

# WindGenerations

## PROGRAM HANDBOOK





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*Please ensure you are reading the most recent version of this handbook by visiting the NV Energy website, [www.NVEnergy.com/wind](http://www.NVEnergy.com/wind).*

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## WINDGENERATIONS OVERVIEW

WindGenerations offers incentives for wind energy systems to residential, commercial, industrial, agricultural, public, low income and nonprofit customers of NV Energy.

- The program was created by the Nevada State Legislature and is regulated by the Public Utilities Commission of Nevada.
- The program was created by the Nevada State Legislature and is regulated by the Public Utilities Commission of Nevada, defined in Nevada Revised Statutes and Nevada Administrative Code Chapter 701B. The program is subject to changes made by the Nevada State Legislature, the Public Utilities Commission of Nevada, and NV Energy.
- The program is funded by NV Energy customers and is administered by NV Energy.
- All program participants must qualify for, participate in and comply with all of the rules of [Net Metering](#).
- 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.
- Projects in construction prior to the issuance of a Reservation Notice are not eligible for incentive.
- NV Energy pays incentives as available per NRS 701B.
- All portfolio energy credits issued for a wind energy system installed pursuant to the Wind Program must be assigned to and become property of NV Energy. Any generating capacity installed outside of the Program must be separately metered in order to maintain ownership of portfolio energy credits.
- NV Energy will install digital “smart meters” for both the revenue and generation meter for all program participants.
- 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 as a result of the customer’s decision to install a renewable energy system.

## ELIGIBILITY

**Customers.** All NV Energy customers except the Federal Government and distribution- only customers are eligible to apply for incentives. Applications are made in one of the following categories, as determined by the type of customer:

- Residential/Small Commercial
- Large Commercial/Industrial
- Public Entity
- Low Income/Nonprofit

### Program Categories and Billing Rate Classes

**Residential/Small Commercial:** All residential customers and non-residential customers in rate classes GS-1, LGS-1 or smaller, including irrigation rate classes.

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

**Low-Income/Nonprofit:** Customers who demonstrate eligibility by submitting evidence of one of the following:


- Ownership of publicly subsidized housing;
- IRS 501(c)(3) status
- Qualification for the federal low income housing tax credit (LIHTC);
- Annual household income that does not exceed the low income limits (80%) of the U.S. Department of Housing and Urban Development's most current Income Limits Documentation System data for the number of individuals in the household and the county in which the person resides; or,
- Qualification as a Title 1 School.

**Public Entity:** Customers that are:

- A department or agency of a state or local government; or,
- A public school district.
- An institute of higher education that is part of the Nevada System of Higher Education;
- An Indian tribe or tribal organization; or,
- A corporation for public benefit.

The System Owner may be the NV Energy Host Customer or a third party as designated by the Host Customer.

**Contractors.** Installers must have an active C-2 or C-2g Nevada contractor's license. If a contractor's license is suspended applications associated with the contractor are not eligible to receive a reservation



notice or an incentive payment, unless the system was completed and inspected by the local building authority prior to the suspension date. Customers may select a different Installer – refer to [Application Changes](#) for more information.

## APPLICATION

Applications are submitted online through PowerClerk, the application website for participants in the RenewableGenerations programs. PowerClerk is accessed through the [How to Apply](#) link on the NV Energy website.

**Applicant:** The party responsible for preparing the application and incentive claim in PowerClerk.

**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 bill. The Host Customer is responsible for making any changes to their NV Energy bill prior to application. Persons listed as co-applicants on the NV Energy bill may apply as the Host Customer.

**System Owner:** The owner of the generating system when the incentive is paid. A third-party system owner is an owner who is not the NV Energy Host Customer.

**Installer:** The Nevada licensed electrical contractor (C-2 or C-2g) who performs the installation and system interconnection.

**Seller:** The party that sells or leases the system to the Host Customer.

**Payee:** The party designated on the Incentive Claim Form to receive the incentive payment.

Applications are reviewed to confirm that the Host Customer is eligible for the category and that all required documentation is provided.

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

Deficient applications will not be processed. Deficient applications that are not corrected within 20 days of the Applicant being notified of the deficiency are canceled and the application fee is forfeited.

An application must include:

- A copy of the installation contract or energy services agreement\* for the installation of the system.
- A recent copy\*\* of the Host Customer's NV Energy utility bill.

- Evidence of average annual wind speed at proposed installation location.
- Evidence of host customer category eligibility (Low-Income/Nonprofit only).

\*The contract or agreement must include:

- Names and signatures of the NV Energy Host Customer and the Installer or service provider. Host Customer name on the contract or agreement must match the name on the application and the NV Energy bill.
- The physical address of the installation.
- The AC wattage, expected energy output of the system or other clear indication of proposed system size.

#### Utility Bill:

If NV Energy service has not been established, as in new construction, the Applicant may submit in place of the utility bill a document indicating future service. NV Energy service must be established before the system will be interconnected. To demonstrate that service has been established a copy of a recent utility bill must be provided with the incentive claim.

## SYSTEM SIZING

The size of a net metered wind system is measured in kilowatts (kW) in alternating current (AC).

- AC wattage of a system equals the rated output of the wind energy system at 11 meters per second wind speed as indicated on the [ITAC](#) list or the IEC 61400-12-1 power performance measurement for the proposed turbine.

Systems may be only as large as is needed to offset the Host Customer's annual requirements for electricity at the interconnection premise and not larger than 500 kW. A customer's anticipated increase in consumption cannot be used as the basis for determining system size. There is no minimum installed system size.

**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.

The estimated production of the proposed system (kWh) may not exceed the customer's annual requirements for electricity (kWh). The estimated production of the wind system is calculated using the rated output of the proposed wind turbine and assuming a 10 percent production capacity factor or other method approved by NV Energy.

**Customer's Annual Requirements for Electricity** equals kilowatt-hours (kWh) consumed at the installation location, or on properties contiguous to the installation location, in the consecutive 12 months with the highest energy usage during the two prior years. Host Customers can find their consumption history online: [MyAccount](#)

If the system is to be installed at a new service, a calculation by a Nevada licensed professional engineer of the customer's expected annual requirements for electricity must be provided. NV Energy will review the calculation in order to determine the limit of the reservation capacity.


### 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. **Ask before you add!**

- All renewable generation capacity on a premise that has received or will receive an incentive cannot exceed 500 kW (CEC-AC). This limitation applies separately for renewable generation systems of other types (i.e. solar and hydro generation).
- If ownership of Portfolio Energy Credits (PECs) for previously installed capacity (for systems that did not receive an incentive) is to be maintained by the System Owner, the new capacity must have a generation meter installed to separately measure system production. PECs for any previously installed capacity that is not separately metered are assigned by the System Owner to NV Energy.
- Installation of additional capacity on a system receiving production based incentive requires that the reserved capacity have a separate generation meter from the additional, unreserved capacity.

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

### Additional Notes on Capacity



Customers may install a system larger than the size indicated on the Reservation Notice provided that the system does not exceed 500 kW and the size limits as described in Net Metering law. A system will not receive incentive payments for any installed capacity greater than the capacity listed on the Reservation Notice.

If a residential Host Customer has not consumed energy at the proposed installation location for a 12 consecutive month period during the 2 years previous to application to the program, or if the wind energy system is being installed on a new residence, the system may not exceed 4.25 watts (AC) per square foot of interior living space. Interior living space must be verified through county records or by building plans as submitted to the local building authority.

If the system is to be installed at a new commercial service, a calculation by a Nevada licensed professional engineer of the customer's expected annual requirements for electricity must be provided. NV Energy will review the calculation in order to determine the limit of the reservation capacity.

## SITING AND EQUIPMENT

**Siting.** Installation locations must have an average annual wind speed of 10 miles per hour or greater at the hub height of the turbine.

Evidence of average annual wind speed may be either:

- A wind speed assessment report from a nationally recognized wind assessment tool\* or,
- Data from a minimum of 12 consecutive months of wind speed measurement using calibrated equipment or from meteorological data at an established site not more than ¼ mile in distance and 250 feet in altitude from the proposed wind generation site.

\*A suggested list of wind assessment tools is available at [www.NVEnergy.com/wind](http://www.NVEnergy.com/wind).

**Equipment.** Turbines must meet the following requirements:

- Turbines with **less** than 200 square meters of swept area must be listed by the [Interstate Turbine Advisory Council \(ITAC\)](#).
- Turbines with **greater** than 200 square meters of swept area must be listed by [ITAC](#) or have a power performance measurement for the turbine according to IEC 61400-12-1 (power curve) from an ISO/IEC 17025 accredited testing laboratory or by an organization that is ISO/IEC Guide 65 or EN45011 accredited to certify to this standard.

Refurbished or remanufactured turbines are eligible for an incentive if they meet the above standards and are comprised of not more than 20 percent refurbished components by total system value, with at least 80 percent of the system value being new components. The Applicant must provide an



independent accountant’s certification or other appropriate documentation that validates that the refurbished turbine meets this standard.

NV Energy reserves the right to suspend turbines from eligibility for the program in its sole discretion should that turbine demonstrate a pattern of failure or unreliability.

## INCENTIVE CALCULATION

Incentives are paid over time, in quarterly payments, determined by the amount of energy produced by the system. This is referred to as a Performance Based Incentive, or PBI. Energy production is measured by the NV Energy generation (REC) meter installed in the customer provided meter socket.

PBI Incentive payment = energy production (kWh) during payment period multiplied by incentive level

### Incentive Levels by Category


Category	Incentive Level
Residential/Commercial/Industrial	\$0.043 / kWh
Low Income/Nonprofit/Public Entity	\$0.0861 / kWh

The total of all incentive payments will not exceed the lesser of:

- The total kWh production of the system during the five years after initial interconnection multiplied by incentive level listed on the Reservation Notice.
- 50 percent of the actual system installation cost.

## RESERVATION NOTICE

Once an application has been reviewed and approved, the Applicant, Host Customer, Installer and System Owner are sent by email a Reservation Notice that indicates that incentive funds have been reserved for the project. The notice lists the expiration date of the reservation, the approved kilowatt capacity of the system, and the maximum incentive amount (EPBB) or the formula for calculation of the maximum incentive (PBI). The Host Customer has sole rights to the Reservation Notice.



Applicants may check the status of their application by signing into PowerClerk. “Active” status indicates that a Reservation Notice has been issued.

Project construction may not begin before a Reservation Notice is issued. Projects that are in construction prior to receiving a Reservation Notice are not eligible for an incentive.

## 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 the system sizing rules. Location changes will require that the Applicant provide a copy of a recent NV Energy bill for the proposed location. The new installation location is recorded in PowerClerk, but the Reservation Notice is not revised. The terms of the original Reservation Notice apply to the new installation location.

### **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. A copy of a recent utility bill in the name of the new Host Customer must be provided with the change request.

### **Reservation Notices**

Reserved capacities and incentives listed on the Reservation Notice cannot be changed. Applicants who intend to install a larger system than originally reserved and *have yet to begin construction* may withdraw the original application and reapply for the desired system capacity. New applications are subject to incentive levels and the availability of incentive funds at the time of the new application and must comply with current net metering rules.

## INCENTIVE CLAIM

The Applicant requests interconnection of the system and payment of the incentive for a completed project by submitting the incentive claim prior to the expiration date listed on the Reservation Notice.



**Completed:** The wind energy system is considered completed when it is completely installed, the building permit is satisfied and the system is capable of producing electricity in the manner and in the amounts for which it was designed. The completed system must be interconnected and producing energy before incentive payment may be issued.

The incentive claim is submitted online through PowerClerk, similar to submitting the original application. PowerClerk is accessed through the [Claim Your Incentive](#) link on the NV Energy website where an online incentive claim tutorial is provided.

Deficient incentive claims will not be processed. Deficient claims that are not corrected within 30 days of the Applicant being notified of the deficiency may be forfeited. In the case that an incentive application is forfeited the system may still be connected but the reserved incentive funds and the application fee is forfeited.

Applications for systems 25 kW and smaller that were originally submitted before July 1, 2015 may use the EPBB incentive calculation method, or retain the original UFI incentive calculation. The Applicant must contact NV Energy before submission of the incentive claim to utilize the EPBB incentive calculation method.

The incentive claim package must include the following:

- Incentive Claim Form.
- A copy of the satisfied building permit from the local jurisdiction indicating the date of satisfactory final wind system inspection. (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.)
- Signed Net Metering Agreement.

**System Costs:** Applicants indicate the completed system cost in PowerClerk. System cost includes the cost of the tangible materials and labor for the installed system. The cost of the local building authority permitting must also be listed. Other costs, including other equipment, and design and engineering may be listed as balance of cost of system.

**Cost of Tangible Materials and Labor:** The reasonable cost of materials and labor for permitting, generators, towers, inverters, the balance of system components and any other costs that are directly related to and required for the operation of a wind energy system. The term does not include such costs for improvements to a building or site which are not necessary to accommodate a wind energy system. Such improvements include but are not limited to fencing, lighting and components for battery back-up systems.

## INSPECTIONS

### Program Post Inspection

The Program Post Inspection may be conducted for any project. The program post inspection verifies the information contained in the incentive claim, including:

- Installation location and siting
- Installed equipment

### Net Metering Interconnection Safety Verification

The Interconnection Safety Verification is an inspection to confirm the system's compliance with net metering standards and is performed by the NV Energy Meter Operations department.

If the system passes the safety verification, the net meter and generation meter are installed and the system may be operated.

If the system does not satisfy the requirements of either the program post inspection or net metering 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 may not be energized prior to successful final net metering verification by NV Energy. The customer will not receive kWh credit for energy put back into the grid until the NV Energy net meter is set.*

**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.

**Net Meter:** The meter provided and installed by NV Energy that measures the electricity used by the customer from the grid and the amount of electricity that the customer's renewable energy system sends back to the grid. This meter is usually installed in the place of the original revenue meter.

**Generation Meter:** The meter provided and installed by NV Energy that measures the wind energy system's production of kWh over time. This meter is required for projects completed in the program and is installed in a meter socket provided by the Host Customer. Also referred to as a REC meter.

**Meter Set:** The installation of the net and generation meters by NV Energy which occurs after submission of complete incentive claim and satisfactory net metering verification.

All Projects must comply with applicable NV Energy construction standards:

[Electric Service Standards – Northern Nevada](#)

[Electric Service Standards – Southern Nevada](#)


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

#### **Systems larger than 25 kW.**

- The Installer must upload to PowerClerk a one-line metering diagram of the proposed installation prior to construction.
- 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.

## **PAYMENTS**



Incentive payments are processed only after satisfaction of required inspections and the installation of the net and generation meters. Completed systems must be producing energy before incentive payments may be issued.

Payments are issued to the Payee as indicated on the Incentive Claim Form. Payees must provide a [Form W-9](#) to NV Energy. NV Energy will issue an Internal Revenue Service 1099-MISC to all Payees at the end of each year in which incentives are paid. To protect Payee privacy, W-9 forms are not submitted in the PowerClerk incentive claim, but are submitted directly to NV Energy. Incentive payments are not made until the W-9 is provided.

### **PBI Payments**

PBI payments are made once a quarter in January, April, July and October. Payments commence the first payment period after the first read of the generation meter and continue quarterly for 60 months of measured system production from the date of the meter set.

### **Payment Delivery Options**

Payments are issued as a bank check mailed to the Payee. PBI project Payees may elect to be paid through electronic transfer by completing the Electronic Payment Authorization Form in PowerClerk. Electronic Payment requests require authentication and are recommended only for Payees expecting to receive multiple incentive payments, as the first payment after an Electronic Payment request may still be issued as a back check.

## **PRODUCTION VARIATIONS**


Variations in the production of completed systems, as determined by the readings of the generation meter, may indicate that the actual capacity of the completed system differs from the capacity indicated in the original application. NV Energy may conduct inspections or reviews of completed and operating systems at any time for the purpose of determining the reason for the production variation.

**Low Production:** This review may help the system owner identify installation issues.

**High Production:** If NV Energy determines that additional generation has been added to the original installation, PBI payments may be suspended until the system is verified in its original capacity.

## **CANCELLATION, WITHDRAWAL, AND FORFEITURE**

An application that has not yet been approved and issued a Reservation Notice may be cancelled by written or verbal request from the Applicant, Installer, System Owner or Host Customer.



An application that has been issued a Reservation Notice may be withdrawn from the program by written request directly from the Host Customer to NV Energy. A Withdrawal Form is also available in PowerClerk.

An application is forfeited if the complete incentive claim is not submitted by the expiration date listed on the Reservation Notice.

Reserved incentive funds for withdrawn and forfeited applications are returned to the program and these applications are no longer eligible for payment. Host Customers may reapply to the program but subsequent applications are subject to the program rules in place at the time of the new application.

## FOR MORE INFORMATION

RenewableGenerations incentive program:

Website: [NVEnergy.com/RenewableGenerations](http://NVEnergy.com/RenewableGenerations)

Email: [RenewableGenerations@NVEnergy.com](mailto:RenewableGenerations@NVEnergy.com)

Toll-Free: **866-786-3823**

Net Metering:

Website: [NVEnergy.com/NetMetering](http://NVEnergy.com/NetMetering)

Email: [NetMetering@NVEnergy.com](mailto:NetMetering@NVEnergy.com)