10 July 2025

Anna Collyer
Chair
Australian Energy Market Commission

Lodged online: www.aemc.gov.au

Dear Ms Collyer,

Inter-Regional Settlements Residue Arrangements on Transmission Loops – Directions Paper

Origin Energy Limited (Origin) welcomes the opportunity to provide feedback on the AEMC's Directions Paper for the rule change on inter-regional settlement residue (IRSR or residues) arrangements for transmission loops. A summary of our position is provided below, with detailed analysis and further feedback in Attachment 1.

Origin supports policy reforms that improve market efficiency, strengthen competition, and deliver long-term benefits to consumers. A key part of this is ensuring that market participants have access to reliable, predictable, and cost-effective risk management tools that enable participation in inter-regional trading, and in this instance, support utilisation of Project EnergyConnect (PEC). Within this context, Origin has significant concerns with the netting approach proposed in the Directions Paper and does not support its implementation.

Risks and costs arising from the netting approach

The proposed netting approach would materially reduce the hedging value of Settlement Residue Distribution (SRD) units, which play a critical role in managing inter-regional price separation. These units are integral to supporting inter-regional trade, which is a core feature of the NEM. Inter-regional trading not only enhances competition but also enables shared system security, load diversification, and the transfer of electricity from low-cost to high-cost regions. Where price signals emerge, it also helps guide efficient investment in generation and storage across regions.[1]

Undermining the firmness of SRD units would weaken a critical financial mechanism supporting inter-regional trade, likely leading to both direct and indirect costs for consumers and reducing overall market efficiency. In our view, the AEMC has not adequately considered the full range of costs and unintended consequences that may arise from netting positive and negative residues. These include:

- **Higher risk management costs**: To offset the reduced value of SRAs, market participants would need to source alternative hedging products, such as swaps and caps. These instruments are typically less tailored to managing inter-regional price separation and come at a higher cost. The reduced precision and increased expense of these alternatives would result in higher risk premiums, which would flow through to consumers.

- **Impact on competition and liquidity**: The reduced effectiveness of SRD units would discourage inter-regional trading and limit the ability of participants—especially those without physical generation in all regions—to serve customers across regional boundaries. This could negatively affect competition and market liquidity, particularly in regions such as South Australia that are already exposed to hedging constraints[2] and limit the market's ability to access lowest-cost generation across the NEM.

- **Lower settlement residue auction (SRA) proceeds and transmission use of system (TUOS) charge offsets**: The diminished hedging value of SRD units is expected to reduce the price paid by participants

[1] Energy Reform Implementation Group (ERIG), Energy Reform, p.229, https://www.energy.gov.au/sites/default/files/energy-reform-way-forward-aust-final-report-exec-summary-2007_0.pdf

[2] Australian Energy Regulator (AER), Wholesale electricity market performance report 2024, p.131, https://www.aer.gov.au/system/files/2024-12/Wholesale%20electrcity%20market%20performance%20report%20-%20December%202024.pdf

Origin Energy Limited ABN 30 000 051 696 • Level 32, Tower 1, 100 Barangaroo Avenue, Barangaroo NSW 2000
GPO Box 5376, Barangaroo NSW 2000 • Telephone (02) 8345 5000 • Facsimile (02) 9252 9244 • www.originenergy.com.au

in SRAs. As SRA proceeds are passed through to consumers via reduced TUOS charges, lower auction revenue reduces the TUOS charge offset provided to consumers, increasing end-user costs.

- **Impact on Retailer Reliability Obligation (RRO) positions**: The diminished firmness of SRD units will impact how liable entities manage inter-regional contracting risk under the RRO. This may compromise the firmness of qualifying contracts, affect how entities calculate and report their net contract position, and lead to higher hedging costs or reduced willingness to serve load in certain regions.

The cumulative effect of these outcomes would weaken the financial risk management framework that underpins inter-regional trade in the NEM. These outcomes are contrary to the National Electricity Objective (NEO) and could undermine broader reforms to strengthen contract market liquidity.[3]

Origin recommendations

Origin does not support the proposed netting approach. It introduces new risks and inefficiencies into the market. By weakening SRD units, the proposal undermines inter-regional trading and will likely lead to additional consumer costs. While the Draft Determination focused on the appropriate allocation of negative residues across TNSPs, the Directions Paper significantly broadens the problem definition and policy direction—reversing earlier positions and concluding in favour of netting without a robust consultation process. The absence of an Options Paper and the compressed three-week consultation period further reinforce concerns that this shift is premature and insufficiently tested.

We consider that there are more targeted ways to address the underlying issues—including TNSP cashflow concerns—without compromising critical risk management tools or broader market efficiency. We strongly recommend that the AEMC:

- Preserve the integrity of SRD units by reverting to the Draft Determination[4] or adopting AEMO's original rule change proposal,[5] rather than proceeding with the netting approach.

- Defer broader design considerations to a future, well-scoped review of residues and SRA arrangements, to be undertaken once PEC has been operational long enough to provide meaningful data on loop flow outcomes.

Notwithstanding the above, if netting is pursued, it should be limited to net-positive loop cases, using the method proposed in the Directions Paper. Retaining current arrangements in net-negative cases would mitigate some of the negative impacts on SRD unit value and limit unnecessary disruption to existing market mechanisms.

If you wish to discuss any aspect of this submission further, please contact Megan Findlay at Megan.Findlay@originenergy.com.au.

Yours sincerely,

Sarah-Jane Derby
Group Manager, Regulatory Policy

[3] DCCEEW, National Electricity Market wholesale market setting review, https://www.dcceew.gov.au/energy/markets/nem-wms-review
[4] AEMC, Draft Determination—IRSR arrangement for transmission loops, https://www.aemc.gov.au/sites/default/files/2024-12/ERC0386%20IRSR%20arrangements%20for%20transmission%20loops%20-%20Draft%20determination.pdf
[5] AEMO, Electricity Rule Change Proposal—Integration of Project EnergyConnect (PEC) into the National Electricity Market (NEM), https://www.aemc.gov.au/sites/default/files/2024-03/New%20rule%20change%20proposal%20-%20AEMO%20-%20Integration%20of%20Project%20EnergyConnect%20into%20the%20NEM%20-%2020240223.pdf

Origin Energy Limited ABN 30 000 051 696 • Level 32, Tower 1, 100 Barangaroo Avenue, Barangaroo NSW 2000
GPO Box 5376, Barangaroo NSW 2000 • Telephone (02) 8345 5000 • Facsimile (02) 9252 9244 • www.originenergy.com.au

Origin is concerned that the proposed netting approach in the Directions Paper will increase risk management costs, reduce the market's ability to manage risk, and discourage inter-regional trade. We do not consider that the approach promotes efficient market outcomes, strengthens competition, or delivers long-term benefits to consumers.

In our view, the proposed netting approach has not been subject to sufficient analysis and risks leading to unintended consequences for both market efficiency and consumer outcomes. The Directions Paper does not clearly demonstrate that the AEMC has considered the full range of costs and implications associated with netting positive and negative inter-regional settlements residues (IRSR, referred to as 'residues' going forward).

In particular, netting would undermine the effectiveness of Settlement Residue Distribution (SRD) units as a risk management tool—requiring market participants to rely more heavily on alternative hedging instruments, increasing costs, and ultimately raising prices for consumers. The sections below provide further detail on how these outcomes may arise and why we consider alternative approaches should be more thoroughly explored.

1. Risks and Costs of a Netting Approach

The proposed netting approach would materially weaken the function of SRD units as an inter-regional hedging tool. These units are currently used by market participants to manage price separation risks between regions in the NEM, enabling efficient trade and supporting competition. By reducing the correlation between SRD unit payouts and inter-regional price separation, netting undermines the hedging value of these instruments (discussed further below, in Section 2.1). This creates both direct and indirect costs to consumers and undermines a critical financial mechanism supporting inter-regional trade. These impacts include:

- Higher risk management costs: Market participants will need to rely on alternative financial products to manage inter-regional risk. These alternatives are typically more expensive and less aligned to inter-regional price separation, resulting in higher risk premiums that flow through to consumers.

- Reduced competition and liquidity: The reduced effectiveness of SRD units would discourage inter-regional trading and limit the ability of participants—especially those without physical generation in all regions—to serve customers across regional boundaries. This may increase market concentration and reduce competition, particularly in regions where contract liquidity is already limited, such as South Australia.[6]

- Lower SRA proceeds and TUOS offsets: As the hedging value of SRD units is reduced, participants will be willing to pay less in SRAs. Lower auction revenue reduces the TUOS offset provided to consumers, increasing end-user charges.

2. Detailed Analysis of the Netting Proposal

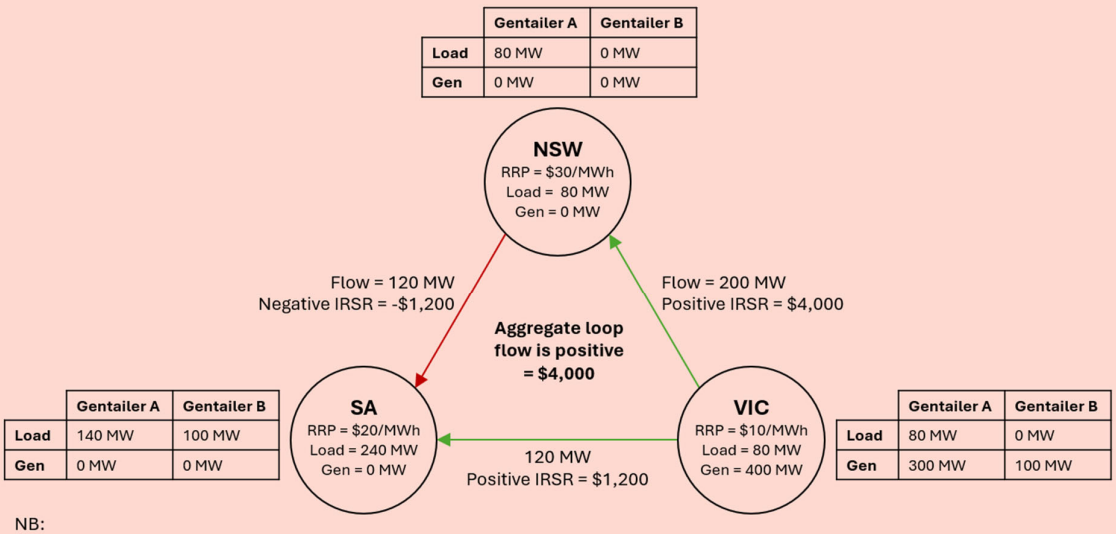
2.1 Worked example: Hedging value of SRD units before and after netting

To illustrate how netting reduces the effectiveness of SRD units as an inter-regional price risk hedge, the following worked example has been developed. This example has been simplified for illustrative

[6] Australian Energy Regulator (AER), Wholesale electricity market performance report 2024, p.131, https://www.aer.gov.au/system/files/2024-12/Wholesale%20electrcity%20market%20performance%20report%20-%20December%202024.pdf

Origin Energy Limited ABN 30 000 051 696 • Level 32, Tower 1, 100 Barangaroo Avenue, Barangaroo NSW 2000
GPO Box 5376, Barangaroo NSW 2000 • Telephone (02) 8345 5000 • Facsimile (02) 9252 9244 • www.originenergy.com.au

purposes and represents the position of two hypothetical vertically-integrated market participants across looped regions, shown here as Gentailer A and Gentailer B.



NB:
Gen = Generation
Like the example in Appendix A of the Direction Paper, we ignore losses and for simplicity assume the dispatch interval is one hour.

To hedge their loads, both market participants participate in SRAs:

- Gentailer A recognises that it is underhedged in both SA and NSW, so purchases 60% of the VIC-SA SRD units and 40% of the VIC-NSW SRD units.
- Gentailer B recognises that is underhedged in SA, so purchases 40% of the VIC-SA SRD units.

Under current arrangements, where positive and negative residues are not netted, these units would provide the following SRD unit payout and equivalent hedge cover:

Table 1: Value of SRD units under current (non-netting) approach

Gentailer	VIC-SA distribution	VIC-SA equivalent hedge	VIC-NSW distribution	VIC-NSW equivalent hedge	Total distribution	Total equivalent hedge
A	$720	72 MW	$1,600	80 MW	**$2,320**	**152 MW**
B	$480	48 MW	$0	0 MW	**$480**	**48 MW**
Total	$1,200	120 MW	$1,600	80 MW	**$2,800**	**200 MW**

NB: Rounded to the nearest MW / dollar for simplicity.

Gentailer A and B recognise that they are still underhedged in SA, so purchase 68 MW and 52 MW of swap cover respectively for a total of 120 MW. Assuming a swap contract price of $90/MWh,[7] this costs $10,800. Gentailer A holds enough SRD units to cover their risk in supplying load in NSW without having to purchase additional cover.

Under the proposed netting approach, these same units would provide the following SRD unit payout and equivalent hedge cover:

[7] ASX Energy, https://www.asxenergy.com.au/. SA swap contract prices range from $90-$105/MWh and NSW swap contract prices range from $110-$125/MWh on average.

Origin Energy Limited ABN 30 000 051 696 • Level 32, Tower 1, 100 Barangaroo Avenue, Barangaroo NSW 2000
GPO Box 5376, Barangaroo NSW 2000 • Telephone (02) 8345 5000 • Facsimile (02) 9252 9244 • www.originenergy.com.au

Table 2: Value of SRD units under proposed netting approach

Gentailer	VIC-SA distribution	VIC-SA equivalent hedge	VIC-NSW distribution	VIC-NSW equivalent hedge	Total distribution	Total equivalent hedge
A	$554	55 MW	$1,230	62 MW	**$1,784**	**117 MW**
B	$370	37 MW	$0	0 MW	**$370**	**37 MW**
Total	$924	92 MW	$1,230	62 MW	**$2,154**	**154 MW**

NB: Rounded to the nearest MW / dollar for simplicity.

Under the netting approach, the value of SRD units is diminished, reducing their effectiveness as a hedge against inter-regional price risk. As a result, both market participants must collectively purchase an additional 28 MW of swaps to maintain hedge coverage for their SA positions. In addition, Gentailer A must now procure 18 MW of swaps in NSW to manage basis risk that was previously covered by their SRD units under the non-netted arrangements.

With the increased demand for swap contracts under the netting arrangements, their price is assumed to increase to $100/MWh.[8] The cost of purchasing the additional 46 MW of swap contracts across both retailers is $4,600. The total cost to the market of managing the same physical position increases from $12,000 under the current framework to $16,600 under the proposed netting approach. Even when considering the $1,200 of negative residues that will not be incurred through TUOS, costs are $4,600 higher under the netting approach to residues compared to the current arrangements (see table 3 below).

Table 3: Costs and benefits to the market under non-netted and netted SRD units

Cost/benefit	Non-netted SRD units	Netted SRD units
Negative IRSR (through TUOS)	-$1,200	$0
SRA proceeds	$2,128*	$1,357**
TUOS offset	**$928**	**$1,357**
Cost of SRD units	-$2,128*	-$1,357**
Cost of swaps***	-$10,800***	-$16,600***
Overall cost to market	**-$12,000**	**-$16,600**

*Assuming the average $0.76 of auction proceeds per $1 SRD unit payout from historical data during non-netting arrangements.[9] More details on this in section 2.3.5 below.
**Assuming the average $0.63 of auction proceeds per $1 SRD unit payout from historical data during netting arrangement from Q2 2004 to Q2 2010.[10] More details on this in section 2.3.5 below.
***Assuming a cost of $90/MWh for swaps under the non-netted arrangements and $100/MWh under the netting arrangements, as increased demand for alternative hedging instruments may increase their prices.[11]

This is a simplified but realistic example demonstrating that the value lost through netting residues creates additional costs and risks for the market that will likely flow through to end-users. Consumers bear the cost of negative residues regardless of who is directly allocated the liability, noting that this cost is generally seen as being an efficient outcome of a least cost market dispatch. Netting simply obscures

[8] ASX Energy, https://www.asxenergy.com.au/. SA swap contract prices range from $90-$105/MWh and NSW swap contract prices range from $110-$125/MWh on average.
[9] AER, Quarterly settlement residues and settle residue auction proceeds, Q3 2010 – Q1 2024, https://www.aer.gov.au/industry/registers/charts/quarterly-settlement-residues-and-settlement-residue-auction-proceeds
[10] AER, Quarterly settlement residues and settle residue auction proceeds, Q2 2004 – Q2 2010, https://www.aer.gov.au/industry/registers/charts/quarterly-settlement-residues-and-settlement-residue-auction-proceeds
Prior to Q2 2004, the auction proceeds where even poorer under the netted arrangement, however, this may be attributed to the infancy of the SRA market and a lack of value/liquidity so has been omitted for the purposes of this assumption, consistent with the period of historical used by the AEMC in the Directions Paper.
[11] ASX Energy, https://www.asxenergy.com.au/. SA swap contract prices range from $90-$105/MWh and NSW swap contract prices range from $110-$125/MWh on average.

Origin Energy Limited ABN 30 000 051 696 • Level 32, Tower 1, 100 Barangaroo Avenue, Barangaroo NSW 2000
GPO Box 5376, Barangaroo NSW 2000 • Telephone (02) 8345 5000 • Facsimile (02) 9252 9244 • www.originenergy.com.au

the cost by embedding it in auction dynamics and risk premiums, while removing access to effective hedging tools for market participants to manage risks on behalf of consumers. This trade-off is not neutral — it erodes cost visibility, increases inefficiency, and reduces consumer benefit.

2.2 Broader market impacts

Beyond the specific example provided above, the netting approach has significant implications for the broader market. With SRD units becoming less effective as a hedging tool, demand for alternative instruments such as swaps and caps would be expected to increase—putting upward pressure on their prices and reducing their accessibility. This would be particularly problematic in regions like South Australia, where liquidity in hedging markets is already limited.[12] The resulting constraints on effective risk management will discourage inter-regional trade and undermine Project EnergyConnect's (PEC's) broader objective of facilitating more efficient inter-regional trading and enhancing competition across the NEM.[13]

The diminished value of SRD units under the proposed netting approach will also affect the contracting strategies of retailers and other liable entities that purchase electricity directly from the wholesale market to meet their obligations under the Retailer Reliability Obligation (RRO).

Under the RRO, if a reliability instrument is triggered, liable entities must enter into sufficient qualifying contracts to cover their share of expected peak demand and report their net contract position (NCP) to the AER. Inter-regional contracts can be used to hedge load in a different region from where it is consumed, but these contracts are exposed to basis risk if interconnectors bind and regional prices diverge.[14]

To manage this risk and support the firmness of interregional contracts, participants may purchase SRD units. For an inter-regional contract to qualify under the RRO, it must be supported by SRD units covering all or part of the reliability gap period. Liable entities using such arrangements must assess the firmness of the combined instrument via a bespoke methodology. [15]

If the value and predictability of SRD units are reduced by the netting approach, the firmness of these hedges may also be compromised. This has implications for how entities calculate and report their NCP and may result in some participants no longer satisfying their obligations under the RRO. Retailers and other liable entities will need to reassess their firmness methodologies and may be required to contract additional cover—potentially at higher cost or with limited availability. In some cases, this could reduce the willingness of participants to serve retail load in certain regions, particularly where alternative hedging options are unavailable or uneconomic.

Origin recommends the AEMC consider the potential implications of netting and reduced SRD unit firmness in the context of the proposed introduction of the Firm Energy Reliability Mechanism (FERM) by the South Australian Government. FERM will impose an additional Reliability Obligation on retailers and self-contracting large loads in South Australia to hold sufficient contracts to manage peak demand at all times. Reduced SRD unit firmness could undermine the ability of liable entities to meet this obligation, particularly when relying on inter-regional contracting strategies.[16]

---

[12] Australian Energy Regulator (AER), Wholesale electricity market performance report 2024, p.131, https://www.aer.gov.au/system/files/2024-12/Wholesale%20electrcity%20market%20performance%20report%20-%20December%202024.pdf

[13] Transgrid, Benefits of Project EnergyConnect, p4 & p87-92, https://www.aer.gov.au/system/files/TransGrid%20-%20A.11B%20-%20FTI%20Consulting%2C%20Benefits%20of%20Project%20EnergyConnect%20-%20June%202020.pdf

[14] AER, Retail Reliability Obligation, https://www.aer.gov.au/industry/retail/reliability-obligation

[15] AER, Retailer Reliability Obligation – Interim Contract and Firmness Guidelines, p34-35, https://www.aer.gov.au/documents/aer-retailer-reliability-obligation-interim-contracts-and-firmness-guidelines-updated-october-2024-0

[16] Government of South Australia, Firm Energy Reliability Mechanism, https://www.energymining.sa.gov.au/public-consultations/recent-consultations/firm-energy-reliability-mechanism

Origin Energy Limited ABN 30 000 051 696 • Level 32, Tower 1, 100 Barangaroo Avenue, Barangaroo NSW 2000
GPO Box 5376, Barangaroo NSW 2000 • Telephone (02) 8345 5000 • Facsimile (02) 9252 9244 • www.originenergy.com.au

2.3 Assumptions in the Directions Paper may understate the risks and costs of netting

To determine the most appropriate policy approach, it is essential that the AEMC clearly articulate and evidence how the proposed netting arrangement would deliver better outcomes for consumers and support the principles of market efficiency. However, the Directions Paper makes several key assumptions to justify its preferred approach—many of which are either difficult to ascertain with a high level of certainty or cannot be verified until PEC is operational.

2.3.1 Netting does not protect consumers from the risk of negative residues

The Direction Paper outlines "*that negative IRSR in a transmission loop represented a significant risk to consumers*"[17] and the "*the Commission considers the netting off approach would effectively manage the risk of negative IRSR.*"[18] While we agree that negative residues is a cost borne by consumers, negative residue itself is not a "risk" that can be eliminated; rather, the key issue is how to allocate it efficiently. Consumers will bear the cost of negative residues regardless of allocation method and this is recognised through the use of clamping to limit consumers' exposure to negative residues.

The issue with the netting approach in particular is that it also introduces additional costs to consumers, that could otherwise be avoided through alternative allocation methods. If aggregate loop flows are positive—as recognised in AEMO's proposal to not clamp interconnectors in these cases—it suggests that the overall system benefits outweigh the negative residues incurred on individual limbs. The Commission also "*remains of the view that negative IRSR in net positive loop cases should not be clamped, because it is the result of efficient dispatch, and clamping an efficient outcome would undermine the intended benefits for PEC.*"[19] In this context, negative residue is an inevitable cost of the pricing structure of the NEM. From this perspective, the policy focus should be on ensuring these costs are allocated to reflect the broader benefits of loop flows, while preserving risk management tools such as SRD units.

2.3.2 Netting is not the lowest cost approach to managing negative residues

While the *"Commission considers that [the netting] approach best manages negative IRSR accruing on an arm of a loop in net positive cases at the lowest cost,"*[20] the Directions Paper does not provide an evidence-based comparison of the full costs and trade-offs across alternative options—including the proposed netting approach.

As outlined earlier, netting introduces material consumer costs through the weakening of SRD units as a hedging tool, reduced market liquidity and higher risk management premiums. Despite the significance of these impacts, the Directions Paper does not include quantitative modelling or a transparent evaluation of policy alternatives against the assessment framework.

We continue to urge the AEMC to undertake a thorough and transparent assessment of all viable options. In our view, netting should not proceed in the absence of this analysis.

2.3.3 Netting does not improve risk management

The suggestion that netting "*would place risks with the parties best placed to manage them*"[21] and improves efficient risk allocation ignores the fact that it degrades SRD unit firmness, increasing uncertainty and reducing their utility as a hedge. By allocating negative residues to market participants—while simultaneously reducing their access to or the reliability of the tools they use to manage inter-

[17] AEMC, Direction Paper—IRSR arrangement for transmission loops, p.15, https://www.aemc.gov.au/sites/default/files/2025-06/ERC0386%20IRSR%20arrangements%20for%20transmission%20loops%20-%20Directions%20paper.pdf
[18] Ibid. p.17
[19] Ibid. p.6
[20] Ibid. p.7
[21] Ibid. p.46

Origin Energy Limited ABN 30 000 051 696 • Level 32, Tower 1, 100 Barangaroo Avenue, Barangaroo NSW 2000
GPO Box 5376, Barangaroo NSW 2000 • Telephone (02) 8345 5000 • Facsimile (02) 9252 9244 • www.originenergy.com.au

regional price risk—the AEMC's proposal risks creating a significant misalignment between those who bear the risk and their ability to control or mitigate it.

2.3.4 Effective price risk management tools are necessary for inter-regional trading

Where effective hedging is unavailable or prohibitively expensive, the Commission suggests that market participants "*might remain exposed to inter-regional price risk*."[22] In practice, however, inter-regional trade depends on participants being able to actively manage the financial risk associated with regional price separation. Prudent participants will not take on material price exposure they cannot hedge within risk limits and will therefore avoid inter-regional trades where effective hedging is not available.

If the value of SRD units is diminished through netting, participants will need to rely more heavily on alternative hedging instruments—primarily caps and swaps—which are typically less targeted and more costly. As more participants seek to use the same limited pool of alternatives, prices for these instruments are likely to rise, further increasing the cost to serve consumers.

This dynamic will discourage inter-regional trading, reduce access to lower-cost generation across the NEM, and weaken competitive pressure—particularly in regions like South Australia, where liquidity in alternative hedging products is already limited.[23]

2.3.5 Non-netted SRD units provide value to consumers

An important consideration in assessing the consumer impacts of netting is the historical relationship between SRA proceeds and settlement residues. This relationship provides a clear, market-based signal of the perceived risk and value of SRD units under different policy arrangements.

Analysis by the Energy Reform Implementation Group (ERIG) in 2007 found that between 1999 and 2006—when netting was in place—settlement residues exceeded auction proceeds by approximately 75% on average.[24] This gap likely reflects the additional risk premium participants applied due to the diminished firmness and higher uncertainty of SRD units under netting arrangements. In contrast, following the AEMC rule change to remove netting in 2010 and allocate all positive residues to SRD unit holders (effective from Q3 2010),[25] the gap narrowed to 32%—demonstrating increased market confidence in SRD units as a more predictable and effective hedging tool.

While the AEMC notes in the Directions Paper that "*these decisions [to remove netting arrangements] were made in a different context*" and that the analysis undertaken may no longer be relevant in loop flow arrangements, we consider the opposite to be true. With the introduction of PEC and AEMO's proposal to not clamp negative residues when loop flows are net positive, negative residues could become more frequent and more volatile. Importantly, until Stage 2 of PEC is online, with loop flows observed, it is difficult to ascertain how frequent and how volatile these will be, with a high level of confidence.

Reintroducing netting under these conditions would increase the risk profile of SRD units, further weakening their value and potentially creating a larger risk premium than observed even in the pre-2010

[22] AEMC, Directions Paper—IRSR arrangement for transmission loops, p.19, https://www.aemc.gov.au/sites/default/files/2025-06/ERC0386%20IRSR%20arrangements%20for%20transmission%20loops%20-%20Directions%20paper.pdf
[23] Australian Energy Regulator (AER), Wholesale electricity market performance report 2024, p.131, https://www.aer.gov.au/system/files/2024-12/Wholesale%20electrcity%20market%20performance%20report%20-%20December%202024.pdf
[24] Energy Reform Implementation Group (ERIG), Energy Reform, p.232, https://www.energy.gov.au/sites/default/files/energy-reform-way-forward-aust-final-report-exec-summary-2007_0.pdf
[25] AEMC, Final Rule Determination—Arrangements for Managing Risks associated with Transmission Network Congestion, https://www.aemc.gov.au/sites/default/files/content/f3618cc5-f037-49d2-8293-25accfd3942d/Notice-of-Final-Rule-Determination-and-Rules-as-Made-13-August-2009.PDF

Origin Energy Limited ABN 30 000 051 696 • Level 32, Tower 1, 100 Barangaroo Avenue, Barangaroo NSW 2000
GPO Box 5376, Barangaroo NSW 2000 • Telephone (02) 8345 5000 • Facsimile (02) 9252 9244 • www.originenergy.com.au

period. This would diminish the benefit flowing to consumers from SRA proceeds and could outweigh gains from reduced negative residue allocations.

Origin also recommends that the AEMC provide a more transparent and granular presentation of the data comparing SRA proceeds to SRD unit payouts. In both the Draft Determination[26] and the Directions Paper, the Commission states that consumers have received an average of $0.72 in SRA proceeds for every $1 paid to SRD unit holders over the 20 years from Q2 2004 to Q1 2024. However, this figure masks the material differences between the netted and non-netted periods:

- **Q2 2004 to Q2 2010 (netted):** SRA proceeds were $0.63 per $1 of positive residue.
- **Q3 2010 to Q1 2024 (non-netted):** SRA proceeds improved to $0.76 per $1.

Alternatively, using the method adopted in the ERIG Energy Reform Paper,[27] the risk premium was approximately 60% during the period between 2004 and 2010, under netting arrangements, and reduced to 32% under the current arrangements—clearly demonstrating that SRD units have become more effective and more efficient as a hedging tool since the removal of netting.

If netting is reintroduced at a time when negative residues are likely to be larger and more frequent, and in any case, will carry a high level of uncertainty until loop flows can be observed, the associated risk premium will increase, reducing SRA participation and resulting in lower proceeds. These costs must be factored into any assessment of the proposed rule change and the net benefits to consumers.

3. Process and Consultation Gaps

The Directions Paper introduces a fundamentally different policy direction—netting positive and negative residues. We understand this shift is to address a broader problem definition. The Draft Determination focused on addressing how best to allocate the costs of negative residues across TNSPs, while the Directions Paper examines the expanded issue of how best to allocate negative residues across all relevant participants.

While it is within the Commission's remit to make more preferable rules, this shift has not been subject to adequate stakeholder consultation, analysis, or engagement. Importantly, stakeholders have not been given a meaningful opportunity to consider or respond to this new proposal or to weigh it against viable alternatives through an Options Paper, for example. The decision to expand the problem definition late in the process—combined with a compressed three-week consultation period—has significantly limited the ability of stakeholders to engage constructively and provide well-informed feedback. Without sufficient consultation or evidence, the late-stage shift in direction and problem definition undermines confidence in the process and risks producing suboptimal outcomes for the market and consumers.

Alternative options raised throughout the process—such as an AEMO-managed holding account, changes to TNSP cost recovery timing, or voluntary negative residue auctions—have not been transparently assessed or consulted on. The lack of detailed modelling, stakeholder engagement, and clear problem definition significantly undermines confidence in the current direction of the rule change process.

To be clear, Origin does not dispute that cashflow challenges may arise for TNSPs. However, if that is the problem to be addressed, then targeted solutions—such as more timely cost recovery, revised settlement cadences, or AEMO-facilitated recovery mechanisms—would better resolve the issue without compromising the value of SRD units or distorting the risk allocation framework. These alternatives have not been given proper consideration in the Directions Paper.

---

[26] AEMC, Draft Determination—IRSR arrangement for transmission loops, https://www.aemc.gov.au/sites/default/files/2024-12/ERC0386%20IRSR%20arrangements%20for%20transmission%20loops%20-%20Draft%20determination.pdf

[27] ERIG, Energy Reform, p.232, https://www.energy.gov.au/sites/default/files/energy-reform-way-forward-aust-final-report-exec-summary-2007_0.pdf

Origin Energy Limited ABN 30 000 051 696 • Level 32, Tower 1, 100 Barangaroo Avenue, Barangaroo NSW 2000
GPO Box 5376, Barangaroo NSW 2000 • Telephone (02) 8345 5000 • Facsimile (02) 9252 9244 • www.originenergy.com.au

4. Origin does not support the proposal to net positive and negative residues

Given the above, Origin recommends that the Commission:

- Maintain the integrity of SRD units by reverting to the Draft Determination or adopting AEMO's original proposal; and

- Defer broader concerns around SRA design and consumer risk exposure to a future, well-scoped IRSR review following a sufficient period of PEC operation if the AEMC remains concerned about the ongoing value of SRAs.

This approach is more aligned with the narrow issues initially identified through the rule change process and more likely to deliver efficient outcomes in the long-term interests for consumers and the market. A future review provides a more appropriate forum to evaluate broader issues comprehensively, with the benefit of actual experience from PEC loop flows and stakeholder consultation. Transparent scoping of that review—including clear problem statements, modelling, and engagement—will allow industry to provide meaningful input and support robust outcomes. Such a review should be comprehensive in scope—examining the full suite of interconnectors—and explicitly evaluate both the direct and indirect consumer benefits provided by SRD units.

5. Feedback on Netting Approach Design

If the AEMC proceeds with a netting approach, Origin's preferred option is the Directions Paper's proposed method of netting negative from positive residues in proportion to positive residues on other arms of the loop in net-positive cases. While this reduces the correlation of SRD units with inter-regional price separation, it maintains some predictability and consistency. In contrast, alternative netting methods—such as based on net trade—would introduce greater uncertainty and further weaken the value of SRD units.

However, Origin does not support the application of netting in net-negative loop scenarios. AEMO has proposed to retain clamping arrangements in such cases, limiting negative residues to $100,000. These existing measures already cap consumer exposure and provide TNSPs with manageable cashflow outcomes. Applying netting in these scenarios would introduce additional costs to consumers without delivering offsetting benefits. Origin therefore recommends that if netting is pursued, it should be limited to net-positive loop cases. This approach would mitigate some of the impacts on SRD unit value and limit unnecessary disruption to existing market mechanisms.

Additionally, if netting is implemented, the AEMC should clarify how residues will be netted during negative residue management (NRM) periods for interconnectors within the loop. Once an NRM period is triggered and an interconnector is clamped, negative residues on that interconnector may reduce, and the aggregate residue across the loop may become positive—while the clamp remains in place. Clear guidance on how netting of residues will be treated in these scenarios is essential to avoid uncertainty around the potential value of SRD units. In making these clarifications, the AEMC should also consider the NRM process changes currently under consultation by AEMO.[28]

[28] AEMO, Consultation on Automation of Negative Residue Management for the implementation of transmission loops, https://aemo.com.au/consultations/current-and-closed-consultations/automation-of-negative-residue-management-for-the-implementation-of-transmission-loops

Origin Energy Limited ABN 30 000 051 696 • Level 32, Tower 1, 100 Barangaroo Avenue, Barangaroo NSW 2000
GPO Box 5376, Barangaroo NSW 2000 • Telephone (02) 8345 5000 • Facsimile (02) 9252 9244 • www.originenergy.com.au