

June 29, 2026

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), Alliance for a Green Economy (AGREE) and the Alliance for Clean Energy New York (ACE NY) 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, specifically the Poughkeepsie pilot, filed by Central Hudson Gas & Electric Corporation ("Central Hudson" or "CHGE") on December 15, 2025, and March 20, 2026.

I. Pilot Design

a. Technical Feasibility Under UTENJA

Central Hudson presents a thoughtful explanation for selecting a single-pipe ambient temperature loop ("ATL") with distributed geothermal borefields. The design is intended to maximize flexibility in a dense urban retrofit setting, accommodate multiple thermal energy resources over time, and support future interconnection and expansion. Those are legitimate design objectives, and the filing usefully explains why CHGE rejected four-pipe and two-pipe alternatives for this site. The filing also offers a potentially valuable comparison case by proposing standalone air-source heat pumps ("ASHPs") in similar buildings to compare performance with ground-source systems.

However, the filing also shows why this project should be treated cautiously. Central Hudson states that supplemental electric resistance heating may be added in smaller interior spaces where integration with a ground-source heat pump is infeasible. That design feature may be practical at the building level, but it also raises the question whether the pilot is simply shifting winter peak electric demand into a constrained period rather than demonstrating a durable, scalable alternative to conventional electrification. The Commission should require CHGE to transparently quantify the project's coincident winter electric peak impacts, including the contribution of supplemental electric heat, the expected operating profile of building-side heat pumps, and any incremental distribution-system consequences.

The filing also remains incomplete in material respects for a project that is at a decision-quality stage. Central Hudson explains that this is a new utility service type that will require new geothermal easement documents and acknowledges that the specific permits and easements

needed will not be known until Stage 3A customer enrollment is complete. That uncertainty matters. If key land rights, routing assumptions, and permitting pathways remain unresolved, the Commission should hesitate before determining that the project is ready for construction. Stage 2 should seek to reduce uncertainty to a manageable level.

b. Credible Business Model

The filing offers a plausible conceptual argument that utilities can play a role in delivering shared thermal infrastructure, especially where customer-by-customer electrification may be difficult, fragmented, or capital constrained. The proposed line of demarcation, under which the utility owns the distribution system, heat exchanger, and instrumentation and then transfers customer-side equipment after the pilot, is one possible business-model pathway. The pilot also has value as a test of landlord-tenant energy burden transitions, customer agreements, and utility ownership structures.

But Central Hudson's own supplemental filing ultimately undercuts the case for this project as a credible near-term business model. CHGE states that the estimated pilot cost now exceeds \$100 million, that relatively few customers would take service, and that the corresponding subsidization required from all customers raises an affordability concern if the pilot moves forward. That is not a marginal concern; it goes to the heart of whether this specific project is a reasonable use of ratepayer funds. A useful UTEN business model should emerge from a development process that is disciplined about scale and scalability, unit cost, replicability, and long-term ownership strategy. The pilot project could achieve these objectives through careful cost cutting measures and further project planning and design scrutiny. Our concern is less with the concept of the Poughkeepsie pilot itself than with the way CHGE appears to have developed and presented it. As filed, the proposal does not yet demonstrate a clear pathway from a highly subsidized pilot serving a limited customer base to a broader, replicable model with lower per-customer costs and durable utility value. In that respect, the filing appears to generate more regulatory learning about the challenges of project development than increase confidence in CHGE's current approach to long-term TEN development and ownership.

II. Customer Protection Plan, including Customer Engagement and the Customer Agreement

a. Effectiveness of customer protections

Central Hudson's Customer Protection Plan includes several positive features. It incorporates complaint-handling protections modeled on existing utility practice, provides a monthly bill guarantee, and contemplates transition options at the end of the pilot. Those are meaningful safeguards and reflect an effort to align UTEN participation with familiar utility consumer-protection principles.

The central weakness, however, is that the filing places significant risk on participating customers during the five-year pilot period. Central Hudson proposes that customers must remain in the pilot for the duration of the pilot period. If a customer believes the system is not

providing adequate service, the Company will investigate and attempt to correct the deficiency. But if the Company determines that the system is operating within design parameters and the customer still wishes to leave during the customer service period, the customer is responsible for all conversion costs, including equipment removal, temporary heating or cooling, replacement HVAC equipment, commissioning, and servicing. For a first-of-its-kind pilot, that is significant risk to place on customers, especially in a disadvantaged community. A pilot should test technology and governance structures without trapping customers in a system they no longer want.

The end-of-pilot provisions are stronger than the mid-pilot protections because CHGE proposes to assume conversion costs for customers who elect to terminate participation at the end of the five-year period. Accommodations should be made to customers in the event specific extenuating circumstances require early disconnection even though the system is operating efficiently as intended.

b. Best Practices

At minimum, best practice for UTEN pilots should include: (1) a plain-language customer agreement; (2) an independent ombuds or dispute-resolution channel outside ordinary utility customer service; (3) clearly defined performance standards for adequate heating, cooling, domestic hot water, noise, and response times; (4) a no-fault customer exit right after a stabilization period; and (5) a requirement that any transfer of post-pilot ownership or operating responsibility be disclosed to and affirmatively accepted by customers. These protections are especially important where utilities are seeking to establish a new service category that does not yet have a mature regulatory framework.

c. Customer Engagement

Central Hudson's outreach record reflects serious effort: website tools, public updates, mailings, phone calls, canvassing, and engagement with city officials, neighboring properties, and tenants. The filing also candidly acknowledges that customer education and buy-in took longer than expected, which is itself an important lesson. In community retrofit contexts, customer engagement is not peripheral; it is project-critical.

That said, the filing also demonstrates that the project's social license remains fragile. CHGE's own risk matrix identifies inability to execute agreements with customers, widespread dissatisfaction, landlord concerns over higher utility bills, and loss of community trust as major project risks. The Commission should treat those risks as substantive signals, not just communications challenges. A pilot that requires intensive risk management around trust, burden-shifting, and participant retention should face heightened scrutiny before advancing to construction.

III. Rate Structure

a. Assessment of proposed rates

Central Hudson proposes a subsidized pilot fee of \$15/ton for multifamily buildings and \$5/ton for non-residential buildings in the first year, escalating by 3 percent annually. The fee is paired with a monthly bill guarantee under which participating customers' heating- and cooling-related energy costs are capped at no more than what they would have paid using their prior fuel source. In principle, that monthly guarantee is an important protection and is preferable to an annual true-up because it reduces the risk of intra-year cash-flow harm to customers. The proposal also has the benefit of making participation more financially acceptable during a pilot phase and, at least nominally, allows the billing determinant to be adjusted downward if a customer is able to conserve.

b. Strengths and weaknesses

The proposed rate structure has several strengths for purposes of a limited pilot. Most importantly, it reduces the risk that participating customers will be financially harmed by joining the UTEN. The monthly parity guarantee functions as a backstop against higher-than-expected costs, which is especially important in a demonstration project involving new infrastructure, new billing constructs, and significant uncertainty about real-world performance. The proposal also attempts to preserve an efficiency signal by allowing the billing determinant to be adjusted downward where a customer is able to conserve, rather than permanently locking customers into a demand basis that ignores actual building improvements or operational changes. In addition, the differentiated ton-based charges for multifamily and non-residential customers suggest an effort to reflect differing building types and use patterns rather than imposing a single undifferentiated fee on all participants.

The primary weakness is the lack of detail on how rates would evolve in a scaled deployment or how system benefits (e.g., avoided grid costs) might eventually be reflected. The Commission should view the proposed structure as acceptable as a provisional pilot mechanism rather than as a mature or transferable rate design.

c. Alternative structures

As an alternative to the proposed rate design, the Commission could require Central Hudson to use a more explicitly temporary pilot structure that clearly distinguishes customer protection from cost-based ratemaking. One option would be a straightforward bill-neutrality approach under which participating customers are held harmless relative to a documented pre-pilot baseline, while any pilot subsidy is separately tracked and reported rather than obscured within the UTEN tariff itself. Another option would be a hybrid structure combining a modest fixed charge, a transparent capacity or reservation component, and a variable charge tied more closely to metered thermal service or documented building-level usage, which would better align rates with cost causation and generate more useful lessons for future pilots. Either approach would provide greater transparency to the Commission and stakeholders, make the extent of ratepayer support easier to evaluate, and better position this proceeding to inform the development of a fair, scalable, and replicable UTEN rate framework.

The Commission may wish to explore future rate structures that more explicitly value system-level benefits, such as avoided electric distribution upgrades and avoided gas infrastructure costs, particularly once UTENs move beyond pilot scale.

IV. Cost Recovery Approach

Central Hudson proposes that costs not recovered through the UTEN Pilot fee be recovered from electric and gas customers under the Company's common allocation formula, currently 80 percent to electric service and 20 percent to gas service. The Company further proposes to capitalize pilot assets, use a ten-year useful life for recovery, and later determine the appropriate Federal Energy Regulatory Commission Uniform System of Accounts classification, in part to preserve the potential availability of the Investment Tax Credit. The proposal has some merit in that it begins to treat UTEN infrastructure more like long-lived utility plant than a short-term demonstration expense, and it acknowledges the importance of proper accounting treatment. At the same time, the proposal leaves too much unresolved. The cost allocation appears only loosely justified, the proposed ten-year life appears short for infrastructure of this type, and the approach would allow substantial cost recovery from non-participating ratepayers without first establishing a sufficiently transparent accounting of what costs were incurred, why they increased so substantially, and which portions are reasonably attributable to scalable utility learning as opposed to project-specific design choices or avoidable development missteps.

Any recovery of Stage 2 or non-advancing pilot costs should be conditioned on full public disclosure of design assumptions, cost categories, procurement decisions, contingency development, customer-side retrofit assumptions, and the reasons for material cost escalation.

a. Assessment

The Commission should recognize that Central Hudson's proposed 80/20 electric-gas split is directionally thoughtful in that it treats UTENs as infrastructure affecting both systems rather than forcing them into one legacy utility silo. The Commission should also note that although it is encouraging that Central Hudson is prepared to use a Uniform System of Accounts framework and pursue tax treatment consistent with utility plant, those steps should not remain aspirational or deferred. A standardized accounting framework should be required upfront, not after significant costs have already been incurred.

b. Preferred approach

The Commission should require a longer useful life than ten years for pilot assets that are intended to function as utility infrastructure. Even acknowledging the pilot nature of the project, thermal distribution assets, borefields, piping, and related utility-side infrastructure resemble long-lived plant more than short-lived equipment. A ten-year life risks overstating annual revenue requirements and making the pilot appear less economic than it may actually be on an infrastructure basis. The Commission should also require use of a uniform system of accounts for all UTEN pilots, with standardized cost categories that distinguish utility distribution assets, customer-side retrofit costs, development costs, contingency, decommissioning reserves, and

ongoing operations and maintenance. Most importantly, cost recovery from non-participating ratepayers should be conditioned on robust transparency.

As UTENs mature, cost recovery mechanisms that align thermal networks with non-wires alternative (NWA) and non-pipes alternative (NPA) frameworks should be considered, particularly where UTENs provide measurable grid and infrastructure benefits.

V. Data Collection, Performance Metrics & Reporting

The Commission should recognize that Central Hudson has made a substantial effort to design the pilot around the performance metrics required by Staff and to identify metering devices, controls, and software capable of collecting the required data. The filing states that the design team kept PSC-required performance metrics “at the forefront of the design,” identified the metering and software needed to track them, and selected a smaller subset of “mission critical” data that operators would use directly through Flowboss RTUs integrated into the utility’s SCADA system. It also proposes to rely on smart pumps, heat pump monitoring platforms, BAS controls, and third-party tools such as Vigilant and Ensure to track additional customer- and equipment-level information. This is directionally useful. A UTEN pilot should produce high-quality operational data, especially where the design is novel and the record raises questions about system configuration, peak performance, backup operation, and customer-side building conversions. The filing also appears responsive to Staff’s broad metric framework, which includes design-stage and operational data on building loads, heat pump operation, thermal source performance, UDS temperatures and pressures, energy use, and backup or peaking operation.

At the same time, the Commission should ensure that the data collection plan remains disciplined, decision-useful, and proportionate to the value of the pilot. Central Hudson itself acknowledges that the full list of required data points is broader than the subset most relevant to actual system operation, and that additional independent sensors increase both cost and complexity. The filing further notes that some data collection may depend on customer Wi-Fi or additional SIM routers, and that for residential buildings a sampling approach could potentially yield similar learnings at lower cost, even though the Stage 2 estimate assumes tracking for all buildings. The Commission should not allow performance monitoring to become an open-ended layer of incremental expense without a clear showing that each category of data is necessary to evaluate safety, customer outcomes, operating efficiency, peak impacts, and transferability to future UTEN projects.

a. Sufficiency of data collection

The Commission should find that Central Hudson’s proposed data collection framework is generally sufficient in scope to support a pilot evaluation, but should require sharper prioritization and clearer reporting commitments. The record shows that the Company proposes to collect data on UDS temperatures, pressures, flow, electric consumption, heat pump performance, customer-side temperatures, and other metrics tied to the PSC’s reporting framework, using a combination of Flowboss RTUs, smart pumps, BAS controls, and third-party

heat pump monitoring systems. That is enough to generate meaningful information about system performance if the pilot advances. However, sufficiency is not only a question of quantity. The Commission should require the Company to specify which metrics will be used to evaluate core policy questions, including customer comfort, winter peak interaction, backup and peaking resource use, loop temperature management, system COP, outage or alarm events, maintenance burdens, and realized lifecycle operating costs. Without that discipline, the proceeding risks collecting a large volume of information without producing clear regulatory findings.

b. Balance of cost and value

The Commission should require a tighter balance between monitoring cost and monitoring value. Central Hudson appropriately notes that “mission critical” data for operators is a narrower subset than the full universe of PSC-required metrics, and it further acknowledges that independent sensors and universal deployment of metering add cost and complexity. The Commission should therefore direct the Company to prioritize the data that is most essential to answering public-interest questions: whether the pilot delivers safe and reliable service, whether customers remain satisfied and comfortable, how the system performs during summer and winter peaks and during shoulder periods, how much electricity and any backup fuel are consumed, how well the single-pipe ATL performs in practice, and whether the project yields transferable lessons for future UTEN deployment. Broader instrumentation may be appropriate where the marginal cost is low, but the Commission should not require or approve a monitoring architecture that is so elaborate that it undermines affordability or becomes difficult to replicate in future, lower-cost pilots. A staged approach, potentially including targeted sampling for some residential metrics and standardized quarterly and annual reporting, would better preserve the learning value of the pilot while respecting the need for cost containment.

VI. Equitable Electrification

The Commission should treat Central Hudson’s life-cycle cost analysis with caution. A useful LCCA requires transparent, symmetrical assumptions across all scenarios, including an accurate business-as-usual case that reflects the building upgrades, equipment replacements, and other capital needs that would reasonably occur over time. The Company’s comparison appears to rely on assumptions that may understate the long-term costs of the BAU, ASHP, and GSHP pathways. The filing also reflects varied building-level design choices, HVAC approaches, electric upgrades, and domestic hot water strategies, which make the results especially sensitive to assumptions about efficiency, scope, avoided replacements, and future maintenance. For that reason, the Commission should scrutinize the LCCA to more accurately determine if the UTEN project is true equitable electrification compared to other options. Before relying on it in a Stage 3 determination, the Commission should require fuller transparency regarding the assumptions used and a more standardized, apples-to-apples comparison across all scenarios.

a. Life-cycle cost analysis

The Commission should find that Central Hudson's life-cycle cost analysis is not yet sufficiently reliable or transparent to support a dispositive conclusion on equitable electrification. As reflected in the draft record, one major concern is that the analysis does not appear to account on a comparable basis for upgrades that would inevitably occur over the life of the business-as-usual case or the ASHP and GSHP alternatives. If the BAU case assumes continuation of existing systems without incorporating replacement cycles, code-driven upgrades, fuel-switching pressures, or other major capital needs, then it is not a true life-cycle comparison. The same concern applies if the ASHP or GSHP cases are modeled without fully incorporating the building-side modifications and future replacement obligations that those pathways would require. In addition, the Company's own materials show meaningful variation in assumed equipment performance, including domestic hot water options ranging from COP 1.0 to roughly COP 4.0, with different cost and bill impacts relative to natural gas. That further suggests that the comparative results are highly assumption-sensitive and should not be treated as settled.

The Commission should require any revised LCCA to place all scenarios on a more apples-to-apples basis. At minimum, each scenario should reflect realistic replacement cycles, future capital reinvestment needs, maintenance obligations, domestic hot water treatment, electric service upgrades where applicable, and a transparent explanation of efficiency assumptions and load treatment. The Commission should also require disclosure of the most load-bearing inputs, including assumed COPs, peaking assumptions, customer-side retrofit scope, financing treatment, residual values, and any assumed future major equipment replacements. Without that level of symmetry and transparency, the LCCA is not a dependable planning tool.

b. Additional considerations

The Commission should also consider that equitable electrification is not only a question of modeled lifecycle economics. It also includes customer risk allocation, quality of service, optionality, and whether the proposed pathway creates durable and transferable benefits for participating buildings and surrounding communities. In this case, the equitable electrification inquiry should include whether customers are being asked to accept significant building intervention while still depending on a heavily subsidized pilot model, whether backup and supplemental electric strategies may increase winter peak exposure, and whether the project design is resilient enough to justify long-term customer reliance. The Company's own filings show that the project relies on a mix of customer-side equipment strategies, monitoring systems, and utility-side controls, all of which may affect customer experience and future replicability. The Commission should consider avoided gas system costs, avoided electric distribution upgrades, and reduced exposure to fuel price volatility when assessing equity impacts. These system-level benefits are not fully captured in traditional customer bill comparisons.

VII. Labor and Workforce Development

The Filing includes commitments to workforce training and utility skill development, consistent with UTENJA's labor objectives. Greater clarity on local hiring and coordination with municipal workforce programs would strengthen this section.

The Commission should find that Central Hudson's filing addresses labor and workforce development in a basic but limited way. The Stage 2 materials indicate that the project would be procured through three separate prime contracts covering residential HVAC conversions, commercial HVAC conversions, and utility infrastructure, and that those contracts would require compliance with prevailing wage and apprenticeship requirements once clarified by the Department of Labor. The filing also states that the project design favors HVAC systems and construction approaches that are "most replicable and familiar to potential contractors," and characterizes the customer-side conversions and utility distribution system installation as work that is relatively straightforward and commonly found across CHGE's service territory. In addition, the Company's draft UTEN operating procedures contemplate training for municipal departments and outside agencies, including public safety, highway, water, and sewer officials, after system in-service.

VIII. Pilot Project Impacts

The Commission should evaluate Central Hudson's pilot not only on its own terms, but also relative to the broader UTEN pilot portfolio. A pilot of this cost and complexity should be authorized to proceed only if it offers distinctive learning value that is not already being generated, or cannot be generated more cost-effectively, by the other utility pilots. On the present record, Central Hudson's proposal does appear to offer some unique learning opportunities, particularly because it appears to test a single-pipe ambient loop approach, a challenging retrofit context, and a project structure that depends heavily on customer-side conversion and integration across multiple building types. At the same time, the Commission should weigh those learning opportunities against the pilot's cost and apparent dependence on Company design choices that may not be widely replicable or following best practice. The question is not whether the pilot would generate any lessons. It is whether those lessons are sufficiently distinctive, transferable, and proportionate to justify advancing this project relative to the rest of the UTEN portfolio.

The Commission should also be careful not to confuse novelty with public value. A highly customized pilot may produce interesting engineering and operational findings, but if those findings are tied to site-specific conditions, unusual customer arrangements, redacted anchor-load assumptions, or unusually costly building-side retrofits, then the broader regulatory value of the project is reduced. In assessing relative impacts, the Commission should therefore ask whether Central Hudson's pilot meaningfully expands the diversity of the overall pilot portfolio, whether it can inform future thermal network deployment in a scalable way, and whether its emissions reductions and customer outcomes justify the level of ratepayer support that would be required.

a. Relative to other pilots

The Commission should view Central Hudson's pilot as one of the more ambitious and potentially more instructive projects in the portfolio, but also as one of the most difficult to justify if judged by cost-effectiveness and replicability. Relative to other pilots, its value lies less in being the most immediately scalable model and more in testing whether a complex retrofit-oriented UTEN can function in practice under real utility conditions. That may be a worthwhile area of inquiry. But the Commission should not allow the project to advance merely because it is technically interesting. The relevant comparison is whether its incremental learning value exceeds what can already be learned from the lower-cost, more transparent, or more readily transferable pilots in the docket.

i. Unique learning opportunities:

Central Hudson's pilot appears to present several unique learning opportunities. It may provide a meaningful test of a single-pipe ambient temperature loop design, including how that structure performs operationally across seasons, under varying customer loads, and with customer-side retrofit complexity. It also appears to raise important questions about how UTENs perform where project success depends substantially on building conversions, customer participation, and integration of diverse end uses rather than simply on utility-side infrastructure. In that respect, the pilot could produce useful lessons on controls, load diversity, customer protection, and the practical interaction between utility thermal service and in-building electrification measures. The Commission may reasonably value those lessons, particularly if they are not already being generated elsewhere in the pilot portfolio.

ii. Diversity of design:

The pilot does appear to add design diversity to the overall portfolio, which is an important consideration. A diversified UTEN portfolio should not test only one technical pathway or one project type. To the extent Central Hudson's proposal differs from other pilots in loop configuration, customer-side retrofit intensity, and project context, it may help the Commission understand the boundaries of where UTENs are feasible and where they become difficult or excessively expensive. That said, design diversity is not an end in itself. The Commission should only credit this pilot for design diversity to the extent that the distinct design actually yields lessons that can be compared across projects and used to improve future policy, regulation, and cost containment.

iii. Transferability and scalability:

This is where Central Hudson's pilot appears weakest. Based on the record as described, the project seems heavily shaped by site-specific conditions, substantial customer-side intervention, and a cost structure that has escalated dramatically. Those factors limit transferability. A pilot may still be worth pursuing if it identifies what not to do, or clarifies where costs become unreasonable, but the Commission should be candid that such a project is less likely to serve as a near-term model for broad replication. The pilot's regulatory value may therefore lie more in

establishing constraints, risks, and cost-containment lessons than in providing a straightforward template for scaling UTENs across the state. If the Commission allows it to proceed, it should do so with that understanding.

iv. GHG reductions:

The pilot may still offer meaningful greenhouse gas reduction value, especially if it displaces fossil fuel use across a mix of participating buildings and demonstrates a pathway to neighborhood-scale decarbonization. But the Commission should evaluate those reductions in context. GHG benefits should not be treated in isolation from project cost, customer impact, or alternative decarbonization pathways. A pilot with material emissions benefits may still be difficult to justify if those benefits are achieved at an exceptionally high cost or through a structure that is unlikely to be reproduced elsewhere. The Commission should therefore weigh emissions reductions alongside affordability, scalability, and comparative learning value, rather than assuming that projected GHG reductions alone are sufficient to warrant advancement.

IX. Pilot Project Risks and Uncertainties

The Stage 2 and supplemental materials indicate that the project faces layered risks across environmental conditions, customer-side retrofit complexity, customer participation, system operation, and overall ratepayer exposure. Central Hudson's filing acknowledges environmental risks and identifies them in a way that appears potentially additive to the already large contingencies embedded in the project budget, rather than fully resolved within them. The work to address environmental risks, like asbestos-containing materials, lead-based paint, and other hazardous materials, is essential and would occur during this transition with or without participation in a UTEN pilot project.

a. Significance of risks

The Commission should recognize the significance of customer participation and operational dependency risks. As reflected in the draft record, the project appears to rely on a redacted anchor customer and then only a relatively modest share of additional participants to remain viable. That may be a strength in one narrow sense because the single-pipe ATL configuration appears to provide some flexibility in reallocating retrofit-side scope as participation changes. But it is also a clear source of uncertainty. A pilot whose economics and learning value depend on retaining key customers, maintaining customer satisfaction, and managing a distributed portfolio of retrofits and controls is exposed to a wide range of failure modes that are difficult to quantify in advance. The Commission should therefore treat participation risk, customer experience risk, and operational-performance risk as central—not peripheral—to the Stage 3 determination.

b. Risk mitigation

The Commission should acknowledge that Central Hudson is undertaking the ordinary forms of due diligence one would expect for a project of this kind. The record reflects training, operating

procedures, controls architecture, leak detection and pressure monitoring concepts, integration into existing utility monitoring systems, and coordination around hazardous-material management and contractor obligations. Those are appropriate mitigation measures.

The Company should be required to provide clearer disclosure of how participation risk is managed if the anchor customer or other key participants withdraw, how customer satisfaction will be tracked and remedied in practice, how operational underperformance will trigger corrective action, and how the Company will protect ratepayers from further cost escalation.

X. Additional Comments on the Stage 2 Filings

The Commission should view Central Hudson's Stage 2 filings as raising serious concerns about cost growth, cost discipline, and transparency. Most strikingly, the projected cost of the pilot appears to have escalated from roughly \$25 million at the earlier stage, or approximately \$17.7 million net of the Investment Tax Credit, to approximately \$131 million at Stage 2. That later figure appears to include a 27 percent construction contingency and approximately \$8 million in decommissioning costs, while not yet netting out the potential value of the Investment Tax Credit. Even adjusting those figures to create a more apples-to-apples comparison still suggests an extraordinary increase. If the Stage 2 estimate is normalized by removing the contingency, accounting for a potential ITC benefit, and moderating the associated O&M assumptions, the project still appears to land in a range of roughly \$68 million when capital and O&M are combined. That remains nearly four times the earlier-stage cost outlook. The Commission should ask what assumptions changed, what design choices drove the increase, whether the project had become dependent on load assumptions that did not materialize, and whether major portions of the customer-side cost burden were masked at the earlier stage by an expectation of larger or more favorable load participation.

The Commission should require a fuller public accounting of how the estimate evolved. Central Hudson itself acknowledges that the project's cost, the relatively small number of customers served, and the corresponding level of subsidy required from other ratepayers raise an affordability concern. That recognition should lead not to acceptance of the filing on its own terms, but to a more demanding standard of review. If a project grows from a moderately sized demonstration into a very high-cost pilot with limited participation, then the burden on the utility to justify every major cost driver should increase proportionally. Even if the project does not move forward, the Commission should require a record that clearly explains the lessons learned, the assumptions that proved unrealistic, and any major missteps that caused the pilot to increase cost.

The Commission should also give limited weight to the Company's lifecycle cost analysis in its present form. As discussed elsewhere, the LCCA does not appear to account on a comparable basis for the upgrades and replacements that would necessarily occur over time under the business-as-usual, ASHP, or GSHP alternatives. That omission makes the comparison materially incomplete. In addition, there are concerns about other key inputs, including comparative efficiency assumptions and the treatment of system performance across cases. A lifecycle analysis can be useful only when each scenario is built on symmetrical assumptions

regarding capital reinvestment, maintenance, performance, and future upgrade needs. On this record, the LCCA appears too assumption-sensitive and too incomplete to serve as a reliable justification for a Stage 3 decision.

If the Commission elects not to advance the pilot, it should still use this proceeding to impose stronger cost-containment and accounting requirements across the UTEN portfolio. At minimum, the Commission should require a uniform system of accounts for all UTEN pilots, including those that do not advance to Stage 3, so that stakeholders can distinguish utility-side infrastructure costs, customer-side retrofit costs, development costs, contingency, decommissioning reserves, and operations and maintenance. The Commission should also benchmark and limit internal utility costs and contingencies; require more disciplined review of peaking-resource assumptions and methods for determining peak, including whether diversity assumptions are coincident or non-coincident; scrutinize coefficient of performance assumptions; and compare proposed capital expenditures against comparable gas and electric utility investments. In addition, the Commission should direct utilities to maximize all existing sources of value before socializing residual costs, including enrollment of participating customers in already-existing ratepayer-funded efficiency and electrification programs, pursuit of all applicable tax credits, and use of other available public funding sources where lawful. If Central Hudson is concerned about affordability, the response should be to strengthen cost discipline. The central lesson of these filings is that the benefits of UTENs are most likely to be realized when projects are designed for scale, cost control, and replicability from the outset.