Electric Vehicle Supply Equipment Connection Technical Specification

January 2025

PowerWater

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Version history

Version	Date	Record	Comment
Draft	Jan 2025	D2024/262313	For consultation

1. Purpose

This technical requirement document provides proponents of electric vehicle supply equipment / electric vehicle supply and discharge equipment (EVSE/EVSDE) connections information about their obligations for connection to and interfacing with Power and Water Corporation (Power and Water) electricity networks, both regulated and unregulated.

NOTE: EVSE refers to equipment, or a combination of equipment, providing dedicated functions to supply electric energy from a fixed electrical installation or supply network to an electric vehicle (EV) for the purpose of charging. EVSDE refers to equipment as per EVSE, that is also capable of discharging electricity from the EV to the fixed electrical installation or network. For the purposes of this technical specification, references to EVSE throughout refer to both EVSE and EVSDE, unless specifically stated otherwise.

2. Scope

This document applies to new low voltage connections of EVSE or modifications to existing EVSE, where the connection consists of a permanent installation of electric vehicle supply equipment(s) with a rated current of over 15A.

The scope of this technical standard does not include:

a. standard wall outlet charging equipment (charging mode2)

b. off-grid charging equipment i.e. not connected to the Power and Water network.

Within scope	Mode (IEC)/ level (SAE)	Typical locations	Rated power (kW)	AC current (A)
No	2 / L1	Residential	2.3 AC	10 - 15
Yes	3 / L2	Residential and commercial	3.7 (1ph) – 22 AC (3ph)	16 – 80 (typical 32)
Yes	4 / L3	Destination charging and service stations	50 – 400 - 3ph	80 - 615

Table 1: Scope of technical specifications

3. Obligations of proponents

Proponents shall comply with all the applicable requirements of this document.

The general obligations of proponents include:

a. the obligation to comply with the technical requirements as well as relevant national standards, industry codes, legislation, and regulations. In the event of inconsistency, an indication of which instrument shall prevail is legislation and regulations, followed by the technical requirements, followed by national standards and industry codes.

b. before connecting new or modifying existing EVSE or EVSDE, apply to Power and Water for network connection approval. Application information is on the Power and Water website: Application Forms.

c. the obligation to comply with Power and Water's Network Connection Agreement (NCA). The NCA will include any new connection obligations, new export allowances and remote-control options.

d. when applying for a new approval, there is an obligation on the proponent to provide the necessary application form, detailed design, operating protocol(s), protection hierarchy, energy management system information and metering design.

e. an obligation to meet any commissioning and system performance requirements of the electricity network, to ensure safe and stable operation.

Power and Water's obligations are to ensure the safe and reliable operation of the distribution system for operating personnel, customers, and the public.

4. Definitions

4.1 Definitions

Term	Definition
Battery Energy Storage System	A system comprising one or more batteries that store electricity generated by distributed energy resources or directly from the grid, and that can discharge the electricity to loads.
Interface Protection	The protection installed to perform the functions of: co-ordinating multiple inverter energy systems installed at one site, providing protection for the entire inverter energy system installation and islanding protection to the connected grid as well as preserving safety of grid personnel and the general public.
Charging mode	Method for connection of an EV to the supply network to supply energy to the vehicle. There are three charging modes permitted for use in Australia: Mode 2 - A Mode 2 charger is a portable charger with an in-cable control and protection device (IC-CPD) integrated into the charger. The IC-CPD contains basic electrical safety functions, including an automatic on/off function controlled by the EV. Mode 3 - Mode 3 uses single or three-phase power via a fixed and dedicated circuit to deliver energy through a tethered cable or a socket outlet. As with Mode 2, AC power is sent to the EV onboard charger that, as soon as the EV is fully charged, power is disconnected between the box and the EV. Mode 4 - Mode 4 incorporates an offboard charger with a DC output. The DC current is delivered directly to the battery and the EV on-board charger is bypassed.
Demand Response (DR)	Response in charge rate due to external inputs.
Demand Response Mode (DRM)	Mode of operation within specified conditions, constraints, or parameters during a DR event as defined in AS/NZS 4755
Electric Vehicle (EV)	A road vehicle that obtains some or all its propulsion energy from on-board batteries which may be charged from the AC electricity supply grid. An EV can be a Battery Electric Vehicles (BEV) without a fuel engine, or a Plug-in Hybrid Electric Vehicle (PHEV) with a fuel engine.

Term	Definition
Electric Vehicle Supply Equipment (EVSE)	Equipment or a combination of equipment, providing dedicated functions to supply electric energy from a fixed electrical installation or supply network to an EV for the purpose of charging. Note: For Mode 3, the EVSE consists of the charging station and the cable assembly.
Electric Vehicle Supply and Discharge Equipment (EVSDE)	Equipment as per EVSE that is also capable of discharging electricity from the EV to the fixed electrical installation or grid. Commonly referred to as Bidirectional EV Supply Equipment.
Electric Vehicle Energy Management System (EVEMS)	Means used to control electric vehicle supply equipment through the process of connecting, disconnecting, increasing, or reducing electric demand or export and consisting of any of the following: monitor(s), communications equipment, controller(s), timer(s), and any other applicable device(s).
Islanding	Any situation where the electricity supply from a grid is disrupted or fails and one or more inverters or generators maintains any form of electricity supply, be it stable or not, to any section of that grid or within the electrical installation.
Maximum rate of charge	The maximum current (Amps) that the EVSE is capable of drawing from the AC supply, given the circuit limits and the internal settings made during installation.
Point of supply	As per AS/NZS 3000 The junction of the consumer mains with the conductors of an electricity distribution system
Power allocation	This approach uses various methods to limit or stop current flow to one or more EVSE.
Remote agent	A person, organisation, or entity, other than the user or owner, who is a) authorised to initiate DR by transmitting commands and operational instructions; and b) responsible for secure communications with the electrical product.
Technical specifications document	This document, which sets out specifications for proponents to enable a grid connection.

Table 2: Definitions

4.2 Abbreviations

Abbreviation	Definition
AC	Alternating Current
API	Application Programming Interface
AS/NZS	A jointly developed Australian and New Zealand Standard
BESS	Battery Energy Storage System
CEC	Clean Energy Council
DC	Direct Current
DER	Distributed Energy Resources
DNSP	Distribution Network Service Provider
DR	Demand Response
DRM	Demand Response Mode
DRC	Demand Response Controller
ESS	Energy Storage System
EV	Electric Vehicle
EVEMS	Electric Vehicle Energy Management System
EVSE	Electric Vehicle Supply Equipment
EVSDE	Electrical Vehicle Supply and Discharge Equipment
HV	High Voltage
IEC	International Electrotechnical Commission
IES	Inverter Energy System
LV	Low Voltage
NEM	National Electricity Market
NER	National Electricity Rules
NMI	National Metering Identifier

Abbreviation	Definition
NT	Northern Territory
POS	Point of Supply
SAE	SAE International

Table 3: Abbreviations

4.3 Terminology

Instructional terms are to be interpreted in the following way:

- the words ‘shall’ or ‘must’ indicate a mandatory requirement.
- the word ‘may’ indicates a requirement that can be mandatorily imposed on the proponent.
- the word ‘should’ indicates a recommendation that will not be mandatorily imposed on the proponent

4.3.1 EVSE vs EVSDE

Unidirectional EVSE (referred to further as EVSE) is a charging equipment which operates only as a load and so does not supply energy from the EV.

Bidirectional EVSE (referred to further as EVSDE) is charging equipment that can supply energy from the EV energy source to the installation which comes in 3 varieties:

1. non-exporting which can supply loads behind the Power and Water point of connection “behind the meter” but must not export to the Power and Water network.
2. exporting or vehicle to grid (V2G) which can export energy to the Power and Water network.
3. either of the above, but with islanding capability.

The technical specifications set out in this document should be interpreted as applying to all subcategories of EVSE and bidirectional EVSE connections unless otherwise specified.

For all enquiries, Power and Water can be contacted via email:

EGApplications.PWC@powerwater.com.au

5. Relevant rules, regulations, standards and codes

5.1 Standards and codes

There are a range of applicable standards and industry codes which define connection types and requirements, and network standards as set out below.

In the event of any inconsistency between an applicable Australian/international standard or industry code (except for legislated industry codes) and these technical requirements, these technical requirements will prevail.

5.1.1 Australian and international standards and industry codes

The Australian and international standards and industry codes listed in Table 4 shall apply to the design, manufacture, installation, testing and commissioning, and operation and maintenance of all plant and equipment for EVSE connections to the distribution network.

Document number	Document name	Document type
AS/NZS 3000	Electrical Installations - Wiring Rules	AU/NZ Joint Standard
AS/NZS 4777.1:2024	Grid connection of energy systems via inverters Part 1: Installation requirements	AU/NZ Joint Standard
AS/NZS 4777.2:2020	Grid connection of energy systems via inverters Part 2: Inverter requirements	AU/NZ Joint Standard
AS/NZS 5033:2021	Installation and safety requirements for Photovoltaic (PV) arrays	AU/NZ Joint Standard
AS/NZS 5139	Electrical Installations - Safety of battery systems for use with power conversion equipment	AU/NZ Joint Standard
AS/NZS 61000	Electromagnetic compatibility (EMC) (multiple parts)	AU/NZ Joint Standard
AS/NZS 4755.1	Demand response capabilities and supporting technologies for electrical products Part 1: Demand response framework and requirements for demand response enabling devices (DREDs)	AU/NZ Joint Standard

Document number	Document name	Document type
AS/NZS 4755.3.5	Demand response capabilities and supporting technologies for electrical products Part 3.5: Interaction of demand response enabling devices and electrical products – Operational instructions and connections for grid connected electrical energy storage (EES) systems	AU/NZ Joint Standard
IEC 63110-1:2022	Protocol for management of electric vehicles charging and discharging infrastructures - Part 1: Basic definitions, use cases and architectures	International Standard
IEC 61851-1:2017	Electric vehicle conductive charging system Part 1: General requirements	International Standard
AS IEC 61851.23:2014	Electric vehicle conductive charging system Part 23: D.C. electric vehicle charging station	Australian Standard adapted from International Standard
SA TS 5396	Electric vehicle (EV) chargers for residential use	
SA TS 5397	Electric vehicle (EV) chargers for commercial applications	

Table 4: Applicable standards

5.1.2 Related Power and Water documents

For further information on Power and Water's network requirements, see Table 5 below. These shall apply to all connections to the Power and Water electricity network.

Document title	Record number
Service and installation rules[1]	NP018
Meter manual[2]	NP010
Embedded generation technical specifications	
Basic Micro Embedded Generation Technical Requirements Specification – less than or equal to 30kVA[3]	

[1] Power and Water, NP18 Service and Installation Rules, available from https://www.powerwater.com.au/developers/power/design-and-construction-guidelines
[2] Power and Water, NP010 Meter manual, available from https://www.powerwater.com.au/developers/power/design-and-construction-guidelines
[3] Power and Water, Basic Micro Embedded Generation Technical Requirements Specification – less than or equal to 30kVA

Document title	Record number
Negotiated Embedded generation technical requirements specification – Greater than 30kVA, less than or equal to 2000kVABasic [4]Micro Embedded Generation Technical Requirements Specification – less than or equal to 30kVA	
The embedded generation system sizes above are based on total aggregate capacity including EVSDE, PV and BESS AC. When referring to embedded generation technical specifications, any instance of embedded generation (EG) will refer to bidirectional EVSDE.	

Table 5: Internal references and documents

5.2 Legislation and regulation

The relevant legislation and regulations listed in Table 6 shall apply to the design, manufacture, installation, testing and commissioning, and operations and maintenance of all EVSE/EVSDE connect to the network.

In the event there is any inconsistency between legislation and regulations and these technical requirements, the legislation and regulations shall prevail.

Document name	Document type
National Electricity (NT) Rules	Rules
Electricity Safety Act 2022 and Regulations	Legislation
Network Technical Code	Code produced under Electricity Reform (Administration) Regulations
System Control Code	Code produced under Electricity Reform (Administration) Regulations
Critical Infrastructure Act 2021	Regulation
Australian Energy Sector Cyber Security Framework (AESCSF)	Code procedure under Critical Infrastructure Act

Table 6: Regulation and legislation

[4] Power and Water, Negotiated Embedded generation technical requirements specification – Greater than 30kVA, less than or equal to 2000kVA

6. Technical requirements

6.1 General requirements

The EVSE shall be compliant to the following EVSE mode/levels:

a. charging Mode 3 or 4 as defined in standard IEC 61851-1:2017 Electric vehicle conductive charging system – Part 1: General requirements; “a method for the connection of an EV to an AC EV supply equipment that is permanently connected to an AC supply network, with a control pilot function that extends from the AC EV supply equipment to the EV; or

b. charging Level 2 and 3 as defined in standard SAE J1772:2017 Electric Vehicle and Plug in Hybrid Electric Vehicle Conductive Charge Coupler.

6.2 Labelling and signage

The EVSE must provide warning signage to clearly indicate that the electrical installation has multiple supplies and which circuits are affected by these supplies if commissioned for bidirectional charging.

The EVSE must provide a warning label to indicate that the maximum charging current is not to be adjusted.

The label shall contain the maximum rating or setting of the charging current, the ampere rating of the overcurrent device supplying the EVSE, and the installed conductor size.

EVSDE shall have labels and signs on the installation, including cables shall meet the requirements of AS/NZS 4777.1, IEC 61851-1:2017, AS/NZS 5139 and NCC as appropriate.

6.3 Demand response

Power and Water may require a demand response system capable of receiving an initiating signal originating from or defined by a remote agent. The protocol and communication methods shall be advised by Power and Water at time of connection application.

6.4 Verification of demand response

The following demand response modes shall be required where Power and Water have assessed demand response is required as per above.

The EVSE shall be capable of responding to and implementing at least the following Demand Response Modes (DRM) as defined in AS/NZS 4755:

- an instruction from a Remote Agent to cease or prevent charging (corresponding to either DRM 0 or DRM 1 in Table 7)
- an instruction from a Remote Agent to constrain the rate of charge in accordance with DRM 2 in Table 7
- EVSDE capable of supplying energy to the installation shall also be required to support DRM 5 to 7 subject to requirements in the relevant Power and Water embedded generation technical specifications.

The relevant DRMs as per AS/NZS 4755 are described in Table 7.

DRM	General description of required response
0	Open the disconnection device or contactor
1	Do not consume energy from the grid for charging EV but control and auxiliary functions may continue.
2	When charging, limit rate to <=50% of rated power
3	When charging, limit rate to <=75% of rated power AND supply reactive power if capable
4	Initiate charging from grid if able to do so. If already charging, increase rate if able to do so
5	Do not discharge energy to the grid
6	When discharging, limit rate to <=50% of rated power (EVSDE only)
7	When discharging, limit rate to <=75% of rated power AND absorb reactive power if capable (EVSDE only)
8	Initiate discharging of energy to the grid if able to do so. If already discharging, increase rate if able to do so. (EVSDE only)

Table 7: Demand response modes to be tested

The implementation of these DRMs shall be capable of being tested when the EVSE is connected to an actual EV or to an EV analogue load.

6.5 Electrical vehicle energy management system (EVEMS)

Energy management is the remote monitoring and control of the EVSE connections to the grid network. The proponent may install an energy management system to ensure that site import and export limits are not exceeded, particularly in instances where the installed EV capacity exceeds the contracted maximum demand. Single EVSE shall comply with the maximum demand requirements of AS/NZS 3000 as appropriate. In normal use, each single EVSE is considered to be used at its full rated current and the installation shall be capable of full rated operation of all EVSE at all times.

6.5.1 EVSE energy management system

Systems with multiple EVSEs may require the installation of an energy management system for load management, automated load balancing and load curtailment and management. A battery energy system may also be installed to provide additional power to the EVSE where the installed EVSE capacity exceeds the contracted maximum demand. All energy storage systems shall comply with the relevant Power and Water embedded generation technical specifications.

With an internal (on site) or external (cloud based) energy management system, all EVSEs must comply with the following:

- implement load management system via an energy meter at the connection point in order to control the power output of each EVSE

- manage site maximum demand to remain within the contracted maximum demand and not exceed point of connection equipment ratings
- the EVSE must have fail-safe modes that reduce the EVSE charging power when the EVEMS is unavailable or if a communications error is detected by the EVSE. (EVSE charging power at fail-safe mode = Maximum capacity at the connection point – Maximum Demand of the site (excluding EVSE)) Upon detection of a failure of the EVEMS the EV chargers shall ramp the effective charge rate at 16.67% of rated capacity per minute.

6.5.2 EVSDE/Bidirectional charging

The power conversion in AC Vehicle-to-Any (V2X) shall be achieved via equipment that complies with AS/NZS 4777.2 and the relevant Power and Water embedded generations technical specifications.

6.5.3 Guidelines

Approval of Export to the grid (V2G) and any associated limits and controls shall be as determined via the relevant Power and Water embedded generation technical specifications.

6.5.4 Islanding from the network

An EVSDE that is capable of suppling an installation during a loss of supply from Power and Water's network may be installed.

This shall require a break-before-make changeover switch for islanded operation.

Changeover switch shall comply with AS/NZS 3010.

Use of an automatic break-before-make switch for the purpose of connecting the EVSDE operating in island mode to the installation is not permitted. Any break before make changeover switch must be of manual type.

Any small IES unit connected behind a break-before-make switch, that is, it isolates the changeover circuit when transferring between grid supply to generation supply, will be considered as an off-grid inverter.

The following shall be considered as a grid connected system and will be required to comply with the requirements of the relevant Power and Water embedded generation technical specifications:

a. an EVSDE unit connected behind a make-before-break switch that results in a momentary, or longer, connection between grid supply and EVSDE island supply circuits when performing a changeover.

b. a multiple-mode EVSDE with uninterruptible power supply (UPS) mode functionality that is grid connected but also supplies an off-grid circuit.

6.6 Earthing

The earthing requirements shall include:

a. for IES, earthing requirements shall be as per AS/NZS 4777.1 and AS/NZS 3000

b. for IES with BESS, earthing requirements shall be as per AS/NZS 5139

c. for PV systems, earthing requirements shall be as per AS/NZS 5033.

DC earthing requirements are excepted for EV batteries.

6.7 Protection

This section covers both EVSE and EVSDE.

6.7.1 Fault protection

For the current limitation for EVSE refer to Power and Water's Service and installation Rules NP018.

Fault protection is required for all EVSE/EVSDE installations. Overcurrent facility fault, overcurrent grid fault and earth fault protection may be required for EVSE systems, and include:

a. each EVSE should be supplied individually by an overcurrent protective device complying with AS/NZS 60898, AS/NZS 61009 or AS/NZS 60947 series.

b. type A RCD shall be acceptable if the EVSE can ensure disconnection of the supply in case of DC fault current above 6mA. If the EVSE does not have this capability, a type B RCD shall be installed.

c. an isolating switch shall be installed with a minimum current rating of the EVSE for the final sub circuit adjacent to the EVSE.

6.7.2 Bidirectional EVSDE protection

Protection requirements for EVSDE shall be as per the relevant embedded generation technical specifications.

6.8 Operating voltage and frequency

For EVSE voltage drop must be within 5% from the point of supply to the EVSE as per AS/NZS 3000.

For EVSDE refer to the relevant Power and Water embedded generation technical specifications.

6.9 Metering

The installation shall meet metering requirements as per NT NER Chapter 7A and Power and Water NP010 Meter Manual[5], including replacement or re-configuration of existing meter(s) to bi-directional meter(s) where EVSDE are installed.

6.10 Power quality for EVSDE

There are no power quality requirements for unidirectional EVSE. For EVSDE Refer to the relevant Power and Water embedded generation technical specifications.

6.11 Communications systems

EVSDE installations shall have the following virtual power plant (VPP) capabilities as a minimum:

a. physical communications interface including an ethernet port capable being used for communications with the system by authorised parties

[5] Power and Water Design and construction guidelines, available from https://www.powerwater.com.au/developers/power/design-and-construction-guidelines

b. remote control capability via application programming interface (API) to remote services (e.g. retailer, equipment manufacturer, aggregator)

c. internet accessibility through at least one method for forming a reliable internet connection accessible by authorised parties

d. remote monitoring communication function that is capable of reporting data

e. remote control capability to respond to remotely provided commands from authorised parties to charge or discharge the battery and change the export limit

f. remote configuration capability to respond to remotely provided commands from authorised parties to alter firmware or operational settings.

6.12 Data and information

6.12.1 Static data and information

Static data and information that is required to be provided by the proponent to Power and Water is set out within Appendix C: Static data and information.

6.12.2 Dynamic data and information

For EVSE no dynamic data is required.

For EVSDE Refer to the relevant embedded generation technical specifications.

6.13 Cybersecurity

The owner of the system is responsible for securing the EVSE from unauthorised external control and modification.

If Power and Water require remote monitoring and control of the EVSE/EVSDE then additional cyber security requirements will be advised.

6.14 Technical studies

Technical study requirements are outlined in the appropriate embedded generation technical specifications.

6.14.1 EVSDE studies

Technical studies shall be undertaken and completed by Power and Water as part of the connection application and in accordance with jurisdictional requirements at the proponent's expense. Technical study requirements are outlined in the appropriate embedded generation technical specifications.

6.14.2 Load assessment

Any EVSE system with an aggregated capacity above 250kVA will require a load assessment by Power and Water.

7. Fees and charges

Information regarding fees and charges applicable to proponents is available at the following link:

https://www.powerwater.com.au/customers/power/power-connections

8. Testing and commissioning

Testing and commissioning requirements for EVSE connections include the following in addition to requirements provide in Table 8:

a. on-site testing and commissioning shall be undertaken in accordance with AS/NZS 4777.1 where applicable, AS/NZS 3000, AS/NZS 5033 (where applicable) and AS/NZS 5139 (where applicable), the equipment manufacturer's specifications, and this document to demonstrate that the EVSE meets the requirements of the connection agreement.

b. testing and commissioning acceptance shall be signed off by the proponent's suitably qualified engineer. The signed off testing and commissioning acceptance shall be provided to Power and Water upon request.

c. testing and commissioning acceptance may require Power and Water to carry out witnessing and may be charged at the proponent's expense.

d. the above tests shall be installation tests not type tests.

Testing and commissioning requirements	Installation type	
	EVSDE	EVSE
Protection settings and performance	✓	×
Power quality settings and performance	✓	×
Export limits settings and performance	✓	×
Communications settings and performance	✓	✓
Shutdown Procedures	–	×
Confirm fallback at loss of comms settings and performance	✓	–
Confirm system is as per specifications	✓	✓
Confirm approved SLD is located on site	✓	–

Table 8:Testing and commissioning requirements

Symbols are used to denote testing and commissioning requirements, where:

✓ Represents that the testing and commissioning shall be required

– Represents that the testing and commissioning may be required

× Represents that the testing and commissioning shall not be required

Refer to the Power and Water embedded generation commissioning form, available at the following link:

https://www.powerwater.com.au/customers/power/power-connections

9. Operations and maintenance

Operations and maintenance requirements for EVSE include:

a. the EVSE shall be operated and maintained to ensure compliance with the connection agreement and all legislation, codes, and/or other regulatory instruments at all times.

b. Power and Water may request to inspect and test the proponent's EVSE at any time at Power and Water's cost. Should the inspection identify non-compliance with this technical specification document, the EVSE may be disconnected from Power and Water's network. The EVSE will not be reconnected to the network until Power and Water is satisfied that the non-compliance has been resolved. Rectification of non-compliance issues shall be at the proponent's cost.

The general expectations for operating and maintaining the EVSE shall include:

a. maintaining the electrical installation at the supply address in a safe condition

b. ensuring that any changes to the electrical installation at the supply address are performed by an electrician lawfully permitted to do the work and that the proponent holds a Certificate of Compliance issued in respect of any of the changes

c. the proponent shall seek Power and Water's approval prior to altering the connection in terms of an addition, upgrade, extension, expansion, augmentation or any other kind of alteration, including changing inverter settings.

9.1 Additional requirements for EVSDE

The requirements in section 9 above are inclusive with the following for bidirectional EVSE.

a. an operation and maintenance plan shall be produced and signed off by the proponent's suitably qualified engineer prior to forming a connection agreement. A copy shall be left on site, and the signed off operation and maintenance plan shall be provided to Power and Water upon request.

b. operation and maintenance reports shall be submitted to Power and Water upon request, no more frequently than annually.

Appendix A: Connection arrangement requirements

A1 Single line diagram

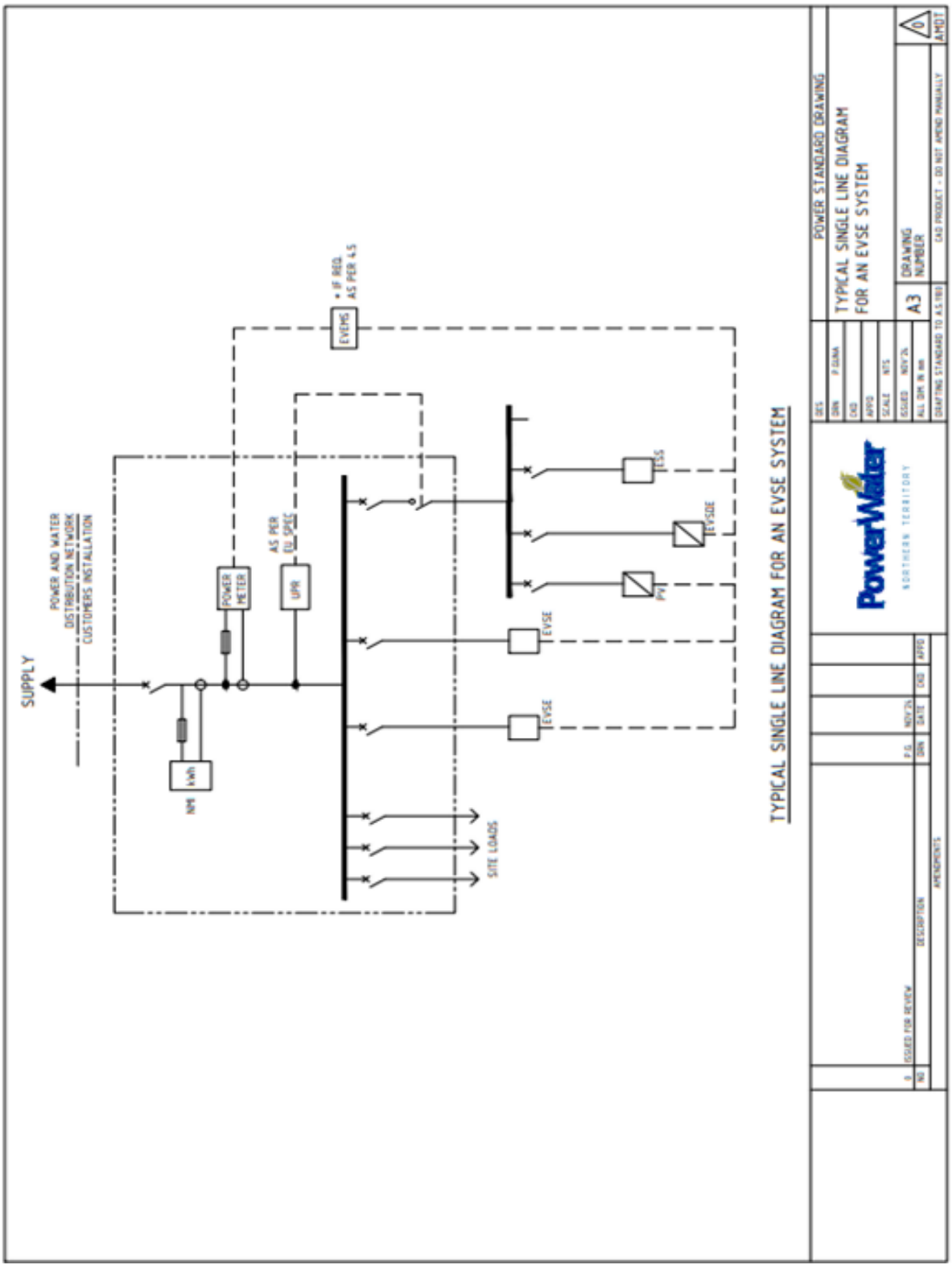

Figure 1: Typical single line diagram for an EVSE system

Appendix B: Connection agreement

The connection agreement template for negotiated EG connections is available at the following link:

- Negotiated contracts
- https://www.powerwater.com.au/customers/power/power-connections

Appendix C: Static data and information

The static data and information that is required to be provided by the proponent to Power and Water is to be provided via the Power and Water embedded generation commissioning form, available at the following link:

https://www.powerwater.com.au/customers/power/power-connections

Further information

If further information is required, please contact:

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Winnellie NT 0821

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