Sheridan Hollow Neighborhood Category A Feasibility Study NYSERDA PON 4614

Albany County

Technical Lead: Aztech Geothermal, CHA, & GreyEdge Group

Anticipated completion of study/availability of final report: August 2022



The Site & Beneficiaries

Sheridan Hollow is a historic mixed-use neighborhood with single and multifamily residential, and commercial buildings in the City of Albany. The neighborhood has a population of approximately 3,850. This cluster of 109 buildings on 94 acres (represented by the area in yellow on the left) includes 448,000 square feet of conditioned space and a homeless shelter with an existing ground-source heat-pump. The goal will be to provide sufficient thermal energy for all these buildings within the footprint of the four blocks. This study will demonstrate that an initial modular networked heat pump system solution can be expanded incrementally throughout the entire Sheridan Hollow community. The initial phase will avoid replacement of a retiring gas main serving sixty accounts.

Potential Thermal Resources

This study, in cooperation with community groups and National Grid, will explore the use of parking lots, vacant areas, and utility right-of-ways as Renewable Energy Service Centers, which would use solar PV and solar thermal parking canopies, storm water retention, and geothermal boreholes to balance and redistribute energy across the district of buildings. The contractor will use building modeling software to understand the losses and gains on the connected buildings and can add in internal loads impacting the ground loop performance.

Potential Configuration

As the system will involve installing underground infrastructure in the public rightof-way, a best-fit ownership model will be explored. Utility or municipal ownership models will be considered, as well as additional models depending on the study's findings. The thermal design resources and business model may be highly replicable across urban and suburban areas throughout New York State and serve as an accelerator to getting networked heat pump systems deployments to the scale needed to meet the CLCPA goals.