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Ms Anna Collyer
Chair, Australian Energy Market Commission
Sydney NSW 2000

Reference: ERC0386

Dear Ms Collyer,

AEMO submission to directions paper – IRSR arrangements for transmission loops

AEMO appreciates the opportunity to make a submission to the directions paper on the rule change considering interregional settlement residue (IRSR) arrangements for transmission loops in the NEM.

The attached submission provides feedback on the directions paper and updated draft rule, including on possible transitional arrangements for settlements residue auction (SRA) units already allocated on affected interconnectors, for periods after the expected commissioning of PEC-2.

The AEMC's updated policy position accepts AEMO's proposed methodology for the allocation of negative residues in a transmission loop and will enable AEMO to maximise efficient dispatch around the loop. The key difference from AEMO's proposal is to deduct, within each trading interval, negative settlement residues from positive settlement residues. AEMO understands the AEMC's reasons for adopting this position but notes that the impact on the value of SRA units as a risk management tool may have broader implications. That said, AEMO's priority at this stage is gaining clarity on the final rule as soon as possible to facilitate implementation in time for the anticipated commissioning of PEC-2.

Should you wish to discuss any aspect of our submission please contact Hannah Heath, Group Manager, Strategic Market Reform (Hannah.Heath@aemo.com.au).

Yours sincerely,

Violette Mouchaileh
Executive General Manager, Reform Delivery

ATTACHMENT – Detailed submission

PART A – Feedback on key changes

1.1 The updated policy direction allows AEMO to progress the market implementation of PEC

AEMO's initial engagement with industry on the market integration of PEC focused on the occurrence of loop counter-priced flows and the need to ensure negative residue management ('clamping') will not inhibit efficient operation around the loop. Our subsequent rule change proposal sought to allocate this un-clamped negative IRSR to the interconnectors with positive IRSR accruing, thereby reflecting the role of counter-priced flows in allowing positive interconnectors to achieve their higher flows.

The updated AEMC policy direction accepts AEMO's proposed allocation methodology, but also changes the determination of "who pays" for negative IRSR from Transmission Network Service Providers (TNSPs) to SRA unit holders. The directions paper indicates that unit holders are best placed to manage the risk of increased negative IRSR at lowest cost to consumers.

AEMO considered, but ultimately did not recommend, this approach in its stakeholder consultation. AEMO's *Market Integration Directions Paper*[1] details the changing dynamics of power flows in a meshed network and how negative IRSR on one interconnector can enable increased flows and positive IRSR on other interconnectors. Chapter 6.3 of AEMO's directions paper goes on to consider whether negative IRSR should be charged directly to consumers in the importing region or whether it should be first deducted in the calculation of IRSR for distribution to unit holders. This decision comes down to whether the deduction of negative IRSR will diminish the utility of SRA units for trading across multiple regions and consequently reduce interregional trading by participants, at a greater cost or impact to consumers.

AEMO's proposal prioritised retaining SRA value, acknowledging regulatory precedent and on the basis that the PEC transmission loop did not, of itself, necessitate changing the funding arrangements - only the approach to allocating the additional transmission loop negative residues. By contrast, the AEMC directions paper considers alternative funding arrangements are necessary as it would be unreasonable for TNSPs to manage the risk of increased and volatile negative IRSR within the transmission loop on behalf of consumers.

While there are both benefits and drawbacks to the different funding arrangements, AEMO's ultimate priority at this stage of the process is to obtain clarity with a final rule as soon as possible to facilitate implementation in time for the anticipated commissioning of PEC-2. AEMO therefore confirms it can implement the updated approach in the directions paper if carried through to the final rule.

[1] AEMO, PEC market integration directions paper - https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2022/pec-market-integration-paper/directions-paper-for-consultation/pec-market-integration---directions-paper-for-consultation.pdf?la=en

1.2 AEMO supports a holistic review of interregional settlement residue arrangements

The alternative funding arrangements of deducting negative IRSR from positive IRSR will have a material impact on the performance of SRA units as a tool to manage interregional basis risk. For market participants who purchase SRA units as part of a portfolio of risk management tools, the change in utility of SRA units may have consequential impacts on contracting practices – potentially affecting contract liquidity, prices and portfolio bid strategies.

Section 2.4 of the directions paper acknowledges this dynamic as a trade-off but considers market participants are best placed to manage the volatility and uncertainty of negative IRSR at lowest cost to consumers, and that netted-off SRA units would continue to support inter-regional hedging. AEMO acknowledges the need to assess this trade off but considers the impact to the utility of SRA units may be understated in the AEMC's assessment. While units are inherently speculative, the deduction of negative IRSR introduces an additional highly speculative variable that decreases the firmness of units.

The directions paper suggests a holistic review of SRA and IRSR arrangements may be required. AEMO is supportive of this review and agrees that the introduction of the transmission loop will have a significant impact on the nature of SRA distributions. Although the updated policy position is to change funding arrangements for negative IRSR prior to this review, an alternative approach could be to retain existing funding arrangements and consider this assessment more fulsomely within the scope of the review. This would allow for deeper analysis of IRSR dynamics, and the design and usefulness of SRD units against the objectives of enhancing competition and efficiency by promoting interregional trade.[2]

1.3 Netting off in net negative cases impacts negative residues due to intra-regional congestion

As set out above, AEMO proposed arrangements to deal with negative IRSR that would not be subject to clamping, defined as "net positive" cases. AEMO did not propose alternative arrangements for negative IRSR in "net negative cases" as these residues, caused by intra-regional congestion, will continue to arise as they do today[3]. AEMO will continue to clamp this negative IRSR in net negative cases and AEMO is currently consulting on updating the approach to clamping with the inclusion of PEC[4].

Clamping the negative IRSR in dispatch is the primary control or treatment for negative residues caused by radial intra-regional congestion. This approach is, however, limited in its effectiveness. For example, in the December 2024 quarter negative residues on the New South Wales to Victoria directional interconnector accrued to some $33.9m[5] despite AEMO's attempts to clamp. As these

[2] NER 3.18.3(b)
[3] Negative IRSR in the NEM today (radial representation) is caused by intra-regional congestion, generator mispricing and network constraints
[4] AEMO, Negative Residue Management Consultation - https://aemo.com.au/consultations/current-and-closed-consultations/automation-of-negative-residue-management-for-the-implementation-of-transmission-loops

negative residues already exist and are unrelated to the PEC loop, AEMO excluded their reallocation from its rule change proposal.

AEMO is of the view that the primary benefit of deducting negative IRSR in net negative cases is clarity and process efficiency in applying a single allocation approach in all cases. Section 3.3 of the AEMC directions paper describes the policy rationale for netting in “net negative” cases as: (1) avoiding potential for gaming, (2) promoting stability by providing continuity across net positive and net negative cases on a per trading interval (TI) basis, and (3) despite clamping there is a risk that material negative IRSR could still arise.

AEMO does not consider that the first two reasons are key drivers of the need for change. The directions paper states that generators holding SRA units will be incentivised to “force the net loop IRSR negative in the hope of receiving un-netted SRA unit payouts”.[6] Generators with positions that can influence flow around the loop are already exposed to price dynamics across and within regions with existing incentive and ability to misprice and dispatch below their local marginal price if to access the RRP. The potential for an un-netted payout in any particular TI will not materially change bid dynamics or create additional incentives on generating bidding.

AEMO considers the benefits for TNSP cashflow of the policy decision to net off in net negative cases may be limited if the methodology is applied on a per TI basis (as in the indicative rules drafting). This is because when the loop is in deficit in net negative cases, there may be limited positive IRSR in the loop available to deduct from. For the avoidance of doubt, AEMO does not support any inter-temporal netting across trading intervals.

1.4 Settlement residue arrangements for existing distributed units

This section provides an initial view of the SRA arrangements that will need to be worked through given the updated policy position. Netting off calculations will impact the payouts to SRA unit holders for periods after the methodology is applied in settlements, including for SRA units that have already been sold for directional interconnectors between Victoria and New South Wales, and South Australia and Victoria.

Clause 16.5 of the Auction Participation Agreement (APA)[7] currently allows an auction participant to terminate a distribution agreement if a change in the calculation of settlements residue for the relevant units is published after the date of the relevant auction. A final rule (in the present draft form) is likely to be a change that this provision was intended to cover. However, given the updated methodology will not be applied before the physical completion and commissioning of PEC-2, the date from which SRA units are affected is inherently uncertain.

AEMO proposes that the final rule include transitional provisions that identify affected SRA units as units applicable to quarters commencing on or after 1 October 2026, and purchased at an auction

[6] AEMC, Directions paper – transmission loop for negative IRSR, page 33 - https://www.aemc.gov.au/sites/default/files/2025-06/ERC0386%20IRSR%20arrangements%20for%20transmission%20loops%20-%20Directions%20paper.pdf
[7] Auction participant agreement - https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/market-operations/settlements-and-payments/settlements/settlements-residue-auction/auction-participant-agreement

cleared before a specified date (potentially September or December 2025). The transitional provisions could require AEMO to clarify the process for the return of affected SRA units within the auction rules or associated documentation, to include a date by which unit holders may terminate a relevant distribution agreement, and what will happen to the returned units. AEMO anticipates there would be a single cut-off date for termination of all affected distribution agreements prior to the application of the new methodology, with relevant units re-auctioned with subsequent unit tranches for the same quarter. Units unallocated in the last tranche will be allocated to the TNSP.

PART 2 – Feedback on rule drafting

This part provides detailed comments and drafting suggestions on the updated indicative draft rule. AEMO welcomes the opportunity to further engage with the AEMC on rules drafting to ensure interpretation aligns with policy intent and practical implementation.

Clause	Description	Suggested change
3.6.5(e)	Allocation of settlements residue	It is not entirely clear what '(if any)' relates to. Suggest redraft to "for any interconnector that is neither a *regulated interconnector* nor a *market network service facility*".
3.6.6(a)	Definition of "importing region"	The term "importing region" is used in multiple clauses (3.6.5, 3.6.6 and 3.18.4). Suggest defining in chapter 10 and using italicised.
3.6.6(a)	Definition of "net loop allocation"	The definitions of "net loop allocation" and "TPA" could be amended to avoid the need for additional definitions and to make the meaning clear up front. Suggest redrafting "net loop allocation" to "…for a parallel interconnector configuration for a *trading interval,* the sum of the positive allocations (if any) for the looped interconnectors in that configuration less the sum of the negative allocations (if any) for the looped interconnectors in that configuration."
3.6.6(a)	Definition of "TPA" in "proportional allocation"	Amend the definition of "TPA" as per the above comment, e.g. "TPA is the sum of positive allocations for the looped interconnectors in the relevant parallel interconnector configuration". This change, in addition to the above, removes the need for additional definitions of TNA and TPA. .
3.6.6(a)	Calculation of proportional allocation	AEMO's preference is to use weekly regional demand for the calculation of ARD and TRD instead of rolling annual regional demand. Rolling annual regional demand is a more resource and system intensive calculation that is unlikely to be materially different to a weekly value. Further, AEMO considers that using a ratio for the billing week where the settlements residue accrues is more reflective of interregional price dynamics.
3.13.5A(b1)	Termination of SRD agreements and unit cancellation	Amend the terminology to refer to termination of an '*SRD agreement*' (it is the agreement that is terminated rather than the units) and subsequently cancellation of the units: "If an *eligible person* terminates any *SRD agreement* … (1) how many *SRD units* (if any) were cancelled as a result of the termination (but not who terminated any *SRD agreement*); (2) the category of *SRD units* cancelled; …"
11.XXX.1	Definition of "effective date"	Suggest replacing "effective date" with 'commencement date", reflecting the distinction between these terms in existing chapter 11 provisions.
11.XXX.1	Date for commencement of new methodology	The draft requires AEMO to apply the new methodology for loop flows from the 'PEC operational date'. However, given the uncertainty associated with the commissioning of PEC and the time available between the expected final rule and the earliest PEC operational date, the rule will need to include a

		fixed ‘not before’ date to allow AEMO to plan and implement this change appropriately, minimising risk to market and operational systems. Assuming the final rule is made by the end of September 2025, that fixed date should be no earlier than 2 November 2026. The new methodology would then be applied from the later date of either the ‘PEC operational date’ and 2 November 2026.