

# Heat Pump Water Heater Demonstration Delaware County Electric Cooperative Delhi, NY

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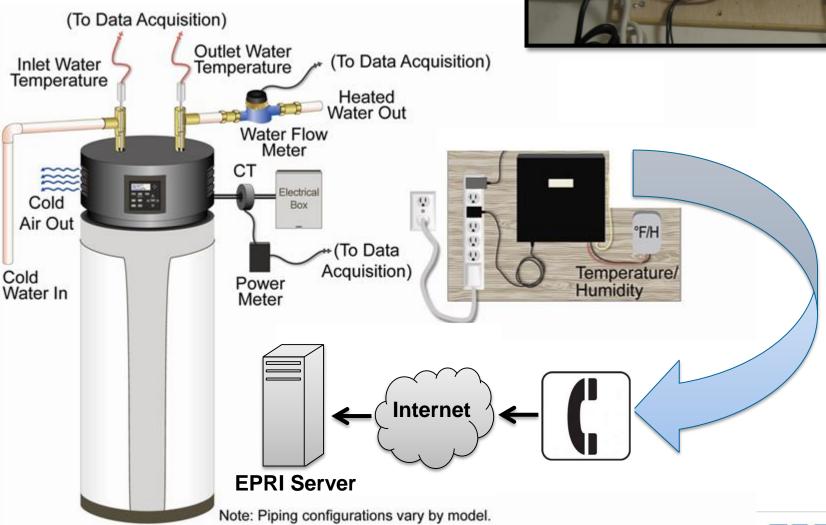
## **Outline**

- 1. Instrumentation Design
- 2. Selection of Sites
- 3. Preliminary Results



# Instrumentation Design

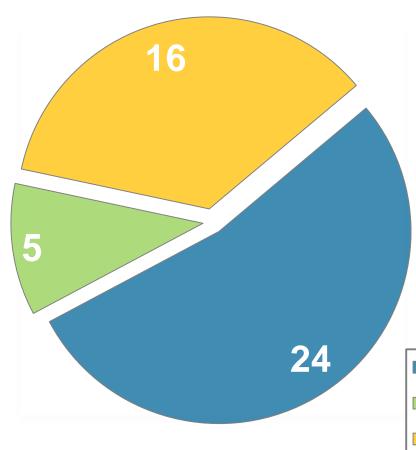
#### **Equipment**





OBVIUS

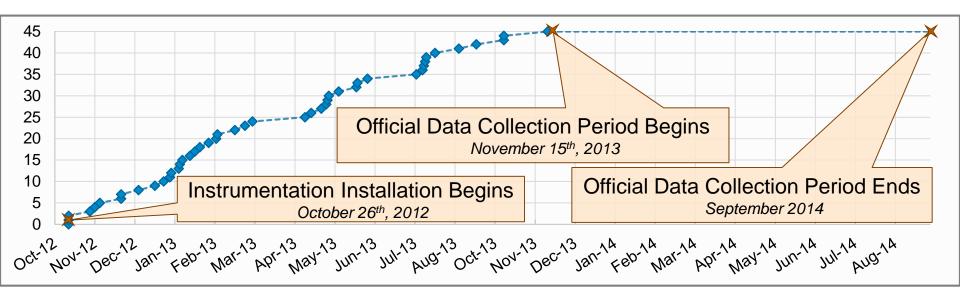
## Installation and Site Selection



- Demonstration sites are located around the town of Delhi, New York.
- Almost all of the water heaters are installed in the basements of area homes. One water heater is installed in a garage.
- Instrumentation install was completed prior to the 2013-2014 Winter (December 2013 through March 2014).

- First Generation Heat Pump Water Heater
- Electric Resistance Water Heater
- Second Generation Heat Pump Water Heater

### A look back...



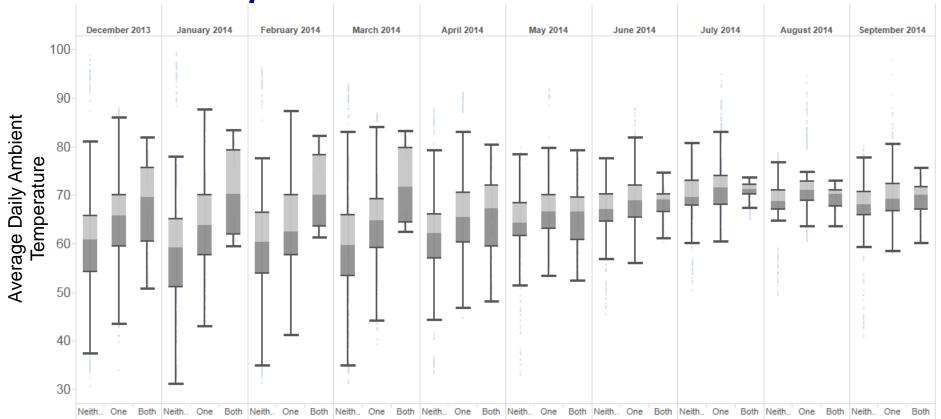
- The official data collection period spanned from November 2013 through September 2014.
- Instrumentation was removed in October / November.





## **Analysis**

**Indoor Air Temperature** 



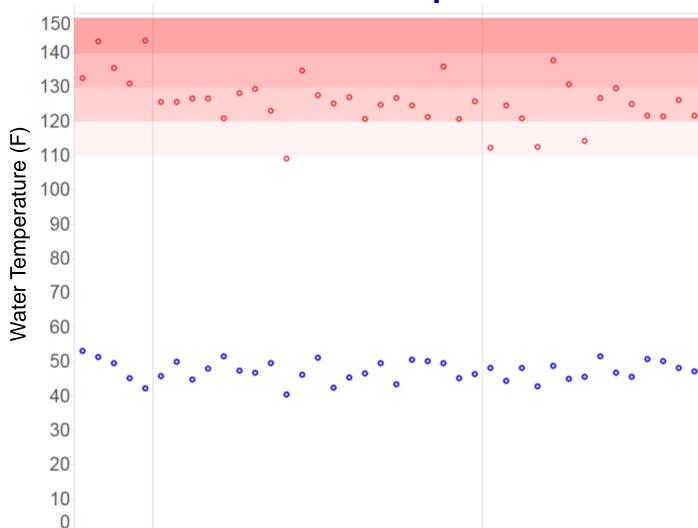
Neither: No space conditioning nor nearby heat source

**One**: Either space conditioning or a nearby heat source.

Both: Both space conditioning and a nearby heat source.

# **Analysis**

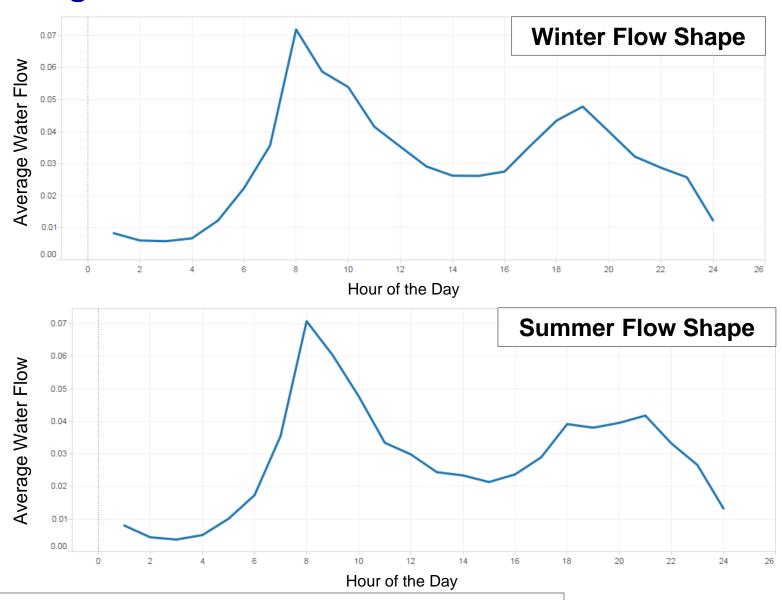
### **Inlet and Outlet Water Temperatures**



- Outlet Water Temperature
- Inlet Water Temperature

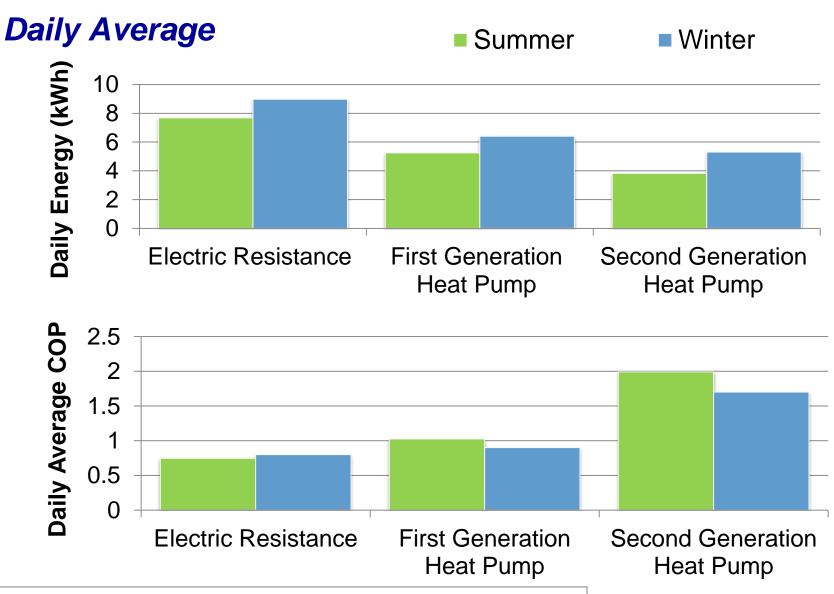


#### **Average Water Use**





## **Performance Data**



## **Next Steps**

- 1. Data collection is complete.
- Analysis is in progress with results available in March.

## **Contact Us**



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