

# Net Metering and Energy Storage Interconnection Handbook



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# CONTENTS

1.	Definitions					
2.	Program Overview7					
3.	Interconnection Document Review					
4.	One Li	One Line Diagram and Site Plan				
5.	Siting and Equipment					
6.	System	n Sizing – Solar	12			
7.	6.1. 6.2. 6.3. 6.4. 6.5. Equipn	Consumption History Energy Audit Report Engineering Calculations Livable Square Footage System Additions nent and Utility Installation Standards	12 13 13 13			
8.	7.1. 7.2. 7.3. 7.4. 7.5. Applica	System Upgrades Net Metering Standards Relevant General Metering Standards Generating Facility Interconnections Requirements Fire Protection Standards	14 14 15 15			
9.	8.1. 8.2. 8.3. Inspec	Application Submittal Application Fees Application Changes	16 17			
10.	Contact Information					
11.	Appendices					
	11.1. 11.2.	Appendix A: Application Checklist Appendix B: Sample Engineering Calculations Document				

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# **1. DEFINITIONS**

This section includes a list of terms defined for common use within this program handbook.

Alternating Current (AC): The form in which electricity is delivered to residences and businesses. This is the type of electricity produced by the inverter and delivered to the home and the utility grid through the service panel.

**Applicant:** The party that is responsible for assembling and submitting the application through NV Energy's application portal. The applicant, often the installer, can be either an individual or an organization. They are specifically chosen by the NV Energy host customer to represent their interests and apply on their behalf for a net metering application.

**Back-up load Panel Meter:** A one directional meter that measures power being consumed by the backup loads. This meter is unique to DC-Coupled ESD projects which utilize a backup load panel (NV Energy's RE-3 standard, Attachment 6). This meter is installed in conjunction with an Energy Storage Meter to measure battery performance in this specific equipment configuration.

**CEC AC Sizing:** The California Energy Commission rating standard for measuring the nominal output power of a PV module/cells to determine the system rating.

**Consumption History:** A method used to size the system. The Host Customers annual energy usage (kWh) is the sum of the largest 12 consecutive months of billing energy data within the past 24 months.

**Direct Current (DC):** The electrical current produced by the generating system. Similar to the energy from a battery, this type of current is not typically used in the home but must be converted to AC electricity by the inverter before being used in the home or returned to the grid.

**Disconnects:** An AC or DC breaker in a distribution panel or a fusible switch. Both may be required. NV Energy personnel must have access to the disconnect breaker.

**Energy Audit Report:** A report may be used to quantify the annual amount of energy the customer's household uses. The energy auditor must have an active license issued by the Nevada Real Estate Division, and all aspects of the energy audit report must follow the standards set forth by the legislative statute NRS 645D.300.

**Energy Capacity:** The maximum amount of electrical energy, in kilowatt-hours (kWh), that an energy storage system can store as rated by the manufacturer. For instance, if you have two batteries, each capable of storing 5kWh, your system's energy capacity would be 10 kWh.

**Energy Storage Device (ESD):** A commercially available technology that is capable of retaining energy or storing energy for a period of time and delivering the energy after storage, including, without limitation, by chemical, thermal or mechanical means. An ESD is also considered a generator for the purposes of this document.

**Energy Storage Meter:** A revenue grade, bi-directional, utility owned and operated interval meter that may monitor the power flow to and from the Energy Storage Device.

Engineering Calculations Document: A method used to size the system. Host customers engineer



estimated annual energy usage (kWh) stamped and signed by a Nevada licensed professional electrical engineer.

**Final Inspection Card:** Must come from the local jurisdiction indicating the date of satisfactory final solar system and or ESD system inspection.

Grid: The distribution network of NV Energy.

**Host Customer:** The NV Energy customer of record at the proposed installation location. The host customer name must exactly match the name on the NV Energy account. The host customer is responsible for making any changes to their NV Energy account prior to application. Persons listed as co-Applicants on the NV Energy bill may apply as the host customer.

**Installer:** The individual who performs the system installation and interconnection. NV Energy requires installations to be performed by a Nevada licensed electrical contractor. A Nevada licensed contractor is required for any renewable energy system that is paired with incentivized energy storage system. Self-installs must be performed by the property owner and adhere to the Nevada State Contractors Board rule found here: <u>Contractor License Requirements</u>.

**Interconnection Agreement:** Agreement for interconnection of renewable energy generating facilities and/or energy storage facilities to the NV Energy system.

**Inverter:** A device that converts DC current into AC current for use at the property where the system is located. Only grid-interactive inverters are eligible for participation in the Energy Storage programs. Please refer to NV Energy's RE-3 standard for detailed requirements.

**Large Commercial/Industrial Customer:** Non-residential customers in rate classes GS-2, LGS-1 or larger.

**Livable Square Footage:** A method used to size the system. This sizing method cannot be used if a customer has 12 or more months of consumption history. The estimated power (kW) can be calculated by multiplying the Livable Square Footage by .0028 (2.8 watts/square foot) for southern Nevada projects or .002 (2 watts/square foot) for northern Nevada projects.

**Meter Set:** The installation of the net meter and energy storage metering by NV Energy. This occurs after submission of complete supporting documentation, satisfactory net metering verification, and completion of utility safety inspection.

**Net Meter:** A revenue-quality, bi-directional, utility owned and operated interval meter that measures the electricity used by the customer from the grid and the amount of electricity that the customer's renewable energy and/or ESD sends back to the grid.

**Net Metering:** Enables customers to offset the cost of their electrical consumption by measuring the difference between the electricity supplied by NV Energy and the electricity generated by the customer that is fed back to the utility over the billing period. This will be required for both solar and energy storage installations.

Non-Profit Entity: See Public and Other Property.



**One-Line Diagram:** This is a simplified schematic, also referred to as a technical, single-line, or threeline diagram, that represents an electrical power system. It's typically a block diagram that illustrates the power flow routes within a system. Various electrical components like inverters, conductors, circuit breakers, protection equipment, disconnects, and so on, can be represented in these diagrams.

**Owned, Leased or Occupied:** Any real property, building or facilities which are owned, leased or occupied under a deed, lease, contract, license, permit, grant, patent or any other type of legal authorization.

**Permission to Operate (PTO):** The formal authorization granted by NV Energy to interconnect the net metering system and begin operating the generator in parallel with the electrical grid.

**Power Capacity:** Also referred to as the maximum continuous output power capacity. It is the amount of power, in kilowatts (kW), that an ESD can deliver to the grid as rated by the manufacturer. For ESDs measured in btu/hr, the conversion is 1 watt equals 3.41 btu/hr.

**Portfolio Energy Credit (PEC):** A measured unit that represents one kilowatt hour (kWh) of renewable energy.

**Premise:** All of the real property and apparatus of a residential or non-residential customer employed in a single integrated activity operating under one name in one or more buildings and/or locations on an integral parcel of land where: (a) such buildings and/or locations are situated on a single unit of property; or (b) such buildings and/or locations are situated on two or more units of property which are immediately adjoining or adjacent, and are not divided by intervening public highways, streets, alleys, railways or waterways. For more information, see NV Energy's rule 1.

**Property Owner:** Individual or entity in possession of title for land or building where the solar panels or ESD was installed.

**Property Transfer Agreement (PTA):** This Agreement is made in order to facilitate interconnection of a net metering system which will be used by the Customer-generator consistent with the provisions of Nevada Revised Statutes ("NRS") 704.766-775. Whereas, the Customer-generator does not own the intended location of the Generating Facility.

**Public and Other Property:** Any real property, building or facilities which are owned, leased or occupied by:

- A public entity.
- A non-profit organization that is recognized as exempt from taxation pursuant to section 501(c)(3) of the Internal Revenue Code, 26 U.S.C. § 501(c)(3), as amended.
- A corporation for public benefit as defined in NRS.
- School Property: Any real property, building or facilities owned, leased or occupied by:
  - A public school as defined in NRS 385.007.
    - A private school as defined in NRS 394.103.
    - An institution of higher education.

The term includes, without limitation, any real property, building or facilities which are owned, leased or occupied by:

• A church.



• A benevolent, fraternal or charitable lodge, society or association.

Public Entity: A department, agency or instrumentality of the State or any of its political subdivisions.

Public Property: Any real property, building or facilities owned, leased or occupied by:

- A department, agency or instrumentality of the State or any of its political subdivisions which is used for the transaction of public or quasi-public business.
- A nonprofit organization that is recognized as exempt from taxation pursuant to section 501(c)(3) of the Internal Revenue Code, 26 U.S.C. § 501(c)(3), as amended.
- A corporation for public benefit as defined in NRS 82.021.

**Revenue Meter:** Also known as a billing meter, is the meter installed by NV Energy that measures the electricity used by the customer from the grid. Where there is a renewable system installed, the revenue meter also measures the amount of electricity that the customer's renewable energy system sends back to the grid.

**Site Plan:** This is a top down visual layout of the installation site. It should show the location of all relevant system components including the solar system panels, the energy storage system, any and all inverters, disconnect switches, any and all meters, main service electrical panel, and any and all electrical sub panels. Any access issues should be indicated on the site plan. This could include, but is not limited to, walls, gates, or equipment installed buildings or structure that are not easily accessible.

**Small Commercial Customer:** Non-residential customers in rate classes GS, GS-1 or smaller, including irrigation rate classes.

System Owner: The individual or entity who owns the solar system and/or ESD.

Third Party Contract: A signed installation or energy services agreement.

Utility: NV Energy.

**Utility Interconnection:** The physical connection between the NV Energy grid and the customer generation. An Interconnection Agreement is required for a customer to have on-site electric generation connected to the NV Energy grid.

**Watt:** The basic unit of measure of electric power. One-thousand Watts is equal to one kilowatt (kW). One million Watts is equal to one megawatt (MW). A kilowatt-hour (kWh) is the unit by which residential and most business customers are billed for monthly electric usage. One kWh represents the use of one kilowatt of electricity for one hour.



# 2. PROGRAM OVERVIEW

The goal of this handbook is to describe the steps in the net metering and interconnection process. This handbook outlines the requirements for receiving interconnection approval from NV Energy for the installation of a non-incentivized renewable energy system and/or non-incentivized energy storage system.

- All interconnection applications must qualify for, participate in and comply with all of the rules of NV Energy, Net Metering Rules, Electrical Services Requirements (ESRs) and Tariffs.
- All portfolio energy credits issued for a solar energy system belong to the solar system owner.
- NV Energy will install digital "smart meters" that may include bidirectional or generation meters for all program participants. The metering requirements will be defined based on the configuration, installation and whether an ESD is included. Please refer to the metering standards in this document.
- NV Energy is not responsible for operation, maintenance, or energy production of renewable energy systems installed through this program.
- NV Energy is not responsible for consumption changes or billing changes because of the customer's decision to install a renewable energy or energy storage system.
- Installations must be permitted through the local building authority and interconnections must be performed by a Nevada licensed C-2 or C-2g electrical contractor. If a contractor's license is expired, suspended, or revoked, the authority having jurisdiction will not conduct the permit inspection. Validity of the licenses can be found in the following websites:
  - PE license: <u>Nevada Board of Professional Engineers and Land Surveyors</u>
  - C-2/C2-G license: <u>Nevada State Contractors Board</u>
- Self-installations are allowed by the property owner. All self-installations must be performed by the property owner and we will abide by the Nevada State Contractors Board rule found here: <u>Contractor License Requirements.</u> NV Energy will validate that the self-installer is indeed the property owner.



# 3. INTERCONNECTION DOCUMENT REVIEW

Prior to any renewable energy or energy storage device application advancing to the pending utility inspection status, all required documentation must be uploaded into the online application portal. Any modification of the customer's electrical bus bar (drilling, tapping, etc.) will also require a UL Recertification Report (conducted by a licensed third-party testing agency) or a manufacturer's review and approval to be submitted.

If the documents are incomplete and the project is suspended, the Applicant has 60 days to make corrections. If the correction is not received within 30 days, NV Energy will send a final notice indicating that the Applicant has 30 days to correct, or their application will be canceled.

Below is a breakdown of all documents and their requirements.

#### Signed Installation Contract or Energy Services Agreement:

• Executed third party contracts will no longer be required when submitting a net metering interconnection application, **except** when the property the system is being interconnected to is rented to verify that the Property Owner is aware of and authorizes the proposed installation.

#### Site Plan:

- Installation address.
- The location of all relevant system components including the solar system panels, the energy storage system, any and all inverters, disconnect switches, any and all meters, main service electrical panel, and any electrical sub-panels. Any access issues should be indicated on the site plan. This could include, but is not limited to, walls, gates, or equipment installed inside buildings or structures that are not easily accessible.
- Company name and contractor license number.

#### **Electrical One Line Diagram:**

- Installation address.
- Either single-line or three-line diagrams.
- Must show the electrical connections for all relevant electrical systems on site. This would
  include any existing and previously installed renewable generation, distributed generation or
  energy storage equipment in addition to any ancillary components. Technical specification,
  including any telecommunications protocols or equipment, for all included electrical systems
- should also be provided. This includes inverters, Energy Storage Devices (ESDs), disconnects and other relevant electrical equipment.
- Company name and contractor license number.

**Energy Storage Technical Specifications:** Data/specification sheets with the nameplate energy capacity, maximum charge power capacity, and maximum discharge power capacity listed are required for energy storage system applications.

**Final Inspection Card and/or Satisfied Building Permit**: Must come from the local jurisdiction indicating the date of satisfactory final solar system and ESD system inspection. Satisfaction of a permit is shown via a copy of final inspection results and date, which is a separate document than the permit. Required is a copy of the permit with an attached copy of the inspection passed results.

In specific areas like Nye County, permits for manufactured homes are not granted. Consequently,



customers in these regions are guided by Nye County to the Nevada State Manufactured Housing Division to obtain the required permit.

In the case of jurisdictions that do not have a building official, verification by a Nevada licensed professional engineer is required attesting to compliance with all applicable state, county, and federal codes and ordinances.

**Interconnection Agreement:** The Host Customer, Property Owner, and System Owner in the Interconnection Agreement match PowerClerk. Please make sure all parties have signed and dated the document. The utility account number, premise number, and system size information must also match. All pages must be included, and Attachment B must be included if installing an energy storage system.

**Proof of Property Ownership:** If the Host Customer is not the Property Owner listed in the application but **is** an owner or co-owner of the property per the County Assessor, documentation that clearly identifies the Host Customer as an owner or co-owner of the property where the System will be installed will be required at the end of this form. This can include one or more of the following

- The county assessor or real property records listing the Host Customer's name;
- The title of the property showing the Host Customer's name; or,
- A letter from the registered Property Owner confirming the Host Customer is an owner or coowner.

**Property Transfer Agreement (PTA):** If the Host Customer is not an owner or co-owner of the property per the County Assessor **and** the Property Owner is not an account holder or co-applicant of the NV Energy utility account, then a Property Transfer Agreement (PTA) will be required. PowerClerk will automatically produce the Property Transfer Agreement (PTA) for signature if it is identified that it is required.

The following is a compilation of all County Assessor websites in NV Energy's service territory:

- <u>Churchill County</u>
- <u>Clark County</u>
- Douglas County
- Elko County
- <u>Esmeralda County</u>
- Eureka County
- Humboldt County
- Lander County
- Lyon County
- <u>Mineral County</u>
- <u>Nye County</u>
- Pershing County
- <u>Storey County</u>
- Washoe County



# 4. ONE LINE DIAGRAM AND SITE PLAN

The metering configuration must comply with NV Energy's RE-3 Net Metering standard. This can be found at: Electric Service Requirements - Net Metering Systems

**Meter and Disconnect Switches**: All utility meters and disconnect switches shall be located on the exterior of the building or in an electrical supply room that is easily accessible to NV Energy personnel. In the case of multiple meters, each one should be accurately marked on the site plan. Additionally, each meter should have a distinct labeled diagram that unambiguously indicates which meter it corresponds to.

The use of master meters is prohibited in new construction. For additional details, please refer to NAC 704-8807.

Inverter: Inverters must be IEEE 1547 compliant.

In the case of commercial projects that include multiple buildings, it is necessary to submit an individual application for each building. Additionally, a detailed master plan must be provided to confirm that the entire project complies with the premise definition as per NV Energy's Rule 1 and that it stays within the 1 MW AC limit for net metering. If the project surpasses the 1 MW AC limit, please reach out to the Rule 15 team at <u>Rule15interconnection@nvenergy.com</u>.



# 5. SITING AND EQUIPMENT

All completed renewable and energy storage systems must adhere to the following siting requirements:

- The solar panels (modules) and inverters in the system must be listed on the <u>California Energy</u> <u>Commission (CEC)</u> list of approved solar equipment.
- All photovoltaic and energy storage equipment requires a UL listing.

**Manufactured Homes:** The property must be classified as Real Property by the Nevada Real Estate Division. The Authority Having Jurisdiction (AHJ) for inspections on manufactured and mobile homes is the Nevada State Manufactured Housing Division.

The chart below shows the documents required for all non-incentive applications:

Documents Required	Net Metering + Energy Storage Application	Net Metering Only Application	Energy Storage Only Application
Copy of the installation contract or energy services agreement for the installation of the system (if required)	~	$\checkmark$	~
Site Plan	$\checkmark$	$\checkmark$	$\checkmark$
One-Line Diagram	<	$\checkmark$	✓
Energy Storage Technical Specification Includes: Data/Specification sheet with nameplate or Power Capacity listed	✓		✓
Final Inspection card and/or satisfied building permit	✓	$\checkmark$	✓
Fully executed Interconnection Agreement	✓	✓	✓
Fully executed Property Transfer Agreement (if required)			



# 6. SYSTEM SIZING - SOLAR

When it comes time to properly sizing a solar PV system, the installation contractor will utilize NV Energy's online application software or will determine the size based upon historical energy usage at the Premise.

**Premise:** All of the real property and apparatus of a residential or non-residential customer employed in a single integrated activity operating under one name in one or more buildings and /or locations on an integral parcel of land where: (a) such buildings and/or locations are situated on a single unit of property; or (b) such buildings and/or locations are situated on two or more units of property which are immediately adjoining or adjacent, and are not divided by intervening public highways, streets, alleys, railways or waterways.

**Systems larger than 25 kW:** Solar PV systems sized larger than 25 kW qualify for net metering billing under schedule NMR-B.

#### 6.1. Consumption History

The highest energy usage that occurred in 12 consecutive months out of the last 24 months will be used to determine the maximum size of the new solar PV system. If the host customer has not consumed energy at a proposed residential installation location for a 12 consecutive-month period during the two prior years, then the solar system may be sized by using less the livable square footage method or an engineering calculation. The system size can be less than the amount estimated to be used at the premise, but it cannot be sized to create more energy than is estimated to be consumed in a year based on the customer's annual requirements for electricity.

The size of a net metered solar PV system is measured in kilowatts (kW) in alternating current (AC). The CEC AC wattage of a system is the California Energy Commission (CEC) rating of each panel multiplied by the number of panels, then multiplied by the CEC efficiency rating of the inverter(s). The adjustment factor is inherently included in the NV Energy application software.

#### 6.2. Energy Audit Report

If the **customer does not have 12 consecutive months of billing history during the two prior years,** or a change in loads or usage behavior is not sufficiently captured in the billing history data, then an energy audit report may be used to quantify the annual amount of energy the customer's household uses. The energy auditor must have an active license issued by the Nevada Real Estate Division, and all aspects of the energy audit report must follow the standards set forth by the legislative statute NRS 645D.300.

A Net Metering System must be sized to meet no greater than one hundred percent of a customer's annual electricity needs per its definition in NRS 704.771. Therefore, a limited energy assessment as described in the NRS 645D regulations will not be accepted in a Net Metering application because it does not account for the entirety of the customer's loads.

The estimated production (kWh) of the proposed system may not exceed the amount of energy usage (kWh) determined by the energy audit report. In the application review process, the energy auditor's license number will be verified by the <u>Nevada Real Estate Division</u> license lookup. The energy audit report will be reviewed to ensure it maintains the standards set by NRS 645D.300. The computer software that is used in making the energy audit report must be approved by the United States Department of Energy and will be verified during application review. The list of software curated by the



Department of Energy can be found here: <u>Approved Software Calculating Energy-Efficient Home Credit</u>.

## 6.3. Engineering Calculations

If energy has not been consumed at a proposed location for a 12 consecutive-month period during the two prior years, or if the customer has had a change of circumstances that would make the historical usage calculation incorrect, then a Nevada licensed electrical engineer's estimated energy usage may be used for systems as an alternative method for estimating usage. Some of the factors that may contribute to a change of energy consumption include:

- Customers that add on additional square footage to a dwelling that already has a solar installation
- Premises that do not have 12 consecutive months of billing history prior to submission of the application
- Customers that add electric vehicles
- Electric water heaters
- Other significant load changes

The estimated production of the proposed system (kWh) may not exceed the engineer's calculation. The engineer's name and license number are verified during the application review process and shall be listed in the roster maintained by Nevada board of Engineers and Land Surveyors. Electrical load calculations are only valid if wet-stamped and signed by a Nevada Licensed Electrical Professional Engineer.

A sample engineering calculations document can be found on Appendix B.

### 6.4. Livable Square Footage

The system may be sized based on the interior living area of the residence. In northern Nevada the solar system may be up to 2 watts (CEC-AC) per square foot of interior living space; in southern Nevada the solar system may be up to 2.8 watts (CEC-AC) per square foot of interior living space. If 12 months of energy usage history exists, then the watts per square foot of interior living space method may not be used.

#### 6.5. System Additions

Host customers may interconnect additional capacity at a premise with existing renewable generation capacity. System addition applications are subject to special terms that require review and approval by NV Energy. The list below addresses some of the considerations for system additions.

- All renewable generation capacity on a premise that has received or will receive interconnection cannot exceed 1 megawatt (CEC-AC). Systems over 1 megawatt (but not to exceed 20MW) must adhere to the Rule 15 interconnection process. This limitation applies separately for renewable generation systems of other types (i.e. wind and hydro generation).
- Non-incentive expansion systems on an originally incentivized system will be interconnected so
  that they do not pass through the existing Portfolio Energy Credits (PEC) meter. The system
  owner is entitled to keep the PEC credits on a non-incentivized solar system. PECs for any
  previously installed incentivized capacity that is not separately metered are assigned by the
  system owner to NV Energy.

#### Ask before you add!



# 7. EQUIPMENT AND UTILITY INSTALLATION STANDARDS

All solar PV and ESD installations must meet NV Energy's standards and metering requirements as outlined in NV Energy's Rules and Standards, and National Electric Code ("NEC") requirements, all National Fire Protection Agency ("NFPA") standards, and other federal or local ordinances. This handbook highlights some of the more commonly used Standards for general metering installations and net metering specific installations. Other Standards will need to be referenced to address staking and trenching, conduits, boxes and vaults, or other installation requirements as needed. A comprehensive list of the NV Energy Standards can be found at:

<u>Electric Service Standards for Southern Nevada</u> <u>Electric Service Standards for Northern Nevada</u>

## 7.1. System Upgrades

To pass inspection, the customer is responsible for the cost of any upgrades required to make the renewable energy system compatible with the NV Energy distribution system. System upgrades must be completed in accordance with NV Energy procedures and standards.

All Generating Facility Interconnections are subject to the provisions outlined in Rule 15: Nevada Power Company provisions can be found at: <u>Rule 15 South</u>.

Sierra Pacific Power Company provisions can be found at: Rule 15 North.

## 7.2. Net Metering Standards

The following documents will provide information on the requirements for how net metering systems must be installed and the type of equipment that can be used. These two NV Energy standards must be met and will be inspected for compliance during the meter inspection phase of the project. These two standards are common standards that apply to net metering systems, but these are not an exhaustive list that may apply. The full list of standards can be found on the general NV Energy Standards websites listed above.

**<u>RE-3: Net Metering Requirements</u>**: One of the standards that is relevant to solar and energy storage installations is the **RE-3 Standard**. This standard includes the approved installation configurations document in One-line Diagrams and can be found at the bottom of the NV Energy standards website. The document will discuss the Utility's design requirements for Net Metering systems to operate in parallel with the Utility's electric system to ensure the safety of people and property and the integrity of the electrical system. ESDs that are paired with a Net Metering System are included in this standard.

### 7.3. Relevant General Metering Standards

The following documents will provide information on metering equipment requirements and standards associated with a Net Metering system. These two NV Energy standards must be met and will be inspected for compliance during the meter inspection phase of the project.

**RPM-G: Material Requirements:** The material requirements will discuss the minimum manufacturing requirements for utility metering and service equipment that is rated 0-600V. These requirements are based on practices that are necessary to supply uniform satisfactory and safe service. This will



describe the type of equipment that NV Energy meters can connect to complete certain ESD installations.

**RPI-G: Installation Requirements:** The installation requirements are based on NV Energy practices that are deemed necessary to supply uniform satisfactory and safety service. This will provide information related to the specifics on where to install meter sockets, how they are wired, and other installation details.

#### 7.4. Generating Facility Interconnections Requirements

The following link to the document below discusses **Rule 15**, which describes the interconnection, operating and metering requirements for Generating Facilities intended to be connected to the Utility's electric distribution system over which the Public Utility Commission has jurisdiction. This document applies only to Generating Facilities with a net Power Capacity of **20,000 kilowatts** or less unless otherwise required in federal or state law.

Rule 15 South

Rule 15 North

#### 7.5. Fire Protection Standards

The National Fire Protection Association has established the criteria for minimizing the hazards associated with energy storage systems with the **NFPA 855 Standard**. This standard for the installation of stationary energy systems can be found here: <u>NFPA 855 Standard</u>.



# 8. APPLICATION PROCESS

#### 8.1. Application Submittal

Applications are submitted online through the online application portal that is accessed through the NV Energy website <u>PowerClerk</u>.

Applications are reviewed within **ten (10) business days**<sup>1</sup> to confirm that all required documentation is provided for renewable system interconnection and energy storage device interconnection. If defects are noted, the utility and applicant shall cooperate in a timely manner to establish a satisfactory application. Applications are reviewed based on the order in which complete applications are submitted.<sup>2</sup>

Complete applications meeting all program requirements are approved and moved to "Inspection Pending" status. The meter shop will make a site visit to inspect the solar system for meter set no later than **ten (10) business days** after project approval. If there are access issues, please indicate in the notes section of the application and request an alternate appointment through the Clean Energy Programs email box at <u>cleanenergy@nvenergy.com</u>.

Deficient applications will be returned to the applicant for correction. Deficient applications that are not corrected within 20 calendar days of the Applicant being notified of the deficiency are canceled. Upon resubmittal, the application will be re-reviewed for accuracy.

Important communications are sent by email to program participants. Accurate email addresses are required for ALL program participants, including host customers.

### 8.2. Application Fees

Per NV Energy's Rule 15 Tariff, an application fee is required for all incentivized power generation system applications and for non-incentive power generation system applications in the Nevada Power territory. The fee must be received and processed by NV Energy before the application may enter the Non-Incentive Awaiting Documentation status.

Since the fee may be paid by the customer or the solar company, customers should communicate with their solar company before submitting payment. If NV Energy receives duplicate fee payments for the same application, the first payment is posted, and subsequent payments are returned.

The fee may be submitted by check and SpeedPay. The application number, generated when the application is submitted, must be written on checks. Application fee checks are not accepted prior to submission of an application. Cash is not accepted.

#### Application fees may be mailed to:

NV Energy Renewable Energy Programs 6226 West Sahara Avenue M/S 29 Las Vegas, NV 89146

<sup>1</sup> Rule 15 Paragraph D.1.b.

<sup>&</sup>lt;sup>2</sup> NRS 701B.210.3.



If the fee is not received within 30 days of submission of the application, the application will be cancelled.

The application fees for Northern Nevada (SPPC) and Southern Nevada (NPC) are as follows:

Location	Initial Review Fee per Application
Northern Nevada	\$184
Southern Nevada	\$119

## 8.3. Application Changes

**Installation Location:** Applicants and Host Customers may change the installation address of a reservation to another address with the same Host Customer. Changes must be requested in writing to NV Energy and are subject to system sizing rules.

**Applicant or Installer:** Host Customers may change or rescind affiliation with any of the parties of the original application with written notice to NV Energy. The Installer may be changed by either the Applicant, System Owner, or the Host Customer with written notice to NV Energy.

**Host Customer:** The Host Customer name for an application may be changed before project completion and interconnection by the original Host Customer with written request to NV Energy.



## 9. INSPECTIONS

**Interconnection Safety Verification:** The Interconnection Safety Verification is an inspection to confirm the system's compliance with NV Energy standards and is performed by the NV Energy Meter Operations department. Once the system successfully passes the safety inspection and the necessary meters are installed, permission to operate will be granted and the system can be turned on.

If the system does not satisfy the requirements of either the program post inspection or interconnection safety verification, NV Energy will contact the Installer and/or Host Customer to inform them of the issue. Re-inspection may be necessary after corrections are made.

NOTE: Systems <u>may not</u> be energized prior to successful final verification by NV Energy. The customer will not receive kWh credit for energy put back into the grid until the NV Energy meter(s) is set. All projects must comply with applicable NV Energy construction standards which can be found at <u>nvenergy.com</u>.

The use of a battery backup system on a grid connected system requires advance review and approval by NV Energy to ensure safe interconnection and that all energy produced by the system is accurately recorded on the utility meter.

Modifications to customer-owned electrical service equipment may compromise the original equipment listing. All modifications shall be approved in writing by the authority having jurisdiction, the manufacturer, or a nationally recognized testing laboratory.



# **10. CONTACT INFORMATION**

More information on NV Energy's programs and services can be found on our website at nvenergy.com.

Website:Clean EnergyEmail:cleanenergy@nvenergy.comToll-Free:866-786-3823Fax:702-402-0339

Application Portal: https://nvenetmeter.powerclerk.com/MvcAccount/Login



## 11. APPENDICES

## 11.1. Appendix A: Application Checklist

□ Are all the addresses matching throughout the application and with the address listed on the utility bill and on the corresponding County Assessor website?

□ Does the address listed in the Site Plan and One Line Diagram match the Host Customer address in the application?

□ Does the system and Energy Storage Device (ESD) sizes match in the application and in the One Line Diagram?

□ Are the number of inverters consistent in the application and the One Line Diagram?

□ Is the Host Customer the Property Owner or listed as an owner of the Premise with the County Assessor, or is the Property Owner a co-applicant on the utility account? If not, has the Property Transfer Agreement (PTA) been electronically signed or signed before uploading?

□ Do you have at least twelve months of billing history? If not, have you uploaded an Engineering Calculations Document stamped by an electrical professional engineer with an active license in the state of Nevada? You can also get an energy audit conducted on your home or use livable square footage to determine your allowable system size.

□ If the property the system is being interconnected to is rented, has the Third Party Contract signed by the Property Owner been uploaded to verify that the Property Owner is aware of and authorizes the proposed installation?

□ Has the Interconnection Agreement been electronically signed or signed before uploading?



□ Does this premise have multiple meters? If yes, separate applications are required for each meter. Please also properly label and specify each meter on the Site Plan and One Line Diagram?

□ Is the Host Customer a commercial customer? If so, does this commercial business also have multiple units? If yes, has the applicant uploaded a master plan and ensured that the totality of the system size is under 1 MW AC?

□ Are the PE, C2, and/or a contractor with C2-G licenses valid and active in the state of Nevada?

#### 11.2. Appendix B: Sample Engineering Calculations Document

ELECTRICAL LOAD CALCUL PROJECT NAME: PREMISE TYPE: METER NUMBER: SERVICE VOLTAGE: SQUARE FEET: INDICATE NEW LOADS THA POOL PUMP EV	ATION AT REQUIRE ENGINEERING CA	ALCULATIONS:		STAMP AND SIGNATURE FROM AN ELECTRICAL PROFESSIONAL ENGINEER IN THE STATE OF NEVADA WITH ACTIVE LICENSE
GENERAL LIGHTING LOAD: NO. OF SQ, FT.	CALCULATION	W./SQ. FT.	TOTAL = XXXX W.	
SMALL APPLIANCE LOAD: NO. OF APPLIANCE TOTAL SMALL APPLIANCE L	APPLIANCE NAME	SIZE	TOTAL = X000 W. = X000 W.	
FIXED APPLIANCE LOAD: NO. OF APPLIANCE TOTAL FIXED APPLIANCE LO	APPLIANCE NAME	SIZE	TOTAL = X000X W. = X000X W.	
HVAC LOAD: NO. OF EQUIPMENT TOTAL HVAC LOAD	EQUIPMENT NAME	SIZE	TOTAL = X000X W. = X000X W.	
MISCELLANEOUS LOAD: (II NO. OF EQUIPMENT TOTAL HVAC LOAD	NDICATE HERE IF THERE'S EV	CHARGERS) SIZE	TOTAL = XXXX W. = XXXX W.	
TOTAL LOAD GRAND TOTAL LOAD	XXXX W. / XXXX	VOLTS	= XXXX W. = XXXX AMPS	
	ESTIMATED ANN PROPOSED XX K YEARLY PRODUCT	CONTRACTOR NAME LICENSE NUMBER CONTACT INFORMATION		

#### PROJECT NAME ADDRESS (SHOULD MATCH THE ADDRESS IN THE APPLICATION)