



Minnesota Power 2019 Residential Rate Design Stakeholder Process Summary

October 22, 2019

I. Why was this process needed?

In late 2018 and early 2019, the Great Plains Institute and Center for Energy and Environment worked with Minnesota Power to plan and facilitate a stakeholder engagement process to explore time-varying rate designs for residential customers.¹ That process successfully resulted in stakeholders coalescing around a set of possible time-varying rate design options. However, multiple stakeholders were interested to know how a time-varying rate would impact the existing inverted block rate (IBR) design, including whether the IBR would discontinue in favor of a new time-varying rate, if one is developed and deployed.

It became clear in that process that some stakeholders thought a time-varying rate was more favorable because it could integrate additional renewables, support beneficial electrification, and be paired with more effective ways of incentivizing energy conservation (one of the primary goals of an IBR). Others thought that switching from the IBR to a time-varying rate could potentially be more costly for the same general benefits, or have adverse impacts on low-usage customers who are currently benefitting from the IBR. It was suggested that Minnesota Power should evaluate the impacts of the IBR, including customer benefits, in the process of weighing the costs and benefits for a potential time-varying rate.

For this new stakeholder process, Minnesota Power hired GPI and CEE to follow up on the previous time-varying rate design process to engage stakeholders in more broadly evaluating residential rate design options in advance of the company's anticipated November 2019 rate case filing, and to explicitly address the question of what should happen with the current IBR rate design. In particular, Minnesota Power was seeking to explore stakeholder perspectives on rate design options that could support an increasingly diverse and decarbonized resource mix, while balancing energy affordability as a priority as well as a variety of customer products and services, including electric vehicle offerings, solar offerings, and green pricing programs.

¹ Full details about the process are available in Minnesota Power's February 20, 2019 filing in Docket No. E015/M-12-233.

II. Who participated?

For this process, Minnesota Power was seeking to engage two groups of key stakeholders: organizations that typically get involved in proceedings at the Minnesota Public Utilities Commission (PUC) in matters concerning Minnesota Power's rates, and local organizations that may represent the interests of Minnesota Power's customers, but that do not typically submit comments to the PUC. The following organizations from those two groups chose to participate in this process. Facilitators allowed participation in-person and by phone, given the dispersion of stakeholders' geographic locations across Minnesota.

PARTICIPANTS:

- Citizens Utility Board of MN
- City of Duluth
- City of Royalton
- Ecolibrium3
- Energy CENTS Coalition
- Fresh Energy
- Fond du Lac Band of Lake Superior Chippewa
- MN Dept. of Commerce, Division of Energy Resources
- MN Office of the Attorney General

III. What did the process look like?

GPI and CEE convened stakeholders for three meetings from July to September 2019. Each meeting was a half-day long and included participation from the stakeholders listed above (in person and by phone), Minnesota Power staff, a third-party technical expert from Navigant Consulting who was hired by Minnesota Power to assist with this process, and facilitators from GPI and CEE. A brief list of the topics covered at each meeting is provided below. Notes and presentation slides from the meetings are also included as an attachment to this summary.

MEETING 1 (JULY 31, 2019 – DULUTH, MN):

- Facilitated discussion to explore stakeholders' perspective on what the utility of the future should look like (as context for discussing rate design options)
- Presentation on rate design policy trends nationally and in Minnesota, as well as on the characteristics of Minnesota Power's system and service territory.
- Facilitated discussion to assess Minnesota Power's current rate design options and identify opportunities for improvement.

MEETING 2 (AUGUST 19, 2019 – MINNEAPOLIS, MN):

- Presentation on rate design examples from other states and information (requested in the first meeting) on low income customers in Minnesota Power's service territory.

- Facilitated discussion to explore stakeholder perspectives around alternative rate design options.

MEETING 3 (SEPTEMBER 17, 2019 – MINNEAPOLIS, MN):

- Presentation from Minnesota Power on a set of specific rate design options
- Facilitated discussion to explore stakeholder perspectives on the options presented and identify areas of agreement and disagreement.

IV. What were the key outcomes?

DEFINING THE UTILITY OF THE FUTURE

In the first meeting, facilitators asked stakeholders to describe what the “utility of the future” looks like from their perspective in order to identify how rate design might fit into a larger vision of a successful utility. In particular, stakeholders were asked to define indicators of failure and success for how they envision the utility of the future. Their responses are summarized in the following table, and complete responses are in the Meeting 1 notes attached to this summary.

THEME	INDICATORS OF FAILURE	INDICATORS OF SUCCESS
Customer Satisfaction	<ul style="list-style-type: none"> • Needs/expectations not being met • Dissatisfied • Not loyal • Don't understand their choices 	<ul style="list-style-type: none"> • Happy and loyal • Understand their rate structure • Enabled to make choices to meet their needs/desires • Have clear, simple, easy choices • Expectations are being met across different segments • Needs being met and increasing satisfaction through a more granular set of products and services

<p>Utility Business Model</p>	<ul style="list-style-type: none"> • Not innovating/adapting • Not competitive on costs • Not delivering safe, reliable, affordable service • Not financially healthy • Not doing “efficiency first” • Ignoring community • Utility’s financial self-interest is in real conflict with the community’s interests 	<ul style="list-style-type: none"> • Delivering safe, reliable, affordable service • Embracing new technology as it develops and using it to benefit all customers • Using data to positively impact customer experience • Financially healthy • Successfully managing fuel switching from electrification • Partnering with homeowners to advance efficient housing • Community partner • Regulatory changes are decoupling sales from profits, with strong DSM incentives
<p>Equity/Fairness</p>	<ul style="list-style-type: none"> • Cost impacts from new products/services are adversely affecting low income customers (or being subsidized by them without access to the benefits) • Cost shifting across classes causing customer burdens 	<ul style="list-style-type: none"> • Affordable access for low-income customers is being maintained • Utility is successfully resolving tensions around cost shifting between industrial and residential customers • Utility is acknowledging that many new products/services will not benefit low income customers, and is managing that to maintain affordability • Savings from new rate designs are being passed on to make rates more affordable for all
<p>Climate</p>	<ul style="list-style-type: none"> • Transition to lower emissions caused increased costs and adverse impacts on customers • Climate and other external pressures are not addressed, to the point that they’re increasing energy poverty 	<ul style="list-style-type: none"> • Emissions being reduced (both GHG and public health related) • Energy is increasingly renewable • Energy is decarbonized and service may be paid for on a subscription basis

DESIRES FOR ANY NEW RATE DESIGN

Following this conversation, facilitators asked stakeholders (including Minnesota Power staff) what they wanted out of any potential new residential rate design. These are the desires that emerged:

- A. Enable customers to meet their needs/desires
- B. Maintain or improve the low-income protections offered by the current inverted block rate (IBR)
- C. Add time-of-day price signals
- D. Have rates that are understandable/explainable to customers
- E. Remove disincentives for beneficial electrification
- F. Develop rates that are easier to administer for the utility internally

MAINTAINING LOW-INCOME BENEFITS FROM THE INVERTED BLOCK RATE

In the second meeting, it became clear that while the current inverted block rate design is desirable for its low-income customer benefits (desire B above), it poses challenges for meeting the other desires. In particular, stakeholders noted that the IBR is difficult for customers to understand, doesn't facilitate load shaping through time-of-day price signals, and disincentivizes beneficial electrification.

To explore this further, stakeholders discussed the low-income customer benefits of the current IBR rate design at length, seeking to identify what would need to be true to meet desire B. Those benefits were summarized as follows:

- 70% of customers pay less (per kWh) than they would on a flat rate, based on current revenue requirements as a baseline with no assumption about possible rate changes
- No application for low income, low use customers to receive a lower rate (e.g., no upfront qualification process that would pose a barrier to access)
- Offsets upwards pressure on costs from new programs/services that low-income customers may not be participating in.

With these in mind, the group explored what a new rate design could look like that would maintain or improve upon these benefits while also enabling the other desires to be met. Together, group members developed a rough proposal for a low-income, low-usage specific rate design that was more targeted to low-income customers without adding an upfront application process to qualify (which would pose barriers to low-income customers taking advantage of the rate). This low-income, low-usage rate would be paired with a different rate design for other residential customers, such as a time-of-day rate. Stakeholders thought this new low-income, low-use rate could potentially be implemented as follows:

1. Define an income level and usage level (in monthly kWh) under which customers would qualify
2. Temporarily default all customers that meet those criteria onto the rate, drawing from low income program participation data and income data from a survey that Minnesota Power had run in the past two years as a proxy

3. After a time period to be specified, ask customers to self-declare (e.g., through a survey or phone call) their low-income status to continue participation in the rate offering
4. Periodically audit the rate offering to ensure that self-declarations are accurate
5. Provide continual outreach and customer engagement across steps 1-4

The idea behind this rate offering was that it would continue to offer a discount for low-income, low-usage customers similar to what the IBR currently offers, but the discount would be more targeted specifically to low-income customers, as one of the criticisms of the current IBR rate design was that it offers a discount to all low-usage customers regardless of income (e.g., some low-usage, high-income customers receive the same discount as low-usage, low-income customers).

While participants were willing to think through these implementation steps, they also had several questions about this rate design, including whether step 2 was feasible given that Minnesota Power has limited income information about its customers. Some low-income customer advocates stated that while they were interested in this new potential offering, they still ultimately preferred the existing IBR rate design.

REFINING A NEW RATE OPTION

In the third meeting, Minnesota Power stated that it would be open to moving towards a residential time-of-day rate design eventually, with an additional rate option for low-income customers. On that additional option, the company presented the following illustrative rate design options for the group to respond to:

- Option 1A: Any household using less than 800 kWh per month is automatically put on a discounted low-income, low-usage rate. Non-low-income households are encouraged to opt out.
- Option 1B: Same as 1A, but usage threshold is set at 600 kWh.
- Option 2A: New low-use, low-income program for verified low-income customers using less than 800 kWh per month. LIHEAP participants are automatically enrolled; other low-income customers must be verified.
- Option 2B: Same as option 2A, but usage threshold is set at 600 kWh.

Stakeholders ultimately found general agreement around Option 2B, with a preference for an enrollment strategy that would opt-in LIHEAP participants and provide heavy targeted outreach to enroll additional low-income customers. Some participants raised a concern about low-income customers on electric heat, but it was noted that pending changes to Minnesota Power's CARE programs will help to alleviate that concern, with the general understanding that more targeted outreach would be helpful.

The group also discussed the transition process from the current IBR rate design towards time-of-day rates paired with a low-income option as described above. On this topic, there was discussion about whether IBR rates and TOD rates are compatible with one another due to increased complexity for customers to understand their bills, and due to increased complexity for customer billing systems.

There was general agreement that in order to gain stakeholder support for moving away from the current IBR, Minnesota Power needs to make a commitment to moving towards time-of-day, following the recommendations of the previous time-of-day rate design process. However, the group could not reach agreement on how that transition should be implemented, with some participants advocating for a flat rate in the interim, between the current IBR and future TOD rate, and other participants arguing against an interim flat rate.

V. What still needs to be resolved?

At the conclusion of the third meeting, Minnesota Power clarified that it intends to have a broader time-of-day offering for residential customers, but implementation and phasing details would need to be considered as part of the TOD proceeding. The Company also expressed receptivity to an additional rate offering specifically to protect low-income, low-usage customers with the potential for a self-declare option. However, as noted above, stakeholders did not find agreement on how that transition should take place. The two key dates at play are Minnesota Power's next rate case filing, which is expected November 1, 2019, and an updated proposal for a time-of-day rate offering, which the Commission has requested that the company provide by August 2020.

Therefore, one key remaining question is what should happen to rate offerings for Minnesota Power's residential customers between approval of the rate case and deployment of the new time-of-day rate. Some participants felt that the transition from IBR to TOD would be too abrupt, and should be softened by providing a flat rate for an interim period. Others preferred to keep the IBR rate in the interim, possibly with a reduction in the number of blocks (from 4 blocks in the current structure to 3 blocks).

Additionally, more information is needed for Minnesota Power and stakeholders to make a final assessment of the options being presented, including the following:

- How will a gradual shift to a TOD rate affect customer bills before that rate is fully deployed? Will there be significant winners and losers from the transition, and if so, how will those impacts be handled?
- What will be required of Minnesota Power to successfully administer both a TOD rate and low-income, low-usage rate? Will the costs be worthwhile?
- What would the new low-income, low-usage rate look like at a different usage threshold, such as 400 kWh per month?
- Are there other eligibility criteria to consider for a low-income, low-usage rate?
- How would a TOD rate affect the low-income customers that would be enrolled in the low-income, low-usage rate? Would those customers potentially be better off on the TOD rate, depending on their usage patterns? (It was noted that the company's implementation of a meter data management system, which is underway, will provide data that can help to answer this).