



NY GEOTHERMAL ENERGY ORGANIZATION

VIA E-MAIL

Hon. John Rhodes
Public Service Commission Chair
New York State Public Service Commission
Three Empire State Plaza
Albany, New York 12223

February 8, 2021

Re: – Proceeding on Motion of the Commission to Implement Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act 20-E-0197

Dear Chair Rhodes:

Thank you for convening this afternoon's power generation public session and for yours and the Commission's ongoing efforts to develop the information and solutions necessary to meet the CLCPA's climate and community protection goals.

I write to repeat a question from me that was conveyed by DPS staff, but wasn't answered in this afternoon's session. I also hope to expand on its significance.

Via the chat I had submitted:

I didn't see any consideration of different types of building electrification taking place to meet the CLCPA goals. Brattle's study in Rhode Island showed 7 extra gigawatts will need to be in place to meet decarbonization goals if ground source heat pumps are the technology employed. 36 gigawatts will be needed if air source heat pumps are employed. This is a MAJOR difference. Of course, in reality there will be a mix of the technologies, but we need to pay more attention to the storage benefits of the ground. What mix was assumed to project increased demand from the building sector to meet CLCPA goals in this study?

Below is a copy of the summary graphics referenced from the Brattle Rhode Island report:

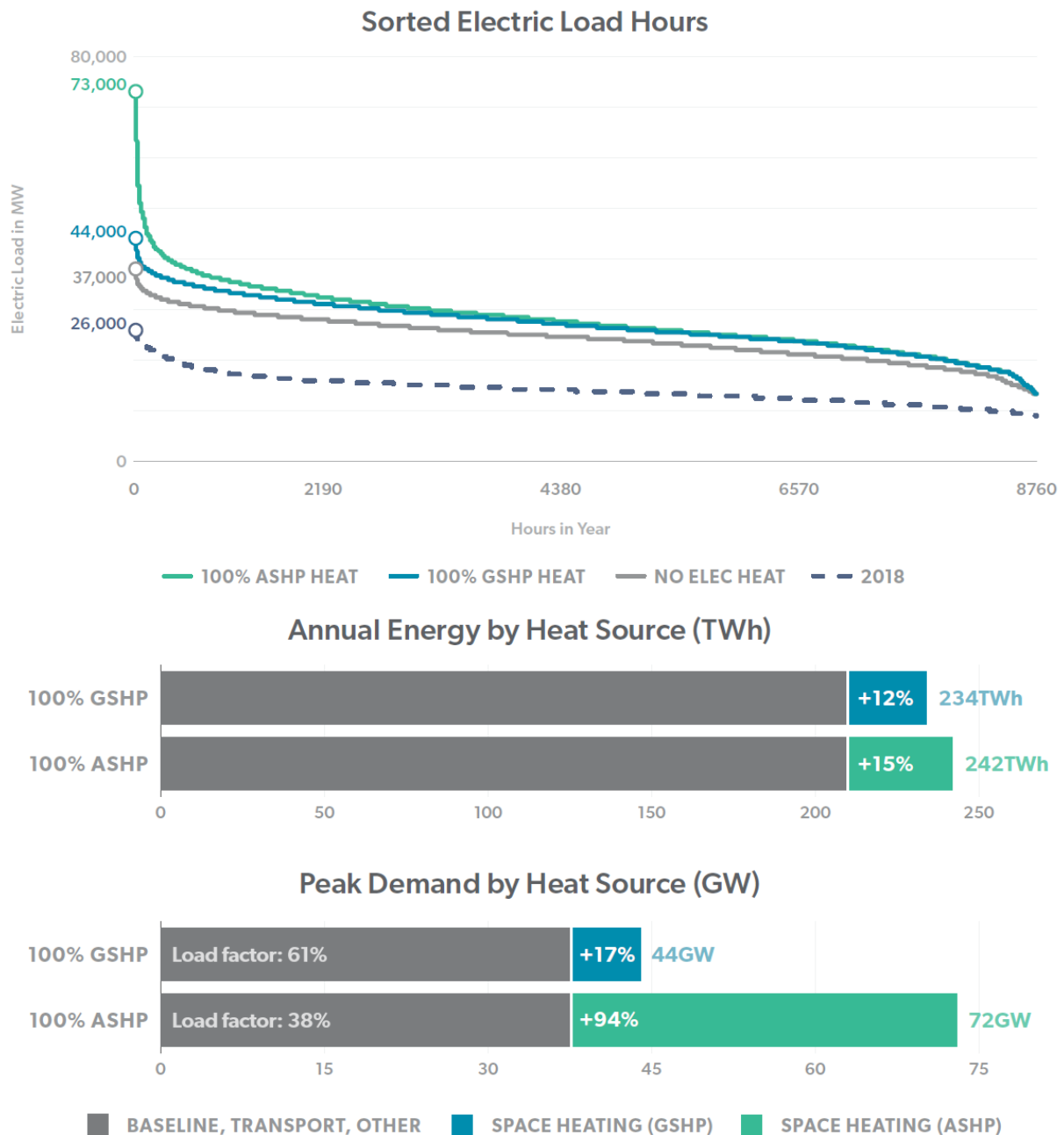


FIGURE 17: IMPACT OF ELECTRIFYING HEAT VIA ASHP VS GSHP – 2050

Note: The 2050 load characterization assumes that the transportation sector is mostly electrified, and also assumes continuing efficiency improvements in baseline uses of electricity (current uses).

The full report, *Heating Sector Transformation in Rhode Island: Pathways to Decarbonization by 2050*, is available at <http://www.energy.ri.gov/documents/HST/RI%20HST%20Final%20Pathways%20Report%205-27-20.pdf>

I'm hoping that this question will be answered as part of the follow-up to this meeting, as no one was able to answer it during the video conference. But more than that, I'm hoping there will be a realization that this should be a FUNDAMENTAL part of research and planning moving forward.

The projections on transmission and distribution infrastructure and their costs look very different depending on the degree to which ground (and water) storage is used in electrifying buildings. There needs to be a weighing of the costs of additional electric infrastructure to meet peak demand vs developing policies and incentives that encourage ground storage and reduce peak demand.

I'm hoping future presentations will take this perspective into account.

Rhode Island's gap was 29 GW. New York has more than 17 times Rhode Island's population. A difference of 29 GW would make a major difference in the projections presented today.

Electricity storage received major consideration in today's presentation, and rightly so.

Thermal storage needs equivalent consideration

Thank you.

Sincerely,

A handwritten signature in black ink that reads "Bill Nowak". The script is cursive and fluid.

Bill Nowak
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The New York Geothermal Energy Organization (NY-GEO) is a non-profit trade association representing geothermal heat pump (GHP) installers, manufacturers, distributors, drillers, consultants and industry stakeholders from throughout New York State and beyond.