### GREEN POWER PROVIDERS PROGRAM PARTICIPATION GUIDELINES

(Effective January 1, 2013)

# **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 region. 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. These customers (Applicants) can apply for participation in the Program by completing the Green Power Providers Participation Agreement, and Distributors (in such circumstances also herein referred to as Applicants) can apply for participation as generators under the Green Power Providers Distributor Facility Participation Agreement (both agreements herein referred to as Participation Agreement), and submitting it to Distributor and TVA for review and potential approval and execution. 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 this Green Power Providers Program Participation Guidelines document (Guidelines). Once TVA has executed the Participation Agreement, 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 Applicant shall comply with the terms of the Participation Agreement.

### **GUIDELINE 2 - DEFINITION OF TERMS**

As used in these Guidelines:

- 2.1 "Applicant" shall mean any potentially eligible residential, commercial, or industrial customer served by Distributor (or a Distributor itself on its own behalf) that elects apply for participation in the Program 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 copy of the Participation Agreement for TVA's and Distributor's review and potential approval and execution.
- 2.2 "<u>Billing Meter</u>" shall mean a retail billing meter located at the <u>Site</u> where the <u>Participant</u>'s facility or dwelling is located. The <u>Billing Meter</u> must be fully operational and measure the billing demand and/or the energy consumed at the Site.

- 2.3 "Business Days" shall mean all days except Saturdays and Sundays and the weekdays that are observed by TVA as Federal holiday (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" shall mean all days in a month, including weekends and holidays.
- 2.5 "<u>Delivery Commencement Date</u>" shall mean the date on which the Distributor has executed the System Acceptance Form.
- 2.6 "Generation Credit" shall mean the accrued generation credits due to Participant, which shall 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" shall mean 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 shall mean either an Interval Generation Meter or a Non-Interval Generation Meter, or both.
- 2.8 "<u>Interconnection Agreement</u>" means the agreement executed by <u>Applicant</u> and Distributor to provide for the interconnection of the Qualifying System to Distributor's distribution system.
- 2.9 "Interval Generation Meter" shall be 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; provided, however; it is recognized that fifteen (15) -minute interval data is preferred. It is further expressly recognized that the Participant's applicable retail rate schedule may require a shorter interval.
- 2.10 "Non-Interval Generation Meter" shall be 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 which does not meet the definition of Interval Generation Meter.
- 2.11 "Premium Rate" shall have the meaning set forth in Guideline 8.
- 2.12 "Site" shall mean 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) Maximum of 50 kW per contiguous property per Participant, subject to Guideline 3 below: and
- (d) Maximum of 50 kW per associated <u>Billing Meter</u> account at the <u>Site</u>, subject to Guideline 3 below.

In addition, the <u>Site</u> shall 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 annual energy usage (kWh) data from the <u>Site</u>.
- (b) The primary purpose of the <u>Applicant</u>'s residential, commercial, or industrial 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, which will require a less stringent review, will not require usage history and distribution system study of impacts, and are not subject to any load or energy usage requirements. 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 is limited to the lesser of (i) 50 kW or (ii) the kW capacity that is designed to generate annually 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.

#### 3.2 New Distributor Customers/New Construction

Provided Distributor agrees to offer the Program to its prospective eligible customers or "new construction" market and subject to the Program's terms and conditions, the following shall 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 <u>Site</u>, must submit acceptable and reasonable annual electrical usage projections for its residential or commercial/industrial facility. For new construction projects, the Builder must complete and submit the "Request for Program Participation Eligibility of New Construction" (New Construction Request Form or Attachment E) to its Distributor for acceptance of its potential Qualifying System(s) into the Program. It is expressly recognized and understood that it is at Distributor's and TVA's discretion to approve or reject any submitted Attachment E.

- (b) 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 the Qualifying System is fully operational and interconnected (as identified on the System Acceptance Form) within 360 <u>Calendar Days</u> from the date of the LOI and 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.
- (c) The LOI is contingent upon an official Participation Agreement being fully executed between the Participant, Qualifying System Owner (if different than the Participant), Distributor, and TVA within one hundred eighty (180) <u>Calendar Days</u> from the date of the LOI. Upon completion of a fully executed Participation Agreement, the Participant/<u>Applicant</u> 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) <u>Calendar Days</u> after TVA's execution of the Participation Agreement. The total project completion period (LOI and Participation Agreement) is 360 <u>Calendar Days</u>. The Participant will receive the <u>Premium Rate</u> associated with the calendar year in which the Participation Agreement is executed by TVA.
- (d) For existing customers without twelve (12) full months of electrical usage history, <u>Applicant</u> must provide Distributor with its projected annual usage (kWh), in addition to the proposed nameplate capacity of the Qualifying System.
- (e) Proposed "Fast Track" projects are not subject to any load or energy usage requirements. However, if the proposed nameplate capacity of the <u>Qualifying System</u> is greater than 10 kW (DC for inverter-based systems, AC for non-inverter-based systems), the system will be subject to projected <u>Site</u> 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 generate annually no more than 100% of the <u>Applicant's/Participant's projected annual usage in kWh, as recorded by the associated <u>Billing Meter</u> at the <u>Site</u>. NOTE: A <u>Site</u> with multiple <u>Billing Meters</u> is limited to one "Fast Track" Qualifying System.</u>

As provided in this Guidelines 3.2, the annual generation (kWh) projections from the Qualifying System must be provided to Distributor by an <u>Applicant</u>, 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 <u>Applicant</u> or Participant must submit a professional estimate for expected generation, if available, which shall be reviewed and subject to approval by Distributor and TVA. The following default annual capacity factors (%) shall 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 groundor 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: (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 shall 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/internet boxes, recreational vehicles, or mobile commercial/industrial facilities.

### **GUIDELINE 6 - PROCESS AND PROCEDURES**

- (a) Distributor customer consults with Distributor about participation in the Program.
- (b) Distributor 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), thereby becoming an <u>Applicant</u>.
- (c) Participant purchases the Qualifying System and installs it so that it is fully operational within one hundred eighty (180) <u>Calendar Days</u> of the date of TVA's execution of the Participation Agreement.
- (d) After the installation of the Qualifying System is completed and Distributor has submitted the System Acceptance Form, upon TVA's approval of the System Acceptance Form, Participant 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.
- (e) 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) One-time \$1,000 rebate incentive after the Qualifying System is installed, completed, interconnected, commissioned, and begins energy generation (the Delivery Commencement Date).

# (b) Monthly Generation Credits.

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

## **GUIDELINE 8 - PREMIUM RATE**

The <u>Premium Rate</u> to be applied in the calculation of a Participant's monthly <u>Generation Credits</u> will vary based on the renewable technology, and the date and calendar year on which TVA executes the Participation Agreement. For the 2013 calendar year, the following <u>Premium Rate</u> is applicable to Participation Agreements executed and dated by TVA on or after January 1, 2013 but on or prior to December 31, 2013. [Note, however, that the Qualifying System(s) must be completed, installed, and generating at full capacity within 180 <u>Calendar Days</u> from the date TVA executes the Participation Agreement, in order to receive said <u>Premium Rate</u>].

Renewable Resource	2013 Premium Per kWh
Solar	\$0.09
Wind, Biomass, and Hydro	\$0.03

TVA will endeavor to approve and execute any completed and acceptable Participation Agreements that Distributor and Participant have already executed within twenty (20) <a href="Business Days"><u>Business Days</u></a> from the date said Participation Agreements are received by TVA. TVA will endeavor also to return any incomplete or otherwise unacceptable Participation Agreements within the same timeframe.

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 a revised Guidelines document online at Program's website

(<a href="http://www.tvagreenpowerproviders.com">http://www.tvagreenpowerproviders.com</a>) one (1) month prior to changing the <a href="https://www.tvagreenpowerproviders.com">Premium Rate</a> and incentives. TVA reserves the right to change the current projected <a href="https://www.tvagreenpowerproviders.com">Premium Rates</a> Premium Rates for Participants assume the risk of TVA establishing differing <a href="https://www.tvagreenpowerproviders.com">Premium Rates</a> for future years when TVA revises these Guidelines. Such changes will not affect fully executed Participation Agreements.

**Example**: a solar project is installed and completed by an eligible Participant in accordance with the terms and conditions of the Participation Agreement and its attached Guidelines document. The Participation Agreement for such solar system was executed by all parties and the date TVA executed the Participation Agreement was January 25, 2013. According to the 2013 Premium Rates above, the Participant may receive a premium of \$0.09/kWh for the first ten years from the Delivery Commencement Date, and there will be 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**

Each Distributor is required to elect either the Distributor Billing Option or TVA-Vendor Billing Option, as defined in the Participation Agreement, and <u>Generation Credits</u> and incentives will be credited or paid to each Participant accordingly.

Under the Distributor Billing Option, the Distributor issues the total <u>Generation Credit</u> to the Participant's monthly electric power bill. In addition, the Distributor provides the one-time \$1,000 rebate incentive to the Participant after the <u>Delivery Commencement Date</u>.

Under the TVA-Vendor Direct Billing Option, Participants receive a portion (retail rate portion only) of their monthly <u>Generation Credit</u> from their Distributor via the monthly electric power bill. The <u>Premium Rate</u> portion of the <u>Generation Credit</u> 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 to the Participant after system commissioning.

## **GUIDELINE 10 - INSTALLERS**

For Participation Agreements executed by TVA beginning January 1, 2013, all solar photovoltaic (PV) and wind installations must be completed by installers who have completed at least one of the following requirements:

- (a) (for solar PV or wind projects) completed participation in the North American Board of Certified Energy Practitioners (NABCEP) Entry Level Program and passed the entry-level installer examination as certified by an Achievement Award distributed by NABCEP once a passing score has been achieved, or
- (b) (for solar PV projects) completed the requirements of the NABCEP PV installer certification as certified by an Certificate distributed by NABCEP once an individual has satisfied the requirements and standards for the Certified Solar PV Installer credentials established by the NABCEP Board of Directors, or
- (c) (for wind projects) completed the requirements of the NABCEP Small Wind installer certification as certified by an Certificate distributed by NABCEP once an individual has satisfied the requirements and standards for the Certified Small Wind Installer credentials established by the NABCEP Board of Directors.

Note that proof of eligibility (Achievement Award or Certificate) will be required prior to the commissioning of the system. Qualified installers must submit either a copy of their Achievement Award or NABCEP Certificate to the Distributor as part of the initial application for Interconnection submittal. A list of NABCEP installers is posted at <a href="https://www.nabcep.org">www.nabcep.org</a>.

## **GUIDELINE 11 - QUALIFYING SYSTEM EXPANSION**

Any capacity upgrades or additions to an existing Qualifying System's approved nameplate capacity are subject to TVA's and Distributor's approval. Participant must complete Attachment D (Request to Amend Participation Agreement to Modify Capacity

of Qualifying System form), 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. Capacity expansions will be subject to available Program capacity in the given year. Additionally, any requested increases or additions 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) <u>Calendar Days</u> of acceptance and approval of the modification by TVA, as indicated by the date of TVA's execution of Attachment D. Additionally, the Participant is responsible for any associated expenses incurred due to said capacity expansion(s), such as <u>Site</u> inspections, reviews, and processing.

### **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.

Participation Agreements will be reviewed and enter a queue for allocation of available Program capacity on a first-come, first-serve basis, as determined by the date Participation Agreements are received and deemed complete by TVA for potential approval and execution. In order to ensure sufficient time to review and process newly submitted Participation Agreements, TVA shall stop accepting Participation Agreements submitted to it on December 1<sup>st</sup> of each calendar year. TVA shall resume, on January 1<sup>st</sup> of the following calendar year, accepting new Participation Agreements, for its review and potential approval, in accordance with the then-current Program requirements.

TVA will publish the progress towards the annual MW limit on the Program's website (<a href="http://www.tvagreenpowerproviders.com">http://www.tvagreenpowerproviders.com</a>). If and when the MW limit for any given year is reached, TVA will publish on the Program's website such news as soon as it becomes available and stop accepting Participation Agreements for that particular year. TVA will announce and notify the public via the Program's website if eligible capacity becomes available in that same year and may start accepting new Participation Agreements.

The 2013 MW limit is 7.5 MW of nameplate capacity for Participation Agreements approved, executed, and dated by TVA in calendar year 2013. To ensure diverse and equitable participation in the Program for calendar year 2013, the "Fast Track" MW reservation for Qualifying Systems will constitute a total of no less than 20%, or 1.5 MW, of the total 7.5 MW limit in calendar year 2013.

Both the "Fast Track" reservation amount and the total Program limits will be reviewed annually and adjusted as appropriate based on Program participation and market conditions. The currently effective Program limits and reservations are outlined in the table below.

Calendar Year	Fast Track MW Reservation	Total Program MW Limit
2013	1.5	7.5

Once a Distributor and a Participant have signed a Participation Agreement and presented it to TVA for review and possible execution, TVA shall be under no obligation to execute said Participation Agreement once the MW limit for that year has been

reached, notwithstanding any actions taken and expenses incurred to date by the Applicant and Distributor.

# **GUIDELINE 13 - TRUST/POWER OF ATTORNEY/ LEGAL DOCUMENT**

In all instances when the Participant or Qualifying System Owner represents there is a legal document relevant to the terms of the Participation Agreement, the Participant or Qualifying System Owner shall provide the Distributor with the original legal document. Distributor shall 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 shall 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 collectively Agent) wishes to continue with the terms and conditions of the Participation Agreement and Guidelines, Agent shall complete the Request to Amend Participation Agreement by Changing Participant and/or Qualifying System Owner (Attachment C) and forward it to Distributor and TVA for review and potential approval and execution; otherwise, the Participation Agreement shall be terminated and any new owner of <u>Site</u> 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 at any time and from time to time upon thirty (30) <u>Calendar Days</u> notice to all Distributors participating in the Program. Said notice shall 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 shall 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 shall govern. TVA will publish any changes or modifications to the Guidelines online at Program's website (<a href="http://www.tvagreenpowerproviders.com">http://www.tvagreenpowerproviders.com</a>).