



RULE

Australian Energy Market Commission

RULE DETERMINATION

NATIONAL ELECTRICITY AMENDMENT (IMPLEMENTING INTEGRATED ENERGY STORAGE SYSTEMS) RULE 2023

PROPONENT

Australian Energy Market Operator

4 MAY 2023

INQUIRIES

Australian Energy Market Commission
GPO Box 2603
Sydney NSW 2000

E aemc@aemc.gov.au
T (02) 8296 7800

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ABOUT THE AEMC

The AEMC reports to the Energy Ministers' Meeting (formerly the Council of Australian Governments Energy Council). We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the Energy Ministers' Meeting.

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SUMMARY

- 1 The Australian Energy Market Commission (AEMC or Commission) has made a more preferable final rule that makes minor amendments to the implementation of the Integrating energy storage systems into the NEM rule (IESS rule).¹
- 2 On 21 December 2022, AEMO (the proponent) made a request² to the AEMC to make amendments related to the implementation of the IESS rule. AEMO identified the amendments in preparing for the commencement of the IESS rule. These proposed amendments were not intended to re-open policy positions from the IESS rule.
- 3 The Commission considered the rule change request to be non-controversial and unlikely to have a significant impact on the NEM. The Commission decided to use an expedited process consisting of one round of consultation and did not receive any objections to using this process.
- 4 The more preferable final rule made by the Commission is attached to and published with this final rule determination. The key features of the more preferable final rule include:
 - **Expanding aggregated dispatch conformance:** amending clause 4.9.2A of the NER, as inserted by the IESS rule, to extend participation in aggregate dispatch conformance to generating systems.
 - **Inflexibility profile eligibility:** amending clause 3.8.19 of the NER to remove the option for semi-scheduled generating units and bidirectional units to submit fast start inflexibility profiles, because these units have not used this to date, nor has it been submitted to the Commission that these units are intending to use it in the future.
 - **Non-energy cost recovery implementation:** bringing forward the commencement of the new non-energy cost recovery (NECR) calculations, and associated rule provisions, in the IESS rule from Monday 3 June 2024 to Sunday 2 June 2024.
 - **Market connection point classification:** amending clause 2.3.4 of the NER to change the classification of market connection points to align with other changes made to refer to market connection points in the NER.
 - **Ancillary service unit classification:** amending clause 2.3D.1(f) of the NER to specify that AEMO must approve the classification of an ancillary service unit if it is reasonably satisfied that in the case of a retail customer or small resource aggregator customer, the applicant has an arrangement with that customer for the supply of market ancillary services.
 - **Small resource aggregator clarifications:** amending:
 - clause 3.6.3(b1) to clarify that the reference to Integrated resource provider (IRP) in that clause includes the specific label or role that the IRP may be acting in (i.e. small resource aggregator)

1 AEMC. Integrating energy storage systems into the NEM, [project page](#).

2 AEMO, Rule change request, *Final amendment rule on Integrating Energy Storage Systems into the NEM*, 21 December 2022.

- clause 3.15.10C(a)(4) to instead refer to 'Cost Recovery Market Participant', which captures the market participants that may be liable under the clause.
- **Metering installations exemptions:** amending clauses 7.8.2(a1) and 7.8.2(b1) of the NER to narrow AEMO's ability to grant exemptions to metering providers for certain metering installations from the data storage requirements under clause 7.8.2(a)(9) of the NER.
- **Minor and administrative amendments:** making other minor and administrative amendments to the IESS rule to improve its clarity and reduce uncertainty with its implementation.

5 The final rule is largely the same as the rule proposed in the rule change request. A different implementation approach has been taken for some proposed amendments and no rule was made for one of the proposed amendments related to generating system classification thresholds. The Commission determined in relation to this issue not to replace the term 'part of a group of generating units' with 'part of a group of production units' in the clauses 2.2.2, 2.2.3 and 2.2.7, which set out the thresholds for classification of groups of generating units at the same connection point as scheduled, non-scheduled or semi-scheduled.

6 The more preferable final rule will commence operation on 11 May 2023, however, because the majority of the amendments made by the rule are to the IESS rule, these amendments will only practically take effect on 3 June 2024.

7 The Commission is satisfied that the more preferable final rule will contribute to the achievement of the national electricity objective (NEO) for the following reasons:

- **Cost and complexity:** it will reduce AEMO's complexity and cost to implement the rule and has potential market benefits.
- **Timing and uncertainty:** it should improve certainty for market participants and will improve clarity and usability of the NER. It also provides additional sufficient time for AEMO to meet its implementation schedule for the IESS rule.
- **Consideration of broader direction of reform:** the changes are in line with the IESS rule and do not impact or change the broader policy positions.

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1 FINAL RULE DETERMINATION

This section sets out:

- AEMO’s rule change request to amend certain elements of the IESS rule
- the rule making process and assessment framework against the NEO
- key features of the Commission’s more preferable final rule.

1.1 AEMO’s rule change request

On 21 December 2022, AEMO (the proponent) made a request to the Australian Energy Market Commission (AEMC or Commission) to make a number of amendments related to the implementation of the integrating energy storage systems into the National Electricity Market (NEM) rule (IESS rule).³

AEMO identified the amendments in preparing for the commencement of the IESS rule. These proposed amendments were not intended to re-open the policy positions from the IESS rule.

AEMO also requested that the rule change request be considered a non-controversial⁴ rule change request and, as a result, be assessed under an expedited rule change process.

AEMO proposed three core amendments and some additional amendments to reduce implementation costs and market uncertainty, and align the drafting of the IESS rule with other regulatory processes. See section 1.4 for the Commission’s final determination on each of AEMO’s proposed amendments.

1.1.1 Relevant background

The IESS rule was made on 2 December 2021 to better integrate storage and hybrid facilities⁵ into the NEM. It made numerous changes to allow greater market participation of storage and hybrid facilities, notably introducing a new registration category, the Integrated Resource Provider (IRP), to allow these systems to participate in a single registration category rather than under two different categories.

The IESS rule includes two implementation dates which cover four main changes:

- Initial release on 31 March 2023:
 - introduction of aggregated dispatch conformance (ADC)
 - enabling market small generation aggregators (MSGAs) to participate in contingency frequency control ancillary services (FCAS) markets.
- Final release on 3 June 2024:
 - introduction of the IRP registration category and bidirectional unit (BDU) classification

³ AEMO, Rule change request, *Final amendment rule on Integrating Energy Storage Systems into the NEM*, 21 December 2022.

⁴ Section 96 of the NEL.

⁵ Hybrid facilities refer to a grid-scale facility that has a group of assets that are co-located behind a single connection point that allow a registered participant to both consume and export significant amounts of electricity from or to the grid. This does not refer to aggregators of small customers with solar panels and batteries.

- changes to non-energy cost recovery (NECR) calculations

1.2 Rule making process

On 2 March 2023, the Commission published a notice advising of its commencement of the rule making process and consultation in respect of the rule change request.⁶ A consultation paper identifying specific issues for consultation was also published. Submissions closed on 30 March 2023.

The Commission accepted that the rule change request was a request for a non-controversial rule as defined in s.96 of the NEL. Accordingly, the Commission commenced an expedited rule change process, subject to any written requests not to do so. The closing date for receipt of written requests was 16 March 2023.

No objections were received to the Commission's proposal to carry out an expedited rule change process. Accordingly, the rule change request was considered under an expedited process.⁷

The Commission received two submissions. These submissions are discussed in the relevant sections of this final rule determination.

1.2.1 Achieving the NEO

Under the NEL the Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the national electricity objective (NEO).⁸ This is the decision-making framework that the Commission must apply.

The NEO is:⁹

to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system.

The Commission may make a more preferable rule or a differential rule according to the NEL. See appendix A.3.1 and appendix A.3.2 for further detail.

1.3 Assessment framework

In assessing the rule change request against the NEO the Commission has considered the following principles:

- Cost and complexity — reducing the cost and complexity of implementing the IESS rule.

⁶ This notice was published under s. 96 of the National Electricity Law (NEL).

⁷ Section 96 of the NEL.

⁸ Section 88 of the NEL.

⁹ Section 7 of the NEL.

- Timing and uncertainty — reducing market uncertainty in time for the commencement of the IESS rule.
- Consideration of the broader direction of reform — aligning amendments with other regulatory processes without deviating from the broader direction of reform decided in the IESS rule.

1.4 Commission's final rule

The Commission's final rule determination is to make a more preferable final rule. The more preferable final rule addresses most of the changes proposed in AEMO's rule change but in some cases takes a different approach to resolving the issue AEMO had identified and also makes other minor and administrative amendments to the IESS rule that were identified in the course of assessing the changes proposed by AEMO.

The final rule does not make the change requested by AEMO to the provisions setting the threshold for classification of groups of generating units at the same connection point as scheduled, semi-scheduled or non-scheduled. The Commission's reasons for making this final rule determination are set out in section 5.1.3.

The key features of the more preferable final rule include:

- **Expanding aggregated dispatch conformance:** amending clause 4.9.2A of the NER, as inserted by the IESS rule, to extend participation in ADC to generating systems.
- **Inflexibility profile eligibility:** amending clause 3.8.19 of the NER to remove the option for semi-scheduled generating units and BDUs to submit fast start inflexibility profiles, because these units have not used this to date, nor has it been submitted to the Commission that these units are intending to use it in the future.
- **Non-energy cost recovery implementation:** bringing forward the commencement of the NECR calculations, and associated rule provisions, in the IESS rule from Monday 3 June 2024 to Sunday 2 June 2024 to align with the commencement of the NEM billing period, which is a period of seven days commencing at the start of the first trading interval on each Sunday.
- **Market connection point classification:** amending clause 2.3.4 of the NER to change the classification of market connection points to align with other changes made to refer to market connection points in the NER. It removes the need for a customer who is also a local retailer to classify 'any load at' a connection point in its local area as a market connection point.
- **Ancillary service unit classification:** amending clause 2.3D.1(f) of the NER to specify that AEMO must approve the classification of an ancillary service unit if it is reasonably satisfied that in the case of a retail customer or small resource aggregator customer, the applicant has an arrangement with that customer for the supply of market ancillary services.
- **Small resource aggregator clarifications:** amending:

- clause 3.6.3(b1) of the NER to clarify that the reference to IRP in that clause includes the specific label or role that the IRP may be acting in (i.e. small resource aggregator)
- clause 3.15.10C(a)(4) of the NER to instead refer to 'Cost Recovery Market Participant', which captures the market participants that may be liable under the clause.
- **Metering installations exemptions:**
 - amending clause 7.8.2(a1) of the NER to:
 - remove AEMO's ability to grant exemptions to metering coordinators for type 1,2 and 3 metering installations from the data storage requirements under clause 7.8.2(a)(9), given these meters are now capable of recording this data
 - narrow AEMO's ability to grant exemptions to metering providers for type 4 metering installations from the data storage requirements under clause 7.8.2(a)(9) to those installed prior to 1 December 2018, as opposed to 1 July 2021, given all type 4 meters installed after 1 December 2018 are now capable of recording this data
 - removing clause 7.8.2(b1) of the NER, which specifies what categories of type 4 metering installations are able to be exempted by AEMO from the requirement to record and provide trading interval energy data, as this information has been moved into clause 7.8.2(a1)
 - making other consequential changes, including to rule 11.103, to implement the amendments above.
- **Minor and administrative amendments:** making other minor and administrative amendments to the IESS rule to improve its clarity and reduce uncertainty with its implementation.

The more preferable final rule will commence operation on 11 May 2023, however, because the majority of the amendments made by the rule are to the IESS rule, these amendments will only practically take effect on 3 June 2024.

Further information on the legal requirements for making this final rule determination can be found in Appendix A.

1.4.1

Summary of reasons

Having regard to the issues raised in the rule change request and during consultation, the Commission is satisfied that the more preferable final rule will, or is likely to, contribute to the achievement of the NEO. The reason each element of the more preferable final rule will, or is likely to, contribute to the achievement of the NEO is outlined in the relevant sections of this determination.

2 INCLUDE GENERATING SYSTEMS IN AGGREGATE DISPATCH CONFORMANCE

This section provides a summary of the Commission's final determination and analysis, and stakeholder views, on the whether to include generating systems in ADC.

2.1 Final determination

The Commission's final determination is to amend new clause 4.9.2A of the IESS rule¹⁰ to enable generating systems that comprise more than one scheduled resource to participate in ADC.

2.2 AEMO's identified problem and proposed solution

AEMO's rule change request identified two issues relating to ADC:

- generating systems can participate in both the existing ADC arrangements and the new transitional ADC arrangements, but there may be uncertainty whether a generating system will be able to participate in ADC from 3 June 2024 because new clause 4.9.2A only extends to integrated resource systems
- there is scope for confusion if new clause 4.9.2A is not extended to generating systems but AEMO implements ADC for both generating systems and integrated resource systems from 3 June 2024 through its dispatch procedure.

AEMO stated that new clause 4.9.2A of the IESS rule explicitly allows ADC for integrated resource systems, but is silent on allowing generating units to participate. Its view is that ADC should be technology agnostic and should be available to both generating systems and integrated resource systems.

AEMO proposed amending new clause 4.9.2A of the IESS rule to explicitly allow ADC for generating systems. It considered the proposed amendment will:

- improve market confidence that participants with generating systems can continue to efficiently use their assets behind a connection point after 3 June 2024
- align the rules and AEMO's dispatch procedure
- make ADC available on a technology agnostic basis to generating systems and integrated resource systems.

2.3 Stakeholder views and Commission analysis

AEMO was the only stakeholder to respond with respect to including generating systems in ADC.

Its submission provided additional input on the issue of ADC and supported ADC being extended to generating units. In response to the question on the discrepancy between new

¹⁰ This clause has been renumbered in the more preferable final rule to be 4.9.2C, due to a clause numbering issue.

clause 4.9.2A and AEMO's new power system operating procedure with respect to aggregation of units behind more than one connection point, AEMO noted it would amend its procedure to remove the reference to ADC applying to systems 'located behind a single connection point'.

In its submission, AEMO also provided clarification on eligibility for ADC.

The Commission considers that extending participation in ADC to generating systems under new clause 4.9.2A:

- **Timing and uncertainty:** has potential market benefits and improves certainty for market participants on who can participate in ADC after the end of the transitional period. It also clarifies the rule and means there is clearer alignment between the rules and AEMO's procedures. AEMO should also have sufficient time to update its procedure to align with the rules.
- **Consideration of broader direction of reform:** the change is in line with the IESS rule and does not impact or change the broader policy positions.

3 REMOVE OPTION FOR SEMI-SCHEDULED AND BIDIRECTIONAL UNITS TO SUBMIT FAST START INFLEXIBILITY PROFILES

This section provides a summary of the Commission's final determination and analysis, and stakeholder views, on the proposal to remove the option for semi-scheduled generating units and BDUs to submit FSIPs.

3.1 Final determination

The Commission's final determination is to amend clause 3.8.19 of the NER to remove the option for semi-scheduled generating units and BDUs to submit FSIPs.

3.2 AEMO's identified problem and proposed solution

AEMO considered that enabling BDUs to submit FSIPs under new clause 3.8.19(e) of the IESS rule will incur additional implementation costs for a capability that it considers will likely never be used.¹¹ AEMO stated that the new clause would require it to design and implement additional systems capability to receive FSIPs from BDUs. This is because BDUs would provide a FSIP for both production and consumption, and AEMO's current systems can only accept one FSIP per dispatchable unit identifier (DUID) for either production or consumption.

AEMO noted that battery energy storage systems are the main form of BDU, and they are unlikely to use the FSIP systems capability given they are a flexible resource that can almost instantaneously start up and shut down. Additionally, the rule change request stated that none of the battery energy storage systems currently in the NEM have submitted a FSIP in the last four years.

AEMO also considered there would be additional implementation costs in enabling semi scheduled generating units to submit FSIPs. AEMO stated that the additional implementation costs would be incurred from the need to augment its FSIP systems capability for a capability it considers will likely never be used by semi-scheduled generating units.

AEMO proposed amendments to clause 3.8.19 of the IESS rule to remove the option for semi-scheduled generating units and BDUs to submit FSIPs. AEMO considered that this change would avoid additional implementation costs associated with augmenting its FSIP systems capability for a new capability which it considers will likely never be used.

3.3 Stakeholder views and Commission analysis

No stakeholders responded to removing the option for semi-scheduled generators and BDUs to submit a FSIP.

No BDUs have indicated to the AEMC that they would use this provision and the AEMC is not aware that any semi-scheduled generators have sought to use this provision. The AEMC has

¹¹ New clause 3.3.19(d) and (e) of the IESS rule.

also been informed that a BDU is unlikely to want to use a FSIP due to warranty constraints.¹²

The Commission assessed its determination to remove the option for BDUs and semi-scheduled generators to submit a FSIP against the following criteria:

- **Cost and complexity:** making this change will reduce AEMO's complexity and costs to implement the rule.
- **Timing and uncertainty:** this change will provide additional certainty for semi-scheduled units by removing the inconsistency with AEMO's registration guidelines and current practice. There should be sufficient implementation time for AEMO as this change means it will not have to augment its IT systems to include BDUs and semi-scheduled generating units.
- **Consideration of broader direction of reform:** the change is in line with the IESS rule and does not impact or change the broader policy positions.

¹² Further information on how BDU warranties may operate can be found here: <https://www.dnv.com/article/energy-storage-capacity-warranties-beyond-the-fine-print-200339>

4 ALIGN IMPLEMENTATION OF NEW NON-ENERGY COST RECOVERY CALCULATIONS TO COMMENCEMENT OF NEM BILLING WEEK

This section provides a summary of the Commission's final determination and analysis, and stakeholder views, on moving the commencement of the new NECR calculations.

4.1 Final determination

The Commission's final determination is to bring forward the commencement of the new NECR calculations, and associated rule provisions, from Monday 3 June 2024 to Sunday 2 June 2024.

4.2 AEMO's identified problem and proposed solution

A NEM billing period is a period of seven days commencing at the start of the first trading interval on each Sunday.¹³ The commencement date of Monday 3 June 2024 in the IESS rule means that the commencement of new NECR calculations does not align with the commencement of a NEM billing week on a Sunday. AEMO noted that this misalignment would require it to design, build, test and operate a 'transitional week', from Sunday 2 June 2024, comprising one day of current NECR calculations and six days of new NECR calculations. AEMO estimated the cost to design, build, test and operate the 'transitional week' would be approximately \$260,000.

AEMO proposed changing the commencement date of NECR calculation implementation to the commencement of the NEM billing week on Sunday, 2 June 2024. It noted that this change may need to apply to several provisions in the rules, which may include definitions of adjusted consumed energy, adjusted gross energy, adjusted sent out energy and cost recovery market participant.

4.3 Stakeholder views and Commission analysis

SA Water was the only stakeholder to respond to the alignment of the NECR calculation with the commencement of a NEM billing week. Its submission strongly supported moving the NECR start date to align with the NEM billing week commencing on Sunday 2 June 2024.

It stated that the commencement of the 5 minute settlement (5MS) rule occurred in the middle of a billing week which resulted in AEMO and SA Water needing to handle a 'transition week' which resulted in significant additional complexity in the solution SA Water had to deliver its 5MS capability.

SA Water also noted the \$260,000 cost identified by AEMO to implement the 'transition week' could be avoided if this change is made.

¹³ AEMO, *NEM Settlements Process*, 13 May 2019.

The Commission assessed its determination to bring forward the commencement of the new NECR calculations to align with the commencement of a NEM billing week against the following criteria:

- **Cost and complexity:** making this change will significantly reduce implementation costs and complexity. AEMO indicated that aligning the commencement with a NEM billing week would reduce the implementation complexity of operating a 'transitional week' and reduce its implementation costs by up to \$260,000.

The Commission tested whether it would be more efficient to bring the NECR calculations commencement forward by one day or move it back to 9 June 2024. AEMO informed the AEMC that while it would appear simpler from a drafting perspective to start the NECR after the rest of the IESS rule change had commenced and the necessary terms were in place, this would likely be more costly than not making the change or bring the commencement forward. AEMO considered the increased costs would arise because it would be required to make the appropriate IT changes to the new system to include the ability for the old calculation method to be included in the new IT build along with the new NECR calculations.

- **Timing and uncertainty:** this change may also improve market certainty by giving market participants a cut-over date from the old to the new NECR arrangements that coincides with the start of a billing week.
- **Consideration of broader direction of reform:** the change is in line with the IESS rule and does not impact or change the broader policy positions.

This change is not intended to change the commencement date of 3 June 2024 for the final release of the remaining IESS rule changes.

5 ADDITIONAL PROPOSED AMENDMENTS

This section outlines the Commission's final determination on each of AEMO's additional proposed amendments:

- Clauses 2.2.2(a), 2.2.3(a) and 2.2.7(a) of the NER — clarify the scheduled, non-scheduled and semi-scheduled classification threshold applicable to groups of generating units
- New clause 2.3.4(i) of the IESS rule — align market connection point classification with other regulatory changes
- Clause 2.3D.1 of the NER — amend ancillary service unit classification
- New clauses 3.6.3(b1) and 3.15.10C(a)(4) of the IESS rule — remove separate references to small resource aggregators when referring to the new IRP registration category
- Clause 7.8.2(a1) and (b1) of the NER — amend exemptions for metering installations related to energy data storage.

5.1 Clarify scheduled, non-scheduled and semi-scheduled production unit classification thresholds

5.1.1 Final determination

The Commission's final determination is not to amend clauses 2.2.2, 2.2.3 and 2.2.7 of the NER and retain the classification threshold for a group of generating units connected at a common connection point that have a combined nameplate rating of 30 MW or greater to take into account only generating units and not also BDUs.

5.1.2 AEMO's identified problem and proposed solution

The classification thresholds for 'scheduled generating unit', 'non-scheduled generating unit' and 'semi-scheduled generating unit' in clauses 2.2.2, 2.2.3 and 2.2.7 of the NER include reference to generating units that are part of a 'group of generating units' connected at a common connection point with a combined nameplate rating of 30 MW or greater. AEMO considered the term 'group of generating units' should instead be 'group of production units' so that the nameplate rating of any BDUs forming part of the group is included in determining whether the 30 MW threshold is met.

AEMO proposed replacing the term 'group of generating units' with 'group of production units' in clauses 2.2.2, 2.2.3 and 2.2.7 of the NER. It considered making this change would ensure the position in the NER before the start of the new classification arrangements under the IESS rule would continue.

5.1.3 Stakeholder views and Commission analysis

No stakeholders responded to whether 'generating units' should be replaced with 'production units' in clauses 2.2.2, 2.2.3 and 2.2.7.

The Commission's determination was assessed against the following criteria:

- **Cost and complexity:** if this change was made, the nameplate rating of any BDUs forming part of the group of production units would be included in determining whether the 30 MW threshold is met. This would mean that a group of generating units at a common connection point with a combined nameplate rating less than 30MW and greater than 25MW that is classified as non-scheduled will become scheduled if they were to add a battery that is under 5MW (the threshold for classification of a BDU as scheduled) but large enough to result in the combined nameplate rating of the generating units and BDUs being greater than 30MW. As a result, the systems for the group of generating units would need to be upgraded to be able to participate in dispatch as a scheduled or semi-scheduled participant. This additional cost could discourage the owner of generating units in this band (25MW to just under 30MW) from adding a small battery where it is efficient to do so.
- **Timing and uncertainty:** no current issue with the threshold has been identified and the Commission considered this as part of its Generator registrations and connections rule change completed on 21 October 2021.¹⁴ At the time, the Commission considered that:
 - there was not sufficient evidence that generating units sized between 5MW and 30MW are causing inaccuracies in forecasting
 - AEMO has the power to impose central dispatch obligations on non-scheduled generating units if necessary
 - based on advice from GHD, the cost of scheduling for smaller generating units would be significant.

The Commission considers that if a future issue arises this could be considered through a separate rule change on threshold limits.

- **Consideration of broader direction of reform:** the Commission's decision in the IESS rule to exclude a BDU's generation capacity from counting towards the combined threshold was intentional. The IESS rule was intended to encourage efficient connection of new BDUs. The Commission considers AEMO's proposed change is counter to the intent of the IESS rule and may discourage non-scheduled generating units from adding small batteries where it is efficient to do so.

5.2 Align market connection point classification with other regulatory changes

5.2.1 Final determination

The Commission's final determination is to amend clause 2.3.4 of the NER to change the classification of market connection points to align with other changes made to refer to market connection points in the NER. It removes the need for a customer who is also a local retailer to classify 'any load at' a connection point in its local area as a market connection point.

¹⁴ <https://www.aemc.gov.au/rule-changes/generator-registrations-and-connections>

5.2.2 AEMO's identified problem and proposed solution

AEMO considered new clause 2.3.4(i) of the IESS rule is inconsistent with other changes made to refer to market connection points in the NER because it specifies that a customer who is also a local retailer must classify 'any load at' a connection point in its local area, as opposed to only a connection point in its local area.

AEMO suggested removing 'any load at' from clause 2.3.4(i) of the NER. It considered this would make it consistent with other changes made to refer to market connection points in the NER.

5.2.3 Stakeholder views and Commission analysis

No stakeholders responded to this issue.

The Commission's determination was assessed against the following criteria:

- **Timing and uncertainty:** removing the need for a customer who is also a local retailer to classify 'any load at' a connection point in its local area as a market connection point should reduce uncertainty about what it intended by the clause and improve consistency with other changes made to refer to market connection points.
- **Consideration of broader direction of reform:** this change will align new clause 2.3.4(i) of the IESS rule with other changes made to refer to market connection points in the NER.

5.3 Amend ancillary service unit classification

5.3.1 Final determination

The Commission's final determination is to amend clause 2.3D.1(f) of the NER to specify that AEMO must approve the classification of an ancillary service unit if it is reasonably satisfied that in the case of a retail customer or small resource aggregator customer, the applicant has an arrangement with that customer for the supply of market ancillary services.

5.3.2 AEMO's identified problem and proposed solution

AEMO stated that the IESS rule combined the provisions for classification of ancillary services for load (typically involving a customer) and generation (often but not always the market participant itself). It noted that the distinction is between connection points at which the registered participant is the intermediary, and other connection points.

AEMO recommended amending clause 2.3D.1(f)(3) of the NER to specify that AEMO must approve a person's application to classify an ancillary service unit if (among other things) it is reasonably satisfied that, if there is a retail customer or small resource aggregator customer (Customer) at the relevant connection point, the applicant has an arrangement with that Customer for the supply of market ancillary services.

5.3.3 Stakeholder views and Commission analysis

No stakeholders responded to this issue.

The Commission's considers there is benefit in clarifying the rules. In making this change the AEMC assessed its determination against the following criteria:

- **Timing and uncertainty:** the amendment should improve certainty for market participants by clarifying the distinction between connection points at which the registered participant is the intermediary, and other connection points.

5.4 Clarify the use of 'small resource aggregator' as a subset of the IRP registration category

5.4.1 Final determination

The Commission's final determination is to make a more preferable rule to amend:

- clause 3.6.3(b1) to clarify that the reference to IRP in that clause includes the specific label or role that the IRP may be acting in (i.e. small resource aggregator)
- clause 3.15.10C(a)(4) to instead refer to 'Cost Recovery Market Participant', which captures the market participants that may be liable under the clause.

In connection with these changes, the Commission's more preferable rule extends to related minor and administrative amendments to the IESS rule to improve the consistent use of the terms used to refer to registered participants and their different roles in the market. The changes are:

- use of the registration label 'Scheduled Generator' to include an IRP that has classified a scheduled generating unit, in the definition of 'Affected Participant' in chapter 10 and in clause 3.14.5A
- use of the registration label 'Scheduled Integrated Resource Provider' to refer to an IRP that has classified a scheduled generating unit, in the definition of 'affected production unit' in chapter 10
- removing the reference to IRPs in the 'Generator' definition in chapter 10, given that IRPs are a separate registration category, not a subset of the Generator registration category
- including reference to IRPs that have classified scheduled load in the definition of 'Affected Load Participant' in chapter 10, clause 3.7.1, clause 3.8.23(c)(5), clause 3.15.7(c) and clause 4.8.5A
- replacing 'Market Customer' in clause 3.14.3(d) with 'Market Participant' and in clause 3.15.10(b) with 'Cost Recovery Market Participant'

5.4.2 AEMO's identified problem and proposed solution

AEMO noted that clause 2.2.8(c) outlines that an integrated resource provider is taken to be a small resource aggregator (only) in so far as its activities related to small resource connection points classified as its market connection points under clause 2.2.8(b).¹⁵ Given this, AEMO considered that maintaining the reference to 'small resource aggregator' in new clauses 3.6.3(b1) and 3.15.10C(a)(4) of the IESS rule is not necessary, given the addition of 'integrated resource provider'.

¹⁵ AEMO, Rule change request, *Implementing Integrated Energy Storage System*, 21 December 2022.

AEMO recommended removing the reference to 'small resource aggregator' in clauses 3.6.3(b1) and 3.15.10C(a)(4).

5.4.3 Stakeholder views and Commission analysis

No stakeholders responded to this issue.

The Commission considers that the clauses should be amended but has taken a different approach to that proposed by AEMO. The Commission's determination was assessed against the following criteria:

- **Timing and uncertainty:** in relation to clause 3.6.3(b1) the Commission's determination will improve clarity and usability of the NER by making the intention of the clause clear within the drafting of the clause rather than requiring the reader to refer to Chapter 2 of the NER to determine the intention.
- **Consider broader direction of reform:** with regard to clause 3.15.10C(a)(4) the Commission's determination is consistent with the NECR changes.

In the course of analysing the changes proposed by AEMO in the rule change request, the AEMC identified other amendments to the IESS rule that result in:

- more consistent use of the terms used for registration categories (Generator, IRP and Customer) and the labels applied where a registered participant in one of these categories classifies plant or a connection point (Scheduled Generator, Scheduled IRP and Market Customer)
- IRPs with scheduled load being referred to consistently in provisions applicable to Market Customers with scheduled load (where this is intended), noting that there is no separate classification label for these IRPs.

The Commission is satisfied that these minor and administrative changes (listed in section 5.4.1 above) are consistent with the intent of the IESS rule and will or are likely to better contribute to the achievement of the NEO by improving the clarity and consistency of the NER.

5.5 Amend exemptions for metering installations related to energy data storage under 5-minute settlement

5.5.1 Final determination

The Commission's final determination is to:

- amend clause 7.8.2(a1) of the NER to:
 - remove AEMO's ability to grant exemptions to metering coordinators for type 1,2 and 3 metering installations from the data storage requirements under clause 7.8.2(a)(9), given these meters are now capable of recording this data
 - narrow AEMO's ability to grant exemptions to metering providers for type 4 metering installations from the data storage requirements under clause 7.8.2(a)(9) to those installed prior to 1 December 2018, as opposed to 1 July 2021, given all type 4 meters installed after 1 December 2018 are now capable of recording this data

- remove clause 7.8.2(b1) of the NER, which specifies what categories of type 4 metering installations are able to be exempted by AEMO from the requirement to record and provide trading interval energy data, as this information has been moved into clause 7.8.2(a1)
- make other consequential changes, including to rule 11.103, to implement the amendments above.

5.5.2

AEMO's identified problem and proposed solution

AEMO noted that clause 7.8.2(b1) of the NER, as amended by the IESS rule, extends AEMO's ability to grant exemptions from the data storage requirements under clause 7.8.2(a)(9) to all type 4 metering installations. AEMO outlined that this position was contrary to the intent of the IESS rule, which was to extend the requirement to record energy data in accordance with clause 7.8.2(a)(9) to all type 4 metering installations installed after December 2018.

AEMO stated that type 4 metering installations that were installed between 1 December 2018 and 1 July 2021 have been converted to record and provide five minute trading interval energy data in accordance with the 5MS rule, and therefore the date in clause 7.8.2(a1) should be 'prior to 1 December 2018' as opposed to 'prior to 1 July 2021'.

AEMO also noted that all type 1 to 3 metering installations were also converted to record and provide trading interval energy data, and all new and replacement metering installations must record and provide trading interval energy data in accordance with clause 7.8.2A. Given this, AEMO stated that there are no longer any type 1 to 3 metering installations recording and providing non-trading interval data, and therefore clause 7.8.2(a1)(1) of the NER becomes redundant.

5.5.3

Stakeholder views and Commission analysis

No stakeholders responded to this issue.

AEMO informed the AEMC that nobody has applied for the exemption, nor has an exemption under clause 7.8.2(a1) been granted, for:

- type 1, 2 or 3 metering installations, or
- type 4 metering installations in the period from 1 December 2018 to 1 July 2021.

The IESS rule amended the type of meters that could be subject to that exemption. The changes proposed by AEMO are intended to clarify the timeline for when a meter has to comply with the trading interval energy data.

The Commission's determination was assessed against the following criteria:

- **Timing and uncertainty:** amending clause 7.8.2(a1) will provide additional clarity on the obligations on metering coordinators in respect of metering installation data requirements. Further, removing clause 7.8.2(b1) will reduce uncertainty by making it clear that all categories of type 4 meters are able to be exempted by AEMO from the requirement to record and provide trading interval energy data if they were installed prior to 1 December 2018.

- **Consideration of broader direction of reform:** the change is in line with the intent of the 5MS rule for energy storage data.

6 OTHER MINOR AND ADMINISTRATIVE CHANGES TO THE IESS RULE

The AEMC has also made other minor and administrative amendments to the IESS rule to improve its clarity and reduce uncertainty with its implementation. These changes correct minor errors in the IESS rule or make clarifications that are minor or non-material in nature.

In particular, the amendments to the IESS rule:

- correct grammatical errors that would result once the IESS rule commences. For example, to amend:
 - Item 13 in Schedule 1 of the IESS rule to avoid a double full stop in clause 2.2.2(c)
 - Item 121 in Schedule 2 of the IESS rule to avoid a double comma in clause 3.8.3A(d)
- correct clause referencing errors in certain IESS rule instructions. For example:
 - the instruction in Item 109 in Schedule 2 of the IESS rule incorrectly references clause "3.8.3(a)(2)", instead of clause "3.8.3A(2)"
 - the instruction in Item 390 of Schedule 2 of the IESS rule incorrectly references clause "3.13.3(f)(6)(iii)" instead of "clause 3.13.4(f)(6)(iii)"
- correct errors in formulas amended by the IESS rule. For example:
 - the formula in clause 3.15.6A(e), as amended by Item 491 in Schedule 2 of the IESS rule, incorrectly references "RBE" instead of "RBF"
 - the definition of "RATSOE" and "RATCE" in the formula in clause 3.15.8(g), as amended by Item 546 in Schedule 2 of the IESS rule, both reference "consumed energy amounts". This should be "sent out energy" in the definition of "RATSOE". Otherwise, the denominator will be zero.
- remove Item 67 in Schedule 1 of the IESS rule, which deletes rule 2.3C of the NER. At the time the IESS rule was made this rule was not used but has since been amended to outline the registration and classification of SAPS resource providers. As such, this rule should not be deleted.
- move the definition of "SRA Customer" from clause 5A.A.1 to the definitions in Chapter 10 for consistency with other definitions
- correct other minor errors, including to clause referencing and numbering, instructions, spelling and grammar.

These changes will improve the clarity of the IESS rule and reduce uncertainty regarding its implementation.

ABBREVIATIONS

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
BDU	Bidirectional unit
Commission	See AEMC
DUID	Dispatchable unit identifier
FCAS	Frequency control ancillary services
FSIP	Fast start inflexibility profile
IESS rule	National Electricity Amendment (Integrating Energy Storage Systems into the NEM) Rule 2021 No. 13
IRP	Integrated resource provider
MSGGA	Market small generation aggregator
NECR	Non-energy cost recovery
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National electricity objective
NER	National Electricity Rules
Proponent	The proponent of the rule change request

A LEGAL REQUIREMENTS UNDER THE NEL

This appendix sets out the relevant legal requirements under the NEL for the AEMC to make this final rule determination.

A.1 Final rule determination

In accordance with s. 102 of the NEL the Commission has made this final rule determination in relation to the rule proposed by AEMO. The Commission's reasons for making this final rule determination are set out in Section 1.4.

A copy of the more preferable final rule is attached to and published with this final rule determination. Its key features are described in Section 1.4.

A.2 Power to make the rule

The Commission is satisfied that the more preferable final rule falls within the subject matter about which the Commission may make rules. The more preferable final rule falls within s. 34 of the NEL as it relates to:

- the activities of persons (including Registered participants) participating in the national electricity market or involved in the operation of the national electricity system,¹⁶ and
- the operation of the national electricity system for the purposes of the safety, security and reliability of that system.¹⁷

A.3 Commission's considerations

In assessing the rule change request the Commission considered:

- its powers under the NEL to make the rule
- the rule change request
- submissions received during consultation
- the Commission's analysis as to the ways in which the more preferable final rule will or is likely to, contribute to the NEO
- its powers to make a more preferable rule¹⁸ and a differential rule.¹⁹

There is no relevant Ministerial Council on Energy (MCE) statement of policy principles for this rule change request.²⁰

The Commission may only make a rule that has effect with respect to an adoptive jurisdiction if satisfied that the proposed rule is compatible with the proper performance of Australian

¹⁶ Section 34(1)(a)(iii) of the NEL.

¹⁷ Section 34(1)(a)(ii) of the NEL.

¹⁸ See appendix A.3.1.

¹⁹ See appendix A.3.2.

²⁰ Under s. 33 of the NEL the AEMC must have regard to any relevant MCE statement of policy principles in making a rule. The MCE is referenced in the AEMC's governing legislation and is a legally enduring body comprising the Federal, State and Territory Ministers responsible for energy. On 1 July 2011, the MCE was amalgamated with the Ministerial Council on Mineral and Petroleum Resources. The amalgamated council is now called the Energy Ministers Meeting.

Energy Market Operator (AEMO)'s declared system functions.²¹ The more preferable final rule is compatible with AEMO's declared system functions because it does not affect those functions.

A.3.1

Making a more preferable rule

Under s. 91A of the NEL, the Commission may make a rule that is different (including materially different) to a proposed rule (a more preferable rule) if it is satisfied that, having regard to the issue or issues raised in the rule change request, the more preferable rule will or is likely to better contribute to the achievement of the NEO.

In this instance, the Commission has made a more preferable rule. The reasons are summarised in Sections 1.4, and 2-6.

A.3.2

Making a differential rule

The NER, as amended from time to time, apply in the Northern Territory, subject to modifications set out in regulations made under the Northern Territory legislation adopting the NEL.²² Under those regulations, only certain parts of the NER have been adopted in the Northern Territory.

As the more preferable final rule relates to parts of the NER that apply in the Northern Territory, the Commission is required to assess whether to make a uniform or differential rule (defined below) under Northern Territory legislation.

Under the NT Act, the Commission may make a differential rule if, having regard to any relevant MCE statement of policy principles, a different rule will, or is likely to, better contribute to the achievement of the NEO than a uniform rule.²³ A differential rule is a rule that:

- varies in its term as between:
 - the national electricity system, and
 - one or more, or all, of the local electricity systems, or
- does not have effect with respect to one or more of those systems,

but is not a jurisdictional derogation, participant derogation or rule that has effect with respect to an adoptive jurisdiction for the purpose of section 91(8) of the NEL.

A uniform rule is a rule that does not vary in its terms between the national electricity system and one or more, or all, of the local electricity systems, and has effect with respect to all of those systems.^{24 25}

²¹ Section 91(8) of the NEL.

²² These regulations under the NT Act are the National Electricity (Northern Territory) (National Uniform Legislation) (Modifications) Regulations 2016.

²³ Clause 14B of Schedule 1 to the NT Act, inserting section 88AA into the NEL as it applies in the Northern Territory.

²⁴ Clause 14 of Schedule 1 to the NT Act, inserting the definitions of "differential Rule" and "uniform Rule" into section 87 of the

²⁵ NEL as it applies in the Northern Territory.

The Commission has determined to make a uniform rule as it does not consider that a differential rule will, or is likely to, better contribute to the achievement of the NEO than a uniform rule.

A.4 Civil penalties

The Commission cannot create new civil penalty provisions. However, it may recommend to the Energy Ministers Meeting that new or existing provisions of the NER be classified as civil penalty provisions.

The Commission's more preferable final rule amends the following clauses of the NER:

- clause 2.2.2(c)
- clause 3.6.3(b1)
- clause 3.8.3A(d)
- clause 4.8.5A(d)

These clauses are currently classified as civil penalty provisions under the NEL or Schedule 1 of the National Electricity (South Australia) Regulations.

The Commission considers that the clauses outlined above should continue to be classified as a civil penalty provision and therefore does not propose to recommend any change to their classification to the Energy Ministers Meeting.

A.5 Conduct provisions

The Commission cannot create new conduct provisions. However, it may recommend to the Energy Ministers Meeting that new or existing provisions of the NER be classified as conduct provisions.

The more preferable final rule does not amend any rules that are currently classified as conduct provisions under the NEL or National Electricity (South Australia) Regulations. The Commission does not propose to recommend to the Energy Ministers Meeting that any of the proposed amendments made by the more preferable final rule be classified as conduct provisions.