

OUR REF: 20260814 Draft Transmission System Operator Capability Framework

14 August 2026

TSOCF project team
Operations
Australian Energy Market Operator
Level 8, 360 Queen Street
Brisbane QLD 4000

Submitted via email: operations@aemo.com.au

Re: Feedback on Draft Transmission System Operator Capability Framework

ElectraNet welcomes the opportunity to provide this submission on AEMO's Draft Transmission System Operator Capability Framework (**TSOCF**).

ElectraNet has worked closely with AEMO, other Transmission Network Service Providers (**TNSPs**) and industry stakeholders in co-designing this framework to strengthen transmission system operational capability. ElectraNet is pleased that AEMO has confirmed to act as coordinator and steward of the framework.

ElectraNet agrees with the following observations in the TSOCF, summarised as:

- There are of emerging risks to power system security as the National Electricity Market (**NEM**) transitions to a high penetration of inverter-based resources, more variable and operationally complex power system;
- Strengthening transmission system operational capability is essential to support secure, reliable and efficient operation of the NEM through the energy transition; and
- The largest emerging resilience risk is the widening gap between power system complexity and operational capability.

ElectraNet supports the objective of the TSOCF to provide greater clarity and transparency regarding the roles, responsibilities and capabilities of TNSPs. The TSOCF also assists with a common and more comprehensive interpretation of relevant NER obligations in the context of the fast-paced energy transition.

ElectraNet notes that the TSOCF is proposed to be a voluntary guidance framework. Although a voluntary framework is a good starting point, ElectraNet recommend that the TSOCF be strengthened over time by considering:

- Strengthening the governance, e.g. a more definitive review cadence and how TNSPs could trigger a review;
- Provide guidance on forecast states and maturity targets for each Level 2 core capability, for example in the General Power System Risk Review; and

- Provide guidance on People, Process and Technology requirements for each Level 2 core capability.

ElectraNet supports the 8 Level 1 domains and 28 Level 2 core capabilities identified to provide a consistent and transparent view of the operational capabilities needed to support the energy transition and assists AEMO and TNSPs to assess, prioritise and progressively enhance operational coordination, capability and maturity. ElectraNet notes that in some specific cases more detail work is required to clarify expectations, e.g.

- Tiered fallback operations for market suspension or AEMO system failure will have to be carefully considered w.r.t. the allocations of potential liabilities; and
- The National Consumer Energy Resources (CER) Roadmap workstreams are expected to redefine roles for market and power system operations, including distribution system operator arrangements, and the related work on transmission–distribution coordination.

ElectraNet has reviewed the TSOCF Level 2 core capabilities and has feedback on the following:

- L2 ID 1.1 – Limits advice;
- L2 ID 1.2 – Short and medium-term load and generation forecasting;
- L2 ID 1.4 & 2.2 – DER/CER and T–D operational planning integration & Cross-network operational visibility, communications and coordination for real time operations;
- L2 ID 2.7 – Operational preparedness and simulation training; and
- L2 ID 7.1 – Tiered fallback operations for market suspension or AEMO system failure.

These are addressed in turn below.

L2 ID 1.1 – Limits advice

ElectraNet has limited visibility of market constraints, which seem to be expected to feed into limits advice. The scope of this core capability will have to be worked through diligently to clarify expectations how market constraints are expected to be taken into account to determine limitations of the transmission network. Further engagement with AEMO will be required to clarify this core capability description.

L2 ID 1.2 – Short and medium-term load and generation forecasting

ElectraNet recommends that “substation nodes” are added to the “Expectation on TNSPs” description – “TNSPs need the capability to process, interpret and apply forecast inputs from AEMO (and others) at the level of granularity needed for their networks, including relevant boundary points, transmission interfaces and sub-regional locations **and substation nodes**, without duplicating AEMO’s forecasting role....”

ElectraNet understands AEMO has a project underway to forecast down to substation nodes. Forecasts at substation nodes will yield a substantial increase in the accuracy of network studies for planned outages.

L2 ID 1.4 & 2.2 – DER/CER and T-D operational planning integration & Cross-network operational visibility, communications and coordination for real time operations

The National Consumer Energy Resources (CER) roadmap workstreams are expected to redefine roles for market and power system operations, including distribution system operator arrangements, and the related work on transmission–distribution coordination.

Further engagement with various stakeholders, especially SA Power Networks, will be required to define ElectraNet's role regarding distribution system operator arrangements, but also clarifying requirements for SA Power Networks on CER visibility and forecasts. TNSPs are expected to be involved in some of the CER roadmap workstreams which in turn is expected to impact on the TSOFC evolving in future.

L2 ID 2.7 – Operational preparedness and simulation training

Operator training is a key priority for ElectraNet and we welcome it being recognised as a specific core capability. ElectraNet is keen to work with AEMO to share experience and resources to ensure this core capability is developed to its required level of maturity in the near future, which includes NEM simulations involving multiple TNSPs at a time.

L2 ID 7.1 – Tiered fallback operations for market suspension or AEMO system failure

Tiered fallback operations for market suspension or AEMO system failure will have to be carefully considered with respect to the allocations of potential liabilities. ElectraNet considers that the scope of this capability will have to be worked through very diligently to clarify expectations before ElectraNet can commit to specific arrangements.

Yours sincerely

Alex Trento
Executive Network