



COLUMBIA GLOBAL ENERGY DIALOGUE

Centering Electricity Affordability in the Utility Ratemaking Process: Roundtable Summary

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The Energy Opportunity Lab (EOL) at the Center on Global Energy Policy (CGEP) at Columbia University SIPA convened a private roundtable on May 20, 2025, focused on utility ratemaking and electricity affordability in the United States. The event brought together leading experts and representatives from utilities, Public Utility Commissions (PUCs), local governments, consumer advocacy organizations, community-based organizations, and academic institutions from seven US states. As part of the discussion, the EOL team presented a draft framework for integrating affordability considerations into the early stages of the utility ratemaking lifecycle. Participants provided feedback on the framework and discussed practical strategies for advancing upstream affordability interventions as well as the barriers to and opportunities for putting these ideas into practice. This roundtable report summarizes the main insights and practical experiences shared during the roundtable across the themes of embedding affordability earlier in the ratemaking process, specific interventions at the revenue requirement and class allocation stages, additional challenges to integration, and concluding reflections on the fundamental changes needed to address affordability concerns.

Moving Affordability Upstream in Ratemaking

With electricity bills rising sharply in many parts of the United States, regulators, utilities, and government agencies are taking action largely focused on the household level, including

This event summary reflects the authors' understanding of key points made in the course of the discussion. It does not necessarily represent the views of the Center on Global Energy Policy. The summary may be subject to further revision.

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encouraging energy conservation, funding efficiency upgrades, promoting other behavioral changes, and offering bill assistance.¹ The Energy Opportunity Lab presented a draft framework that aims to shift regulators' and stakeholders' attention further upstream in the regulatory process, stressing the need to engage early and center affordability in the ratemaking lifecycle. The framework proposes that a ratemaking lifecycle approach to affordability begins at the core of the ratemaking process, where regulators establish the revenue requirement and allocate costs among customer classes, and then moves outward toward the periphery to rate design and targeted bill discounts. By intervening at fundamental decision points, high bills can be prevented before they reach households, in contrast to the prevailing practice of addressing affordability in a more reactive manner. The framework also details the statutory, procedural, and institutional reforms needed for these early-stage interventions to take place.

Participants described how current ratemaking practices disadvantage residential customers and by default place the heaviest burden on low-income households. They also questioned the arbitrariness of the traditional cost-of-service approach, emphasizing how commercial and industrial customers are positioned to benefit from it at the expense of residential customers. On this point, one participant noted that in Michigan residential electricity rates rose 51 percent between 2010 and 2023, while industrial rates increased only 15 percent. The participant questioned how such a wide gap could emerge.

Participants mostly agreed that the affordability programs they engage with or are aware of – bill discounts and assistance – kick in only in the last stage of the ratemaking process, offering discounts on bills that have already been determined by earlier decisions on revenue requirements, class allocation, and rate design stages.

New York-based participants highlighted the progress that the state has made on affordability, pointing out that it enrolls nearly 50 percent of eligible customers in its Energy Affordability Program and about 30 percent in its Low-Income Home Energy Assistance Program (LIHEAP), which is far more than most other states. Despite these gains, they noted that most of the state's energy affordability initiatives still focus on relief at the household level. One participant argued that some of New York's efforts, such as the Reforming the Energy Vision plan introduced by the New York State Public Service Commission in 2014, which established a framework to transform the electric grid and expand renewable energy,² do not integrate affordability considerations but instead shift much of the responsibility for managing energy costs and supporting program goals onto consumers. The participant observed that tools such as heads up displays and home energy reports assume a level of control that many energy insecure families do not have, making it unlikely that they alone can resolve the structural cost challenges embedded in the ratemaking process.

Affordability in the Revenue Requirement Stage

The EOL framework presented at the roundtable identified ongoing and proposed interventions at each stage of the ratemaking lifecycle, beginning with the core stage of setting the revenue requirement. A notable intervention discussed for this stage is Performance-Based Ratemaking (PBR). Participants observed that while PBR has potential to incorporate affordability at the revenue requirement stage, its effectiveness depends on thoughtful design, incentives, and broader structural reforms. The EOL presentation noted that by 2023 seventeen states had enacted laws allowing PUCs to use PBR, but implementation varies widely and few programs fully integrate affordability and equity indicators. In most of these jurisdictions, traditional cost-of-service ratemaking still dominates, creating blended regulatory environments; participants cited New York as an example of a blended state, and highlighted Hawaii's more advanced PBR program.

A central element of PBR that participants discussed is performance incentive mechanisms (PIMs) and scorecards, which can reward or penalize utilities based on their progress on indicators such as reducing disconnections and arrears. While participants agreed that these tools hold promise for supporting affordability, they noted practical hurdles to implementing and sustaining them. One participant raised the example of New York, where a disconnection-rate incentive has been paused for nearly five years because pandemic-era moratoria distorted the data needed for reliable test years.

Participants also debated whether PIM-based rewards and penalties are large enough to influence utility behavior. Most jurisdictions set these incentives at modest levels – often a few hundred thousand dollars or a few basis points of return on equity – but several utility representatives reported that even modest amounts can shape program decisions and day-to-day operations. Others argued that penalties often prove more effective than rewards, especially when missed targets trigger basis-point reductions significant enough to affect earnings. This exchange underscored the importance of calibrating incentive size so that it meaningfully shifts utility priorities without unduly burdening ratepayers.

In addition to PIMs, one participant emphasized structural options within the PBR toolkit that can advance affordability further upstream. As examples, the participant cited decoupling mechanisms and multi-year rate plans, which can curb capital expenditure bias that encourages utilities to expand their rate base even when less costly alternatives might better serve customers.

Beyond PBR, participants discussed strategies focused on reducing the rate of return and reallocating avoidable costs to fund affordability programs. Some mentioned that initiatives aimed at providing deeper relief for low-income customers often meet resistance, including from commission staff, who cite potential cost burdens on middle- and higher-income households

and question how such programs will be funded. To address these concerns, they argued that affordability can be supported directly at the revenue requirement stage by identifying non-essential or counterproductive costs and reallocating them, including those associated with collection and shut off activities, gas marketing, and certain commercial and industrial incentives. One participant shared a recent case from New York where the state spent roughly ten million dollars per year on collection activities alone, and suggested that these funds could instead support comprehensive affordability programs.

As participants noted, reallocating avoidable costs is only one part of the strategy. They also proposed involving shareholders by lowering the allowed return on equity (ROE). One participant invoked the hypothetical example of a utility with an equity base of one billion dollars, suggesting that each one percent reduction in the return could offset 40 to 50 percent of the projected cost of a percentage-of-income payment program. Another participant highlighted the potential of ROE reform and described a publicly available calculator³ that models customer savings from incremental ROE reductions. The tool lets users plug in basis-point changes at the utility or state level and shows how even small adjustments can translate into billions of dollars in lower revenue requirements. The participant noted that although utilities and shareholders have resisted such proposals, intervenors have begun introducing ROE reform analyses in integrated resource plans and rate cases. The participant pointed to Georgia and Connecticut as recent cases where significant customer savings were achieved.⁴

Finally, participants examined the role of special contracts, focusing on how these agreements can undermine affordability and equity in utility rates. They discussed how states are increasingly examining the extent to which special contracts for large industrial customers shift costs onto residents, prompting calls for more transparency and equitable rate structures. Recent research by one of the participants proposed eliminating special contracts for high load customers, which tends to shift costs onto residential ratepayers. Instead, they proposed moving these customers into standardized tariff proceedings or, at minimum, adding safeguards to improve transparency and accessibility.⁵

Participants noted, however, that addressing special contracts poses significant practical challenges. As an example, one participant described how their state PUC has limited leverage when the local utility negotiates with the Department of Defense. If the military does not receive the rates it wants, it can threaten to build its own generation, which could strand existing distribution and transmission assets and leave remaining customers to cover the costs. According to the participant, situations like this one illustrate how large customer bargaining power hinders efforts to advance rate equity.

The discussion also highlighted emerging state efforts to curb the negative effects of special contracts, especially for energy-intensive facilities such as data centers. Participants noted that commissions often grant confidentiality reflexively, limiting public participation and hampering commission staff, who lack resources to scrutinize these deals. As participants observed, some recent legislation seeks to close these gaps: Utah's SB 132 still permits special contracts but requires a study of transmission cost allocation for large loads; Maryland's HB 1035 mandates more rigorous ratemaking analysis; and Texas's SB 6 addresses co-location issues tied to cost allocation. Although these approaches differ, participants agreed that states are increasingly recognizing how special contracts can shift costs onto residential customers and are beginning to push for statutory requirements that protect low-income residential customers.

Affordability in the Class Allocation Stage

As part of the core of the ratemaking lifecycle presented by the EOL team, class allocation was highlighted as a key stage for proactive affordability interventions. A significant example of this type of intervention that was raised in the presentation is the potential creation of a subsidized low-income customer class to improve affordability. The households that fall within this new class would then receive their own cost allocation rather than being grouped with all other residential customers, so that their rates better reflect their ability to pay. Participants agreed in principle that this move could strengthen affordability but observed that in practice only a handful of jurisdictions list a low-income class in their tariff books, and even when they do it is used mainly to administer downstream bill assistance programs rather than to shape the initial distribution of costs. Participants stressed that one major barrier to implementing income-based allocation is the difficulty of identifying who belongs in the low-income rate class. Utilities often lack direct access to verified income data and must rely on third-party datasets of uncertain quality or on information held by other state agencies.

Several speakers suggested that linking utility records with income data maintained by departments of finance or tax authorities would help overcome this challenge, reducing the number of households that slip through the cracks and improving transparency when proposals for a low-income class are brought forward.

New York-based participants noted that utilities in the state already match customer records with its LIHEAP administrative agency, so implementing a separate low-income customer class would not require new data infrastructure. Other participants warned, however, that fixed income benchmarks can exclude many households that still face high energy burdens. Using thresholds such as 80 percent of area-median income or specific federal poverty-level cut-offs may identify some low-income customers while leaving out families earning just above the threshold that still

struggle to pay their bills. As one participant put it, “what we say is the low-income class is generally not who ends up in the Percentage of Income Plan (PIP) ... if you are above \$2,500 a month, you are not getting into the program, even though the way we calculate energy burden shows that you may still be struggling.”

Additionally, participants noted that in states where many residents live in multigenerational households, household income can overstate ability to pay and distort eligibility thresholds for an income-based class. Recognizing these data limitations and the challenges of relying solely on income, one participant shared that in at least one state regulators are considering creating a multifamily housing customer class as a potential proxy for identifying affordability challenges and because multifamily buildings often share infrastructure, making them easier to group than single-family homes, which each require their own infrastructure. Participants acknowledged that a detailed study would be needed to determine whether introducing separate class categories would reduce overall costs or advance affordability goals, particularly in markets with diverse household compositions and limited income data.

Participants also pointed out that multiyear rate plans (MRPs) can limit opportunities to revisit cost allocation. One participant described the experience of a particular PBR jurisdiction to illustrate additional hurdles. Since five-year MRPs replace traditional general rate cases, there is usually no venue to revisit class allocation until the end of each cycle. Faced with distorted pandemic test years, the commission in question chose to open a general rate case anyway. Participants viewed the situation as a cautionary example of how MRPs can limit opportunities to adjust allocation decisions under cost-of-service principles.

Additional Challenges Limiting Integration of Affordability into Ratemaking

Participants identified several overarching obstacles that prevent early-stage affordability measures from advancing.

First, sealed settlements and opaque rate discounts to large industrial customers limit oversight and may shift costs to low-income customers without accountability. Participants emphasized that many rate-case settlements and special-contract negotiations are filed under seal, preventing outside advocates and even some commission staff from understanding what was agreed to and/or how it affects low-income customers. This concern was echoed in relation to commercial and industrial rate proceedings where discounted rates are often granted without transparency. As participants observed, these confidential decisions can reduce funding available for affordability programs and shift costs onto residential customers yet remain largely outside public oversight.

Second, affordability proposals often face resistance, prompting calls for outreach and dialogue to build understanding and reduce pushback. Participants described persistent “sticker shock” when affordability proposals are introduced, noting that staff and utilities often respond that they are already doing a great deal for low-income customers even though, as one participant pointed out, the core affordability challenges remain unresolved. To help reduce this resistance and explore these ideas in ways that feel less intimidating and more constructive, some participants proposed conducting listening tours and presentations for commission and utility staff.

A third barrier identified was cultural. Intervenors who question the disparities in rates and rate discounts between commercial and industrial customers on the one side and residential customers on the other are frequently told that this is how things have always been done. One participant noted that overcoming this mindset will require sustained dialogue and ultimately a shift in institutional culture.

Fourth, income data gaps hinder targeting low-income customers, but partnering with state agencies for data matching could improve eligibility verification and outreach. As noted by participants and mentioned previously, utilities do not have direct access to verified income information and often rely on third-party sources that are opaque or unreliable. Several participants urged bringing state departments of finance or tax agencies into the process so that utility records can be matched with authoritative income data. As evidence that automated enrollment can work, they pointed to the experience of New York City, where utilities already match customer files with the state’s LIHEAP database. Participants noted that expanding the data match to include tax records could help reach customers who fall just above traditional income cut offs but still face substantial energy burdens.

Fifth, automatic enrollment faces technical and administrative challenges due to limited inter-agency coordination and data privacy issues. Participants noted that effective file matching requires coordination across multiple agencies, each with its own data privacy protections, system structures, and protocols for handling sensitive information. These inconsistencies make it difficult to streamline enrollment, even when eligibility data exists. Without stronger inter-agency cooperation, many eligible households are likely to remain unserved.

In Closing: Business-as-Usual Ratemaking Is No Longer Sufficient

The conversation concluded with reflections from the closing speaker, a high-level utility regulator, who emphasized that the US is currently facing yet another affordability crisis—one in a series that have unfolded over the past two decades alongside broader economic disruptions.



The regulator noted that despite numerous interventions, utility ratemaking continues to follow a business-as-usual approach with outcomes unchanged. Invoking the case of New York, they pointed out that arrears have reached record highs, with balances for some utilities more than doubling since the pandemic, even after billions were spent to reduce them. The speaker noted that while low-income customers enrolled in assistance programs have received some protection, moderate-income households and small businesses have fared worse and remain largely excluded from affordability measures.

The speaker called for more creative and structural solutions, noting that in response to mounting arrears, some utilities have proposed expanding their collections workforce, while others are revisiting affordability program models from other states. They argued that this moment calls for rethinking how rate cases and affordability efforts are structured from the outset, rather than relying on peripheral program design that attempts to address the issue too late in the process, and how affordability can be integrated into early-stage ratemaking, building on past instances when commissions considered such approaches during periods of economic crisis.

The speaker further highlighted that addressing the structural inequities in cost allocation across customer classes is essential to advancing affordability. They cited the example of New York, where the rates for large commercial and industrial customers are dropping year by year, while residential rates have increased, highlighting that affordability cannot be addressed without reassessing the underlying allocation of costs and distribution of benefits and burdens.

Participants noted that affordability and decarbonization should not be pitted against each other, but rather approached as parallel crises that demand parallel and at times intersecting solutions. The discussion underscored that the US is at a crossroads between an existential affordability crisis and an existential climate crisis, and current models are not equipped to move in both directions at once.

Finally, participants stressed the need to think across silos and agencies. With longstanding systems like LIHEAP under threat, more foundational reforms are needed to protect low-income customers from unaffordable rates and burdensome electric bills. According to participants, meeting this moment will require foundational changes, beginning with statutory, governance, and regulatory structures to ease the burdens of affording household energy.

Notes

1. Andrea Nishi, Diana Hernández, and Michael Gerrard, “Energy Insecurity Mitigation: The Low Income Home Energy Assistance Program and Other Low-Income Relief Programs in the US,” Center on Global Energy Policy (infoguide), November 2023, <https://www.energypolicy.columbia.edu/publications/energy-insecurity-mitigation-the-low-income-home-energy-assistance-program-and-other-low-income-relief-programs-in-the-us/>.
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3. Albert Lin, “Electricity Bills Too High? Then, Get The ROE in Line,” *Our Finance Lab*, August 30, 2022, <https://www.ourfinancelab.com/post/electricity-bills-too-high-then-get-the-roe-in-line>.
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About the Authors

Qëndresa Krasniqi is a Research Associate at Columbia University’s Center on Global Energy Policy. Her work focuses on climate-induced energy insecurity, utility affordability, and regulatory reform. Her research examines how extreme weather, power outages, and high energy burdens affect historically marginalized communities. She conducts research and coordinates cross-sector convenings to develop policy recommendations that inform grid modernization, emergency response, and utility rate-setting with equity and affordability at the center. Qëndresa also holds a concurrent role at Columbia Climate School’s National Center for Disaster Preparedness (NCDP), where she works on vulnerability metrics, hazard projections, rural disaster risk, and equity-informed emergency planning.

Qëndresa holds a Master of Public Administration in Development Practice from Columbia University’s School of International and Public Affairs, and a Bachelor of Arts in Financial Economics from Methodist University. Previously, she has taught economics and worked on policy analysis and mixed-methods research with the Intergovernmental Panel on Climate Change (IPCC), the World Food Programme (WFP), and the European Stability Initiative (ESI).



Dr. Vivek Shastry is a Senior Research Associate at the Center on Global Energy Policy, Columbia SIPA. His work focuses on issues of energy access, opportunity, and justice across India, Africa, and the U.S., supporting CGEP's Energy Opportunity Lab and the India Program. He has published several peer-reviewed articles in diverse journals, contributing to the literature on global energy poverty, U.S. energy transition, and energy use in the built environment. In addition to interdisciplinary research, he brings many years of strategic planning, partnership building, and program implementation experience through his prior work with SELCO Foundation.

Dr. Shastry earned a PhD in Public Policy from the University of Texas at Austin, where his doctoral research focused on understanding the consequences of poor electricity at rural health facilities, and the impacts of adopting productive uses of renewable energy among rural entrepreneurs. He also holds master's degrees in Sustainable Design, and Community and Regional Planning from the University of Texas at Austin, and a bachelor's degree in Civil Engineering from National Institute of Technology Karnataka, India.

Dr. Diana Hernández, a tenured Associate Professor at Columbia University's Mailman School of Public Health, is the Founding Principal Investigator of the Energy Equity, Housing, and Health Program and co-Director of the Energy Opportunity Lab at the Center on Global Energy Policy.

Dr. Hernández is a pioneering sociologist and leading authority on energy insecurity, a concept she defined and operationalized through groundbreaking mixed-methods research. Rooted in community engagement and policy innovation, her work addresses systemic barriers to energy access for disadvantaged populations and tests promising interventions. She is lead author of *Powerless: The People's Struggle for Energy* (with Jennifer Laird, Russell Sage, April 2025), the first major book on energy insecurity in the U.S.

Dr. Hernández has authored nearly 100 peer-reviewed articles as well as book chapters, and policy briefs in top-tier journals and secured nearly \$10 million in competitive funding from federal agencies and philanthropies. A sought-after thought leader and speaker, Dr. Hernández has delivered more than 250 invited lectures and presentations. She is regularly featured in national media, has served in key leadership roles including as a mayoral appointee to NYC's Environmental Justice Advisory Board and is the recipient of multiple honors, including induction into Columbia's Academy of Community and Public Service.

As native of the South Bronx, Dr. Hernández has led small-scale social impact real estate projects where she has implemented clean energy and energy efficiency deep retrofits. A proud product of NYC public schools and Section 8 housing, she earned a BA from Hunter College and a PhD from Cornell University in Sociology.

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