

# **Nashville Electric Service**

## **NESolar Connect and NESolar Savings Guidelines**



**Effective October 2024**

## General Terms and Conditions

### Program Guidelines

- These Program Guidelines are intended to provide eligible NES customers with information and requirements for the NESolar Connect and NESolar Savings power purchase programs.
- Capitalized Terms used in these Program Guidelines have the same meaning as in the NESolar Connect and NESolar Savings Power Purchase Agreements (“Agreement”). In the event of any conflict between the body of the Agreement and these Program Guidelines, the Agreement controls.
- NES may amend these Program Guidelines at any time, in part or in whole, by posting such amendments on the NES website at [www.nespower.com](http://www.nespower.com), or such successor website as NES may designate from time to time. Such amendments will be effective upon 30 days’ written notice in accordance with the Agreement and will not apply to any Energy Resource documented in the *Nashville Electric Service Application for Interconnection of Renewable Generation* form approved by NES in accordance with these Program Guidelines prior to the effective date of such amendments. This paragraph does not apply to any adjustments made to the price per kilowatt-hour (kWh) stated in the Crediting and Pricing Structure section of these Program Guidelines.
- Terms and conditions in these Program Guidelines are in addition to and made a part of the Agreement.
- Participants that sell renewable generation to and receive a bill credit of more than \$400 a month, on average, from NES will need to register for sales tax in accordance with Tennessee Rules & Regulations 1320-05-01-.63. Applicable participants will need to retain a NES resale certificate (available upon request) for the credits to remain exempt from sales and use tax. For additional information on sales tax, reporting, and regulatory requirements, please contact the Tennessee Department of Revenue.

### Energy Resources

A facility that NES receives generation or equivalent benefit from, either through ownership, a PPA, or a contract for benefits, and which produces electric energy, or stores electric energy produced by another Energy Resource, while operating in parallel with or interconnected to an NESolar Connect participant’s distribution system or TVA’s transmission system.

### Eligibility

- No Energy Resource may be deployed until it has been approved by NES in accordance with the Agreement and these Program Guidelines. A participant’s NESolar Connect facilities may require TVA approval based on system size.
- No expansion of the capacity of an Energy Resource may occur without the prior written approval of NES.
- NES may reject any Energy Resource, in whole or in part, if, in NES’s sole discretion, it deems that the Energy Resource poses a potential safety risk or adverse impact to NES’s transmission or distribution system.
- Customers may not have 1) multiple line side-connected energy resources on different power purchase programs on a single account, or 2) multiple excess generation energy resources on different power purchase programs on a single account.
- A separate commercial account will be required for customer accounts on time-differentiated hours use of demand rate schedules (e.g., TDGSA, TDMSA, LMS, or LGS).

## Requirements

- NES, in its sole discretion, at any time during the approval process or while the Energy Resource is deployed, may require, at customer's cost, one or more of the following for an Energy Resource facility in order to determine any adverse impacts to NES's transmission or distribution system, what equipment and/or network upgrades are required, and other factors and requirements for safe operation and deployment of an Energy Resource:
  - "Facilities Study" means a formal scoping process by NES for any system above 500 kW using other studies as needed and information to produce the necessary project drawings, detailed cost estimates, and work schedule for the deployment of a potential Energy Resource facility.
  - "Flexibility Device Kit" means NES's preferred communication link for acquiring generation data from Energy Resources (if other existing communication links are not available), which includes a cell router, GPS clock, AC-DC converter, smart metering and NES or TVA implementation support.
  - "System Impact Study" means an engineering study completed by NES, TVA, or consultants as selected by NES in its sole discretion, to identify the impact and any scope of work necessary for the safety and reliability of NES's transmission or distribution system and for the interconnection of an Energy Resource to TVA's transmission system or NES's distribution system.
  - "Transmission Screen" means a study performed by NES, TVA, or consultants as selected by NES in its sole discretion, to determine the appropriate load sizing for a potential Energy Resource at a given delivery point, including but not limited to metering, protection, and visibility requirements.
- "Interconnection Requirements" means the latest version of NES's *Interconnection and Operation Agreement*, with which all Energy Resources must comply, and as applicable the North American Electric Reliability Corporation (NERC) registration requirements.
- "Commissioning Requirements" means NES's *Distributed Generation Checklist* which can be found in Appendix A. All Energy Resources will be subject to the full Commissioning Requirements.
- "Modeling Requirements" means the latest version of TVA's Modeling Requirements for Synchronous Generators and Inverter-Based Resources. An Energy Resource with deployment between 5 MVA and 25 MVA may require full or partial compliance with the Modeling Requirements as well as a TVA Transmission Study. An Energy Resource at or above 20 MVA will be subject to the full Modeling Requirements.
- An Energy Resource at or above 20 MVA must comply with TVA's Operating Procedures and deliver to TVA forecasting information, including but not limited to, a daily projected output schedule and other forecasting information TVA may reasonably require.
- If identified at any time during the approval process or while the Energy Resource is deployed, any adverse impacts on NES's or TVA's transmission system that will be caused by the customer's planned Energy Resource(s), NES will notify the customer of the protection equipment and actions necessary to remediate such adverse impact. The customer will coordinate with NES and TVA as needed for the installation of any such necessary equipment and actions and reimburse TVA or NES for TVA's or NES's equipment costs.
- NES or TVA-owned meter(s) may be required for the deployment and continued operation of an Energy Resource. The customer must reimburse TVA or NES for TVA's or NES's costs in procuring and installing such meter(s) in accordance with the Metering Requirements.
- NES will be responsible for determining and installing metering and communication devices for customer's Energy Resources. Customers are required to provide NES and TVA with unrestricted physical access to the metering facilities at all times.

## Crediting and Pricing Structure

Energy Resources will displace demand and energy usage that NES would otherwise have purchased from TVA:

### NESolar Connect:

- For solar Energy Resources directly interconnected to NES's distribution or transmission system, NES will purchase exclusive rights and title to 100% of the energy output and Environmental Attributes, capacity-equivalent benefits, and other project attributes from the customer's Energy Resource.
- For all solar energy delivered to and purchased by NES at the delivery point, NES will pay the customer the seasonal rate per kWh as noted below plus the TVA Standard Service Total Monthly Fuel Cost ("TMFC") rates for the billing month. Any energy delivered by NES to the customer's Energy Resource will be added to the customer's retail usage in the applicable billing month.
  - Summer (June, July, August, September): \$0.07363 per kilowatt-hour (kWh)
  - Winter (December, January, February, March): \$0.04459 per kWh
  - Transition (April, May, October, November): \$0.05682 per kWh
- Specific payment terms, metering requirements, and contract price provisions are defined in the Agreement.
- For any conflict between these Program Guidelines and the Agreement, the Agreement governs.

### NESolar Savings:

- For any solar generation in excess of customer's load at the NES delivery point that causes energy to flow onto the NES transmission or distribution system at any interval, NES will purchase exclusive rights, title, Environmental Attributes, capacity-equivalent benefits, and other project attributes to any such energy from the customer who has an executed Agreement for the Energy Resource.
- For all energy delivered to and purchased by NES at the delivery point, NES will pay customer the seasonal rate per kWh plus the TVA Standard Service Total Monthly Fuel Cost ("TMFC") rates for the billing month.
  - Summer (June, July, August, September): \$0.03069 per kWh
  - Winter (December, January, February, March): \$0.03197 per kWh
  - Transition (April, May, October, November): \$0.03244 per kWh
- Specific payment terms, metering requirements, and contract price provisions are defined in the Agreement.
- For any conflict between these Program Guidelines and the Agreement, the Agreement governs.

### Other

- The provisions in these Program Guidelines applicable to the Agreement apply to Energy Resources for which the customer has executed an Agreement.
- The Agreement rates apply exclusively to solar-based power generating Energy Resources and may be updated by NES consistent with adjustments and changes (including increases or decreases) to TVA's Standard Service Wholesale rates.
- These Program Guidelines do not limit NES's right to change or replace its formula to determine price per kWh.
- For non-solar-based Energy Resources, upon request from a customer, NES will assess feasibility and in its sole discretion may calculate a separate technology-specific rate.

## Required Forms

Customer must complete the following forms regarding Energy Resources, using the appropriate form and frequency, both of which NES will specify.

### NESolar Connect or NESolar Savings Power Purchase Agreement

Executed by customer and NES to establish the purchase of energy generated from customer's Energy Resource and environmental attributes.

### Nashville Electric Service Application for Interconnection of Renewable Generation form

A "Nashville Electric Service Application for Interconnection of Renewable Generation form" ("Application") is required during the early planning stages of Energy Resource facility development, but in all cases no later than 60 days prior to any new Energy Resource power production.

### Initiation Notice Form

Submitted by NES on behalf of the customer for the programmatic approval of a facility that may become an Energy Resource.

### Operational Notice Form

The "Operational Notice Form" is required prior to any Energy Resource facility power production. The Operational Notice Form notifies TVA of an Energy Resource project that is capable of and ready to generate energy and provide power, consistent with the Agreement and these Program Guidelines, along with providing TVA with relevant information about such projects, including but not limited to location, type, size, inverter data, transformer data, and other metering and interconnection information.

### Interconnection and Operating Agreement (IOA) Placeholder

NES will require an Interconnection and Operating Agreement to be completed for each solar installation that will connect to the NES grid.

### Additional Forms and Information

NES, by written notice, may require additional forms and information from customer for the administration, compliance, and continued implementation of the Agreement, these Program Guidelines, and any Energy Resource.

## NESolar Connect Guidelines

These NESolar Connect Guidelines establish the processes and procedures to be followed by customers participating in the NESolar Connect program (“NSC program”) and connecting an Energy Resource directly to NES’s distribution system. Customers should read and understand all the terms and conditions set forth in the Agreement and these Program Guidelines.

Due to limitations in purchasing power from sources other than TVA, participation in NES’s NESolar Connect program will be on a first come, first serve basis and have an overall initial program maximum of 35 megawatts (MW).

### Participation Requirements

Participant must, in accordance with the Agreement, these Program Guidelines, and in any forms or instructions, as they may be requested, required, and updated from time to time by NES:

- Submit a completed NES solar application;
- Maintain responsibility for all costs associated with the preparation, planning (including environmental reviews if any), development, deployment, execution, implementation, completion, continued operation, and ceasing operation of the Energy Resource;
- Comply with all standards, guidelines, laws and regulatory obligations;
- Execute the Agreement;
- As applicable, in NES’s sole discretion, enter into any other agreements (e.g., Interconnection Agreement and/or Parallel Operation Agreement) required for the initial and continued safe deployment of the Energy Resource;
- Implement curtailment requirements at NES’s request;
- as applicable, enter into an Excess Option Power Purchase Agreement (EOPPA) with NES and TVA for any generation that flows from the Energy Resource onto the TVA transmission system;
- Purchase equipment, at NES’s request, which will enable safety measures and prevent generation from flowing to NES grid as outlined in the IOA agreement;
- Ensure that:
  - The solar installation is owned or leased by an NES customer, as designated by the customer’s power billing account that is associated with the billing meter at the address of the on-site solar installation;
  - As applicable, at participant’s sole expense, participant receives the local building code official’s inspection and certification of the solar installation and Metering Installation and submits such documentation to NES showing that the solar installation and Metering Installation is permitted, approved, and meets all electrical and mechanical qualifications;
- Customer’s Energy Resource:
  - Must be line-side connected to NES’s transmission or distribution system; and
  - Must have a nameplate of at least 200 kW for solar generating facilities or 80 kW for other generating facilities;

## NESolar Savings Guidelines

These additional NESolar Savings Guidelines establish the processes and procedures to be followed by customers participating in the NESolar Savings program (“NSS program”). The customer should read and understand all the terms and conditions set forth in the Agreement and these Program Guidelines.

Due to limitations in purchasing power from sources other than TVA, participation in NES’s NESolar Savings program will be on a first come, first serve basis and have an overall program maximum of 10 megawatts (MW).

### Defined Terms

- “Metering Installation” means meters and related facilities used to determine the amounts of electric energy flowing onto NES’s transmission or distribution system from solar installations.
- These guidelines may be updated from time to time by NES or based on changes made by TVA to the Commercial Energy Solutions Policies.
- “Site” means a participant’s eligible residential, commercial, or industrial real estate and associated personal property to which the solar installation is connected. In addition, the Site must meet and maintain the following requirements:
  - The property must be located in the service territory of, and receive its retail electricity distribution services from, NES at the location of the solar installation;
  - The primary purpose of the solar installation must be to serve the load at participant’s premises, not primarily for energy generation sales. For example, participant may not be an entity whose main business purpose is energy generation and sales;
  - The solar installation must be located on the same premises of participant, where the participant’s own electrical load is located;
  - A maximum of 250 kW and minimum of 50 kWh average monthly excess generation per Standard Service customer of NES is permitted;
  - Electric energy delivered to and purchased by NES does not exceed more than 100% of the participant’s annual electrical usage (the aggregate of all billing meters on Participant’s contiguous property at the Site); and
  - Participant and the solar installation must meet the requirements set forth herein.

### Participation Requirements

Participant must, in accordance with these Program Guidelines, and in any forms or instructions, as they may be requested, required, and updated from time to time by NES:

- Maintain responsibility for all costs associated with the preparation, planning (including environmental reviews if any), development, deployment, execution, implementation, completion, continued operation, and ceasing operation of the Energy Resource;
- Comply with all standards, guidelines, laws and regulatory obligations;
- Execute the Agreement;
- As applicable, in NES’s sole discretion, enter into any other agreements (e.g., Interconnection Agreement and/or Parallel Operation Agreement) required for the initial and continued safe deployment of the Energy Resource;

- Purchase equipment, at NES's sole discretion and request, which will enable safety measures and prevent generation from flowing to NES grid *as outlined in the IOA agreement*;
- Comply with all applicable Rules and Regulations of NES;
- Ensure that:
  - Participant's primary purpose for participating in the NESolar Savings Program is not energy generation;
  - Participant's system is an on-site solar photovoltaic ("PV") installation or solar PV with battery storage installation ("solar installation");
  - The solar installation has a direct current nameplate rating of 250 kW or less;
  - The solar installation is owned or leased by an NES customer, as designated by the customer's power billing account that is associated with the billing meter at the address of the on-site solar installation;
  - As applicable, at participant's sole expense, participant receives the local building code official's inspection and certification of the solar installation and Metering Installation and submits such documentation to NES showing that the solar installation and Metering Installation is permitted, approved, and meets all electrical and mechanical qualifications;
  - Electric energy received and purchased by NES do not exceed more than 100% of each participant's annual electrical usage (the aggregate of all billing meters on participant's contiguous property at the Site).



**Appendix A**

**Distributed Generation Checklist: Inverter Test and Commissioning**



Customer Name :	<input type="text"/>	TVA ID :	<input type="text"/>
Account No :	<input type="text"/>	Date: <input type="text"/>	IOA No. : <input type="text"/>
Customer Address :	<input type="text"/>	Generation Acct No. :	<input type="text"/>

No	Task Item	Pass	Fail	N/A
1	<b>Contracts/Approvals/Mapping</b>			
	a) Application Packet Completed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) One Line Diagram Approved	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Site Plan Approved	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) TVA Participation Agreement or Power Purchase Agreement Fully Executed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e) Distributor Interconnection and Operating Agreement Fully Executed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	f) Authorities Having Jurisdiction (Codes) Release Processed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	g) Back Feed Warning Added to Address in GIS Mapping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<b>Site Inspection</b>			
	a) ESE to Verify Pole Placards have been installed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Are Meter Warning Stickers installed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Does the weather proof drawing of the Qualifying System meet guidelines?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) Generation meter and disconnect within 50 ft. line of sight of the Billing meter?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e) Is the disconnect switch in a readily accessible location?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	f) Is the disconnect switch capable of being locked in the "open" position?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<b>Qualifying System Outage Testing</b>			
	a) Did Qualifying System generate under normal conditions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) Did Qualifying System cease generation during simulated outage?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) Did Qualifying System remain off-line for a continuous five minutes after utility service was re-established?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) Did three-phase Qualifying System cease generation under simulated single-phase outage conditions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Results**

Pass

Fail

ESE Personnel	<input type="text"/>	Date	<input type="text"/>	Signature	<input type="text"/>
Meter Personnel	<input type="text"/>	Date	<input type="text"/>	Signature	<input type="text"/>
Comments: <input type="text"/>					New Billing Meter: <input type="text"/>
					New Check Meter: <input type="text"/>

Participant shall comply with all applicable laws, regulations, zoning codes, building codes, safety rules, and environmental restrictions, including the latest version of the National Electrical Code, applicable to the design, installation, operation, and maintenance of its Qualifying System. Distributor does not review based on local building or structural codes. Additional, more detailed information may be required by local authorities.