



Customer Perspectives on Electric Bills: Affordability, Transparency, and Rate Design

Prepared On Behalf of National Grid

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Qualifications of the Author

Elin Swanson Katz is the founder of Blue Swan Energy Strategies, LLC, where she provides strategic policy and regulatory advice to policymakers, regulators, and stakeholders on advancing affordable and sustainable energy for households and businesses.

Katz previously served as the inaugural Director of the Federal Energy Regulatory Commission's Office of Public Participation, created to strengthen the role of consumers and communities in federal energy proceedings. She also served as Connecticut's Consumer Counsel from 2011 to 2019, representing ratepayers in major utility and affordability proceedings. She also served Chair and member of the Connecticut Siting Council, where she oversaw the siting of critical electric and telecommunications infrastructure. She is a former President of the National Association of State Utility Consumer Advocates.

Katz also served as a consumer protection expert for the U.S. Department of Energy's \$8.8 billion Home Rebates Program, focused on helping households lower energy bills through efficiency and electrification. She has also held senior leadership roles in the telecommunications sector, including Associate General Counsel and Vice President of Utilities at Tilson Technology Management.

Katz holds degrees from Cornell University, Boston University School of Law, and Trinity College in Hartford.

Executive Summary

National Grid's electric customers evaluate their bills primarily through the lens of the total amount due and consistently describe that total bill as high, unpredictable, and increasingly difficult to manage. Across focus groups, affordability emerged as the central concern, particularly for low- and moderate-income households, who reported making difficult tradeoffs to pay their electric bills and expressed concern about their ability to remain in their homes. Customers define affordability solely in terms of the total bill, not individual components.

At the same time, customers consistently describe electric bills as overly complex and difficult to understand. The number of line items, technical terminology, and lack of clear explanations prevent customers from identifying what drives their costs. As a result, customers often disengage from the bill entirely and focus only on the total amount due.

A central and recurring concern is the perceived disconnect between energy usage and total bill amounts. Customers expect that reducing usage should lead to meaningful savings. However, many report that efforts to conserve energy do not result in consistent or noticeable reductions in their bills, reinforcing the perception that many charges are unrelated to usage and outside of their control.

These dynamics, including high total costs, limited transparency, and a weak connection between usage and cost, shape customer perceptions of fairness and trust. Customers frequently question whether charges are allocated appropriately and who is responsible for those decisions. In the absence of clear explanations, confusion leads to skepticism and skepticism leads to distrust.

Importantly, customers do not reject investments in infrastructure, clean energy, or low-income programs. Rather, they seek clearer explanations, greater transparency, and a more direct connection between costs and benefits. They also express interest in understanding which costs are driven by policy and whether alternative funding mechanisms should be considered.

Taken together, these findings indicate that customer dissatisfaction stems less from any single charge and more from the overall structure and presentation of the bill. Improving affordability, simplifying bill design, and strengthening the connection between usage and cost will be critical to maintaining customer trust and supporting broader energy and policy objectives.

Introduction

National Grid, in collaboration with Blue Swan Energy Strategies, LLC, conducted three 90-minute focus groups with a cross-section of its Massachusetts customers to inform its understanding of customer perspectives on electric bills, affordability, energy policy, and rate design. The focus groups were facilitated by The Harris Poll, an independent third-party research firm that served as a neutral moderator.

The sessions were designed to elicit customer views across several key areas, including electricity affordability, bill volatility, and the transparency and clarity of billing. Participants were also asked to provide feedback on public policy-related charges, net metering and residential solar policies, and their priorities with respect to potential changes to electricity charges, billing structures, and energy policies in Massachusetts.

Customers consistently describe their electric bills as high, confusing, and difficult to control. These concerns are driven not only by rising costs, but by limited transparency and a perceived disconnect between usage and total bill amounts. Customers do not reject investments or modernization efforts. Rather, they want to understand what drives their total bill, see a clear connection between their behavior and what they pay, and trust that charges are fair and justified.

Cost alone does not drive these concerns. Customers react to a combination of rising prices, limited transparency, and perceived unfairness. They do not reject system investments or modernization efforts; rather, they want clarity, accountability, and a clearer link between what they pay and what they receive. Many also call for reconsideration of how certain costs are allocated and funded.

These findings present a growing risk for utilities, regulators, and the industry. As costs rise and bills become more complex, customer trust may erode unless transparency and communication improve alongside policy implementation.

Customers also describe their bills as unpredictable. They struggle to understand the structure of charges, particularly when multiple line items lack clear explanations. Many customers report that reducing usage does not produce consistent or meaningful savings, reinforcing the perception that total bill cost is largely disconnected from consumption.. In response, customers develop their own explanations for bill fluctuations, often relying on incomplete or speculative reasoning. Some also question cost allocation, including the impact of solar and other policies, which further contributes to concerns about fairness.

These findings establish a consistent narrative that customers want to control their bills, understand what drives costs, and see a clear connection between usage and what they pay.

Focus Group Composition

National Grid maintains an online Customer Council to gather ongoing input on the company's policies, programs, and communications. The Council represents a cross-section of customers across the company's U.S. footprint, including more than 600 participants from the Massachusetts service area. The company uses this forum to conduct surveys and other qualitative and quantitative research to inform data-driven business decisions.

Participants for this research were recruited by The Harris Poll from the Customer Council through a structured screening survey designed to assess interest and eligibility. From those who expressed interest, participants were selected to ensure representation across key customer segments, including residential customers, low- to moderate-income (LMI) customers, and customers with rooftop solar. This approach ensured that the focus groups captured perspectives from customers with differing usage patterns, bill impacts, and experiences with energy programs.

All participants were current National Grid customers, and only those selected to participate were compensated for their time. The three focus groups consisted of six to seven participants and included both low- and moderate-income (LMI) customers and rooftop solar customers. To protect privacy, individual participants are identified only by pseudonyms. A description of each customer's profile and their place of residence is attached as Appendix A.

National Grid appreciates the time customers devoted to these discussions, as well as the thoughtful and candid dialogue that occurred during the sessions. The focus groups demonstrate that Massachusetts residents are not only concerned about electricity costs but are also actively engaged and focused on identifying practical solutions.

National Grid retained The Harris Poll to serve as the independent moderator of the focus groups in order to minimize the potential for moderator bias and to promote candid, unfiltered discussion. Participants were explicitly informed that the moderator was a third-party consultant and not affiliated with National Grid.

Customers were encouraged to provide fulsome, uncensored feedback, including both positive and negative perspectives. The moderator did not attempt to justify or critique any aspect of the bill or related policies, and participants were told there were no right or wrong

answers. This approach was designed to create a neutral setting in which customers could speak openly about their experiences, without influence or concern that their views would be challenged or judged.

While focus groups are not intended to be statistically representative, the recruitment and selection process was designed to ensure that participants reflect a reasonable cross section of the Company's customer base. The diversity of participants and the consistency of themes expressed across multiple groups provide confidence that the findings are not isolated or anecdotal but instead reflect common customer experiences and concerns.

Importantly, the perspectives expressed in the focus groups align closely with multiple independent sources, including the Massachusetts Chamber's *Energy Issues Survey Results*¹ (the "Chamber Survey"), the analysis conducted by Dr. Courtney Henderson of Hawks Peak Strategies for the Massachusetts Attorney General as presented in the DPU's technical session on April 3, 2026 (the "Henderson Presentation"), and written comments submitted in this docket.

These findings are consistent across multiple independent sources reinforce the reliability of the findings and demonstrate a clear and consistent set of concerns among Massachusetts residents regarding electricity costs, bill transparency and comprehension, and overall affordability.

Customer quotes are presented as close to verbatim as possible, with edits only for clarity. Where appropriate, participant responses are supplemented with findings from the Chamber Survey, customer comments filed in this docket, and other publicly available data.

Electricity Affordability and Volatility

Affordability emerged as one of customers' primary concerns. Participants consistently described electricity costs as expensive, unreasonable, and, in some cases, unaffordable.

When asked to characterize their electric bills in just a word or two, customers overwhelmingly used terms such as "expensive," "overpriced," and "outrageous." These responses reflect concern about rising total bill costs, limited transparency, and growing frustration with affordability.

¹ Massachusetts Chambers Policy Network, *Energy Issues Survey Results* (Feb. 2026) (conducted by Suffolk University, Jan. 3 –Feb. 5, 2026, n=500, margin of error $\pm 4.4\%$), available at [Energy Poll Results \(Feb. 2026\)](#), a statewide survey of 500 Massachusetts residents conducted January 31 through February 5, 2026.

*I was going to say expensive, but I guess I'll change it to overpriced because it's like expensive, but **without kind of understanding why it's so expensive** and why it's changing.*

Steven² (emphasis added)

The stress associated with high and unpredictable bills was a central theme. Customers described receiving an electric bill as “nerve-wracking” and expressed concern about continued increases over time:

[I]t's like really [electric bills are] skyrocketing so you're constantly nervous that it's going to go up and I would imagine for everyone else having to pay massive electrical bills that they also worry that it's constantly going up.

Lisa

Another customer noted that bills have increased “drastically” over time. (Jaqui)

This is consistent with the Chamber Survey, in which respondents said they were either “very concerned,” (49%) or “somewhat concerned” (34%) about how much they pay for their monthly utility bills. *Chamber Survey*, eighth slide.

While they reported confusion and overwhelm with respect to the many sections of the bill, as discussed further below, customers consistently return to the total bill as the only number that matters. Customers define affordability solely in terms of the “[t]he lowest possible bill”:

It's always [about the total cost of the bill].

Cheryl

Others also emphasize minimizing the total bill amount as their primary concern, as noted by Jamie.

Affordability challenges were particularly acute among LMI customers, some of whom described the “heat versus eat” dilemma or other difficult choices they may have to make to pay electric bills.

² A fuller list of quotations from the focus groups can be found in Appendix B.

*I'm terrified that it's gonna skyrocketwhat do I do? **Pay the electric bill or get groceries?***

Jamie (emphasis added).

I shut my heat off all night and then in the morning I turn it only during the day.

Lisa

Customers worry about their ability to remain in their home or even in the state.

[I]t does seem like the bill goes up every year...it's part of the factor of should we think about downsizing so we're not kind of wasteful about where we live.

Alexa

These challenges are echoed in written comments filed in this docket. Elderly customers write of lowering their heat, and families are thinking of moving out of state.

*We are in our 80's and have resided at the above address for over 50 years. The double distribution fees and Mass Save fees are adding to the challenge of us being able to remain in our home. ... **We keep our house setting at 67 and wear sweaters.***

Comments of George and Madelyne Pope, Scituate, December 28, 2025 (emphasis added).

*I have electric heat and **I keep our house at 65-66 degrees...**My recent bill of nearly \$1,400 bill for one month is too much!*

Written comment of Susan Setterland, Hanover, January 28, 2026 (emphasis added).

*My pay increase [isn't] keeping up with expenses. **I have reached the point that I am ready to move out of this state.***

Written comment of Nelson I., December 15, 2025 (emphasis added).

Bill volatility further compounds these concerns. Customers noted that electricity bills fluctuate significantly compared to other household expenses, making budgeting difficult and reinforcing the perception that total costs are outside of their control.

[It's] hard during the holiday season to budget accordingly when you don't know how ...expensive the [electricity] is going to be.

Alexa

*I think **the electric bill and the gas bill are the only ones that kind of fluctuate...** Your phone bill, cell phone, all that is pretty consistent.*

Fred (emphasis added)

The Henderson Presentation also found that low-income customers in particular experience considerable financial and emotional stress over large fluctuations in energy bills. See Slide 23, “Bill Volatility Creates Real Financial & Emotional Stress, but is that Stress is Heavily Income-Dependent,” and Slide 24, “Strong Emotional Reactions to Bill Volatility & Unpredictability.”

This unpredictability undermines customers’ ability to budget and reinforces the perception that bills are not within their control.

Several customers noted that electricity rates and bills were significantly lower in other states in which they may have a second home and pay an electric bill. Customers also compared electricity costs to other states and wondered what is different about Massachusetts compared to other states.

Why in the state of Maine am I paying so much less than I am in Massachusetts?

Dennis

Customers also questioned why electricity costs are higher in Massachusetts than in neighboring states and speculated about differences in infrastructure and system costs.

Together, these perspectives show that affordability concerns are not abstract. They directly affect household stability and long-term decisions about remaining in the state.

Bill Complexity and Customer Confusion

Customers consistently describe bills as overly complex, citing long lists of charges and technical language that obscure what drives costs. As one customer put it, they “don’t even like looking at it because the whole thing is just too confusing” (Lisa).

Customers also questioned the origin and approval of charges, reinforcing the perception that bills are not transparent. This sense that customers have no control over the “fees” leads to anger and frustration:

*How much you've used and how much it costs is easy. **The lengthy list of items and how much is being charged for the lengthy list of items per item is impossible to understand.***

Jacob (emphasis added)

Customers feel like there are duplicative charges:

I'm paying the same thing twice.

Cheryl

Although there are explanations of the charges on the bill, customers were unaware of them or felt they were inadequate. They want descriptions to be clearer: *“This is what distribution charge means, blah, blah, blah, blah, blah, you know what I'm saying?”* (Jamie)

As a result, even when information is available, customers do not engage with it, limiting the effectiveness of existing bill explanations.

This is consistent with the findings presented in the Henderson Presentation:

- “Most customers understand little beyond the total amount due” (Slide 12). “Add a mandatory plain language explanation of all socialized and program funded charges” (Slide 22).

These findings align with other research showing that most customers understand little beyond the total amount due. Together, they point to the need for simpler, clearer bills that allow customers to identify what drives total cost.

Links Between Fairness, Trust, and Transparency

When customers do not understand their electric bills, they become distrustful and skeptical. They question whether costs are allocated fairly and who is responsible, and they call for both clearer bills and greater transparency into electric costs. They feel a loss of control over their own bills.

The Henderson Presentation reported that the word participants used over and over again was “transparency.” See Slide 32. In the focus groups that are the subject of this report,

customers also ranked transparency as being of central importance. Only with transparency would they be able to understand and control their total bill:

*To me, transparency of charges [is most important], because **if I know where everything's going, then I can adjust everything else.** Or petition forward or work towards it. So I need to know what I'm paying for.*

Cheryl (emphasis added)

Transparency and a better understanding of the bill empower customers:

[If] I know where the charge is coming from and who's mandating it...I know who to complain to if I have a problem.

Alexa

Transparency is therefore not simply a communications issue; it is central to maintaining customer trust and providing greater agency over their usage and their total bills.

Lack of Customer Control over Bills

It is not simply a matter of a better understanding of the bill and increasing transparency. Customers expect to control their bills by managing their energy usage. However, many report that reducing usage does not produce consistent or meaningful savings. This reinforces the perception that total bill cost is largely disconnected from consumption. They believe changes in consumption have little impact on total costs and that many charges appear unrelated to usage, weakening confidence that behavior can influence cost. This disconnect between usage and cost is one of the most significant drivers of customer frustration.

Customers feel they don't have "any say" over the many charges on the bill, that they are captives to a system they don't understand:

*I don't know why it takes several different charges to do that in different ways, but you don't have a choice. There's an electric company and you need electric. **You're going to pay the bill on all the fees they want to add.***

Cheryl (emphasis added)

Many are acutely aware that the line items they don't understand constitute a substantial portion of the bill:

*It's just when you start seeing **those surcharges at the bottom add up more than the cost of the actual electricity**, it's mind-blowing, mind-blowing.*

Eliza (emphasis added).

Without a clear link between usage and cost, customers cannot manage their bills, which weakens confidence in the rate structure.

Interest in Budget Billing as a Potential Mandate

Many customers value budget billing, but expressed concern that the year-end true-up, often viewed as a “balloon payment” (Anna), lacks transparency and obscures actual usage. They worry “that you will get surprised” that your usage was higher than expected and hence more expensive (Glenn). As a result, they worry that budget billing further weakens the connection between usage and total bill cost.

*I think budget billing will not give you an accurate view of what you might be spending monthly. So you might... be running electric heat or an electric heater in an attic space or something and **you're not going to see that you might have ways that you could be turning things off during certain periods.***

Glenn (emphasis added).

Customers want to see budget billing as an option, but not a mandate.

I would say I'd like to see this as an option, like I think if people want it, it's great for them. If people don't want it, they should have that option to not do it as well.

Justin

This is consistent with the Henderson Presentation, which reported:

- Preference for opt-in over automatic enrollment was universal: linked strongly to choice, agency, & control

Slide 26.

While budget billing can be a valuable tool, it should remain optional rather than a required billing approach.

The Bill as a Policy Delivery Mechanism

Customers increasingly perceive their bill as containing multiple charges unrelated to their own usage. While many support the underlying policies, they question whether the electric bill is the appropriate mechanism for recovering those costs. Customers also consistently questioned whether costs are allocated fairly and who is responsible for those decisions. Lack of clarity leads directly to skepticism.

It also contributed to a sense that customers have insufficient control over their bills. Customers do not distinguish between policy-driven and utility-driven costs when viewing the total bill. Instead, they experience all charges as part of a single total cost, which drives concerns about affordability and fairness.

I don't want to pay for someone's electric vehicle. ... No one asked me if I wanted to[.]

Cheryl (emphasis added)

There is also structural confusion between the many line items:

*Yeah, there seem to be two charges to make up for solar...and then distribution, solar charge, and renewable energy charge. **Those all seem like ... the same thing.***

Lewis (emphasis added)

Customers repeatedly questioned whether the electric bill is the appropriate mechanism for recovering policy costs and expressed concern about fairness and cost allocation.

I mean, if it's a Massachusetts policy, I kind of feel like it should be done through your taxes rather than your electric bill.

Jaqui

Some noted the regressive nature of electric bills as a source for policy initiatives.

I definitely think it should be state tax-based because then it's based on your income, where here it's based on your electricity usage.... So if you're low-income and using a lot of electricity, you're paying into these programs at a high cost comparatively to other people.

Justin

They also express interest in clearer identification and grouping of policy-related charges, as well as greater transparency regarding how those costs are determined. This transparency is essential to addressing fairness concerns and maintaining trust:

So, if there's something on there that actually said, which ones are state programs and which ones are other charges, that that would be helpful in understanding.

Jaqui

This finding is consistent with the Henderson Presentation, which indicates that customers prefer a bill that is visually clearer and cleaner, but also more detailed with respect to individual line items. See Slides 17 and 22.

In the absence of such clarity, customer frustration shifts from discrete charges to the structure of the bill as a whole.

Stronger Support for Energy Efficiency and Low-Income Programs

When asked about the policy charges, customers were largely supportive of the Mass Save energy efficiency programs, many of whom had used the program in their own home.

[We] used Mass Save to insulate our attics [and other programs]....Those have saved thousands of dollars for us over the past 10 years.

Marcus

Some customers expressed frustration that they invested in electric appliances and then were shocked by the increase in their bills.

I had a heater, electric heater, because it was going to be more efficient, but my electric bill went up twice, doubled.... I had to not use the heater because it was costing too much, so anyway.

Fred

The utility's low-income programs were generally viewed as necessary and appropriate.

*You're... basically helping people who ... need to be in homes that are heated. [They] don't really have the resources to do so otherwise.
And I think that [is great].*

Marcus

In fact, some customers were concerned that the low-income programs might be under-utilized.

I think the key is to sign up the sign up to people who need it ... Have they gotten what they need to get? Is it easy enough to do it?

Richard

Others noted that some people don't have internet access and noted the challenges of requiring applications online.

These findings suggest that customers support programs they understand and experience directly.

Customer Service Charge as the Cost of Getting Electricity

Customer reactions to the customer service charge provide a useful lens into how fixed charges are interpreted within the broader structure of the bill. Some view it as “flat fee,” like a basic subscription charge for service. STEVEN– Leominster. Others noted other situations where there are service fees:

{It} reminds me of Ticketmaster when I buy a ticket and it's like ticket fee and it's like \$25 and it's like I'm just buying with the cost of the ticket.

Justin

Most viewed the \$10 customer charge as fairly insignificant in the context of the total bill. Some expressed awareness that there were fixed costs independent of usage. One used the example of a vacation home with low usage during certain months, but nonetheless consistent cost to the utility:

[Someone] might have like a vacation home where they're just using so little electricity... And if it was just charged by the amount of kilowatt hours, it wouldn't

cover the cost that the electric company has to...read their meter every month and send them a bill and answer any questions if they call and stuff like that. So I think that's fair.

Lewis

Customers generally accept fixed costs when they are clearly explained and perceived as reasonable. There was little enthusiasm, however, for large increases in the fixed charge.

Net Metering and Solar Charges

There was a clear division within the focus groups between those who had solar panels and those who did not. Those with solar panels felt the system was fair and their installations contributed to the grid. Those without solar panels almost universally questioned why they were paying for them as a line item on their bills. They felt this acutely when their living situation precluded solar panels.

I think it's great if people can do solar energy. I don't know why I have to support it. But the problem with where I live is it's in the historical area. You're not allowed to put solar panels out.... There's no way I can do it, but yet I still have to pay a solar fee.

Cheryl

Others noted that it feels like nonparticipants were “getting charged for everything.” Marla

Customers with solar installations felt there were benefits to the grid that justified the costs on the bill.

[Solar installations] makes the electricity cheaper for everybody because if people didn't put solar panels on their roofs, the electric company would have to build, or the suppliers would have to build more power plants, which are very expensive... and I think it's just better to take the solar panel than a new coal power plant.

Lewis (Solar customer)

Other solar customers noted that electricity from solar panels can reduce brownouts and outages:

So we became generators of electricity to reduce brownouts, reduce blackouts, rolling brownouts in the state, and that's what they're trying to encourage.

Kelsey (Solar customer)

However, some solar customers also thought it was unfair to ask nonparticipants to contribute to the program as noted by Alexa (solar customer)

Customers, including solar customers, did not necessarily understand why the solar and net metering programs required support from other customers.

I just still find it strange that there would be a charge that even exists for [net] metering... Why would there be a cost associated with the solution?

Steven

The solar panel customers expressed frustration that they were unable to understand how much electricity they were generating from the bill format. They sought more information on the interaction between their solar panels and the grid.

[When] it shows my usage, it just shows what I have beyond what I produced. ... It would be nice if somehow on there, it said your total consumption of electricity from your panels and what you're getting off the grid together.

Lewis (Solar customer)

There was considerable confusion about how net metering compensates solar customers, with some customers believing that National Grid profits under net metering.

So maybe like eight or nine months out of the year, I'm producing more electricity than I'm using... So National Grid is getting 40 cents for every kilowatt that I produce. ... But they're already making a lot of money off of it.

Lewis (Solar customer)

There was generally consensus among non-participants that solar customers should have to pay their share of system costs:

The wires come down as in a storm. Someone needs to put them back up again. So, yes, you [solar customers] need to a reasonable amount.

Cheryl

Taken together, these perspectives suggest that while customers may support the goals of net metering, concerns about cost allocation and fairness can undermine acceptance if impacts are not clearly explained and may warrant consideration of targeted reforms to improve transparency and alignment with customer expectations.

Smart Meter Awareness and Expectations

Customers raised questions about smart meters and time-varying rate (TVR) in every focus group, even though they were not asked about them by the moderator. They questioned why the electric company invested in smart meters if there was not going to be some form of TVR. They wanted more information on how smart meters would benefit them or the system.

But I think the most important thing on the bill would be...if they're more transparent as to what's happening with the smart meter, giving us more self-control over...when and where we use the electricity ...and how it'd be reflected in the cost, in the true cost.

Lewis

Many customers said they “had no idea it was cheaper at night”(Lisa). Customers saw TVR as a means to both lower their bills and to assist the electric company with managing usage.

I mean, if they encouraged off -peak, it would just lower their costs and everybody's cost... the electric company not using off -peak power is just a tremendous cost for everybody, including for them.

Lewis

Other customers were interested in a system such as in England,

{Where} they can look... in real time at exactly how much energy they're using...so that they know they can literally tell what their bills are going to be and what their own behavior is doing to affect that.

Marcus

As with other aspects of the electric bill, customer acceptance of smart meters depends on whether they enhance control, improve transparency, and build trust through clear and actionable information.

How the Cost and Complexity of Electric Bills Negatively Impacts Electrification and Climate Goals

Customer perspectives on electric bills have direct implications for electrification and climate policy, as high and uncertain electricity costs can discourage adoption of technologies intended to advance those goals. The contrast customers draw between electric bills and gas and oil bills highlights how layered charges and policy costs can steer consumers toward fossil fuels.

Like I used to think oil was expensive, but it clearly is not....Because with oil, you don't pay surcharges on it. ... But with oil, you get 100 gallons. That's what you pay for. You don't pay any other extra fees.

Eliza

Others with EVs said they would not advise purchasing an EV due to the cost of electricity, as noted by Robyn.

Taken together, these perspectives suggest that unless electricity costs are perceived as manageable, predictable, and clearly linked to usage, high prices and complex billing structures may act as a barrier to electrification and, in turn, to achieving broader climate goals.

Conclusions and Recommendations

Conclusions

Customers evaluate their electric bills through a framework defined by affordability, control, transparency, and fairness, each of which shapes their trust in the bill and their willingness to support broader energy and climate policies.

First, many customers experience electricity as increasingly unaffordable and focus on the total bill amount. Rising costs and bill volatility create real financial strain, particularly for low- and moderate-income households, and influence decisions about whether to remain in their homes or adopt new technologies.

Second, customers experience electricity as increasingly unaffordable and focus primarily on the total bill. They expect to control their costs through usage, but do not see a

consistent relationship between consumption and total bill amounts. At the same time, complex bill structures prevent them from understanding what drives costs.

Third, customers struggle to understand how bills are structured. Complex line items, technical terminology, and limited explanations prevent customers from identifying what drives their costs.

Fourth, these gaps in understanding lead directly to concerns about fairness. Customers question whether costs are allocated appropriately and who is responsible for those decisions. Over time, this uncertainty erodes trust.

Importantly, customers do not reject investments in infrastructure, clean energy, or low-income programs. Instead, they want clearer explanations, greater accountability, and a more direct connection between costs and benefits. They also want policymakers to consider funding mechanisms beyond utility bills.

Taken together, these findings demonstrate that customer dissatisfaction stems from the structure of the total bill, not any individual charge. Addressing these concerns will require improving transparency, strengthening the connection between usage and cost, and ensuring that electricity remains affordable. It may also warrant consideration of targeted reforms to net metering and improved integration of smart meter capabilities, including consideration of TVR, to better support customer understanding, control, and confidence in the electric bill. Without meaningful improvements in affordability, transparency, and cost alignment, current billing structures risk eroding trust, discouraging electrification, and undermining the policy goals they are intended to support.

Recommendations

Addressing the concerns identified in this report will require a coordinated approach that places affordability, transparency, and customer understanding at the center of rate design and customer engagement. Based on these conclusions, it is recommended that National Grid consider the following actions, as appropriate through filings with and subject to review and approval by the Massachusetts Department of Public Utilities:

First, improving affordability must remain a primary objective. Customers increasingly experience electricity as a financial strain, and rising costs risk undermining both trust and participation in energy programs. National Grid should consider continuing to prioritize affordability in its planning, rate proposals, and customer programs, with a focus on managing total bill impacts where feasible and supporting low- and moderate-income customers. National Grid should also consider whether to propose, in appropriate

proceedings, evaluation of cost recovery approaches for certain policy-driven costs, including whether alternative mechanisms could support affordability and improve customer understanding.

Second, strengthening the connection between usage and cost is important to restoring a sense of customer control. National Grid should consider evaluating opportunities within its rate design proposals and customer communications to better distinguish between usage-based and non-usage-based charges and to more clearly demonstrate how customer behavior affects total bills. This may include proposing refinements to the balance between volumetric and non-volumetric charges, where appropriate, to better align rate structures with customer expectations regarding control and cost. In addition, to the extent changes to fixed charges are proposed, National Grid should consider implementing such changes incrementally over time to mitigate potential rate impacts and avoid customer bill volatility.

Third, improving transparency and clarity in billing is essential to building trust. National Grid should consider continuing to enhance bill design and customer communications by simplifying formats, using plain language, and organizing charges in a way that helps customers understand what they are paying for and why. This may include proposing more standardized approaches to bill presentation, including clearer identification and grouping of policy-related costs, along with concise, customer-friendly explanations.

Fourth, National Grid should consider proposing targeted refinements to net metering and related distributed energy frameworks to address customer concerns regarding cost allocation and fairness. This may include evaluating whether existing structures appropriately balance costs and benefits and identifying opportunities to improve transparency while maintaining support for distributed energy goals.

Fifth, enhanced integration of smart meter capabilities may support improved customer understanding and engagement. National Grid should consider continuing to advance its grid modernization efforts through filings that expand access to real-time or near real-time usage information and provide tools that help customers better understand how usage translates into bill impacts.

Finally, National Grid should consider proposing evaluation of time-varying rates (TVR) as part of a broader effort to align costs with customer behavior. When supported by clear communication and customer education, TVR may provide additional opportunities for customers to manage their bills and better understand the relationship between usage and cost.

Taken together, these actions should help National Grid address the concerns identified in this report through its filings before the Department. By continuing to focus on affordability, transparency, and the connection between usage and cost, National Grid can support improved customer understanding and trust, while advancing broader energy and policy objectives within the Department's established regulatory framework.

Appendix A

Focus Group Pseudonyms and Demographic Information

Focus Group 1

Customer Pseudonym	Place of Residence	Demographic Information
Cheryl	Nantucket	Senior
Dennis	Saugus	Senior
Lisa	Methuen	Low Income, age 45-54
Alexa	Chelmsford	Senior
Lewis	Dudley	Solar, Senior
Jaqui	Bellingham	Age 45-54
Jamie	Newburyport	Low Income, Senior

Group 2

Pseudonym	Place of Residence	Demographics
Marcus	Randolph	LIHEAP, Solar, Senior
Jacob	Randolph	Senior
Glenn	Medford	Senior, Solar
Anna	Rutland	Low Income, Age 55-64
Robyn	Leicester	Senior, Low Income, Solar
Richard	Marlborough	Senior

Group 3

Pseudonym	Place of Residence	Demographics
Marla	Seekonk	Senior
Kelsey	Weymouth	Solar, Age 55-64
Eliza	Seekonk	EV, Age 35-44
Steven	Leominster	Age 25-34
Fred	Lynn	Low income, Senior
Mabel	Worcester	Age 45-54
Justin	Rutland	Age 35-44, solar

Appendix B

Customer Quotes

When asked by the moderator for one word to describe electric bills:

Expensive.

Kelsey

Expensive.

Eliza

I was going to say expensive, but I guess I'll change it to overpriced because it's like expensive, but without kind of understanding why it's so expensive and why it's changing.

Glenn

Overpriced.

Justin

And I'd like to say expensive too, but yeah, take all my money.

Mabel

But it is, it is, it's very expensive for low users.

Marla

It's outrageous, it happened all of a sudden.

Jacob

Lots of fees.

Glenn

On high, unpredictable, and uncontrollable bills:

Only thing I could say is maybe nerve-wracking every time I get the bill so nerve-wracking

Anna

[I]t's like really [electric bills are] skyrocketing so you're constantly nervous that it's going to go up and I would imagine for everyone else having to pay massive electrical bills that they also worry that it's constantly going up.

Lisa

Just things are getting too expensive overall. And any way I can cut that down would be helpful to me.

Dennis

I've owned this house for about 8 years now. And the amount it's gone up in just those 8 years is kind of ridiculous....But at the same time, like, that number just drastically goes up every year.

Jaqui

On challenges for LMI customers and that ability of those on fixed incomes to remain in their homes:

Because I'm low income. Yet, I own my own home. I've owned it for years. I had to retire early because of a disability. I'm terrified that it's gonna skyrocket and I am not gonna be able to pay for it. ...I'm not gonna make any more than I do right now. And my mortgage is my mortgage. So, I'm just really afraid that it's gonna go up and I, you know, gee, what do I do? Pay the electric bill or get groceries?

Jamie

I'm also on disability and I'm low income and I get help and I get fuel assistance and I still even though my bill is low it is high for me because I'm low income...so I do have that fear that it will go up... I try to do is like in the winter all night no matter how cold it is. I shut my heat off all night and then in the morning I turn it only during the day So there's some things I deal I'll deal with just to try to keep it out and even doing that.

Lisa

I mean, I had like probably like a \$900 bill. Like, you know, I mean like three months ago, it was probably like 800. I mean, it's very costly. It's like, it's kind of ridiculous.

So when I could be doing all these other things with my money, but you know, of course, like I don't want them to shut my electric off.

Mabel

[I]t does seem like the bill go up every year...it's part of the factor of should we think about downsizing so we're not kind of wasteful about where we live.

Alexa

It can be very scary even especially for older people on fixed incomes People, you know who don't have good pensions Social Security people just it doesn't get better You know, I mean, so I think it's just the not knowing what your bills gonna be and if it's gonna go up

Anna

Customers are considering moving out of state because of electricity costs:

I did the math and in 2025 the cost of gas and electricity ran me about \$6000.00 for the year. This is nuts compared to a couple of years ago when it cost me \$3000 for the year. ... My pay increase [isn't] keeping up with expenses. I have reached the point that I am ready to move out of this state. ...I never [thought] I would ever say I would move out of MA. This is the state I grew up in and my kids also. But the cost to reside in MA has gone through the roof.

Written comment of Nelson I., December 15, 2025.

The cost of electricity delivery has skyrocketed over the past years. My husband and I are retired and it is becoming difficult to meet the monthly expense of our electric bill. I have electric heat and I keep our house at 65-66 degrees...My recent bill of nearly \$1,400 bill for one month is too much!

Written comment of Susan Setterland, Hanover, January 28, 2026.

Comments on bill volatility:

[It's] hard during the holiday season to budget accordingly when you don't know how ...expensive the [electricity] is going to be.

Alexa

[I] try to do things like that to keep like I don't I shut all my lights....I really don't use that much electricity. But I do whatever I can to keep it because it goes much higher in the winter.

Lisa

I was going to say, I think the electric bill and the gas bill are the only ones that kind of fluctuate. If I'm trying to think of all the bills we normally get, those are the ones that fluctuate. Your phone bill, cell phone, all that is pretty consistent.

So if you really are having a need to budget, and have a predictability, and be able to have the right cash flow, then it is going to be important.

Fred

On the lower cost of electricity in other states:

They're a lot higher than my vacation in [Maine]. I look at the two bills. And one is like one-fifth versus, not sure....Why in the state of Maine am I paying so much less than I am in Massachusetts?

Dennis

But you know, as [DENNIS] mentioned, you know, the rates in Maine are cheaper.

So it'd be nice to have that almost as a comparison as to why it's expensive in Massachusetts when compared to neighboring states that may have, you know, less people, but they must have similar infrastructure because they have to get the power to all those people....Is it because our infrastructure is older and there's kind of maintenance tied in or other factors?

Alexa

On bill confusion and complexity:

I don't even like looking at it because the whole thing is just too confusing...with the big huge list of stuff.

Lisa

Lots of items on the bill that add to the total bill that I'm not really familiar with.

Alexa

I find the fees very confusing, and I also don't really know when they started, or I don't feel like we get notified when there's going to be new fees. ... where are all

these coming from? How are they approved? Why aren't we getting prior notices when bills are going to have new fees on them and explaining them at that point?
Jaqui

How much you've used and how much it costs is easy. The lengthy list of items and how much is being charged for the lengthy list of items per item is impossible to understand.
Jacob

On confusion between transmission, transition, and distribution fees:

Yeah, what's my cost to get it to my house? I don't need seven breakouts.
Dennis

*I don't want to pay for it twice. It's what it looks like to me.
I'm paying the same thing twice.*
Cheryl

On the need for clear definitions:

This is what distribution charge means, blah, blah, blah, blah, blah, you know what I'm saying?
Jamie

Customers rank transparency as being of central importance:

To me, transparency of charges [is most important], because if I know where everything's going, then I can adjust everything else. Or petition forward or work towards it. So I need to know what I'm paying for.
Cheryl

The most important to me is...the transparency of the charges, you know, just so I know where the charge is coming from and who's mandating it, and that kind of clarifies it in my mind, and I know who to complain to if I have a problem.
Alexa

Transparency on who's impacting each charge.
Jaqui

Now it's like transparency of charges [is most important to me]. Like why are we paying all, you know, this extra? I think it's extra.

Mabel

On customers' lack of control over their bills:

The delivery systems and all that. We don't have any, any say over it.

It has to come here. I don't know why it takes several different charges to do that in different ways, but you don't have a choice. There's an electric company and you need electric. You're going to pay the bill on all the fees they want to add.

Cheryl

Yeah, I like the graphs as well, and I think the usage is pretty easy to understand, but the other fees, you know, where did they come from, where do they go, things like that.

Alexa

It's just when you start seeing those surcharges at the bottom add up more than the cost of the actual electricity, it's mind-blowing, mind-blowing.

Eliza

I feel bad for people starting off not realizing how much it is to like own a house or rent and having to pay these extra costs that they've been into with because not related to electricity....And then when you see your first electricity bill, like holy crap, I have to pay that now.

Eliza

[I] want to eventually would like to get to is just the kind of thing that my family in the UK has, which is they, they have, they can look all the time in real time at exactly how much energy they're using, what it's, what its source is, electric, gas, whatever, and how it's being spent so that they know they can literally tell what their bills are going to be and what their own behavior is doing to affect that.

Marcus

Customers do not want mandated budget billing:

Yeah, if you have the same every month, but then electricity goes up then you could be super surprised with almost like a balloon payment[.]

Anna

I think budget billing will not give you an accurate view of what you might be spending monthly. So you might, you know, be running electric heat or an electric heater in an attic space or something and and you're not going to see that you might have ways that you could be turning things off during certain periods.

Glenn

One thing about the budget billing, I can see somebody's worry is that you get surprised at the end of whatever your 12 month period is, if the, if, if somebody's miscalculated, but if national grid had on its monthly bill to those people, well, your, your actual use was \$150, your, your budget billing is 100.

Richard

I would say I'd like to see this as an option, like I think if people want it, it's great for them. If people don't want it, they should have that option to not do it as well,
Justin

On objections to the bill as a policy delivery mechanism:

And one thing about the bill is there seems to be a lot of extra fees on there that I never got to approve....I don't want to pay for someone's electric vehicle. I don't agree with them. I don't want to pay for them. No one asked me if I wanted to, and I don't care if it's 11 cents on my bill. That's two beer cans. I pick off the ground and recycle for 10 cents. That's how I look at things.

Cheryl

Yeah, I think my bill, I always have a, well, I have a very low bill as far as usage goes and all the extra fees are usually a lot more than my bill.

So it's different for me, you know.

Lisa

I think it's clear, but I had no idea that I was helping the electric car program or the other government initiatives.

Jamie

The electric vehicle is not something I knew about at all and I think it seems like a lot of these fees are covering a bill from Massachusetts that doesn't necessarily impact all customers.

Jaqui

We don't, we don't, we don't, we're not trying to hate on the people that have electric vehicles or charges or anything, but why, you know, and somebody's saying, here's a nice policy, here's your rebate, but we're footing the bill.

Marla

Yeah, there seem to be two charges to make up for solar, you talked about, you know, people with net metering and then distribution, solar charge, and renewable energy charge. Those all seem like they, it's three things that are the same thing. And they're each one have a different charge.

Lewis

Yeah, that goes for the electric car, too. I get a gas vehicle. Why am I paying for someone else?

Dennis

The delivery systems and all that. We don't have any, any say over it [the bill]. It has to come here. I don't know why it takes several different charges to do that in different ways, but you don't have a choice. There's an electric company and you need electric. You're going to pay the bill on all the fees they want to add.

Cheryl

I think that could be optional. You shouldn't even be required to pay those [policy charges]. I think it should be like when you, when you pay your taxes, you can pay extra money to cover different things. I think that's the way it should be with those options on your bill.

Cheryl

[S]ome of them shouldn't be applied to some of us. Like for solar panel charges, like I don't have solar panels, I have regular electricity. I don't have an electric vehicle, so I shouldn't be paying surcharges on those things.

Eliza

I mean, I think that's like one of the sources of frustration for myself I'm sure others where you see things like an energy efficiency charge and Distributed solar charge and electric vehicle charge and you're thinking these are all things that should be making electric bill be less not more... What would be you know, when I see something like an energy efficiency charge and a renewable energy charge I'm don't know what it would be for but it makes me irritated.

Steven

I still don't understand why we have to pay for the programs that it benefits both you and I, if we're able to be more energy efficient, you're not having to drive up costs, but yet we're the ones footing the bill. The cost to bring back the solar back to them, which again, it feels like we're getting charged for everything.

Marla

I mean, if it's a Massachusetts policy, I kind of feel like it should be done through your taxes rather than your electric bill.

Jaqui

I think electric bill, no.

Dennis

I think it should be both [taxes and the electric bill], because the other is the advantage. Taxes, because you get a, you know, you get an abatement on a tax credit when you file your taxes at the end of the year. So I think that's the way to do it, it should be a combination of the two.

Lewis

Well, I feel like it's a, you know, it's a policy thing for the state of Massachusetts to encourage, you know, alternative and renewables, which I have no problem with. But it seems to me that it is, they do double dip in a way because even those costs show up in your in the distribution.

Lewis

I don't feel too great about it [the policy charges]. I think they just jammed it into us. I mean, I know they had public meetings and things like that. I think they had one last night. But they just jammed this through without even talking and considering the public. And I know it's not an actual grid that put these charges through. It's the

state. And I get that. But I don't know. I just feel like they just jammed it down our throats.

Dennis

I definitely think it should be state tax-based because then it's based on your income, where here it's based on your electricity usage.... So if you're low-income and using a lot of electricity, you're paying into these programs at a high cost comparatively to other people.

Like the Energy Star program is, the federal Energy Star program is through your taxes. So it seems unfair that at the state level, it's not also income-based and through your taxes rather than being passed on based on your usage, which doesn't discriminate based on your income.

Justin

I agree with [CS] on that. Because we're doing this based off our usage. And there's people out there who have lower income or who get assistance through the low income subsidies with energy, energy efficiency, surcharges.

Eliza

I feel the two utilities are more interested in appeasing the state government than in holding down costs.

Richard

You know how when you have a cell phone bill, you get charged for whatever prices, and then it will say in one small area, taxes and fees, and no one really reads it, but it has a whole bunch of different fees on there that you would be like, wow, I didn't know I paid for that, right? Well, I almost feel like it would be easier if they just did that, if they didn't show all that, and they just said, this is how much you owe, and this is all our fees, and as one extra fee thing, and if you want to research it, you could go online or something.

But now that they mention some of it as state stuff, I think maybe they should put state programs or something and have that in its own category.

Lisa

*And I'd like to see them still broken out, because how many do I have there now?
And next month, I might have five more. I honestly don't trust the state, to be
honest with you.*

*I would break them out. This is the national grid charges. These are the state policy
charges. Here's what national grid needs to run its business.*

And here's what the state has just left on top of it.

Dennis

*I want to know exactly what I'm paying for. I don't want it bundled so that you can
just lump anything and you choose. I'd rather see it broken down.*

Cheryl

*So, if there's something on there that actually said, which ones are state programs
and which ones are other charges, that that would be helpful in understanding.*

Jaqui

Customers generally support energy efficiency and low-income programs.

*But I've got a ton of value out of mass save in particular some some of it on the
electrical side a huge savings rebate and a rate for a loan for Redoing the the oil
based boiler system in my house.... So I've got a bunch of value from different
things and You know if you take care of the rebates with appliance changes[.]*

Steven

*So like when we can buy devices from National Grid at like 90% discount and
other, like I have the home audit, not like they do the free insulation of your attic.
I think that's the state mandated energy program, I think.*

Justin

*Well,... we use MassSave to insulate our attics. So we use MassSave, you know, for
all of their variety of different programs where, you know, MassSave comes in and
estimates things and how much energy you're losing or gaining.*

*So all got to do with efficiency. ...We, you know, those are for us, those have saved
thousands of dollars for us over the past 10 years.*

Marcus

I think it's yeah, I mean mass save gets a ton of play and is really well-known, but I think some of the other ones are more [unknown].

Mabel

I had some of the Mass Save energy audits done. And I feel like those were of value because they were smaller things that were completed very quickly. So I forgot insulation, extra insulation, weather stripping on some of the windows and doors and the light bulbs.

Marla

I mean, I did the Mass Save also, and they also helped me financially with getting heat pumps put on my house, so I think that's part of what you're talking about.

Lewis

I've used them same thing for insulating the attic I think there was a rebate on my home electric charger And then I did a couple of rebates with like an old refrigerator You get like \$50 back if you have them recycle it.

Robyn

I had a heater, electric heater, because it was going to be more efficient, but my electric bill went up twice, doubled.... I had to not use the heater because it was costing too much, so anyway.

Fred

You're, you're, you're basically helping people who can't, you know, need to be in homes that are heated. We don't really have the resources to do so otherwise. And I think that depending on what your politics is, but Great.

Marcus

I'm fine with the programs offered because they have a very big screening tool they have to go through to get the program. I mean, I work in human services. I apply people for the programs all the time. And as long as people legitimately needing the programs that are not just abusing the programs, then, then I don't think there's an issue with it because there's so many other programs out there for people who don't qualify based on income alone that can help out.

Eliza

I think they're advertised, I think the key is to sign up the sign up to people who need it. And, and try to figure out have you covered the covered that group of people? Have they gotten what they need to get? Is it easy enough to do it? And is it useful and productive?

Richard

Some people don't have internet access, some people don't have, you know, they don't have computers at home, and a lot of times you have to apply for these things online. So making it really easy for the people that need this stuff, I think is really important.

Glenn

Customers see the customer service charge as the cost of getting electricity.

I thought it was like a flat fee, kind of like your starting point, your basic subscription almost charge to just be in the game to begin with, before we start.

Steven

I'm gonna laugh a little bit because it reminds me of Ticketmaster when I buy a ticket and it's like ticket fee and it's like \$25 and it's like I'm just buying with the cost of the ticket. Why is there another fee for buying a ticket and I feel every time I see this every month I think the exact same thing like an additional charge on top of what I'm It's like going to the grocery store buying a banana for a dollar, right? And then it's just like grocery store fee 50 cents, but I already bought the banana. I don't need a grocery store fee Yeah

Justin

I'm not in favor of the fixed costs going up because that's independent of usage. And for some people, if you use less electricity, you're still paying that rate. So I'd rather, for me, have it more function by usage and not be a flat rate.

Fred

It's not a big deal. I mean, there's certainly a cost. Fine, it is what it is.

Dennis

Yeah, it's not, it's not a large cost.

Jaqui

I think it's very, I mean, somebody might have like a vacation home where they're just using so little electricity, you know, all winter, because the place is empty, but they still have electricity, just for like, maybe a light on the front porch or something. And if it was just charged by the amount of kilowatt hours, it wouldn't cover the cost that the electric company has to like, you know, read their meter every month and send them a bill and answer any questions if they call and stuff like that. So I think that's fair.

Lewis

There is a clear division in the focus groups between those who have solar panels and those who do not.

What bothers me is, especially like the solar charge. I think it's great if people can do solar energy. I don't know why I have to support it. But the problem with where I live is it's in the historical area. You're not allowed to put solar panels out. Even if I wanted to, which, you know, I know people that have them and it's great. There's no way I can do it, but yet I still have to pay a solar fee.

Cheryl

The cost to bring back the solar back to them, which again, it feels like we're [non-participants] getting charged for everything.

Marla

Now that I don't think so...Well, if we're not getting benefit out of [a solar panel],, why should we pay for it?

Anna

Net metering, like solar, when I send stuff back to the grid, my meter goes backward. So I'm like basically giving energy back to National Grid.

So I'm not sure why National Grid needs to recover money for credits given to me, because there's no credits, just a one-to-one, my meter's going backwards.

So there should be no cost to National Grid. I'm providing electricity to the company grid.

Justin (Solar Customer)

So when we generate electricity, particularly during times when there's a high usage rate, the extra electricity we generate goes directly into grid and is used by all the rest of the people who don't have solar. So we became generators of electricity to

reduce brownouts, reduce blackouts, rolling brownouts in the state, and that's what they're trying to encourage. They're trying to encourage to get people to generate more electricity so there's not as much pull on the electric system at the time. We get credits back for when we generate too much electricity, but we still get charged electric bills at the same exact rates as everyone else.

We just have less because we're generating electricity.

Kelsey (Solar Customer)

[Solar installations] makes the electricity cheaper for everybody because if people didn't put solar panels on their roofs, the electric company would have to build, or the suppliers would have to build more power plants, which are very expensive, and that involves not only a big expense, but there's, you know, the electric company gets a big profit from building a new power plant.... If none of that existed, everybody would be paying for new power plants, which, you know, the people who aren't using, taking advantage of those programs are, you know, would have to pay for as well. So you're gonna have to pay for it one way or the other, and I think it's just better to take the solar panel than a new coal power plant.

Lewis (Solar customer)

[I] don't know if it's fair to ask everyone to pay for programs that not everybody uses.

Alexa

Yeah, but that's confusing because we don't get payments back from National Grid. Our payments come from the companies that we have our solar panels with. So like when I get paid back, it comes from Tesla. It doesn't come from National Grid. So I'm not sure what that actually means.

Kelsey (Solar customer)

And our solar credits that we get are used for our tax purposes, not for anything that's given back to us. National Grid pays for nothing when we put our solar systems and we paid them out of pocket, all of them, or we rented them or we leased them from the solar companies.

Justin (Solar customer)

I just still find it strange that there would be a charge that even exists for that metering, because let's say that electric bills are generally \$100 and people with solar panels are able to generate \$50 worth. So they're being charged \$50 a

month instead of the 100. Why would there be a cost associated with the solution? Why wouldn't that just come out of the surplus that exists? Why would they break a cost out of that?

Steven

For me, it doesn't make any difference.

I mean, I've got solar, so I think nine months out of the year, I don't have any bill, and then I just have, obviously, much higher bills in the winter.

So I've got one other thing, I'm not sure if it's really part of this discussion, but I have solar panels. And so when it shows my usage, it just shows what I have beyond what I produced. So it doesn't really tell me how much electricity I use, it only tells me how much I'm getting off the grid. It would be nice if somehow on there, it said your total consumption of electricity from your panels and what you're getting off the grid together, what you were using, because that would make it easier to compare what you're doing now with what happened in the past.

Lewis

Mine is extra confusing because I have solar and you can't. You know because you're making some and using some you can't compare month to month how much you use because how much do you make?

Robyn

So maybe like eight or nine months out of the year, I'm producing more electricity than I'm using, and the National Grid only credits me a portion of what it costs me to get electricity, like during the winter when I need it off the grid. So maybe like, I'm not sure if it's a third or a half, it's all I get. So there, you know, in other words, the electricity for my solar panels that go into my neighbor's house, when I'm overproducing, I'm selling it for like maybe, let's say 20 cents a kilowatt, I don't know the number at all. But they're paying 60 cents for it. So National Grid is getting 40 cents for every kilowatt that I produce. And that goes towards, you know, and they should get some because they're paying for the transmission that they go from here to my neighbors. But they're already making a lot of money off of it.

Lewis (Solar customer)

I mean, you're using the grid, so it has to be maintained. The wires come down as in a storm. Someone needs to put them back up again. So, yes, you [solar customers] need to a reasonable amount.

Cheryl

Customers were very interested in discussing smart meters and TVR.

Are we going to talk about smart meters?

Jamie

So if there's a reason that [my rate] has to go up, it'd be nice to know because then you'd say, well, I'm getting better service or I get, we got better reliability, but, or we got new equipment. Like we just got new smart, smart, what do you call it?

Not monitors, but the smart meters.

Is that why our prices went up because we have these smart meters that we didn't ask for? And do the smart meters benefit you or do they benefit us?

Marla

[I would like to know more] of the meters that are attached to our house that [the cost of] doesn't seem to ever go away.

Eliza

I mean the new smart meters are supposed to do, is maybe we can look at it, and they put them on our house, they put the new smart meter on, and there's no, you know, if I go and look at it, if I walk outside and look at the meter, I can see about, you know, it goes through a cycle about seven or eight different numbers, and one of them is my usage, and I have no idea what the other numbers are, and so, you know, they keep saying, you know, we keep getting these things that say, you know, do you like your new smart meter, and so, well, they never let us know how to use it, or how to get that information off of it, and that's the information that's supposed to be able to tell you, like, how much certain appliances are using, or how much you're using at night versus during the day, or during peak, or off peak, and you should be able to access that, they made it sound like you'd be able to access that right on your home computer, or on your laptop, but they never gave anybody, I don't know, anybody who knows how to use it, it seems like a waste[.]

Yeah, I would say so.

I mean, if they encouraged off-peak, it would just lower their costs and everybody's cost. I mean, not having, not, the electric company not using off-peak power is just a tremendous cost for everybody, including for them.

Lewis

[Y]ou know, I don't see anything on my bill that says that, and I know that the electric company, especially during the summer, says try to use, go, use as much off-peak as you want, and that the off-peak, using off-peak electricity lowers the cost for the electric company, but there's nothing to encourage you to go off-peak, to use more off-peak.

You know, I could, for example, I could, you know, if the cost of the electricity was better reflected in what I have to pay for it, for example, I could take a shower in the morning and then shut off my hot water heater, so that only, it'll recharge at night, reheat the water at night so that it's ready for the next morning, for example.

That would help the electric company, you know, that would help lower the cost for the electric company, but they don't seem to care about encouraging people to do it unless it's like really a couple of days during the summer when they're really in trouble and they don't have the capacity, but otherwise, they're not doing anything to encourage off-peak use, and I thought that that's what the smart meters were supposed to be.

Lewis

But I think the most important thing on the bill would be as if they're more transparent as to what's happening with the smart meter, giving us more self-control over where we, when and where we use the electricity or when and how it'd be reflected in the cost, in the true cost.

Oh, I think that last question is just that they make it more transparent with through access to the smart meter.

That we get the benefits of it, that include the benefits of a smart meter. I just don't understand why that's not happening.

They have a separate rate at night or something, but, you know, they don't here, and I know many states do, and why they don't do it here is just because I think they make more money by having a flat rate.

Lewis

But I think that because I if I generate extra solar it goes to national grid So let's say there's a sunny day. I could either charge my car And use it directly or I send it to national grid And then when I want to charge my car at night when there's no Sun

They're charging me the distribution charge and all that stuff to charge my car. They want me to charge it at night. But why would I do that when it cost me extra?

Robyn

Because my vacation home [in Maine], my rate at night is so cheap, it's ridiculous. And so you run your dryer or whatever you want to do at night, it makes a significant difference.

Dennis

I had no idea it was cheaper at night.

Lisa

Moderator: *So is that [TVR] something that they could do to improve affordability then?*

Absolutely.

Cheryl

For sure. It would help.

Lisa

If their costs are low, why not?

Dennis

Yeah, it would also be more, you know, for me, the environmental use, and I know that's not true for everybody, but the environmental impact of the electricity is very important to me, and by not having, not encouraging off-peak means that the power company has to use very expensive and very dirty, what they call peaker plants, which are, you know, and so, but national grid, you know, I think [DH] is saying in Maine they do that.

Lewis

For example, I have an electric vehicle, and it seems to me that we're asked to charge our cars off-peak, like at night instead of the day, during the day when electricity is cheaper for you to produce, yet we're getting charged extra because of people using electric vehicles. But we should also get a credit for using off-peak because it's cheaper for the electric company. I mean, that's when they have excess electricity at night. So I always charge my car at night, and I have it set so

that it only charges at night for that reason, but there's no credit for it. And there probably should be.

Lewis

Customers noted that high electric bills negatively affect electrification and climate policy goals.

I don't know if this applies, but I bought an electric car about two years ago because the gas prices were going up so high and you know electricity is a lot better and I feel like I bought it and then the electric bill just went sky-high and It's it's not as cheap as it sounds when you add in all the other like especially if you don't charge at home I would not recommend somebody gets an electric car unless they charge at home

Robyn

That's what I never understood electric cars because of that reason my electric bill can be Especially in the winter extraordinarily high and I thought well Electricity costs money and then you charge your car and that cost money So does it either equal either equals out depending on the way the gas prices are going up and down? So I just never thought so I really saw them maybe for the environment I don't even know because then electric batteries and all that but we won't not talking about that, but I just never understood Electricity costs money and you got to pay it.

Anna

Like I used to think oil was expensive, but it clearly is not....Because with oil, you don't pay surcharges on it. You pay for what you get. Same thing with gas. Gas, you pay surcharges. But with oil, you get 100 gallons. That's what you pay for. You don't pay any other extra fees.

Eliza

That's such a great point, when we're talking about the distribution charges and I think about my oil fill up, there's no oil delivery fee, distribution fee from getting the oil from somewhere.

Justin