

Transitional Services Guideline

Prepared by:	AEMO Operations & System Design	
Version:	1	
Effective date:	22 November 2024	
Status:	DRAFT	
Approved for distribution and use by:		
Approved by:	Michael Gatt and Merryn York	
Title:	Executive General Manager Operations and Executive General Manager System Design	
Date:		

aemo.com.au

New South Wales | Queensland | South Australia | Victoria | Australian Capital Territory | Tasmania | Western Australia Australian Energy Market Operator Ltd ABN 94 072 010 327



Contents

Curr	ent version release details	2
1.	Introduction	3
1.1.	Purpose and scope	3
1.2.	Definitions and interpretation	3
1.3.	Related documents	4
2.	Procurement process	4
2.1.	Documents to procure transitional services	5
2.2.	Procurement options	5
2.3.	Process considerations	6
2.4.	Competitive tender minimum requirements	7
2.5.	Direct request for offer process	8
2.6.	Unsolicited offers	8
2.7.	Selection of transitional services to meet the Transitional Services Procurement Objective	
	(TSPO)	9
2.8.	Technical capability	12
2.9.	Further relevant procurement requirements of processes	13

Tables

Table 1	AEMO's guidance for selecting a suitable procurement process	. 7
Table 2	Examples of interrelated factors within the Transitional Services Procurement Objective	. 9
Table 3	Factors AEMO will consider in relation to each of Type 1 and Type 2 services	10

Figures

Figure 1	Documents relevant to procurement of transitional services	5
----------	--	---

Current version release details

Version	Effective date	Summary of changes
1	1 December 2024	First version.



1. Introduction

1.1. Purpose and scope

This is the Transitional Services Guideline made under clause 3.11.11(e) of the National Electricity Rules (NER) (Guideline).

This Guideline has effect only for the purposes set out in the NER. The NER and the National Electricity Law prevail over this Guidelines to the extent of any inconsistency.

1.2. Definitions and interpretation

1.2.1. Glossary

Terms defined in the National Electricity Law and the NER have the same meanings in this Guideline unless otherwise specified in this clause.

Terms defined in the NER are intended to be identified in this Guideline by italicising them, but failure to italicise a defined term does not affect its meaning.

The words, phrases and abbreviations in the table below have the meanings set out opposite them when used in this Guideline.

Term or acronym	Meaning
IBR	inverter-based resources
ITT	invitation to tender
ISF Rule	National Electricity Amendment (Improving security frameworks for the energy transition) Rule 2024
NER	National Electricity Rules
NMAS	non-market ancillary service
NSCAS	network support and control ancillary service
NSP	Network Service Provider
SRAS	system restart ancillary service
Statement of Security Need	The statement AEMO is required to publish under NER 3.11.12
transitional services (TS)	Defined in NER Chapter 10 as a service provided by <i>plant</i> , equipment or <i>facilities</i> to meet a <i>power system security</i> need as a result of the transition to a low- or zero-emissions power system
Transitional Services Objective (TSO)	Has the meaning in NER 3.11.11(a)
TNSP	Transmission Network Service Provider
Transitional Services Procurement Objective (TPSO)	Has the meaning in NER 3.11.11(c)
Transitional Services Provider (TSP)	Defined in NER Chapter 10 as a person who agrees to provide one or more <i>transitional</i> services to AEMO under an <i>ancillary services agreement</i>
transitional services unit (TSU)	Defined in NER Chapter 10 as a <i>production unit</i> registered with AEMO under NER 3.11.11(n)



1.2.2. Interpretation

The principles of interpretation set out in Schedule 2 of the National Electricity Law apply to this Guideline.

1.3. Related documents

Title	Location
System Restart Ancillary Services (SRAS) Guideline	https://aemo.com.au/energy-systems/electricity/national-electricity-market- nem/system-operations/ancillary-services/system-restart-ancillary-services- guideline
Network Support and Control Ancillary Services (NSCAS) Guideline	https://aemo.com.au/energy-systems/electricity/national-electricity-market- nem/system-operations/ancillary-services/network-support-and-control- ancillary-services-procedures-and-guidelines
Provisional Security Enablement Procedures	https://aemo.com.au/en/energy-systems/electricity/national-electricity-market- nem/system-operations/power-system-operation/power-system-operating- procedures

1.3.1. The Transitional Services Procurement Objective

NER 3.11.11(f) references the *Transitional Services Procurement Objective* (TSPO). This is defined in NER 3.11.11(c), which provides that, if AEMO identifies a need to acquire *transitional services*, AEMO must use reasonable endeavours to acquire *transitional services* to:

- (1) contribute to achieving emissions reductions targets;
- (2) achieve and maintain power system security;
- (3) minimise the costs of transitional services to end users.

2. Procurement process

This Guideline outlines AEMO's procurement process for acquiring *transitional services* and includes:

- guidance on the factors that AEMO must take into account when making a decision to follow a particular type of procurement process to acquire *transitional services* to meet the TSPO (see Sections 2.1 and 2.2);
- a process for AEMO to follow for contacting a potential *Transitional Services Provider* (TSP) to negotiate the provision of *transitional services* without a competitive tender process (see Section 2.3);
- a competitive tender process to be used where practicable when acquiring *transitional services* (see Section 2.4);
- a process for a potential TSP to contact AEMO to offer the provision of *transitional services* without a competitive tender process, which offer AEMO is not obliged to accept (see Section 2.5);
- guidance on how AEMO will achieve the TSPO (see Section 2.7): and

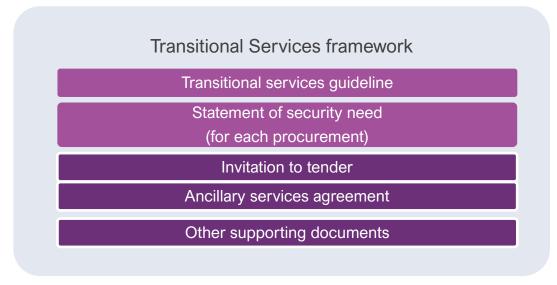


• any requirements for a TSP to demonstrate the relevant *plant* or equipment's capability to provide *transitional services* (see Section 2.8).

2.1. Documents to procure transitional services

Figure 1 below outlines the documents relevant to procurement of *transitional services*.





To the extent possible, AEMO has aligned this Guideline with other existing non-market ancillary service (NMAS) Guidelines¹ for the purpose of consistency, efficiency, and reduced complexity for both AEMO and industry.

2.2. Procurement options

Under the National Electricity Amendment (Improving security frameworks for the energy transition) Rule 2024 (ISF Rule)², AEMO has been given a new power to procure NMAS that fall outside the scope of the services previously available under the NER for *power system security*. These services are referred to in the ISF Rule as 'transitional services', and the new provisions in the NER dealing with the procurement and enablement of these services are referred to as the 'transitional services framework'.

Two types of *transitional services* are introduced by the ISF Rule:

• Type 1 Services: NER 3.11.11(b)(1) defines these as

¹ See https://aemo.com.au/-/media/files/electricity/nem/security_and_reliability/ancillary_services/sras-guideline-guidelines-2017.pdf?la=en.

² See <u>https://www.aemc.gov.au/rule-changes/improving-security-frameworks-energy-transition.</u>



- the services are required for power system security and cannot otherwise be provided by an inertia network service, a system strength service, a market ancillary service or a NMAS.
- Contracts for the procurement of Type 1 services may be up to three years in length and must not have a term that extends past 1 December 2029.
- Type 2 Services: NER 3.11.11(b)(2) defines these as
 - the services are acquired for the purpose of trialling new technologies, or a new application of existing technologies, for the management of power system security in a low- or zero-emissions power system where the particular application of the technology employed through the transitional services has not been used to provide services to manage power system security prior to 28 March 2024.
 - Contracts for the procurement of Type 2 services may be up to 10 years in length and must not have a term that extends past 1 December 2039.

AEMO may procure Type 1 or Type 2 *transitional services* in the circumstances set out in Table 3 and Section 2.7.

2.3. Process considerations

Under NER 3.11.11(f), AEMO may procure *transitional services* using one or a combination of two processes:

- competitive tender; or
- direct request for offer.

AEMO may also consider unsolicited offers for the provision of *transitional services* without a competitive tender process.

If AEMO is procuring *transitional services* for multiple needs in the same timeframe, different procurement processes can apply for each need.

This section provides guidance on the factors AEMO will take into account when making a decision to follow a particular type of procurement process to acquire *transitional services* to meet the TSPO, as required by NER 3.11.11(f)(2).

Flexibility is provided to select alternative procurement processes when implementing a competitive approach is deemed impracticable. AEMO considers this flexibility is important in the case of both types of *transitional services*, in that:

- Type 1 security needs are likely to only be able to be met by specific assets, therefore limiting the practical usefulness of a full competitive tender process; and
- Type 2 services may involve trialling of technologies that may only be available by specific technologies and/or one or more TSPs.

Contracts for Type 2 services are an opportunity to foster innovation. Technology providers should be incentivised to put forward innovative proposals by being assured of some protection of unique ideas prior to contract award.



In general, AEMO will select a suitable procurement process for *transitional services* following the guidance outlined in the below table.

Transitional service type	Circumstances where AEMO will procure transitional services using an appropriate competitive tender process	Circumstances where AEMO will directly request one or more TSPs to make an offer to provide transitional services
Туре 1	 AEMO considers the available <i>transitional</i> services from competing <i>Transitional</i> Service Providers is likely to exceed the level required to meet the identified security need; or Having regard to the need for the procurement process, any specific requirements necessary to meet the security need could be provided by several competing TSPs. 	 Neither of the conditions for a competitive tender process apply; or there is insufficient time to run a competitive tender to address an urgent security need that is unable to be met via other mechanisms; or the security need cannot be met unless AEMO acquires <i>transitional services</i> from specified system security units owned by that TSP(s).
Туре 2		 Neither of the conditions for a competitive tender process apply; or there is insufficient time to conduct a competitive tender for a <i>transitional service</i> to address an identified security need; or sharing details of the new technology or application being trialled is considered to pose a risk to the negotiation process or discourage future innovation; or the new technologies, or new application of existing technologies, cannot be procured unless AEMO acquires such <i>transitional services</i> from specified system security units owned by that TSP(s).

Table 1 AEMO's guidance for selecting a suitable procurement process

2.4. Competitive tender minimum requirements

AEMO is required to use a competitive tender process where practicable when acquiring *transitional services*, as per NER 3.11.11(f)(1).

As a competitive tender must be open to any prospective TSP to meet the technical and other requirements set out in the relevant Statement of Security Need, AEMO has aligned the minimum requirements for a competitive tender process for *transitional services* with those for existing NMAS procurement.

AEMO will publish, alongside its Statement of Security Need, an invitation to tender (ITT) document on its website. This document specifies the tender process steps and timelines, and the information to be submitted in or with a tender offer, which includes:

- forms for the submission of technical information or prices;
- if applicable, the period within which a test must have been conducted prior to the date of the offer, or may be conducted after the offer;
- the proposed duration of the ancillary services agreement for the transitional service;
- any information that may be required from a Network Service Provider (NSP) or other third party;
- the minimum validity period of the offer;
- any criteria or principles that AEMO proposes to apply to the evaluation of offers, in addition to those specified in this Guideline.



As soon as reasonably practicable after publication of the ITT, AEMO will notify those potential TSPs that, to the best of AEMO's knowledge, would be capable of providing the relevant *transitional services*.

2.5. Direct request for offer process

NER 3.11.11(f)(4) requires this Guideline to include a process for AEMO to follow for contacting a potential TSP to negotiate the provision of *transitional services* without a competitive tender process. AEMO's direct request for offer process for *transitional services* is aligned to the equivalent process for the procurement of SRAS³.

Except in the case of Type 2 services, where sharing information with other service providers may pose a risk to the negotiation process or discourage future innovation, if AEMO decides to procure *transitional services* by directly requesting offers, AEMO must issue a request to all potential TSPs that:

- to the best of AEMO's knowledge, would be capable of providing *transitional services* for the specific security service required; and
- would assist in meeting the security requirement as set out in the relevant Statement of Security Need.

The request must specify the offer process and timelines, and the information to be submitted in or with an offer.

AEMO will set out its reasons for not using a competitive process for any direct procurement within the relevant Statement of Security Need, as required by NER 3.11.12(a)(3).

2.6. Unsolicited offers

NER 3.11.11(f)(5) requires this Guideline to include a process for a potential TSP to contact AEMO to offer the provision of *transitional services* without a competitive tender process. AEMO is not obliged to accept an unsolicited offer.

This process is described as:

- A potential TSP may at any time submit to AEMO an expression of interest or offer to provide *transitional services*.
- AEMO may develop and publish, on its website, a form for the submission of expressions of interest or offers.
- If no form is published, a potential TSP must include in its expression of interest or offer sufficient information to allow AEMO to assess the technical capability of the proposed *transitional service* and any other applicable requirements, including how the proposed service will meet the Transitional Service Procurement Objective. An expression of interest or offer is valid for the period specified by the potential TSP in its submission.
- If no period is specified, AEMO must assume it remains valid for two years.

³ See https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/system-operations/ancillary-services-guideline.



- AEMO:
 - is not obliged to consider or assess an expression of interest or offer submitted under this clause;
 - may at any time request further information from a potential TSP to assess the capability of a *transitional service* proposed; and
 - may, but is not obliged to, accept any offer to provide transitional services.

2.7. Selection of transitional services to meet the Transitional Services Procurement Objective (TSPO)

NER 3.11.11(f)(3) states that this Guideline must provide guidance on how AEMO will achieve the TSPO. This section provides guidance on how AEMO will balance each of the objectives of contributing to achieving emissions reductions targets, achieving and maintaining power system security, and minimising the costs of *transitional services* to end users. AEMO may find it most appropriate to balance security, cost and emissions reductions on a case-by-case basis when comparing procurement options.

The way each of these factors is considered by AEMO may vary depending on the security need and type of *transitional service*.

Examples of the interrelated and intertemporal nature of each of these factors in the TSPO are provided in the below table.

Transitional service	Example
Туре 1	"the maintenance of system security and reliability is a crucial component of the progressive replacement of thermal generators with VRE. Compromised security could lead to a significant deceleration of progress towards emissions targets, as we would have to rely more frequently on market interventions and costly measures." AEMC Final Determination page 72 In this way, AEMO sees the procurement of Type 1 services as both addressing the security need, and as a consequence avoiding deceleration of progress towards emissions targets. By following a competitive process where feasible, AEMO considers it to be achieving the TSPO overall.
Туре 2	Trials of new technologies or new applications of existing technologies present a chance to demonstrate how such technologies or applications can supply or facilitate the supply of system security services throughout the transition to a diverse and flexible energy mix that is different to how the power systems were originally designed. While trials inherently do not have guaranteed success, it is important to consider the potential learnings when valuing the system security services contribution to items listed in the TSPO.

Table 2 Examples of interrelated factors within the Transitional Services Procurement Objective

The following Table 3 set out the factors AEMO is considering in relation to each of Type 1 and Type 2 services in terms of security, cost and emissions reductions and guidance around how these will be balanced.



Table 3 Factors AEMO will consider in relation to each of Type 1 and Type 2 services

AEMO's role	Factors to be considered – Type 1 services	Factors to be considered – Type 2 services
Achieve and maintain power system security	 Procurement is aligned to the circumstance outlined in NER 3.11.11(b)(1). Statement of Security Need will outline the security shortfall to be met via the procurement process. If the agreement is longer-term (for example, longer than one year), AEMO may have regard to the impact of forecast or expected power system development on the enduring need for <i>transitional services</i>. 	 Purpose of procurement of Type 2 services is to trial new technologies, or a new application of existing technologies, for the management of <i>power system security</i> in a low- or zero-emissions power system. May be procured ahead of the security need emerging operationally, for the purpose of keeping the NEM ahead of the engineering challenges of the energy transition before they emerge operationally for <i>power system security</i>. May not be a short-term need for Type 2 procurement, however the objective is to increase the technologies and supply available for system security services, such that <i>power system security</i> can be achieved and maintained over the longer term. Must provide flexibility for the varying nature of potential Type 2 services: Type 2 contracts may be utilised to conduct specific and defined trials, and in doing so agreements may be short (possibly months in duration) and with defined outcomes. Outcomes of these trials could then inform the provision of system security by new technologies or a new way of operating the <i>power system</i>, once the operational security need arises. Conversely, Type 2 contracts may serve as a sustaining revenue source for new technologies and may be longer in duration (up to 10 years). In this circumstance, the <i>transitional service</i> under contract may be used directly to address an operational security need.
Contribute to achieving emissions reductions targets	 Considers the direct emissions impact associated with <i>transitional service</i> provision is likely to be relatively low given the short term nature of Type 1 services (maximum of three years). Recognises the possibility of limited competition, and that it may not have a choice between equivalent providers, one with higher emissions and one with lower. Where there are similar providers. AEMO may use emissions as criteria for selection between providers. Where there are multiple offers via a competitive process, AEMO may either consider relative emissions between potential security service providers, or the relative emissions reductions enabled by competing offers. AEMO will account for relative emissions as a tie breaker to choose between otherwise equivalent offers, where following either a competitive process or a direct request for offer process. 	 Where there are similar providers, AEMO may use emissions as criteria for selection between providers. Where there are multiple offers via a competitive process, AEMO may consider relative emissions between potential security service providers, or the relative emissions reductions enabled by competing offers. AEMO will account for relative emissions as a tie breaker to choose between otherwise equivalent offers, where following either a competitive process or a direct request for offer process. In making the procurement decision, AEMO will consider broader impacts to long-term emissions reduction across the <i>power system</i>, for example, scalability, and whether the security service is supportive of future low-emissions <i>power system</i> development/operation.
Minimise the costs of transitional services to end users	 Using the offers submitted, AEMO will identify each service or combination of services that meets the requirements set out in the Statement of Security Need. Using the offers submitted by TSPs, AEMO will use reasonable endeavours to select and seek to procure the service or combination of services that meets the requirements at the lowest cost to end users, having regard to other elements of the TPSO as set out in previous sections. 	 Using the offers submitted, AEMO will identify each service or combination of services that meets the requirements set out in the Statement of Security Need. AEMO will use reasonable endeavours to select and seek to procure the service or combination of services that meets the requirements at the lowest cost to end users, having regard to other elements of the TSPO as set out in previous section. AEMO may consider services that are not the lowest cost in themselves, but through the trial of new technologies or new application of existing technologies, may lead to lower long-term costs to end users.



AEMO's role	Factors to be considered – Type 1 services	Factors to be considered – Type 2 services
	 AEMO may determine the lowest cost as the lowest total cost of procuring a service or combination of services. If, using reasonable endeavours, AEMO is unable to acquire sufficient services to meet the requirements set out in the Statement of Security Need, AEMO may (but is not obliged to) acquire service/s that meet the TSPO as closely as reasonably possible. AEMO is under no obligation to enter <i>transitional services</i> contracts. The Rules (NER 3.11.11 (f) – (j)) set out requirements for AEMO to conduct competitive procurement and negotiate contracts, but do not impose an obligation on AEMO to enter into a contract nor to select the lowest priced contract. For minimising costs and to enable contracts: Before entering onto a transitional services contract AEMO may require assurance from the potential TSP, and may also require assurance from relevant NSPs, that the same service is not and will not be contracted to an NSP for the period of the contract, noting that the same service provider may be able to be contracted with for the provision of different security services. 	



2.8. Technical capability

NER 3.11.11(a)(6) states that this Guideline must include any requirements for a TSP to demonstrate the relevant *plant* or equipment's capability to provide the *transitional services*. These requirements could apply either prior the intended commencement date of an agreement for the provision of *transitional services*, or as part of the agreement, as applicable to the service type.

2.8.1. Type 1 contracts

AEMO will not enter into an agreement for the provision of Type 1 services unless it is satisfied that the capability to provide the contracted *transitional service* has been successfully demonstrated by the TSP. This capability should be evidenced by a report demonstrating that the provider is able to deliver the service described in the Statement of Security Need prior to the intended commencement date of the agreement. AEMO reserves the right to waive or vary any of the below requirements as deemed appropriate,

Requirements for Test / Testing

- Tests where practicable should be performed as both a desktop study as well as on-site physical test.
- The TSP is expected to, using a sufficiently accurate model (PSCAD[™], PSS®E, Simulink, or other approved by AEMO) demonstrate the relevant *plant* or equipment's capability in accordance with the procured service. The simulation test results must be validated and accepted by AEMO.
- A physical on-site test where practicable should also be performed at AEMO's discretion.
- Tests should be conducted:
- (a) no less than every 12 months;
- (b) within eight weeks following a major overhaul of the relevant *plant* or equipment that could impact its ability to meet its contracted service; and
- (c) within eight weeks of a written request from AEMO.
- Tests should be undertaken within 8 weeks after the date of the TSP's notice to AEMO that the service is ready to be returned to service following a major overhaul.
- Test results must be provided to AEMO within 20 business days of completion of the relevant test. Tests may be substituted by a real world operation if it has occurred to a satisfactory level within the last three months supported by evidence and at AEMO's absolute discretion.

2.8.2. Type 2 contracts

Given the range of potential projects under contracts for Type 2 services, and that a Type 2 service may have the purpose of demonstrating capability, AEMO does not specify testing requirements and/or demonstration of technical capability in respect of Type 2 services.



Instead, requirements will be specified within the Statement of Security Need, or will form part of the scope of a trial once a contract for Type 2 services is entered into. The Statement of Security Need would describe how the project will be technically capable of contributing to building understanding and confidence in managing security in a low- or zero-emissions power system.

2.8.3. Type 1 and Type 2 contracts

For all Type 1 and Type 2 services, a transitional service must be provided using *plant* or equipment that meets the applicable technical requirements detailed in the Statement of Security Need as evidenced by (as applicable) tests, modelling and assessment and has data communication facilities meeting the applicable requirements of the Power System Data Communication Standard published by AEMO under NER 4.11.2. The *plant* must have capability to establish arrangements for receiving instructions for enablement/activation of services from AEMO.

2.9. Further relevant procurement requirements of processes

Before entering into a *transitional services* contract AEMO may require assurance from the potential TSP, and may also require assurance from relevant NSPs, that the same service is not and will not be contracted to an NSP for the period of the contract. Noting that the same service provider may be able to be contracted with for the provision of different security services.

Where the *transitional service* is intended to be scheduled alongside security services procured by NSPs, these services must have regard to the Security Enablement Procedures (or, prior to those Procedures being made, the Provisional Security Enablement Procedures⁴).

For contract enablement, when a unit has a security contract with a TNSP, AEMO will consider costs as part of which service to enable, which will be developed in the Security Enablement Procedure (or, prior to those Procedures being made, the Provisional Security Enablement Procedures⁵).

The need for Type 1 services may arise with urgency, creating a need for flexibility, and Type 2 services are potentially widely varying in nature.

Other technical requirements, requirements for information and/or requirements for NSPs or other Registered Participants will vary on a case-by-case basis and will be included in the relevant Statement of Security Need, or within other supporting documentation.

⁴ Refer https://aemo.com.au/en/energy-systems/electricity/national-electricity-market-nem/system-operations/power-systemoperation/power-system-operating-procedures

⁵ Refer https://aemo.com.au/en/energy-systems/electricity/national-electricity-market-nem/system-operations/power-systemoperation/power-system-operating-procedures

