Agenda Item# 8

DISCUSSION

February 28, 2024

Subject:	Virtual Power Plants for Community Benefit
Reporting Period:	January-February 2024
Staff Lead:	Sean Kennedy, Deputy Director of Energy Investments, SGC

Summary

On February 12, SGC released a Request for Proposals (RFP) for a public-private partnership to leverage federal funding, specifically through the U.S. Department of Energy Loan Programs Office (US DOE LPO), to develop Virtual Power Plants (VPPs) at sites and facilities supported by SGC Council Agency programs. The selected provider will work with SGC to determine appropriate eligible sites, including SGC-funded Community Resilience Centers, to develop or expand VPP operation with locally installed and operated distributed energy resources, including solar and battery storage. Moving forward, SGC will engage with other State entities seeking to leverage a similar approach to meet policy and program objectives.

Background

The US Department of Energy Loan Programs Office (LPO) has the authority to loan over \$400 billion to help finance clean energy projects, build energy infrastructure, create jobs, and reduce emissions across the United States. Under the <u>Title 17 Clean Energy Financing Program</u>, LPO provides federal financing for projects that support clean energy deployment and energy infrastructure reinvestment to reduce greenhouse gas (GHG) emissions and air pollution.

Under its original Title 17 authority, the LPO was limited to providing credit to borrowers working with innovative technology. But a new carveout in the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA) extends that credit authority to nearly any kind of energy project, so long as it is co-financed by a State Energy Financing Institution (SEFI). The SEFI-Supported category of the Title 17 Clean Energy Financing Program enables LPO to augment state-administered clean energy programs, providing additional financial support to projects that align federal energy priorities with those of U.S. states. SEFI-supported projects are not subject to LPO's technology innovation requirement, so the authority expands the eligibility for LPO financing to include specific projects that incorporate commercial technologies or aggregate technology-diverse projects and receive meaningful financial support or credit enhancements from a SEFI.

In September 2023, the Strategic Growth Council (SGC) became one of three California State entities to receive the LPO SEFI designation. SGC is now leveraging this designation to help sites and facilities supported by SGC Council Agency programs across California to build energy resilience and benefit from reduced energy costs and compensated use of supported facilities for distributed energy resource siting and operations. Virtual power plants (VPPs), broadly defined as a connected aggregation of solar and storage resources across multiple sites, offer a proven pathway for meeting these objectives in a way that extends direct benefits to California's disadvantaged communities.



Request for Proposals

On February 12, 2024, SGC released a Request for Proposals (RFP) for a public-private partnership to leverage federal funding, specifically through the US DOE LPO, to implement distributed energy resources as virtual power plants at sites and facilities supported by SGC Council Agency programs. This RFP aims to identify a VPP provider that will partner with SGC and collaborate with eligible sites to enhance the resilience of supported facilities while contributing to the overall reliability and sustainability of the California electric grid. SGC expects to select and contract with one VPP provider to collaborate with and identify appropriate eligible sites for VPP development and operation but reserves the right to select and contract with more than one qualified VPP provider.

Goals, Benefits, and Outcomes

The selected VPP provider(s) will work with SGC to determine appropriate eligible sites, including SGC-funded Community Resilience Centers (CRCs), to develop or expand VPP operation with locally installed and operated Distributed Energy Resources (DERs), such as solar and battery storage. Determining the appropriateness of sites will be an iterative and collaborative process, considering factors such as potential for on-site renewable power generation, existing DER investments, local support and partnerships, and agreement terms between the provider and host facility.

Benefits should accrue to all actors involved in the launch, operation, and management of the VPP, including supported sites and VPP providers. Benefits should include, but are not limited to:

Eligible Sites Supported by SGC Council Agency Programs

- Rental income from VPP provider for hosting DERs.
- Lower energy costs and improved downtime resilience through the installation of DERs (e.g., solar and storage, heat pumps) with zero upfront costs.
- Enhanced energy resilience through a more stable grid via VPP operation and demandresponse program participation, minimizing downtime during emergencies.

VPP Provider

- Opportunity to develop standardized long-term power purchase agreements across multiple project sites.
- Right-of-first-refusal access to eligible sites funded by SGC-member programs for lowercost DER development.
- Opportunity to seek and be considered for US DOE LPO Title 17 Loan Guarantee Program Innovative Technology Requirement waiver through SGC's SEFI status.
- Potential consideration for National Environmental Protection Act (NEPA) exemptions depending on the scale and scope of the solar infrastructure installed.
- Opportunity to demonstrate the commercial viability of site-level resilience measures.



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Grid, Utility, Community Choice Aggregation (CCA), or other Electric Load Servicing Entity

- Improved grid reliability and resilience.
- Expanded DER adoption with equitable benefits and community empowerment.
- Decarbonization and reduced air pollution.
- Reduced pressure on existing transmission and distribution infrastructure.

Next Steps

SGC will host an informational webinar on March 5, with proposals due on March 17. Notice of intent to award is anticipated before the April 24 SGC Council meeting. Moving forward, SGC will engage with other State entities seeking to leverage a similar approach to meet policy and program objectives.

Discussion Questions

Across your respective agencies, which programs do you see as having the potential to participate in this virtual power plant opportunity?

What additional information or support do you require to explore this potential further?

Attachments

Attachment A: Virtual Power Plants for Community Benefit: Request for Proposals

