



Grid Connected Homes & Businesses

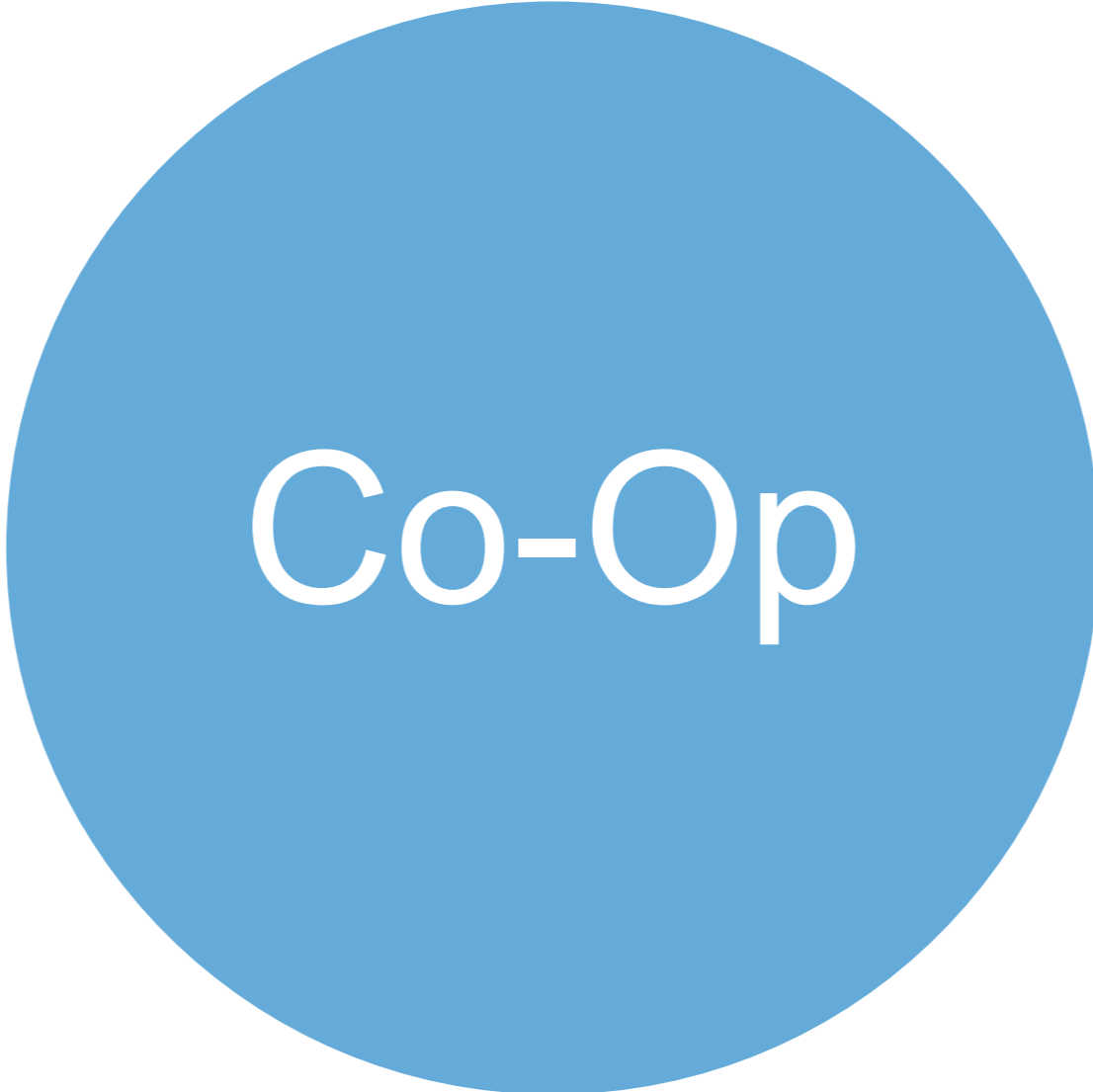
Table of Contents

- 1 About the Vermont Public Power Supply Authority (VPPSA)
- 2 Partnership with Virtual Peaker
- 3 Heat Pump Water Heater Pilot

About VPPSA: Types of Electric Utilities in Vermont



Green Mountain Power

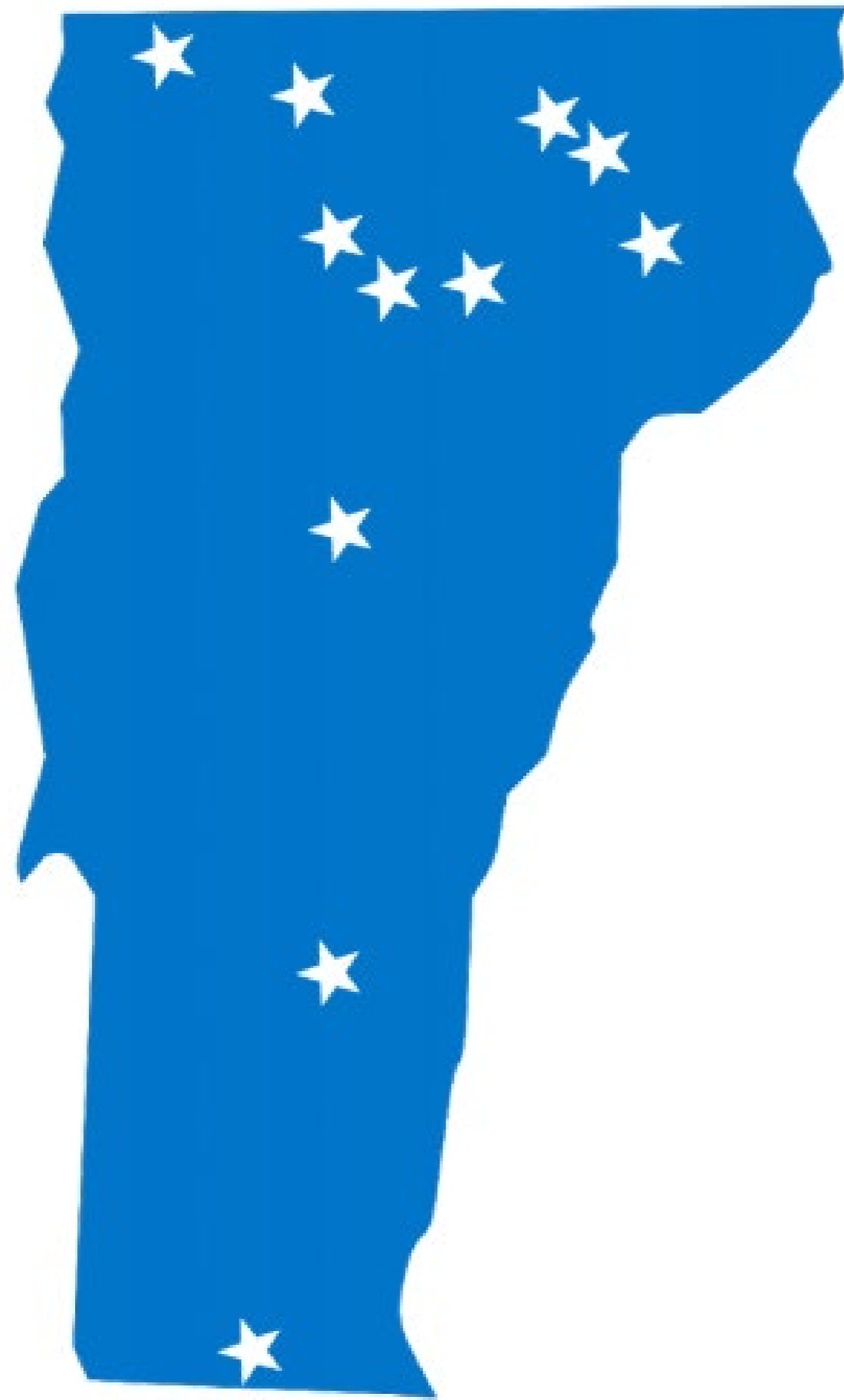


Vermont Electric Co-Op
Washington Electric Co-Op



VPPSA Member Utilities
Burlington Electric
Stowe Electric
Hyde Park Electric

About VPPSA: Where We Work



Barton Village
Village of Enosburg Falls
Hardwick Electric Department
Village of Jacksonville
Village of Johnson
Ludlow Electric Light Department
Lyndonville Electric Department
Morrisville Water & Light Department
Northfield Electric Department
Swanton Village
Village of Orleans

About VPPSA

VPPSA was established in
1979 by the Vermont
Legislature:
Title 30 VSA, Chapter 84

We provide services and
solutions to municipal
electric utilities.

Putting the **Public** in **Power**.



About VPPSA



Power Supply



Financial Services



Rates and Planning



Legislative and Regulatory Assistance



IT Support



Communication and Outreach

Grid Connected Homes: Why We Care

- VPPSA and other utilities are striving to decarbonize under the Renewable Energy Standard
- As the grid becomes cleaner and greener, replacing fossil-fuel with electric appliances in the home becomes even more attractive
- More electric appliances = load growth for the utility, which helps drive electric rates down

Incentives For Beneficial Electrification

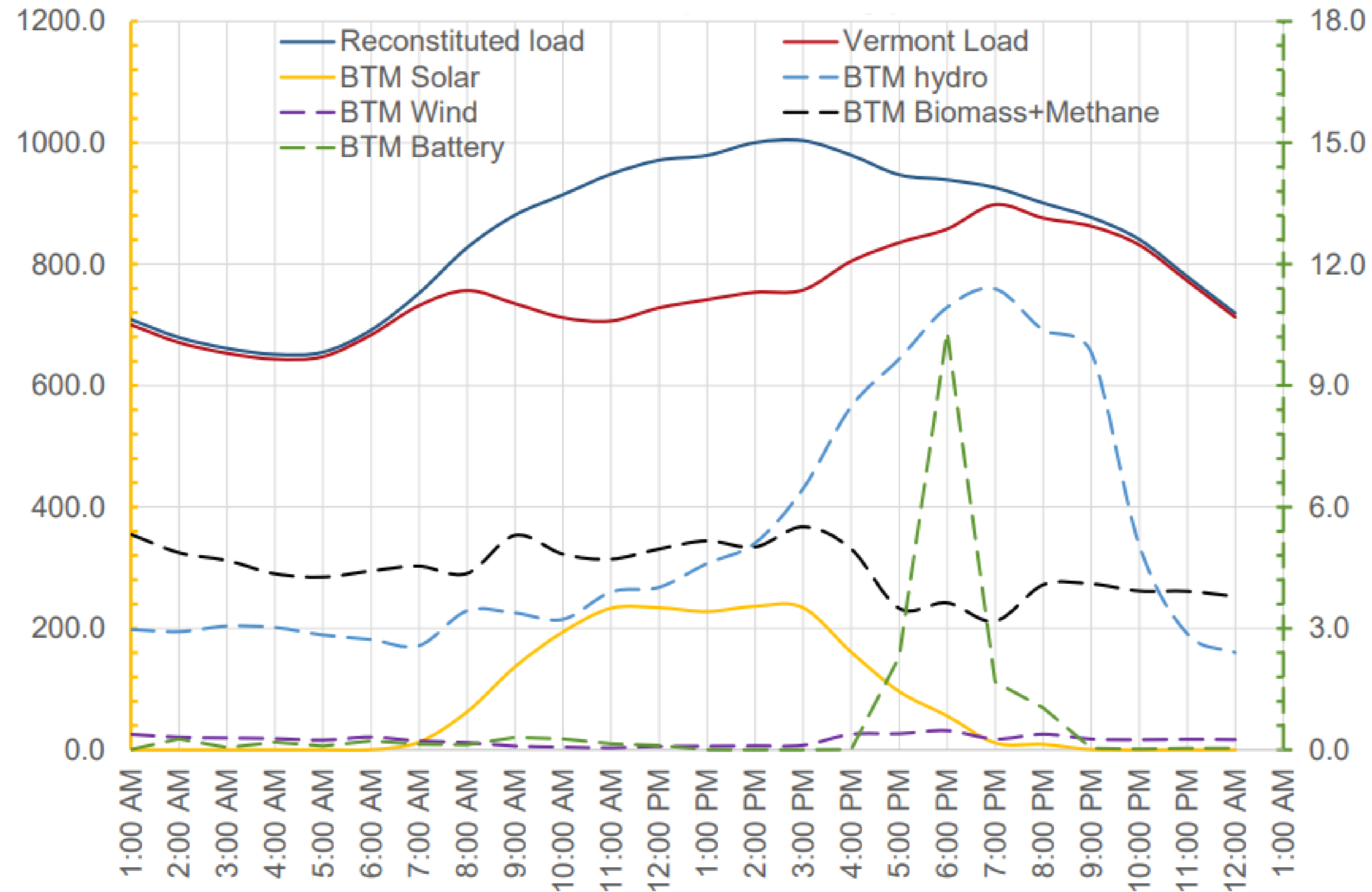
Measure	Incentive Value	Additional Incentive
Electric Vehicle	\$1,000	\$400 (Low Income)
Plug-In Hybrid	\$500	\$400 (Low Income)
Used Electric Vehicle	\$500	
Used Plug-In Hybrid	\$250	
Level 2 Charger	\$500	
Cold Climate Heat Pump	\$400	\$100 (Weatherized)
Heat Pump Water Heater	\$650	
Forklift	\$3,000	
Golf Cart	\$50	
Lawn Mower (Residential)	\$25	
Lawn Mower (Commercial)	\$1,000	
E-Bike	\$100	

Grid Connected Homes: Why We Care

- VPPSA and other utilities are striving to decarbonize under the Renewable Energy Standard
- As the grid becomes cleaner and greener, replacing fossil-fuel with electric appliances in the home becomes even more attractive
- More electric appliances = load growth for the utility, which helps drive electric rates down
- More electric appliances = possibility for higher peaks, which could lead to higher electric costs

Grid Connected Homes: Why We Care

July 30, 2019
Vermont Peak Load
on the New England
Peak Day



Opportunities to Grid-Connect

Measure	Incentive Value	Additional Incentive
Electric Vehicle	\$1,000	\$400 (Low Income)
Plug-In Hybrid	\$500	\$400 (Low Income)
Used Electric Vehicle	\$500	
Used Plug-In Hybrid	\$250	
Level 2 Charger	\$500	
Cold Climate Heat Pump	\$400	\$100 (Weatherized)
Heat Pump Water Heater	\$650	
Forklift	\$3,000	
Golf Cart	\$50	
Lawn Mower (Residential)	\$25	
Lawn Mower (Commercial)	\$1,000	
E-Bike	\$100	

Partnership with Virtual Peaker

About Virtual Peaker:

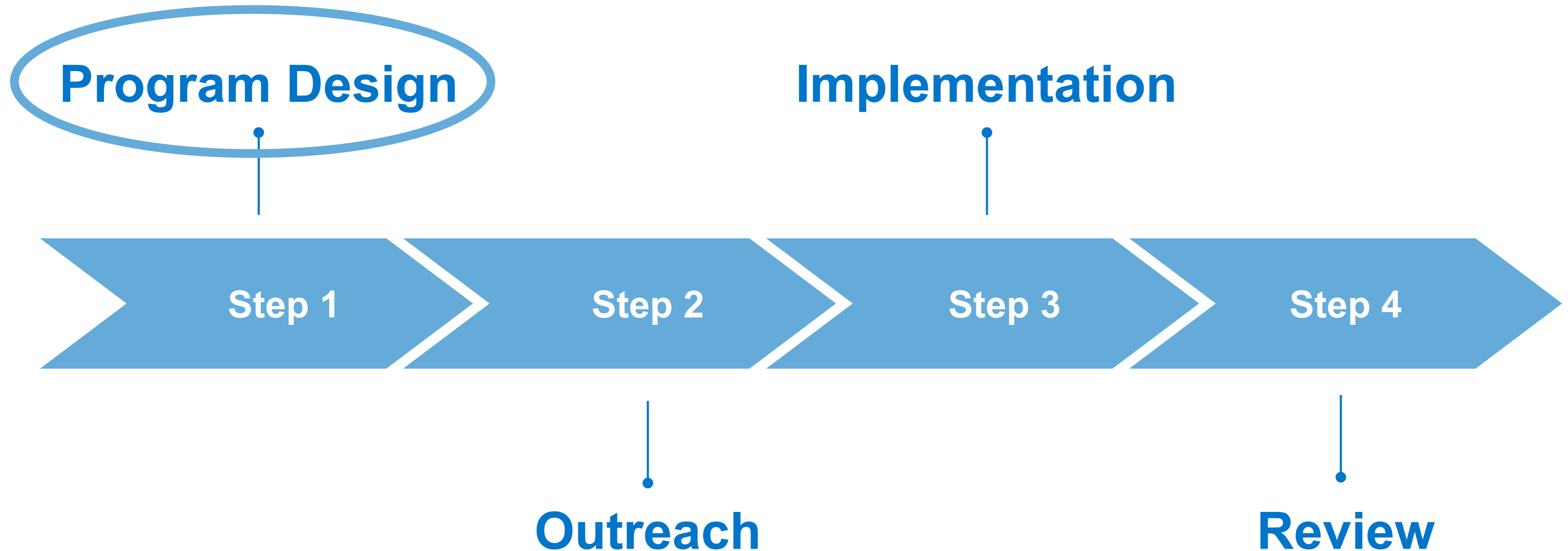
- Software platform that manages residential electric demand
- Allows utilities to control devices with internet connection
- Acts as a messaging service

Currently Piloting:

- Flexible load management for municipal utilities- **behavioral**
- Residential heat pump water heater flexible load management- **active**

Virtual Peaker 

Heat Pump Water Heater Pilot



Heat Pump Water Heater Pilot

Program Design:

- Will be working exclusively with Rheem models (Virtual Peaker compatible without additional device)
- Likely going to involve customers from multiple electric utilities
- Customers will receive incentive for participating, likely a credit on their electric bill



Contact Info

Julia Leopold
Communications Specialist

Phone: (802) 884-4488

P.O. Box 126
5195 Waterbury-Stowe Road
Waterbury Center, VT 05677



www.vppsa.com