NRN
National
Renewable
Network

OPS Hand Book

Version 1 | June 2025

Contents

Overview

Summary of Operational Process Flow

6

Stages to Completion:
Every job moves through
- Proposal
- Application
- Approvals & Contracts
- ERP Sign-Up & Metering
- Installation
- Audit & Payment

NRN Approvals Required:
Certain milestones need NRN review and approval before progressing to the next stage.

Payment Linked to QA:
Final payment depends on passing QA checks and submitting complete, verified documentation

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Key Requirements

There are 6 main stages in the delivery process.

You're responsible for completing and submitting key documents and tasks along the way.

NRN must approve certain milestones before the job can progress.

Missing or incorrect submissions may delay approvals and impact your payment timeline.

Main Stages

- Proposal
- Application
- Approvals & Contracts
- ERP Sign-Up & Metering
- Installation
- Audit & Payment

Checklist of Requirements

- Proposal created
- Customer Application submitted
- Site Design & Pre-Inspection submitted
- Compliance Check passed
- Contracts signed
- Energy Retailer Sign-Up accepted
- Smart Meter installed
- Installation – site commissioned and documentation completed

Operational Process Flow

1 Proposal

- Proposal shared with customer
- Compliance Call completed

2 Application

- Customer submits application & documents
- Submit Site Design & Pre-Inspection

NRN Approval:

- Customer application (ID, usage, ownership, etc.)
- Site design and inspection
- Compliance check

3 Approvals & Contracts

- Customer signs contracts (SRP & NRN)
- NRN reviews all approvals and signs contract

4 Sign-Up & Metering

- Customer signs up for Energy Plan
- (If needed) Basic meter upgrade initiated
- Purchase Order (PO) issued

NRN Approval:

- Energy retailer sign-up confirmation
- Smart meter requirements completed

5 Installation

- System installation by SRP
- Safety documentation completed
- STC and site inspection photos completed
- Site commissioned

6 Audit & Payment

- SRP invoices NRN
- Payment issued to SRP

NRN Approval:

- QA must be passed and documentation verified before payment is released

Pre-Contract

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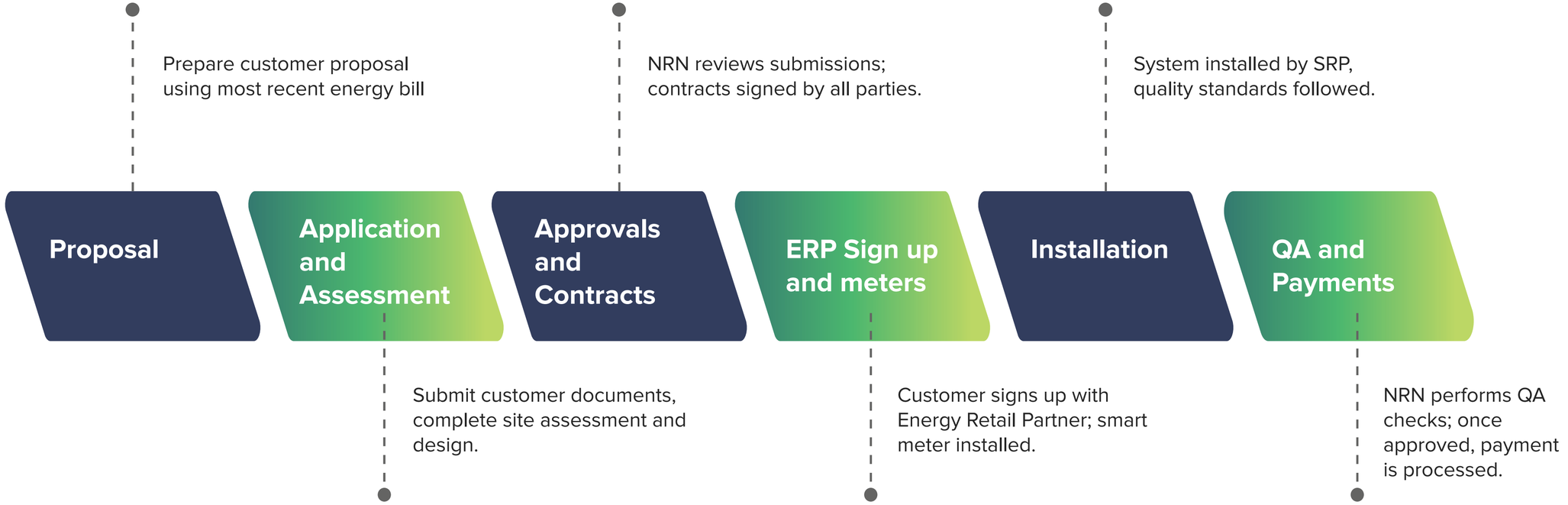
Overview: SRP Complete Job Checklist



SRP Complete Job Checklist

1 Proposal Stage

- Collect customer's recent energy bill.
- Enter bill data into NRN Estimate Tool.
- Verify Daily Average Load (DAL) is 15 kWh or greater.
- Generate accurate proposal.
- Ensure owner of property is the applicant.

2 Application & Assessment

Customer Documents:

- Automated ID, homeownership, and credit checks.
- Certificate of Currency for Home Insurance.
- Payment details submitted.
- Compliance Call completed.
- No Life Support on site.
- Secondary contact details submitted.

Estimate Review:

- Bill data matches exactly.
- Existing solar declared (if applicable).
- Discounts included.
- Control load correctly classified.

Site Assessment:

Site Design:

- Yield ≥ 1.2 kWh/kWp.
- Shading ≥ 70% monthly access.
- Inverter, battery, switchboard locations correct.

Inspection Form:

- Roof condition suitable.
- Switchboard compliant with required space.
- Inverter/battery clearances meet 600mm min.
- Safety hazards documented.

3 Approvals & Contracts

- System Access Agreement signed (NRN and Customer).
- Installation Services Agreement signed (SRP and Customer).

4 ERP Sign-Up & Metering

- Customer signed up with Energy Retail Partner (ERP).
- Smart meter installed and confirmed.
- PO issued after contracts, ERP sign-up, and metering complete.
- Grid approval applications submitted.

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SRP Complete Job Checklist

5 Installation

- Notify customer 24 hours before install.
- Conduct pre-start safety checks.
- Complete STC documentation in NRN portal.
- Install system per approved design and NRN standards.
- Maintain clean, safe, respectful worksite.
- Conduct final walkthrough and handover with customer.

6 Commissioning & QA

- Upload all site photos and documents to NRN STC Portal.
- Submit valid Grid Approvals to NRN.
- Confirm system operational in OEM Portal (48 hours data).
- Verify battery cycling and PV output aligned to system size.
- Pass Technical Desktop Audit.

7 Invoicing & Payment

- Mark job as “NRN to Review” in Tracker by Friday COB.
- Submit invoice to NRN by COB Friday.
- NRN review completed by Wednesday.
- Approved payments processed Friday.

Application Overview

- The Application stage ensures customers meet NRN's eligibility, compliance, and financial requirements before proceeding.
- Customer documents, insurance details, credit status, and energy usage are thoroughly reviewed to verify suitability for the NRN program.
- Accurate submissions help avoid delays, protect customer satisfaction, and support the long-term integrity of NRN's Virtual Power Plant.

The Application stage requires careful attention to detail to ensure each customer is fully eligible, properly assessed, and correctly prepared to proceed. NRN conducts several checks at this stage to protect customer satisfaction, ensure compliance with regulatory and funding partners, and safeguard the long-term integrity of the NRN portfolio.

The Application is made up of two key components:

1 **Customer Documentation Review**

NRN verifies the customer's identity, homeownership, credit eligibility, and insurance coverage. Most of these checks are completed automatically, but customers must upload their current Certificate of Currency for Home Insurance and complete a short Compliance Call with NRN agents. This ensures every customer fully understands the offer and is appropriately protected before moving forward.

1 **Energy Usage Review (Estimate and Energy Bill Check)**

The customer's recent energy bill is reviewed in detail to verify that their daily energy usage meets NRN's minimum eligibility requirements. SRPs must enter energy data into the NRN Portal with full accuracy. System sizing is carefully matched to each customer's load profile to ensure long-term system performance, efficient battery cycling, and full participation in NRN's Virtual Power Plant.

Application Stage Checklist

- Customer identity verified (automated)
- Credit check completed and passed (automated)
- Homeownership confirmed (automated)
- Certificate of Currency for Home Insurance uploaded and valid
- Compliance Call completed
- Estimate reviewed and approved
- Any existing solar system declared and reflected in estimate
- Customer payment details entered
- No Life Support or medical dependencies on site

Customer Docs

- NRN reviews customer documents to verify eligibility and compliance.
- Identity and homeownership checks are fully automated – no manual upload required
- Customer must upload a valid Certificate of Currency for Home Insurance
- Credit check is mandatory; customer consent is required
- Compliance Call must be completed before the application can proceed

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Overview

The Application stage marks the first operational step after a customer accepts an NRN solar and battery solution proposal. In the first part of this stage, the Customer Documents are reviewed by NRN to confirm eligibility. Most checks are now handled automatically (such as identity and ownership verification), however proof of insurance needs to be uploaded manually.

Customer Docs

NRN verifies key customer information to confirm eligibility and compliance. Identity and ownership are checked automatically through secure digital systems, with no manual uploads required. Customers must manually submit a current Certificate of Currency for Home Insurance to confirm property coverage before installation. These checks protect all parties, ensure system suitability, and support long-term program integrity.

Credit Check

NRN assesses all residential customers for creditworthiness before installation, in line with requirements from our funding and energy retail partners. This ensures financial risk is managed and program integrity upheld. Credit checks are conducted using verified customer data from a licensed bureau. While we don't publish exact thresholds, applicants generally must show a stable credit history with no recent serious issues. Applications that fall outside these guidelines are not eligible. This process supports the long-term viability of the VPP and protects NRN and participating customers.

Compliance Call

As part of the application process, customers are required to complete a Compliance Call with an NRN agent. Agents are on standby to take these calls, which typically take 3–4 minutes. During the call, the agent confirms that the customer has received and reviewed their proposal, understands the product, pricing, and contractual terms, and has had the offer clearly explained. This call is mandatory to progress the application and is a key compliance step required by NRN's funding and energy retail partners. It ensures customers are fully informed, confirms compliant sales practices, and support long-term customer satisfaction.

Customer Docs

Click here for support via the Portal

Key Requirements

Automated checks - customers do not need to submit these documents manually.

- **Valid ID check**
- **Credit Check**
  Customers must also consent to a credit check. This check will not affect their credit score.
- **Proof of homeownership**
  Customers must submit the following document as part of the application:
- **Certificate of Currency for Home Insurance**
  - Must be current and cover the property where the system will be installed.
  - The start and end dates of the policy must be clearly listed
  - The certificate should clearly list the installation address and demonstrate valid building coverage.
- **Set Up Payment details with NRN Direct**
- **Compliance Call with NRN.**

Process Flow

1. Customer accepts proposal, begins application process
2. Identity, credit checks and proof of ownership checks are conducted digitally by NRN
3. Customer submits Certificate of Currency for Home Insurance.
4. Customer submits payment details with NRN Direct.
5. Customer completes Compliance Call.
6. NRN reviews the document to confirm validity and suitability.
7. If the document is incomplete or poor quality (e.g. expired or missing details), NRN will request resubmission.
8. Once the document is approved, the application proceeds to Site Assessment.

Checklist

- Customer is the owner of the property
- Certificate of Currency for Home Insurance provided and valid
- Emergency Contact Details provided
- No manual ID or proof of ownership submission required
- No Life Support on site
- Compliance Call is completed

Tips for success

- Make sure to submit the Certificate of Currency, not the renewal notice, to avoid delays in processing application.
- Most current information is provided.
- Ensure the compliance call is completed and payment details are provided.
- No Life Support on site.
- Ensuring all information is entered correctly without errors.
- Clearly communicate with NRN and promptly provide any required notifications or updates to keep your application moving smoothly.

Estimate and Energy Bill Check

The customer's recent energy bill must be submitted with accurate data entry to confirm eligibility and calculate savings.

All usage volumes, rates, supply charges, and GST must match the bill exactly to avoid delays or rejections.

The customer's Daily Average Load (DAL) must be at least 15 kWh, unless supporting evidence for higher future usage is provided and approved.

System sizes are strictly matched to usage to ensure the battery is fully cycled and the Virtual Power Plant operates effectively.

NRN reviews every submission in detail to validate eligibility, check for accurate savings projections, and confirm compliance before approval.

Click here for support via the Portal

Overview

This stage ensures that the customer's energy usage qualifies them for an NRN solar and battery system—and that the proposed solution delivers real value.

As a Solar Retail Partner (SRP), you'll submit the customer's recent energy bill and input their usage data into the NRN Portal. NRN uses this information to assess eligibility, validate savings, and check for any unusual energy patterns that may affect system performance. Getting this right helps avoid delays, ensures customer trust, and sets the foundation for a successful installation.

Accurate Data Entry

It's important that all details from the customer's energy bill are entered accurately when creating the estimate. This includes the daily supply charge, usage rates, and whether GST is included in the rates or listed separately at the bottom. Mistakes in this step can significantly affect the proposal and lead to incorrect savings being shown.

NRN reviews this data closely. If it does not match the bill, the application may be rejected and sent back for correction. This is a common reason for delays.

While the automated bill scraper tool is usually reliable, it can make errors. Always double-check the figures before submitting.

It's also important to involve the customer. Make sure they understand the rates being used in their estimate and how this impacts their projected savings. This helps ensure the proposal is accurate and builds confidence in the system.

Properly Sized Systems

NRN does not oversize systems. Each system is carefully sized to match the customer's actual energy usage. Based on the customer's load, the NRN Estimate and Proposal Tool recommends the appropriate system size. Oversizing offers no benefit to the customer, as there is no feed-in tariff and excess solar cannot be monetized. This marks a shift from the traditional view that more solar is always better. For the VPP to operate effectively, systems must be optimized to the site's usage profile so the battery can be fully cycled and solar generation used efficiently. This is a core principle of the NRN model and is not negotiable.

Estimate and Energy Bill Check

Key Requirements

- Customer's Daily Average Load (DAL) must be 15 kWh or more
- Energy bill must be recent, showing the correct address and NMI
- Bill must be for the submitted property address
- Any existing solar systems must be declared in the application and reflected in the estimate
- Control load (if applicable) must be treated correctly in the estimate
- Guaranteed discount from the energy retailer, This is not a government rebate or concession
- All volumes and rates must match the bill exactly
- GST must be accurately calculated as per the bill

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Minimum Daily Average Load (DAL)

Customers with low energy usage are not eligible for the NRN product. It is critical that NRN systems are fully optimized for the customer usage profile, and since NRN does not install small systems, so if a household uses too little power, the system may be underused and offer poor value.

Our Energy Retailer Partners need customers to have a usage profile that supports the cost of delivering the NRN plan. Low-usage customers do not meet this requirement.

Finally, the Virtual Power Plant (VPP) relies on systems being actively used every day. This includes minimal solar export and the battery being fully cycled. If usage is too low, the system is not optimized and not deliver full value to the VPP.

Therefore, we are strict in this requirement, and thus careful checks are conducted to ensure the standards are met.

There are circumstances where a single customer bill may not reflect their true usage profile. In these cases please follow these guidelines:

If DAL is below 15 kWh, you must provide:

- At least 9 months of bill history
- Valid explanation for any low-usage months (<12 kWh)
- Evidence of increased future usage (e.g., EV, electric heating)
- NRN explicit consent to proceed with an adjusted system size

Estimate and Energy Bill Check

Click here for support via the Portal

NRN Review and Approval Checks

Once an estimate and energy bill are submitted, NRN carries out a detailed review to ensure the proposal is accurate and eligible for approval.

This includes the following checks:

- **Minimum Usage Requirement:** Confirming the customer meets the minimum Daily Average Load (DAL) of 15 kWh.
- **Control Load Status:** Checking if a control load is present and whether it has been correctly classified (retained as control load only or removed and reclassified as off-peak).
- **Existing Solar Status:** Checking if a existing solar system is present and whether it has been correctly classified.
- **Discount Status:** Checking if a guaranteed discount from the energy retailer has been factored into the estimate.
- **System Sizing:** Reviewing that the proposed system size is appropriate for the customer's energy usage and aligns with what has been recommended by the NRN Estimate and Proposal Tool.
- **Savings Validation:** Ensuring the estimated Year 1 savings are realistic and make sense based on the customer's usage profile.
- **Line-by-Line Bill Accuracy:** Verifying that every figure entered in the estimate matches the energy bill exactly—including usage volumes, rates, supply charges, and GST treatment.

If any discrepancies are found, the application may be returned for revision and clarification via the SRP Portal.

Checklist

- Energy bill is recent and matches application details
- DAL is ≥15 kWh or supporting information/evidence provided
- Control load correctly included or removed
- All usage volumes, rates, and GST match the bill
- Existing solar system included (if applicable)
- Estimate reviewed and approved
- Proposal reflects accurate usage and savings
- No Life Support / Medical Rebate

Common Mistakes

- Don't submit estimates for customers with DAL < 15 kWh unless you've uploaded supporting documents and evidences.
- Bill is outdated (e.g. older than 3 months)
- Incorrect DAL calculation (wrong date range or usage total)
- Double-check GST— incorrect treatment affects customer savings
- Rates do not match bill (e.g. missing peak/off-peak rates)
- Control load included when it shouldn't be
- Control load excluded when it should be considered
- GST miscalculated (e.g. double-counted or not included when needed)
- Don't oversized/undersized system unless you've uploaded supporting documents and evidences.

Overview: Site Assessment

The Site Assessment ensures each system is designed to safely fit the home, maximise solar performance, and meet all compliance and safety standards.

Both the Site Design and Inspection Form are manually reviewed by NRN to validate system suitability, address risks, and prevent issues before installation.

Questions or Clarifications?

Please reach out via the SRP Portal if you need clarification or assistance with solar panel modelling, yield calculations, or approval feedback.

Click here for support via the Portal

The Assessment stage is the second operational step after a customer accepts the NRN proposal. This is where the SRP determines the suitability of the site for the NRN Solar and Battery solution. It is comprised of two sections: Site Design and Inspection Form. These are carefully reviewed by the NRN Team to ensure that the site is optimally designed for solar and meets the compliance and safety requirements of a solar installation.

Key Requirements

To progress the application:

- **Site Design Passed**
  - Minimum 70% shading impact per month.
  - Minimum average annual yield vs. system size > 1.2kWp
  - Site Design clearly shows location and compliancy of all PV components
- **Inspection form passed**
  - Installation Safety Requirements met
- **Roof Suitable for installation**
  - Inverter, Battery, NRN Link Location optimised and complaint
  - Compliant Meter Switchboard with enough space for new components
  - Incomplete or poor-quality submissions (e.g., blurry switchboard images, incomplete information, vague descriptions etc) will delay site assessment approval.

Final Approval Checklist

Before submitting to NRN for approval, SRPs must ensure:

- Site Design Completed
- System Configuration Optimised
- Pre-Inspection Completed with Clear Photos
- Site is suitable for NRN Solar and Battery Installation

Site Design Review

- The Design Review ensures your proposed solar layout delivers strong long-term performance, with optimal panel positioning, minimal shading, and a verified annual yield above NRN's minimum thresholds.
- Designs must achieve an estimated annual yield above 1,200 kWh/kWp, monthly sun access above 70%.

Questions or Clarifications?

Please reach out via the SRP Portal if you need clarification or assistance with solar panel modelling, yield calculations, or approval feedback.

Click here for support via the Portal

The Design Review forms part of the Assessment stage in the Application Process. The SRP is responsible for proposing a solar design which meets NRN approval standards and is optimally placed for maximum solar production. These proposed installation designs are then manually reviewed by the NRN team once the application has been submitted to determine site design suitability.

Process Flow

1. Create panel layout site design in OpenSolar / your chosen solar design platform
2. Ensure PV System meets average annual yield and shading requirements
3. Label the position of the Inverter/Battery Module, NRN PVDB and Meter Box/ Main Switchboard on the site design
4. Submit the Site Design screenshot
5. NRN Review of Site Design

Checklist

- Estimated Annual Yield vs. System Size greater that 1.2kW
- Shading impact greater that 70%
- Distance between Inverter/NRN Link and MSB no greater than 20m

Pre-Contract

Site Design Review

NRN Site Design Requirements

To streamline the assessment approval process, SRPs must ensure the following criteria are satisfied when submitting the site design:

1 Estimated Yield

Yield requirement:

- Minimum 1.2 kWh
- If not met: Try alternative configurations in your design portal or notify NRN in the SRP Portal with suggestions.
- Estimated yield is calculated by dividing the annual forecast output by the system size. This must be greater than 1.2kWp

2 Re-Submitting Site Design

If the proposed panel site design falls below the thresholds, then an alternative configuration should be created and submitted:

- Suggesting a new panel configuration
- Moving the panels to a different roof location

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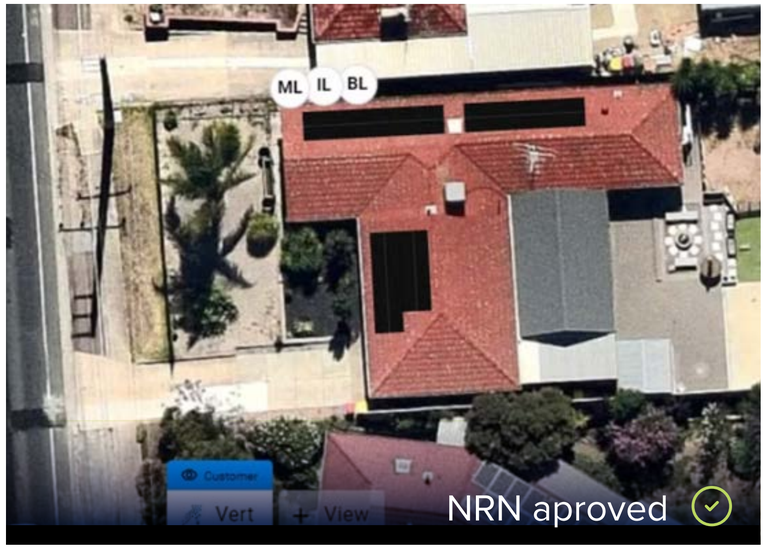
22 Panel System

9.680 kw | 205% | 9.6 kWh | 14958 kWh



System size - 9.68kWS

Annual Output - 14,958kWh

14958/9680 = 1.55

15 Panel System

6.600 kw | 102% | 0.0 kWh | 7415 kWh

System Size: 6.6kW

Annual Output = 7.415

7415/6600 = 1.12

Pre-Contract

Site Design Review

NRN Site Design Requirements

To streamline the assessment approval process, SRPs must ensure the following criteria are satisfied when submitting the site design:

3 Array Positioning and Obstructions

- Panels must be placed only on suitable roof surfaces with no obstructions.
- Panels must fit in the proposed roof space
- Communicate design issues (e.g., space limitations, obstructions) in the SRP Portal.
- Ensure that the correct roof angle has been selected in the pre-inspection form.

4 Shading

Assess shading impact:

- Must be above 70% performance (i.e., less than 30% shading) for each month.
- Shading is calculated by NRN by modelling the proposed panel layout in OpenSolar

Click here for support via the Portal

Winter months have less than 70% shade impact

	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	
Jan	–	–	–	67%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	96%	42%	98%
Feb	–	–	–	36%	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	96%	–	98%
Mar	–	–	–	–	100%	100%	100%	100%	100%	100%	100%	88%	71%	88%	89%	–	95%
Apr	–	–	–	–	100%	100%	100%	100%	100%	100%	88%	40%	43%	61%	–	–	83%
May	–	–	–	–	100%	100%	100%	100%	100%	88%	40%	7%	26%	43%	–	–	69%
Jun	–	–	–	–	99%	100%	100%	100%	100%	69%	33%	14%	8%	–	–	–	67%
Jul	–	–	–	–	92%	100%	100%	100%	100%	74%	38%	17%	10%	–	–	–	67%
Aug	–	–	–	–	97%	100%	100%	100%	100%	86%	35%	13%	17%	31%	–	–	67%
Sep	–	–	–	–	100%	100%	100%	100%	100%	100%	71%	22%	36%	54%	–	–	78%
Oct	–	–	–	72%	100%	100%	100%	100%	100%	100%	99%	60%	63%	78%	–	–	90%
Nov	–	–	–	3%	100%	100%	100%	100%	100%	100%	100%	92%	93%	97%	93%	–	96%
Dec	–	–	–	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	96%	–	99%

	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	
Jan	–	–	–	–	–	100%	100%	100%	100%	100%	100%	100%	100%	100%	60%	98%
Feb	–	–	–	–	–	100%	100%	100%	100%	100%	100%	100%	96%	100%	0%	94%
Mar	–	–	–	–	–	100%	100%	100%	100%	100%	100%	100%	100%	100%	7%	94%
Apr	–	–	–	–	–	100%	100%	100%	100%	100%	100%	100%	93%	87%	–	96%
May	–	–	–	–	–	100%	100%	100%	100%	67%	7%	47%	7%	–	–	68%
Jun	–	–	–	–	–	100%	100%	100%	100%	33%	0%	14%	0%	–	–	57%
Jul	–	–	–	–	–	100%	100%	100%	100%	33%	0%	17%	0%	–	–	57%
Aug	–	–	–	–	–	100%	100%	100%	100%	73%	0%	13%	0%	–	–	63%
Sep	–	–	–	–	–	100%	100%	100%	100%	100%	73%	100%	67%	0%	–	85%
Oct	–	–	–	–	–	100%	100%	100%	100%	100%	100%	100%	100%	100%	–	98%
Nov	–	–	–	–	–	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	96%
Dec	–	–	–	–	–	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	97%

Pre-Contract

Site Design Review

NRN Site Design Requirements

To streamline the assessment approval process, SRPs must ensure the following criteria are satisfied when submitting the site design:

Click here for support via the Portal

Wiinter months have above minimum 86% shading impact

	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	
Jan	–	–	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	–	–	100%
Feb	–	–	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	–	–	100%
Mar	–	–	100%	100%	100%	100%	100%	100%	100%	100%	100%	83%	67%	89%	–	–	97%
Apr	–	–	–	100%	100%	100%	100%	100%	100%	100%	89%	56%	6%	17%	–	–	88%
May	–	–	–	100%	100%	100%	100%	100%	100%	100%	78%	39%	0%	–	–	–	87%
Jun	–	–	–	100%	100%	100%	100%	100%	100%	100%	78%	39%	0%	–	–	–	87%
Jul	–	–	–	–	83%	100%	100%	100%	100%	100%	83%	50%	0%	–	–	–	86%
Aug	–	–	–	100%	100%	100%	100%	100%	100%	100%	83%	50%	0%	0%	–	–	87%
Sep	–	–	–	100%	100%	100%	100%	100%	100%	100%	83%	50%	0%	0%	–	–	87%
Oct	–	–	100%	100%	100%	100%	100%	100%	100%	100%	89%	61%	50%	83%	–	–	93%
Nov	–	–	100%	100%	100%	100%	100%	100%	100%	100%	100%	89%	89%	100%	–	–	99%
Dec	–	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	–	–	100%

Tips for success

- Clearly demonstrate the optimal positing of the panels on the roof design

Annual Average PV Yield greater than 1200 kWh / kWp

Shading analysis show minimum 70% shading impact per month.

Show the position of the Inverter/Battery, NRN PVDB and Meterbox on the site design

Distance between NRN Solar components and Main Switchboard no greater than 20 meters

Incomplete submissions will delay site assessment approval.

Overview: Inspection Form

- The Inspection Form confirms the physical suitability of the site, ensuring there is adequate space for all system components and that safety, compliance, and access requirements are fully met before installation.
- NRN manually reviews key items including switchboard compliance, roof condition, equipment clearances, inverter and battery placement, and the safety of installers and meter technicians.
- All switchboards must meet Australian Industry Standards, with full 600mm clearance around batteries, properly documented electrical infrastructure, and accurate, clear photos to support the assessment.

Click here for support via the Portal

The Inspection Form is the second part of the Assessment process. This will be completed between the SRP and Customer and will form the basis of whether the site is suitability for the NRN solar and battery system. This is manually reviewed by the NRN operations team to ensure that there is enough space for the proposed products and to ensure that the site meets safety requirements for the proposed solar system.

Key Requirements

To progress the application:

- Meter box & Main Switchboard must be compliant with enough space for new components
- Suitable space and location for PV modules and components

Incomplete or poor-quality submissions (e.g., blurry switchboard images, incomplete information, vague descriptions etc) will delay site assessment approval.

Process Flow

1. SRP assesses whether a site would be suitable for the NRN product including:
2. Assessing roof condition and space
3. Suitable area where the inverter/battery module and NRN Link will be installed
4. Complete Inspection Form with information provided by the customer
5. NRN reviews each application to determine site eligibility
6. Installation Safety
7. Roof Suitability
8. Inverter, Battery, NRN Link Location, meets clearance requirements
9. Condition and suitability of Meter Box & Main Switchboard

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Pre-Inspection Form Approval Criteria

When completing the Pre-Inspection Form, SRPs must address the following:

1 General Checks

- Ensure site address matches the proposal.
- Communication signal strength must be Moderate or above.

2 Safety

- Identify and note any safety hazards (installer risks or meter access restrictions).

Meter installers will often delay or leave a meter upgrade appointment if the meter box or NRN PVBD is installed behind a locked gate, and they do not know the code. Or there are animals present which could endanger them. This is why accuracy in this section is imperitive to ensure no part of the installation is delayed. It also ensures your installations teams safety on the install day.

3 Site Details

- **Phase Verification:**
  - 1-phase system → 1-phase inverter
  - 3-phase site → Best practice is 3-phase inverter
- Exiting PV: identify how large the system is and to what level it is functioning

It is imperative that you accurately assess the current PV installation if there is one present. This is because it impacts the daily average load on the Energy Bill and enables NRN application assessment team to accurately determine whether the NRN product is best suited to the customer.

- Clear access to the main switchboard is required.
- Cross-check on-site shading photo with site design model.

4 Roof

- Roof condition must be rated Good or above.
- Confirm no obstructions exist where panels are to be placed, or panels are mapped to avoid obstructions.

Click here for support via the Portal

Pre-Inspection Form Approval Criteria

5 Switchboard

It is the SRPs responsibility to ensure that:

- Switchboard is compliant

If switchboard is not compliant then we cannot progress the application. This work must be completed prior to application being submitted

- Space for smart meter upgrade is available
- Space for PV isolator
- Presence of both Main Switch Isolator and Meter Isolator

Tips for success

- Provide accurate information
- Provide clear photos
- Main Switchboard is compliant to Australian Industry Standards
- If you are unsure if a switchboard/meter box is complaint, then gain verification from a level 2 electrician prior to submitting the application and write this confirmation in the site notes
- Ensure that the space proposed for the Inverter/Battery and NRN PVDB is clear and meets 600mm clearance

If there is no Main Switch Isolator, then the switchboard needs to be upgraded to include this prior to an application being submitted

If there is no Meter Isolator this will need to be installed or one available when the On Market Smart Meter is installed

- If there is a sub-board and a main switch board that both are documented
- If asbestos is present, this must be noted for installer reference.

If any upgrade works are identified to the MSB at the time that the smart meter is installed as required by the energy retailer, the SRP is responsible to arrange this with the customer. NRN cannot proceed with the installation until these upgrade works are completed.

6 Inverter & Battery Placement

- **Ensure adequate space for:**
  - Inverter
  - Battery
  - NRN PVDB device
  - Backup Gateway (if required)
- **Clearance must be:**
  - 600mm around the battery and any windows or doors
- Distances between all installed components and main switchboard does not exceed 6m.
- If installed in direct sunlight → a sunshade must be added and installed
- All electrical equipment to be installed on a wall facing between SW - NE orientation
- Surface must be level and solid
- For installation on/near a habitable room:
  - Confirm fireproof wall or install fireproof board
- Raise any special equipment needs (e.g., bollards, sunshields)

Post Installation

Installation Sign-off

The Desktop Audit helps supports long-term performance, minimising future site issues, and call-backs.

NRN reviews all submitted installation photos, technical data, and compliance documents before releasing final payment to the SRP.

Any audit failures will be returned with clear defect notes; these must be fully resolved before payment can be processed.

Click here for support via the Portal

Once an NRN solar and battery system has been installed, a structured signoff and payment process ensures every system meets NRN's operational, compliance, and quality standards before invoices are approved for payment. This safeguards NRN's billing integrity with Energy Retailers and ensures only fully operational sites enter the billing pipeline.

An installation is considered "complete" and ready for review when:

- the system is fully energised, commissioned, and visible in the OEM online portal, with solar, battery, and consumption profiles displaying as expected. (NOTE: 48hours of data is required to review.)
- all required documentation including completed STC paperwork, NRN-required site photos uploaded to the STC portal
- DNSP connection approvals (PTC/SEG) are submitted to NRN.

SRPs submit installations for review via the shared installation tracker. NRN Operations then conducts a Desktop Audit, reviewing the site photos. This audit verifies that the system meets the Standards and that all commissioning steps and compliance requirements have been properly completed.

If the QA is passed, the SRP receives full payment of the invoice. If any issues are identified, NRN will notify the SRP with details of defects to be rectified or additional information required before payment can be released.

Key Requirements

- Site active in OEM Portal with data appearing as expected
- Installation Passed Technical Desktop Audit
- All STC documentation completed
- Permission to Connect Approved and submitted to NRN

OEM Portal Checklist

- The OEM Portal QA check verifies that the system has been correctly commissioned, is operating normally, and reflects real-time system performance data.
- PV, battery, and load data should be accurately displayed in the monitoring portal, with any irregularities addressed.

Click here for support via the Portal

Connection to the Original Equipment Manufacture's Portal is essential in order for NRN to mark an installation as complete and release payment. It is paramount for the nominated installer to ensure that the PV system is correctly commissioned, active and operating normally in the manufactures online monitoring portal.

QA Checks

1. Battery fully cycling - charge to 100% (if available PV), discharge to 0% (repeat)
2. MPPT voltage check
   - Amount of MPPTs match amount of strings
   - Voltage correlates to # of panels per string e.g. 1 panel = approx 40v
3. Check PV output correlates to system size e.g. 6.8kWp Solar we would expect to be reaching this peak, weather permitting

If you see any of the following it would be cause for concern

1. Negative PV Load
2. Zero Night Load
3. PV Export Without Charging Battery first
4. MPPT Voltage is low
5. Night PV
6. High Voltage Difference between MPPT strings
7. Load Mirrors PV

Post Installation

OEM Portal Checklist

Click here for support via the Portal

Process Flow

1. Create the site in the monitoring platform
2. Add NRN as a Channel/Partner in the Administration role
3. Add your SRP as a Channel/ Partner
4. List NRN as Retailer/installer Organization Code: AUSX9BZL
5. Perform firmware update on devices, if required
6. Confirm export limit has been applied in accordance with PTC (if required)
7. Confirm that site is acting as ‘normal’ in monitoring platform
8. Verified by NRN

Checklist

- Site is created and connected to online monitoring portal
- Site is operated ‘normally’ in monitoring portal
- PV generation is being reflected in portal
- House load is being reflected in portal
- Battery is charge/discharge is reflected in portal

Tips for Success

- Ensure CT Clamp has been correctly installed on the house load
- Ensure CT Clamp correctly wired into Energy Meter
- Monitor the site for at least 1 hour after installation to verify that it is live in the portal
- Verify MPPT string voltages match your voltage tester

Post Installation

Site Examples

Tips for Success

- Ensure CT Clamp has been correctly installed on the house load
- Ensure CT Clamp correctly wired into Energy Meter
- Monitor the site for at least 1 hour after installation to verify that it is live in the portal
- Verify MPPT string voltages match your voltage tester

Click here for support via the Portal

Normal Site Example:

Tis idigeni enest, ipsant harciae pedion rem. Ut eiciam volum laborerum facepud aerchil luptium quationse pra comnihil maios reprae

Normal Site

Post Installation

Site Examples

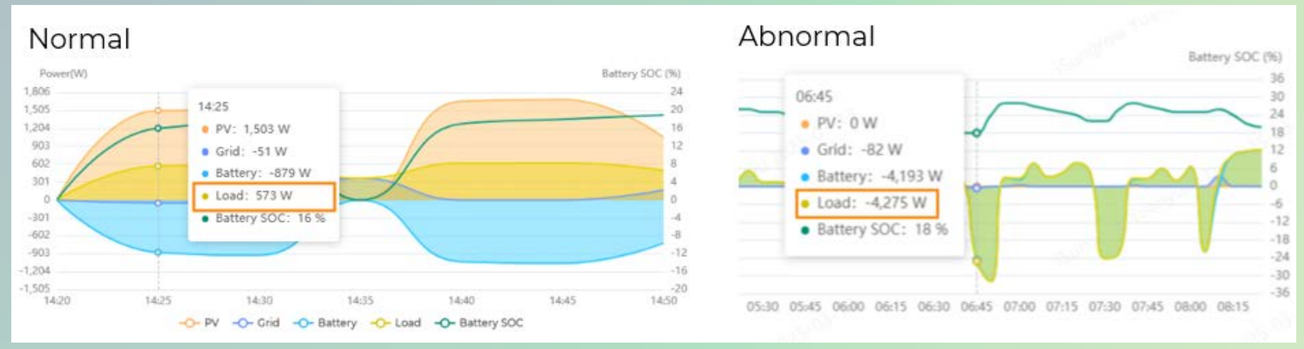
Tips for Success

- Ensure CT Clamp has been correctly installed on the house load
- Ensure CT Clamp correctly wired into Energy Meter
- Monitor the site for at least 1 hour after installation to verify that it is live in the portal
- Verify MPPT string voltages match your voltage tester

Click here for support via the Portal

Abnormal Site Examples:

If the iSolar Cloud demonstrates any of these graph anomalies or anything else out of the normal data distribution this needs to be raised and rectified:



Negative Load - CTs potentially connected in reverse

No Battery

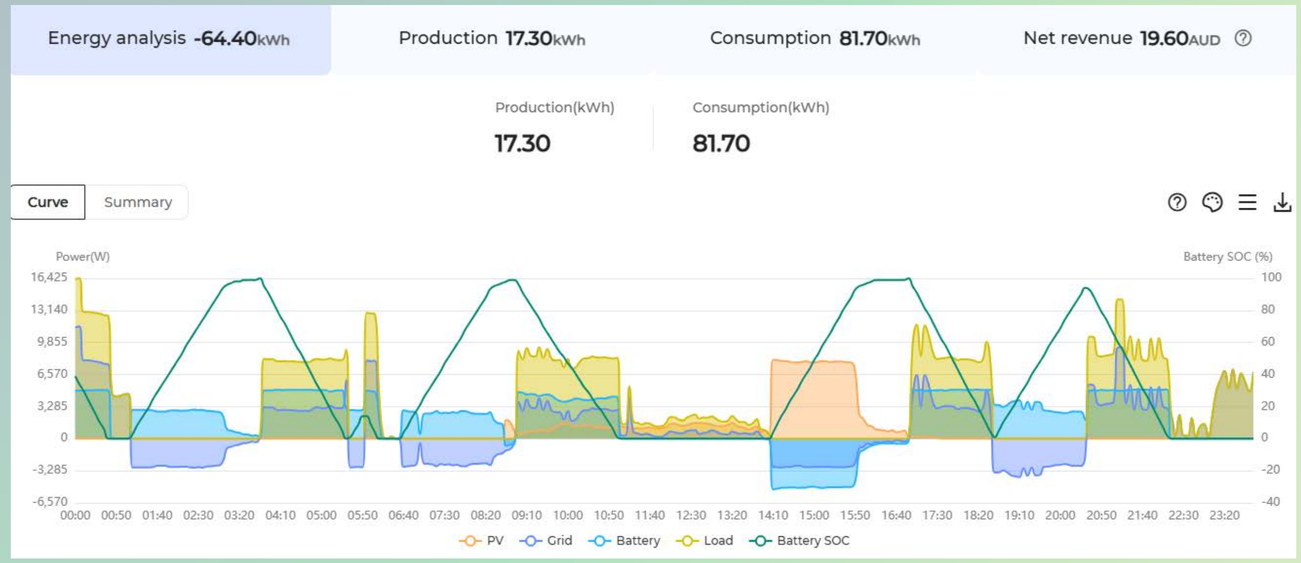
Post Installation

Site Examples

Click here for support via the Portal

Abnormal Site Examples:

If the iSolar Cloud demonstrates any of these graph anomalies or anything else out of the normal data distribution this needs to be raised and rectified:



CT Issue

Tips for Success

- Ensure CT Clamp has been correctly installed on the house load
- Ensure CT Clamp correctly wired into Energy Meter
- Monitor the site for at least 1 hour after installation to verify that it is live in the portal
- Verify MPPT string voltages match your voltage tester

Post Installation

Site Examples

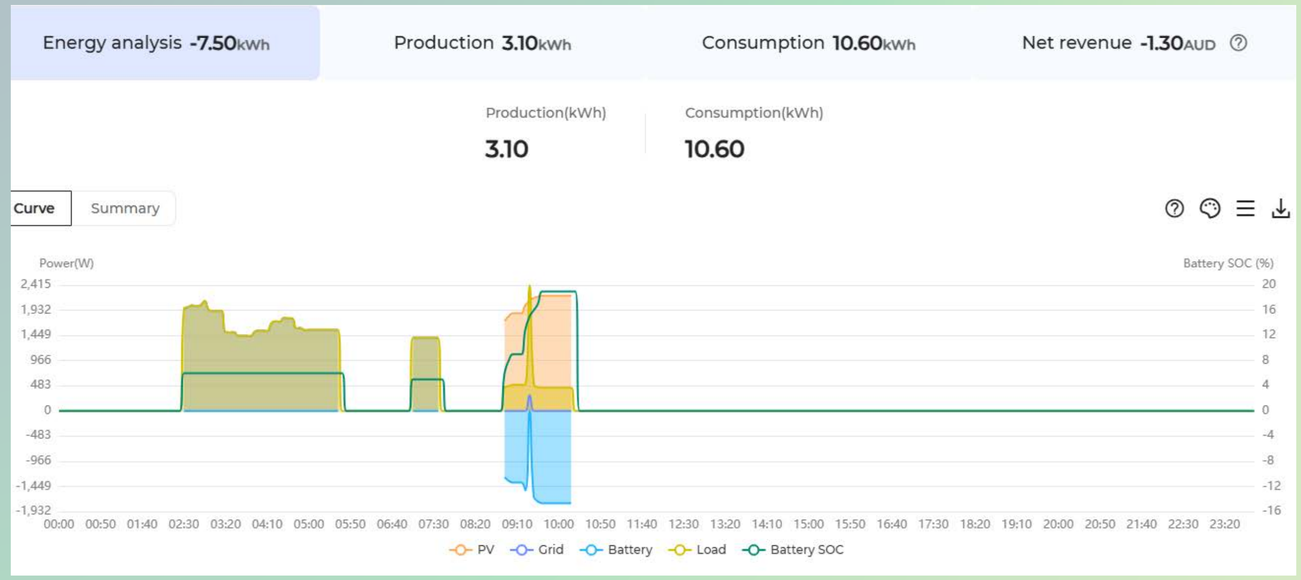
Tips for Success

- Ensure CT Clamp has been correctly installed on the house load
- Ensure CT Clamp correctly wired into Energy Meter
- Monitor the site for at least 1 hour after installation to verify that it is live in the portal
- Verify MPPT string voltages match your voltage tester

Click here for support via the Portal

Abnormal Site Examples:

If the iSolar Cloud demonstrates any of these graph anomalies or anything else out of the normal data distribution this needs to be raised and rectified:



Intermittent data - possible comms connection or signal strength issue

Post Installation

Site Examples

Tips for Success

- Ensure CT Clamp has been correctly installed on the house load
- Ensure CT Clamp correctly wired into Energy Meter
- Monitor the site for at least 1 hour after installation to verify that it is live in the portal
- Verify MPPT string voltages match your voltage tester

Click here for support via the Portal

Abnormal Site Examples:

If the iSolar Cloud demonstrates any of these graph anomalies or anything else out of the normal data distribution this needs to be raised and rectified:

Total system drop out & no night time load

Post Installation

Site Examples

Click here for support via the Portal

Abnormal Site Examples:

If the iSolar Cloud demonstrates any of these graph anomalies or anything else out of the normal data distribution this needs to be raised and rectified:

Battery drop out

Tips for Success

- Ensure CT Clamp has been correctly installed on the house load
- Ensure CT Clamp correctly wired into Energy Meter
- Monitor the site for at least 1 hour after installation to verify that it is live in the portal
- Verify MPPT string voltages match your voltage tester

Technical Desktop Audit

- NRN's Technical Desktop Audit carefully reviews detailed installation photos, wiring, and component setup to ensure the system has been installed exactly to manufacturer specifications, industry standards, and NRN requirements.
- The audit focuses on key areas like cable management, electrical terminations, clearances, correct wiring of CT clamps, safety labelling, and system commissioning to prevent future faults, ensure safe operation, and protect long-term system performance.

Click here for support via the Portal

The Technical Desktop Audit forms a main part of the installation sign off process. These checks are done manually by the NRN audit team to ensure that the installation meets Australian industry standards.

Key Requirements

1 Panel Installation

- Under-array, no cables touching the roof
- Metal cable ties used
- Adequate waterproofing at roof penetration
- Panels installed as per manufactures specifications
- String layout diagram shows number of panels per string (to be used to verify monitoring platform MPPT voltage check)

2 Inverter / Battery Installation

- Correct make/model installed
- Installed as per manufacturers specifications
- Inverter String Voltages - Demonstrating the voltage in each of the strings / MPPTs - one photo per string
- Smoke Alarm installed if battery is indoors
- Battery Signage - All battery safety stickers have been installed on the battery modules.
- Battery Clearance of 600mm clearly met
- Fireproofing Methods clearly demonstrated

Post Installation

Technical Desktop Audit

Click here for support via the Portal

3 NRN PVDB Link Installation

- Installed facing between NE-SW
- Demonstrates clearance of 100 mm clearance on sides, 200 mm above and below for cable access and ventilation.
- All cable entries are at the bottom or rear ONLY and adequatley sealed.
- **Behind Panel**
  - Clean separation of comms/ data and AC / DC wiring
  - Earthing of AC, DC and Comms cables
- **Inverter Supply Circuit Breaker Size**
  - 1 Phase, 8kW Inverter - 50A
  - 1 Phase, 10kW Inverter - 63A
  - 3 Phase, 10kW Inverter - 10A
  - 3 Phase, 15kW Inverter - 20A
- Circuit Breaker Terminations - in properly and crimped

4 Energy Meter Wiring - installed in NRN Link or MSB

- Visual of Energy Meter
- Incoming CT terminations clearly visible and direction matches the CT Clamp in MSB
- CTs must not be extended or any third-party wiring installed
- **Antenna installed if there are network connectivity issues**
  - Antenna facing out the box

5 Main Switchboard

- **CT clamps installed in the main switchboard on the main incoming load.**
  - Correct direction - Ensure that the arrow on each CT faces the load side
  - Securely fastened.
  - Using only the pre-supplied CTs
- **NRN Link Breaker Size in MSB**
  - 1 Phase, 8kW Inverter - 50A
  - 1 Phase, 10kW Inverter - 63A
  - 3 Phase, 10kW Inverter - 10A
  - 3 Phase, 15kW Inverter - 20A
- Solar main switch clearly labelled and accessible (AS/NZS 4777.1).

Tips for Success

- Ensure that all components have been installed as per industry and manufacture standards
- Ensure that the CT Clamps have been installed correctly

Support & Questions

For any questions or support during this stage, please contact NRN via the SRP/NRN Google Sheet

Post Installation

Technical Desktop Audit

Click here for support via the Portal

6 Cable Size

- **Use the provided cable and circuit breaker sizing unless the following conditions are not met:**
  - 20 meters from the Main Switchboard (MSB) to the inverter, and 20 meters from the inverter to backup loads
- **AC Cable Size - MSB to NRN Link, NRN Link to Inverter**
  - 1 Phase, 8kW Inverter - 16mm 2 Core (twin) + 6mm Earth
  - 1 Phase, 10kW Inverter - 25mm 2 Core (twin) + 6mm Earth
  - 3 Phase, 10kW Inverter - 6mm 4 Core + 2.5mm Earth
  - 3 Phase, 15kW Inverter - 6mm 4 Core + 2.5mm Earth

7 Safety Stickers

- **All safety stickers have been installed including:**
  - In the meter box to indicate that there is a solar and battery System.
  - ES label.
  - PV label.
  - Energisation and Shutdown Procedure.
  - Annotated Site Map in MSB.

Process Flow

1. Nominated installer ensures that installation is completed as per industry and manufactors standards
2. Nominated installer completes checklist in Greendeal Portal
3. NRN Reviews

Checklist

- Panel Installation Accurate
- Inverter / Battery Installation Verified
- NRN PVDB Link Installation Accurate
- Energy Meter accurately wired to MSB
- Safety stickers installed

Tips for Success

- Ensure that all components have been installed as per industry and manufacture standards
- Ensure that the CT Clamps have been installed correctly

Thank you

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