
TVA Programs Overview

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Agenda

High-Level TVA Green Programs

Flexibility Option Overview

Dispersed Power Production (DPP)

Next Steps

TVA Green Portfolio

Deliver renewable solutions that drive economic development, secure committed load and strengthen Valley partnerships

Residential

Small
Business

Corporations

Datacenters

Universities

Cities

Manufacturing

LPCs



DPP

Connect

Switch

Flex

Invest

Generation Flexibility Principles

Flexibility Volume (MW)

Each Valley Partner may deploy energy resources in an aggregated capacity amount not to exceed the greater of (1) 5% of that Valley Partner's energy, where energy is the average hourly capacity usage, initially over TVA fiscal years 2015 through 2019, or (2) 1 MW of aggregated capacity

Flexibility Pricing Structure

Valley Partner energy resources will either displace demand and energy usage that TVA would have otherwise charged to the Valley Partner under the prevailing wholesale power rate structure; or Valley Partner energy resources will be treated in accordance with an economically equivalent wholesale crediting mechanism.

Flexibility Carbon Position

A Valley Partner's energy resource implementation must be consistent with TVA's Integrated Resource Plan to help ensure that TVA's system carbon position is improved.

Energy Resource Standards

Energy resource sites must be documented, metered, operated, and connected in a manner consistent with applicable TVA standards.

Energy Resource Size and Location

All Valley Partner energy resource facilities, regardless of scale, must be located in the Valley.

Energy Resource Benefits

Valley Partner energy resource electrical output must be provided or distributed to the interconnected Valley Partner or TVA and all energy resource environmental attributes must benefit Valley customers' carbon positions. For any aggregated project, participating Valley Partners would receive economic benefits consistent with their contributions.

Expanded Flexibility Program Options & Eligible Resources

Possible SFA Applications

The **Valley Partner Hosted** option allows for aggregation and partnership opportunities connected to a host LPC distribution system.

Valley Partner Hosted with Excess Generation option allows LPCs to address delivery point load constraints for projects connected to an LPC distribution system by selling excess power to TVA.

The **TVA Interconnected** option enables Valley Partners to deploy projects that interconnect to TVA's bulk transmission system via a back-to-back PPA commercial structure.

Possible SFA Applications

The **End-use Customer Hosted** option allows Valley Partners to be positioned as the trusted energy advisors in their service territory and procure excess generation from small-scale generators with guidance on rates an LPC can pay.



Solar-based resources, including those integrated with storage



Wind turbine generation

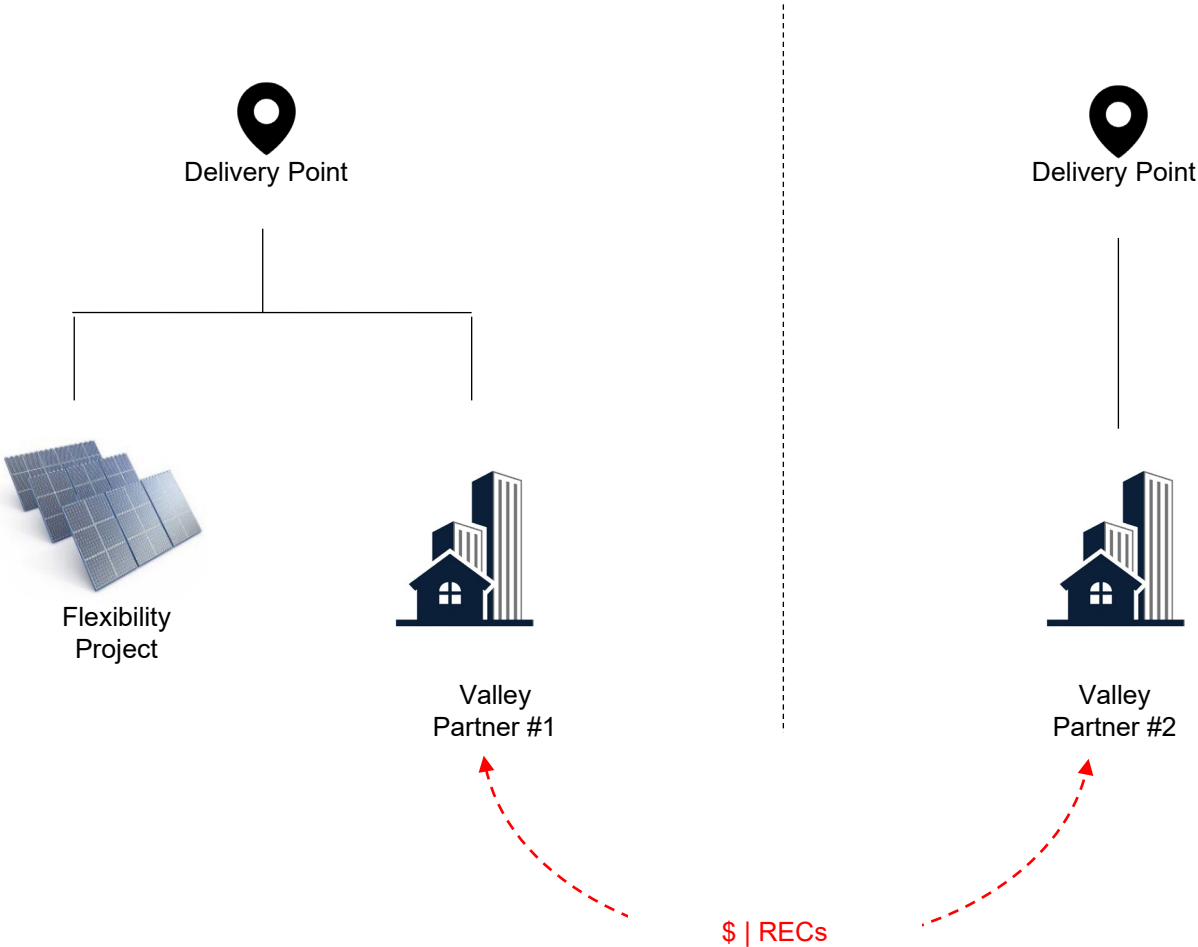


Natural gas power generating resources



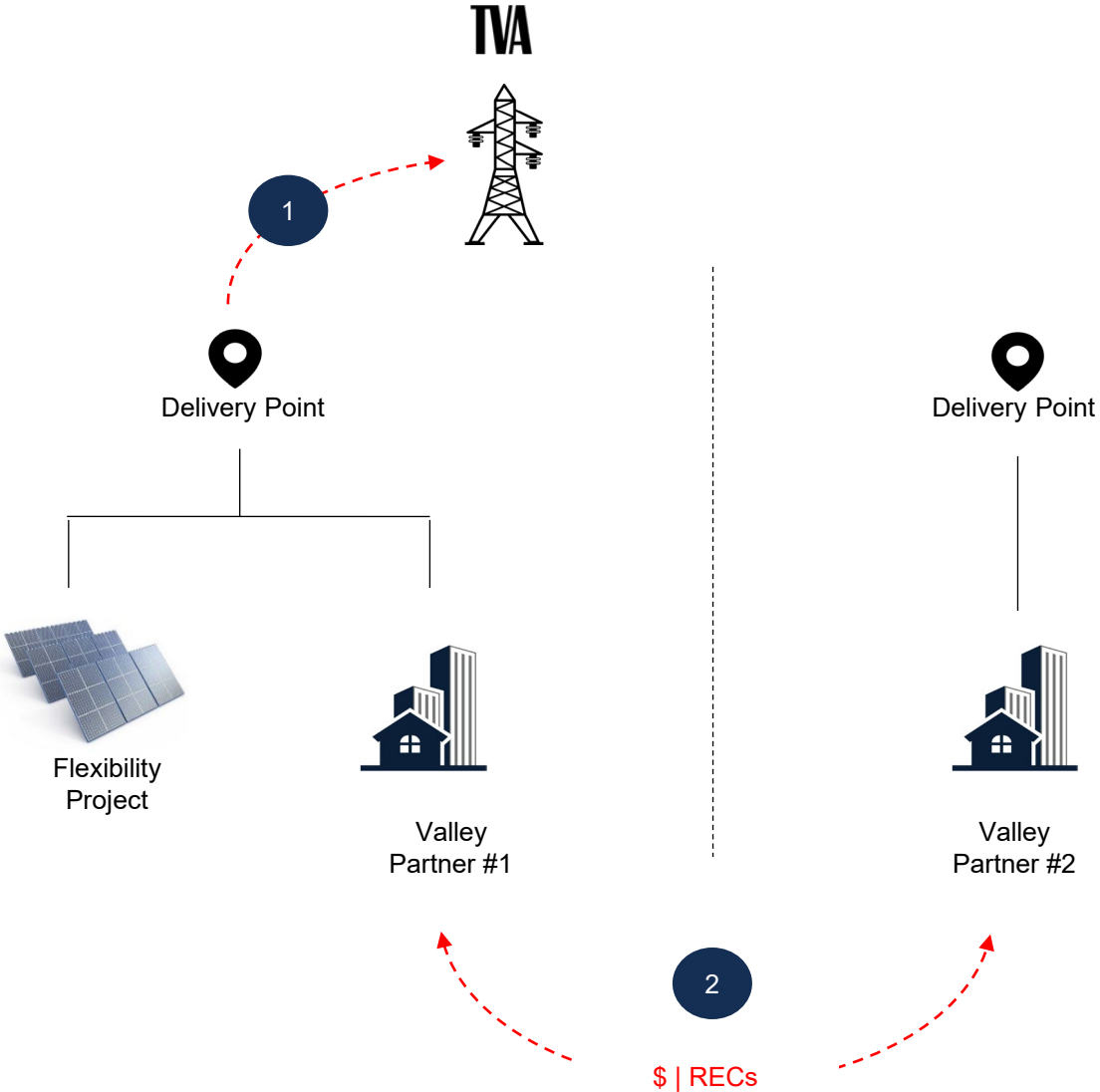
Other carbon-free or carbon-neutral technologies consistent with TVA's IRP

Valley Partner Hosted with Valley Partner Aggregation



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Valley Partner Hosted with Valley Partner Aggregation



Valley Partner Hosted with Excess Generation option allows LPCs to address delivery point load constraints for projects connected to an LPC distribution system by selling excess power to TVA.

End-use Customer Hosted Option

An end-use customer offsets their power usage with generation (behind the meter).

They sell excess energy to their LPC through a Power Purchase Agreement.

The LPC compensates the customer using a different rate than Dispersed Power Production (DPP).

Draft Program Criteria and Details

Qualifying Energy Resource Criteria

- Onsite solar systems
- System size less than 250 kW (AC-nameplate)
- Residential and General Service A (GSA) rate classes
- Limited to the purchase of excess generation
- Metering requirements: rightsized projects

Program Details

Technology Factor applied for qualified on-site solar-based power generating Energy Resources 0.2 (0.4 for solar in base agreement)

Established pricing “guardrails” for on-site generation

Position LPC as retail facing trusted energy provider by transitioning DPP administration to LPCs

Programmatic NEPA review

Possible Flexibility 2.0 Implications of the IRA

Considerations for discussion:

- **Direct pay** – plus project specific benefits – may create intriguing LPC ownership structures
- **Stand alone storage opportunities** *(not limited to Flexibility 2.0)*
- **Low Income Bonus** ITC for wind, solar (+ storage) projects of less than **5 MWs** in low-income communities
- The ITC also becomes available for interconnection costs if the project is **less than 5MW**
- **Energy Community Bonus** for communities impacted by the retirement of a coal plant (and other criteria)
- **For projects under 1MW**, bonuses in addition to the 30% ITC, domestic content, energy community and qualified low-income communities

Note: Not an all-inclusive list of provisions in the IRA. Not a tax or legal analysis of any benefits applicable to TVA.

DPP Program

DPP Overview

Dispersed Power Production (DPP)

TVA's Dispersed Power Production program allows Qualifying Facilities to connect to TVA or an LPC's power lines and either use its power for itself and sell any extra power to TVA at TVA's avoided costs or sell all of its power to TVA at TVA's avoided costs.

A program that allows residential, business and industry customers to **sell power from Qualified Facilities** to TVA.



Program Highlights



5-year agreements

between TVA and qualified facility



No enrollment cap

We have room for as many of your customers as possible



No tri-party contracts

End-use customer creates agreement directly with TVA



Experienced program framework

The program has been around since 1981



Retained renewable attributes

by participants

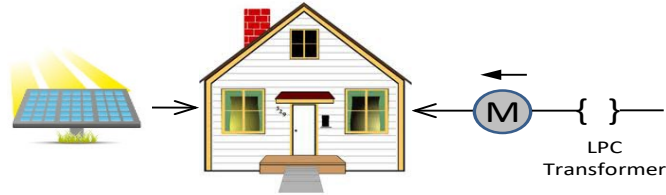


Regulated pricing

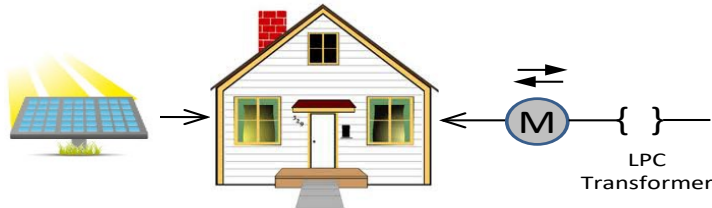
Public Utilities Regulatory Policies Act of 1978 (PURPA) obligates all regulated electric utilities to purchase energy under PURPA at avoided cost

DPP Configuration Options

1. **Self-Generation:** Excess flows to grid; no payment



2. **Self-Generation and Dispersed Power Contract:** Excess purchased by TVA



3. **Dispersed Power Sell-All Contract:** All power purchased by TVA



Other Information

- Interconnection and metering arrangements with either LPC or TVA
- TVA should have direct access to DPP meters for expected capacity over 1MW for billing purposes
 - TVA only reads meters greater than 1MW
- Customer retains any Renewable Energy Certificates (RECs)
- No program capacity cap

i.e. # of systems that come online each year is not limited)

Next Steps