Department of Climate Change, Energy, the Environment and Water

NSW Service and Installation Rules Review

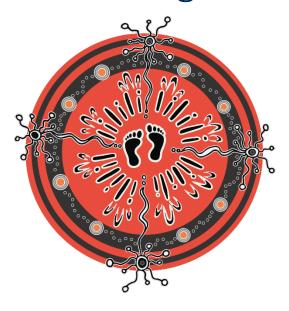
Explanatory Statement

May 2025





Acknowledgement of Country



Department of Climate Change, Energy, the Environment and Water acknowledges the traditional custodians of the land and pays respect to Elders past, present and future.

We recognise Australian Aboriginal and Torres Strait Islander peoples' unique cultural and spiritual relationships to place and their rich contribution to society.

Artist and designer Nikita Ridgeway from Aboriginal design agency – Boss Lady Creative Designs, created the People and Community symbol.

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More information

Visit <u>www.energy.nsw.gov.au/nsw-plans-and-progress/regulation-and-policy/service-and-installation-rules or email service.rules@planning.nsw.gov.au.</u>

Acknowledgements

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NSW Department of Climate Change, Energy, the Environment and Water also acknowledges the input and advice provided by Building Commission NSW, National Electrical Communications Association and SafeWork NSW.

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1 Introduction

The Service and Installation Rules for New South Wales (SIRs) are the industry code that electricians and Accredited Service Providers (ASPs) must follow when connecting a customer to the electricity distribution network. The rules are aimed at achieving safe, reliable and efficient outcomes for both the electricity distributor and the customer.

The SIRs are an amalgam of the connection requirements of the 3 NSW electricity distributors (Ausgrid, Endeavour Energy and Essential Energy). Capturing these in a single document fosters uniformity and collaboration amongst the electricity distributors, making it easier for electricians and ASPs to undertake work in NSW. The SIRs capture areas of commonality while also allowing flexibility for methodologies specific to one electricity distributor.

The NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) serves as the convenor and secretary of the Service and Installation Rules Management Committee (the Committee) overseeing the development of the SIRs.

The SIRs play a crucial role in guiding the standards and practices for electrical installations and services throughout the state. Given the rapid advancements in technology, shifts in consumer expectations, and the imperative to enhance safety and efficiency, it has become essential to revisit and review these rules on a regular basis.

2 Purpose

The draft SIRs for public consultation were prepared with input and contributions from government representatives, electricity distributors, ASPs, industry peak bodies and other stakeholders. The draft SIRs aim to increase the effectiveness of existing provisions, integrate technological advancements and enhance consumer protections. This review has recently concluded.

The primary reason for this review is to ensure that the SIRs better align with contemporary industry standards and technological innovations. As new technologies evolve, it is vital that the rules governing service and installation practices are updated to address new challenges and opportunities. This review aims to enhance the clarity, relevance and effectiveness of the SIRs, ensuring they can facilitate future electricity supply connections.

This review seeks to address feedback from industry stakeholders, and to benchmark to best practices from other jurisdictions. By doing so, the review will help streamline regulatory processes, improve safety outcomes, and instil confidence among consumers and industry stakeholders.

3 Regulatory components

The SIRs reflect the requirements outlined in the *Electricity Supply Act 1995* (the Act) and Chapter 5A of the National Electricity Rules (NER). They confer the ability for the electricity distributors to impose additional requirements aimed at ensuring safety and technical compliance with relevant standards and regulatory obligations through the connection agreement with the customer.

Any revisions to the SIRs must ensure that public safety is not compromised and that the new standards are enforceable. These concerns can sometimes slow the pace of change, as each

proposed modification must be carefully scrutinised for its potential impact on both the industry and the public.

3.1 NSW regulatory environment

The Act sets the framework for regulating the supply of electricity in the retail market and the transmission and distribution of electricity. A key aim of the Act is to promote consumer choice and competition in the supply of electricity, while ensuring appropriate safeguards for consumers, personnel working on the network, and the network itself.

Part 3 Division 4 of the Act (the Division) enables customer connection services and establishes these as contestable network services. This Division relates to any person who applies to a distributor to provide customer connection services or to whom customer connection services are provided. An electricity distributor may refuse to provide customer connection services to a person who fails to comply with a requirement under this Division.

3.2 National regulatory environment

The Australian Energy Regulator (AER) is responsible for the economic regulation of electricity distributors. The National Electricity Law and National Electricity Rules (NER) set out the role of the AER and establish the regulatory framework for electricity networks.

Chapter 5 of the NER details the customer obligations when connecting to the electricity distribution network. It requires a customer to enter into a connection agreement with the electricity distributor prior to their equipment being connected to the network of the electricity distributor. It also requires that a customer complies with the reasonable requests of the electricity distributor regarding equipment proposed to be connected, load forecasts, and participation in inspection and testing of facilities and equipment prior to connection.

The NER requires customers to:

- operate their equipment in a manner that assists in preventing or controlling instability within the power system
- comply with electricity distributor performance standards
- assist in the maintenance of the power system and reliability of supply.

4 Modernising the SIRs for clarity

The review has introduced updates to improve the clarity, searchability, and readability of the SIRs. For the first time since the inception of the SIRs, illustrations have been digitally redrafted and offer far higher resolution and enhanced compatibility with digital devices.

Terms featured in the definitions of the SIRs are now hyperlinked back to the definitions to enhance searchability and user understanding. A conscious effort was made to remove terms that are no longer used as part of the industry vernacular and common terms are now defined to improve readability.

5 Review considerations

5.1 Align with Australian Standards

The review of the SIRs has considered changes to Australian Standards as part of the process to align with current and relevant industry practices. Australian Standards are regularly updated to reflect technological advancements, safety requirements, and regulatory changes. By incorporating these updates, the review aims to enhance the safety, efficiency, and compliance of electrical installations in NSW, ensuring that local practices are consistent with national guidelines and meet the evolving needs of industry.

The SIRs align with various Australian Standards, which provide the minimum requirements for electrical installations. The review process considered newly introduced standards, amendments to existing standards, and the removal of superseded standards. In some instances, new standards have been introduced to the SIRs and in other instances, references to superseded standard have been removed.

The review process made a concerted effort to remove sections of the SIRs that duplicated information already covered by Australian Standards. This approach not only streamlines the SIRs but also reduces the risk of conflicting information should an Australian Standard be revised between SIRs revisions. Additionally, the terminology within the SIRs has been updated to align with that used in the Australian Standards. A key example of this is the replacement of the term "must" with "shall" to precede all mandatory requirements.

5.2 LED lighting is now the standard

Since the last revision of the SIRs there has been almost ubiquitous adoption of LED lighting systems. The 2019 SIRs refer to fluorescent lighting systems, a technology that is, for all intents and purposes, superseded. Appropriate amendments were made to remove superfluous information on fluorescent lighting circuits.

5.3 Address NBN connection issues

The review has addressed challenges arising from the NBN rollout. Connection information for NBN fibre to the curb (FTTC) type connections has been inserted into the Special Small Services section of the SIRs with an accompanying diagram.

5.4 The Accredited Service Provider Scheme and review

Consultation with ASP Scheme stakeholders revealed that terminology used in the SIRs did not align with ASP industry practices, leading to industry confusion. The term 'Accredited Service Provider' (ASP) has been rewritten in the SIRs to refer to entities rather than individuals. The term 'Authorisation' was changed to 'Authorised Person' because authorisations are issued by the electricity distributors to individuals.

5.4.1 ASP Scheme review

Separately, the ASP Scheme has been reviewed to examine the continued need for the Scheme and to improve arrangements for contestable energy connection services. That Review aims to bring the Scheme up to date and to position it for future changes.

The final Review report detailed 34 recommendations that have been supported by the NSW Government, including to:

- deliver enhanced customer service through a self-service, digital platform
- redraft the ASP Scheme rules to improve clarity and update training requirements
- consider expanding the scope of the ASP Scheme to additional contestable services
- improve regulatory compliance in both ASP Scheme participation and delivery
- improve long-term governance by establishing an advisory committee.

Progress is underway on customer service delivery improvements and the revisions of the Scheme rules. Work to deliver a new digital administrative platform commenced in 2023 along with the establishment in 2024 of an advisory body to oversee and guide the implementation of the broader recommendations.

The recommendations are expected to be implemented by 2027, with significant staging and milestones achieved throughout the implementation period. The outcomes of this work may require further incremental revisions to the SIRs to remain relevant and aligned with the ASP Scheme.

5.5 Consumer energy resources

Consumer energy resources (CER) is the name given to renewable energy systems that are commonly located at homes or businesses. These systems are often referred as being 'behind the meter' because the electricity is generated or managed 'behind' the electricity meter in the customer's installation. Common examples of consumer energy resources include rooftop solar photovoltaic (PV) units and battery storage.

The electrical industry is constantly evolving, with new technologies, products and services emerging regularly. For example, the increasing integration of renewable energy systems, battery storage, electric vehicles (EVs), and smart grids presents both opportunities and challenges for the SIRs. The SIRs need to remain flexible enough to accommodate these new technologies, but doing so without disrupting existing systems can be complicated.

Furthermore, the review process involves gathering feedback from industry professionals and experts, who may not always agree on the best approach for managing new technologies. Some stakeholders may advocate for rapid adoption of cutting-edge solutions, while others may emphasise the need for caution and thorough testing.

In addition, the pace of technological advancements often outstrips the speed at which regulatory frameworks can be updated. Even after a thorough review, the SIR may require additional amendments shortly thereafter to keep up with new developments.

5.5.1 NSW Consumer Energy Strategy

The <u>NSW Consumer Energy Strategy</u> sets out the plan for NSW Government energy policy and programs into the future. It has 50 actions that are guided by the principles of accessibility, safety, health and wellbeing, transparency, innovation and value of investment. The NSW Government is introducing new targets, incentives, practical resources, consumer protections and reforms. These will help consumers upgrade their homes and businesses to cut their energy use and access more affordable energy, boost their consumer protections, and help make our energy system safer and more reliable.

The rapid evolution of CER has prompted significant updates, particularly in Section 8 of the SIRs, to address issues like export limiting systems and voltage rise. A further review of the SIRs may be necessary to address ongoing challenges from consumer energy resources.

5.6 Metering requirements and the SIRs

On 1 December 2017, new arrangements came into force to reflect changes to the NER involving the introduction of competition in metering services. Under these arrangements, the responsibility for metering shifted from electricity distributors to metering coordinators, which are appointed by the customer's retailer.

As a result, requirements for metering were moved into the Metering Annexure to the SIRs, except for some aspects relating to existing Type 5 and 6 meters and controlled load equipment. These continue to be administered by the electricity distributors.

The metering installation requirements captured in the Metering Annexure to the SIRs are enforceable under the provisions afforded to the SIRs through the *Electricity Supply Act 1995* and therefore remain under the SIRs under the current framework.

The Committee is aware that the Building Commission NSW intends to publish a standalone Metering and Installation Rules (MIRs) to replace the Metering Annexure. The Building Commission NSW is undertaking a broader <u>building law</u> review and other regulatory reforms that will enable the application of the MIRs upon release. Until the appropriate regulatory reforms are enacted, the metering requirements remain within the metering annexure.

In anticipation of this work, the Committee has not made any changes to the SIRs Metering Annexure. Instead, the Committee has focused on significantly modifying portions of the SIRs, particularly Section 4, to remove any duplication with the Metering Annexure. This work has been prioritised by the Committee to enable unencumbered progress of MIRs that are in line with current NER requirements.

The Building Commission NSW will conduct their own redrafting and undertake any consultation process for release of the MIRs. While the SIRs and MIRs address different issues, they are however complementary and there are areas of interactions overlap, for example at customer switchboards.

6 Continuous improvement

The review of the SIRs has been a necessary process to ensure that electrical installation and service standards across the state are safe, reliable, and aligned with the evolving demands of the electrical industry. It is important to recognise that the review process, while comprehensive, cannot address all stakeholder concerns at once.

The diversity of stakeholder interests, the technical complexity of the issues involved, the constraints of the regulatory environment, and the need for ongoing adaptation in the face of technological change all contribute to the necessity of a continuous improvement approach.

Because of the complexity of the issues involved, the SIRs review should not be a one-off event. Instead, it must be part of an ongoing dialogue between all relevant stakeholders. As new concerns emerge and the industry continues to evolve, the SIRs must be revisited periodically to ensure that it remains relevant and effective.

Rather than attempting to resolve every issue in a single review cycle, stakeholders can work collaboratively to implement changes incrementally, allowing for adjustments and refinements as needed. This approach allows for ongoing feedback, adaptation, and innovation within the regulatory framework.

By adopting a continuous improvement approach, the SIRs can remain dynamic and responsive to the needs of the industry. Regular consultations and updates ensure that the rules evolve in a way that aligns with technological advancements, industry best practices, and the safety needs of the public. Moreover, it provides stakeholders with an opportunity to remain actively engaged in shaping the future of the rules, which can lead to more sustainable, consensus-driven solutions.

7 Consultation process

The draft SIRs, for public consultation, outline the key findings and recommendations from the review of the SIRs, aimed at enhancing safety, efficiency, and alignment with modern standards and technologies.

This consultation process, as part of the review process, will provide valuable feedback from a range of stakeholders. If some concerns cannot be fully addressed at this stage, they will be considered in future reviews. The feedback gathered will inform not just the immediate changes to the SIR but also help identify areas where further research, pilot programs, or detailed stakeholder engagement may be necessary.

Your response to this consultation should be submitted in writing, by email, to service.rules@planning.nsw.gov.au.

The table below outlines the dates for the consultation:

| Activity | Commences | Closes |
|---|--------------|--------------|
| Public consultation period (4 weeks) | 5 May 2025 | 1 June 2025 |
| Review feedback and amendment, liaise with stakeholders as required and finalise amendments (4 weeks) | 2 June 2025 | 29 June 2025 |
| Final publication | 30 June 2025 | |

Once the submissions are received, the Committee may use stakeholder workshops and/or roundtable meetings to progress any matters requiring further consideration. The Committee intends to publish the revised NSW Service and Installation Rules in June 2025.