



INFORMATION

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IRSR arrangements for transmission loops

The AEMC has made a more preferable draft rule

Our draft rule would create a new allocation method for negative inter-regional settlements residue (IRSR) in transmission loops. This draft rule, which is a more preferable rule, seeks to manage the consumer risks of unpredictable negative IRSR by sharing it amongst all looped regions in proportion to regional demand. We made this draft determination and draft rule in response to a rule change request submitted by the Australian Energy Market Operator (AEMO) on 23 February 2024.

We are seeking stakeholder feedback by 30 January 2025.

Project EnergyConnect will create a transmission loop

Project EnergyConnect Stage 2 (PEC) is a new interconnector linking South Australia and New South Wales which is expected to be fully operational in late 2027. Together with the existing interconnectors between New South Wales, Victoria and South Australia, PEC will create the first inter-regional transmission loop in the National Electricity Market (NEM).

PEC will help facilitate the transition to net zero by enabling future renewable projects to connect to the grid and supply energy to multiple regions. It is expected to deliver consumer benefits including increased inter-regional trade, reduced emissions, increased competition, and improved pricing outcomes.

Negative IRSR in transmission loops can support net benefits

IRSR is a surplus or deficit in NEM settlement outcomes which arises when electricity flows between regions with different prices. On 'radial' interconnectors (those that do not form part of a transmission loop), negative IRSR (that is, a settlement deficit) is expected to occur relatively infrequently. AEMO also limits the magnitude of negative IRSR by restricting the flow of electricity over the relevant interconnector, known as 'clamping'.

Negative IRSR is expected to arise more frequently in a transmission loop than it does across radial interconnectors. Specifically, negative IRSR can occur on one or two arms of the loop while the net IRSR for the loop is positive, in a way that supports overall efficient dispatch. This is due to the way that power flows in a transmission loop, and how this interacts with the NEM's regional pricing model. For this reason, the AEMC supports AEMO's intention not to clamp the PEC loop interconnectors when the net IRSR for the loop is positive.

Large and unpredictable negative IRSR could pose financial risks

Under the current rules, negative IRSR is allocated to the transmission network service provider (TNSP) in the importing region. Positive IRSR is auctioned through the settlements residue auction (SRA) process, with auction proceeds allocated to the TNSP in the importing region.

If the current rules were applied to a transmission loop, it could result in a large amount of negative IRSR being allocated to a single region. This would pose a significant risk of bill impacts to electricity consumers in that region. Applying the current arrangements to a transmission loop would also create cash flow risks for TNSPs in the looped regions. That is, TNSPs could experience challenges managing the payment and recovery of negative IRSR, because negative IRSR may be unpredictable and difficult to forecast.

Our draft rule would share the risk of negative IRSR between regions

How the rule would operate

Under the draft rule, negative IRSR that accrues in a transmission loop would be shared amongst all three looped regions in proportion to regional demand. This allocation method would apply regardless of whether net loop IRSR is positive or negative. Regional demand would be measured on a rolling annual basis, updated weekly.

Consistent with the current arrangements, AEMO would recover negative IRSR from the TNSP in each region and TNSPs would recover it from customers via transmission charges.

The draft rule would not make any changes to the allocation of positive IRSR through SRAs, but we intend to explore this in a broader review, outlined below.

The draft rule would commence on 3 July 2025. The new allocation method would begin to be used when AEMO incorporates the transmission loop formed by PEC into the dispatch engine. Based on current timelines, this is expected to be in Q4 2026, at which time PEC will be operating at partial capacity, ahead of ramping up to full capacity by Q4 2027. These dates are subject to change.

Why we made the rule

The draft rule seeks to address the financial risks of negative IRSR by sharing negative IRSR between all regions in the loop (New South Wales, South Australia, and Victoria). We consider that this allocation method would manage risk more effectively than either the current arrangements or AEMO's proposed rule. Further, we consider that allocation by regional demand would align costs with beneficiaries more effectively than other options.

The draft rule, combined with AEMO's intended approach to clamping, would support efficient transmission loop operation and PEC's expected consumer benefits.

We also intend to review SRA arrangements

Beyond this rule change, we intend to review the arrangements for SRAs in 2025-26 subject to our annual prioritisation process. The review would consider whether the current SRA arrangements are in the long-term interests of consumers, for interconnectors both within and outside of a transmission loop.

SRAs are designed to support inter-regional trade by enabling market participants to hedge against the risk of price differences between regions. Inter-regional trade increases competition, which should benefit consumers through lower electricity prices.

However, the current arrangements leave consumers exposed to the entire risk of negative IRSR, because the settlements residue distribution units sold through SRAs allow hedging of only positive IRSR, and not negative IRSR. It is also not clear that the sale of settlements residue distribution units is delivering value to consumers at present. The introduction of a transmission loop could heighten existing issues because it is expected to cause larger amounts of IRSR, both positive and negative.

Next steps

The AEMC requests submissions to the draft determination by 30 January 2025. We will publish a final determination for the rule change on 27 March 2025.

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