

B2B Working Group Meeting 12

11 October 2022





Online forum housekeeping

- 1. Please mute your microphone, this helps with audio quality as background noises distract from the information being shared.
- 2. Having your video 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 B2BWG@aemo.com.au your name and organisation for our records.
- 6. If you 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.





- AEMO is committed to complying with all applicable laws, including the Competition and Consumer Act 2010 (CCA). In any dealings with AEMO regarding proposed reforms or other initiatives, all participants agree to adhere to the CCA at all times and to comply with this Protocol. Participants must arrange for their representatives to be briefed on competition law risks and obligations.
- Participants in AEMO discussions must:
 - Ensure that discussions are limited to the matters contemplated by the agenda for the discussion
 - Make independent and unilateral decisions about their commercial positions and approach in relation to the matters under discussion with AEMO
 - Immediately and clearly raise an objection with AEMO or the Chair of the meeting if a matter is discussed that the participant is concerned may give rise to competition law risks or a breach of this Protocol
- Participants in AEMO meetings must not discuss or agree on the following topics:
 - Which customers they will supply or market to
 - The price or other terms at which Participants will supply
 - Bids or tenders, including the nature of a bid that a Participant intends to make or whether the Participant will participate in the bid
 - Which suppliers Participants will acquire from (or the price or other terms on which they acquire goods or services)
 - Refusing to supply a person or company access to any products, services or inputs they require

Under no circumstances must Participants share Competitively Sensitive Information. Competitively Sensitive Information means confidential information relating to a Participant which if disclosed to a competitor could affect its current or future commercial strategies, such as pricing information, customer terms and conditions, supply terms and conditions, sales, marketing or procurement strategies, product development, margins, costs, capacity or production planning.





- 1. Welcome
- 2. Actions Log
- 3. IESS Feedback (sub-types and other impacts) and next steps
- 4. B2M Update
- 5. IEC ICFs
- 6. Other Business
- 7. Appendix
 - ERCF ICF Register
 - IESS Background



Actions Log

Blaine Miner (AEMO)

Closed Actions



Action	Description	Responsible	Outcome
1406-04	Take the feedback regarding RoLR communication for AEMO internal consideration	Meghan Bibby (AEMO)	Now addressed by action 1207-02
1207-01	B2B WG members to provide feedback re the proposal to combine all B2B procedures into one procedure	B2B WG	Not enough support. Revisit following completion of B2B guide improvement
0908-01	Provide further justification regarding the benefits of the proposed B002 and B004 ICFs	Mark Riley (AGL) and Aakash Sembey (Origin)	Closed, ICF endorsed by the B2B WG at the Sept meeting
0908-03	Draft the ICF for B001 (One way notification with CSV payloads) including justifications	Mark Riley (AGL)	Closed, ICF not received
0908-04	Provide potential use cases to Mark Riley in support of the B001 ICF drafting	B2B WG	Closed, ICF not received
0908-05	Review ICFs B003 and B005 and send any feedback	B2B WG	Closed, ICF endorsed by the B2B WG at the Sept meeting
0908-08	Review the IESS rule and identify potential impacts on the industry sector they represent in 6 weeks	B2B WG	Completed
0908-10	Prepare and circulate IESS scenario diagrams	Mark Riley (AGL)	Diagram circulated
0908-11	Prepare and circulate a table in MS Excel based on the Table 1 - B2B Transactions and Typical Participant combinations from the B2B Guide	Paul Greenwood (Vector)	Spreadsheet provided
1309-06	Include the reason for the withdrawal of the ICF in the ICF register	AEMO	ICF register updated with 'reason for withdrawal'
1309-08	Circulate a placeholder for member's calendar for 22 and 23 November meeting	Nandu Datar (AEMO)	Placeholder has been sent/established

Open Actions



Action	Description	Responsible	Due Date	Update
0803-01	Improve the B2B Guide	B2B-WG	On going	
1207-02	Pass on the B2B WG request for any proposed changes to the RoLR communications to be brought to the ERCF and the B2B WG for feedback prior to finalisation	Meghan Bibby (AEMO)	When available	
1207-03	Consider any potential impacts associated to the perceived misalignment between controlled load values between the B2M and B2B Procedures	B2B WG	Next B2B WG meeting	
0908-07	Consider publishing a running errata sheet for minor procedure corrections that will be implemented at a later date	AEMO	ТВА	Propose to include/capture these items in the IEC ICF Register and to include them as an Appendix in the monthly meeting packs
0908-12	Identify which of the survey responses will not require any further action	B2B WG	Next B2B-WG meeting	
0908-15	Provide their view on how the guide and their handbooks interact	Networks	Next B2B-WG meeting	
1309-01	Consider what information is required to determine if the current procedures were sufficiently fit-for-purpose for the transmission of power quality data and what sort of scalability would need to occur to allow for that transmission to occur	B2B WG	ТВА	
1309-02	Consider and recommend if the B2B procedure changes could be accelerated to allow for power quality transactions to flow rather than waiting for an AEMC rule change	B2B WG	TBA	
1309-03	Combine the timeframe tables from the meeting pack and add them to the appendix for all future meeting	AEMO	Next B2B-WG meeting	
1309-05	Prepare the IEC engagement content to support the expedited consultation on the PersonName definition	B2B WG	asap	
1309-07	Send feedback about B003 to Aakash Sembey	B2B WG	asap	



1.IESS Feedback (sub-types and other impacts) and next steps

Blaine Miner

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B2M Update

Blaine Miner (AEMO)





(Provided for B2BWG visibility, questions and consideration)

Forum/Consultation	Description	Update
ERCF	Primary B2M change channel where interested parties can collaboratively participate in the enhancement of the Retail Electricity Market Procedures Framework	13 Open ICFs, with 5 associated subgroups (refer to the Appendix)
Consumer Data Rights (CDR)	The Consumer Data Right (CDR) for Energy will enable consumers to authorise third parties i.e. FRMPs to access their energy data, up to 2yrs in the same account holder at the NMI. This will empower consumers to more easily share their data to get a better deal on a range of energy products and services.	Final Report Part 2 to be published by Tuesday, 8 November 2022
Stand-alone Power Systems (SAPS)	The AEMC's Final Report and Proposed Rules for Updating the regulatory frameworks for the distributor led Stand-Alone Power Systems (SAPS) Priority One (AEMC Final Report) sets out a national framework to facilitate the provision of SAPS by DNSPs to their existing customers, where SAPS offer a more economically efficient solution relative to investing in, and maintaining, traditional network solutions.	Final report to be published by Thursday, 3 November 2022.
Integrated Energy Storage Systems (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.	Formal consultation re Retail & Metering consultations are planned to commence mid-2023
MSATS Standing Data Review	 48 new and amended MSATS fields: 21 NMI Data Table fields (7 new fields, 14 amended fields) 24 Meter Register Table fields (15 new fields, 9 amended fields) 3 Register Identifier Table fields (3 amended fields) 	 Final blind script mappings have been completed Transitional activities, including the sequencing and timing of the execution of blind scripts and the use of the BUT, is ongoing Go-live - 7 Nov 2022
Other B2M consultations	 UFE Reporting Guidelines Load Profiling 	 UFE: Draft Report due to be published by Friday 18 November 2022 Load Profiling Methodologies: Submissions due on Issues Paper due by COB Thursday, 27 October 2022



IEC ICFs

B2B WG

Current IEC ICFs



ICF No	Title	Description	Proponent	Status	Next Step
B002/22	Alignment of B2B field lengths to B2M Procedures/schema	Since r42 B2M schema release, there has been some inconsistent field lengths identified for the same fields in the B2B transactions. Due to this issue, the information may get truncated while using B2B transaction.	Aakash Sembey (Origin Energy)	Pending	Non-urgent, to be included in the next Consultation which requires a schema change.
B003/22	B2B RoLR Procedure Updates	Version 2.3 of the NEM RoLR Processes (Part B) require changes to some of the in-text referencing in section 104 as errata changes. Also, while reviewing these clause references, it was observed that some of the subclauses need to be broadened to other service providers, in addition to the LNSPs.	s to some of the in-text referencing in section 104 (Origin Energy) ca changes. Also, while reviewing these clause ces, it was observed that some of the subclauses be broadened to other service providers, in		B2B WG to review the amended clause in the RoLR procedure and provide feedback
B004/22	B2B/B2M field lengths – Address elements	ICF is aimed to harmonise the B2B fields lengths in line with the Australian Standard, as well as any B2M usage to ensure consistent interchange of information within the energy market.	Mark Riley (AGL)	Pending	Non-urgent, to be included in the next Consultation which requires a schema change.
B005/22	Clarification of UMS Data in Inventory Table			Pending	B2B WG review
B006/22	PERSONNAME definition spec correction	Person Name field Technical Specification clarification	Helen Vassos (PLUS ES)	Pending	B2BWG to prepare the IEC engagement content to support the expedited consultation on the PersonName definition
B007/22	Discrepancy between B2B SO Process and B2B Guide (V3.7)	Discrepancy between B2B SO Process and B2B Guide for FormReference and FormNumber fields		New	Raise ICF

New Proposed IEC ICF



• B007/22

- Discrepancy between B2B SO Process and B2B Guide (V3.7)
 - Form Reference and Form Number fields are marked as 'N' for Sub-category Re-Energisation of the ServiceOrderType (Page 44 of SO process).
 - However, the B2B guide mentions different FormReferece values to be provided depending on Jurisdiction and Scenarios (example: Required for VIC Re-Energisations where service is off-supply for more than 12 month) (Page 70 of B2B Guide)
 - In Table 13 against the field FormReference, the text in Definition column makes reference to 'Supply works Request' whereas the column headings are 'Supply Service Works'. Should it be 'Supply Service Works Request'?



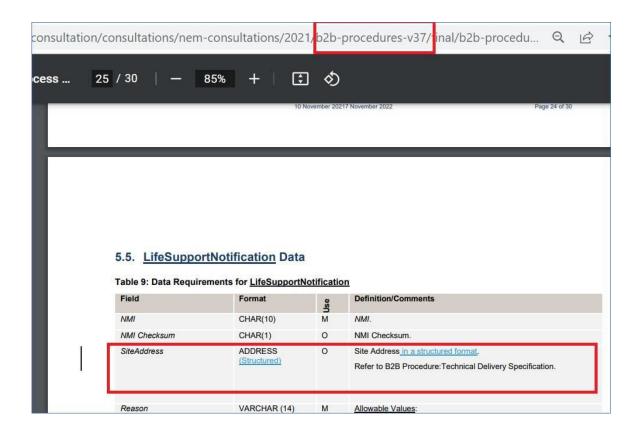
Other Business

Blaine Miner (AEMO)



Other Business

- B2B v3.7 clarification sought
 - Is the intent of v3.7 that a recipient rejects a B2B transaction where the initiator has supplied unstructured address elements
 - If yes, then the EVM would need to be updated.



Other Business



- B2B WG Meeting survey
- B2B WG out of session meeting placeholder for IESS on Mon 24 October
- Next monthly meeting will be face to face and scheduled for 22 and 23 November 2022 in Brisbane
- Propose agenda items for November meeting, e.g.:
 - B2B Guide detailed review
 - Learnings from 2022
 - What's coming in 2023?
- Any other business items?



Appendix



ERCF ICF Register



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	ENM compliance requirement includes maintenance of standing data of Child NMIs – TNI and DLF I. 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. 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). 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. 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.	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.



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	Subgroup formed. Proponent considering next steps.
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	'Substitution Type review' workshop occurred on 30 Aug. Sub-group nominations have been requested.
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	ICF 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 considering next steps.
'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	ICF included in the 'Load Profiling Methodologies' consultation.



Issue/Change Title	Short Description	Proponent	ICF Ref#	Current Status/Update
Addition of the 'HouseNumberToSuffix' field	The 'House Number To Suffix' is a part of the Australian structured address standards. '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'. While its addition to the schema may be technically valid, its addition to the Procedures is still subject to consultation.	Aakash Sembey (Origin Energy)	064	ICF included in the 'Load Profiling Methodologies' consultation.
Removal of NMI Discovery Type 3 limitations	'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. 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. 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.	Aakash Sembey (Origin Energy)	065	ICF included in the 'Load Profiling Methodologies' consultation.





Issue/Change Title	Short Description	Proponent	ICF Ref#	Current Status/Update
New 'CT Ratio Available' field values requested	New 'CT Ratio Available' field values are being requested by PlusES: • 1250:01 • 60000:05 • 1000/1200/1600:5 • 1000/1500/2000:5 • 400/1400/1600/2400:1 • 600/750:1 • 200/600/900/2400:1 • 15/25/40/60:5 • 50/75/100/150:5	Linda Brackenbury (PlusES)	066	Standing Data for MSATS procedure to be updated and published for comment In Oct, in preparation for 7 Nov 2022.
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.	AEMO	067	Document to be updated and published for comment. Exact timing still TBD.



IESS Background





- The Commission's final rule makes a number of changes that better integrate storage into the NEM. These
 changes include:
 - 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.
 - Clarify scheduling obligations that apply to different hybrid configurations, including DC-coupled systems. Operators of these systems will have flexibility to be scheduled or semi-scheduled (with some limitations).
 - Allowing hybrid systems to manage their own energy flows behind the connection point, subject to system security limitations (aggregate conformance)
 - Clarifying that the current approach to performance standards that are set and measured at the connection point will apply to grid-scale storage units, including when part of a hybrid system.
 - Transferring existing small generation aggregators to the IRP category, and requiring new aggregators of small generating and/or storage units to register in this category. Aggregators will be able to provide market ancillary services from generation and load.
 - Grid-scale storage will bid and be dispatched under a single DUID (20-bid bands), using a new scheduled bidirectional unit classification
 - Amending the framework to recover non-energy costs based on a participant's consumed and sent out energy over relevant intervals, irrespective of the participant category





- The majority of changes made by the final rule will come into effect on 3 June 2024.
- Two changes will come in earlier on 31 March 2023, allowing:
 - Aggregators of small generating and storage units to provide frequency control ancillary services
 - Hybrid systems to use aggregated dispatch conformance
- While the IRP category will not be available until June 2024, participants will still be able to register hybrid systems in the existing categories, for example as generators and market customers, and classify their units under the existing framework

Context





Integrating Energy Storage Systems
High Level Design

December 2021

AEMO has published a draft high-level design for IESS [link]

IESS rule change

- Updates NEM arrangements to better integrate storage
- Requires changes across AEMO's market processes and framework (especially for registration and dispatch)
- Major step toward the ESB's trader-services model

NEM 2025 Implementation Roadmap

- AEMO preparing IT and regulatory roadmap for ESB reform implementation. March 2022 release date.
- Reform Delivery Committee (RDC) established to guide its development:
 - Market bodies AEMC, AER and AEMO
 - Industry participants representing AEC, ENA and CEC
 - Consumer representatives ECA, MEUA, EUAA and PIAC
- IESS is one of the more advanced reforms in the Roadmap.



Key dates

Activity	Date
Rule change request submitted by AEMO	23 Aug 2019
Final determination	2 Dec 2021
High-Level Design consultation	Published 16 Dec 2021 Feedback due 11 Feb 2022 Final published March/April
 Transitional aspects – baseline release Aggregate conformance for hybrid systems FCAS participation for SGAs 	31 Mar 2023
Market trials	Feb to May 2024
Final release	3 June 2024

Integrated Resource Provider and Bidirectional Unit



New registration category: the Integrated Resource Provider (IRP)

- Use by participants with storage resource and hybrid systems
- Also technology neutral category.
- Can classify end user connection points (nominate as FRMP)

Accompanied by a new resource type – the bidirectional unit

 Resources that produce and consume energy (excluding auxiliary load)

What is classified	Label (NER)	IRP	Eligible Ca Generator	_	
Scheduled bidirectional unit	Scheduled IRP	/			
Non-scheduled bidirectional unit	Non-Scheduled IRP	/			
Scheduled generating unit	Scheduled Generator	/	~		
Semi-scheduled generating unit	Semi-Scheduled Generator	/	~		
Non-scheduled generating unit	Non-Scheduled Generator	/	~		
Small resource connection point (small GU / small BDU)	Small Resource Aggregator	/			
Scheduled load	Market Customer	/		~	
Market connection point	Market Customer	/		~	
Ancillary service unit	Ancillary Service Provider	/	~	~	~

Small Resource Aggregator and Ancillary Service Unit



Market Small Generation Aggregator will move to the IRP, using the label Small Resource Aggregator

 Will also be able to provide market ancillary services –
 Baseline release

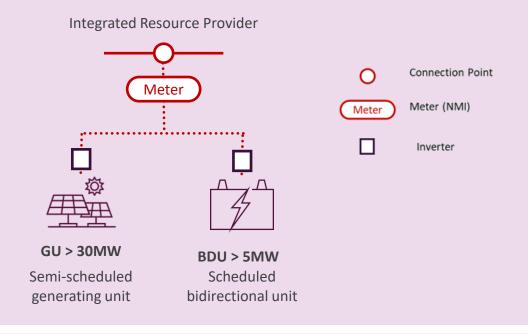
Ancillary service unit is a consolidative term – it replaces

- ancillary service generating unit
- ancillary service load

	What is classified	Label (NER)	IRP	Eligible Ca Generator	_	
	Scheduled bidirectional unit	Scheduled IRP	/			
	Non-scheduled bidirectional unit	Non-Scheduled IRP	~			
	Scheduled generating unit	Scheduled Generator	~	~		
	Semi-scheduled generating unit	Semi-Scheduled Generator	/	~		
	Non-scheduled generating unit	Non-Scheduled Generator	/	~		
	Small resource connection point (small GU / small BDU)	Small Resource Aggregator	~			
	Scheduled load	Market Customer	/		~	
	Market connection point	Market Customer	/		~	
	Ancillary service unit	Ancillary Service Provider	/	~	~	~

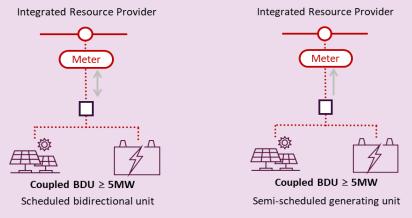
Hybrid integrated resource systems:

- Classification, bidding & scheduling at unit level
- Aggregate dispatch conformance introduced (Baseline release)



Coupled production units (DC-coupled systems):

• Rule change provides for flexibility in registration & classification for production units with separate plant that share equipment (e.g., inverter – DC coupled).



Single set of bids/dispatch instructions.

Single set of bids/dispatch instructions

generating unit bidirectional unit

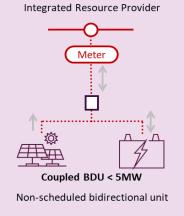
Separate bids/dispatch instructions

Semi-scheduled

Coupled BDU ≥ 5MW

Scheduled

Integrated Resource Provider



Separate bids/dispatch instructions for Non-scheduled – no bidding or each unit. Non-scheduled – no bidding or dispatch instructions.

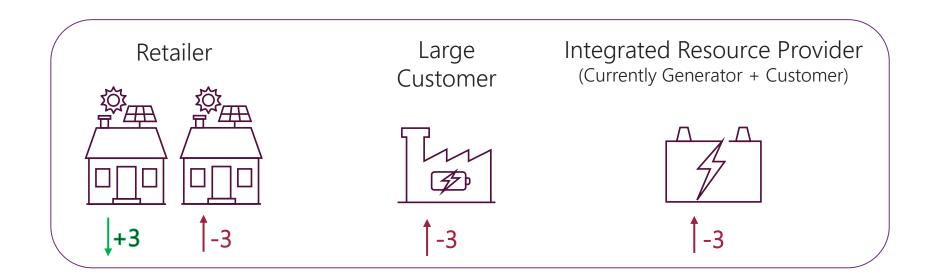


Non-energy cost recovery framework

- NECR updated, removing existing differences due to registration category.
- Cost recovery based on participant's gross consumed energy and/or gross sent out energy in an interval across its connection points
- The two required data streams will be available in May 2022 with global settlements:
 - Adjusted Consumed Energy (ACE)
 - Adjusted Sent Out Energy (ASOE)
- Remaining type 6 accumulation metering installations → retain current arrangements until replaced with smart meters.



Non-Energy Cost Recovery Example



Participant	Net Consumption	Gross Consumption
Retailer	0	-3
Large Customer	-3	-3
Integrated Resource Provider	-3	-3
Total	-6	-9

Current arrangements: Large Customer and IRP each pay 50% of the relevant NECR charges.

IESS arrangements: Retailer, Large Customer and IRP each pay 33%.



Integration: Retail and Metering

- IRPs can classify end-user connection points, subject to retail authorisation requirements.
- IRPs will be incorporated into the Markets, Settlements and Transfer Solution (MSATS) system.
 - Will be able to be nominated as the FRMP for a connection point by a customer; and
 - Will have access to MSATS functions such as NMI discovery and end-user transfer rights.
- IESS progresses Flexible Trading Arrangements Model 1, by extending the SGA framework to bidirectional flows (storage, EVs).
 - The IRP for the secondary small resource connection point will be treated as a FRMP in MSATS, as above.





RRO

 IRPs liable entities if aggregate annual load exceeds 10GWh in particular NEM region.

Intervention compensation framework

• IRPs integrated.

Network charges

• Current framework retained.

Performance standards

 Maintains existing approach of measuring performance standards at connection point.

Aggregation & ramp rates

 Addresses inconsistencies & removes 6 MW threshold for aggregating semi-scheduled units.

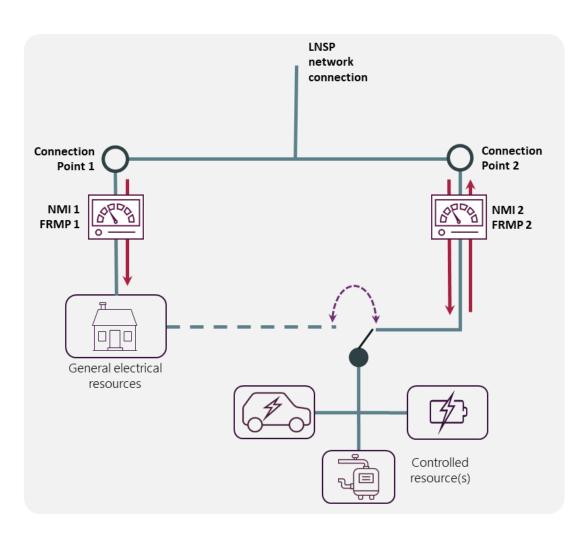


Minor & administrative changes

- IESS contains many terminology changes to reduce technology-specific language etc
- Final transitional rule (clause 11.145.9) allows for minor and administrative changes without normally-prescribed consultation processes.
 - But does not define 'minor & administrative'.
- AEMO's Regulation group:
 - Developing guidance and a process for efficiently processing these changes.







- SGAs will transition to IRPs under the label 'Small Resource Aggregator'
- Model (mostly) already exists in market systems and catered for in settlement
 - Now explicitly bidirectional
 - Non-energy cost recovery changes
 - Can provide ancillary services subject to the MASS (baseline release)



For more information visit

aemo.com.au