October 27, 2025

Hon. Michelle L. Phillips, Secretary,
New York State Public Service Commission,
Three Empire State Plaza,
Albany, New York, 12223-1350

Dear Secretary Phillips,

Re: Comments regarding final UTEN Pilot Project Engineering Design and Customer Protection Plans in Case 22-M-0429

The Building Decarbonization Coalition (BDC) and the Alliance for a Green Economy (AGREE) respectfully submits this comment in response to the Public Service Commission's notice of proposed rulemaking, considering whether it is in the public interest to authorize the relevant utilities to proceed to Stage 3, Construction, for the Utility Thermal Energy Network (UTEN) pilot projects with completed Stage 2 filings.

In 2022, the State legislature passed and Governor Hochul signed the Utility Thermal Energy Network and Jobs Act (UTENJA). UTENJA authorizes and mandates each of the seven major investor-owned utilities to pilot thermal energy networks (TENs) in their territories. It also requires the Public Service Commission (PSC) to inform a regulatory process and thermal utility model that aligns with the climate justice and emissions reductions requirements within the Climate Leadership and Community Protection Act (CLCPA). UTENJA's goals include: generating technical, operational, and regulatory lessons necessary to establish a framework for utility-scale thermal energy service; timely construction to rapidly develop a well-trained, highly-skilled workforce; and promoting good jobs for local residents—especially in disadvantaged communities—in the growing building decarbonization sector.

UTENJA took effect in July 2022 and required the PSC, within six months of the effective date, to determine "whether it is in the public interest to approve or modify such pilot thermal energy network projects and shall issue an order directing each gas, electric or combination gas and electric corporation to implement such proposed or modified pilot thermal energy network projects." The law's intent was to move pilots forward quickly, subject to modification from the PSC, to achieve lessons that could inform the long-term development of UTENs in New York. We recognize that the six month timeframe was aggressive and that the PSC and utilities have required extra time to ensure projects are planned properly. However, approval of these projects is now almost three years overdue.

Because of this, we stress the urgency of moving projects forward. BDC urges the PSC to advance all six projects into Stage 3 to ensure the goals of UTENJA are fulfilled. We also recognize that Stage 3 and subsequent stages present further opportunities for increased transparency and cost reductions as designs are finalized. We support the collaboration between NYSERDA and the PSC to hire a reviewer for these pilots whose expertise will contribute to our shared long-term goal of creating a durable, transparent, and equitable regulatory UTEN framework, ultimately enabling utilities, communities, and private partners to collaboratively build out a low-carbon, networked thermal energy system across New York State.

Discussion

Thermal energy networks represent a critical next step in New York's transition toward an equitable, affordable, low-carbon energy future. TENs enable the capture, recovery, exchange, and storage of thermal energy (heat) by interconnecting buildings and facilities through shared thermal infrastructure, namely proven and mature technologies such as heat pumps, waste-heat recovery systems, and district-scale energy sharing. TENs move heat into buildings when they need heating and out of buildings when they need cooling. Connecting diverse, non-combusting thermal energy resources reduces dependence on fossil fuels while improving energy efficiency in connected buildings.

TENs are highly efficient. They can achieve coefficients of performance (COP) of 4 or more, meaning that for every unit of electricity, they can provide four units of heat. By comparison, electric resistance heating sees a COP of 1, and a high-efficiency gas furnace might have a COP of 0.97. Due to their high levels of efficiency, when strategically deployed, TENs can also directly relieve electric grid congestion by reducing heating and cooling load. By shifting energy-intensive heating and cooling loads from the constrained electric system to efficient thermal infrastructure, TENs can defer costly grid reinforcements and enhance reliability in high-demand areas.

As utility-scale solutions, UTENs have the capacity to deliver family-sustaining union jobs and offer skills transition pathways for workers; indeed, a "just transition" pathway for gas workers and a pathway into unions for members of disadvantaged communities were key goals of UTENJA. UTENs can provide good jobs for local residents through required training and entry programs to bring new workers into the union workforce, and support the existing union workforce in skills transition and opportunities, especially for transitioning utility workers who have lost, or are at risk of losing, their employment as a utility downsizes its gas transmission and distribution system.

An important feature of all the projects, anticipated to be carried out by the Stage 2 filings, are the use of project labor agreements, apprenticeship and pre-apprenticeship standards for all construction contractors, and protections for the various utilities' workforce. BDC acknowledges and supports the commitment in all the complete Stage 2 utility filings, which indicate that they will follow these standards as projects advance to the next Stage. Such agreements can ensure that the goals of UTENJA in relation to workforce development, career pipelines for residents of disadvantaged communities, and safe, high-quality infrastructure are met. The timely advancement of project labor agreements between bona fide trade union organizations and the utilities for their pilot projects will also help ensure that projects can advance construction on a timely schedule with high safety and training standards in Stage 3.

With these inclusions, UTENJA set a national precedent for building a clean energy economy that sustains good union jobs while opening new opportunities for underrepresented workers, and mitigates the risk of incentivizing low-wage, transient jobs. By ensuring utilities continue to comply with these provisions going forward, the PSC can help New York continue to lead the nation in building clean energy infrastructure grounded in safety, timeliness and family-sustaining jobs.

Furthermore, TENs foster *industrial symbiosis* through heat sharing—linking industrial and commercial facilities so that waste heat from one process becomes a productive input for another. This transforms stranded thermal energy resources into local economic assets, promoting energy circularity and enhancing the resilience and productivity of New York's manufacturing base. By enabling cost-effective reuse of process and waste heat across sectors, TENs advance the state's climate and economic goals simultaneously, establishing a foundation for competitive, sustainable, and interconnected regional economies.

TENs represent a powerful economic development tool for New York State. Because TENs can harvest waste heat from existing assets, like buildings and transportation systems, they can also catalyze redevelopment around these assets—supporting the siting of affordable and mixed-income housing near transit hubs and downtowns. TENs can also support the achievement of local requirements such as New York City's Local Law 97. Such redevelopment can create long-term employment opportunities in construction, operations, and maintenance for a low-carbon built environment. TENs can support equitable, neighborhood-scale building electrification by ensuring neighbors upgrade their homes at the same time, creating opportunities to strategically retire leak-prone gas pipe and avoid expensive pipe repairs and replacements.

Review of Pilot Projects

The pilot projects submitted under UTENJA mark a major milestone in New York's transition to a low-carbon thermal energy future. The pilots will test diverse configurations of networked geothermal and waste-heat recovery systems across varying building types, geographies, and utility territories. Each will provide critical insight into cost structures, customer interconnection, rate design, workforce training and equitable access. Approval of pilots under this proceeding will allow utilities and their partners to demonstrate benefits and advantages of TENs in real-world settings, and resulting lessons will inform the development of a regulatory framework capable of supporting an open, non-discriminatory thermal energy marketplace.

Here, each project is evaluated not only on its technical and site-specific merits, but on its potential to inform a broader regulatory framework and help establish a fair and durable thermal energy marketplace. Our comments focus on how effectively each pilot tests key relationships among operators, suppliers, customers, and financiers and whether it produces replicable lessons on cost transparency, scalability, design and engineering, and equitable market participation.

Orange & Rockland

It is critically important that Orange & Rockland Utilities (O&R) advance a UTEN pilot. Its service territory provides a unique and highly relevant context for demonstrating the scalability of thermal energy networks in smaller urban centers and suburban communities.

Unlike the large investor-owned utilities operating primarily in New York City, O&R's footprint encompasses a mix of compact downtowns, aging building stock, and emerging redevelopment zones—conditions common across much of the State. A successful O&R pilot would therefore serve as a template for similarly-sized utilities seeking to implement clean thermal infrastructure in smaller municipalities requiring tailored solutions. By testing financing structures, customer engagement strategies, and community-scale integration of geothermal and waste-heat recovery systems, O&R can help establish practical models for equitable, cost-effective decarbonization across New York's smaller cities and towns, ensuring that the benefits of UTENJA extend beyond the major metropolitan centers to every corner of the State.

Haverstraw

O&R's Haverstraw thermal energy network pilot represents a high-impact initiative in the Lower Hudson Valley, designed to serve both public and private customers within a designated Disadvantaged Community. It provides a template for small-city and suburban-scale TENs that incorporate municipal assets, private development, and natural energy resources, standing out not only for its technical ambition but for its potential to show how climate policy, housing policy, and local economic revitalization can integrate.

Centered in the urban core of the Village of Haverstraw, the project envisions a shared geothermal borefield complemented by additional low-temperature, renewable heat recovery opportunities, most notably from the municipal sewer main and the Hudson River. Together, these resources will supply a resilient and flexible TEN capable of supplying heating, cooling, and domestic hot water to a mix of municipal buildings, private commercial spaces, and residential developments.

The pilot proposes two independent ambient-temperature single-pipe thermal loops, with the potential to eventually combine the loops into a larger network. The east loop will serve new waterfront affordable housing construction, and the west loop will serve the downtown and municipal cluster. Future interconnection of the east and west loops could create a larger, more resilient network that enhances community energy independence and positions Haverstraw as a regional leader in equitable clean energy innovation. The PSC's advancement of both the east and west loops simultaneously could maximize cost-effective economies of scale for construction as well as marketing and administration, and would present the opportunity to demonstrate effective interconnection between two loops in the future.

The proposed $5/ton/month network access fee, coupled with a total customer cost guarantee covering both electric and thermal energy, is an important measure to ensure affordability and ratepayer protection for all users and stakeholders.

Con Edison of New York

Con Edison has demonstrated an earnest and substantive commitment to advancing the goals of UTENJA through a portfolio of well-conceived pilot projects that reflect technical rigor and strategic foresight. The company's proposals—ranging from high-density Midtown Manhattan to mixed-use neighborhood-scale deployments—illustrate a genuine effort to integrate lessons from electric and gas system planning into the design of a thermal energy network infrastructure.

Con Edison's pilots align closely with UTENJA's goals of non-discriminatory access and scalability. By engaging proactively with municipal and interagency partners, including the Metropolitan Transit Authority (MTA) and local building owners and real estate developers, the company is helping to define replicable models for public-private collaboration and to set the foundation for an open, low-carbon thermal marketplace consistent with the CLCPA's objectives.

Mount Vernon

The Mount Vernon pilot targets a suburban section of the City of Mount Vernon, identified as a Disadvantaged Community, where leak-prone gas infrastructure presents both a hazard and an opportunity for accelerated decarbonization, yielding critical health and safety benefits. Additionally, this provides a model for networked geothermal systems as a neighborhood-scale decarbonization approach across building typologies, in a replicable context. BDC appreciates that Con Edison's team has worked in coordination with the City of Mount Vernon and residents and building owners in the pilot project area to build understanding of and support for pilot participation.

By replacing 500 feet of aging gas main with thermal distribution infrastructure and installing all-electric appliances to the eight buildings currently served by the leak-prone pipe, the pilot enables neighborhood-scale decarbonization and supports equitable access to clean heating *and* cooling. Replacing existing fossil-fuel powered HVAC systems with electric appliances will improve occupant health and safety in an area burdened with high asthma rates. The new system will also reduce greenhouse gas emissions and reduce peak electric system demand, reducing electric system impact by 45 percent compared to heating and cooling decarbonization with air-source heat pumps (ASHPs) alone.

The design proposes a two-pipe geothermal network, which is an opportunity for empirical learning on two-pipe system hydraulics, performance, and customer integration. The system's design incorporates centralized ASHPs to complement the geothermal borefield and reduce its required capacity. This hybridized approach follows engineering best practices to minimize geothermal field sizing and may optimize seasonal efficiency. Properly implemented, the design could deliver permanent electric peak load mitigation, supporting broader grid benefits in this capacity-constrained region.

The primary thermal resource is a shared geothermal borefield that will serve a mix of 42 existing buildings, including large multifamily buildings, one- to four-family homes, commercial establishments, municipal buildings, religious facilities and a new mixed-use Energy Center. This diverse customer base will provide valuable insight into the technical and financial performance of networked geothermal systems across multiple building types.

The customer protection plan aligns with the intent of UTENJA. The pilot proposes to charge customers a flat fee of $10/month and implement a cost protection guarantee. This increases likelihood of customer participation and ensures that customers benefit from energy cost predictability and affordability. It will also help resolve long standing issues with inadequate heating in winter and cooling in summer, with customers' increased comfort facilitated by the cost protection guarantee.

Rockefeller Center

The Rockefeller Center TEN is a significant step toward demonstrating how networked, low-temperature thermal systems can operate effectively in ultra-high-density, high-rise urban environments such as Midtown Manhattan. It not only advances decarbonization in one of the most publicly-visible and energy-intensive districts in the nation, but also tests new compensation models for thermal resource providers and demonstrates how public-private collaboration can deliver climate adaptation benefits to municipal urban infrastructure.

The pilot builds upon an existing, well-established thermal system and extends it to serve additional office buildings, both within the Rockefeller Center complex and across Sixth Avenue. By interconnecting multiple buildings through a shared thermal loop, the project enables time-of-use heat sharing—capturing and redistributing internal and process heat between buildings with differing load profiles throughout the day and year. This not only enhances overall system efficiency but also reduces electric grid demand, contributing to improved reliability and operational flexibility in one of the most congested load zones in the State. The Rockefeller Center pilot thus offers a replicable framework for deploying scalable, grid-integrated thermal energy networks across New York City's most dense areas.

From a technical standpoint, the project employs modular water-source heat pumps connected to a low-temperature water loop, operating at approximately ±95°F. This design approach maximizes heat recovery potential, decreases parasitic losses, and allows the system to efficiently meet 100 percent of the heating and domestic hot water needs of all participating buildings without reliance on fossil backup.

The Rockefeller Center pilot tests a new model of compensation of thermal energy providers. Tishman Speyer will receive compensation for providing thermal energy from its chilled water plant to the TEN, highlighting a model to incentivize waste heat capture and utilization within a networked system. The proposed pricing structure sets a per-MMBtu rate to reimburse Tishman Speyer for its additional electricity costs as a result of operating their systems in coordination with the TEN; it also allows a reasonable profit on their investment to incentivize Tishman Speyer's capital contribution to the pilot's construction. This is an innovative approach to mobilize private capital and public-private partnerships to support decarbonization and TENs.

The pilot requires routing a thermal main through an active Metropolitan Transit Authority (MTA) subway station. Con Edison's collaboration with the MTA can unlock mutual benefit. The MTA faces increasing challenges in managing heat accumulation in stations and tunnels. Using the subway network as a source and sink for thermal energy exchange could enable winter heat recovery and summer station cooling, reducing mechanical ventilation loads and improving the transit experience for millions of daily riders. This would transform what is currently a thermal liability into a shared energy resource, demonstrating the potential for coordinated, cross-agency solutions to New York's climate adaptation challenges. In the short-term, this collaboration will provide lessons in navigating complex underground utility coordination and permitting; in the long-term, as the MTA continues to implement its climate adaptation and carbon reduction strategies, participation in networked thermal systems can provide operational resilience and lifecycle cost savings, while helping Con Edison and the State meet CLCPA mandates. Such public-private partnerships also enable long-term co-investment in underground infrastructure, maximizing spatial efficiency and minimizing surface disruption during future capital projects.

Chelsea

The Chelsea thermal energy network pilot presents a real-world test bed for designing, operating, and regulating TENs in areas characterized by rapid change and substantial quantities of recoverable waste heat. This will inform future TENs across New York City and other constrained urban areas, where similar redevelopment pressures and thermal opportunities coexist. In this way, the project acts as a strategic down payment on long-term energy and infrastructure modernization, even as specific building connections change and evolve.

Located in a dense, mixed-use area of Manhattan, the project will capture excess heat from a nearby data center and office complex, and deliver it via a short, one-block thermal distribution main to a central heat pump plant serving a New York City Housing Authority (NYCHA) residential community. The initial configuration will provide domestic hot water service to three NYCHA buildings and full heating, cooling, and domestic hot water to one, while maintaining hydraulic and thermal balance without the need for fossil backup systems—a notable technical achievement. This effectively converts waste heat that would otherwise be rejected to the atmosphere into a valuable, renewable thermal resource that can advance both building electrification and affordable housing modernization.

By eliminating the need for a standalone central plant building, overall capital costs have been significantly reduced, improving project economics and scalability. The network's balanced load profile means that cooling heat rejection is required for only a few hours each year, maximizing the utilization of recovered thermal energy.

The Chelsea pilot is located within a redevelopment zone where several participating NYCHA buildings may be demolished within the next decade. However, the enduring value of this pilot lies in the installation of the permanent trunk infrastructure that will enable waste heat recovery from nearby data centers and other large commercial buildings. Moreover, the system has been designed for future expansion to serve additional mixed-use and residential redevelopment in the surrounding neighborhood. By establishing this backbone now, Con Edison will create foundational thermal infrastructure for the future redeveloped neighborhood, rather than retrofitting systems later at significantly higher cost and disruption. Even as the specific building connections evolve, the pilot will generate data on interconnection standards, network hydraulics, load balancing, and operational control between waste heat sources and multi-building customers.

National Grid

National Grid's broad service territory—spanning urban, suburban, and rural contexts—uniquely positions it to demonstrate the versatility of TENs as a statewide decarbonization strategy. The company developed technically ambitious pilot concepts that align with the CLCPA and reflect a meaningful commitment to workforce development, infrastructure modernization, and equitable access to clean energy. BDC recognizes that National Grid's pilots are important to advancing the objectives of UTENJA, as their outcomes will inform replicable models for utilities operating across diverse building and community types.

We urge the PSC to approve these pilots to advance to Stage 3 and modify the Customer Protection Plans, as described below, to ensure that customers see bill savings and are adequately incentivized to participate in the pilot.

Syracuse

The Syracuse thermal energy network pilot, developed by National Grid in partnership with the City of Syracuse and Metro Syracuse agencies, demonstrates how collaboration between utilities and municipal partners can align climate policy with community development goals. This pilot could become a flagship model for building climate infrastructure to advance economic renewal in New York's upstate cities, and a model for leveraging existing municipal assets like wastewater treatment plants to support decarbonized development.

The system will utilize wastewater heat recovery technology at the Syracuse Wastewater Treatment Facility, located near the city's Inner Harbor. By capturing and reusing heat from this public asset, National Grid will provide renewable heating and cooling to a cluster of planned new residential and commercial buildings, establishing a foundation for sustainable urban growth. Notably, because the wastewater facility is a continuously operating municipal service, the pilot benefits from a highly stable thermal resource and avoids reliance on fossil backup systems. The inclusion of thermal storage capable of delivering up to 24 hours of heating and 12 hours of cooling provides a robust operational buffer and enhances system resilience.

The PSC should modify the Customer Protection Plan for this project to ensure that participating customers see energy bill savings in the pilot. The filing proposes that 80 percent of "available savings" will be assessed as a thermal energy fee; this is too vague to understand the actual impact of the pilot on customer bills. A flat fee structure which guarantees that customers are not paying more, and gives rebates where there are significant savings, is a more appropriate solution to incentivize pilot participation and enhance affordability.

The Inner Harbor district is a historically industrial area now poised for redevelopment. It sits at the intersection of Syracuse's climate, housing, and workforce priorities, and the deployment of a TEN here sends a strong signal that decarbonization can also mean economic opportunity. Although the initial network will not directly serve existing residents, it is within a designated Disadvantaged Community; by pairing state and local public investment with private-sector redevelopment, the project will help attract new businesses, improve energy resilience, and reduce long-term operating costs for future building occupants. If approved by May, construction is scheduled to begin in 2027 and be completed by 2028, marking a significant milestone in establishing Central New York as a leader in integrated, utility-led decarbonization.

Brooklyn

National Grid's Brooklyn thermal energy network pilot integrates geothermal and wastewater heat recovery systems to deliver fully-decarbonized heating and cooling to several New York City Housing Authority (NYCHA) high-rise multifamily buildings and an adjacent retail complex. Its location within a designated Disadvantaged Community aligns with the CLCPA, presenting an opportunity to advance both decarbonization and equity objectives through affordable housing modernization and local investment. The inclusion of cooling service for NYCHA residents is an important equity-centered outcome, improving resilience and public health during extreme heat events.

Technically, the Brooklyn pilot represents an opportunity to learn more about utility-scale geothermal technology and the interaction with wastewater heat recovery. The shared geothermal borefield—comprising roughly 150 boreholes, each 500 feet deep—is being designed to meet 100 percent of the connected buildings' heating load, supported by a SHARC wastewater heat recovery system that provides supplemental thermal energy and enhances load balancing.The inclusion of waste heat recovery from a grocery store located across the street—a private partner motivated by Local Law 97 compliance—illustrates the project's potential to leverage industrial symbiosis, converting regulatory obligations into shared public and environmental benefit. Additionally, National Grid is exploring future expansion options using MTA dewatering or wastewater treatment plant heat sources, creating the potential for a larger TEN that could serve mixed-use redevelopment in surrounding neighborhoods.

This project presents an opportunity for the PSC to approve this pilot, and modify the proposed fee structure for Brooklyn pilot participants, currently proposed to be calculated based on what participants currently pay on their energy bills, which may not guarantee that all customers benefit equitably from participation. Tying fees to existing bills can disproportionately affect households that currently have higher energy needs, but whose building performance may improve with time. To encourage pilot participation and ensure affordability and bill predictability, customers should see *savings* through pilot participation. A flat fee structure, similar to Con Edison's proposal in Mount Vernon, would guarantee that customers are not penalized with higher bills due to their pilot participation and could provide rebates where significant savings occur, and incentivize pilot participation. The BDC also recommends that the PSC modify National Grid's requirement for customers to agree to specific fixed indoor temperatures. The proposed restrictions, stating "Customer understands and agrees that it shall maintain the setpoint for its heating/cooling system during the heating season at temperatures no higher than 72°F and during the cooling season at temperatures no lower than 75°F," are impractical, if not impossible, to monitor or enforce, do not account for differences in customer needs and comfort, and could undermine data that will measure the success of a pilot and its ability to scale in real-world conditions.

Key Recommendations for Stage 3

BDC submits the following general recommendations on the six UTENJA pilots outlined above, that can be monitored and implemented by the PSC upon advancement of pilots to Stage 3. These recommendations are intended to guide the development of a long-term, durable regulatory framework and market model for TENs in New York State. As pilots advance through Stages 3, 4, and 5, the PSC can continue to modify projects to ensure that they are transparent, incorporate sustainable financing and cost-effective design principles, advance Integrated Resource Planning (IRP) between agencies and across energy sectors, and advance serious, scalable, and replicable project concepts. Furthermore, the PSC can implement strategies to: ensure cost control and cost accountability and ensure unspent balances are returned to ratepayers; retain the right to approve drawdowns on the contingencies as projects develop further; continue to monitor to ensure that utilities comply with labor standards; and ensure utilities engage earnestly and in good faith in the pilot and regulatory process.

BDC recommends the PSC consider these recommendations across all pilots, and make recommended modifications, as they are authorized under the Utility Thermal Energy Network and Jobs Act to do, and as needed to bolster transparency and cost-effective implementation as pilots move forward in Stage 3.

Transparency

First, projects should demonstrate transparency, particularly in reporting costs and system design decisions that influence those costs. Current utility filings contain extensive redactions and lack granularity in their cost projections. More than 50 percent of the filed plan and proposal documents for the six projects that have complete Stage 2 filings under consideration are redacted, meaning members of the public do not have the same level of information as the utilities and DPS staff. Therefore, ratepayers are relying on DPS staff to ensure project costs are reasonable. We understand that a competitive marketplace sometimes requires certain financial information to be protected. However, because the UTENJA pilots are subject to cost recovery from captive ratepayers, as much transparency as possible is absolutely critical. We urge the PSC and the utilities to limit redactions as much as practicable as part of Stage 3 to support stakeholders in evaluating program performance, costs, prudency of design and investment decisions, ratepayer impacts, expandability and replicability.

Given the uncertainty built into the process, and the increased costs to accommodate risk that are created by that uncertainty, we expect to see the current cost estimates continue to become more accurate and to come down as utilities begin advancing procurement efforts and finalizing design decisions.

As pilots move into the construction phase, utilities should be required to report, and clearly separate, network infrastructure costs in the following functional, uniform categories: heat production (boreholes, data center waste heat, heat pumps, etc.); distribution (shared mains, heat exchangers, energy centers, monitoring equipment and all other systems used to deliver heat from the source to the individual customer), and customer (service lines, heat pump installation, individual metering, building retrofits, etc.) This separation into functional cost categories is crucial for accurate cost benchmarking and informed rate design. It is consistent with current utility practice in both the gas and electric industries. Further, and of essential importance, it enables analysis of which categories are most likely to see cost reductions as TENs scale.

Redactions make it impossible for stakeholders to fully and fairly evaluate customer equipment and retrofit cost data ahead of this comment deadline, and we will ask for more transparency on this information during Stage 3. All stakeholders, including intervenors and the public, must have access to detailed costs, key design parameters, and performance information to the extent practicable to enable informed evaluation and oversight, and we are encouraged that NYSERDA is hiring a technical consultant to review these projects for both design and cost effectiveness. The PSC should require the removal of all redactions, except where disclosure would compromise legitimate customer privacy or confidential information, national security, system security concerns, or would jeopardize competitive bidding processes that benefit customers. The PSC should also require separation of costs into functional, uniform categories. This would uphold the principles of transparency, accountability, and learning that underpin this proceeding. Lastly, the PSC can implement cost control and cost accountability strategies and retain the right to approve drawdowns on the contingencies as projects develop further, and ensure unspent balances are returned to ratepayers.

Lessons for a Future Thermal Utility Model: Retrofit Cost Recovery

The pilots, especially if advanced to construction and operation, should generate important lessons for a future thermal utility model in New York. Valuable lessons will include identifying sustainable sources for building retrofit funding and the ability to apply Integrated Resource Planning (IRP) principles to UTENs.

The installation of a TEN within existing building stock typically necessitates extensive HVAC retrofits and, in some cases, improvements to the building’s thermal envelope. These measures, while essential to project success, often represent a significant share of implementation costs. BDC supports the inclusion of building retrofits within pilot project scopes, recognizing that these are crucial learning opportunities for the PSC, the utilities, the customers, and the market at large. Pilots are intended to generate insights into the technical, financial, and logistical challenges associated with integrating new thermal infrastructure into existing buildings. Accordingly, inclusion of these costs at the pilot stage is appropriate so long as they are transparently presented, well-documented, and analyzed in a way that informs future rate design and policy frameworks. As part of Stage 3, utilities should be required to implement cost-control measures—such as competitively bidding retrofit work—and limit customer charges to actual incurred costs.

In the future, as the State transitions from pilot demonstrations to scalable deployment, utilities must take a strategic and integrated approach to funding building retrofits. Ratepayer-backed UTEN cost recovery should not serve as the sole or primary mechanism for financing such upgrades. Instead, utilities and their partners should actively coordinate across all available funding sources—including those authorized under other PSC dockets (e.g., the Energy Efficiency and Building Electrification (EE/BE) portfolio) and funding in the Sustainable Future Fund, as well as federal programs, state incentive funds and grants, and municipal and private capital. This blended funding model can minimize rate impacts while maximizing participation and equitable access to neighborhood-scale decarbonization.

Public-private partnerships, in particular, can play a critical role by aligning private investment with public objectives, leveraging building owner capital, and accelerating retrofit adoption across diverse customer classes. Such an approach ensures that the financial responsibility for these transformative projects is distributed fairly, that the benefits of TENs are broadly shared, and that future rate structures reflect the true, sustainable life-cycle cost of decarbonized thermal infrastructure.

Lessons for a Future Thermal Utility Model: Integrated Resource Planning (IRP) and Strategic Infrastructure Deployment

The PSC should also assess projects' alignment with Integrated Resource Planning (IRP) principles, ensuring that thermal infrastructure is deployed strategically to optimize system-wide benefits that integrate with concurrent decarbonization and grid planning efforts.

UTENJA provides a critical opportunity to advance learnings that move beyond siloed planning toward a truly sector-coupled model of IRP. This model must recognize that decisions about thermal energy infrastructure—including the siting, sizing, and sequencing of networked systems—directly influence electric grid operations, investment needs, and ratepayer costs. As electric loads increase due to building and transportation electrification and industrial loads, strategically-deployed TENs can serve as a moderating force by reducing peak demand, stabilizing local grids, and deferring or eliminating the need for costly distribution and transmission upgrades. Additionally, TENs can act as distributed thermal storage assets, enabling load shifting and reducing electric peaks through intelligent integration with heat pumps, thermal storage, and waste-heat recovery systems. These capabilities effectively create "thermal buffers" within communities, improving resilience during extreme weather events and supporting reliability under increasingly variable renewable generation conditions.

To realize this potential, in the upcoming Stages of the pilots, utilities should be required to demonstrate how each proposed pilot project will impact not only local thermal loads, but also electric dispatch, system flexibility, and regional capacity dynamics. Utilities should also model and report thermal storage and buffer effects as part of their filings, quantifying avoided infrastructure costs, deferred investments, and the capacity value that thermal systems contribute to the grid. This level of integration will also allow the PSC to capture the full value stack of TENs—including avoided transmission and distribution costs, reduced capacity requirements, emissions reductions, and improved local resilience.

Beyond grid-level benefits, strategic deployment of TENs should also be aligned with neighborhood-scale decarbonization, retirement of leak-prone gas pipe, and land-use planning objectives, and coordinate with existing municipal, utility and state infrastructure projects to minimize disruption and reduce installation costs.

Finally, the UTEN pilots also present an opportunity to evaluate different technical designs that can influence IRP processes. The ongoing expansion of ambient-temperature system designs is a positive development: these low-temperature systems are efficient and experience minimal thermal losses. Within the ambient-temperature range, UTEN designs may incorporate one- or two-pipe configurations. Each of these may confer specific advantages or limitations relevant to IRP goals. For example, two-pipe designs can leverage centralized energy sources—such as transit hubs, data center waste heat, or a wastewater treatment plant—and deliver consistent heating and cooling throughout the network. However, they can be complicated and costly to expand beyond a centrally-planned district. Single-pipe designs are generally more adaptable and easier to scale, but require support from distributed thermal resources, such as multiple borefields. At this stage in the proceeding, BDC does not advocate for a single design over the other, but encourages the PSC and utilities to measure, compare, and report transparently on the performance of both types. This can determine which technical configurations are best-suited to different communities and thermal resource opportunities.

Amortization and Rate Recovery

Throughout the proposed pilots, the PSC should assess amortization and depreciation schedules and modify them to align with the useful life of the system and the equipment, rather than abbreviated schedules of 10 to15 years that require recovering higher costs from ratepayers over a shorter schedule. The piping networks, geothermal boreholes and heat transfer systems, and heat pump technologies in TENs are mature technologies and their amortization timelines should align with other types of utility infrastructure. For example, the amortization timeline for HDPE pipe should be the same as the schedules the PSC approves for piping in the gas system, often recovered on a timeline of over 50 years. Similar useful life spans apply for geothermal boreholes. Geothermal heat pumps in buildings have a useful life of 25 to 30 years, and rate recovery timelines for this equipment should reflect that to protect ratepayers from unnecessarily high charges.

BDC notes that cost recovery for these pilot projects remains fully at the discretion of the PSC, and that discretion must be exercised with an eye toward genuine commitment to the CLCPA and the long-term decarbonization of New York's buildings. Without clear accountability, the proceeding risks producing data and outcomes that understate the true potential of TENs and delay the policy and regulatory evolution envisioned by UTENJA.

Accordingly, the PSC should hold utilities to the highest standard of prudency review and disallow cost recovery in cases where aspects of pilot projects are found to have been proposed or executed without a good-faith effort to advance the objectives of the CLCPA and UTENJA. Utilities—particularly those with large gas operations—must demonstrate through their conduct, filings, and project management that they are genuinely planning for a decarbonized future and not obstructing it through inaction, delay, inflated costs, insufficient project design, or impractical restrictions on customers.

Transparent project reporting, measurable decarbonization outcomes, and verifiable cost data must serve as the foundation for any recovery determination. This will ensure that ratepayer dollars are directed toward projects that contribute constructively to New York's clean energy transition and will help establish the institutional trust necessary for broader market transformation in the thermal energy sector.

Conclusion

The PSC's evaluation of the UTEN pilots should fully recognize their short-, medium-, and long-term implications as the foundation of New York's next generation of clean, resilient utility infrastructure. These projects are not transient experiments but anchor investments in the State's emerging low-carbon thermal economy. When strategically located, thoughtfully designed, and transparently managed, TENs can become permanent components of the energy system—supporting deep building decarbonization, grid flexibility, and equitable economic development.

These six pilots exemplify how first generation deployments can function both as near-term learning and workforce and economic development opportunities and as long-lived public assets that guide future regulatory and market design. The PSC's timely advancement of these pilots to implementation and construction, as required under the UTENJA legislation, will set a strong foundation as New York builds its statewide thermal energy marketplace.

As the PSC approves pilots to Stage 3, and makes modifications, there will be continued improvements that can be made in this and subsequent stages to maximize benefits to New Yorkers. Transparency must be prioritized, with utilities required to clearly delineate between network infrastructure and retrofit costs and to share performance data that will inform future replication. Strategic infrastructure deployment should follow the principles of Integrated Resource Planning (IRP), targeting areas where thermal networks can deliver system-wide value by relieving electric grid congestion, safely retiring leak-prone gas pipe, supporting housing and industrial redevelopment, and improving local resilience. The PSC should continue to uphold strong labor standards, community engagement, and equitable access, ensuring that projects align with the intent of UTENJA and the CLCPA. Just as importantly, utilities must demonstrate good-faith participation and readiness, working collaboratively with host communities, municipal partners, and workforce organizations to ensure that pilot projects generate enduring technical, social, and economic value.

We are pleased that so many pilots are strategically positioned to relieve grid constraints, replace leak-prone gas infrastructure, and catalyze redevelopment, while offering replicable models across service territories. To maximize the benefits of these pilots, BDC urges the PSC to require utilities to amend their filings to increase transparency around costs and program design, to enable revisions that improve feasibility and ratepayer outcomes in service of advancing projects to construction in a timely manner. The PSC should use its authority to make modifications to adjust project scope, reduce scale where necessary, or phase implementation to align with funding availability, technical readiness, and community capacity. This approach will allow New York to begin gathering vital lessons on construction, operation, and cost performance while maintaining fiscal prudence and public trust.

By enabling these pilots to advance decisively and thoughtfully, the PSC can ensure that today's early projects mature into permanent, expandable systems of shared clean infrastructure, anchoring New York's path toward a resilient, equitable, and low-carbon future.

Sincerely,

Allison Considine, Interim Director, NY Policy and Campaigns, Building Decarbonization Coalition

Jessica Azulay, Executive Director, Alliance for a Green Economy