NYSERDA Residential Market Advisory Group (RMAG) Quarterly Meeting

Virtual Webinar

Thursday, February 27, 2025

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NYSERDA RMAG Quarterly Meeting

Meeting Summary, Thursday, February 27, 2025, at 011:00am ET

Meeting Overview

Background

On February 27, 2025, the New York State Energy Research and Development Authority (NYSERDA) convened its Q1 2025 virtual Residential Market Advisory Group (RMAG) meeting. The event brought together New York State residential building efficiency and electrification stakeholders to discuss market development updates, provide updates on Clean and Resilient Buildings program activities at NYSERDA, and discuss challenges and opportunities for geothermal heat pump market development in New York, aided by a presentation from New York Geothermal Energy Organization (NY-GEO).

In total, 95 individuals attended the meeting, including 16 NYSERDA staff.

Question & Answers (Q&A) were solicited both verbally and in writing via the Q&A function of the WebEx Webinar. All Q&A from the meeting is included as Appendix A.

Meeting Agenda

Time	Topic and Presenter	Presenters
11:00 am – 11:05 am	*Welcome and Introductions*	• **Tamar Nagel**, Project Manager, NYSERDA • **Trevor Reddick**, Senior Director, Kearns & West
11:05 am – 11:25 am	*New York State Updates and NYSERDA's 50th Anniversary*	• **Susanne DesRoches**, Vice President, Clean and Resilient Buildings, NYSERDA • **Courtney Moriarta**, Director, Single Family Residential, NYSERDA
11:25 am – 11:40 am	*NYSERDA Multifamily Program Updates*	• **Brian Cabezas**, Program Manager, Multifamily, NYSERDA
11:40 am – 12:20 pm	*NY-GEO: Revaluing and Incentivizing Geothermal Heat Pumps*	• **Jens Ponikau**, NY-GEO Board President, co-owner of Buffalo Geothermal Heating • **Kevin Moravec**, NY-GEO Board Member, President of Barney Moravec, Inc.
12:20 pm – 12:30 pm	*Closing and Next Steps*	• **Tamar Nagel**, Project Manager, NYSERDA • **Trevor Reddick**, Senior Director, Kearns & West

Meeting Summary

Welcome and Introductions

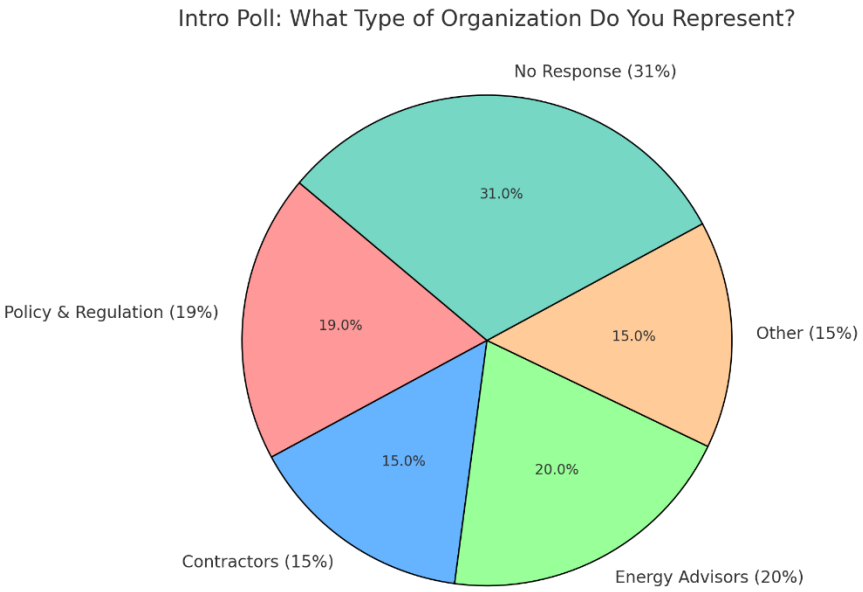
Opening

Trevor Reddick opened the meeting by reviewing the agenda and providing an overview of the Residential Market Advisory Group (RMAG). He emphasized RMAG's role in facilitating engagement opportunities through quarterly meetings, working groups, expert panels, and listening sessions.

Participant Poll

A poll was conducted to understand the types of organizations represented in the meeting, with results shown in Figure 1. The poll had a total of forty-one (41) respondents.

Figure 1: Introductory Polling



NYSERDA Opening Remarks

Trevor introduced Tamar Nagel, Project Manager, NYSERDA, who provided opening remarks. Tamar introduced herself as the NYSERDA lead for the RMAG, thanking participants for their collaboration and inviting them to reach out to collaborate on programming for the RMAG. After her opening comments, Tamar introduced Susanne DesRoches, Vice President, Clean and Resilient Buildings, NYSERDA, who provided a brief overview of the federal and state energy policy landscape.

Susanne discussed federal updates, noting that NYSERDA is actively monitoring. She underscored the commitment of Governor Kathy Hochul and New York State to achieving a clean energy transition, stressing the importance of job creation, economic development, and affordability for all New Yorkers as core to that vision. Additionally, she highlighted the governor's allocation of $1 billion dollars in the executive budget to support climate commitments. This investment is intended to generate new jobs, lower energy costs for consumers, and reduce harmful emissions. Budget negotiations will continue through April and May, and NYSERDA is closely tracking developments.

Susanne also highlighted how NYSERDA's programs are impacted by a forthcoming order expected from the New York State Department of Public Service (NYS DPS) on Case Number 18-M-0084, colloquially referred to as Energy Efficiency and Building Electrification Portfolios. This order will finalize the scope of roles and responsibilities for Joint Utilities of New York and NYSERDA for incentive and technical assistance programs in fiscal years 2026 through 2030. Additional guidance will be provided when the Order is received from NYS DPS, and participants are invited to stay involved in the process via the NYS DPS Document Matter Management system, linked above.

New York State Updates and NYSERDA's 50th Anniversary

After her opening comments, Susanne introduced Courtney Moriarta, Director, Single Family Residential, NYSERDA. Courtney's presentation discussed NYSERDA programs in 2025, marking the fiftieth anniversary since NYSERDA's founding in 1975. Courtney highlighted NYSERDA's programmatic efforts past and present, and shared preliminary findings from a recent satisfaction survey of NYSERDA EmPower+ Program air source heat pump customers as part of a conversation exploring what's next for the Authority.

Energy Policy Context and Historical Perspective

Courtney began with a timeline of significant events shaping the national and global energy landscape. NYSERDA was established in 1975, a year of major cultural and economic tumult, including recovery from a major economic recession, the conclusion of the Vietnam War, and the start of construction on the Trans-Alaska Pipeline.

As NYSERDA celebrates its fiftieth anniversary in 2025, the Authority's staff are reflecting on achievements and the state's continued commitment to clean energy in the state. To close this section, Courtney shared "A Future in the Making", a video highlighting progress on New York's clean energy vision by elevating the contributions of all stakeholders.

Courtney highlighted New York State's progress toward clean energy goal achievement, including:

- New York successfully deployed its first utility-scale offshore wind generation project, marking a significant milestone in renewable energy development.
- More than one million New Yorkers have participated in NYSERDA-supported programs since inception.
- Contributions to the growth of the clean energy workforce which now comprises 178,000 jobs across the state.
- $39 billion dollars in clean energy investments across the state have been made since 2015.

Figure 2: A Future in the Making - NYSERDA 50th Anniversary Video

Stakeholder Perspectives and NYSERDA Program Customer Experiences

As part of her presentation, Courtney discussed findings from a 2023 Annual Statewide Study and preliminary findings from an EmPower+ Program past participant survey, focusing the discussion on satisfaction rates of customers with their residential efficiency and electrification upgrade measures.

Discussing the 2023 Annual Statewide Study, Courtney explored the key findings showing most New Yorkers support key activities contributing to a clean energy transition like the installation of renewable energy. It was noted that economic disparities can significantly impact adoption, with the study finding that low-income households were less familiar with ways to reduce fossil fuel consumption compared to higher-income groups. The

importance of addressing these needs in terms of NYSERDA's incentive and technical assistance programs for Low-to-Moderate Income ratepayers were discussed.

Courtney also shared insights from a recent survey conducted among past participants of the EmPower+ program, which focuses on providing energy efficiency solutions to low- and moderate-income households. The survey aimed to gauge participants' experiences with heat pumps, yielding strong response rates and positive feedback Notably, out of one hundred and nine (109) survey participants:

- **8 in 10 respondents** are 'Very Satisfied' or 'Extremely Satisfied' with their heat pump.
- **85% of respondents** say their heating bill is less expensive with their heat pump.
- **65% of respondents** say their overall energy costs are lower with their heat pump.
- **4 in 10 respondents** report saving more than $500 dollars annually on their energy bills with their heat pump.

To supplement the survey data, Courtney presented testimonials from participants, highlighting the comfort and convenience that heat pump measures have driven for consumers.

What's Coming Up in 2025

Courtney closed her presentation by outlining key residential market initiatives for 2025.

NYSERDA will be fielding the third round of the Residential Building Stock Assessment, a statewide survey designed to comprehensively identify and analyze the characteristics of New York's residential buildings. This effort will expand on outputs of prior rounds to drive more effective trend analysis and produce insights that will better align program design and implementation efforts with market needs.

Another focus for the coming year is the continued development of MyEnergy (https://myenergy.ny.gov/), a web resource intended to help consumers move through the clean energy customer journey. The site was launched last fall and will soon be updated with new features to enhance the user experience and accessibility. As part of MyEnergy, NYSERDA is also developing a new virtual residential energy assessment platform that will be deployed over the course of the year.

Courtney reiterated NYSERDA's commitment to supporting market-enabling activities like the RMAG. In 2025, this will include ongoing efforts within the Clean Heat Connect upstream partners network, the continued expansion of Experience Clean Heat, and the launch of a new Business Consulting and Mentoring opportunity for contractors to build competencies that will help them expand their businesses.

NYSERDA Multifamily Program Updates

Courtney introduced Brian Cabezas, Program Manager, Multifamily, NYSERDA, who presented three initiatives: (1) Owner's Representative Services, (2) Low Rise Multifamily Pilot, and (3) Multifamily Contractor Network.

Owner's Representative Services Program

Background

The Owner's Representative Services Program was established to respond to known challenges that building owners and managers face when navigating building retrofits. Often, these stakeholders have limited resources and may struggle to take the next steps after completing an energy audit. Without clear guidance, audits frequently stall as owners may not know how to develop bids, evaluate proposals, or structure financing for retrofit projects. Additionally, projects have been known to drop out due to budget overruns, which could be mitigated with construction oversight and cost management support. These challenges, particularly for historically underserved buildings, led to the creation of the Owner's Representative Services Program.

Services

The program is expected to launch by the end of this quarter or early next quarter. It will provide building owners with access to key services, including project planning, competitive bid facilitation, capital stack guidance and analysis, communication and relationship management, construction oversight and cost management, and project closeout support. The program also allows flexibility for new service offerings based on evolving needs.

Eligibility and Next Steps

Eligibility is targeted at under-resourced buildings, specifically those located in disadvantaged communities, buildings meeting Disadvantaged Community (DAC) criteria, condominiums or cooperatives, and buildings with 50 or fewer units. NYSERDA has preselected a pool of service providers who will contract directly with NYSERDA through existing task work orders. Funding for each project is capped at $35,000. The first $20,000 is fully covered by NYSERDA, while the remaining $15,000 follows a cost-share model, with 75% covered for affordable housing projects and 50% for market-rate properties. A Program Opportunity Notice (PON) and dedicated webpage will be published soon, providing further details on participation and funding opportunities.

Low Rise Multifamily Pilot Program

Background

The Low-Rise Multifamily Pilot Program is a new initiative designed to help further identify and ameliorate challenges that 5–19-unit multifamily properties face when conducting building retrofits. Many property management companies prioritize larger buildings where they can maximize savings, and multifamily contractors typically focus on larger properties that qualify for higher incentive allocations. Additionally, many of NYSERDA's programs require an energy audit or energy savings modeling through simulation software, which presents upfront costs that can be difficult for small building owners to manage.

Services

The pilot will provide a one-stop shop experience for small multifamily building owners where NYSERDA will help owners and managers navigate available incentives and services to maximally leverage available resources. As part of this approach, the pilot is expected to provide technical assistance in coordination with initiatives such as the Small Affordable Multifamily Energy Study Program and with support of Regional Clean Energy Hubs for outreach. Additionally, support from the Owner's Representative Services Program will be incorporated into the pilot to provide direct project support and technical guidance.

Eligibility and Next Steps

The Low-Rise Multifamily Pilot Program is anticipated to launch in June 2025 with an initial 12-month timeline. Lessons learned throughout the pilot will be used to refine strategies and inform future multifamily programs, ensuring that small multifamily buildings continue to receive tailored support and resources. NYSERDA has limited eligibility to properties with up to nineteen (19) units that are in total 1–3 stories above grade. Most of these buildings were constructed before 1980, meaning they predate both state and national energy codes, presenting significant opportunities for energy savings. By contrast, buildings with 20 or more units are more likely to have been built within the last 45 years, where energy efficiency opportunities tend to be more limited.

Multifamily Residential Energy Pathways Network

Background

Lastly, Brian discussed the Multifamily Residential Energy Pathways Network (MREP) Participating Contractor Network, which launched in November 2024 under Request for Qualifications 5906 (RFQL 5906: Multifamily Residential Energy Pathways Participating Contractor Network). This new network is designed to establish a more comprehensive and qualified pool of contractors to serve the multifamily sector. It replaces the previous Multifamily Building Solutions Network while expanding the range of service categories available to building owners.

Services

The previous contractor network primarily focused on technical assistance services, whereas the MREP Participating Contractor Network includes air-source and ground-source heat pump installers, general contractors, plumbers, electricians, and other contractors to ensure a more integrated pool of resources for multifamily energy projects. This expansion is intended to ensure that more aspects of multifamily energy efficiency and electrification projects are adequately supported by pre-qualified professionals.

Eligibility and Next Steps

In addition to eligibility for future incentives, participating contractors will be listed on NYSERDA's contractor directory, which is actively promoted to building owners and customers. The network will also serve as a platform for contractors to provide direct feedback to NYSERDA on program performance and evolving market trends, shaping the direction of future multifamily energy initiatives.

The contractor application is now live and offers two pathways for participation. Full application is required for new applicants who have not previously participated in a NYSERDA contractor network. A shortened application is available for providers who have joined an eligible network in the past three years or who have completed projects through eligible programs.

NYSERDA: Consolidated Question & Answer

Questions from audience members were solicited and responded to in writing via the Q&A function in the WebEx Webinar. A record of all Questions and Answers for NYSERDA presentations are included under *A.1. Consolidated NYSERDA Question and Answer* in Appendix A.

Participants are encouraged to reach out to Brian Cabezas using the contact information available on the presentation.

NY-GEO: Revaluing and Incentivizing Geothermal Heat Pumps

Background

Trevor provided introductory context, noting that as part of efforts to foster cross-sector discussion and awareness raising for efficiency and electrification solutions, the RMAG will occasionally host external organizations to share their perspectives on the market. NY-GEO was invited as a guest speaker to present on the challenges and opportunities for geothermal heat pump adoption in New York State, with emphasis on revaluing its benefits for the grid and consumers.

Opening Remarks – John Rath

Trevor Reddick introduced John Rath, Director of Operations, NY-GEO, to provide opening remarks for the NY-GEO presentation. John opened by highlighting the alignment between NY-GEO and RMAG's clean energy goals and market education, noting NY-GEO aims to engage participants, address questions, and understand perspectives on geothermal adoption. He underscored the importance of collaboration, framing the presentation and discussion as an introduction to geothermal adoption considerations in New York. This included the Ground Up Geothermal Alliance, a Western New York initiative focused on standardizing installations and reducing costs to expand geothermal adoption statewide.

John then introduced the speakers:

- **Jens Ponikau**, president of NY-GEO and owner of Buffalo Geothermal, an IGSHPA-accredited ground-source heat pump designer and installer. Jens' presentation focused on the value of ground-source heat pumps for both individual buildings and the electrical grid.
- **Kevin Moravec**, president of Barney Moravec, Inc., and VanHee Mechanical, followed with insights from his 4,800 ground-source heat pump installations. He compared ground-source and air-source heat pumps, addressing barriers and incentives shaping the industry.

The Impact of Peak Demand on Heat Pump Performance and Grid Stability

Overview

Jens Ponikau opened his presentation with an observation that peak kilowatt (kW) demand, not just average kilowatt-hour (kWh) consumption, is critical for grid planning. An energy simulation model developed as an example by NYISO showed an air source heat pump operatingefficiently on most days (COP ~2.3), with its efficiency dropping sharply (COP ~1.12) on the coldest days due to reliance on resistance heating, creating spikes in grid demand. Field studies confirmed this trend, emphasizing that peak demandneeds to be taken into account in electrification plans. Jens pointed to assessments indicating that full electrification of space heating via air source heat pumps alone could require nearly four times New York's current peak electricity capacity.

To prevent grid overload, future heating systems must maintain stable efficiency in extreme temperatures, eliminate the need for electric resistance back-up heating, and integrate smarter energy solutions. Jens highlighted the central role of geothermal heat pumps to solve this issue, arguing that geothermal heat pumps function as a multi-month battery. Jens underscored this via the example of Zer0Place, a high-performance building in New Paltz using geothermal heat pumps using stored underground heat to sustain efficiency year-round, ultimately reducing peak demand and enhancing grid stability.

Zero0Place Example

Jens Ponikau presented Zer0Place, a 46-unit, 55,000 sq. ft. building using advanced geothermal systems for heating, cooling, and hot water, which earned NYSERDA's Buildings of Excellence Award. The geothermal system stores excess heat underground, creating a thermal battery that reduces grid dependence by providing heating in winter and cooling in summer. On a -6°F day, Zer0Place used 63% of its energy from stored heat, reducing peak grid demand by 70%. This type of system, if replicated at scale, could theoretically save millions in grid infrastructure costs, providing efficient backup to the grid at a fraction of the cost of grid-scale back-up battery storage currently being explored via demonstration projects.

Jens postulated that geothermal systems leveraged in this manner could significantly cut costs for grid expansion, providing long-term savings. At Zer0Place, energy use was lower than in similar apartments, debunking the need for major grid expansion if geothermal systems are scaled. Jens emphasized geothermal's potential to meet New York's climate goals, decarbonize buildings, and maintain grid stability while avoiding many costly infrastructure upgrades.

Electrifying Existing Buildings: The Role of Incentives

Overview

Kevin Moravec, President of VanHee Heating Mechanical and Barney Moravec, Inc., discussed challenges and opportunities surrounding the electrification of existing buildings. His presentation covered geothermal system costs, variable capacity technology, and the need for incentives.

Weatherization vs. Electrification

Kevin addressed misconceptions regarding geothermal systems, noting that loop field costs have become more standardized, with only minor fluctuations based on factors like bedrock depth. Heat pump unit costs are stable, and the savings for customers are often negligible once rebates and tax credits are considered. He emphasized that prioritizing loop field installation ensures long-term electrification. Rising electricity costs are a concern, with the coefficient of performance (COP) influencing energy drawn from the grid.

Workforce Development and Industry Growth

Kevin highlighted workforce development as a key to scaling geothermal adoption. As demand for loop field installations grows, companies will expand and hire more workers, offering high salaries. He also emphasized repurposing New York's existing HVAC workforce, which already installs gas systems but often lacks geothermal knowledge.

The Case for Prioritizing Electrification

Kevin asserted that full electrification with geothermal should be prioritized over incremental energy efficiency improvements. Technological advancements and cost standardization make geothermal more viable. Variable capacity heat pumps adjust output based on real-time needs, providing better efficiency than traditional systems. Once a home transitions to geothermal, it permanently eliminates fossil fuel heating. However, adding any heat pump system either ASHP or GSHP gives a homeowner the ability to go fossil fuel free.

Rising energy prices can make electrification more important. Kevin referenced U.S. Department of Energy data showing average savings of eighteen percent (18%) from energy retrofits, with U.S. electricity and natural gas rates steadily rising. These increases highlight the need for more efficient heating systems like geothermal, which help mitigate exposure to price volatility.

Sizing Geothermal Systems: Impact on Load and Homeowner Costs

Geothermal sizing is based on seasonal energy demand, not just peak load. Weatherization alone can reduce heating costs but may prolong reliance on fossil fuels if consumers interested in electrifying their homes are resource-constrained, delaying New York's climate goals. When factoring in all tax credits and available incentives Kevin posits that geothermal heat pumps can offer better returns on investment by eliminating gas dependence and improving efficiency, also noting that current Clean Heat incentives that are scaled to the capacity of the installed heating system effectively creates a disincentive to weatherize. (Actual savings are highly contingent on installation and energy costs. Under current rates and fuel prices there are savings vs natural gas, but the payoff period can be longer than the 25 years a geothermal heat pump is rated to last).

Comparative Costs and Incentives

Kevin compared air-source and ground-source heat pumps, noting that air-source systems may increase operating costs in homes that are converting from natural gas. In contrast, geothermal heat pumps provide a long-term solution, decarbonizing homes and stabilizing energy costs. Kevin discussed internal equipment geothermal installation costs, ranging from $15,000 to $25,000 depending on system features. The external loop field installation can add $12,000 to $20,000; however, incentives significantly reduce homeowner expenses. Current incentives range from $7,500 to $25,000 depending on the utility provider, with additional federal tax credits currently available.

Kevin pointed out that incentives can often be a barrier to broader geothermal heat pump adoption. Simplifying training and support for new contractors is crucial. Discussions with New York State agencies are focused on restructuring incentives to support loop field

installations. Kevin proposed reallocating funds from gas line subsidies to geothermal infrastructure to encourage adoption. He favored individual building-level loop fields over communal thermal energy networks due to the risk of shared system failures.

Kevin proposed restructuring incentives to make geothermal adoption more accessible, such as allowing funds to be allocated based on project needs. By applying financial support to the critical loop field component, more homeowners could transition to geothermal, reducing reliance on fossil fuels and achieving long-term savings.

He concluded by stressing the importance of aligning policy adjustments with the state's electrification and decarbonization goals to make geothermal widely accessible.

NY-GEO Question & Answer

Questions from audience members were solicited and responded to both verbally and in writing via the Q&A function in the WebEx Webinar.

A record of all Questions and Answers for NY-GEO are included under *A.2. Consolidated NY-GEO Question and Answer* in Appendix A.

Closing and Next Steps

Final Polling

Participants were asked to detail their biggest takeaway from the discussion. In total eleven (13) responses were received. Full responses are detailed here.

Poll Results: What's your biggest takeaway from today's discussion?

- Geothermal heat pumps can heat and cool efficiently even without weatherization measures
- As someone who has a geothermal heat pump in an unweatherized home in Idaho (at $.11/khw), the comfort and utility bill implications are chronic without weatherization. This could potentially taint the reputation of HP installations.
- Geothermal is so much better than ASHPs
- Great presentation. There is data to support geothermal installations working in different climates
- Ground source over air source
- Importance of valuing the impact on the grid of geothermal and how to monetize it. Potential to have NYPA fund community projects should be explored
- Interested in hearing about the upcoming pilots
- It's important to think about demand on the grid during peak heating times when weighing different building heating options

- Opportunities for geothermal
- Significant benefits of geothermal systems as a battery source, "ground vs. grid"
- We should pilot big geothermal incentives in DACs as proof of concept to familiarize low-income families with this technology. We should also end the natural gas customer exclusion from accessing heat pump incentives.
- My take away - the ground loop is needed to make electrification possible without an unworkable expansion of the grid.

NYSERDA Closing Remarks

Courtney provided brief closing statements. She emphasized that the RMAG can convene Working Groups and other forums to support market interests, and that attendees are encouraged to reach out to Trevor Reddick from Kearns & West and Tamar Nagel from NYSERDA with ideas for upcoming meetings or areas of interest. Tamar closed the session by thanking all participants for their collaboration and active dialogue as RMAG members.

Appendix A: Consolidated Question & Answer

A.1. Consolidated NYSERDA Question and Answer

Question/Comment	NYSERDA Answer
RMAG Feedback	
Disappointed that you all are again not providing a forum for attendees to be active participants; In order to truly engage with what you are saying is an "Advisory Group" you should create a space where engagement can actually happen, instead of being afraid of what people have to say.	We have a framework for various types of workgroups that the RMAG can support for more active engagement. We encourage RMAG members to suggest topics for member-driven working sessions. These could be one-off meetings or ad hoc committees that convene over time to work toward solutions on specific topics. If you have ideas, please share with Tamar and Trevor and we can get something going.
EmPower+ Heat Pump Satisfaction Survey	
How many of those participants were LMI? Okay - this is only LMI if Empower+, so what's the actual number of respondents? Would be helpful for context.	The survey size for the EmPower+ survey discussed by Courtney was 109 respondents.
Thanks for the number re the survey. How many were in NYC?	We received responses from 3 homeowners in NYC. This is consistent with the rest of the state where we had 1-4 responses per county in most cases. Tompkins and Suffolk were outliers with 12 and 8 respondents respectively.
Could you provide the geographic profile of the survey respondents? Thanks	Please see Courtney's response to a prior question, "We received responses from 3 homeowners in NYC. This is consistent with the rest of the state where we had 1-4 responses per

	county in most cases. Tompkins and Suffolk were outliers with 12 and 8 respondents respectively."
How many past participants of EmPower+ received a heat pump through the program?	We found ~1400 LMI households that had received a heat pump through the EmPower+ program or the demonstration pilot we ran in 2021-22. The survey was sent to all of them and we had 109 responses, about 8% response rate.
Thanks for this info. Of the 109 respondents of the survey, how many received heat pumps through the EmPower+ program?	The survey went out to those who had heat pumps installed through EmPower+, so all 109 respondents would have received heat pumps through EmPower+.
These 109 participants went from natural gas to a heat pump?	The survey included participants who previously used a variety of fuels as their primary heating source: 32% fuel oil 20% propane 17% natural gas 13% wood or wood pellets 10% electricity 4% kerosene 1% coal 3% other/not sure
NY Program Updates	
How will Health and Safety testing be done with the virtual assessments?	The virtual assessment will be designed to provide decision-grade information to homeowners recognizing that some of the data will need to be field validated before a contractor can create a final work scope. Part of that field validation process would include various condition assessments and H&S checks that can't be completed virtually.
Could you give an update on the IRA funding: HER/HEAR and if funds have been frozen? We have heard this is an issue with GGRF and other funding resources.	We have not made any changes to our IRA HEAR rebates at this time. We are monitoring the federal situation closely and any potential impacts on our work.
Why are there incentives for air source heat pump when it is known the COP is almost equal to electric resistance heat on a design day? The air source heat pump incentives are hurting our electric grid & environment.	To meet the needs of our climate goals, we will need to take advantage of all viable solutions to decarbonize homes. This includes both ground source and air source heat pumps being part of the solution. Air source heat pumps offer COPs closer to their maximum efficiency, much higher than electric resistance heat, when properly sized and installed, especially in an appropriately weatherized home. NYSERDA requires envelope performance meet minimum standards before heat pumps are installed to aid in mitigating winter peak demand and continuously invests in improving the knowledge and skills of contractors installing these systems. For example, NYSERDA is currently developing a set of best practices documents and links to help contractors install efficient systems throughout New York.

Multifamily Programs	
@Brian- only a few of the hubs have grown into working with larger multifamily buildings. I encourage you to do a training not just on what your program offers but really a 101 on the lifecycle of an upgrade project for a multifamily building, as well as how to triage when to refer people to this program rather than just directly to EmPower+ 2-4 family or AMEEP.	That is helpful feedback. Thank you for sharing. We'll work on putting something like that together.
re: the owners representatives services program will there be outreach materials and trainings developed specifically for the Hubs?	Yes, we have plans to present information about both programs I discussed today with the Hubs. We plan to hear from the Hubs what they need from us to help promote these opportunities to their communities.
Do LMI multifamily buildngs include Mitchell Lama?	Yes, when our multifamily programs allow for moderate income households then we have accepted Mitchell Lama buildings.

A.2. Consolidated NY-GEO: Questions and Answer

Verbal or Written	Question/Comment	NY-GEO Answer
Verbal	One of the things that we've run into with geothermal in Syracuse is we keep getting told that the salt brine aquifer near the city is a deterrent from doing geothermal in the region. How real is this, and what are our options because we have a lot of households in Syracuse and they would all have to go with air sourced heat pumps - maybe the geothermal energy is not really an option.	There are ways to approach the salt equation that exists in part of central NY. We're doing a 90 hole project where we will be crossing through a brine aquifer and there are several ways to deal with that. It's a slight barrier, and cost adder, but not a disqualifier. Talk to experts. Don't be discouraged by third parties.