

## VPPSA

### Lead & Leapfrog

### Technology Plan

### Consultant Request For Proposals (RFP)

#### About VPPSA

Vermont Public Power Supply Authority (VPPSA) is a joint action agency and Authority of the state of Vermont created under statute (V.S.A Title 30 Chapter 84) in 1979. VPPSA was created specifically to provide support services to municipal and cooperative electric utilities in Vermont. It presently serves eleven (11) member municipal utilities, providing a broad range of financial, regulatory, power supply, and technology services.

## VPPSA Members



- Barton Village: 2,000
- The Village of Enosburg Falls: 1,700
- Hardwick Electric Department: 4,500
- Village of Jacksonville: 700
- Village of Johnson: 1,000
- Ludlow Electric Light Department: 3,700
- Lyndonville Electric Department: 5,700
- Morrisville Water & Light: 4,200
- Northfield Electric Department: 1,800
- Village of Orleans: 700
- Swanton Village: 3,800

Of key importance is the fact that Vermont electric utilities, including municipal utilities, are regulated by the state. VPPSA member utilities must meet the same regulatory standards as investor-owned utilities and must undergo scrutiny of decisions by state officials.

VPPSA members serve some of the most economically depressed parts of Vermont and have historically focused very heavily on affordability. As a result, they have been slow to adopt cutting edge technologies and tend to operate with the minimal staffing and systems necessary to maintain an affordable and reliable utility.

### **Project Background**

VPPSA is presently implementing Advanced Meter Infrastructure (AMI) and Geographic Information System (GIS) programs on behalf of its members on a centralized basis. VPPSA also manages a centralized program to help each member utility meet its regulatory obligations under Vermont's Renewable Energy Standard.

The VPPSA members each manage their own operations, including having individual financial, billing, and customer information systems. They are individually quite small with customer bases ranging from 700 meters to 6,000 meters with the total across all members totaling roughly 30,000 meters.

Seven of the eleven members are also responsible for other municipal departments (water, wastewater, etc.) such that VPPSA's evaluation of technology projects necessarily includes consideration of impacts and/or efficiencies resulting from other operations.

In the past several years Vermont has begun implementing climate change policies that have resulted in an overall direction toward Net Zero through electrification and renewable energy deployment. Present policies promote adoption of electric vehicles, heat pumps, and small-scale solar generation with significant financial incentives provides toward adoption of these technologies.

As part of this policy direction Vermont's electric utilities are under increasing pressure to implement load control (so-called Flexible Load Management) programs, implement innovative rates (such as specific appliance rates, critical peak pricing, time of use, and potential real-time rates). State regulators are very focused on managing loads and generation at the home/business level in order to increase resiliency and avoid the need for significant infrastructure investments.

In addition, Vermont remains vertically integrated with distribution utilities remaining responsible for power supply decisions. The state is served by a single transmission provider, VTTRANSCO, which is owned by all of the state's distribution utilities generally in proportion to their load ratio share of retail sales. VTTRANSCO is subject to NERC oversight and has seen increased needs for distribution level data on generation and flexible loads to meet its planning and operations obligations.

Vermont also has a dedicated statewide efficiency utility (Efficiency Vermont or EVT) that has historically been focused on providing programs that help customers become more efficient in their overall energy use and consumption. EVT sits beside the distribution utilities and serves the same customer base. As Vermont has moved more toward policies that reduce greenhouse gas emissions through electrification EVT has begun to expand its portfolio to the point that there is increasing tension between it and the distribution utilities as to who will ultimately manage customer loads under the future grid paradigm.

Under Vermont's Renewable Energy Standard distribution utilities are required to assist customers in reducing fossil fuel use, and as a result VPPSA has established a robust rebate program on behalf of its Members. To manage this rebate program VPPSA has both coordinated efforts with EVT, and has implemented a third-party online rebate portal.

All of these various pressures have caused the VPPSA member utilities to conclude that now is the time to implement a comprehensive optimization of their operations from a data analysis and technology standpoint. Members are evaluating whether, and how, to upgrade their financial and CIS systems. They have asked VPPSA to consider whether a centralized SCADA system, or at least a data acquisition system, would enable responding to information requests from VTTRANSCO, ISO-NE, and state entities. They are assessing how to protect their autonomy, sustain future grid modernization, and expand energy services to customers through traditional DERMS or other distribution control systems including whether active control of customer loads is the appropriate foundation for future growth versus market-based price signals or market aggregators .

To consider the full breadth of technology improvement requirements - while honoring each member's independence and simultaneously looking for ways to leverage VPPSA ability to offer centralized services - VPPSA is embarking on development of a complete technology roadmap. VPPSA seeks assistance from firms that can aid it in developing a unified plan that can be rapidly deployed over the next 18-24 months while essentially leapfrogging the more advanced utilities that have deployed technology piecemeal over the past decade. In short, VPPSA seeks a partner capable of assisting its members to modernize their grid operations in one leap while maintaining a focus on affordability and reliability.

### **Desired Services & Timeframe**

**Bidders must demonstrate the ability and resources to rapidly perform these services under a short timeframe. Work should commence immediately upon contract award with project completion by the end of 2024. Interim deliverables that could allow deployment of specific components are desirable.**

1. Facilitate a Working Group of VPPSA and Member Utility staff to identify a consensus future state of operations needed to meet customer, regulator, and legislative requirements, including energy services and efficiency (demand-side), power resources (supply and generation), distribution system design (reliability, redundancy, protection and controls, system monitoring, etc.), safety and security (physical and cyber), workforce availability, sustainability (i.e. future-proofing), etc.

VPPSA and Member utility Staff will develop an initial framework of known and anticipated requirements and directives to serve as a starting point for the "Lead & Leapfrog" Working Group.

**DELIVERABLE** - document consensus end state in a written report

2. Conduct assessments of each VPPSA member utility to document existing IT and OT (software and hardware) systems and system design, including any upgrade/replacement plans the utility may be considering, including any identified lifecycle management plans.

**DELIVERABLE** - Document existing status for each utility

3. Conduct a gap analysis on each utility to identify necessary technology deployments to meet the operational future state.

**DELIVERABLE** - Document gaps for each utility

4. Using the gap analysis, identify a proposed technology “Leapfrog Strategy” roadmap for individual utilities and VPPSA itself, including systems required, order of deployment (linear or otherwise), timeline, and budget estimate

**DELIVERABLE** - Document each roadmap

5. Using the individual roadmaps, evaluate opportunities to leverage VPPSA by centralizing aspects of the plans, including opportunities for centralized procurement, deployment, and operations. Identify impacts on system needs, timeline, and budget

Prepare an overall “Leapfrog Strategy” Implementation Recommendation incorporating individual and joint system requirements including urgency, scalability, agility, and sustainability/lifecycle.

**DELIVERABLE** - Combined Implementation plan documenting systems, timelines, budgets

6. Present the Leapfrog Strategy to the VPPSA Board of Directors and Working Group. Revise as necessary based on input received.

**DELIVERABLE** - Publish a final Leapfrog Strategy sufficiently detailed to demonstrate concrete technologies to be deployed, with sufficient detail to establish concrete goals and timelines while concurrently demonstrating progress to external stakeholders.

## **Responses**

Responses to this RFP should be sent to:

Kenneth Nolan, General Manager  
Vermont Public Power Supply Authority  
P.O. Box 126  
5195 Waterbury-Stowe Road  
Waterbury Center, VT 05677  
[knolan@vppsa.com](mailto:knolan@vppsa.com)

Respondents should indicate their intent to bid by sending an e-mail to [knolan@vppsa.com](mailto:knolan@vppsa.com) prior to **September 18, 2023**. Any respondents indicating an intent to bid will be included in any future notices and will receive answers to any questions that may be posed. Notification of intent to bid is not otherwise required and will not impact VPPSA's evaluation of any proposal a vendor may later choose to submit.

**Responses to the RFP are due at VPPSA's Waterbury Center office by 4:00pm eastern time on October 6, 2023.** E-mail responses sent to [knolan@vppsa.com](mailto:knolan@vppsa.com) are acceptable and should include "VPPSA Lead & Leapfrog Technology Plan Proposal" in the subject line.

Respondents must provide specific responses to the deliverables included in items 1-5 above but are free to propose alternative approaches that produce equivalent results.

Any questions related to this RFP should be submitted in writing to [knolan@vppsa.com](mailto:knolan@vppsa.com) no later than **4:00pm on September 29, 2023**. VPPSA's responses to any questions will be sent to all vendors that have indicated an intent to bid.

Proposals should include:

- Description of the proposed vendor approach to the project
- Assigned team members with descriptions of experience
- Proposed Timeline
- Estimated hours of effort for each task
- Hourly rates for all assigned team members
- Pricing proposal that will be held firm for a minimum of 30-days

## **Evaluation**

VPPSA reserves the right to reject any or all bids at its sole discretion, and nothing in this RFP should be construed as obligating VPPSA to proceed with the described project.

Proposals will be evaluated based on the following:

- Respondents familiarity with the municipal utility environment
  - o Especially within the ISO-NE footprint
- Respondents familiarity with the Vermont regulatory environment
- Familiarity with DER heavy environments and/or venues with aggressive climate change policies
- Respondent teams identified familiarity with completing similar projects
- Vendor demonstration that their recommendation have been successfully deploy
- Cost

VPPSA will notify bidders of its decision by October 20, 2023, and may choose one or more vendors to continue discussions with beyond that date.