



roxbypower
a division of roxby council

SERVICE AND INSTALLATION RULES

JULY 2018 – REV. 2

Roxby Power
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PREFACE

These *Roxby Power Service and Installation Rules* incorporate the “Technical Installation Rules” referred to in regulation 76 of the *Electricity (General) Regulations 2012* under the *Electricity Act 1996*.

In accordance with regulation 76 of the *Electricity (General) Regulations 2012*, the Technical Installation Rules have been prepared by Roxby Power (a division of Roxby Council), and approved by the Technical Regulator.

The *Roxby Power Service and Installation Rules* prepared by Roxby Power (a division of Roxby Council) included parts which are not part of the Technical Installation Rules. The Technical Installation Rules within this document are denoted by the symbol **TIR** adjacent to the relevant clause.

If a provision of the *Roxby Power Service and Installation Rules* which is not part of the Technical Installation Rules is inconsistent with the Technical Installation Rules, the Technical Installation Rules shall prevail, and the provision shall, to the extent of the inconsistency, be invalid.

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1. ABOUT THIS DOCUMENT

This document outlines the technical requirements and other relevant information for customers, contractors, electrical workers wishing to work on or connect to the Roxby Power Electrical Distribution System.

This document is copyright to Roxby Downs Council and Roxby Power.

The document also references copyrighted documents owned by SA Power Networks.

The document is to be read in conjunction with relevant Australian Standards including, AS/NZ3000, and AS3008. Other standards may also be applicable under a given circumstance.

2. ABOUT ROXBY POWER

The Roxby Downs Council is the sole electricity distributor and retailer for the township of Roxby Downs, designated under the Roxby Downs Ratification Act 1987. Roxby Power is division of the Roxby Downs Council.

3. MANAGEMENT

The Roxby Council Administrator is responsible for all Roxby Downs Council operations including Roxby Power and Roxby Water.

Roxby Power is under the direct control of:

- **Roy Blight – Roxby Council Chief Executive:**
Overall control of all Roxby Council operations.

- **Stuart Edwards – Group Manager, Essential Services & Assets :**
Overall control of day to day operations, budgeting, works programs, regulation and licensing.

- **Robert Hutchinson – Electrical Operations Officer:**
Oversees the daily operations of Council's Electrical works operations including construction and maintenance, control of contractors, maintenance works, works programs and meter installation, solar installation metering and installation inspection.

Provides technical advice to Roxby Power.

- **Leah Caden– Electrical Accounts Officer:**
Control of accounting, billing, payments, records, certificates of compliance and customer service.

As a combined business, other less specific general administration and customer service is undertaken by various Roxby Downs Council staff and officers.

4. CONTACTING ROXBY POWER

Head Office is located at the Council Building at 6 Richardson Place, Roxby Downs, SA, 5725.

Postal Address: PO Box 124, Roxby Downs, SA, 5725

Phone: (08) 8671 0010

Fax: (08) 8671 0521

Email: roxby@roxbycouncil.com.au

Website: <http://www.roxbydowns.com/Power/p-home.html>

5. EMERGENCY SERVICE

For power failure and faults within office hours (9.00am - 5.00pm, Monday - Friday), please call the Council Office on 08 8671 0010.

After hours Number (Emergency Only) is 0418 892 870.

The afterhour's number is manned by a Council Officer who is not necessarily a Roxby Power Officer. They will help determine the extent of the issue, and if it is not a Roxby Power matter, they will direct you to a contractor. If the issue is directly related to Roxby Power they will advise the appropriate Roxby Power staff member who will assess the matter further.

6. POWER OUTAGES

Roxby Power will notify if a pre arranged outage is to occur. This will be advertised on the local radio station, RoxFM and in the Monitor newspaper. Our staff are aware of these and will advise if your outage is pre arranged. If not, they will assess the extent of the outage and advise the Roxby Power Manager, who will follow up the outage.

Please be aware that most township outages are a result of failure on the feeder line from the BHP Billiton Mine Site. Roxby Power has no control over these outages and often cannot advise their duration. For BHP outages please call their Outage Advice Line on: 1800 728 472.

You must allow time for them to investigate and assess the outage, and then update the advice line.

7. INFORMATION AVAILABLE ON OUR WEBSITE

- Application forms for connection and disconnection of power
- Information on payment arrangements and other documentation
- Bond returns form
- Solar credits form
- A list of tariffs and charges
- Customer default contract
- Customer charter

8. THE ROXBY POWER SYSTEM OVERVIEW

The Roxby Downs Township is supplied by a 33KV feeder originating from the BHP Billiton Mine site; this line also feeds the Olympic Dam Village and the BHP Billiton Desalination Plant.

Roxby Power operates the 11KV distribution system within the township of Roxby Downs ONLY; we take supply from the 33kV to 11kV power substation in Callana Road and distribute it via 3 main 11kV feeders. These feeder systems may be connected in a ring main fashion. All ring mains are open, but may be closed to facilitate for non power interruption switching.

Roxby Power owns a network of 11KV to 415V Distribution Transformers. These supply underground mains to all customers in the township. We utilise large switching pillars that allow us to tie LV mains together and also to create ring main systems for switching purposes. We also utilise small service pillars that connect direct to the street main and provide power for adjacent houses and business installations. All services are fused at the pillar. Pillars are only to be accessed by Roxby Power Officers or approved and trained Contractors.

Roxby Power provides the meters and meter isolation switches at every installation.

Roxby Power also maintains the street lighting system.

9. EXCLUSIONS

We do not operate the distribution and retail in the Olympic Dam Village and Heavy Industrial Area, this is owned and operated by BHP Billiton: 08 8671 8888.

Nor do we operate in the township of Andamooka; this is owned and operated by Andamooka Power House, Contact Mr. C Lyon on 08 86727135.

10. ACCESS TO HIGH VOLTAGE PLANT AND EQUIPMENT

At times, Contractors may need to access overhead lines and transformers. At times isolation may be required.

No contractor is to access or operate our High Voltage equipment without:

- a. Expressed permission from Roxby Power.
- b. Having an approved Access and Approval to Work Permit issued by Roxby Power, and
- c. Where isolation of supply is required, an authorised system switching procedure.

Contact Roxby Power Electrical Services Manager for further details.

11. CUSTOMER AUGMENTATIONS

Where a customer wishes to install new or additional HV Equipment, full development plans, system and plant specifications, and proposed load data must be provided by accredited engineers prior to commencement of work. All new equipment must meet our requirements, so we state all new equipment is to be approved by us before purchase. We will not be responsible if unsuitable plant is procured prior to approval.

Contact Roxby Power Electrical Services Manager for further details.

12. GENERAL SERVICE AND INSTALLATION RULES

Within the state of South Australia there is a primary distributor who operates most all power distribution networks. This operator is SA Power Networks. However there are areas in the state not under the control of SA Power Networks. Roxby Downs is one such area.

Customers should note that Roxby Power is an independent distributor and retailer, and not affiliated with SA Power Networks in any way.

In applying any of the rules or making enquiries in relation to issues within the Roxby Downs Township, Customers and Contractors should contact Roxby Power and not SA Power Networks, using the contact details herein.

13. ROXBY DOWNS SPECIFIC SERVICE REQUIREMENTS FOR SINGLE AND THREE PHASE INSTALLATIONS

The following information contains Councils general requirements for consumer's mains and temporary supply and permanent supply information. SA Power Networks Service and Installation Rules also apply, (copies are available from SA Power Networks web site.) except where varied in the items below. Where there is a contradiction, then the Roxby Power Rules prevail.

14. GENERAL REQUIREMENTS

1. A Certificate of Compliance is to be supplied by the Contractor for installation of temporary supply services and permanent services. If for a temporary supply, e.g. primarily required for the builder prior to the completion of the main house wiring, then a further Certificate of Compliance is required when the house wiring is completed.
2. Certificates of Compliance – Supply Authority Copy of COC's are to be presented to Roxby Power. Documents must be completed fully prior to submission. Documents must be legible and readable.
3. A completed Application of Supply (form available from the Roxby Council) is required before Council will connect the supply and fit meters. The OWNER must complete the form.
4. A service seal is recommended to be installed in the supply pit end of the consumer's mains conduit. This may prevent the ingress of water or termites into the supplied installation.
 - a. For single phase supplies and 3 phase supplies up to 16 mm building wire, the rubber stopper type seal is required at the pit end on the end of the conduit.

- b. For single and 3 phase supplies using 25mm and above sized cables a junction box is to be installed within 500mm of the pit. The junction box is to be filled with an EPOXY free flowing type sealant ONLY. **Silastic and other compounds SHALL NOT BE USED.**
 - c. Note: It is now preferred practice for the rigid PVC conduit to be run almost to the pit, and then an adapter fitted and the remainder of the service conduit to be in corrugated PVC. This gives some flexibility when fitting the conduit into the pillar.
5. Consumer's mains are to be laid at a depth of 600mm. Electrical trench tape is to be installed 100mm above the service conduit. Other services may be laid in same trench to the respective services specifications.
 6. When multiple meter neutrals are required for metering purposes a Black Clipsal L7 Meter Link (sealable) or similar type, minimum 5 holes, 3 to be sized for 16mm cable is to be installed in the meter box. Council will now no longer loop multiple neutrals in the meter.
 7. When multiple actives are required for metering purposes a Red Clipsal L7 Meter Link (sealable) or similar type, minimum 5 holes, 3 to be sized for 16mm cable is to be installed in the meter box. Council will now no longer loop multiple actives in the meter.
 8. All metering links supplied must be sealable.
 9. The incoming Service Conduit is to be fixed to the rear of the meter panel in a manner so as to allow easy opening and closing of the panel. The tails shall extend at least 1 meter further for connection to the supply isolator and meter(s).
 10. The Service Conduit is to enter the supply pillar at least 300mm and tails are to extend a further 1.5 meters into the service pillar. Suitable colours are Black (only) for neutral, red white or blue for actives. 3 phase supplies shall have Black neutral, and the 3 standard active phase colours. Where all red cables are used they shall be sleeved with heat shrink sleeving to the correct colour in both the meter box for the full length of the conductor.
 11. Location of the meter box is to comply with SA Power Networks Service and Installation Rules. Copies are available from SA Power Networks web site. **The Owner is to ensure that access to the meter box is not restricted by fences, gates or other obstacles and that the specified clearances are maintained as per the above regulations.**
 12. Council will connect the Consumers Mains at both ends, supply the power meters, and a meter Isolation Switch.
 13. Please advise council of your supply requirements, single or three phases, as soon as possible. Meters and switchgear may need to be ordered.
 14. Every Installation with max demand calculation under 80A shall have dedicated 80A Main switch, irrespective of the number of circuit breakers in the distribution board. **Councils Service Isolation Switch is NOT A MAIN SWITCH for the purposes of this requirement.**
 15. Large 3 Phase Installations (above 100A per phase max demand) shall have an approved suitably sized main switch and a fault current rated and tested switchboard / meter panel. See council for fault current levels.
 16. It is the responsibility of the consumer to check if they are on the correct tariffs. Check at the Council Office for confirmation of available tariffs. Note tariffs names, uses and rates are similar to those used by AGL and other retailers.
 17. Council will not charge for actual connections of new consumers mains or the fitting of meters to new houses UNLESS;
 - a. There is a requirement by the customer for a 3 phase supply; in such case the Council will charge a fee of \$450.00 for providing the larger meter and switchgear.

And may charge an additional \$800.00 for upgrading of the service pillar if deemed required by the Council.

- b. Where MD is greater than 120A phase, CT Metering will be employed, and will incur cost of CT's, potential fuses and test / isolation block. Items will be costed per installation. Please provide MD calculations and make allowances in switchboard distribution board for CT's and associated equipment.

The installation is non standard e.g. Block of Flats or Units with multiple metering requirements. Cost will be calculated by provision of the first two meters free, additional meters will then be charged at \$250.00 ea. This applies for general flats and for Community Title developments.
 - c. Council no longer employs plug in meters, all meters are standard mount with Isolation switch and lock off device. Electrical Contractors will need to contact Roxby Power as to the location of the metering board, spacing and arrangement of metering devices and isolators, once the type of supply is established to each unit. i.e. single tariff M, or dual tariffs M & J.
 - d. A calculated maximum demand is required for use in our calculations of system supply suitability to these developments.
 - e. Community Title and Strata Title Developments shall have all metering at a common single point, this can be arranged at a freestanding meter box, or a meter box fixed to one of the dwellings.
18. Council will normally only provide one meter at a commercial installation. It is the developer's responsibility to provide any additional metering to any tenants. Council will not read and bill metering for tenants in any commercial situation.
 19. Commercial premises where the meter is installed behind a fence, and there is NOT a day office open for the public continuously during normal business hours shall have the following requirements for location of the meter box.
 - a. The meter box is to be located at the front of the property, one metre inside the fence. A clear panel is to be installed so that meter can be read easily from outside of fence. Should the clear panel become discoloured it shall be replaced with a new clear panel by the owner.
 20. Option 1: Council will now supply a single phase temporary supply for builders adjacent to the service pillar. The cost of the rental contract will be \$250.00 for the first 3 months or part thereof. A bond of \$100.00 will also apply. The cost includes installation and removal. Consumption will be charged at Councils current standard commercial rate. The contract may be extended at a fee of \$20.00 Month thereafter. The builder will be responsible for ensuring no undue damage is inflicted upon the temporary supply box; damages will be charged out of the bond. Council will also deduct any additional usage fees from the bond (eg. additional power and extended monthly rentals). Council will remove the supply at the end of 3 months unless the builder makes notification that an extension of use is required.
 21. An application for the installation of a Council Temporary Supply is available from the Council Office.
 22. Option 2: Council will allow temporary supply to be installed at the building provided the meter box is installed in its final position on the buildings actual framework. Typically an RCD/MCB and 1 or 2 Din outlets are installed. Power will be charged at standard commercial rates. A 20Amp Meter isolator will be installed and will be upgraded to full service size ONLY when the installing electrician provides a COC for the completion of the general house/installation wiring.
 23. Roxby Power accepts Solar Power Supplies connected to it distribution network. Solar credits are payable once the accumulated credits exceed \$100.00 or if the customer vacates the premises. A Credit Claim form is available on the website. The maximum Solar System size allowable on any installation is 10 Kw. For systems above this size specific approval will be required.

24. Only accredited installers may install Solar Systems within Roxby Downs. Installers shall provide proof of current accreditation before installing Solar Systems.
25. Solar Power System installers must provide the technical specification of the system to be installed including, make, model and size of the inverter, the make, model, size and quantity of panels to be installed. A COC is required before Roxby Power will connect the Solar System. All systems are to be installed to AS 4777 (all parts) and other applicable standards.
26. The owner of the installation where a Solar System is to be installed must apply to Roxby Power for a new Solar Power connection. An Application for Supply form is available from the Council office or from our website.
27. A BOND is now payable for new connections. Check with council to see if the bond will apply to your installation.