Ratepayer Reliability Project

We are a collective of New England ratepayers determined to work together for actual grid reliability. Our electric grid currently operates using a ridiculous market system that uses our money to subsidize failing power plants, without actually providing reliable, sustainable electricity. Instead of focusing on energy conservation and collective action, our grid operator is completely invested in the idea of unlimited electricity- no matter the cost to our utility bills, our communities, the planet, and long-term grid sustainability. We know this isn't the answer.

So, we are doing what our grid regulators won't. We are building a network of ratepayers who are ready to do "conservation demand response" ourselves. When demand for electricity is high, we will support each other in reducing our energy usage so that fossil fuel "peaker" plants *don't have to turn on*. We will measure our impact on the grid, and then bid collectively into the very market system that seeks to keep us out. By establishing ourselves as a collective capable of responding to peak electricity demand, we will show grid regulators that voluntary conservation, not fossil fuel funding, is a key component to grid reliability. We will build an alliance of ratepayers ready to support each other in the face of snowballing economic, environmental, health, and social crises. And together we will build a foundation for joyful, community-centered conservation demand response and a just transition.

Other Resources:

Quarter sheet: Demand Response Handout qtr page
Climate Disobedience Center Demand Response webpage:
https://www.climatedisobedience.org/demand_response

Context/Definitions

Here are some definitions to provide context on this project. We know that our grid operators intentionally use confusing and inaccessible language to fence us out of regulatory spaces, and keep us feeling like passive "consumers" who just need to listen to the "experts." This is an intentionally disempowering choice on their part, but we know that the people of New England are capable and resilient. We are more than able to engage with and alter the grid regulatory process. We hope these descriptions and context will be useful to you, and if anything is unclear please feel free to reach out. We are determined to support each other in decoding and understanding this system!

Ratepayer- A ratepayer is a person who pays electric bills anywhere in New England. You are a ratepayer if you pay electric utility bills directly, or if you live in or rent from a household that pays electric bills. You are also a ratepayer if you produce your own electricity but still pay a connection fee to the grid. You are still a ratepayer if you receive government or non-profit

support to pay your electricity bills, or if you live in a shared residential setting (like a school/college dorm, co-op, retirement home, healthcare facility, prison, or other situation where your money and/or labor is going toward paying the electric bills. Ratepayers are the lifeblood of the New England Electric grid - it is our money that funds grid operator ISO-NE's work and pays for the power plants, transmission lines, and other infrastructure that makes up our grid. Many grid officials have attempted to brand us instead as "consumers" or "end users"- much more passive roles that ignore our true role and power. We are the ones using the electricity, and we are the ones paying for it. Our voice matters!

ISO-NE - ISO New England is the regional grid operator for New England. Technically a nonprofit, a set of rules and frameworks (called a tariff) approved by the Federal Energy Regulatory Commission (FERC) grants it the power to make decisions about how to manage our regional electrical grid. ISO-NE makes these calls both in real time (by calling on power plants to turn on), and in advance (through their planning of future grid operations). A lot of ISO-NE's future-oriented work takes place through their "forward capacity market" system. ISO-NE states that it's chief responsibility is the "reliability" of our grid, and that it's work of "grid operation, market administration, and power system planning" are designed to "help protect the health of the region's economy and the well-being of its people by ensuring the constant availability of competitively-priced wholesale electricity—today and for future generations." In reality, this work is primarily focused on ensuring corporate profits over any concern for ratepayer wellbeing.

Forward Capacity Market - ISO-NE England uses a system of auctions to determine which sources of electricity will be on the grid. Some of these auctions happen daily, as utility companies buy electricity from power plants to immediately send to their ratepayers (and also bid on electricity for the next day.) While all of this is happening, ISO-NE tries to balance the demand for energy with the electricity available on the grid by making sure there are always power plants on standby to turn on when the demand is the highest (also known as "peak demand"). To do this, they also operate a "forward capacity auction." Unlike the daily auctions, this auction operates 3 years in advance. To participate in the forward capacity auction, companies submit bids to ISO-NE offering to provide a certain amount of electrical "capacity" in exchange for funding. Unlike the electricity sold in the daily auctions, "capacity" isn't actually real electricity, but merely the *possibility of electricity 3 years in the future.* If their bid is accepted, the company is awarded a contract where they agree to keep their power plants operational in exchange for millions of dollars in funding in "forward capacity payments." These forward capacity payments form a central pillar of many companies' business plans, and allow them *to be paid* simply for keeping outdated, uneconomical, dangerous and sometimes barely-functional "peaker plants" connected to the grid.

An important note: *all* of the money that ISO-NE uses to make forward capacity payments comes from ratepayer utility bills. Approximately 20% of each ratepayer's monthly utility bill is sent to ISO New England just to pay forward capacity payments to fossil fuel plants. This doesn't account for the portions of our ratepayer bills that go toward funding ISO operations and staff bonuses or paying for the actual electricity produced on the grid.

An example: the fictional Racoon Power LLC could submit a bid for 4 million dollars to keep a 100 megawatt trash incinerator operational until May of 2027. If their bid meets the minimum requirements of ISO's Forward Capacity Auction, they would then receive regular payments totalling 4 million dollars between June 2026 and May 2027 *just for keeping their plant operational during those months.* In 2025 and 2026, they would also have opportunities to submit bids for 2028 and 2029 and receive further ratepayer funding for those years. Once 2027 rolls around, if ISO-NE actually called on them to run the incinerator, they would then be paid for this electricity *again* in the daily auctions. If after 2027 Racoon Power decided to shut down, they could then file a bid to retire their incinerator, and receive ratepayer funding for the cost of its retirement.

Peaker Plants - A peaker plant is an electric generator that only runs at "peak load times" - the times that demand for electricity is highest on our grid. Peaker plants receive forward capacity payments from ISO for staying online just in case demand for electricity spikes, even though some of them run only a few days a year. In this year's forward capacity auction, fossil fuel peakers received $350 million in forward capacity payments. The funding that goes to support these plants could instead be used to transition our grid. Peaker plants would not be necessary if we instead *reduced* our demand for electricity at peak load times.

Grid reliability - ISO-NE frequently states that its greatest priority is "grid reliability." But their definition of reliability is extremely narrow. To our grid operators, reliability means that we will be able to use as much electricity as we want, whenever we want. There is no consideration for the well-being of ratepayers and our communities in this equation, or for the long-term sustainability of our grid. ISO-NE's definition of reliability doesn't include the environmental and health costs of burning fossil fuels, or the threat of climate change to future grid operation. It doesn't account for the impact of forward capacity payments on our utility bills either. ISO-NE's idea of reliability is that we are passive consumers who just want to flip a switch and have the lights turn on, no matter the cost.

But we know better. We know that true grid reliability means building a system that will work now and decades into the future. We know it means keeping our neighbors alive and healthy and preventing climate disasters from knocking down our power lines. True grid reliability is bigger than just a light switch - it's about how we relate to the idea of electricity demand, and how we structure our communities to care for each other. It means prioritizing ratepayer wellbeing over corporate profits, and paying less money to subsidize defunct power plants. It means conserving electricity, and luckily that's something ratepayers have immense power to do.

Demand Response - Demand response refers to the process that ISO-NE uses to manage the grid. During times of peak demand for electricity (for example, when everyone is using their air conditioner in the summer), ISO-NE will ask peaker plants with forward capacity contracts to turn on and start producing energy. This is production demand response - producing more

electricity during “peak load” times. There is another type of demand response, however, and it’s not used nearly enough.

Conservation Demand Response - Instead of turning on more power plants, ISO-NE can call for “conservation demand response” instead. This means asking people (both companies and individuals) to *reduce their demand for electricity* instead. This can be extremely effective. For example, the winter 2022-2023 reliability crises could have been avoided if all ratepayers simply turned their microwave power settings from a 7 to a 3. Our grid operator even grants forward capacity contracts for conservation demand response - just as they can pay power plants forward capacity money for agreeing to be operational in advance, they can also pay forward capacity payments to companies who grant ISO-NE the power to reduce their electricity consumption when energy demand is high. But despite these payments for theoretical conservation, it’s unclear whether the contracts are ever activated. For example, during last year’s reliability crisis, ISO-NE explicitly stated that they “were not calling for conservation,” and instead elected to turn on multiple fossil fuel generators, many of which failed due to extremely low temperatures. There is no publicly available data about the amount of demand response conservation actually happening on our grid, and it appears that ISO-NE is sending ratepayer money to companies just for the power to reduce their electricity use, *while rarely (if ever) reducing it*.

ISO-NE is also determined to ignore the potential of residential conservation demand response - conservation contracts are currently offered only to large corporations. Instead of calling on us (and paying us!) to reduce our energy usage, ISO-NE claims that ratepayers are unwilling to conserve electricity and that any need for conservation is a failure of their mandate to ensure “grid reliability”. This is an insult to ratepayers’ agency and power in the grid. It is both wasteful and impractical. Despite claiming to prioritize the affordability of our electric bills, ISO-NE is more than happy to waste our money paying companies for fictional conservation while sending even more of our utility payments toward propping up unnecessary power plants. Instead, ISO should be supporting ratepayers in reducing our own demand for electricity, and shaping a grid that is sustainable for everyone.

So what are we going to do?

We are planning to form our own demand response collective. We are currently organizing a network of ratepayers to assist each other in *actually doing* conservation - by adjusting our usage during peak load times. This can include turning off lights, staggering dishwasher cycles, turning down microwave power settings, adjusting thermostats, and more. There are so many tiny changes we can make that, collectively, will vastly reduce demand on our grid. But this approach isn’t about individual choices, it’s about what we can do together. So, we will be measuring the impact of our actions on the grid. And then we will be infiltrating the energy market system.

If big companies can submit bids to ISO-NE offering to reduce their consumption during peak demand, ratepayers can too. There is nothing stopping us from bidding into ISO-NE's forward capacity market - nothing except a massive wall of jargon and bureaucracy. But jargon and bureaucracy are things we can work through together. Once we've practiced collective conservation demand response, we plan to bid into ISO-NE's forward capacity auction as a demand response entity, using this action to challenge their continued funding of peaker plants over community-based conservation initiatives. If we win the auction, we plan to use any funding we obtain to support future residential ratepayer demand response and utility bill relief, build relationships in frontline climate justice communities, and invite our neighbors to participate in the growing collective with us. If we don't win the auction, we will keep conserving electricity and refining our approach to ISO-NE's bureaucracy. Meanwhile, our participation will still mark a massive disruption in the usual energy market system, call attention to ISO-NE's hypocritical priorities, and challenge regulators to actually engage with residential conservation demand response.

So, how are we going to do this?

This project has many steps and ways to get involved! Here is a general framework for our process:

1. Community education- we need to increase our collective understanding of ISO-NE market systems and empower ratepayers to engage with it! This will look like hosting workshops, engaging with schools, and creating materials to explain (with as little jargon as possible), how our electricity market works. This part of the work will be ongoing!
2. Pilot project- we are convening a small network of ratepayers to support each other in testing out our conservation demand response process. This pilot project will have several steps.
    a. First, we will form a small team of pilot "community organizers" from at least three different areas in New England.
    b. These community organizers will learn together about our electric grid and energy market system to the point of being able to understand the basics and explain them to others.
    c. The community organizers will also practice doing energy conservation together. The conservation practice will have several components, including:
        i. Doing a personal audit of household electricity usage to see what conservation could happen
        ii. Practicing reducing general household electricity usage, sharing the experience with the group, and group problem-solving difficulties that come up
        iii. Working together to track times of peak demand using information from ISO-NE
        iv. Supporting each other in timing electricity conservation with times of peak demand, sharing successes and difficulties with the group.

v. Beginning to measure electricity conservation in several ways, for example by:
    1. Self reporting energy conservation efforts
    2. Using small, handheld measuring devices to measure changes in energy usage. (We are planning to hopefully buy several of these for folks in the collective to use. They do not attach to your electric meter, but are just held over the wire coming out of the box to take measurements before and after taking a conservation action. For example, ratepayers can use these devices to measure the electricity coming into their home before they turn down their microwave and after.)
    3. Tracking overall conservation over time by decoding the meter reports on electric bills

d. The community organizers will report back to each other and other folks working on the project about their experiences so we can make the experience of being in the conservation collective better for future participants!
e. The community organizers then work to identify members of their own communities (neighbors, friends, coworkers, etc), who could participate in a second round of the pilot project. With support from the rest of the group, they will then convene these community members to form small pilot groups in each of their areas.
f. With help from the community organizers, these newly-recruited participants will work through the same process mentioned above- learning about the electric grid, practicing conservation together, and sharing their experiences.

3. We will then be able to use the feedback from pilot groups to improve our systems and invite more communities to participate in the project. This will mean creating pilot groups in more areas in our region, and also inviting more people in already-participating areas to join!
4. We will also work to analyze the data that comes out of the pilot project to estimate how much conservation we are able to do collectively. At the same time, we will be continuing to decode ISO-NE's bureaucratic processes to better understand how our collective can bid into their markets. We will use the experiences of the pilot groups to create an initial application to bid into the regional energy market as a conservation demand response entity.
5. Our application will likely be rejected at first. We will use this rejection to raise public awareness about the failings of our current energy market and challenge ISO procedures, while also using any concrete feedback we receive to enhance future applications. We will continue to improve our conservation efforts and collective understanding of our grid and invite more communities to join us.
6. We will continue building power as a community of ratepayers until we either:
    a. Are able to submit a successful bid and receive funding as a conservation response project, in which case we will continue expanding our efforts and bringing more ratepayers into our collective, while also using our participation in

ISO markets to challenge their proceedings and make fossil fuels increasingly irrelevant.

b. Are able to build so much power as ratepayers *outside of ISO electricity markets* that we are able to
    i. Independently reduce demand enough to make peaker plants and fossil fuels obsolete
    ii. Successfully challenge ISO-NE's existence itself and rewrite their tariff with the Federal Energy Regulatory Commission
    iii. Otherwise dismantle the corporate capture of our electrical grid and enact a just transition

How can I get involved?

There are several ways to get involved at the moment, and there will be even more in the future! Here are a few options at the moment:

- You can help us research and decode ISO systems and develop accessible ways to explain them to other ratepayers
- You can volunteer to be a community organizer and help your community participate in the pilot project
- You can join a pilot project in your area when one starts
- You can talk to fellow ratepayers about the grid and conservation demand response
- You can attend the quarterly ISO-NE CLG (consumer liaison group) meeting on March 6th in Portland, Maine (or online), which will explore ideas of conservation demand response!