

Overview of Renewable Standard Offer

This Overview for the Renewable Standard Offer, for the purchase of renewable energy, is provided only to assist you by giving a general overview. Please note that the Overview does not contain the full details of the Renewable Standard Offer and is not binding on TVA.

Further, TVA may change, modify, amend, or update the Renewable Standard Offer at any time and without notice. While TVA will endeavor to keep the Overview current, TVA cannot guarantee its accuracy or completeness.

Please refer to the Renewable Standard Offer Contract for the most up-to-date, binding terms and conditions.

Capitalized terms used in this Overview that are not defined within have the meanings given in the Renewable Standard Offer Contract and the Guidelines for Renewable Standard Offer.

INTRODUCTION

TVA is joining a growing number of utilities in the United States that are offering programs to increase the penetration of renewable energy in its service territory. The Renewable Standard Offer for purchase of renewable electric energy is similar to feed-in tariffs used in Europe and in at least five states in the United States, as well as a number of cities and other utilities. The Renewable Standard Offer is designed for developers of renewable energy projects greater than 50 kW, and less than or equal to 20 MW. Developers of projects less than or equal to 50 kW should investigate TVA's Green Power Providers; and developers of projects larger than 20 MW should investigate the Unsolicited Proposal Process or the Dispersed Power Production (DPP) Program.

The Renewable Standard Offer has been designed using guidance from TVA's Board concerning the terms by which TVA may purchase renewable energy. All of the major renewable power generating technologies, including solar photovoltaic, wind, biomass gasification, and mature renewable technologies, such as biomass direct combustion, methane recovery, and co-firing of 50% or more liquid and gaseous biomass, are covered under this program. The Renewable Standard Offer will accept up to 100 MW in 2013, but no single technology can exceed 50% of total Renewable Standard Offer capacity. Review of quantity caps and pricing will occur at least annually, and when a quantity block is fully subscribed.

The Renewable Standard Offer Overview is intended to provide:

- Potential renewable project Applicants with a simplified version of the Renewable Standard Offer Guidelines
- Overview for developing a renewable energy project under the Renewable Standard Offer
- Guidance to potential Renewable Standard Offer Applicants in preparing for the Renewable Standard Offer application process

The Renewable Standard Offer Application Instructions will help guide you through the process for completing and submitting an application form.

This document also provides an overview of the scope of the requirements for developing a renewable energy project under the Renewable Standard Offer. However, it is not intended to provide a complete listing of all the requirements which are defined in the Renewable Standard Offer Guidelines and the Renewable Standard Offer Contract. Defined Terms listed in Appendix A of the Renewable Standard Offer Guidelines are identified with capitalized words.

Before applying for a Renewable Standard Offer Contract, you should investigate all of the requirements for owning and operating a renewable generating facility, including determining a business structure, obtaining financing, securing an interconnection, necessary local, state, federal, and other jurisdictional permits, assessing business income and property tax impacts, and tracking costs and revenues. Consulting with experienced professionals prior to making a significant investment is strongly advised.

SECTION 1: REVIEW OF RENEWABLE STANDARD OFFER

1.1 Renewable Standard Offer Criteria

a. Eligibility Requirements

What projects are eligible to apply for a Renewable Standard Offer contract?

The Renewable Standard Offer is open to project sizes greater than 50 kW and less than or equal to 20 MW, and a variety of fuel types. Principal requirements state that the Project must be new, must be located within the TVA Power Service Area, and must not have sold renewable energy to TVA prior to October 1, 2010.

Qualifying renewable fuel sources include:

- Solar Photovoltaic
- Wind
- Qualified Biomass resources

Qualified Biomass includes solid, liquid, or gaseous forms of renewable biomass from the following: a) 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; b) All agricultural crops or waste; c) All animal and other organic waste; d) All energy crops; and e) Landfill gas and wastewater methane.

Biomass co-firing is allowed, provided that a Project uses at least 50% qualified biomass, the biomass is in a liquid or gaseous state, and the quantity of biomass used for generation can be verified on an on-going basis. Only the electricity produced from biomass is eligible under the Renewable Standard Offer; the remainder will be purchased at prices that are equal to the applicable CSPP prices payable by TVA under its Dispersed Power Production Program. A co-firing project cannot exceed 20 MW in capacity.

b. Capacity Blocks

The Renewable Standard Offer is currently available for 100 MW in 2013 with no technology or technology grouping accounting for more than 50% of the total amount. Projects approved beginning January 1, 2013 will receive the new price structure and terms and conditions. TVA reserves the right to alter this allocation at any time. Blocks will be filled on a first-come first-serve basis; Applications in excess of a capacity block limit will be placed on a waiting list. Technology groupings for capacity blocks are as follows:

- Solar Photovoltaic
- Wind
- Direct combustion or co-firing of Qualified Biomass resources -

- minimum 50% (excluding methane recovery)
- Methane recovery from landfill gas, wastewater treatment, or livestock operations
- Qualified Biomass Gasification (excluding methane recovery).

c. Pricing and Price Schedule

Pricing under the Renewable Standard Offer will be for a bundle of energy, ancillary services, capacity attributes, RECs (Renewable Energy Credits), and additional/future environmental attributes. Prices will vary by season and time of day. The same prices will apply to all technologies, with the average hourly base price escalated annually by a constant percentage over the length of the contract. As a result, technologies that operate during peak hours (e.g. solar) will receive the benefit of higher prices during those periods. A sample price table is included as Attachment A.

The price incorporated into the Renewable Standard Offer Contract will be offered to Applicants whose Applications have been accepted; the applicable price schedule will be set as of the date of the Contract Issue Notice. Price schedules are updated, at least annually; however, any revisions will not affect Renewable Standard Offer Contracts previously executed.

d. Contract Length

The contract term for projects approved beginning January 1, 2013 is 20 years. TVA reserves the right to change what contract lengths it is offering at any time; however, these modifications will not affect any executed Renewable Standard Offer Contracts.

e. Program Review

TVA intends to review and amend, as necessary, the Renewable Standard Offer, Renewable Standard Offer Guidelines, Renewable Standard Offer Contract, and price schedule at regular annual intervals. Notwithstanding an annual review, TVA may also, at any time, make changes to the Renewable Standard Offer (including substantial changes or a suspension or termination of the Renewable Standard Offer), the Renewable Standard Offer Guidelines, the form of the Renewable Standard Offer Contract, or the price schedule. Amendments outside of the annual review may be in response to changes in laws and regulations, significant changes in market conditions, or other circumstances as required. Subsequent changes to the program will not affect any executed Renewable Standard Offer Contracts.

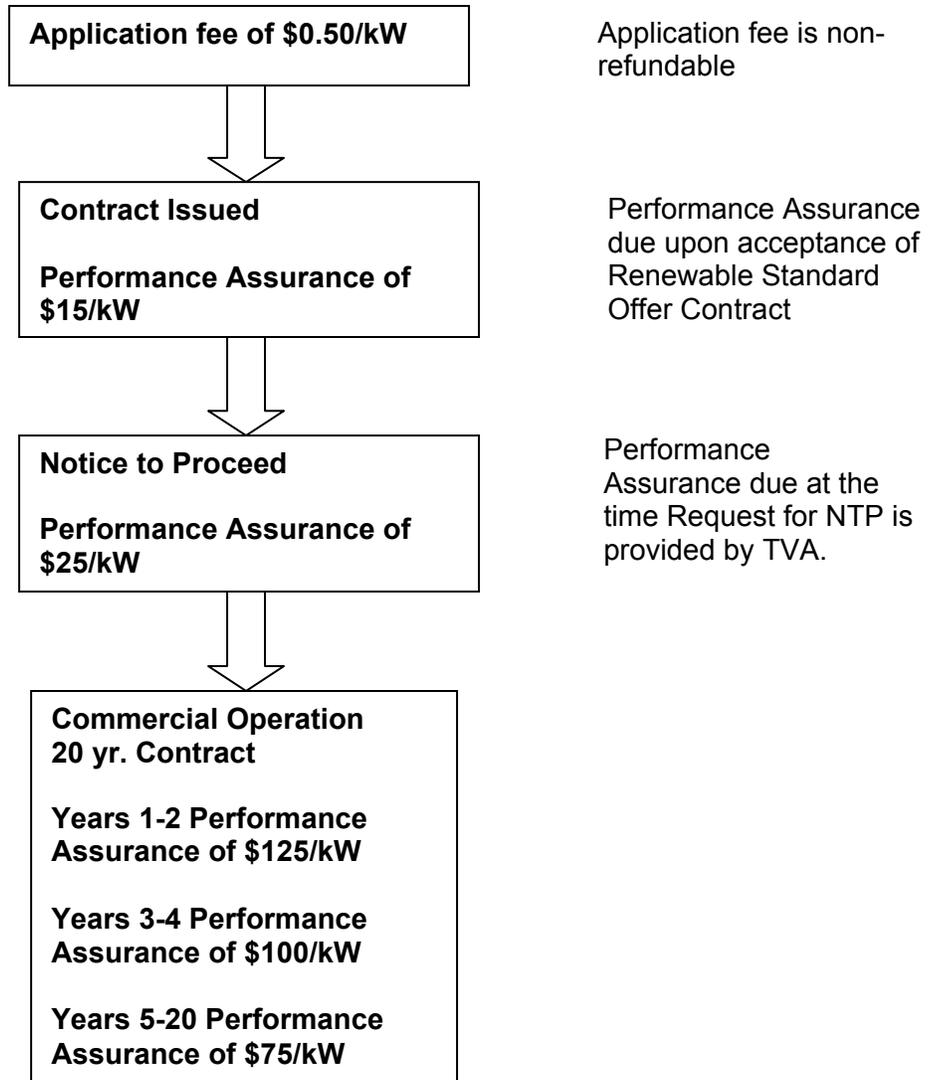
f. Confidentiality

Prospective Applicants to the Renewable Standard Offer Program should be aware that the information provided to TVA is subject to the Freedom of Information Act (FOIA), and may become generally available to the public. Information that a Renewable Standard Offer Applicant considers to be commercially sensitive or otherwise

confidential should be clearly marked as such; however, this designation does not guarantee that it will not need to be released under FOIA.

1.2 Fees and Security

Several payments are due to TVA at various stages of the application and contract processes. The diagram on the next page summarizes the required application fee and performance assurances.



Performance Assurance Example: 200 kW, 20 Year Project			
Contract Issued:			\$3,000
Notice to Proceed:			\$5,000
Commercial Operation:	Years 1-2:		\$25,000
	Years 3-4:		\$20,000
	Years 5-10:		\$15,000
Note: Total maximum performance assurance required at any given time throughout example is \$25,000.			

The Performance Assurance payments must be in one of the following forms:

- Cash (cashier's check, bank wire, or ACH debit)
- Irrevocable standby Letter of Credit issued by a Qualified Bank.
- Guaranty from a Qualified Guarantor.

Liquidated damages will be assessed against the Performance Assurance in the event the Seller does not meet its obligations under the Renewable Standard Offer Guidelines and the Renewable Standard Offer Contract.

1.3 Interconnection Availability

All interested Applicants are strongly encouraged to consult with the applicable Distributor (where appropriate) and TVA Transmission Reliability and Operations procedures, prior to submitting an Application, to determine the likelihood that their Project can be interconnected and begin operation consistent with the Renewable Standard Offer program timeline. Depending on the location of the Project, an interconnection can be very costly or lengthy. Individual Distributors will have their own requirements for interconnection, and these may vary from Distributor to Distributor. Procedures for small generators wishing to interconnect to TVA, for generating facilities no larger than 20 MW, are available on TVA's OASIS Website; see <http://www.oatiaoasis.com/tva/tvdocs/TVASGIP.pdf>. Applicants are responsible for all Interconnection Costs, whether through a Distributor or TVA, including system impact studies, metering, system upgrades and expansions, and operating and maintenance for facilities used in interconnection.

1.4 Environmental Review and Acceptability

All interested parties are urged to consult with the National Environmental Policy Act (NEPA) compliance procedures at TVA prior to submitting an Application to determine the likelihood that their project can be reviewed for environmental acceptability consistent with the desired timeline. This process typically involves preliminary determinations by TVA of: 1) whether or not provisions of NEPA and related laws apply to the decision; and 2) if so, which of three levels of review would be initiated. TVA's implementing procedures for NEPA are available at http://www.tva.com/environment/reports/pdf/tvanepa_procedures.pdf. A short description of TVA's NEPA process is also included in Appendix B of the Renewable Standard Offer Guidelines. Applicants are responsible for all costs associated with the conduct of, and preparation of documentation for, the appropriate level of environmental review.

SECTION 2: SUBMITTING AN APPLICATION FOR POWER PURCHASE AGREEMENT

Applications, along with instructions, are available on TVA's website (<http://www.tva.gov/renewablestandardoffer/>), via mail request through Renewable Standard Offer, 1101 Market Street, LP 3D, Chattanooga, TN 37402-2801, or via email request at renewablestandardoffer@tva.gov. An application package must include the following:

- Two hard copies and one scanned electronic copy of your signed application form and all supporting materials
- Supporting materials include:
 - Application checklist
 - Authorization letter for TVA to request confirming information from the designated Distributor
 - Evidence of site access rights to a Project site
- Application fee

Upon determination by TVA that a Project meets the Project and Application eligibility requirements of the Renewable Standard Offer, an Application will be assigned a Date Stamp and reference number. All Applications will be processed on the basis of the Date Stamp, i.e., the order in which they were received. TVA may request clarification or additional information on a specific Application, but is not obligated to do so. Applicants must provide the additional information within ten (10) Business Days of the request.

Incomplete Applications will be rejected, and the Application Fee and the Date Stamp forfeited. However, the Applicant can re-apply once the Application is complete. This will be considered a new Application and the Applicant will be assigned a new Date Stamp.

Applicants need to be aware that they are solely responsible for ensuring the technical, regulatory, and financial viability of their Projects, and that TVA has no responsibility whatsoever to independently assess the viability of any Application or Project, nor any liability whatsoever in the event that a Project turns out not to be viable in any respect. TVA may reject an application if it concludes the application does not support the program's goals of encouraging diversity of generation sources and dispersed power production. A decision by TVA to accept or reject an Application will be final and binding and not subject to appeal. Submission and acceptance of an Application does not create any binding obligation between TVA and the Applicant. The Renewable Standard Offer Contract is the only document that creates a legal obligation between the two parties.

SECTION 3: CONTRACT AND MILESTONES

3.1 Contract Issuance and Acceptance

TVA will notify Applicants by issuance of a Renewable Standard Offer Contract once it has been determined that an Application has met the Renewable Standard Offer requirements and that the Project will not exceed the technology-specific quantity block. Upon issuance of the

Renewable Standard Offer Contract, the Applicant has ten (10) Business Days to accept the Renewable Standard Offer Contract and submit the required Performance Assurance of \$15/kW.

If the Renewable Standard Offer Contract is not accepted within ten (10) Business Days, the Application will be deemed to have been effectively withdrawn and the Renewable Standard Offer Contract will be revoked.

3.2 Form of the Renewable Standard Offer Contract

The existing form of the Renewable Standard Offer Contract consists of a Renewable Standard Offer Contract Cover Sheet, definitions, standard terms and conditions, and exhibits; and shall be used as binding documents going forward. A copy of this contract, in its accepted form, is posted on the TVA website along with the Cover Sheet. Applicants should review the Renewable Standard Offer Contract in detail prior to submitting an Application.

3.3 Notice to Proceed

Applicants have twelve (12) months to obtain a Notice to Proceed (NTP); otherwise, TVA may terminate the Renewable Standard Offer Contract. In order to receive a NTP, a Seller must file a request within a year after receiving a Renewable Standard Offer Contract and provide the following:

- i) a demonstration that financing has been arranged for the Facility;
- ii) receipt of, or application for, any applicable permits for the Project's construction;
- iii) execution of any necessary interconnection agreements with either TVA or a Distributor, as applicable;
- iv) execution of any necessary interconnection agreements, including metering and upgrade costs, with TVA and/or the Distributor for the installation, operation, maintenance, and reading of the metering equipment;
- v) receipt from TVA of any necessary executed transmission service agreements including Network Integrated Transmission service Agreements and Network Operating Agreements with TVA and/or the Distributor for transmitting the Energy Output to TVA loads;
- vi) a fuel resource survey indicating adequate fuel for the production of the Minimum Energy Quantity;
- vii) demonstration of completion of the appropriate review under the NEPA; and
- viii) revised Performance Assurance of \$25/kW.
- ix) for projects co-firing 50% or more Qualified Biomass, a fuel consumption heat content verification method approved by TVA.

TVA will issue a NTP if all of these items are present and deemed satisfactory. If any of these items is missing, TVA may terminate the Renewable Standard Offer Contract, or defer its decision in accordance with the terms of the Renewable Standard Offer Contract.

3.4 Initial Delivery Date

The Initial Delivery Date is determined by completion or satisfaction of the conditions defined in Section 6.4 of the Renewable Standard Offer Guidelines and demonstration that the Project is capable of generating and delivering Energy Output to the Delivery Point in a consistent and reliable manner. The Initial Delivery Date cannot be earlier than the **Expected Initial Delivery Date of Project and** must be within one year after the receipt of the NTP. Failure to achieve this milestone may result in termination of the Renewable Standard Offer Contract and the assessment of stipulated liquidated damages.

SECTION 4: FOR MORE INFORMATION

If you have questions about the Renewable Standard Offer for the purchase of renewable energy, please contact us.

Tennessee Valley Authority
Attn.: Renewable Standard Offer
1101 Market Street, LP 3D
Chattanooga, TN 37402-2801
renewablestandardoffer@tva.gov
Phone: 423-751-2372

ATTACHMENT A

PRICING EXAMPLE

Below is an example of the seasonal and time-of-day prices a developer will receive for a project in the Renewable Standard Offer program for all technologies. TVA can adjust the relevant levels of seasonal and time-of-day prices by 1% per year, but the average hourly base price will be escalated annually by a constant percentage over the length of the contract. For complete details of pricing, see the Renewable Standard Offer Contract.

Month	Time of Day (CPT)	Base Price (¢/kWh)
July & August	Mon-Fri 12pm-8pm	8.286
	Mon-Fri 6am-12pm and 8pm-12am; Sat & Sun 6am-12am	4.571
	Everyday 12am-6am	3.071
June & September	Mon-Fri 12pm-8pm	4.759
	Mon-Fri 6am-12pm and 8pm-12am; Sat & Sun 6am-12am	3.528
	Everyday 12am-6am	2.964
January & February	Mon-Fri 6am-10pm	4.086
	Mon-Fri 10pm-12am; Sat & Sun 6am-12am	3.398
	Everyday 12am-6am	3.115
December & March	Mon-Fri 6am-10pm	3.632
	Mon-Fri 10pm-12am; Sat & Sun 6am-12am	3.391
	Everyday 12am-6am	3.115
April, May, October, & November	Mon-Fri 6am-10pm	3.520
	Mon-Fri 10pm-12am; Sat & Sun 6am-12am	3.151
	Everyday 12am-6am	2.985

For this 2013 example, the average hourly base price is 3.742 ¢/kWh.