



Review of SA Electricity Licensing Framework

Supplemental Paper – Existing operating and approval requirements for electricity entities

Purpose

This paper presents a high-level overview of the approval standards currently required for electricity entities in South Australia. The purpose is to enable stakeholders interested in the Review of the Electricity Licensing Framework to identify and consider where responsibilities currently lie for existing approval processes and standards.

The information contained below provides indicative and preliminary views of the Department for Energy and Mining.

Stakeholders are welcome to provide their own views and feedback, both of which would assist us in undertaking the Review. More detailed information about these processes, and the conditions that accompany these approvals, can be found via websites of the relevant market bodies and legislation.

Definitions

In Table 1 headings below:

- “SA license” refers to licences required for electricity entities under the Electricity Act 1996, administered by the Essential Services Commission of SA
- “AEMO registration” refers to the registration process required by the Australian Energy Market Operator (AEMO) for market participants in the National Electricity Market
- “AER registration” refers to the Australian Energy Regulator (AER) retailer authorisation a person must hold prior to engaging in the retail sale of energy.SA Power Networks connections



Table 1: Comparison of approvals required for various electricity entities

Operation Type	SA license?	AEMO registration?	AER authorisation?	Comment
Generation nameplate capacity >5MW	✓	✓	✗	AEMO exemption may apply for 5MW to 30MW nameplate capacity if generating system does not comprise a battery system of 5MW or more. SA Power Network connection technical standards and protocols also may apply – see “Connections” below
Generation nameplate capacity ≤ 100kVA	✗	✗	✗	SA Power Network connection technical standards and protocols still may apply see “Connections” below
Generation nameplate capacity 100kVA to 5MW	✓	✗	✗	In SA licence exemption in place until November 2023. Exemptions are subject to conditions . SA Power Network connection technical standards and protocols also may apply see “Connections” below
Distribution and Transmission	✓	✓	✗	Network exemptions from the AER for AEMO registration may be available for privately-owned embedded networks or networks not registered with AEMO.
Retail (NEM connected)	✗	✓	✓	Retail exemptions from AER authorisation may be available
Retail (non-NEM connected)	✓	✗	✗	Usually an AER retail exemption will need to accompany an AER network exemption
Virtual Power Plants (VPPs)	VPPs are not specifically classified in legislation. In SA, generator licence exemptions are in place for VPPs until Nov 2023 subject to conditions For AEMO VPP Demonstration of 2019-2021, participants had to register as a Market Customer or Market Ancillary Service Provider. Currently interim AEMO arrangements apply for FCAS provision from DER for previous VPP Demonstration participants			
EV Charging Stations	EV charging stations are not specifically classified in legislation In SA, distribution and retail licence exemptions are in place for EV charging stations until Nov 2023 subject to conditions .			



Table 2: Comparison of required information across regulatory frameworks (example of generation operations with nameplate rating > 30MW)

Required Information	Extent of information required by:		Comment
	ESCOSA/OTR	AEMO	
Contact, corporate and legal information	Moderate	Extensive	More detailed contact information required by AEMO, reflecting system security and market trading functions.
Generator system and operational scope details	Moderate	Extensive	More detailed information required by AEMO, reflecting need for necessary integration with NEM complex market systems
Corporate honesty and integrity of applicant and shareholders	Moderate	Moderate	ESCOSA undertakes due diligence and requires applicant declare any action taken against it.
Financial, prudential and credit-worthiness	Extensive	Extensive	
Availability of human and technical resources	Extensive	Extensive	
Risk management strategy	Moderate	Moderate	AEMO requires information on operational and system readiness.
Holding of, and compliance with, other approvals, registrations and licenses	Extensive	Extensive	
Information of IT systems	Limited/None	Extensive	More detailed contact information required by AEMO, reflecting need to connect to AEMO IT systems.
Metering and connection quality	Moderate	Extensive	More detailed contact information required by AEMO, reflecting market dispatch functions.
Local black system procedures	Limited/None	Extensive	AEMO required to understand the condition of generating systems after a black system event and constraints of operation that would apply during restoration process
Safety, reliability, technical, maintenance planning	Extensive	Extensive	OTR requires safety, reliability, maintenance, and technical management plan (SRMTMP).
Promote competitive market conduct and protect consumer interests with respect to price, quality and reliability of electricity supply	Moderate	Moderate	Explicit need for ESCOSA in ESC Act 2002 to have regard for consumer interests and competitive and efficient markets. For AEMO, Chapter 3 of NER applies.



Table 3: Overview of SA generation license terms and conditions

License Condition	Coverage of condition as part of AEMO registration?	Comment
Allow access to NSP of relevant generating plant	✓	Covered in the NER Chapter 5 (5.2.5) under the obligations of generators.
Dispute Resolution	✗	Covered in the NER Part B. Does not apply to the extent the dispute is subject to resolution in accordance with or under the NER
Compliance with Codes	✗	NER Chapter 2 (2.4.2) – market participant must meet any relevant requirements imposed under relevant jurisdictional electricity legislation. License obliges generators to comply with industry codes made by ESCOSA under the ESC Act.
Safety, reliability, maintenance and technical management plan (SRMTMP)	✗	Some elements are covered in NER, particularly related to reliability and technical. Connecting network service provider assumes some responsibility for technical requirements of registered generators under national framework. AEMO Generator Performance Standards in rule 4.14 and 4.15 of NER. Further analysis to be undertaken as part of Review.
Switching Manual	✗	AEMO don't explicitly switching manual however compliance with some technical regulations and control systems assumed by connecting network service provider and Chapter 5.2 of the NER.
National Electricity Market	✓	The complement to "Compliance with Codes" above.
Information to AEMO	Not applicable	
System Controller	✗	NER doesn't include provisions for SA system controller entity.
Information to the Commission	✗	While NER requires registered generators to provide information to AEMO on request to fulfils its functions and obligations under the Rules, there is no equivalent requirement to provide this information to ESCOSA.



License Condition	Coverage of condition as part of AEMO registration?	Comment
Operational and compliance audits	✗	While AEMO market audits are required under 3.13.10 of the NER, these are not aligned in nature with the audits associated with SA license.
Confidentiality	✓	SA licensing condition allows ESCOSA rules to be able to use generator information, unless otherwise required by the NEL Part 5 (Div 6).
Compliance with community service obligations	✗	While NER (2.4.2) requires market participant meet any relevant requirements imposed under relevant jurisdictional electricity legislation, legislative obligations do not exist for non-retail electricity entities.
Compatibility – generation must not negatively impact network	✓	AEMO Generator Performance Standards in rule 4.14 and 4.15 of NER.
Bushfire insurance	✗	Not required as part of AEMO registration.
Compliance with laws	✓	Covered in NER Chapter 2 (2.4.2) – market participant must meet any relevant requirements imposed under relevant jurisdictional electricity legislation;
Information to Network Service Provider	✓	Covered in the NER Chapter 5 (5.2.5) under the obligations of generators, with the TNSP also the system controller.

Additional to the information above, [Technical standards and protocols](#) exist for connections to the SA Power Networks (SAPN) distribution network:

- Embedded generating systems (5MW and above) that must comply with Chapter 5 of the NER;
- Embedded generating systems (below 5MW), that must comply with Chapter 5A of the NER.
- Inverter Energy Systems above 30kW and up to or equal to 200kW
- Inverter Energy Systems above 200kW or any size rotating generating system
- [Small embedded generating connections with capacity not exceeding 30kW](#)