30 January 2025

Ms Anna Collyer

Chair

Australian Energy Market Commission

GPO Box 2603

Sydney NSW 2001

Electronic Lodgement: ERC0386

Dear Anna,

AEMC Draft Determination Inter-regional settlements residue arrangements for transmission loops

Energy Networks Australia (ENA) welcomes the opportunity to make this submission in response to the Australian Energy Market Commission's (AEMC) Draft Determination Inter-regional settlements residue arrangements for transmission loops.

ENA represents Australia's electricity transmission and distribution and gas distribution networks. Our members provide more than 16 million electricity and gas connections to almost every home and business across Australia.

The ENA is very concerned that, if implemented, the Draft Determination will result in Transmission Network Service Providers (TNSPs) being required to make significantly greater and more uncertain payments for negative interregional settlement residues (IRSR) arising in transmission loops. These have the potential to be orders of magnitude higher than on radial interconnectors, highly volatile and inherently unforecastable.

While associated negative residues would be proportionally distributed between regions and ultimately recovered from network customers in (Transmission Use of System) TUOS payments, it may take up to two years for full recovery. This leaves TNSPs with an unacceptably high cashflow risk in the intervening period.

The draft rule takes no steps to reduce the magnitude or frequency of negative IRSR but seeks to spread exposure by sharing negative IRSR across all looped regions based on regional electricity demand.

Loop flow between two adjacent regions will involve parallel flow paths where the accrual of both negative and positive IRSR are inextricably linked. In a loop a net flow from Vic to NSW may be made of a direct Vic-NSW flow and one via the Vic-SA then SA-NSW legs. Both the Vic-NSW and SA-NSW legs may have positive IRSR while the Vic-SA one has negative IRSR. The two positives are materially higher due to the negative IRSR on the Vic-SA leg. The draft rule does not propose to net positive and negative IRSR around the loop and instead gifts the total positive IRSR windfall to

participants and traders while the associated negatives are ultimately paid by consumers via higher TUOS in a later year and exacerbates unnecessarily the volatility in TUOS.

The Draft Determination compounds concerns raised with the AEMC during the recent *Improving security frameworks for the energy transition* rule change consultation and represents a worrying trend that TNSPs are increasingly exposed to large and volatile cashflow swings that are linked to wholesale market outcomes. Stable and largely predictable cash flows underpin the regulated rates of return which in turn support stable network pricing outcomes for energy consumers. TNSPs are not well placed to manage this risk and have no ability to mitigate exposure.

To date, TNSP exposure to negative IRSR has been largely manageable, because the associated values were low – negative IRSR arose infrequently and the exposure was physically limited by AEMO procedures which clamped interconnector flows when they occurred. With the commissioning of Project Energy Connect, the introduction of loop flows within the NEM will produce a step-change increase in the frequency, value and volatility of negative IRSR that will arise. Related cashflows and week-to-week variability have the potential to become very large relative to TNSP revenues.

The proposed approach to sharing costs amongst TNSPs in NSW, SA and Vic according to total energy demand will smooth payments to some extent, but does not sufficiently mitigate volatility and related cashflow risks because the underlying quantum to be shared is still variable and unpredictable. We also note that exposure to negative IRSR would still be very concentrated, with over half to be allocated to NSW as the largest region. This is a change to the current settlement approach across the three regions and will have an impact on TNSPs and consumers as it rolls into the transmission charges. Given the quantum is variable this will have flow on impacts on large transmission connected consumers and distribution connected consumers as there will be a higher annual exposure and also higher volatility year to year for consumers. Some regions have the potential to be better off and others worse off once Project Energy Connect is fully commissioned.

Market modelling commissioned by AEMO implies that annual negative IRSR in the loop could be around $50 million in 2030, with year-to-year variability of up to 300%[1]. The Draft Determination also presents a hypothetical scenario in which almost $100 million in negative IRSR could accrue over an 8-hour period in extreme market conditions, which would be practically impossible to forecast. Presumably if the extreme conditions occur once then it is reasonable to assume that such events may cluster further exacerbating the cashflow issues. Cashflow swings of this magnitude would present acute challenges for TNSPs, even if shared on a proportional basis. TNSPs would require additional highly flexible debt facilities to call upon at short notice, for up to two years until full cost recovery is achieved. Establishing and calling upon these facilities would impose additional financing costs on TNSPs, and consideration needs to be given to how these costs would be accounted for and recovered under any rule change. An ensuing risk with further associated costs would be if volatility in negative IRSR led to TNSPs being drawn into AEMO's prudential framework, and to the extent possible, the AEMC should clarify that this should not occur.

Volatile cash flows also have the potential to adversely impact existing debt covenants and credit ratings for TNSPs, and exacerbate financability challenges for major new transmission developments. This may ultimately delay the development and/or increase the costs of these projects, which would be a poor outcome for energy consumers and the market, given that these projects will produce considerable economic benefits and have been identified by AEMO in the Integrated System Plan as crucial for the energy transition.

In summary, we consider that the Draft Determination does not adequately address risks to the sustainable financial operation of TNSP businesses, and their flow-on consequences. We would

[1] Acil Allen (2023) *Modelling the settlement effects of Project Energy Connect Final Report*

support the AEMC undertaking and publishing market modelling to quantify the materiality and volatility of IRSR for all stakeholders before proceeding with a Final Determination.

Consider options to reduce associated cashflow risks and achieve better outcomes for consumers

ENA also propose the following options (or a combination thereof) which would reduce associated risks and achieve better consumer outcomes:

- **Netting off positive IRSR from negative IRSR that occur as part of related loop flows in the same trading interval.** The Draft Determination proposes to allocate all negative IRSR that arise in transmission loops to TNSPs (and ultimately consumers), even when these arise from flows on one interconnector link that directly support flows on another interconnector that create positive IRSR, and there are net positive residues in the loop overall. It is not reasonable that energy consumers should ultimately bear full exposure to negative IRSR but only partial and indirect receipt of the benefits of the corresponding positive IRSR (via Settlement Residue Auction proceeds). This approach also dramatically increases the frequency, quantum and volatility of IRSR to be allocated to TNSPs, and the associated financing costs and cashflow risks. The ENA considers (at most) only *net* negative settlement residues be allocated proportionally to TNSPs, and consumers.
- **Establishing a working capital facility managed by AEMO to manage intra-year cashflow volatility.** A similar facility was recently established by the UK NESO (power system operator) to manage the cashflow risk arising from the difference in forecast and actual real time balancing charges (BSUoS) which can be volatile and unpredictable, and which are ultimately recovered from consumers in regulated tariffs. Such a facility could fully recover negative IRSR costs from TNSPs, but would align recovery with TUOS revenue receipts, and manage cashflow exposures in the interim. Settlements Residue Auction proceeds could be paid into such a fund to support its liquidity.
- **Setting an upper-limit on the level of negative IRSR that can accumulate in a given monthly or annual period to create an exposure threshold for impacted parties.** This could be achieved in several ways (such as administered pricing arrangements, interconnector clamping, or reallocating further negative IRSR that accumulate). This would recognize the impracticality of allocating an effectively uncapped financial risk to any business without the ability to mitigate or hedge it.

The options above would better manage the intra year *volatility* for TNSPs and would assist in reducing the *quantum* of IRSR paid for by TNSPs, both of which are ultimately borne by consumers. These matters appear more in the long-term interests of consumers than starting arrangements around the loop that result in a worse outcome for consumers. Whilst strongly supportive of the review proposed, a review and lengthy rule change will take years to reverse these consumer impacts once the arrangements are embedded in SRAs, if at all. ENA suggests the AEMC consider a 6 month or so delay to making a final determination that is more favourable to consumers.

Any mechanism put in place must allow TNSPs to make reasonably accurate forecasts and enable timely recovery of expected costs, reducing cashflow volatility for TNSPs and seek to reduce volatility for consumers TUOS. ENA notes that if negative IRSR are allocated to TNSPs once the PEC transmission loop is established, this may result in a step-change increase in TUOS.

Support reviewing the effectiveness of the rule implementation and a timely SRA/SRD review

ENA supports a timely SRA/SRD review commencing in 2025. The review should start with a clean slate and cover the treatment of all residues and SRA proceeds and ensure efficient cost recovery

consistent with the pre 2009 arrangements. TNSPs should not be funding market facing arrangements - this was a least worst regrets arrangement developed at a time when market exposure was manageable, and this arrangement should not continue as the NEM evolves and exposes TNSPs to risks that are beyond their capacity to efficiently manage for consumers. Ideally the changes would be implemented before VNI West is commissioned and exacerbates the quantum and impacts on distributions to network consumers.

ENA also support a review of the PEC transmission loop IRSR impacts after it has been in use for two years and assessing the impacts of the future VNI West.

ENA looks forward to working with the AEMC as it finalises the rules for transmission loop settlements. In the meantime, if you would like to discuss this submission, please contact Verity Watson (vwatson@energynetworks.com.au) in the first instance.

Yours sincerely

Dominique van den Berg
Chief Executive Officer