

GREEN POWER PROVIDERS PROGRAM PARTICIPATION GUIDELINES

(Effective January 1, 2015)

GUIDELINE 1 - PROGRAM PURPOSE AND DESCRIPTION

The purpose of the Green Power Providers program (Program) is to continue to increase the renewable energy supply in the Tennessee Valley. In addition, the Program aims to align with the green power demand and participation levels in TVA's Green Power Switch program, while also stimulating economic growth and serving as a customer-focused solution to grid integration of small scale clean and renewable energy systems.

Distributors of TVA power (Distributors) that have entered into a Green Power Providers Agreement with TVA have the opportunity to offer the Program to their customers. A customer can request a Program capacity reservation by completing a Green Power Providers Capacity Reservation Request (Request) and submitting it, along with any Request fees, to its Distributor for its review. The Distributor will in turn submit it to TVA. Requests will go through a process (Process) for allocating available capacity (complete information about the Request and the Process is located at the Program's website: <http://www.tvagreenpowerproviders.com>.) The same Process will apply to a Distributor who wishes to install a generation system on its facility and participate in the Program as a generator. After a customer receives notification of initial project approval, the customer will complete and submit to Distributor an interconnection application and a Green Power Providers Participation Agreement (Distributors will instead have to complete the Green Power Providers Distributor Facility Participation Agreement), in accordance with the Process, to become an Applicant. (The Green Power Providers Participation Agreement and the Green Power Providers Distributor Facility Participation Agreement will be referred to herein as "Participation Agreement.")

All Applicants must be the same person(s) or entity designated on the customer's power billing account that is associated with the single associated Billing Meter at the Address of Site (defined below). Each Applicant will be given the status of "Participant" upon full execution of a Participation Agreement by all parties, provided such Applicant qualifies for and meets, at the time TVA executes the Participation Agreement, the then-current participation requirements. In order to retain its status as a Participant, each Applicant must install its generating system (Qualifying System) in accordance with the Participation Agreement and the Guidelines. Once TVA has executed the Participation Agreement, (i) the Qualifying System must be fully interconnected and operational within one hundred eighty (180) Calendar Days of TVA's execution of the Participation Agreement, as indicated on Distributor's Acceptance of Qualifying System form (System Acceptance Form), and (ii) the Applicant will comply with the terms of the Participation Agreement.

GUIDELINE 2 - DEFINITION OF TERMS

As used in these Guidelines:

- 2.1 "Applicant" means any potentially eligible residential, commercial, or industrial customer served by Distributor (or a Distributor on its own behalf) that elects

- to apply for participation in the Program, after initial approval through the Process, by (i) submitting an interconnection request to Distributor, and upon Distributor's approval, entering into an Interconnection Agreement with Distributor, and (ii) submitting a completed Participation Agreement for TVA's and Distributor's review, approval, and execution.
- 2.2 "Billing Meter" means a retail billing meter located at the Site where the Participant's facility or dwelling is located. The Billing Meter must be fully operational and measure the billing demand and/or the energy consumed at the Site.
- 2.3 "Business Days" means all days except Saturdays, Sundays, and the weekdays that are observed by TVA as Federal holidays (Federal holidays currently include New Year's Day, Martin Luther King's Birthday, Presidents' Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day).
- 2.4 "Calendar Days" means all days in a month, including weekends and holidays.
- 2.5 "Delivery Commencement Date" means the date on which the Distributor has executed the System Acceptance Form.
- 2.6 "Generation Credit" means the accrued generation credits due to Participant, which will be calculated by applying the sum of the energy charge in the applicable retail rate schedule (residential (RS) or deemed to be GSA1 for all commercial and industrial customers) and the applicable Premium Rate to the kWh energy measured on the Generation Meter.
- 2.7 "Generation Meter" means a meter additional to the Billing Meter at the Site that is installed by Distributor and designed to measure the alternating current (AC) energy output from the Qualifying System at the Site. Generation Meter will mean either an Interval Generation Meter or a Non-Interval Generation Meter, or both.
- 2.8 "Interconnection Agreement" means the agreement executed by Applicant and Distributor to provide for the interconnection of the Qualifying System to Distributor's distribution system.
- 2.9 "Interval Generation Meter" means a solid-state type meter of high quality for billing purposes that records at least clock hour (hour interval) data and measures the energy output (kWh) from the Qualifying System at the Site; however, fifteen (15) -minute interval data is preferred. Furthermore, the Participant's applicable retail rate schedule may require a shorter interval.
- 2.10 "Non-Interval Generation Meter" means a solid-state type meter of high quality for billing purposes that measures the energy output (kWh) from the Qualifying System at the Site but does not meet the definition of Interval Generation Meter.
- 2.11 "Premium Rate" has the meaning set forth in Guideline 8.

2.12 "Site" means Participant's residential, commercial, or industrial real estate and associated personal property to which the Qualifying System is connected, the address of which is identified under the Participant's power billing account. In addition, the Site must meet all of the following requirements:

- (a) The property must receive its retail electricity distribution services from Distributor at the location of the Qualifying System;
- (b) The Qualifying System must be located on the same premises of Participant, where the Participant's own electrical load is located;
- (c) A maximum of 50 kW per contiguous property per Participant and/or Owner of the Qualifying System is permitted, subject to Guideline 3 below. Furthermore, the capacity of an existing system at the Site, with an effective participation agreement under the Generation Partners pilot (Pilot) or this Program, will be included in determining the maximum capacity referred to under this subsection 2.12(c);
- (d) A maximum of 50 kW per associated Billing Meter account at the Site, subject to Guideline 3 below; and
- (e) Meet the requirements set forth in the Participation Agreement and these Guidelines.

GUIDELINE 3 - CUSTOMER ELIGIBILITY AND LOAD REQUIREMENTS

3.1 Existing Distributor Customers

- (a) Existing Distributor customers must have at least twelve (12) months of historical energy usage (kWh) data from the Site.
- (b) The primary purpose of the Applicant's facility cannot be energy generation.
- (c) Qualifying Systems with a nameplate capacity of up to 10 kW (DC for inverter-based systems, AC for non-inverter-based systems) are deemed Fast Track projects. Fast Track projects will not be subject to any load or energy usage requirements, as they require a less stringent review, no usage history, and no distribution system impact study. However, if the nameplate capacity of the Qualifying Systems is greater than 10 kW (DC for inverter-based systems, AC for non-inverter-based systems), the system will be subject to energy usage requirements, as recorded by the single associated Billing Meter at the Site. In this case, the Qualifying System's nameplate capacity (Maximum Capacity) is limited to the lesser of (i) 50 kW or (ii) the kW capacity that is designed to annually generate no more than 100% of the Site's historical annual usage in kWh, as recorded by the associated Billing Meter at the Site. **[Note: A Site with multiple Billing Meters is limited to one Fast Track Qualifying System, unless otherwise approved by TVA after reviewing the load or energy usage requirements for each Billing Meter to which any additional Fast Track system is proposed to be connected.]**

- (d) A Pilot participant's Site will not qualify for participation in the Program if the participant has a currently effective participation agreement under the Pilot with a capacity that either exceeds (i) 50 kW or (ii) the kW capacity that is designed to annually generate more than 100% of the Site's annual usage in kWh, as recorded by the associated Billing Meter at the Site.

3.2 New Distributor Customers/New Construction

Provided Distributor agrees to offer the Program to its eligible customers or "new construction" market, and subject to the Program's terms and conditions, the following will apply:

- (a) For prospective new and existing customers without twelve (12) full months of historical usage, either the builder (Builder), for new construction, or existing customer, for customers without twelve (12) full months of historical electrical usage at the Site, must submit acceptable and reasonable annual electrical usage projections for its residential or commercial/industrial facility.
- (b) For new construction projects, a Builder must submit a Request for initial approval through the Process. Upon capacity approval, the Builder must complete and submit the "Request for Program Participation Eligibility of New Construction" to its Distributor for acceptance of its potential Qualifying System(s) into the Program. It is at Distributor's and TVA's discretion to approve or reject any submitted Request for Program Participation Eligibility of New Construction.
- (c) The Builder may receive a Program letter of intent (LOI) from Distributor and TVA, which guarantees the Builder's Qualifying System acceptance into the Program against the annual capacity limit, provided that (i) Distributor approves and allows for acceptance of new construction projects in the Program, (ii) the Qualifying System meets the eligibility requirements for the Program, and (iii) there is available capacity (MW) for the Program in the given year.
- (d) The LOI is contingent upon an official Participation Agreement being fully executed by the Participant, Qualifying System Owner (if different than the Participant), Distributor, and TVA within one hundred eighty (180) Calendar Days from the date of the LOI. Upon completion of a fully executed Participation Agreement, the Participant/Applicant must satisfy all of the requirements of the Participation Agreement and the Guidelines, including having the Qualifying System interconnected and fully operational within one hundred eighty (180) Calendar Days after TVA's execution of the Participation Agreement. The total project completion period (LOI and Participation Agreement) will not exceed three hundred sixty (360) Calendar Days. The Participant will receive the Premium Rate associated with the calendar year in which the Participation Agreement is executed by TVA. For existing customers without twelve (12) full months of electrical usage history, Applicant must provide Distributor with its

projected annual usage (kWh), in addition to the proposed nameplate capacity of the Qualifying System.

- (e) If the proposed nameplate capacity of the Qualifying System is greater than 10 kW (DC for inverter-based systems, AC for non-inverter-based systems), the system will be subject to projected Site energy usage requirements. In this case, the Qualifying System's proposed nameplate capacity is limited to the lesser of (i) 50 kW or (ii) the kW capacity that is designed to annually generate no more than 100% of the Applicant's/Participant's projected annual usage in kWh. **[Note: A Site with multiple Billing Meters is limited to one Fast Track Qualifying System, unless otherwise approved by TVA after reviewing the load or energy usage projection for each Billing Meter to which any additional Fast Track system is proposed to be connected.]**

As provided in this Guideline 3.2, the annual generation (kWh) projections for the Qualifying System must be provided to Distributor by an Applicant, or by any existing Participant with a nameplate capacity of 10 kW or less and who wishes to increase its Qualifying System's nameplate capacity to be above 10 kW. This Applicant or Participant must submit a professional estimate for expected generation, if available, which will be reviewed and subject to approval by Distributor and TVA. The following default annual capacity factors (%) will be used to determine the maximum nameplate capacity (kW) of any new or expanding Qualifying System.

- Solar PV – 15%
- Wind – 15%
- Low-Impact Hydropower – 50%
- Biomass – 70%

Example: A small commercial business' projected annual usage is 30,000 kWh on a single Billing Meter and it wishes to install a solar PV project in the Program. The maximum nameplate capacity for this business would be 23 kW DC since it would likely generate no more than 100% of the customer's annual usage on the single Billing Meter.

Solar PV Generation Example Default Calculation:

23 kW X 8,760 hours X 15% Annual Capacity Factor = 30,222 kWh
(round maximum kW to the nearest whole number)

GUIDELINE 4 - ELIGIBLE RENEWABLE TECHNOLOGIES

Participant must be able to demonstrate, on an ongoing basis, that the Qualifying System generates electricity from one of the resources (Qualifying Resources) included below:

- (a) Solar Photovoltaic (PV): Monocrystalline panels, polycrystalline panels, or thin film cells using fixed or single/dual axis tracking systems, which can be ground- or structure-mounted.
- (b) Wind: Turbines in conventional sizes for commercial-scale generation.

- (c) Low-Impact Hydropower: From new generation capacity on a non-impoundment or new generation capacity on an existing impoundment. Such generation must be located in the Cumberland River watershed or in the Mississippi River. Hydro generation could be located in the Tennessee River watershed only if TVA were to issue a permit under section 26a of the TVA Act. Additionally, such generation must meet one or more of the following conditions prior to requesting participation in the Program: (1) The hydropower facility is certified by the Low Impact Hydropower Institute, or (2) The facility is a run-of-the river hydropower facility with a total rated nameplate capacity equal to 50 kW or less (multiple turbines will not be counted separately and will not amount to more than the nameplate capacity); or (3) The hydropower facility consists of a turbine in a pipeline or a turbine in an irrigation canal. Furthermore, such generation must also meet any applicable FERC requirements.
- (d) Biomass: Solid, liquid, or gaseous form of renewable biomass that is produced from the following fuels in a manner that complies with applicable law: 1) all wood waste including “black liquor” from pulp and paper processing, mill residues, industrial waste wood, and waste wood from woodworking or wood processing, so long as the wood is not chemically treated or coated; 2) all agricultural crops or waste; 3) all animal and other organic waste; 4) all energy crops; and 5) landfill gas and wastewater methane.
- Biomass resources excluded from eligibility include:
 - (1) wood that has been coated with paints, plastics, or Formica;
 - (2) wood that has been treated for preservation with materials containing halogens (such as chlorine or other halide compounds) or arsenic (such as CCA or chromated copper arsenate);
 - (3) municipal solid waste; and
 - (4) biodiesel.

GUIDELINE 5 - PROGRAM RESTRICTIONS

No Qualifying System may be installed on billboards; light poles; cable, communication, or internet boxes; recreational vehicles; or mobile commercial/industrial facilities.

GUIDELINE 6 - PROCESS AND PROCEDURES

The process for participation in the Program is as follows:

- (a) Distributor customer consults with Distributor about participation in the Program.
- (b) After reading and understanding these Guidelines, the customer completes a Request for a capacity reservation and submits it to Distributor.
- (c) Upon capacity reservation approval through the Process, the customer applies for Program participation by submitting to Distributor: (i) an interconnection request, including any interconnection request fees, (ii) a completed Participation Agreement, and (iii) a Program application fee (not to exceed \$500 for residential customers and not to exceed to \$1,000 for commercial and industrial customers), thereby becoming an Applicant. Except as otherwise agreed to by TVA, any changes that deviate from the original Request submitted under section (b)

above, and approved by TVA in this section (c), will require a new Request for a capacity reservation, subject to the capacity available at the time of said new Request.

- (d) Participant purchases and installs the Qualifying System. Within one hundred eighty (180) Calendar Days of the date of TVA's execution of the Participation Agreement, the Qualifying System must be fully operational and Participant provides to Distributor the total project investment cost. In addition, installers of PV systems must provide the documentation described in Guideline 10.
- (e) Once Distributor submits and TVA approves the System Acceptance Form, Participant, if eligible per Guideline 7, will receive a one-time \$1,000 rebate incentive from either TVA or Distributor, depending on which billing option the Distributor has selected for the Participant in accordance with Guideline 9.
- (f) Participant's Qualifying System begins generation and Participant receives monthly credits for the renewable generation in accordance with the Participation Agreement.

GUIDELINE 7 - PROGRAM INCENTIVES

Eligible Participants will receive the following:

- (a) A one-time \$1,000 rebate incentive after the Qualifying System is installed, completed, interconnected, commissioned, and begins energy generation (the Delivery Commencement Date). The one-time rebate incentive is limited to residential Participants only and will be paid per Qualifying Resource type per Site. Furthermore, a residential Participant's Site with multiple systems of the same qualifying resource type will be entitled to only one \$1,000 rebate incentive.
- (b) Monthly Generation Credits.

Note that the Premium Rate is dependent upon the date and calendar year that the Participation Agreement is executed by TVA for participation in the Program. Furthermore, the Premium Rate will apply only to the first ten (10) years from Delivery Commencement Date; no Premium Rate will be paid for the remaining term of the Participation Agreement.

GUIDELINE 8 - PREMIUM RATE

The Premium Rate to be applied in the calculation of a Participant's monthly Generation Credits will vary based on the renewable technology and the calendar year in which TVA executes the Participation Agreement. For the 2015 calendar year, the following Premium Rate is applicable to Participation Agreements executed and dated by TVA from January 1, 2015 through December 31, 2015. **[Note: in order to receive said Premium Rate, the Qualifying System(s) must be completed, installed, and generating at full capacity within 180 Calendar Days from the date TVA executes the Participation Agreement].**

Renewable Resource	2015 Premium Per kWh
Solar, Wind, Biomass, and Hydro	\$0.02

TVA will endeavor to approve and execute any completed and acceptable Participation Agreements that Distributor and Participant have already executed, or return any incomplete or otherwise unacceptable Participation Agreement requests, within twenty (20) Business Days from the date said Participation Agreement requests are received by TVA.

In order to provide a sustainable, steady, and transparent path for small scale renewable generation, as well as to align power purchases with Green Power Switch demand, TVA will review the Program and incentives annually and will endeavor to publish revised Guidelines at Program's website (<http://www.tvagreenpowerproviders.com>) one (1) month prior to changing the Premium Rate and incentives. TVA reserves the right to change the projected Premium Rates for future Participation Agreements, and Applicants and Participants assume the risk of TVA establishing differing Premium Rates when TVA revises these Guidelines for future years. Such changes will not affect fully executed Participation Agreements.

Example: A solar project is installed and completed by a Participant in accordance with the Participation Agreement and Guidelines. TVA executes the Participation Agreement on March 25, 2015. According to the 2015 Premium Rates above, the Participant may receive a premium of \$0.02/kWh for the first ten years from the Delivery Commencement Date, and there is no effective premium for years 11-20. TVA will pay the applicable retail rates only (Residential (RS) or GSA1) for energy generated in the subsequent ten-year term of the Participation Agreement. All environmental attributes (RECs) are purchased by TVA for the term of the Participation Agreement.

GUIDELINE 9 - BILLING AND INCENTIVE DISTRIBUTION

As stated in the Participation Agreement, each Distributor is required to elect either the Distributor Billing Option or TVA-Vendor Billing Option. Generation Credits and incentives will be credited or paid to each Participant accordingly.

Under the Distributor Billing Option, the Distributor issues the total Generation Credit and applies it to the Participant's monthly electric power bill. In addition, the Distributor provides the one-time \$1,000 rebate incentive, described in Guideline 7(a), to qualified Participants after the Delivery Commencement Date.

Under the TVA-Vendor Direct Billing Option, Participants receive a portion (retail rate portion only) of their monthly Generation Credit from their Distributor via the monthly electric power bill. The Premium Rate portion of the Generation Credit will be issued, on a monthly basis, to the Participant through a TVA-designated third-party vendor. The TVA-designated third-party vendor will also issue the one-time \$1,000 rebate incentive, described in Guideline 7(a), to eligible Participants once Distributor submits and TVA approves the System Acceptance Form..

GUIDELINE 10 - INSTALLERS

For Participation Agreements executed by TVA in the 2015 calendar year, all solar photovoltaic (PV) must be designed, inspected, and approved by installers who have completed at least one of the following requirements:

- (a) Installers must have completed the North American Board of Certified Energy Practitioners (NABCEP) Entry Level Program and have received an Achievement Award, or
- (b) Installers must have completed the requirements and standards of the NABCEP to become a Certified Professional PV Installer.

As part of the initial application for interconnection, qualified installers must submit either a copy of their Achievement Award or NABCEP Certificate to the Distributor. A list of NABCEP installers is posted at www.nabcep.org.

Furthermore, for Participation Agreements executed by TVA beginning January 1, 2016, all solar PV installations must be designed, inspected, and approved by installers who have completed the NABCEP solar PV installer certification program and received a certificate from NABCEP. TVA will no longer accept projects installed by those who have only completed the NABCEP Entry Level program and passed the entry-level installer examination. Application deadlines and exam schedules are posted at www.nabcep.org.

GUIDELINE 11 - QUALIFYING SYSTEM CAPACITY MODIFICATIONS

If a Participant wishes to increase its Qualifying System's approved nameplate capacity, the Participant must complete a Request and submit it to Distributor and TVA for initial approval through the Process. Upon capacity approval, Participant must complete a Request to Amend Participation Agreement to Modify Capacity of Qualifying System, submit it to the Distributor and TVA for review, and obtain the approval of both Distributor and TVA prior to making any modifications to the system. A Request to decrease the nameplate capacity of existing Qualifying System(s) does not require initial approval through the Process; instead, completing Request to Amend Participation Agreement to Modify Capacity of Qualifying System and submitting it to Distributor and TVA for review/approval prior to making any modifications to the system is sufficient. Additionally, any requested increases in nameplate capacity, if approved, must be completed and the entire modified Qualifying System must be fully operational and interconnected within one hundred eighty (180) Calendar Days of TVA's execution of Request to Amend Participation Agreement to Modify Capacity of Qualifying System. Additionally, the Participant is responsible for any associated expenses incurred due to said capacity increase or decrease, such as Site inspections, reviews, and processing. TVA will perform periodic audits of the generation submitted to TVA by Distributor. Upon review of the generation, TVA and Distributor may determine that a Site visit is necessary. If an audit or Site visit reveals unauthorized increases to the nameplate capacity of a Qualifying System, said unauthorized increases may result in any or all of the following: (i) change to or suspension of Generation Credits, (ii) reimbursement due

to Distributor/TVA for Generation Credits received for excess capacity, and/or (iii) termination of the Participation Agreement.

GUIDELINE 12 - ANNUAL PROGRAM PARTICIPATION LIMITS

TVA will conduct an annual Program evaluation and will set annual MW limits that provide sustainable growth of renewable capacity in alignment with the Green Power Switch program participation and demand as well as TVA’s Integrated Resource Plan. The Program participation limit for the 2015 calendar year is 10 MW.

As Participation Agreement requests are approved and projects completed, TVA will publish the progress toward the annual MW limit on the Program’s website (<http://www.tvagreenpowerproviders.com>).

To ensure diverse and equitable Program participation by market segment for calendar year 2015, the total capacity reservation in calendar year 2015 for residential Participants is limited to 40% of available capacity. The total capacity reservation in calendar year 2015 for non-residential Participants is limited to 60% of available capacity.

Calendar Year	Market Segment	Capacity Amount (MW)
2015	Residential Participants	4
	Non-Residential	6

The capacity reservation amounts for residential and non-residential Participants and the total Program limits will be reviewed and adjusted annually, as appropriate, to reflect Program participation and market conditions. The currently effective Program limits and reservations outlined in the table above and may be adjusted upon thirty (30) Calendar Days’ notice to Distributor.

Once a Distributor and a Participant have signed a Participation Agreement request and presented it to TVA for review and execution, TVA will be under no obligation to execute said Participation Agreement if it does not conform to the requirements set forth in the Participation Agreement and Guidelines, notwithstanding any actions taken and expenses incurred to date by the Applicant and Distributor.

GUIDELINE 13 - TRUST/POWER OF ATTORNEY/LEGAL DOCUMENT

When a Participant or Qualifying System Owner represents that there is a legal document relevant to the terms of the Participation Agreement, the Participant or Qualifying System Owner must provide the Distributor with the original legal document. Distributor will then make a copy of said legal document and attach it to the Participation Agreement. TVA’s decision on the legal effect of said legal document will be controlling.

GUIDELINE 14 - PARTICIPANT DEATH OR INCAPACITY

Upon Participant’s death or incapacity, if Participant’s estate executor, conservator, attorney in fact, or court ordered agent (herein referred to as Agent) wishes to continue

the terms and conditions of the Participation Agreement and Guidelines, Agent must complete the Request to Amend Participation Agreement by Changing Participant and/or Qualifying System Owner and forward it to Distributor and TVA for review and execution; otherwise, the Participation Agreement will be terminated and any new owner of Site must reapply for Program participation in accordance with the then-current Participation Agreement and Guidelines.

GUIDELINE 15 - GUIDELINES CHANGES

These Guidelines continue in effect until modified or replaced by TVA upon thirty (30) Calendar Days' notice to all Distributors participating in the Program. Said notice will be deemed properly given if provided electronically either by electronic mail or by posting electronically on a computer-based information system designated by TVA for such purpose. In the event of a conflict between these Guidelines, the Green Power Providers Agreement, a Participation Agreement, or any other contract executed by TVA, the Green Power Providers Agreement will govern. In the event of a conflict between these Guidelines and a former version of the Guidelines (including a version of the Guidelines that was in effect at the time any contract was signed), these Guidelines will govern. TVA will publish any changes or modifications to the Guidelines online at Program's website (<http://www.tvagreenpowerproviders.com>).