



Review of the South Australian Electricity Licensing Framework

Consultation Paper



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Acknowledgement of Country

The Department for Energy and Mining acknowledges Aboriginal people as the First Nations Peoples of South Australia. We recognise and respect the cultural connections as the traditional owners and occupants of the land and waters of South Australia, and that they continue to make a unique and irreplaceable contribution to the state.

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Acronyms

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
DEM	Department for Energy and Mining
DER	Distributed Energy Resources
DNSP	Distribution Network Service Provider
DRSP	Demand Response Service Provider
DSR	Demand Side Response
EV	Electric Vehicle
ESCOSA	Essential Services Commission of South Australia
NEL	National Electricity Law
NEM	National Electricity Market
NECF	National Energy Customer Framework
NER	National Electricity Rules
NERL	National Energy Retail Law
NERR	National Energy Retail Rules
OTR	Office of the Technical Regulator
PV	Photovoltaic
SAPS	Stand-Alone Power System
SRMTMP	Safety, Reliability, Maintenance and Technical Management Plan
VPP	Virtual Power Plant
WDR	Wholesale Demand Response

Review of the electricity licensing framework

Key points:

- *Stakeholder views are being sought on the current electricity licensing framework*
- *The licensing framework must balance the need for technical and safety oversight against the administrative and financial implications for industry.*

The purpose of this paper is to seek the views of stakeholders on the South Australian licensing framework that applies to electricity entities, as established in the *Electricity Act 1996* (Electricity Act).

Licences are required under the Electricity Act for electricity generation, transmission, distribution, and system control functions. A retail licence may also be required for entities who sell electricity to customers but are not connected to the National Electricity Market (NEM). Licensing of electricity entities operating in South Australia under the Electricity Act enables appropriate regulatory oversight of the South Australian power system.

A well-functioning electricity regulatory framework is crucial to ensure industry participants generate and deliver electricity, as an essential service, sustainably, safely, and reliably to South Australian consumers.

It is acknowledged that the current licensing framework detailed in the Electricity Act and Electricity (General) Regulations 2012 (Regulations) was established in a very different technological environment from the one that is currently evolving. It is important that the electricity licensing framework keeps pace with the way that electricity is increasingly being generated and delivered to customers in South Australia.

Any licensing framework must balance the need for technical and safety oversight with the administrative and financial implications for industry. In considering the framework, it is important to be aware that Distributed Energy Resources (DER) and associated business models, such as Virtual Power Plants (VPPs) and Electric Vehicle (EV) charging networks, are expected to grow and evolve in coming years and subsequently have a significant impact on our future electricity supply and demand balance.

This paper therefore seeks stakeholder views, preferably backed by evidence, on the following:

- observed strengths and weaknesses of the current electricity licensing regime
- observed costs and benefits of the current electricity licensing regime
- whether the current electricity licensing regime is achieving its objectives
- how well the current electricity licensing regime interacts with the NEM.

While this review of the South Australian licensing regime will not include the national energy regulatory regime in its scope, the review will consider how South Australia's licensing regime interacts with the national framework.

An overview of the current legislative framework

Key points:

- *The Electricity Act specifies the Essential Services Commission of South Australia as the regulator of the electricity supply industry, including its role in licensing of electricity entities.*
- *Each electricity licence contains a variety of conditions including a range of mandatory conditions.*
- *The Regulations provide for statutory exemptions from the requirement to hold a licence, while the Act also gives ESCOSA, the Technical Regulator and the*

Licensing Overview

The Electricity Act requires that a person who carries on operations or activities in the South Australian electricity industry is required to hold a licence. Part 3 of the Electricity Act specifies the role of the Essential Services Commission of South Australia (ESCOSA) in the regulation of the electricity supply industry, including its role in licensing of electricity entities.

In carrying out its licensing function, ESCOSA must comply with the Electricity Act and have regard to the broader factors detailed in section 6(1) of the *Essential Services Commission Act 2002* (ESC Act), which includes the need to:

- promote competitive and fair market conduct
- prevent misuse of monopoly or market power
- facilitate entry into relevant markets
- promote economic efficiency
- ensure consumers benefit from competition and efficiency
- facilitate maintenance of the financial viability of regulated entities and the incentive for long-term investment
- promote consistency in regulation with other jurisdictions.

Each electricity licence issued by ESCOSA contains a variety of conditions. Mandatory licence conditions, which ESCOSA must include in each licence, are specified in Part 3 of the Electricity Act. These conditions are further discussed in chapter 5 of this paper. As well as specific conditions listed in the Act, ESCOSA is required to make a licence subject to further conditions, as required by regulation, as well as any other conditions they consider appropriate.

The Technical Regulator is responsible for the safety and technical performance of the electrical, gas, and water industries. In the case of electricity, its role and responsibilities are detailed in the Electricity Act and the Regulations.

The Technical Regulator, assisted by the Office of the Technical Regulator (OTR), may or will, depending upon the Act, require the entities licensed by ESCOSA to prepare and periodically revise a safety, reliability, maintenance, and technical management plan (SRMTMP). Requests for technical information associated with electricity licence applications is referred by ESCOSA to the Technical Regulator for review.



Exemptions Overview

Regulation 15 of the Regulations provides statutory exemptions from the requirement to be licensed provided certain criteria are met. These criteria relate to when the electricity to which the operations relate is for a person's own use, where the supply of electricity is to only a designated body, or when a tenant or licensee of the operator is supplied by the operator but is not directly charged for this electricity.

Section 80 of the Electricity Act provides ESCOSA, on the approval of the Minister for Energy and Mining, the power to grant an exemption from part 3 of the Electricity Act, or specified exemptions from part 3, including the requirement to be licensed.

Generation licences

Section 15 of the Electricity Act requires that a licence is required for all entities in the electricity supply industry that are generating electricity.

Statutory exemptions for generation licenses include generation with a rated nameplate output of less than or equal to 100 kVA, and for those generators which don't supply electricity for reward by means of a transmission or distribution network.

Retail licences

For retailers connected to the NEM, recognising that customers throughout Australia should receive the same level of consumer protections, in 2012 the Australian Energy Regulator (AER) assumed responsibility for regulating retail energy markets across most states and territories. The National Energy Customer Framework (NECF) streamlines the way that energy retail markets are regulated through a single framework enforced by the AER. The NECF includes the National Energy Retail Law (NERL), National Energy Retail Rules and National Energy Retail Regulations. Together, these set out the key protections and obligations for energy customers and the businesses they buy their energy from.

Following the implementation of the NECF in South Australia from 1 February 2013, ESCOSA's responsibility for administering the licensing regime for the retailing of electricity changed. Under the NECF, energy retailers operating within the NEM no longer require a licence issued by the Commission but instead require an authorisation issued by the AER. Retailers and end users who buy electricity in the NEM spot market must be registered as Market Customers by the Australian Energy Market Operator (AEMO), which includes the payment of a registration fee and allocated fees reflecting their customer load.

As a result of the commencement of the NECF in South Australia, ESCOSA's energy retail licensing functions became limited to 'off-grid' electricity operations not connected to the NEM. Consequently, retail licences previously issued by the Commission to retailers who are now NERL retailers ceased to have effect from 1 February 2013. A retail licence may be required from ESCOSA for entities who sell electricity to customers not connected to the NEM.

Transmission and distribution licences

A transmission or distribution licence may be required from the Commission for entities who operate a whole or part of a system for the transmission or distribution of electricity.

Statutory exemptions exist for operators of distribution or transmission inset networks (inset network operators) who can offer their retail customers an effective right of access to a licensed retailer of the customer's choice.

The way electricity is being supplied and delivered is changing

Key points:

- *The transition to a power system increasingly supplied by DER represents an unprecedented change in power system and electricity market operation.*
- *South Australia's Energy Solution highlights an orderly transition to cleaner, and more affordable and reliable power*

The electricity supply is in the process of rapidly transitioning to a carbon constrained future, with South Australia leading this transition. This is resulting in technically different electricity supply entering the market and radical changes to customer demand from the electricity system.

Distributed energy resources (DER) refer to often smaller generation units that are located on the consumer's side of the meter, and includes technologies such as battery storage, rooftop photovoltaic (PV) units, diesel and oil engines, wind generating units, batteries in electric vehicles used to export power back to the grid, biomass generators, hydro schemes, fuel cells, and tri-generation units that also utilise waste heat to provide cooling.

The transition to a power system increasingly supplied by DER represents an unprecedented change in power system and electricity market operation. Growth in installed distributed PV is set to continue as consumers seek to better manage their energy use, security, and costs. Changes in consumer awareness and solar industry competitiveness and marketing are leading to increasing choices for consumer energy solutions.

The falling cost of renewable generation and batteries is leading to significant decreases in the costs of providing off-grid electricity supply, providing customers potential additional benefits such as improved reliability for customers in remote regions and a reduced carbon footprint. Recent legislative amendments to the national framework now mean that Stand-Alone Power Systems (SAPS), which supply electricity not physically connected to the national grid, can be provided by Distribution Network Service Providers (DNSPs) where these offer a lower cost substitute to investing in, and maintaining, traditional network solutions.

In addition, while market participants were once previously classed as either loads or generators, it is now more common for participants to be both drawing electricity from the grid and sending electricity out to the grid. This is due to the increasing role of storage, ranging from fixed grid scale batteries connected to the transmission network down to smaller distributed storage options. This



also extends to grid-scale hybrid facilities, comprising storage systems coupled with generating systems and/or industrial loads co-located behind a single connection point.

South Australia is a world leader in meeting electricity demand with renewables. In October 2020, solar output accounted for more than 100 per cent of state demand, while on Saturday 2 October 2021, solar reached a record peak of 106.1 per cent of South Australian demand, meeting at least 100 per cent of state demand for nearly an hour.

As reported by AEMO in its latest Electricity Statement of Opportunities (ESOO), South Australia has achieved periods with up to 78 per cent of underlying demand met by distributed PV and is, to AEMO's knowledge, the first gigawatt-scale power system in the world to approach periods with 100 per cent of underlying demand being supplied by DER. Supporting this view, the South Australian distribution network reported negative load on four occasions in October 2021 including for a period of over four hours on Saturday 31 October.

South Australia's Energy Solution announced in June 2020 highlights an orderly transition to cleaner, and more affordable and reliable power underpinned by the four key energy pillars of Project EnergyConnect, the Grid Scale Storage Fund, support for the roll-out of home batteries, and the better integration into the power system of distributed energy such as rooftop solar and household appliances.

A power system with significant supply from DER operates very differently than the dispatch of centralised generation. Most distributed PV systems in the NEM today are not subject to the same performance requirements as centralised generation and are not visible or controllable by distribution network service providers (DNSPs). This transition has also led to system security challenges such as the disconnection of distributed PV inverters in response to voltage disturbances and the load requirements needed to provide minimum required levels of system strength, inertia, frequency control and voltage management.

Fortunately, new technology now available makes it entirely feasible for DER to be actively managed. South Australia is pioneering active management capabilities for all new distributed installations, including by supporting the development of South Australia's Virtual Power Plant. As outlined in the Electric Vehicle Action Plan, South Australia is also bringing forward the adoption of electric vehicles (EV's) including providing support for EV smart chargers and EV VPPs.

Examples of evolving distributed energy technologies

Key points:

- *Our transition to a smart power system will need the right regulatory settings and economic signals to reward supportive behaviours.*
- *EV charging stations, Demand Response Service Providers (DRSPs), VPPs, and commercial scale solar PV farms are examples of emerging business models that were not envisioned when the existing regulatory framework was developed.*

The demand for DER is leading to business models underpinned by innovative new technologies and energy solutions. This is increasingly giving consumers the opportunity to reduce their electricity bills, improve their quality of life, and reduce carbon emissions.

While DER technology will continue to evolve over the longer term, there are emerging DER business models that are already playing an ever-increasing role in our lives. To make the most of these opportunities, our transition to a smart power system will need the right regulatory settings and economic signals to reward supportive behaviors.

This section provides examples of emerging business models that were not envisioned when the existing regulatory framework was developed.

Electric vehicle charging stations

The uptake of EVs has the potential to greatly benefit the management of our electricity system and provide a boost for South Australia's economy. By the mid-2020s, a broad range of consumer, social and environmental benefits will start to flow from South Australia's transition to EVs.

Managed well, EVs will integrate seamlessly within our homes and businesses. As outlined in South Australia's Electric Vehicle Action Plan, we are supporting the deployment of EV charging services across the road network to meet demand and provide. Smart charging will mean that electricity network operators, power retailers and home battery systems can dial up or down charging during times of high demand on the network, high renewable energy generation or high electricity prices.



The Electric Vehicle Council has identified three types of EV chargers¹:

Level 1

- Existing power point (10-15 Amp, single phase), used in combination with a specialised cable which is typically supplied with the vehicle.
- Typically used in standalone domestic homes.
- This method will add between 10 and 20km of range per hour plugged in.
- It will top up daily use but will not fully recharge a typical pure electric vehicle overnight.

Level 2

- A dedicated AC EV charger at up to 7kW (32 Amp, single phase).
- Typically installed in homes, apartment complexes, workplaces, shopping centres, hotels and anywhere the vehicle will be parked for a while.
- This method will add up to 40km of range per hour plugged in.
- It will top up average daily vehicle use in an hour or deliver a full recharge overnight.

Level 3

- A dedicated DC EV charger at power levels from 25kW to 350kW (40 – 500 Amp, three phase).
- Typically used in commercial premises and road-side locations to provide for faster recharging than Level 1 and 2 can achieve.
- At the lower end, this method will add up to 150km of range per hour plugged in.
- At the upper end, this method may have the potential in the future to fully recharge some electric vehicles in 10 to 15 minutes.

The planning system will consider the needs of future fleets at residential, commercial, community, public and regional planning levels. It is important to ensure that the motor vehicle services sector is prepared for the different needs of electric vehicles and that the electricity regulatory framework can appropriately accommodate the requirements of EV charging service providers.

Demand Response Service Providers

Demand side response (DSR) is an active, short-term reduction in electricity demand by consumers who decide to respond to price signals throughout the day by shifting their electricity use to another period, or to use another type of generation, or to simply not use electricity at specific times.

¹ Electric Vehicle Council: <https://electricvehiclecouncil.com.au/about-ev/charger-map/>

Wholesale demand response (WDR) enables customers to sell demand response in the wholesale market either directly or through specialist aggregators (Demand Response Service Providers (DRSPs)) in response to market and network conditions, independent of their retailer.

DRSPs can participate in the wholesale demand response mechanism and classify and aggregate the demand response capability of large market loads for dispatch through the NEM's standard bidding and scheduling processes in a manner similar to bids submitted by generators.

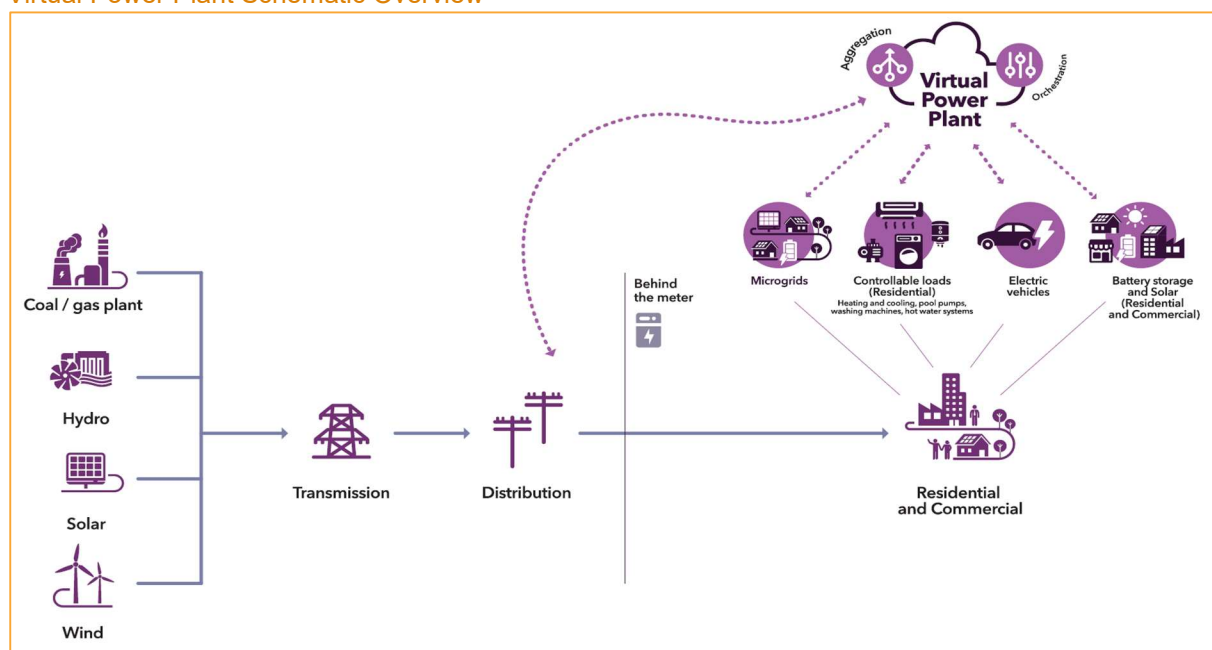
The DRSP will receive payment for dispatched response, measured in mega-watt hours (MWh) against a baseline estimate, at the electricity spot price. The DRSP pays customers for the value of their demand reduction based on agreed commercial arrangements.

Virtual Power Plants

A VPP is a network of distributed energy resources – such as homes with solar and battery systems – all working together as a single power plant. Grid-connected VPPs usually consist of rooftop PV systems, battery storage and controllable load devices. The VPP operator uses Wi-Fi technology and sophisticated software to charge or discharge energy from the batteries and trade it on the NEM.

With many systems working together, small amounts of energy stored in individual home batteries can become large amounts of energy to help support the grid in times of need. The capacity and power of a VPP can sometimes match or even exceed a traditional power station.

Virtual Power Plant Schematic Overview



AEMO, AEMO NEM Virtual Power Plant Demonstrations: Knowledge Sharing Report 4, September 2021

With smart charging, as part of a VPP, this storage could support the electricity grid and further reduce electricity costs for all South Australians.

The South Australian government is supporting the roll out of VPPs through its Home Battery Scheme and South Australia's Virtual Power Plant. VPPs have the potential to make a valuable contribution to markets and to lowering costs for consumers but face challenges to integrate with market and regulatory frameworks that were not designed for this distributed model.

Smaller generation operations

While a majority of network capacity provided by the electricity generation fleet comprises utility-scale operations, there are numerous smaller commercial embedded generation operations that supply electricity for specific energy-intensive businesses.

The increase in the number of these operations is being led by commercial scale solar photovoltaic arrays. In many cases, these operations provide a dedicated source of own-use electricity to a particular large industrial or commercial facility. These operations may be supplemented by storage and be backed by diesel generation.

Around half (34) of the current 68 generation operations licensed by ESCOSA have a capacity between 5kVA and 5MW, most of which are commercial scale solar PV. Over time, the number of licences issued by ESCOSA for solar PV generation operations has increased as shown:

Year	Generation licences issued	Solar licences issued (<5MW)
2018	16	9
2019	17	12
2020	26	14
2021*	34	19

*Includes both licences issued and current applications; Source: ESCOSA (as of 22 October 2021)

AEMO treats small scale generators as a 'negative load' when managing the dispatch of electricity and does not schedule the generation exports as part of the national electricity market.

What are the licensing conditions for electricity entities?

Key points:

- *Mandatory licence conditions include corporate and legal, regulatory, technical, and human resources, and financial and prudent information.*
- *The review will assess how compatible existing license conditions are with characteristics of emerging DER business models.*

Each electricity and gas licence issued by ESCOSA contains a variety of conditions. Mandatory licence conditions, which ESCOSA must include in each licence, are specified in Part 3 of the Electricity Act. These include, but are not limited to:

- the payment of an application fee and ongoing annual fee
- compliance with applicable codes or rules made under the ESC Act
- compliance with specific technical or safety requirements or standards
- meeting financial or other capacity to continue operations under the licence
- requirement for undertaking and reporting audits of operations
- notifying changes to officers and, if applicable, major shareholders of the entity.

In considering applications, ESCOSA will assess whether the generating plant (or proposed generating plant) will generate electricity of the appropriate quality for the relevant transmission or distribution network. ESCOSA must also assess whether the applicant is a suitable person to hold an electricity generation licence and consider the following:

- The applicant's (and, where applicable, its officers and major shareholders) previous commercial dealings and the standard of honesty and integrity shown in those dealings.
- The resources available to the applicant – financial, technical, and human.
- Any other matters prescribed by regulation.

ESCOSA takes advice from the OTR on specific factors in the Electricity Act such as the quality of the electricity being generated. For operations over 5MW, ESCOSA will also seek advice from AEMO. Since 2017, additional system security requirements for generators have been in place, and developers must include power system security services as part of their South Australian-based projects.

The OTR administers SRMTMPs which are confidential documents that describe how an entity will comply with work, health and safety, technical standards, operation, maintenance and emergency procedures, and management of review and improvement. All entities are required to comply with the approved SRMTMP and conduct annual audits to ensure compliance with the plan. In addition to the annual internal audits, the OTR completes independent safety and technical audits to verify the accuracy of information provided and compliance with an entity's SRMTMP.

The OTR advises ESCOSA on whether the generating plant is suitable for the South Australian network with respect to power system security services and has released a guideline specifying

the technical requirements that generators above 5 MW must meet before seeking development approval².

Electric vehicle charging stations

The issue of licences for EV charging stations, particularly in view of the Electric Vehicle Action Plan, has been raised by a number of potential operators, including those seeking to be involved in the Electric Vehicle Smart Charging Trials.

Electricity retailers subject to the NERL are not required to hold a South Australian retailer licence. For off-grid activities however, under the Electricity Act, an EV charging station operator could be considered to provide retail services to customers for consumption by that person and may therefore be required to hold a licence.

An EV charging network operator could also be captured within the concept of the operation of a distribution network. EV charging network operators are not currently entitled to statutory exemptions as set out in Regulations, because the EV charging network operator cannot offer customers their choice of licensed retailer. Therefore, EV charging network operators could currently be captured under the existing licensing framework.

EV charging stations are an example of electricity operations that were not envisioned at the time the Electricity Act was drafted, and as such, there may not be full alignment between the practical operations of those stations and the mandatory licence terms and conditions contained in the current regulatory framework.

Virtual Power Plants

VPPs are unique in that their operations are based on an aggregation of distributed energy resources and the size, distribution and composition of that aggregation may continually change over time. This presents a somewhat different context for the standard licensing conditions.

Generally, each generating plant that makes up part of a VPP has a small capacity and falls below the current 100kVA licensing exemption threshold provided for under the Regulations. However, once coordinated and controlled as part of a larger system, their combined output capacity (when treated as a single unit) may bring them within the licensing framework.

In June 2021, an exemption variation was issued by ESCOSA under the Electricity Act, extending the exemption for enrolled participants in the AEMO Virtual Power Plant Demonstration Program from the requirement to be licensed until 30 June 2023³.

ESCOSA recently undertook stakeholder and public consultation in relation to VPP operators, in particular on the potential extension of the term of the current exemption for enrolled participants

² Office of the Technical Regulator, Generator Development Approval Procedure, May 2021, accessed via https://www.sa.gov.au/_data/assets/pdf_file/0003/311448/OTR-Generator-Development-Approval-Procedure-Version-1.2.pdf

³ <https://www.escosa.sa.gov.au/news/electricity-news/jun21-news-2021-e-glva-vpp-aemo-final>

in the VPP Demonstration. From the six submissions received, stakeholders expressed concern as to the applicability of the licensing regime to VPPs.

Given the potential for a VPP to scale up and to be operated as a dispatchable resource, there remains a need for operational visibility to maintain power system security and to continually keep supply and demand balanced.

In its latest Knowledge Sharing Report on the NEM VPP Demonstrations project, AEMO noted that VPPs are currently exempt from participating in the NEM energy market dispatch process. As AEMO has no operational visibility of VPPs, it considers this could pose a risk to the efficient operation of the power system as VPPs scale. AEMO states that if visibility and control of elements within the VPP – such as batteries and/or rooftop PV – is enabled, this can avoid any curtailment of consumer loads, providing efficient outcomes for the consumer.⁴

Smaller generation operations

Generators under 5MW are exempt from registering with AEMO as a participant in the NEM. In South Australia, the Regulations currently exempt operations under 100kVA from the requirement to hold an electricity licence but for generators with a capacity of between 100kVA and 5MW a licence is required.

With small scale solar and battery systems becoming increasingly affordable, ESCOSA has received an increasing number of applications for generation systems less than 5MW. While ESCOSA has the discretion to tailor the level of information to have regard to the scale and scope of the generation operations, feedback from applicants indicates that satisfying the mandatory licensing conditions of the Electricity Act is complex and burdensome for small scale operators.

The licensing review will assess the level of economic regulation and licensing of these providers against the level of risk posed to the operation of the NEM.

Costs and benefits of licensing

Key point:

- *The licensing framework results in a range of costs to government and electricity entities, but these costs should be offset by benefits to industry and consumers.*

Licensing seeks to address different types of risks that have the potential to negatively impact consumers, industry, the community, and the environment. The balance of advantages and disadvantages of the licensing of electricity entities depends on the risks being targeted and how cost-effective the licensing framework is at addressing these risks.

⁴ AEMO, AEMO NEM Virtual Power Plant Demonstrations: Knowledge Sharing Report 4, September 2021

A description of the most significant costs and benefits is provided below. Where possible and practical, the review will quantify these costs and benefits in order to better assess policy options that result in amendments to the electricity licensing framework.

Costs

Administrative costs are incurred by business and the community when demonstrating compliance with a regulation and are incurred by government in administering the regulation. These costs will often include the time spent learning about administrative requirements, record keeping and reporting, inspection, and enforcement of regulation.

ESCOSA has estimated the costs of the license application process at approximately 19-25 hours for each application, spread across four staff members, and includes consideration by both the Leadership Team and Commissioners. Activities undertaken by ESCOSA in assessing each application includes reviewing applications, undertaking public consultation, and preparing briefing material for ESCOSA executive and Commissioner approval.

In addition to ESCOSA's costs there are costs to applicants in preparing applications, annual compliance and audit reports, and monitoring. Costs to the OTR include assessing applications for SRMTMPs, assessing annual audits of these plans, and providing advice to ESCOSA on specific factors in the Electricity Act such as the quality of the electricity being generated.

In early 2021, ESCOSA undertook an internal review of licensing processes and determined that applications for operations less than 5MW were low risk. This led to amendments made to the licensing application, where a simplified application form was created for operations less than 5MW.

Compliance costs related to the capital and production costs that are incurred by industry in satisfying the conditions of the licence. This includes where businesses incur costs to buy new equipment, maintain equipment and undertake specific training in order to meet license conditions.

Regulatory charges include the license fees and charges payable by electricity entities.

Annual licence fees are set by the Minister and are payable by each licensee as an amount that the Minister considers to be a reasonable contribution towards the costs associated with administering the Electricity Act. The licence fees determined by the Minister are collected by ESCOSA. At annual intervals, ESCOSA, on behalf of the Minister, will send to each licensee, depending on the category within the sector, an invoice for the licence fee. An electricity licence application or transfer is currently \$1000 while annual licence fees, at least for generation, are determined based on the capacity of the operation.⁵

⁵ Licence fee schedule found at <https://www.escosa.sa.gov.au/industry/electricity/licensing/licence-register>

The Electricity Act also requires NERL retailers (operating in the NEM) to pay an annual administration fee to ESCOSA. The Regulations provide the formula for calculation of the annual administration fee, and includes:

- AEMC costs relating to retailing of energy in South Australia
- Administration costs of the Electricity Act relating to the retailing of energy
- ESCOSA costs attributable to the retailing of energy to small customers

Indirect costs and economic impacts relate to costs that arise from regulation that affects market structures or consumption patterns. Such regulations can create barriers to entry, limit competition, and impose opportunity costs which may lead to barriers to innovation, decreased choice and quality for consumers, and higher prices.

An example of these costs includes regulatory delays which can impose significant costs to businesses through lost revenue and other costs. License applicants may be prone to a risk of delays in entering operations contracts and other activities as a result of not being licensed.

Benefits

Licence conditions that include **minimum entry standards** provides a level of guarantee that licensees are suitable and trustworthy. It provides a level of comfort that electricity entities meet minimum technical, safety, financial, and network quality conditions (such as those described above in Chapter 5) before connecting to the South Australian electricity network. Properly designed and implemented licence conditions enables regulators to reduce the risk that poor quality operators will enter the industry.

Likewise, licence conditions that include **ongoing standards** can ensure consumers retain a level of confidence in South Australian network safety, security and reliability.

The collection of revenue to **fund the energy-related activities** of ESCOSA, OTR and the AEMC provide a range of consumer, industry, and community benefits. These activities can lead to improved consumers protections, enhanced electricity network safety, system security and reliability, and a more efficient electricity market that leads to lower wholesale and retail costs.

Licensing provides a source of administrative data that can provide useful and **transparent market information**. This data can be used to improve the targeting and effectiveness of policy solutions that aim to benefit consumers. In particular, while DER provides a range of benefits, power systems and networks are still adjusting to the effects of these new DER technologies. As such, visibility over these ‘behind the meter’ operations is important in understanding both emerging system security, and supply and demand balance issues.

Enforcement includes the processes and sanctions that ensure licensed operators comply with license conditions. Regulation that is not enforced gives consumers a false sense of safety and can undermine community confidence in the industry and the regulatory system. A well-designed licensing framework can reduce the cost of enforcement by making it easier to identify and

monitor licensed operators. Additionally, the potential for operators to lose, or have conditions placed on, their licence may deter breaches.

Cost recovery

Key point:

- *Cost recovery associated with the licensing regulatory framework should consider issues including equity, efficiency, and policy outcomes.*
- *Energy supply industry fees are intended to meet the full cost of the energy related activities of ESCOSA, the OTR and the South Australian contribution to the AEMC budget.*

In line with the Australian Government Cost Recovery Guidelines⁶, the funding and revenue settings of the licensing regime should consider factors including:

- promoting equity, preferably where the recipients of licences, rather than the public, bear its costs
- how cost recovery settings influence demand for licences
- improving the efficiency, productivity and responsiveness of government activities and accountability for those activities
- increase cost consciousness for all stakeholders by raising awareness of how much a government activity costs.

Any changes to the existing licensing regime will need to:

- ensure efficient cost recovery such that licence revenue generated continues to meet the costs incurred by the regulators
- consider the distributional implications of cost recovery, such that licence fees across different types of electricity operators reflect the cost to regulate different entities based on factors that could include the complexity, risk, or size of operations
- consider the longer-term relationship between charges and regulatory costs given the likely future growth of smaller generators, EV's and VPP's
- consider how cost recovery might affect policy outcomes, legal requirements, ministerial responsibilities for DER
- assess the impact on competition, innovation, and the financial viability of the directly affected entities, including the cumulative effect from other government activities
- ensure there is appropriate consultation with stakeholders on any proposed changes to cost recovery settings.

⁶ Australian Government Cost Recovery Guidelines, Resource management Guide No. 304, July 2014

It has been the government's policy that energy supply industry fees will meet the full cost of the energy related activities of ESCOSA, the OTR and the South Australian contribution to the AEMC budget.

The AEMC is fully funded by the NEM jurisdictions on a proportional basis, including in relation to its electricity rulemaking and market development functions. The funding arrangements are set out in an inter-governmental funding agreement between the governments of South Australia, Victoria, Tasmania, the Australian Capital Territory, New South Wales and Queensland. In South Australia, the annual AEMC fee is recovered through generator and network service provider license fees, as well as retailer administration fees.

Question 1

With the evolution of the market, especially with the increasing integration of Distributed Energy Resources, do you believe the licensing regime remains fit-for-purpose?

Question 2

How do you see South Australia's licensing regime interacting with the national framework for participating in the NEM?

Question 3

What challenges have you experienced with the existing electricity licensing framework?

Question 4

Can you provide examples where the current framework has impeded your participation in the South Australian energy market?

Question 5

What do you see as the main strengths and weaknesses of the existing licensing framework?

Question 6

What do you regard as the main costs and benefits of the existing licensing framework? Please quantify these where possible.

Question 7

Aside from the examples of DER business model described in this paper, can you identify other examples of emerging technologies that may pose challenges for the existing licensing framework.

Question 8

Are there key features of the electricity licensing framework that you would like the department to consider including in its review?

Submissions

Written submissions should be provided by **cob Friday, 18 February 2022**.

Submissions via email are preferred with the subject line “Review of Electricity Licensing in South Australia” or can be posted to:

Review of Electricity Licensing in South Australia
ATTENTION: Rebecca Knights
Department for Energy and Mining
Energy and Technical Regulation Division
GPO Box 320
ADELAIDE SA 5001

Email: dem.consultation@sa.gov.au

All submissions will be published on the Government of South Australia website including your name and organisation (if applicable), however your contact details will not be published.

Please indicate clearly on the front of your submission if you would like it to be treated as confidential, in full or part, and the reason why it should not be made publicly available.

Under the *Freedom of Information Act 1991*, the Government of South Australia may also be required by law to release your submission to a third party. If a request is made under the Act, you will be contacted prior to the release of any material.

Further information

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