

Review of the Northern Territory's Electricity Licensing Regime

Issues Paper

A paper considering the scope and design of the Territory's electricity licensing regime

April 2022

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Contents

Acronyms and abbreviations	2
Executive summary	3
1 Introduction	4
Review of the Territory's licensing regime	4
The role of the Commission	4
Purpose of this consultation	4
Submissions	5
Confidentiality	5
Consultation process	6
2 Licensing coverage and purpose	7
Legislative framework for licensing and exemptions	7
Special licences – legacy arrangements	8
Independent power producers	8
Standalone power systems – mining communities	9
Objectives that licensing aims to address	11
Licence duration	13
3 Emerging technologies and business models	14
Energy storage systems	14
Alternative supply models	17
Electric vehicle recharging	18
4 Licensing coverage – exemptions	20
Administration of the exemptions framework	20
SSRE operations exemption	22
On-supplier exemption	27
Appendices	
A: Summary of consultation questions	29
B: Electricity licensing application checklist, attachment list and declaration	31

Acronyms and abbreviations

AER Australian Energy Regulator

BESS battery energy storage system

Commission Utilities Commission of the Northern Territory

DER distributed energy resource

EIP Code Electricity Industry Performance Code

EPO electricity pricing order

ERA Energy Resources of Australia Ltd

ER Act Electricity Reform Act 2000

ER Regulations Electricity Reform (Administration) Regulations 2000

ERS Code Electricity Retail Supply Code

EV electric vehicle

GEMCO Groote Eylandt Mining Company Pty Ltd

IPP independent power producers

kVA kilovolt amperes

NETCC New Energy Tech Consumer Code

MW megawatts
PV photovoltaic

PWC Power and Water Corporation

RTA Gove Alcan Gove Pty Limited

SSRE small scale renewable energy

Territory Northern Territory

UC Act Utilities Commission Act 2000

VPP virtual power plant

Executive summary

In the Northern Territory (Territory), businesses operating in the electricity supply industry are required to hold (or be exempted from holding) a licence granted by the Utilities Commission (Commission). A licence sets out the terms and conditions that the business must meet in order to operate in the Territory's electricity supply industry including the requirement to comply with electricity laws, regulations, codes and rules that jointly form the standard for electricity supply.

The Territory's electricity licensing regime (licensing regime) is premised on a traditional electricity supply chain where centralised generation produces energy which is transmitted and distributed through poles and wires to end consumers who purchase their electricity through a retail business. This traditional supply model is being challenged by developments that provide consumers with the opportunity for involvement in electricity supply to their premises and new business models providing a broader range of energy-related services. The licensing regime needs to accommodate these changes taking into account the desire to minimise barriers to entry so consumers have more choice in products and suppliers while still ensuring consumers are sufficiently protected with respect to the price, reliability and quality of services and supply.

Accordingly, this Issues Paper reviews the coverage, relevance and flexibility (scope and design) of the Territory's licensing regime with a focus on its application and performance in three broad areas:

- the types of activities that should be subject to licensing given emerging technologies and business models
- the framework for circumstances where an exemption rather than a licence would be more appropriate
- the conditions that should be placed on licensees and those who are exempted from the requirement to hold a licence.

The Commission seeks feedback from existing and potential licensees, consumers and other stakeholders on the issues raised in this Issues Paper. To help guide submissions, the Issues Paper poses 27 questions for consideration by respondents.

Submissions should be submitted by 5 pm Friday, 3 June 2022 and provided electronically by email to utilities.commission@nt.gov.au in Adobe Acrobat or Microsoft Word format. Submissions will be made publicly available on the Commission's website.

Responses to this Issues Paper will inform the Commission's next steps and a subsequent paper presenting its preliminary views on changes to the Territory's licensing regime. Submissions will also inform a broader review of the Territory's licensing regime, which will ultimately cover the consistency, efficiency and effectiveness of the form and content of licenses and licensing administration and related reporting and compliance processes.

1 | Introduction

1.1 Section 14 of the *Electricity Reform Act 2000* (ER Act) provides that a person must not carry on certain types of operations in the Territory's electricity supply industry unless that person holds a licence authorising the relevant operations or is exempted from the requirement to hold a licence.

Review of the Territory's licensing regime

- 1.2 The operation of the Territory's licensing regime has not been subject to major review since its establishment in 2000. Over the same period, however, technology has evolved and an increased demand for renewable energy has resulted in the rapid growth of alternative electricity supply arrangements not contemplated at the time the licensing regime was established. Given these developments, the Commission has commenced a review of the Territory's licensing regime that will ultimately encompass all aspects of the regime, but will be undertaken in three separate components as follows:
 - a review of the coverage, relevance and flexibility of the licensing regime (scope and design)
 - a review of the consistency, efficiency and effectiveness of the form and content of licences
 - a review of the efficiency and effectiveness of the Commission's licensing and related reporting and compliance processes (licence administration).
- 1.3 This Issues Paper relates to the first component, which reviews the scope and design of the Territory's licensing regime.

The role of the Commission

- 1.4 The Commission is an independent statutory body established by the *Utilities Commission Act 2000* (UC Act) with defined roles and functions for declared (regulated) industries in the Territory including electricity, water supply and sewerage services industries, and ports. The Commission seeks to protect the long-term interests of consumers of services provided by regulated industries with respect to price, reliability and quality.
- 1.5 The Commission has responsibility for performing licensing functions in the electricity supply industry under the ER Act and Electricity Reform (Administration) Regulations 2000 (ER Regulations). These functions include the power to: grant, amend, transfer and revoke licenses; grant (subject to Ministerial approval) an exemption from the requirement to hold a licence; determine the conditions to be included or excluded from a licence; and monitor and enforce compliance against licence conditions.¹

Purpose of this consultation

1.6 In undertaking its review of the scope and design of the licensing regime, the Commission takes the position that there is a continued need for licensing in the electricity supply industry but that the operation of the regime could be clarified and enhanced. Licensing also needs to be regularly reviewed to reassess the balance between the administrative and financial cost of licensing for licensees and government, and the benefits to consumers and industry.

¹ ER Act, part 3 and sections 87 and 87A; ER Regulations, regulation 3D.

- 1.7 The Commission has identified three key areas where the application and performance of the regime requires assessment. These are:
 - the types of activities that should be subject to licensing (coverage) given emerging technologies and business models
 - the framework for circumstances where an exemption rather than a licence would be more appropriate and
 - the conditions that should be placed on licensees and those who are exempted from the requirement to hold a licence.
- 1.8 The Issues Paper discusses these matters and pose questions for stakeholders with the intent of guiding feedback on the issues under consideration.

Submissions

- 1.9 All interested parties (stakeholders) are invited to make submissions on matters raised in the Issues Paper by 5pm Friday, 3 June 2022.
- 1.10 To facilitate publication, submissions should be provided electronically by email to utilities.commission@nt.gov.au in Adobe Acrobat or Microsoft Word format.
- 1.11 As noted above, the Issues Paper poses a series of questions, which appear like this:

Question X Example question...

- 1.12 Submissions do not have to address every question. Stakeholders need only respond to questions relevant to their areas of expertise or interest. Stakeholders may also provide feedback on other matters relating to the scope and design of the licensing regime (noting there will be the opportunity to comment on licensing administration and the form and content of licences in subsequent stages of the licensing review). The Commission encourages stakeholders to include sufficient explanatory detail in their responses to questions and any other matters discussed in the Issues Paper.
- 1.13 Any questions regarding the Issues Paper or the review should be directed to the Commission by email to utilities.commission@nt.gov.au.

Confidentiality

- 1.14 In the interests of transparency, the Commission will make all submissions publicly available on its website, with the exclusion of confidential information. Confidential information may include:
 - information that could affect the competitive position of an entity or other person
 - or information that is commercially sensitive for some other reason.
- 1.15 Submissions must clearly specify any information that a respondent considers confidential and advise the Commission why they would like the information to be treated as confidential. A version of the submission suitable for publication (that is, with any confidential information removed) should also be submitted to the Commission.
- 1.16 The Commission may also exercise its discretion not to publish any submission based on its content such as submissions containing material that is offensive or defamatory.

Consultation process

- 1.17 Following this consultation, the Commission will consider what changes may be needed to the scope and design of the licensing regime and as necessary publish a paper outlining its proposed changes, which will be subject to a further round of consultation. The Commission's intent is to focus on matters within its power to change, but notes that where there are issues requiring amendments to legislation, the Commission will recommend changes to government; however, the decision to give effect (or not) to those changes resides with the Territory Government.
- 1.18 It is expected this component of the Commission's review of the Territory's licensing regime will be completed during 2022 with other components of the Commission's review of the licensing regime to be undertaken in subsequent years.

2 | Licensing coverage and purpose

2.1 This chapter summarises the legislative framework for the Territory's licensing regime and the objectives the Commission seeks to achieve through the application of licensing or granting of exemptions.

Legislative framework for licensing and exemptions

- 2.2 Under the ER Act and ER Regulations, the following operations require a licence:
 - generation of electricity
 - owning or operating an electricity network or a dedicated connection asset
 - selling electricity
 - system control over a power system
 - operating a wholesale market.^{2, 3}
- 2.3 However, the ER Act and ER Regulations provide for certain exclusions and exemptions from the requirement to hold a licence. The following exclusions and exemptions are in place:
 - exclusion of certain types of generation where it is not connected to electricity infrastructure owned or operated by an electricity entity and it is generated for the person's own use.4
 - exclusion of the sale of electricity from a person to a customer where electricity is not available for supply to the customer by an electricity entity (for example, a customer located in a remote area where there is no existing electricity network) and the total amount supplied is not more than 160 megawatt hours per year.⁵
 - an exemption for the system control licensee for the Darwin-Katherine power system to operate a wholesale market for that power system without being required to also hold a wholesale market licence.6
 - an exemption for the on-supply of electricity, that is, where an owner or occupier of premises, or a person who has the right to use premises, supplies or sells electricity to other users on the premises.⁷
- 2.4 Section 87 of the ER Act also provides for the Commission, with the approval of the minister, to grant an exemption from the requirement to hold a licence from any operation, on terms and conditions the Commission considers appropriate. The Commission has issued the following exemptions:
 - small scale renewable energy (SSRE) operations with a maximum generation capacity of 2 megawatts.
 - three individual exemptions for specific entities and their operations.8

² ER Act, section (s) 14

³ ER Regulations, regulation 3E

⁴ ER Regulations, regulation 3A

⁵ ER Regulations, regulation 3B

⁶ ER Regulations, regulation 3F

⁷ ER Regulations, part 4.

⁸ Refer the Commission's website at https://utilicom.nt.gov.au/electricity/licensing/register-of-electricity-licences-andexemptions

- 2.5 The Commission is required to keep a register of the licences and exemptions it grants under the ER Act, which can be inspected at no cost. The Commission maintains a register on its website for this purpose, which provides viewers with access to a copy of each licence or exemption. Each individual licence or exemption shows the entity licenced or exempted, the activities covered including their location, and terms and conditions attached to the licence or exemption.
- 2.6 Sections 15(2) and 19(2) of the ER Act require licence applicants and licensees to pay application fees and annual fees, which are set by the Treasurer. There are no fees associated with exemptions. While fees and charges are not within the scope of the Commission's licensing review, the Commission balances these and other costs (for example, costs of compliance and reporting) against the need for customer protections and technical and safety oversight in granting licences and exemptions.

Special licences - legacy arrangements

2.7 At commencement of the licensing regime, there was a need to accommodate existing arrangements. The following sections discuss these legacy arrangements, with review needed to ensure they remain fit-for-purpose and offer sufficient protections for consumers.

Independent power producers

- 2.8 There are special licenses for privately-owned generators whose electricity is only sold under contract to another licensed generator or privately-owned standalone generation where arrangements predate the introduction of the ER Act. These generators are referred to as independent power producers (IPPs). Current IPP licences have fewer obligations than a standard generation licence, typically omitting conditions relating to:
 - evidencing of financial, technical and other capacity to continue operations (when required by the Commission)
 - establishing and maintaining a compliance process to ensure the licensee complies with its obligations under the licence and all applicable laws, codes, rules or standards
 - reporting on compliance to the Commission and conducting external audits of compliance as required by the Commission
 - notifying of changes in officers or major shareholders
 - compliance with requirements of community service obligations approved and funded by the government
 - providing ancillary services on request by the power system controller
 - preparing and submitting a safety management and mitigation plan to the Commission for approval as well as compliance with, and annual review of, these plans¹⁰
 - requirements if an operator is appointed under section 41 of the ER Act
 - entry into coordination agreements with retail or network licensees.

⁹ In accordance with sections 37 and 88 of the ER Act.

¹⁰ The Electricity Safety Bill 2021 passed on 29 March 2022 will convert this licence condition into a legislated requirement with safety management and mitigation plans to be approved by the Electrical Safety Regulator.

2.9 The Commission is not aware of any issues relating to IPP licensees' compliance with the conditions that are contained in their licenses or any issues arising from the omission of the above conditions from IPP licences. However, the Commission invites comments from stakeholders where it is considered that the lesser requirements on IPP licensees poses an increased the risk to power system integrity or the quality, reliability and cost of electricity supply to customers. The Commission does not expect to issue IPP licences for new operations.

Question 1	Are there risks or other issues that arise as a result of the omission of certain conditions from licences for independent power producers? If so, what are they?
Question 2	Noting the long-standing nature of IPP arrangements, would the benefits outweigh the costs of imposing additional obligations on independent power producers through licence conditions?

Standalone power systems - mining communities

- 2.10 Many communities have standalone power systems as they are located in remote areas, distant from the Territory's three largest power systems (Alice Springs, Darwin-Katherine and Tennant Creek). In most of these communities, the licensed providers of network, generation and retail services are the Territory's government owned corporations - the Power and Water Corporation (PWC), Territory Generation and Jacana Energy.
- 2.11 However, for two special purpose lease (mining) communities Nhulunbuy and Alyangula - electricity services are provided by private providers. For Nhulunbuy (including surrounding areas within the limits of the network), electricity supply operations are undertaken by Alcan Gove Pty Limited (RTA Gove) while Groote Eylandt Mining Company Pty Ltd (GEMCO) operates electricity supply arrangements for Alyangula.
- 2.12 For the township of Jabiru, electricity has been generated and sold by Energy Resources of Australia Ltd (ERA) under an IPP licence. With ERA discontinuing generation activities, replacement generation for the township is to be supplied by EDL Jabiru Pty Ltd, which has been authorised under a standard generation licence.
- 2.13 RTA Gove is exempt from the requirement to hold a licence through an ER Act section 87 exemption document issued by the Commission and approved by the relevant minister¹¹. The exemption was originally established in 2005 then reviewed in 2019. The current exemption is subject to review every three years and contains the following conditions:
 - On request, RTA Gove must provide information as necessary for the Commission to perform its functions. For example, the Commission requires annual reporting on any material breaches of its section 87 exemption obligations and performance against applicable sections of the Electricity Industry Performance (EIP) Code.
 - RTA Gove must comply with clause 10 of the Electricity Retail Supply Code (ERS Code)¹² relating to customers with life support equipment and comply with its life support procedures for such customers. The procedures are required to be approved by the Commission.

¹¹ Available at https://utilicom.nt.gov.au/publications/exemptions-on-issue/alcan-gove-pty-ltd

¹² Available at https://utilicom.nt.gov.au/electricity/codes-and-guidelines/electricity-retail-supply-code

- RTA Gove must establish guaranteed service levels for performance indicators relating
 to interruptions, connections and appointments. There is flexibility for the guaranteed
 service levels to be appropriate and tailored for the circumstances in Nhulunbuy and
 surrounding areas (that is, the levels in schedule 1 table 1 of the EIP Code need not
 apply) but they are required to be approved by the Commission.
- RTA Gove must comply with clause 4 (Guaranteed Service Level Scheme) and clauses 5 to 7 (reporting, data quality and data segmentation) of the EIP Code as these clauses relate to its approved guaranteed service levels.
- 2.14 While there is not a condition relating to pricing, RTA Gove's primary customers are its own operations, workforce and supporting industries. Accordingly, RTA Gove has an interest in ensuring costs and pricing is as efficient and low as possible. The Commission has not received any complaints relating to RTA Gove's electricity pricing.
- 2.15 GEMCO conducts its electricity operations under an isolated system licence.¹³ The isolated system licence permits GEMCO to undertake network, generation and sales operations for Alyangula and connect with the PWC's electricity network at Angurugu for supply of electricity to that community. GEMCO's licence contains conditions mandated by the ER Act relating to compliance with laws, regulatory instruments and the Territory Government's electricity pricing order (EPO) and development and compliance with customer-related standards and procedures.
- 2.16 GEMCO's licence also includes obligations relating to:
 - quality and adequacy of supply
 - ensuring compatibility with other electricity networks
 - operating and maintaining the network and generation plant to ensure public safety and security of supply
 - restrictions on disconnections
 - providing data to customers
 - requirements to participate in developing, issuing and reviewing regulatory instruments by the Commission
 - providing information to the Commission upon request.
- 2.17 The licence omits obligations relating to audits of operations, evidencing financial or other capacity to continue operations under the licence and notifying the Commission of changes to officers and major shareholders. The absence of these obligations is unlikely to pose undue risk given the essential nature of providing electricity for GEMCO's mining operations and workforce.
- 2.18 Reporting and information requirements on GEMCO are relatively light touch. For example, the Commission does not require GEMCO to report annually on its compliance with the conditions of its licence. The Commission considers this a relatively low risk as there should be alignment between the interests of GEMCO and its customers.
- 2.19 In relation to pricing, the Commission received a complaint regarding charging of electricity by GEMCO in 2003, but since that time, it has not received any further complaints regarding pricing. The Commission has not received any other complaints regarding the services provided by GEMCO.

 $^{13\} Available\ at\ https://utilicom.nt.gov.au/publications/licences-on-issue/groote-eylandt-mining-company-pty-ltd$

2.20 The Commission does not expect to issue any new isolated system licences. This type of licence is not specified in the ER Act and the likelihood of establishing a new mining township (and need for a licence for a single entity providing all electricity operations) is low. Where electricity supply arrangements change in existing standalone communities in the future, the Commission will consider licensing requirements on a case-by-case basis (as has occurred for Jabiru).

Question 3 Are there risks or negative impacts to customers in remote mining communities where there are legacy arrangements to provide electricity supply by private providers operating under special licences or exemptions? If so, what are they?

Objectives that licensing aims to address

- 2.21 In considering applications for a licence, the ER Act requires the Commission to consider the general factors specified in section 6(2) of the UC Act which are 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
 - protect the interests of consumers with respect to reliability and quality of services and supply in regulated industries
 - facilitate maintenance of the financial viability of regulated industries
 - ensure an appropriate rate of return on regulated infrastructure assets.
- 2.22 Creating and maintaining a 'level playing field' for industry participants is necessary due to the continued dominance of government-owned corporations across the electricity supply chain. Licensing promotes appropriate market conduct and moderates monopoly power by enabling the Commission (through powers under the ER Act to include certain licence conditions and make licences subject to other conditions at the Commission's discretion¹⁴) to impose standard obligations and requirements on licensees performing the same type of operation (for example, selling or generating electricity).
- 2.23 The Commission can also influence behaviour between industry participants through licence conditions, for example, requiring retail and network licensees to enter into an agreement to coordinate service provision to their customers and for generators to comply with directions from the power system controller. Other conditions require licensees to ensure reliability, safety and quality of supply including complying with technical and other codes.

- 2.24 The conditions that licensees are subject to are transparent to other and potential market participants through publishing licences on the Commission's website. Licensees are also required to report to the Commission annually on their compliance against licence conditions. The Commission's annual compliance report publishes a summary of the compliance reports received, including a description of breaches reported by each licensee, any remedial action proposed or taken by the licensee in order to resolve the breach, and any enforcement action taken by the Commission.¹⁵
- 2.25 Additionally, the ER Act requires the Commission to ascertain whether the applicant is a suitable person to hold a licence and determine the suitability of the proposed operation or applicant for the activity for which a licence is sought. The Commission obtains necessary information to enable assessment of whether an applicant is a fit and proper person through its application process. Noting the circumstances of a licensee may change over time, it is a condition of all licences (as required under section 24 of the ER Act) that a licensee notifies the Commission of changes in officers and major shareholders and, if requested by the Commission, provide details on its financial, technical and other capacity to continue operations under the licence.
- 2.26 The Commission consults on licence applications, which provides the opportunity for other system participants and stakeholders to provide input into its assessment of the application. This assists with identifying potential technical, financial and other issues that may adversely affect the operation of the power system or viability of industry participants.
- 2.27 The Commission recognises that complying with the conditions of a licence imposes costs on licensees and in some cases these costs may outweigh the benefits, for example, small scale operations with few customers or businesses where the sale of electricity is not core business. In these cases, the Commission may determine that an exemption would better achieve desired outcomes such as facilitating entry to markets and allowing consumers to benefit from competition and efficiency (through more choice or lower cost providers). The Commission's exemption framework is discussed further in chapter 4.

Question 4	How effective is the licensing regime at controlling market power, facilitating competition and promoting investment?
Question 5	How effective is licensing at managing risk including ensuring licensees have the necessary technical competence, financial strength and honesty to operate in the industry?
Question 6	If not effective, what else is needed to address the problem(s) you have identified?
	Alternatively, if current licence conditions are more than what is needed to achieve these outcomes, what requirements could be removed and why?

¹⁵ Available at https://utilicom.nt.gov.au/electricity/reporting/annual-compliance-report 16 ER Act, section 16.

Licence duration

- 2.28 The Commission typically does not set an expiry date for a licence. Instead, a licence continues until it is surrendered by the licensee or the Commission cancels (or suspends) the licence in accordance with section 36 of the ER Act. Allowable reasons for cancellation (or suspension) are: the licensee obtained the licence improperly; is guilty of material contravention of a licence condition or legislative requirements; has ceased to carry on operations authorised by the licence; or there has been behaviour or circumstances that mean the licensee would no longer be entitled to be granted its licence.
- 2.29 This approach avoids the costs associated with renewal for both licensees and the Commission (for example, fees and resources required to prepare documentation and administer the process). The Commission can still, however, revoke the licence of a poorly behaved entity, if needed. Conversely, if there was a set duration for a licence, the renewal process would afford the Commission the opportunity to review a licensee's compliance with licence conditions with the potential to impose more or less requirements in the licence based on performance. However, the Commission monitors compliance through its annual reports and could, if it wished (through its Compliance Framework and Reporting Guidelines), adopt an approach that applied less reporting or auditing requirements for licensees who demonstrate good, consistent performance.

Question 7

Do the benefits of the Commission's approach for the term of a licence appropriately balance any risks that may arise from no expiry date and costs associated with requiring regular renewal?

3 | Emerging technologies and business models

- 3.1 The electricity supply industry is undergoing transformation with the emergence of new energy technologies and business models. These developments include energy storage systems, SSRE generation systems, embedded networks, virtual power plants (VPPs), electric vehicle (EV) charging stations, peer-to-peer trading and community energy projects. Their uptake will increase the diversity of industry participants, localise generation and result in the bi-directional flow of energy.
- 3.2 The diversity of emerging technologies and business models presents a challenge to the licensing regime and a one-size-fits-all approach will not be appropriate. Instead, the application of licences and exemptions needs to be adaptable and flexible so it facilitates the entry of these alternative supply models while still ensuring consumers (or prospective consumers) of those services are sufficiently protected and power systems continue to operate safely, securely and reliably.
- 3.3 This chapter discusses the application of the licensing regime to key emerging technologies and business models. It identifies areas of potential uncertainty, barriers or risks, and seeks input from stakeholders to help the Commission determine the approach that needs to be taken to accommodate alternative supply arrangements.

Energy storage systems

- 3.4 Energy storage systems encompass an array of technologies including electrochemical (batteries), mechanical (such as flywheels), thermal (such as molten salt), gravity (such as pumped hydro) and hydrogen. Energy storage will be an integral part of the transition to the Territory Government's 50% renewable energy target. For example, a 5 megawatt (MW) battery energy storage system (BESS) has been installed in the Alice Springs power system and procurement is underway for a 35 MW BESS for the Darwin-Katherine power system, with significantly more battery investment envisaged in the future 18. On a smaller scale, many homes and businesses are installing batteries as part of their SSRE systems, in part facilitated by the Territory Government's Home and Business Battery Scheme.
- 3.5 The Commission classifies battery energy storage systems and other energy storage technologies as generation, noting these systems provide the same services as those provided by, or inherent to, traditional forms of thermal generation. The Commission also considers that the definition of generation of electricity in the ER Act "operation of any kind of electricity generating plant and all incidental and related operations, but does not include anything declared by Regulations not to be generation" would encompass energy storage systems, noting the ER Regulations contain no exclusions specific to these systems.

¹⁷ Energy Storage Association. Technologies of Energy Storage webpage. Accessed on 12 August 2021 at https://energystorage.org/why-energy-storage/technologies/.

¹⁸ Northern Territory Government. Darwin-Katherine Electricity System Plan. Accessed on 26 October 2021 at https://territoryrenewableenergy.nt.gov.au/strategies-and-plans/electricity-system-plans#Darwin-Katherine-electricity-system-plan.

¹⁹ ER Act, section 4.

- 3.6 To date, larger scale commercial energy storage systems in the Territory have been installed by incumbent generators or form part of new hybrid generation systems. Batteries installed by households and businesses would be exempt from licensing under the Commission's SSRE operations exemption provided the total system size including battery capacity remains below the exemption threshold, which is currently 2 MW. The SSRE operations exemption is discussed further in the following chapter.
- 3.7 The Commission has yet to receive any licence applications relating to energy storage systems for localised energy needs, for example, a community battery or to provide essential system services; however, the Territory's arrangements for the provision of essential system services are still under development²⁰. Once market arrangements are in place and the opportunity exists for commercial energy storage systems to provide relevant services, licences to operate will likely be sought.
- 3.8 Small scale commercial energy storage or community-owned systems intended to primarily serve local needs (that is, service providers and customers are primarily the same) may require a more nuanced approach. For some projects, the costs associated with licensing including annual fees, compliance reporting and complying with service and other standards may be unduly high relative to revenue and/or the benefits of licensing (for example, customer protections, application of a compliance and enforcement regime, dispute resolution processes, visibility and direction by power system controllers). In these instances, an exemption from a licence may be appropriate, noting such an exemption would be subject to compliance with conditions intended to mitigate any major risks.
- 3.9 In issuing a licence (or an exemption), the Commission must consider what conditions the licence (or exemption) is to be subject to. Section 24 of the ER Act requires all licences to be subject to the following general conditions:
 - requiring compliance with applicable codes or rules (with modifications or exemptions determined by the Commission) made under the UC Act
 - requiring compliance with protocols, standards and codes applying to the licensee under the ER Regulations
 - relating to the licensee's financial or other capacity to continue operations under the licence
 - requiring the licensee to have all or part of the operations authorised by the licence audited and report the results of the audit to the Commission
 - requiring the licensee to notify the Commission about changes to officers and, if applicable, major shareholders of the electricity entity
 - requiring the electricity entity to comply with the requirements of any scheme approved and funded by the minister for the performance of community service obligations by electricity entities.
- 3.10 Examples of codes that may be applicable to electricity entities (subject to the nature of their operations) are the System Control Technical Code, Network Technical Code, EIP Code and ERS Code. Other applicable instruments include the Territory Government's EPO, and the Commission's Compliance Framework and Reporting Guidelines and EIP Code Independent Compliance Audit Guidelines.

²⁰ For further information see the Northern Territory Electricity Market Priority Reform Program website at https:// industry.nt.gov.au/reforms/northern-territory-electricity-market-priority-reform-program

- 3.11 For generation licences, which would be applicable to energy storage systems, section 25 of the ER Act also allows the Commission to impose additional conditions intended to address risks that generation operations may pose to power system integrity. These conditions are:
 - requiring compliance with directions from the power system controller
 - requiring the licensee to provide electricity of a quality suitable for the electricity network
 - requiring the licensee to not do anything affecting the compatibility of their generating plant with any electricity network so as to prejudice public safety or the security of supply
 - requiring the licensee to give a network provider the right to use or access its generating plant when necessary for ensuring proper integrated operation of the power system and carrying on of the licensee's authorised operations.
- 3.12 Beyond this, the Commission has the power to pose other conditions as it determines are appropriate.²¹ This is also the case for exemptions, noting that any exemptions granted by the Commission including associated conditions must be approved by the minister.
- 3.13 The Commission seeks to standardise the conditions applied to licensees of a particular type (to ensure a level playing field); however, this may be overly onerous for smaller or community-owned operations. Equally, some conditions may be critical to mitigate risks posed by circumstances that will or have the potential to result in significant detriment to customers or power system operation. Therefore, it is necessary they be included in both licences and exemptions.
 - Question 8 Are there barriers to entry or other issues with classifying energy storage systems as generation for potential participants? If so, what are they?
 - Question 9 Are there any benefits to prescribing energy storage systems as a separate operation in the electricity supply industry requiring a licence (or exemption)? If so, what are they?
 - Question 10 What are the key risks to electricity supply (if any) that need to be addressed through licensing (or exemptions) of energy storage systems?
 - Question 11 Would any of the general or specific conditions for generation be not relevant or difficult to comply with by an operator of a standalone energy storage system? Why?
 - Question 12 Beyond those already specified in legislation, are there any other conditions the Commission should consider including in a licence (or exemption) for an energy storage system? What risks do these address?

Alternative supply models

- 3.14 Technology (for example, smart meters and communications infrastructure), SSRE operations and competitive markets are giving rise to new and innovative business models and products, which offer individuals or groups of customers a supplementary or independent supply of electricity and the ability to engage in providing wholesale electricity, essential system services and selling of electricity. ²² Examples of these alternative supply models include aggregators, microgrids and alternative energy sellers.
- 3.15 Aggregators use a centralised information technology system to remotely operate, in unison, distributed energy resources (DERs) that are directly connected to a distribution network.²³ DERs include generation units, energy storage systems, smart charging EVs and other devices owned by households and businesses where demand can be remotely controlled. By optimising the use of DERs, aggregators can participate as a single entity in electricity markets or provide essential system services, creating additional revenue streams or cost reductions for DER owners.²⁴ An example of aggregation in the Territory is the proposed VPP component of the Alice Springs Future Grid project.²⁵
- 3.16 A microgrid is an energy system connected to the existing grid, but unlike an aggregation platform, it can disconnect and operate independently to continue to supply power to its customers through its own generation and storage sources when needed. A microgrid services a particular geographic area, such as a business precinct, university campus or residential development, and manages its operations to meet goals set by its customers (such as lowest prices) by increasing or decreasing use of any or combinations of the microgrid's resources.²⁶
- 3.17 Alternative energy sellers encompass a range of business models and can include other operations such as generation and distribution activities, for example, an energy project where a community group develops, operates and benefits from a localised electricity supply initiative. Other models may involve a solar power purchase agreement where a business installs a generation system on a customer's premises, but retains ownership, maintains the system and charges the customer (and potentially other users on the premises) for the electricity generated from the system.²⁷ An example in the Territory of this model is Assure Energy Asset Pty Ltd's provision of electricity to the Department of Defence at its bases in Holtze and Winnellie.²⁸

²² International Renewable Energy Agency. Innovation landscape brief: Aggregators. Accessed on 13 August 2021 at https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Feb/IRENA Innovation Aggregators 2019.

²³ International Renewable Energy Agency. Innovation landscape brief: Aggregators. Accessed on 13 August 2021 at https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Feb/IRENA_Innovation_Aggregators_2019. PDF.

²⁴ Ihid

²⁵ Intyalheme Centre for Future Energy. Alice Spring Future Grid project website at https://alicespringsfuturegrid.com.au/.

²⁶ Microgrid Knowledge. What is a microgrid? accessed on 16 August 2021 at https://microgridknowledge.com/ microgrid-defined/.

²⁷ Victorian Department of Economic Development, Jobs, Transport and Resources. Review of the General Exemption Order Issues Paper. Accessed on 12 August 2021 at https://www.energy.vic.gov.au/legislation/general-exemption-

²⁸ Available at https://utilicom.nt.gov.au/electricity/licensing/register-of-electricity-licences-and-exemptions.

- 3.18 At present, the licensing requirements for alternative supply models in the Territory are considered on a case-by-case basis. For clarity, these models cannot be assumed to fall under the SSRE operations or on-supplier exemptions (refer paragraph 3.3) as the commercial nature of these activities, sale of products other than electricity (for example, essential system services) and the potential for a large amount of distributed generation to be under centralised control does not fit with the intent of those exemptions.
- 3.19 The Commission is concerned that consumers may assume the protections provided under traditional arrangements extend to alternative models of electricity supply, even where these operate under relatively limited regulatory oversight (that is, an exemption). Equally, the uncertainty regarding the need for a licence and associated costs of compliance could be deterring the entry of businesses offering alternative supply models (and therefore the availability of such services to consumers). The Commission seeks to find a pathway forward for alternative supply models that balances the benefits and costs of licensing.
 - Question 13 Are there barriers to entry or other issues the Territory's current licensing regime presents for new entrants offering alternative supply models?
 - Question 14 What characteristics or activities of alternative supply models might mean a more 'light-handed' regulatory approach is needed? Why?
 - Question 15 What are the major risks (such as financial, security, quality or information) associated with alternative supply models that the Commission should take into account in its licensing decisions?
 - Question 16 If the Commission were to grant an exemption to operate an alternative supply model, what type of conditions should apply (please relate this to major risks)?

Electric vehicle recharging

3.20 EV uptake in the Territory is currently low; however, this is expected to change over coming years facilitated by the Territory Government's Electric Vehicle (EV) Strategy and Implementation Plan²⁹, increased affordability and changing consumer preferences toward low and zero emission vehicles. As the Territory's recharging infrastructure expands to support greater uptake, it is expected this will give rise to a range of business models including entities whose primary business activity is the recharging of EVs (akin to a petrol station).

- 3.21 The ER Act and associated legislative instruments (including on-supplier exemption provisions in the ER Regulations) do not contemplate EV charge points; however, where a charge is made for the service (including cost recovery) it would fall within the ER Act's definition of selling, that is, trading in electricity including the selling of electricity to customers. There is no specific exemption for EV charging infrastructure, but where EV charging is provided in an apartment block or business premise to owners or occupiers, the charging infrastructure may fall under the on-supplier exemption³⁰. In this case, where a charge is made for the consumption of electricity used in recharging, as measured by a meter, the charge can be no more than the regulated tariff as prescribed by the EPO (that is, either the commercial or residential tariff).
- 3.22 Where, however, electricity is sold through an EV recharging point, a retail licence or an exemption from the requirement for a licence would appear to be needed, otherwise the business could be operating in breach of the ER Act. It should be noted that EV recharging infrastructure must comply with safety and technical requirements under the ER Act, regardless of licensing arrangements. Metering equipment would also need to comply with any trade measurement standards for EV charging stations set by the National Measurement Institute.³¹
- 3.23 Licensing the selling of electricity seeks to address risks associated with supply to customers and it is a condition of a retail licence that the licensee complies with the ERS Code. The ERS Code provides rules for transferring customers between retailers, arrangements relating to credit support, billing and metrology, dispute resolution processes and protections for customers that require life support equipment. These requirements reflect the necessity of electricity supply for domestic purposes (such as, heating, cooling, cooking and lighting) or commercial activities. The relevance of such requirements to EV charging stations is less clear given the short-term nature of recharging, EV owners' ability to choose where they recharge (including at their own premises) and the existence of alternative options for transport.
 - Question 17 What protections in terms of price, access, quality and continuity of supply are needed for users of commercial EV recharging services? Note: EV recharging stations must comply with safety and technical
 - requirements under the ER Act and other relevant legislation. Regulation of safety and technical requirements are the responsibility of the Electricity Safety Regulator and outside the scope of this consultation.
 - Question 18 What are the major risks (such as financial, security, quality or information) associated with EV charging stations that the Commission should take into account in its licensing decisions?
 - Question 19 If the Commission were to grant an exemption to an EV charging station, what type of conditions should apply (please relate this to major risks)?

³⁰ ER Regulations, part 4

³¹ National Measurement Institute. Electric Vehicle Charging Stations - Trade Measurement Policy Consultation Paper August 2021, accessed on 24 December 2021 at https://consult.industry.gov.au/trade-measurement-policy-forelectric-vehicle.

4 | Licensing coverage - exemptions

- 4.1 The Commission recognises that a 'lighter touch' in terms of obligations and licensing costs may be justified where risks to customers or power system security are low, operations are of a small scale or community orientated. The tool available to the Commission is its power, under section 87 of the ER Act (and subject to ministerial approval), to exempt a person or class of activities from the requirement to hold a licence on terms and conditions that the Commission considers appropriate.
- 4.2 This chapter examines the operation of the exemptions framework and seeks input on the principles the Commission should use to guide its decisions in determining whether a licence or an exemption is the appropriate pathway. The chapter also reviews the purpose and functioning of the Commission's SSRE operations exemption in light of developments in SSRE technology and business models.

Administration of the exemptions framework

Risks, benefits and options for exemptions

- 4.3 The Commission considers that licensing and associated obligations (licence conditions) are the means to:
 - control market power licence conditions serve to create a 'level playing field' (for
 example, compliance with regulatory instruments and reporting requirements), promote
 coordination between participants and place the focus on customers
 - facilitate competition and private sector investment transparency on who is
 participating in the electricity supply industry, the nature of their activities and the
 conditions to which they are subject
 - manage risk including technical competence, financial strength and honesty assessed through the application process and monitored through reporting, audit and notification obligations
 - provide protection for customers conditions placed on licensees including compliance with technical and other codes, and requirements relating to standards and procedures from a consumer protection framework for the supply of electricity
 - protect the secure and reliable operation of the power system through requirements regarding adequacy and quality of supply, operation, maintenance and asset management, and compliance with directions of the power system controller.
- 4.4 Licensing does, however, impose costs on licensees through fees and resources associated with achieving and maintaining compliance with licence conditions. Accordingly, exemptions are a means by which certain types of operations can be less burdened by licensing costs and obligations when they would be disproportionate relative to the potential risks to customers and/or the operation of the power system.
- 4.5 Importantly, while an exemption from the requirement to hold a licence may be granted, an exemption is not unconditional. Typically, definitional criteria will establish what operations are covered by the exemption and there will be conditions exempted entities must comply with. If an entity does not fall within these criteria or comply with the conditions of exemption, then they are effectively operating without a licence and potentially subject to a penalty under the ER Act.

- 4.6 Exemptions established by the Commission take one of two forms:
 - an individual exemption, which must be applied for and is tailored to an entity's specific activities and situation including any appropriate conditions
 - a class exemption where if an entity's activities fall within a particular defined type (class) of activities, there is no need to apply to the Commission for an exemption, but the person must abide by any conditions attached to that exemption (the SSRE operations exemptions is an example of a class exemption). It is up to a person to satisfy themselves that they fall within the activities covered by a class exemption including obtaining their own legal advice, if necessary.
- 4.7 In other jurisdictions, there is also a 'registrable' exemption where if a person's activities fall within a particular class of activities there is no requirement for a licence but the person must register their activity and abide by any conditions attached to the exemption. An example of this type of exemption is the Australian Energy Regulator's (AER's) network service provider registration exemption. The situations that registrable exemptions apply are defined by the AER and where a person's activities fall within those parameters, they must complete an online registration form on the AER website (the exemption is not automatic), which requires information including detail on the person or business seeking the exemption, the site and activities at the site.³² The exemption comes into effect once the exemption appears on the AER's public register. The registered party must comply with conditions relevant to their registrable exemption and advise when their details or activities change. Victoria also has a Register for Exempt Persons, which requires most people and businesses that on-sell or supply electricity within a site they own, occupy or operate, but are not required to have an electricity licence (as specified under Victoria's General Exemption Order 2017) to register with the Essential Services Commission as an exempt person.33
- 4.8 The Commission has not used such an approach to date, but it could be appropriate for some emerging technologies where potential risks to power system security or customers justify identification of operations and the capacity for more monitoring than might otherwise be possible under a class exemption. Registration also provides information should there be a need for the Commission to investigate a complaint and assists the Commission to effectively undertake its compliance and enforcement obligations. The need for registration is also considered later in this chapter in relation to the SSRE operations exemption.

Guiding principles for assessing exemptions

4.9 While the ER and UC Acts provide guidance for assessing licence applications³⁴, this is in terms of granting or refusing the licence. The legislation does not provide guidance for determining whether a licence or an exemption is the most appropriate outcome or whether an individual or class exemption should be considered. The lack of principles or factors to guide decision-making reduces transparency for potential applicants and increases the risk of inconsistency across assessments.

³² AER. Electricity network service provider - registration exemption guideline version 6 March 2018. Accessed on 3 February 2022 at https://www.aer.gov.au/system/files/AER%20electricity%20NSP%20Registration%20 Exemption%20Guideline%20-%20Version%206%20-%201%20March%202018.pdf.

³³ Essential Services Commission. Registration guideline for exempt persons. Accessed on 3 February 2022 at file:///C:/ Users/rmalyon/Downloads/Registration-Guideline-for-Exempt-Persons.pdf

³⁴ Section 16 of the ER Act.

- 4.10 The Commission considers its primary objective is to protect the long-term interests of Territory consumers with respect to price, reliability and quality of electricity supply. To achieve this, electricity industry operations need to be reliable, safe, efficient and cost-effective. There also needs to be a level playing field for all market participants, regardless of their scale or scope of operations including the relative cost impact of regulation so this does not unduly deter entry or impact on the viability of potential service providers.
- 4.11 The Commission proposes to develop a set of principles to guide its decision-making on when an exemption might be a preferred approach to authorising an electricity entity or class of operations. The Commission seeks feedback on some preliminary principles to follow and suggestions for further guiding factors:
 - exemptions must be in the public interest (individual and broader benefits outweigh) any detriment associated with exemption)
 - the residual risk of detriment is low (as a result of application of any conditions)
 - electricity is bundled with other products and forms an insignificant part of the service
 - vulnerable consumers are sufficiently protected
 - customers are well-informed to be able to benefit from the activity and its competitive market impact
 - market conditions will ensure customers are supplied on fair and reasonable terms
 - market conditions will ensure customers are supplied at a fair price
 - the costs of regulation would outweigh the benefit of regulation
 - if needed, registration (rather than licensing) could provide sufficient visibility of operations
 - a risk-based approach will be applied to determining conditions for an exemption (a standard set of conditions for all exemptions would not be sufficiently adaptable or flexible).
 - Question 20 Are the principles listed above appropriate for determining whether an exemption is an appropriate outcome (rather than a licence)?
 - Question 21 What other factors could guide the Commission's considerations?
 - Question 22 Is there a scale (for example, size of customer or operation) for an electricity supply activity, where an exemption may be appropriate? Please explain your answer including whether scale is dependent on the type of activity.

SSRE operations exemption

- 4.12 The Commission's SSRE operations exemption, established in 2007, exempts small scale renewable energy operations from the need to hold a generation or retail licence with exempt activities defined as follows:
 - the generation of electricity where:
 - the maximum generating capacity is 2 MW
 - the electricity is generated from a renewable source
 - the electricity is generated primarily for on-site supply
 - the generator is connected to the distribution network
 - and the associated sale of excess electricity generated that is exported to the distribution network, when electricity is generated in excess of on-site supply requirements.
- 4.13 The exemption is subject to three conditions. The first condition requires an exempt person to provide the Commission with any information requested in the performance of the Commission's functions under any applicable laws. To date, the Commission has not requested any information from persons operating under the SSRE operations exemption.
- 4.14 The second condition requires the exempted person to have a contract with a licensed electricity retailer for the sale of electricity exported to the distribution network. The Commission does not monitor compliance with this condition, noting that without such a contract, an exempted person will not receive payment (a feed-in tariff) for electricity exports. The Commission notes that feed-in tariffs are determined by each retailer on a commercial basis. There are no legislative arrangements that set the level of these tariffs.
- 4.15 The final condition requires the exempted person to comply with all relevant safety and technical requirements of the ER Act and ER Regulations. Safety and technical matters are overseen by the Electricity Safety Regulator (NT Worksafe). These requirements as well as conditions associated with connecting to the network, ensure SSRE operations are installed and operate safely and integrate appropriately with other electricity entities and infrastructure.
- 4.16 At the time the SSRE exemption was established, uptake of rooftop solar photovoltaic (PV) systems was relatively low and the exemption was intended to reduce barriers to uptake of and access to feed-in tariffs for the sale of excess electricity from these systems. Uptake of rooftop solar PV has risen markedly since that time and it is now timely that the Commission review the exemption to ensure it is appropriately targeted and remains efficient and effective. The following sections raise specific issues identified with the SSRE operations exemption with input sought from stakeholders, as relevant.

SSRE operations that do not export to the grid

4.17 As currently written, the SSRE operations exemption only applies to renewable generation that is exporting excess electricity to the distribution network (grid). It does not account for circumstances where there is no export. It is likely these circumstances were not anticipated at the time the exemption was established and the SSRE operations exemption should be amended to include relevant generation plant, regardless of whether or not there is export to the grid.

Aggregation of SSRE operations

4.18 The potential for aggregation and centralised control of SSRE operations was not contemplated at the time the SSRE operations exemption was established. The exemption is not intended to cover the activities of aggregators, noting they can have substantial implications for the secure operation of power systems. The Commission considers this exclusion should be made clear in the exemption.

SSRE threshold

- 4.19 The upper threshold of the SSRE operations exemption is set at 2 MW, which is much larger than the size of a rooftop solar PV system for a typical residential property. It does cover larger rooftop solar PV systems installed on apartment blocks and small business premises, however it seems overly generous even for the larger energy demand of owners and occupiers of these premises, noting the SSRE operations exemption intends for electricity generated to be primarily for on-site supply. It is not intended to cover generation of a larger scale, purposefully well in excess of needs (in order to maximise the revenue from exports of electricity), rather these operations should be licensed (or individually exempted).
- 4.20 At the time the SSRE operations exemption was established, these operations may not have been considered likely to present an undue risk to the secure operation of the Territory's power systems and there is no requirement under the exemption for owners of these systems to comply with directions from power system controllers (as is the case for licensed generators) or provision made for other mechanisms to influence the output of these systems in order to manage risks to power system security. The substantial uptake of rooftop solar PV and associated decline in minimum system demand during daylight hours means additional SSRE operations, particularly larger scale operations, could have substantial implications for the power system. For example, in the Territory's largest power system, the Darwin-Katherine interconnected system, minimum demand is currently about 85 MW, but has been as low as 67 MW³⁵, and is forecast to decline to about 40 MW by 2029-30³⁶. This means a 2 MW SSRE system equates to about 2% of minimum demand at present but by 2029-30, it would represent 5% of minimum demand. For the Alice Springs power system, the proportionate figure is even greater with minimum demand currently around 10 MW and forecast to decline to 7 MW by 2029-30.
- 4.21 Although SSRE operations do not require a licence, they require a connection agreement with PWC, as network provider for the Territory's larger power systems. Through the connections process, PWC imposes technical requirements and site export limits. While PWC provides for systems less than 30 kilovolt amperes (kVA) to be pre-approved for connection to the Alice Springs, Darwin-Katherine and Tennant Creek systems (with specified site export limits), eligibility for connection of generation above 30 kVA in size must be negotiated (with site export limits determined by assessment).³⁷ In other power systems, there are different arrangements in place and in some small isolated power systems a zero export limitation or a total limit on solar PV systems is imposed because of the potential impact on the stability of the power system.³⁸

³⁵ In May 2020. System Control advice to the Commission on 25 February 2022,

³⁶ Utilities Commission. Northern Territory Electricity Outlook Report 2020. Available at https://utilicom.nt.gov.au/electricity/reporting/electricity-outlook-report.

³⁷ Refer https://www.powerwater.com.au/customers/power/solar-power-systems/pv-class-requirements.

³⁸ Refer https://www.powerwater.com.au/customers/power/solar-power-systems/remote-solar-pv-systems

- 4.22 Given the above issues, it may be appropriate to lower the 2 MW threshold for the SSRE operations exemption. Lowering the threshold would mean any future SSRE operations over the new threshold would either require a licence or individual exemption. While this would impose additional costs on owners of larger SSRE operations in terms of fees and compliance with licence (or exemption) conditions and any associated reporting requirements, it would provide visibility of these systems (this issue is discussed further in the next section) and the ability for the Commission to consult with electricity industry participants on the impact of these systems and assess what conditions should be attached to the licence (or exemption) for the SSRE operation.
- 4.23 A reduction in the threshold of the SSRE operations exemption would have implications for existing larger SSRE operations falling within the current 2 MW threshold as they would no longer be exempt from the requirement to hold a licence (or exemption). Accordingly, as part of any potential reduction in the threshold, the Commission would consider what arrangements would be needed to accommodate those operations under the revised exemption.

Question 23 If the 2 MW threshold of the SSRE operations exemption were lowered, what would be an appropriate revised threshold?

Question 24 What would be the costs and benefits of such a change?

Visibility of SSRE operations

- 4.24 The SSRE operations exemption means owners of these operations have no need for contact with the Commission. As a result, the Commission has little information on who is relying on the exemption and there is limited public visibility on the extent, location and size of these behind-the-meter operations (PWC, as the network provider, has a level of information available through its connections process). The lack of visibility increases the complexity of forecasting, planning and operating the Territory's power systems. It also potentially results in less efficient operational and investment decisions as there is no publicly available location information on the balance between energy exports and demand across network infrastructure.
- 4.25 Elsewhere in Australia, issues of visibility have been addressed by establishing registers of DER in the National Electricity Market³⁹ and Western Australia's South West Interconnected System⁴⁰. While PWC has information on rooftop solar PV systems through its connection agreement process, there is no publicly available information on these systems other than PWC's Register of Completed Embedded Generation Projects Greater than 200kW, which would capture larger SSRE operations⁴¹.

³⁹ Refer https://www.aemc.gov.au/rule-changes/register-of-distributed-energy-resources.

⁴⁰ Refer https://aemo.com.au/en/initiatives/major-programs/wa-der-program/wa-der-register.

⁴¹ Three registers are available on the PWC website at https://www.powerwater.com.au. The registers show 2 systems between 200 kW and 2 MW in size were connected during the period from 2016 to 2021.

- 4.26 The SSRE operations exemption, or certain types of SSRE operations, could be transitioned from a class exemption to a registrable exemption (as discussed earlier in this chapter). In addition to improving transparency on who is operating under the exemption and providing more information for planning, operations and investment, registration would assist in investigating complaints or potential issues associated with compliance. Any registration process (including requirements to maintain the currency of information in the register) would need to be relatively easy to ensure the costs of increased oversight would not outweigh the benefits.
- 4.27 The Commission seeks the views of stakeholders on the merit of establishing a SSRE operations register for the Darwin-Katherine, Alice Springs and Tennant Creek power systems. The Commission also seeks input on what existing processes and information that could be leveraged to populate a register and what summary information drawn from a register would be useful for publication.
 - Question 25 What benefits and costs would there be to establishing a SSRE operations register in the Territory to provide better visibility of the extent, location and nature of these systems?
 - Question 26 What existing processes and information could be used to populate a register?

Third-party ownership of SSRE operations

- 4.28 Typically, rooftop solar PV in the Territory is installed and operated by owners of the premises. Circumstances where third parties install and operate rooftop solar PV on private premises and sell the output to the owner(s) was not considered at the time the SSRE operations exemption was established. The absence of either an explicit inclusion or exclusion of third-party ownership creates uncertainty for potential market participants about licensing requirements.
- 4.29 Were third-party ownership arrangements to be exempted from the requirement to hold a licence, their customers would not have protections relating to billing, disconnection and reconnection, payment and dispute resolution arrangements that are applicable to licensed retailers. There would also be no process to scrutinise whether business operators have suitable expertise, integrity and financial resources to conduct operations nor would there be ongoing regulatory oversight of their activities.

- 4.30 The Commission notes, however, that this does not imply consumers are without protections and avenues for recourse. The services provided by third-party owners are subject to Australian Consumer Law, which provides generic protections for consumers. Compliance and enforcement activities associated with the legislation are undertaken by Northern Territory Consumer Affairs including provision of conciliation services in the case of disputes. 42 The Commission also notes the industry has drafted the New Energy Tech Consumer Code (NETCC), which sets voluntary minimum standards of good practice and consumer protection for the sale of behind-the-meter products and services. 43 The NETCC program will commence in January 2023 with Approved Sellers having demonstrated to the Clean Energy Council, as administrator of the Code, that they have the processes and procedures in place to ensure ongoing compliance with the standards outlined by the NETCC.
- 4.31 The Commission notes a third-party owned SSRE operation will provide an alternative avenue of electricity supply to owners of premises, but it is likely that the premises will also typically have supply provided (or the ability to be supplied) through a licensed retailer from the electricity grid. Hence, electricity supply remains accessible should supply by the third-party owned SSRE operation be curtailed. The Commission also notes the prices charged by third-parties for electricity supplied will likely be lower than for supply through traditional sources (where tariffs are capped under the Territory Government's EPO) in order to be an attractive alternative source of supply.
- 4.32 Noting the safeguards above, the Commission seeks input from stakeholders on whether there are substantive residual risks to consumers (or potential gaps in consumer protections) that arise as a result of third-party ownership arrangements for SSRE operations being exempt from the requirement to hold a retail licence. A substantive residual risk would be one where the detriment to consumers is likely to be high, the ability to remedy the detriment poor or the industry is unlikely to provide a response (such as changes to conduct) of its own accord.

Question 27 What risks to consumers (if any) would licensing of third-party ownership arrangements for SSRE operations need to address in addition to generic protections and voluntary codes of conduct? Where possible, please provide examples or evidence of specific risks and their consequences.

On-supplier exemption

4.33 As noted in previously, part 4 of the ER Regulations exempts on-suppliers (also known as embedded networks, which are privately owned electricity networks that serve multiple premises, such as some apartment buildings, shopping centres and industrial estates) from the requirement to hold a licence and associated licence conditions for selling electricity. The exemption is, however, on the basis the on-supplier complies with conditions relating to the charges that can be imposed for electricity supplied or sold to a receiver where the receiver's consumption of electricity is measured by a meter.

⁴² For further information see the Northern Territory Consumer Affairs website at https://consumeraffairs.nt.gov.au/

⁴³ For further information see https://www.cleanenergycouncil.org.au/industry/new-energy-tech-consumer-code

- 4.34 The Commission has received complaints relating to the conduct of some on-suppliers. The Commission can ensure an on-supplier is charging in accordance with the conditions of the statutory exemption and does its best to assist by providing information on options, including the contact details for Consumer Affairs. Beyond this, however, the Commission has no power to investigate matters (as provided for under division 8 of part 3 of the ER Act) as an on-supplier is not an electricity entity as defined under the ER Act (that is, a person who holds a licence or whose licence has been suspended, cancelled or has expired).
- 4.35 It is not within the Commission's power to address issues associated with the operation of the on-supplier exemption (the exemption is a policy decision of government and implemented through the ER Regulations), although the Commission considers there may be merit in the Territory Government reviewing the operation of the exemption.

Appendix A: Summary of consultation questions

- Q1 Are there risks or other issues that arise as a result of the omission of certain conditions from licences for independent power producers? If so, what are they?
- Q2 Noting the long-standing nature of IPP arrangements, would the benefits outweigh the costs of imposing additional obligations on independent power producers through licence conditions?
- Q3 Are there risks or negative impacts to customers in remote mining communities where there are legacy arrangements to provide electricity supply by private providers operating under special licences or exemptions? If so, what are they?
- Q4 How effective is the licensing regime at controlling market power, facilitating competition and promoting investment?
- How effective is licensing at managing risk including ensuring licensees have the necessary technical competence, financial strength and honesty to operate in the industry?
- Q6 If not effective, what else is needed to address the problem(s) you have identified?

 Alternatively, if current licence conditions are more than what is needed to achieve these outcomes, what requirements could be removed and why?
- Q7 Do the benefits of the Commission's approach for the term of a licence appropriately balance any risks that may arise from no expiry date and costs associated with requiring regular renewal?
- Q8 Are there barriers to entry or other issues with classifying energy storage systems as generation for potential participants? If so, what are they?
- Q9 Are there any benefits to prescribing energy storage systems as a separate operation in the electricity supply industry requiring a licence (or exemption)? If so, what are they?
- Q10 What are the key risks to electricity supply (if any) that need to be addressed through licensing (or exemptions) of energy storage systems?
- Q11 Would any of the general or specific conditions for generation be not relevant or difficult to comply with by an operator of a standalone energy storage system? Why?
- Q12 Beyond those already specified in legislation, are there any other conditions the Commission should consider including in a licence (or exemption) for an energy storage system? What risks do these address?
- Q13 Are there barriers to entry or other issues the Territory's current licensing regime presents for new entrants offering alternative supply models?
- Q14 What characteristics or activities of alternative supply models might mean a more 'light-handed' regulatory approach is needed? Why?
- Q15 What are the major risks (such as financial, security, quality or information) associated with alternative supply models that the Commission should take into account in its licensing decisions?
- Q16 If the Commission were to grant an exemption to operate an alternative supply model, what type of conditions should apply (please relate this to major risks)?
- Q17 What protections in terms of price, access, quality and continuity of supply are needed for users of commercial EV recharging services?
- Q18 What are the major risks (such as financial, security, quality or information) associated with EV charging stations that the Commission should take into account in its licensing decisions?
- Q19 If the Commission were to grant an exemption to an EV charging station, what type of conditions should apply (please relate this to major risks)?

- Q20 Are the principles listed above appropriate for determining whether an exemption is an appropriate outcome (rather than a licence)?
- Q21 What other factors could guide the Commission's considerations?
- Q22 Is there a scale (for example, size of customer or operation) for an electricity supply activity, where an exemption may be appropriate? Please explain your answer including whether scale is dependent on the type of activity.
- Q23 If the 2 MW threshold of the SSRE operations exemption were lowered, what would be an appropriate revised threshold?
- Q24 What would be the costs and benefits of such a change?
- Q25 What benefits and costs would there be to establishing a SSRE operations register in the Territory to provide better visibility of the extent, location and nature of these systems?
- Q26 What existing processes and information could be used to populate a register?
- Q27 What risks to consumers (if any) would licensing of third-party ownership arrangements for SSRE operations need to address in addition to generic protections and voluntary codes of conduct? Where possible, please provide examples or evidence of specific risks and their consequences.