

# SolShare DNSP Interconnection Guide

Version B5 – February 2023

#### **DISCLAIMER**

This document is intended to provide guidance on how to apply for interconnection of a rooftop PV installation with a SolShare on different distribution networks in Australia. It should be read in conjunction with applicable annexes. This document does not override official guidance from Distribution Network Service Providers (DNSPs). It is the responsibility of the solar design engineer to ensure the shared solar installation meets the relevant requirements of the DNSP, including their Service and Installation Rules.

If you have any questions with regards to the contents of this document, please do not hesitate to contact Allume Energy at <a href="mailto:interconnections@allumeenergy.com.au">interconnections@allumeenergy.com.au</a>.



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## LIST OF ABBREVIATIONS

AEMO = Australian Energy Market Operator

CCEW = Certificate of Compliance for Electrical Work

CES = Certificate of Electrical Safety

CX = Connection Application

DER Register = AEMO's Distributed Energy Resource Register

DNSP = Distribution Network Service Provider

ESV = Electricity Safety Victoria

EWR = Electrical Work Request

LEI = Licensed Electrical Inspector

LV = Low Voltage

MSB = Main Switch Board

NATA = National Association of Testing Authorities

NMI = National Metering Identifier

PV = photovoltaic

RPEQ = Registered Professional Engineer of Queensland

SHP = Social Housing Provider (i.e. a Public Housing Provider or a Community Housing Provider)

SLD = Single Line Diagram

SEG = Small Embedded Generation

SPA = Solar Pre-Approval

## A. VICTORIA

#### Important Note for Victorian DNSPs

For all Distribution Network Service Provider (DNSP) interconnections in Victoria it is necessary to apply for a network exemption from the Victorian Essential Services Commission. This is a straightforward process that can be quickly completed by following the steps provided in Annexure A0 to this DNSP Interconnection Guide.

# A.1. Citipower/Powercor

## A.1.1 Staging of process

The process for Citipower/Powercor is in two phases. One precedes installation of the rooftop PV system; the second follows installation of the rooftop PV system. It is recommended that SolShare Installation Partners familiarise themselves with all steps of the process prior to commencing the interconnection application or on-site works. It can take a few weeks of lead time to gather the information required to complete the pre-installation documentation, particularly the AER Network Exemption referred to in step 6 of A.1.2.

## A.1.2 Pre-installation of rooftop PV system

- 1. Read the Embedded Generation Network Information Sheet provided on pp. 1-2 of Annex A1-1 to this DNSP Interconnection Guide.
- 2. Identify all participating customers by name, physical address, Citipower/Powercor meter number and (optionally) the National Metering Identifier (NMI) into Table 1 of the Embedded Generation Network (EGN Part-A) spreadsheet provided in Annex A1-2.
  - Note: each SolShare installed at site will need a separate EGN Part-A form. You do not need the NMI for each meter; it is acceptable just to use the Citipower/Powercor meter number.
- 3. Apply for Solar Pre-Approval (SPA) in Citipower/Powercor eConnect system for each participating NMI. If you do not have an existing eConnect account, you will need to create one at <a href="https://www.powercor.com.au/industry/econnect/">https://www.powercor.com.au/industry/econnect/</a>
  - Note: only Licensed Electrical Workers accredited by Electricity Safety Victoria (ESV) can register on eConnect and have the authority to apply for SPAs.
- 4. The size (in kW) per connection as listed in the EGN Part-A form will be size of the inverter capacity to be installed with a SolShare, divided equally by the number of NMIs connected to that SolShare as per Equation 1.

Equation 1 - Fraction of inverter capacity for Citipower/Powercor

 $Inverter\ capacity\ against\ single\ NMI = \frac{Total\ inverter\ capacity\ connected\ to\ SolShare}{Number\ of\ NMIs\ connected\ to\ the\ SolShare}$ 

Note: if there are differing numbers of connections on each phase, e.g. 3 connections on L1 and four connections on L2, ignore this and use the simple average for all the whole inverter as per Equation 1 above.

- 5. Enter the SPA numbers in the Table 1 of the EGN Part-A spreadsheet provided in Annex A1-2.
- 6. Apply for a Network Exemption from the Australian Energy Regulator (AER). This is required by Citipower/Powercor ensure full compliance with energy distribution regulations. See Annex A1-3 for a step-by-step guide on how to do this. Note that this is *in addition* to the Network Exemption required from the Victorian Essential Services Commission as per the guidance at the top of this Section A.

Note: You will need the NMI for the common light and power, or failing that, one of the lots on site, to be able to apply for a network exemption.

7. Complete Section 1 on page 5 of the Notice of Embedded Generation Network Information Sheet.

Note: this will require an AER distribution exemption for an Embedded Network. The typical size of SolShare installations is such that a Deemed Exemption category almost always applies. Visit the AER's website for more information.

8. Email Section 1 of the Notice of Embedded Generation Network Information Sheet available at Annex A1-1 and Table 1 of the EGN Part-A form available at Annex A1-2 to EmbeddedNetworks@powercor.com.au and carbon-copy in mark.pilkington@powercor.com.au and interconnections@allumeenergy.com.au

You are now ready to proceed to installation of the rooftop PV system, including the SolShare.

## A.1.3 Post-installation of rooftop PV system

1. Following installation of the rooftop PV installation and SolShares, you will need to get the installation inspected by a Licensed Electrical Inspector (LEI). The LEI will need to issue a Certificate of Electrical Safety (CES) for each NMI connected to the SolShare.

Note that a <u>prescribed</u> CES must be issued for each NMI. <u>Non-prescribed</u> CESs will not be accepted by Citipower/Powercor.

Keep the CES for each NMI on file in-case requested in future by Citipower/Powercor.

2. On the Citipower/Powercor eConnect system, enter the CES number against each NMI and submit for interconnection for each NMI.

This will require nominating the inverter model and the fraction of inverter capacity against each NMI. Use the same fraction as per Table 1 of the EGN Part-A Spreadsheet, i.e. as per

A fee will be charged to each end-user's retail electricity provider, which may be imposed by the retailer on the end-user. The end-user will also be contacted by the retailer to initiate the Feed-in Tariff for exported electricity.

3. Enter the CES numbers into Table 2 of the Embedded Generation Network (EGN Part-A) Spreadsheet and complete all other mandatory fields.

- 4. Complete Sections 3 and 4 (pp. 7-8) of the Notice of Embedded Generation Network Information Sheet.
- 5. Email the Table 2 of the Embedded Generation Network (EGN Part-A) Spreadsheet and Sections 3 and 4 of the Notice of Embedded Generation Network Information Sheet to EmbeddedNetworks@powercor.com.au and carbon-copy in mark.pilkington@powercor.com.au and interconnections@allumeenergy.com.au

### **A.1.4** Ongoing responsibilities of the Solar Installation Partner

Citipower/Powercor reserves the right to request access to the embedded generation system, including the SolShare, on request of the Solar Installation Partner. The contact details of the Solar Installation Partner are lodged in the eConnect system when submitted the interconnection request.

If an end-user connected to a SolShare is physically and permanently disconnected from the rooftop PV system (i.e., the wired connection between the SolShare and the end-user's circuit is removed), Citipower/Powercor must be notified through eConnect, and Allume Energy must be notified at support@allumeenergy.com.au. Note that this does not need to occur if the end-user has simply been disconnected through the Solar Isolator switch for their circuit.

## A.2. Jemena Energy Networks

## A.2.1 Staging of process

Interconnection application must proceed and confirmation from Jemena that the design is acceptable must be received prior to proceeding with on-site installation.

Note: If the installation has a total capacity above 30kVA (even if multiple inverters or multiple SolShares are used) it will be essential to follow <u>Jemena's guidelines</u> on system design for systems of this scale.

## A.2.2 Interconnection application process

- Apply for a network exemption from the Victorian Essential Services Commission. This
  is a straightforward process that can be quickly completed by following the steps
  provided in Annex A0 to this DNSP Interconnection Guide.
- 2. Email GenerationEnquiries@jemena.com.au and carbon-copy tanya.li@jemena.com.au and interconnections@allumeenergy.com.au and state in the email that you will proceed to apply for interconnection of a SolShare installation. Include in the email the following documents for the shared solar installation:
  - a. The network exemption application number from the Essential Services Commission, as per step 1 above.
  - b. A copy of the design SLD.
  - c. An Inspection and Test Plan for the rooftop PV installation.
  - d. A SolShare Commissioning Plan, with template available at Annex A2-1.
  - e. A SolShare Anti-Islanding Functionality Test Plan, with template available at Annex A2-2.
- 3. Apply for interconnection of embedded generation at <a href="mayervices.jemena.com.au">myservices.jemena.com.au</a> by applying for the full inverter capacity against one NMI that will be participating in the shared solar installation.
- 4. Pay for the application fee to complete the submission.
- 5. Once Jemena has confirmed by email that the design is acceptable and the interconnection approved, you are free to proceed to installation.

## A.3. United Energy

More information about the connection process with United Energy can be found on the United Energy website.

### **A.3.1** Installations with Basic Micro Embedded Generation (below 30kVA)

Check the eligibility of your installation as basic micro embedded generation here. All basic micro embedded generation installations are now handled using the Solar Pre-Approval process.

- 1. Apply on behalf of your customer for Solar Pre-Approval via the United Energy online connection application service. A guide about this process is available here from United Energy. It should be noted that only one NMI can be provided during this application process you should choose one NMI that will be connected to solar at the site and assign the total solar value to this NMI. You should then contact the United Energy team via phone or email to manually split the capacities evenly (this will assist United Energy in keeping their back end systems up to date).
- 2. Install the solar system with SolShare, ensuring the correct inverter settings are in place (Australia A).
- 3. Submit a Model Standing Offer contract or Generator Agreement on behalf of your customer.

A maximum export limit may be imposed on your installation.

## **A.3.2** Installations with Negotiated Embedded Generation (above 30kVA)

If applicable, the counterparty to the Agreement must be the Owners Corporation if a stratatitled building, the Social Housing Provider (SHP) if it is a SHP-owned and operated building, or the single building owner for other types of properties.

- Submit an application for Preliminary Assessment via the United Energy <u>online</u> <u>connection application service</u>. A guide about this process is available <u>here from</u> <u>United Energy</u>. A response will be sent back.
- 2. Apply for Embedded Generation Connection via the United Energy <u>online connection</u> application service.
- 3. Install the solar system with SolShare.
- 4. Submit an Alteration request via the United Energy <u>online connection application</u> service.

## A.4. Ausnet Services

At this time, installations in the Ausnet network are only permitted if there is a 3-phase common light and power meter onsite against which the application for embedded generation application can be made. Ausnet Services will not accept applications that do not have a common light and power meter, or only have a single-phase common light and power meter. Systems under 30kVA will be offered Ausnet Services' Model Standing Offer if the maximum that can exported through the meter is 5kw or less. Each of these connections will require an application be lodged.

Systems over 30VA are issued a negotiated offer for embedded generation.

Please note that no SolShare installations have proceeded in the Ausnet Services network to date. If you are intending to undertake an installation in the Ausnet network, please email interconnections@allumeenergy.com.au.

### B. NEW SOUTH WALES

## **B.1.** Ausgrid

## **B.1.1** Staging of process

Interconnections for Ausgrid need to be via their <u>Connections</u> page of the website. The steps below must be completed prior to works commence at site to confirm there is no grid congestion at the intended point of installation.

### **B.1.2** Steps for interconnection application prior to installation

- 1. Submit embedded generation application for the common light and power NMI based on the full system size (inverter capacity) for the SolShare installation(s) at site. i.e., if there are two SolShares, each with 10kW inverters connected, apply for interconnection with 20kW against the house lights/common light and power NMI regardless of whether it is connected to the SolShare or not.
- 2. To highlight the application to Ausgrid's Energy Transformations team for technical assessment, the applicant must:
  - a. Make note in the comments field as per Figure 1 below.



Figure 1 - Ausgrid portal comments section

 b. In addition to this comment, a statement must be provided to the effect that all the NMI owners consent to being part of the collective application and that they agree to the terms of the Ausgrid Model Standing Offer Basic Connection Services – Micro Embedded Generation Connections.

Note: The applicant will need to get this consent prior to submitting the application on behalf of the electricity customers and keep this consent on file. The consent can be provided by an Authorised Representative of an Owners Corporation or Social Housing Provider.

Note: If the system is >30kVA (i.e. the sum of all inverter capacities at site exceeds 30kVA), the Solar Installer will need to follow the additional steps in the application process of submitting single line diagram and control and protection schematics as per Ausgrid's Network Standard NS194 Secondary Systems Requirements For Embedded Generators.

c. Answer "Yes" to the question "My installation is part of a multi-tenanted premises or embedded network that has existing inverter connected Generation installed" and then answer "9999" to the question "Total existing inverter connected generation kW" as per Figure 2 below.



Figure 2 - Ausgrid portal inverter capacity section

d. When asked to expedite the connection offer for all premises, select "Yes" then "Basic connection services – Micro EG connections" as per Figure 3 below.

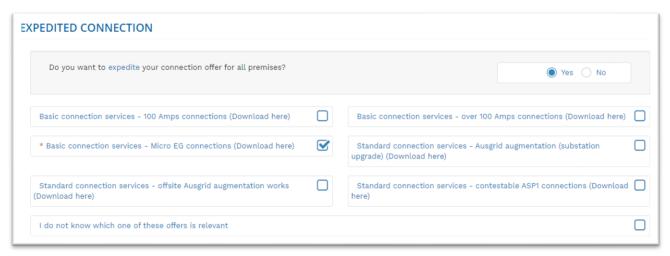


Figure 3 - Ausgrid portal expedited connection section

- e. Once the application has been submitted, the applicant will need to send a copy of the *Ausgrid Interconnection Details for Allume Energy SolShare* spreadsheet available at Annex B1-1 with all required information filled out to eg@ausgrid.com.au and carbon-copy interconnections@allumeenergy.com.au.
  - i. Note that all connected NMIs of the site <u>must</u> be included in the spreadsheet.
  - ii. If the total system capacity is below 30kVA, please attach the SLD for the proposed design.
- 3. Once the application has been received, the Energy Transitions team will assess the application and manually enter all data for the site into Ausgrid systems and the Distributed Energy Register (DER). This manual entry will come at a cost and will be billed to the applicant in addition to an inspection fee.

## **B.1.3** Post-installation inspection

- 4. A mandatory inspection is required for each SolShare installation before the generator installation is permanently electrified. Once the rooftop PV installation is complete and the SolShare(s) have been commissioned, de-energise the rooftop PV system and send the following documentation to <a href="mailto:eg@ausgrid.com.au">eg@ausgrid.com.au</a> and carbon-copy interconnections@allumeenergy.com.au:
  - a. Certification that the installation has been installed as per approved design.

- b. A copy of as-built design drawings which include voltage rise calculations.
- c. A test plan and test report undertaken by suitably qualified people and using NATA-approved test equipment (when required for systems >30kVA)
- d. A copy of the CCEW.
- e. Acceptance of the connection offer in the Ausgrid online portal.
- 5. An Ausgrid officer will review the settings and as-built drawings and if there are substantial differences to the initial design Ausgrid shall request that revised drawings be resubmitted and new fees will apply.
- 6. You will receive a job number from Ausgrid within 10 business days. Once you have received the job number, please email operationalsupport@ausgrid.com.au to arrange a mandatory installation inspection using the job number.
- 7. Once the inspection has successfully been completed, the rooftop PV system can be re-energised.

## **B.2.** Endeavour Energy

The SolShare Installation Partner will complete the application on behalf of a project proponent, which can be a Strata Corporation (or delegated Strata Manager), Social Housing Provider or Property Developer. This proponent shall coordinate the application process on behalf of all participating customers with Endeavour Energy.

The application for interconnection must be made prior to work commencing on site.

#### **B.2.1** Application for interconnection

- The proponent must ensure each participating customer (per NMI) completes Endeavour Energy's <u>Application for Connection of a Generator form (FPJ6008)</u> (also available at Annex B2-1) to indicate each individual customer understands and agrees with Endeavour Energy's <u>Model Standing Offer for a Standard Connection Service</u>. The <u>Generation System Details</u> and <u>Additional Information</u> sections of the form must be left blank. The completed forms shall be combined into a single PDF file.
- 2. The proponent shall complete a separate *Application for Connection of a Generator form (FPJ6008)* for the Common Property NMI. *Generation System Details* must be completed on this form.
- 3. The proponent shall complete an *MOU Shared Solar System* using the template provided at Annex B2-2.
- 4. The proponent shall package the completed MOU, all completed *Application for Connection of a Generator form (FPJ6008)* forms along with any supporting technical information (SLD, voltage rise calculations) and email the package to <a href="mailto:cwadmin@endeavourenergy.com.au">cwadmin@endeavourenergy.com.au</a>. The email subject and body must clearly mention that the application is for a *shared solar generation system*.
- A technical assessment will be carried out by Endeavour's technical assessor. A connection offer will be provided within 2 weeks if the assessor is satisfied with all the information provided.
- 6. A Permission to Connect will be issued to the proponent when the technical constraints (if any) have been addressed and associated application fees have been paid.

## **B.2.2** DER Register

The solar installer must complete the DER Register on <u>AEMO's website</u> using the common light and power/house lights NMI and Endeavour Energy reference number from the Permission to Connect letter.

## **B.2.3** Certificate of Compliant Electrical Works (CCEW)

The electrical contractor must submit the CCEW to the NSW Department of Fair Trading. See the Fair Trading website for more details.

## **B.3.** Essential Energy

The Solar Installer will complete the application on behalf of a project proponent, which can be a Strata Corporation (or delegated Strata Manager), Social Housing Provider or Property Developer. This proponent shall coordinate the application process on behalf of all participating customers with Essential Energy.

The application for interconnection must be made prior to work commencing on site.

### **B.3.1** Connection Requirements for a shared solar generation system

In the Essential Energy network area, the proponent of the SolShare system, by seeking interconnection to the Essential grid, will indemnity Essential Energy for any damage or inconvenience caused to the building or other customers, quality of supply issues, safety risks and possible commercial concerns.

Note that at this time it is not possible to install a shared solar installation on Torrens title properties, dual occupancy titled properties (ie. duplexes), shopping centres or shopping malls within the Essential Energy network area.

Note that it is also not possible to have a shared solar installation on a site that has more than one service main.

### **B.3.2** Application for interconnection

- 1. Complete the Customer Declaration Form at Annex B3-1 and ensure it is signed by the project proponent.
- 2. Complete a Low Voltage (LV) Connection Application using Essential Energy's online portal for the full system size (inverter capacity) using the common light & power/house lights NMI. All system details must be completed on this form. Please ensure that urban commercial is selected as the premise type. A copy of the Customer Declaration Form and supporting technical information (such as an SLD and voltage rise calculations) shall be attached to the application.
- Essential Energy will complete a technical assessment at the connection point (ie. The MSB) and provide any site-specific conditions or site export limits where applicable. A connection offer will be provided within 10 business days if the assessor is satisfied with all the information provided.
- 4. The proponent must ensure each participating customer (per NMI) completes a LV Connection Application to indicate each individual customer understands and agrees with Essential Energy's *Model Standing Offer for a Standard Connection Service*. Please ensure that **urban commercial** is selected as the premise type. Reference to the initial connection application (NMI & Offer number) should be included in the *Additional Information* sections of the application form. Please also indicate that this is a shared solar site in the additional information section.
- 5. A connection offer will be provided for each subsequent NMI within 10 business days if the assessor is satisfied with the information provided.

## **B.3.3** Distributed Energy Register (DER)

The solar installer must complete the DER Register on <u>AEMO's website</u> using the common light and power/house lights NMI and Essential Energy's reference number on the connection offer.

## **B.3.4** Certificate of Compliance Electrical Works (CCEW)

The electrical contractor must submit the CCEW and copies of the as built drawing for the installation using Essential Energy's <u>secure web form portal</u>.

### **B.3.5** Electrical Inspections

Each shared solar site will be inspected by Essential Energy's Network Assurance Team. To book an inspection, please email <a href="mailto:aspinfo@essentialenergy.com.au">aspinfo@essentialenergy.com.au</a> and carbon-copy <a href="mailto:interconnections@allumeenergy.com.au">interconnections@allumeenergy.com.au</a> and include the site approval details. An Essential Energy Assurance facilitator will then contact you to schedule an inspection.

## C. ENERGY QUEENSLAND

#### C.1. Introduction

The Energy Queensland <u>Electrical Partners Portal</u> has been adapted to include new fields for Electrical Partners to select when submitting applications for embedded generation connected to a solar sharing devices such as the SolShare. This part of the portal is available under the "Embedded Generation Sharing" option when commencing and interconnection request.

The Negotiated Connection Contract for SolShare installations on the Energy Queensland network is available at Annex C1. It must be completed for each shared solar installation.

Please note that at this time all installations in Energy Queensland must have a common light and power/house lights connection to the grid, and this must be included in the shared solar installation (i.e. connected to the SolShare).

#### C.1.1 Installations below 30kVA

- 1. The application must be submitted on behalf of the party who will execute the Negotiated Connection Contract. This will be the body corporate or a Social Housing Provider for a social housing building.
- 2. For the common light and power/house lights NMI where the SolShare device is installed, select "yes". Note that the primary NMI must be registered as a 3-phase connection (even if it is only single phase). i.e., if the common light and power/house lights NMI is the primary connection, select it as 3-phase to be able to associate the 3-phase inverter. See Figure 4 below for guidance.
- 3. Once "yes" is selected, drop down the NMIs related to the same multi-tenancy installation (these will auto-populate) and select the relevant NMIs which are participating in the shared solar at this site. These can be selected individually, or via a Select All option. Note that NMIs will have restrictions on electrical equipment and solar tariffs.

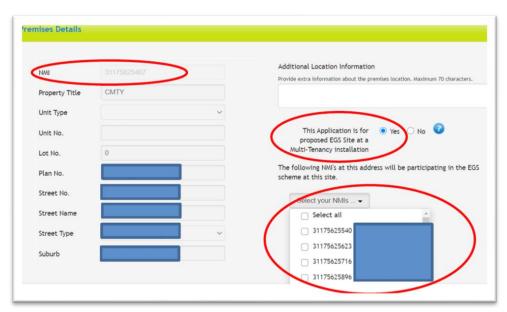


Figure 4 - Premises Details section of EQ portal

- 4. EGS applications are classified as 'Negotiated' and will require a Technical Assessment in addition to a Negotiated Connection Contract. Energy Queensland will provide you the technical assessment within 30 business days from the date your application is considered complete. The technical assessment will be appended to the Negotiated Connection Contract and issued via email to the applicant and Retail Account Holder for execution and return via email to Energy Queensland at either ergongeneration@energyq.com.au or energexgeneration@energyq.com.au
- 5. Once the signed Negotiated Connection Contract has been received it will be fully executed and uploaded to the portal for your records.
- 6. At this point the connection application will transition to 'Accepted' to allow for the submission of the EWR within 90 business days.

#### C.1.2 Installations above 30kVA.

You must ensure the generating system is not interconnected to Energex's distribution network in any way until Energex is satisfied the installation complies with the <u>Standard for Connection of Embedded Generating Systems (>30 kVA to 1,500 kVA) to a Distributor's LV Network.</u>

Note: Interconnection without such consent may attract penalties under clause 28(1) of the Electricity Regulation 2006 (Qld). In addition, such a non-compliance could also result in the obligation upon Energex to connect the relevant premises ceasing, thus entitling Energex to disconnect the relevant premises (being the entirety of the site).

The below guidance is to be read in conjunction with the guidance for Solar Sharing Devices as per the <30kVA installation guidance provided in C.1.1 above.

- 1. Submit your Enquiry via the Energex portal.
- 2. On submission of your Enquiry, you will receive an email and text message (SMS) asking if you would like to progress your enquiry to a Site-Specific Enquiry Response (SSER) and pay the fee (currently \$876.00). If you choose to progress, please action within the portal and an invoice will be issued to you by email within 6 business days.
- 3. On receipt of the SSER payment, Energy Queensland will provide a Site-Specific Enquiry Response (SSER) within 30 business days. The SSER will be uploaded to the portal where you can access the results.
- 4. At this point you will be able to progress your Enquiry to an Application within the portal. Please ensure the following documents are uploaded to avoid delays:
  - Design Certification Report certifying compliance of the generating system in accordance with the Low Voltage Embedded Generation Standards (STNW1174)
  - b. The Design Certification Report needs to include a covering letter signed by an Registered Professional Engineer of Queensland (RPEQ) and the following supporting documentation:
    - i. Network connection diagram (signed by RPEQ)

- ii. Protection line diagram including inverter and grid protection device settings and instrument transformer details (signed by RPEQ)
- iii. DNSP approved Grid Protection Relay (GPR) including name, make and mode. See the <u>list on the Energex website</u>.
- iv. Voltage Rise Calculations the EG system has been designed to operate so that there is a maximum 2% voltage rise from the EG system to:
  - A shared Distribution System connection the Network Coupling Point; and
  - A dedicated Distribution System connection the transformer's low voltage terminals
- v. Battery Storage System details (if applicable)
- 5. If you choose to pay by invoice, an invoice will be emailed to you, outlining the fee payable as per the SSER cover page and provided below. Please note: the application only becomes visible for review once your payment has been received. A remittance advice can be emailed to <a href="mailto:accountsreceiveable@energyq.com.au">accountsreceiveable@energyq.com.au</a>
- 6. If your Connection Offer Type has been classified as 'Basic' in accordance with the Connection Policy 2020-2025, the Connection Application (CX), if you have chosen to Expedite the CX, will transition to a status of "Awaiting Compliance Report". If not, the Model Standing Offer will be provided to you via the Portal, and the CX will transition to "Offer". You must ACCEPT this offer within the portal with 20 business days. The CX, will then transition to a status of "Awaiting Compliance Report". In this case, skip to step 10.
- 7. If your Connection Offer Type has been classified as 'Negotiated' in accordance with the Connection Policy 2020-2025, and complete from a material perspective, the Connection Application (CX) will be issued to a Technical Officer to provide a Technical Study and approval to proceed to offer. This will occur within 30 business days
- 8. An email with an Offer to Execute and Technical Study will be emailed to the applicant. Please return the entire signed offer to <a href="mailto:energyg.com.au">energyg.com.au</a>
- Once the signed offer has been received it will be fully executed and uploaded to the portal for your records. At this point the CX will transition to 'Awaiting Compliance Report'.
- 10. The operation of the completed installation must be tested for compliance to the relevant Connection Standards and technical requirements outlined in the Technical Study. These test results must be certified by an approved RPEQ.
- 11. The system must be switched off at the AC isolator/s once the testing has been completed, however the DC isolators must be left switched on.
- 12. On completion of the tests the signed Compliance Report must be emailed to <a href="mailto:energyq.com.au">energyq.com.au</a> within 7 business days.
- 13. Once our Protection and Technical Engineer confirm the Compliance Report satisfies the requirements of the relevant Connection Standards (this usually takes 10 business

- days), the CX will transition to *Accepted* which will then allow for an Electrical Work Request (EWR) to be submitted.
- 14. Once the EWR is submitted, the portal will transition the EWR to the customer's relevant retailer, who will manage the metering requirements i.e., upgrade, reprogramming etc.
- 15. At this point, the customer will need to liaise with their retailer to confirm what metering changes are required.
  - a. If the customer is advised of no metering changes required, the system can be turned on.
  - b. If the customer is advised that a meter change is required, the system can only be turned on once these changes have occurred.

## D. SOUTH AUSTRALIA POWER NETWORKS

## **D.1.** Installations below 30kVA (Small embedded generation)

All installations in SAPN below 30kVA must comply with SAPN's <u>Technical Standard 129</u>. Once your design is in compliance with this standard:

- Apply for interconnection through the SmartInstall workflow available on the <u>SAPN</u> website.
- 2. Assign the inverter capacity to the common light and power (regardless of whether the SolShare is connected to that circuit or not).
- 3. Once a Small Embedded Generation (SEG) number has been issued, you can commence installation.
- 4. Use the SEG number for activation of solar feed-in tariff with the electricity retailer for each customer NMI connected via the SolShare.

# **D.2.** Installations above 30kVA (Medium embedded generation)

For applications of multiple SolShares where the total installed inverter capacity exceeds 30kVA, the solar installer must design the installation in compliance with SAPN's <u>Technical Standard 130</u>. Once your design follows this standard:

- 1. Apply for interconnection using the <u>online application form</u> for Medium Embedded Generation.
- 2. Assign the sum of the capacity of the inverters (either connected via the SolShare or standing alone from the SolShare) to the common light and power/house lights NMI.
- 3. Once SAPN has issued a Connection Offer and ongoing Contract and this has been executed, installation work can commence.
- 4. Use the confirmation number for activation of solar feed-in tariff with the electricity retailer for each customer NMI connected via the SolShare.

## **D.3.** SAPN Witness Testing

SAPN may choose to conduct specific witness testing for the SolShare installation. The guidance on this test procedure has been issued by the South Australian Office of the Technical Regulator and can be found at Annexure D1.

## E. WESTERN AUSTRALIA

### **E.1.** Western Power

Applications for interconnection in the Western Power network are made through the Western Power's <u>Embedded Generation Connection Application</u> portal. The steps are as follows:

- Apply for the PV inverter capacity against the Retailer Reference Number for the common light and power meter (or one of the units if there is no common light and power).
- 2. Attached the SLD for the site.
- 3. In the 'Applicant' section, include <a href="mailto:interconnections@allumeenergy.com.au">interconnections@allumeenergy.com.au</a> as a cc'ed email address.

Note that export limitations occur for all inverters over 5kVA in the Western Power network, unless a Battery Energy Storage System is connected to the inverter. Export limitation is typically 1.5kW. It may be necessary to design the SolShare installation with export limiting functionality monitoring the main supply to the building.

# **TABLE OF ANNEXES**

A zipped file of all Annexes can be downloaded from the Allume Energy website at the Document Library at this address: <a href="https://allumeenergy.com/document-library/">https://allumeenergy.com/document-library/</a>

Number	DNSP	Title	
A0	All Victorian	Applying for a Network Exemption from the Victorian	
	DNSPs	Essential Services Commission	
A1-1	Citipower/Powercor	Notice of Embedded Generation Network Establishment	
		Part A Information sheet	
A1-2	Citipower/Powercor	Embedded Generation Network Establishment Part A	
		Tables	
A1-3	Citipower/Powercor	AER Network Exemption for Citipower/Powercor	
A2-1	Jemena	SolShare sample commissioning Plan	
A2-2	Jemena	SolShare Anti-Islanding Functionality Test Plan	
A3-1	United Energy	Negotiated Agreement for Embedded Generation	
A3-2	United Energy	Application Form – Non-Registered	
B1-1	Ausgrid	Ausgrid interconnection Details for Allume Energy	
		SolShare	
B2-1	Endeavour Energy	MOU for Shared Solar Scheme in the Endeavour Energy	
		network	
B3-1	Essential Energy	Shared Solar Scheme – Customer Declaration Form	
C1	Energy	EQ Solar Sharing Network Connection Contract	
	Queensland		
D1	SAPN	D1 - OTR Guidance on SAPN Witness Testing	