Report
 - Chris Murphy agrees with AEMO's position
 - Adrian Honey – highlighted that participants aren't in control of how software vendors design their systems, can only advise.
 - Simon Tu: AEMO proposes that a new C1 Report will be built to report on 'views' of table data including configuration data, based on various use cases e.g. MSATS enumerations used for internal validation. This approach will allow flexibility to add additional fields to the report.
 - The ERCF agreed that this change is not urgent and can wait for the next schema release (after R43 May 2023). MSATS Technical Specification will provide the field mappings in the interim.
 - Note: Schema Release R43 will contain both B2B v3.8 and B2M changes
- **Action:**
 - Members to provide AEMO feedback by COB Tues 29 Nov re their proposal to assist Participants (and their software vendors) whose market systems are based on the MSATS database schema
 - Simon to investigate the possibility of ASWG documents being circulated to the ERCF from now on



ICF Register Update

Blaine Miner (AEMO)

ICF Register Update

Issue/Change Title	Short Description	Proponent	ICF Ref#	Current Status/Update
ADWNAN Reporting changes	Assignment of Interval ADWNANs to MDP in AEMO Performance Reports	Jane Hutson, EQ	017	Implementation delayed due to an identified impact to AEMO's MDM. Implementation date TBD.
Child NMI standing data quality - TNI and DLF	<p>ENM compliance requirement includes maintenance of standing data of Child NMIs – TNI and DLF I.</p> <p>Child NMI TNI and DLF is directly inherited from parent NMI TNI and DLF for all child NMIs except Child NMIs with site specific TNIs.</p> <p>ENMs currently do not have visibility on parent NMI standing data and to any changes made on the parent NMI standing data (CRs raised on Parent NMIs).</p> <p>This results in an issue as the Child NMI TNI and DLF becomes inaccurate when a parent NMI TNI and DLF are changed in the market but not updated to the ENMs.</p> <p>This affects the Child NMI billing in the market resulting in incorrect billing of consumers. * This also directly affects the SDQ report in MSATS and in turn our ENM compliance report from AEMO.</p>	intelenm@energy intel.com.au	032	Scheduled for the May 2023 release.
Updating Network Tariff for a Greenfield NMI	Configuration change to validation in MSATS on the CR3101 to allow the CR3101 to continue rather than reject on a Greenfield NMI.	Laura Peirano (UE)	047	Scheduled for the May 2023 release.

ICF Register Update

Issue/Change Title	Short Description	Proponent	ICF Ref#	Current Status/Update
NMI Status Updates	Proposes more explicit obligations regarding LNSPs reflecting NMI status energisations/de-energisations in MSATS regardless of the mechanism that triggered the status and this trigger point being from when LNSPs are advised of said status.	Helen Vassos (PLUS ES)	052	Should this ICF now be considered closed?
Substitution Review	The review requires consideration for new substitution rules to be implemented for interval metering data to replicate substitution rules derived from Manually Read Interval Meters and Accumulative Meters.	Mark Leschke (Yurika)	054	Subset of the initial subgroup to meet to consider next steps. Next meeting likely to occur Feb 2023.
Clarifying when an embedded network code must be issued	Clarifying EN interpretations of the relevant clause, so the clauses are applicable regardless of the Distributor's embedded network application process.	Dino Ou (Endeavour)	055	Included in the 'Load Profiling Methodologies' consultation
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	Subgroup formed. Proponent considering next steps.
Review of NMI Classifications	Some NMI Classifications are defined according to consumption, while some are defined according to throughput. The descriptions should be updated for consistency and to better accommodate for new connection arrangements (EG: those associated with IESS)	Mark Riley (AGL)	059	Subgroup formed. Proponent to provide an update as part of the 'Subgroup Updates' agenda item.
'Spikes' in settlement volumes within a 30-minute period	Following the introduction of 5MS, participants have witnessed peculiar 'spikes' in settlement volumes. These spikes occur within a 30-minute period and are a consequence of using the methodology outlined in AEMO's Metrology Procedures Part B.	Mark Riley (AGL)	060	Included in the 'Load Profiling Methodologies' consultation

ICF Register Update

Issue/Change Title	Short Description	Proponent	ICF Ref#	Current Status/Update
Addition of the 'HouseNumberToSuffix' field	<p>The 'House Number To Suffix' is a part of the Australian structured address standards.</p> <p>'HouseNumberToSuffix' was added to the r42 schema in mid-November 2021 by the ASWG, the body that ensures the technical accuracy of the aseXML schema. At the time, ASWG Industry representatives suggested that, purely from an XML perspective, it would be prudent to add a 'HouseNumberToSuffix' element as a logical extension of 'HouseNumberTo'.</p> <p>While its addition to the schema may be technically valid, its addition to the Procedures is still subject to consultation.</p>	Aakash Sembey (Origin Energy)	064	Included in the 'Load Profiling Methodologies' consultation
Removal of NMI Discovery Type 3 limitations	<p>'Won in Error' process being impacted by MSATS NMI Discovery Type 3 showing an error message where a transfer completed more than 130 business days ago.</p> <p>This MSATS constraint forces market participants to rely on a manual process and retailers are left with no choice but to obtain the 'previous FRMP' details from the relevant network via email.</p> <p>Rule 7.15.5 (c) and (e) of the NER provides relevant provisions for retailers to access to energy data, including NMI Standing Data, in order to comply with its obligation. Since there are no restrictions in the NER, Origin requests AEMO to consider removing this validation from MSATS.</p>	Aakash Sembey (Origin Energy)	065	Included in the 'Load Profiling Methodologies' consultation

ICF Register Update

Issue/Change Title	Short Description	Proponent	ICF Ref#	Current Status/Update
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 SMS and Global Settlements. AEMO Metering to review and update where required the examples in Appendix H of the MDFF Specification.	AEMO	067	Document to be updated and published for comment. Exact timing still TBD.
Enumeration Management	This ICF identifies proposed fields for their enumerations to be managed outside the Standing Data for MSATS procedure, the process to amend those enumeration lists via a Rapid change process and where those enumerations are published.	Mark Riley (AGL)	068	Being assessed by AEMO and seeking further feedback from the ERCF
New fields in MSATS defined by a naming convention that does not align with the procedural field name.	With the introduction of new fields into MSATS as part of the MSDR it has become known that AEMO may create the new fields in MSATS defined by a naming convention that does not align with the procedural field name. The AEMO defined the field name may be based on their database name and participants are then required to create a mapping table within their systems to associate this name with the procedural field name that is defined in the Standing Data for MSATS document.	Adrian Honey (TasNetworks)	069	AEMO proposal provided

Notes

- Blaine Miner (AEMO) spoke to slides 24 – 28 ICF Register Update
 - Blaine would like ERCF members to consider whether certain open ICFs should be closed by the Jan 2023 monthly meeting
 - ICF_017 – no update – will continue to monitor
 - 3 ICFs (55, 64, 65) relate to Load Profiling Methodologies consultation – tracking well through consultation process
 - ICF_068 New Standing Data for MSATS procedure will be published for comment by early next week and open for 2 weeks for feedback.
- **Action:**
 - Members to provide AEMO feedback on their preferred option re Enumeration Management by COB Tues 29 Nov 2022



Subgroup Updates

Proponents

Subgroup Updates

Issue/Change Title	Short Description	ICF Ref#	Status	Proponent	Current Status/Update
Clarification of End Date in Inventory Table	AGL has raised the issue that Inventory Tables are being populated and maintained inconsistently between DNSPs and that the data being provided by some DNSPs are seen as being inadequate.	56	Active	Mark Riley (AGL)	Update required from the proponent
'Spikes' in settlement volumes within a 30-minute period	Following the introduction of SMS (1 Oct 2021), Powershop has witnessed peculiar 'spikes' in settlement volumes. This subgroup is being established to discuss and consider potential long-term solutions to address this issue.	60	Active	Mark Riley (AGL)	'Load Profiling Methodologies' consultation currently in progress
NMI Status	PlusES is proposing that the NMI status must be updated by the LNSP when they become aware that the supply status to the connection point is different from what is recorded in MSATS. i.e. the updating of the NMI status should not only occur when the LNSP has effected an energisation service.	52	On-hold	Helen Vassos (PlusES)	Subgroup last met on 4 May 2022. Should this now be considered closed?
Review of NMI Classifications	AGL is proposing that the basis of, and the NMI classifications themselves, be reviewed to ensure they appropriately communicate the service a NMI represents.	59	Active	Mark Riley (AGL)	Update to be provided today
Enumerations	Subgroup is considering the preferred treatment of various MSATS enumerations, predominantly around separating the enumerations into 2 categories: <ul style="list-style-type: none"> Those that have a consequential impact on key Industry functions e.g. billing which should continue to be maintained in AEMO's 'Standing Data for MSATS' procedure Those that are provided for 'information purposes only' which may be able follow the ASWG's 'Rapid change process' 	TBD	Active	Mark Riley (AGL)	Being assessed by AEMO and seeking further feedback from the ERCF

Notes

- Blaine Miner (AEMO) spoke to Subgroup Updates
 - Mark Riley stated that work had been progressing between AGL and Telstra re the 'Review of NMI Classifications', additional content to be provided to the subgroup shortly for their consideration and feedback

Consultations Update

Kate Gordon (AEMO)

Consultations Updates

Consultation	Short Description	Status	Current Status/Update
Standalone Power Systems (SAPS)	AEMO has prepared an Issues Paper to facilitate informed debate and feedback by industry about the most efficient way to meet the objectives for implementing the SAPS Framework in AEMO Retail Electricity Market and Settlement procedures.	Completed	<ul style="list-style-type: none"> Final report published Thursday 3 November 2022.
Consumer Data Right (CDR)	Consumer Data Right (CDR) is Australian Government legislation, introduced in November 2017, to give more control and choice to consumers on how their data is shared and used. CDR has been introduced as an amendment to the Competition and Consumer Act under Australian Commonwealth legislation. AEMO has published an Issues Paper regarding the most efficient way to meet AEMO's Consumer Data Right (CDR) obligations and other matters which require modification (including ICF 061, ICF 062 and ICF 063).	Completed	<ul style="list-style-type: none"> CDR Part 2 Final Report published Tuesday, 8 November 2022.
UFE Reporting Guidelines	AEMO has prepared an Issues Paper to facilitate informed debate and feedback by industry about the content of the UFE reporting guidelines to meet the objectives for 3.15.5B in the NER.	In progress	<ul style="list-style-type: none"> Publication of Draft Report and Determination Friday 18 November 2022 Closing date for submissions in response to the Draft Report 19 December 2022 Publication of Final Report and Determination 27 February 2023
Load Profiling (ICF_060)	<p>Following the introduction of SMS, participants have witnessed peculiar 'spikes' in settlement volumes. These spikes occur within a 30-minute period and are a consequence of using the methodology outlined in AEMO's Metrology Procedures Part B. This consultation will seek to determine a preferred long-term methodology. Procedures impacted include: Metrology Part B and MDM Procedure.</p> <p>Consultation also expected to include:</p> <ul style="list-style-type: none"> ICF_055 - Embedded Network Codes - Procedure(s) impacted: CATS ICF_064 - 'HouseNumberToSuffix' field - Procedure(s) impacted: CATS/WiGS and Standing Data for MSATS ICF_065 - Removal of NMI Discovery Type 3 limitations 	In progress	<ul style="list-style-type: none"> Publication of Draft Report and Determination Thursday, 1 December 2022 Closing date for submissions in response to the Draft Report Friday, 20 January 2023 Publication of Final Report and Determination Friday, 24 February 2023 Draft material issues: <ul style="list-style-type: none"> Option 6 will be the recommended methodology Implementation date proposed to be shifted to 1 Oct 2023 to minimise the risk of price volatility during the transition
Standing Data for MSATS	<p>Updated version about to be published for comment :</p> <ul style="list-style-type: none"> Allow for additional enumerated values from Essential Energy and PlusES Correct minor errors 	Upcoming	<ul style="list-style-type: none"> To be published by Monday 28 Nov 2022
IESS	The Commission's final rule makes a number of changes that better integrate storage into the NEM, including, a new registration category, the Integrated Resource Provider (IRP), that allows storage and hybrids to register and participate in a single registration category rather than under two different categories.	Upcoming	<ul style="list-style-type: none"> In recognition of ERCF feedback, formal consultation re Retail & Metering consultations are planned to commence from March 2023

The link to the 'Retail consultations calendar' is provided below, noting that there may be a short lag between updates: <https://aemo.com.au/en/consultations>

Notes

- Blaine Miner (AEMO) spoke to Consultation Updates
 - SAPS - Mark Riley proposed a SAPS guideline or similar to provide overview of elements of SAPS difficult to glean from procedures.
 - CDR – As requested by stakeholders, a CDR LCCD Workshop has been scheduled for 13 Dec 2022
 - UFE Reporting Guidelines and Load Profiling Methodologies consultations in progress
 - Load Profiling Methodologies – 2 material issues to be addressed in the Draft Report
 - Preferred longer-term methodology and application
 - Preferred implementation date
- **Action:**
 - Members to provide potential agenda items and use cases supporting the CDR workshop by Fri 2 Dec 2022



General Business and Next Steps

Blaine Miner (AEMO)

General Business & Next Steps

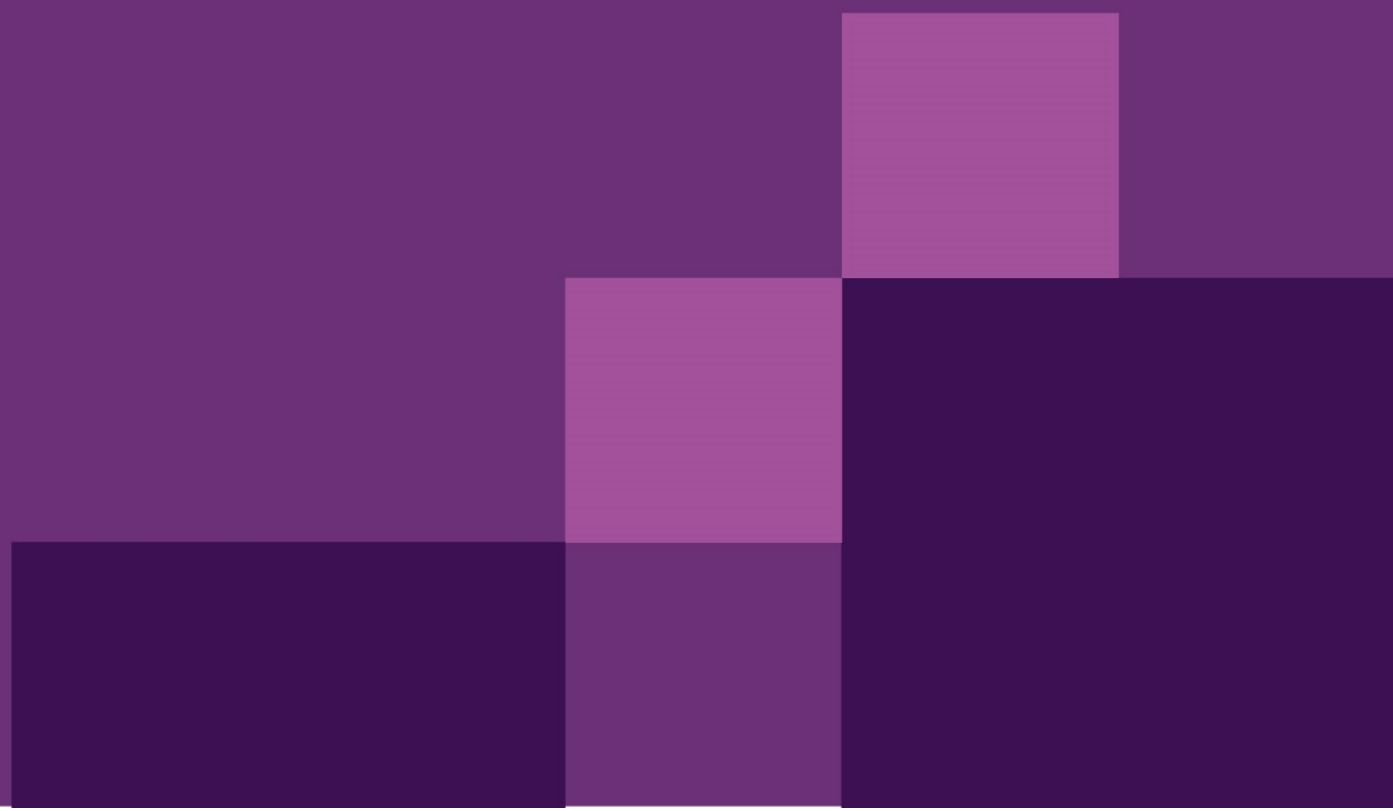


- A look forward to 2023...
 - What should we 'Start', 'Stop' and 'Continue' in 2023?
- Are there any general business items members wish to raise?
- Actions and notes to be circulated asap
- Next meeting scheduled for Monday 30 Jan 2023
 - Please send through any proposed agenda items, questions or comments to ERCF@aemo.com.au
- Thank you for all of your support and efforts during 2022, we're looking forward to working with you all again in 2023 😊
- Have a great Christmas/New Year's break!!

Notes

- Blaine Miner (AEMO) spoke to General Business

Appendix



ERCF Planned Release Summary

November 2022:

ICF ID	Description	Document Impacted
013	Change Cancellation Timeframe for CR6800	• CATS Procedure
016	Reinstatement of MC Objection of BadParty” for Victorian SMALL NMIs	• CATS Procedure
031	Revision of definitions of SMALL and LARGE NMI Classifications	• CATS Procedure
049	Controlled Load Enumerations	• Standing Data for MSATS
053	GPS Coordinates Minimum Requirements. Connection configuration clarification	• Standing Data for MSATS
062	GPS Coordinates Value where no GPS coverage is available at the metering installation.	• Standing Data for MSATS
063	Additional Transformer Valid Values	• Standing Data for MSATS

May 2023:

ICF ID	Description	AEMO Change Type
032	Child NMI standing data quality - TNI and DLF	• System only change
047	Updating Network Tariff for a Greenfield NMI	• System only change

* Please note that the above summary only contains ERCF initiated changes **which have been consulted on**, if required, and does not include:

- Items where consultations are still open
- Other initiatives such as MCPI, MSDR, GS, etc.

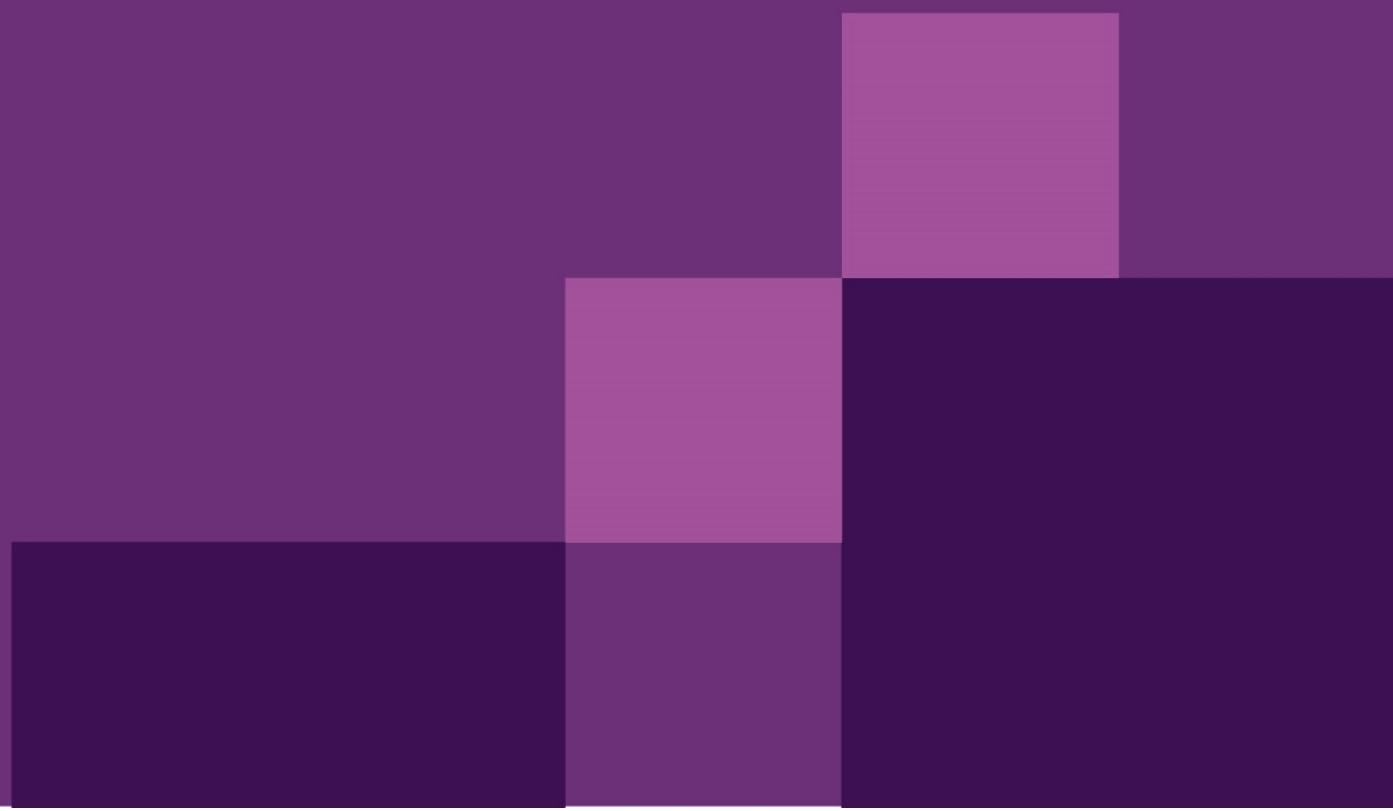
ERCF Member Provided LNSP SIPF Email Addresses



Organisation	Email Address
Ausgrid	mbshelpdesk@pluses.com.au
AusNet	LNSP@ausnetservices.com.au
Citipower Powercor	connections-services-enquiries@powercor.com.au
Endeavour Energy	groupisolation@endeavourenergy.com.au
Energex	premisedata@energex.com.au
Ergon Energy	premisedata@ergon.com.au
Essential Energy	networkB2B@essentialenergy.com.au
EvoEnergy	nemnetwork@evoenergy.com.au
Jemena	mc@jemena.com.au
SAPN	sipflag@sapowernetworks.com.au
TasNetworks	TasNetworksLNSP@tasnetworks.com.au
United Energy	MROsupport@ue.com.au



IESS



NMI Classification Code Question

Question	Response
<p>There are examples of Market Generators that currently exist in embedded networks – what is happening to them?</p>	<p>AEMO is not aware of Market Generators existing within embedded networks. Note embedded networks are distinct from registered networks.</p> <ul style="list-style-type: none"> • Embedded networks are operated by parties exempt from registering as a Network Service Provider, and are defined as a <i>distribution system, connected at a parent connection point</i> to either a <i>distribution system</i> or <i>transmission system</i> that forms part of the <i>national grid</i>, and which is owned, controlled or operated by a person who is not a <i>Network Service Provider</i>. • Registered networks are referred to in relation to a Network Service Provider, which is a person who engages in the activity of owning, controlling or operating a <i>transmission system</i> or <i>distribution system</i> and who is registered by AEMO as a <i>Network Service Provider</i> under Chapter 2. <p>Market Generators can, and will continue to be able to, be connected within registered networks. AEMO notes that some registered networks use a similar set-up as embedded networks to settle correctly in the NEM, however these are not embedded networks. The same applies to TIRS and DIRS NMI classification codes.</p> <p>Embedded networks are exempted from the requirement to be registered as an NSP and are exempted from complying with the technical requirements set out in chapter 5. There is no connection framework for a registered generator to follow to connect to an embedded network, consequently, NMIs with a generation component can only be classified as NREG when connected within an embedded network.</p>
<p>Does it apply to generators downstream of the EN connection? What about generators at the parent connection point? Would have thought the parent connection point would still work.</p>	<p>As per answer above, a Market Generator cannot exist within an embedded network. AEMO is seeking further advice as to whether a generator can be connected at the parent connection point of an embedded network.</p>
<p>Although it is clear why there are two generator variations, it is unclear why there are two IRS variations, because if you have a NMI classification of IRS you know what network it is connected to and that will tell you if it is a transmission IRS or a distribution IRS.</p>	<p>An IRS can have energy flows in both directions, and the consumption flows for distribution-connected facilities need to be included in UFE calculations. This requires them to be differentiated from transmission-connected facilities. Having NMI Classification Codes for DIRS and TIRS enables AEMO to identify the distribution connected IRS facilities for UFE calculation purposes.</p> <p>Some transmission connection points are connected below the bulk connection point and AEMO cannot use the LNSP field to determine the correct classification in these cases. These cases would be assigned DIRS (with a TNSP). The consumption energy value at the DIRS connection point needs to be included in the UFE calculation and these facilities are subject to a UFE allocation.</p>
<p>How are exempt networks being treated in the scheme of these changes?</p>	<p>Any non-market generator with an exempt network should be assigned the NREG NMI Classification, if it fits the description, today. There is no change planned.</p>

NMI Classification Code Responses

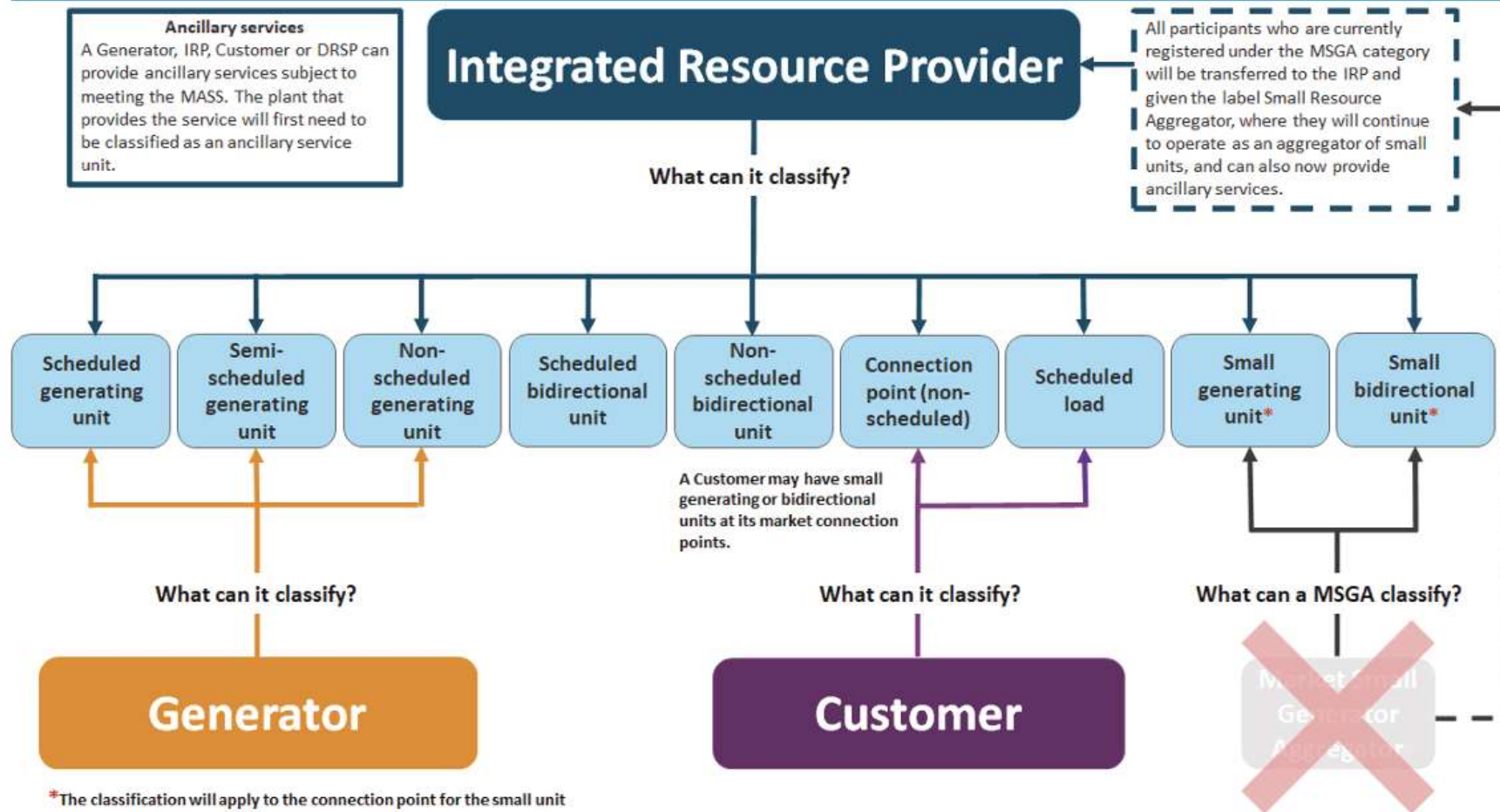


Question	Response
AEMO will do the NMI allocation – what classification do LNSPs apply to start with?	LNSPs will set up the NMIs as usual (LARGE, SMALL and NREG as appropriate). Then through the formal registration process, AEMO will make the change the NCC from LARGE or SMALL to GENERATR, DGENRATR, TIRS or DIRS. Similar process that occurs today will continue. For existing connection points that need to be changed, AEMO will manage the transition.
When will the IESS NCCs go live?	3 June 2024, which is the final release date for the IESS rule change.
Everything in the proposal seems to capture registered/market functions but not the non-market activities, within which there is a lot of variation in terms of generation and consumption. Once we get into the retail space, we will have lots of customers with generally small systems which will be picked up by aggregators. NREG definition seems to be associated to a provider rather than a function.	AEMO considers this to be an appropriate topic for the NMI Classification Code ERCF subgroup and IESS project noted that it would consider these points.
Definitions will end up in the CATS procedures. Can we put some worked examples of how the NMI classification codes are being assigned in a document as we start adding more?	AEMO will provide worked examples in the NMI procedure, which will form part of the formal consultation.
What will happen to the existing 2 NMI connections?	<p>AEMO will revert the existing two NMI installations to a single NMI. This was the initial intention which is why the generation NMI has been set-up as the primary NMI in Market Systems.</p> <p>More broadly, the IESS rule change contains transitional arrangements covering the transition of these systems to the Integrated Resource Provider (IRP) category and bidirectional unit (BDU) type. It requires that existing participants with non-exempt bidirectional resources will need to apply to register as an IRP and to classify their BDU in accordance with the new rules no later than three months before the registration grace period (3 September 2024). The registration grace period commences on the effective date (03 Jun 2024) and ends six months after the effective date (03 Dec 2024).</p> <p>Further information on broader aspects of the IESS rule change may be found on the AEMO project page: https://aemo.com.au/initiatives/major-programs/integrating-energy-storage-systems-project and AEMC final determination: https://www.aemc.gov.au/rule-changes/integrating-energy-storage-systems-nem</p>

NMI Classification Code Responses

Question	Response
<p>NREG – new definition has ‘non-registered DER provider’ – if you have a customer that slips in and out of being a DER provider, does that mean their NMI classification flicks back and forth as they join the DER and then cancel the DER arrangement?</p>	<p>The proposed changes to NREG are driven mainly by terminology changes, as well as the need to reflect that <i>small resource connection points</i> may be bidirectional and encompass both <i>small generating units</i> and <i>small bidirectional units</i>.</p> <p>Note that <i>non-registered DER provider</i> is the AEMC’s replacement term for <i>non-registered embedded generator</i>. The definition of <i>non-registered DER provider</i>, which has been updated for terminology changes, is: “a <i>distribution connected unit operator</i> that is neither a <i>micro resource operator</i> nor a <i>Registered Participant</i>”.</p> <p>The definitions of <i>distribution connected generating unit</i> and <i>distribution connected bidirectional unit</i> refer to units connected within a <i>distribution system</i>. The definition of <i>distribution system</i> includes embedded networks and has not been amended in the IESS rule:</p> <ul style="list-style-type: none"> <i>distribution system</i>: Each of the following: <ul style="list-style-type: none"> (a) a <i>distribution network</i>, together with the <i>connection assets</i> associated with the <i>distribution network</i>, which is connected to another <i>transmission system</i> or <i>distribution system</i>; and (b) a <i>stand-alone distribution system</i> in a <i>regulated SAPS</i>. <p>A number of terminology changes relevant to the proposed definition of NREG are:</p> <ul style="list-style-type: none"> <i>distribution connected unit</i>: A <i>distribution connected generating unit</i> or a <i>distribution connected bidirectional unit</i>. <i>distribution connected bidirectional unit</i> (new term): A <i>bidirectional unit</i> connected within a <i>distribution system</i> and not having direct access to the <i>transmission network</i>. <i>distribution connected generating unit</i> (replaces <i>embedded generating unit</i>): A <i>generating unit</i> connected within a <i>distribution system</i> and not having direct access to the <i>transmission network</i>. <i>distribution connected unit operator</i> (replaces <i>embedded generating unit operator</i>): A person who owns, controls or operates a <i>distribution connected unit</i>. <i>Micro resource operator</i> (replaces <i>micro embedded generator</i>): A <i>small customer</i>, <i>large customer</i> or <i>SRA</i> [small resource aggregator] customer who operates, or proposes to operate, a <i>distribution connected unit</i> for which a <i>micro DER connection</i> is appropriate. <i>small resource connection point</i>: A <i>connection point</i> that connects one or more <i>small generating units</i> or <i>small bidirectional units</i> (or any combination) to the <i>national grid</i>, where the only supply to the <i>connection point</i> is: <ul style="list-style-type: none"> (a) for use by a <i>small bidirectional unit</i> connected at the <i>connection point</i>; or (b) <i>auxiliary load</i> of a <i>small generating unit</i> or <i>small bidirectional unit</i> connected at the <i>connection point</i>. <i>small bidirectional unit</i> (new term): A <i>bidirectional unit</i>: <ul style="list-style-type: none"> (a) with a <i>nameplate rating</i> that is less than 5 MW; and (b) that is incorporated in an <i>integrated resource system</i> in relation to which AEMO has given an exemption under clause 2.1A.2 from the requirement to register as an <i>Integrated Resource Provider</i>. <i>small generating unit</i>: A <i>generating unit</i>: <ul style="list-style-type: none"> (a) with a <i>nameplate rating</i> that is less than 30MW; and (b) that is incorporated in a <i>generating system</i> or an <i>integrated resource system</i> in relation to which AEMO has given an exemption under clause 2.1A.2 from the requirement to register as a <i>Generator</i> or <i>Integrated Resource Provider</i>. <i>Small Resource Aggregator</i>: An <i>Integrated Resource Provider</i> who has classified a <i>small resource connection point</i> as one of its <i>market connection points</i> in accordance with clause 2.2.8. <p>We require clarification regarding the comment around a NMI classification flicking back and forth. We would consider that the arrangement would be no different to the operation of SGAs today. Where SGAs are switched to the grid, the SGA’s meter will see energy values, and zeros at all other times when, for example, it is being used for back-up generation. The assets haven’t disappeared – just switch from one use to the other – and the NMI Classification Code does not change.</p>

Figure 1: Classifications and services that can be provided by Market Participants



Source: AEMC



For more information visit

aemo.com.au