Daniel P. Wolf Executive Secretary Minnesota Public Utilities Commission 121 7th Place E., Suite 350 St. Paul, MN 55101

RE: Comments of Community Power Regarding Xcel Energy's Request for the 2020-2034 Upper Midwest Resource Plan Due Date to be Extended to July 1, 2019 Docket No. E002/RP-15-21

Dear Mr. Wolf and members of the Minnesota Public Utilities Commission,

Community Power respectfully submits these comments regarding Xcel Energy's request for an extension to the submission of its 2020-2034 Upper Midwest Resource Plan. Community Power is a grassroots organization that educates and activates residents of Minnesota cities and towns to create clean, local, equitable, affordable, and reliable energy systems. We have been participating actively in Xcel Energy's stakeholder process, as well as conducting parallel community engagement and education activities to help Xcel Energy customers understand the significance of the resource planning process and provide meaningful input into it.

Community Power believes that this particular plan is pivotal in the future of Minnesota's electric services because:

- 1. It comes at a critical juncture with the retirement of Xcel Energy's baseload fleet and thus the evaluation of how best to replace the energy and capacity it represents
- 2. It represents a key opportunity to integrate more effective modeling of non-power plant resources including distributed generation, demand-side alternatives, and transmission solutions into Integrated Resource Planning and utility modeling generally as the PUC required in its last IRP order (January 11, 2017)

With so much weight on this plan, it requires deep and meaningful engagement of energy users to ensure that Minnesota communities served by Xcel have an opportunity to understand and give meaningful input into the shape of our energy future.

Meaningful engagement requires time, dedication, and deep commitment to thoughtful analysis and inclusive deliberation. Yet time is not the only required ingredient for success; achieving these goals also requires a willingness to utilize new analytic tools, meaningfully consider solutions that haven't previously been on the table, and a commitment to creating a process that builds a vision rooted in the needs and interests of the diverse communities that use this energy system. At Community Power, we are eager to see this process done thoroughly and well, through a regulatory process enriched by creative thinking, grounded in public participation, and committed to the oversight that the PUC provides.

As is further developed in the sections below, Community Power supports the granting of the extension on the condition that Xcel Energy uses the extra time to get the engagement and modeling processes right. In supporting an extension request, we feel that Xcel must:

- Conduct analysis and modeling that fairly compares demand-side and supply-side alternatives, and effectively integrates distribution-level modeling, demand side management, and grid reorganization under a range of assumptions without pre-assuming at the outset of the analysis the solution set it prefers. For transparency, Xcel should also disclose the relative shareholder benefit based on projected utility-owned assets in its scenario analyses. We have included below several elements of this modeling and analysis that we would like to see addressed.
- 2. Facilitate deep and meaningful public engagement. As participants in Xcel Energy's current stakeholder process, we feel that the current process does not create accessible and meaningful ways for participants to shape the trajectory of Xcel's Preferred plan or its approach to analysis, and have included below a number of recommendations on how to make engagement relevant to the public.
- 3. Commit to the Commission-centered resource planning process as the appropriate venue, and not propose or support legislation that preempts Commission oversight .

We provide further detail on these three elements below.

1. Analysis and Modeling That Fairly Evaluates All Options

In its last Xcel resource plan order, the Commission required, among other things, that:

"14. In its next resource plan filing, Xcel shall:

a. describe its plans and possible scenarios for cost-effective and orderly retirement of its aging baseload fleet, including Sherco, King, Monticello, and Prairie Island. b. evaluate combinations of supply-side (distributed and centralized), demand-side, and transmission solutions that could in the aggregate meet post-retirement energy and capacity needs as well as contribute to grid support.

c. explore the role of cost-effective combined heat and power solutions.

d. report on its solar acquisition progress.

e. provide a full and thorough cost-effectiveness study that takes into account the technical and economic achievability of 1,000 MW of additional demand response, or approximately 20% of Xcel's system peak in total by 2025.

f. summarize its investigation and findings concerning the potential for an energy efficiency competitive bidding process for customers that have opted out of CIP.
15. In future resource plan filings, analysis and inputs must, to the extent possible, be consistent with Xcel's distribution system planning."

Community Power has seen a number of shortcomings in the analysis presented to date that should be addressed in the time granted for this extension. We have communicated many of these items directly to Xcel Energy through the stakeholder process as well.

Absurd Baseline Model

Given the findings of independent studies such as Grid Lab's *Smarter Grid* study, the proposed baseline Strategist model isn't just poor, it's absurd. It does not reflect Xcel's public commitment to reach 60% renewable by 2030, nor does it model any additional cost reductions for wind and solar, where a declining cost curve has continued for decades, or model for more than marginal changes in natural gas fuel costs over the span of the resource plan. It also omits the aggressive commitments to clean energy that many municipalities and communities in Xcel Energy territory have already made, such as the 100% renewable electricity commitment of the Minneapolis Clean Energy Partnership, of which Xcel Energy is a member. Baseline modeling should reflect likely outcomes based on public commitments and the economic realities of renewable energy costs.

Artificially Constrained Analysis

In multiple stakeholder meetings, Xcel representatives framed the modeling discussion around this position: "Xcel is not willing/or able to go above 60% renewable or 80% carbon free (numbers and thresholds have changed meeting to meeting) so that's what we're going to analyze" and then brought forward analytic processes to evaluate how to achieve that predetermined goal.

Community Power is aware of other existing analysis, including Grid Lab's *Smarter Grid* study that find that cost-effective strategies to pursue electric grid decarbonization are *also* less expensive than business as usual.¹ Recommendations from that study suggest it would be most cost-effective for Minnesota electricity consumers to close all existing coal plants, add another 2,000 MW of wind and 1,000 MW of utility-scale solar, and add 1,000 MW of energy storage, all before 2030, with an estimated savings for doing so of \$600-\$1200 per customer annually as compared to current practices.

Given the enormous economic and environmental benefit of rapidly closing aging coal plants and deploying clean energy to both Xcel customers and the state as a whole, modeling should

¹ https://www.mcknight.org/programs/midwest-climate-energy/mn-smarter-grid/

not be artificially constrained to limit identification of cost-effective measures to deliver cleaner electricity.

A Blind Eye to Distribution-Level Changes

Strategist modeling has not incorporated power flow or generation assets at the distribution level. Xcel Energy had stated in the 2016 IRP that it understood that its modeling was not capturing the distribution system effectively, that it did not have the time to effectively integrate distribution-level modeling into the 2016 IRP but would do so in its next IRP.

In the 2018 stakeholder meetings, Xcel has been saying the same thing it said last time: 'we know we need to do it, but we don't have time now'. **The extension should not be granted if it will not result in Xcel completing the promised assessment of likely customer-driven distribution-level impacts.**

As an illustration of the scale and speed of distribution-level changes, California's grid has been fundamentally changed in the past decade by 700,000 customer-sited solar installations with a collective capacity of 7 gigawatts (see footnote for a time-lapse).² Minnesota's grid is likely to experience similar substantial change in the next decade. The time to have a truly integrated resource plan is now; the Commission cannot continue to accept plans that omit distribution-level changes as an *Integrated* Resource Plan.

A Necessary Distribution Modeling Scenario

At least one distribution-planning scenario should include the *Smarter Grid* Study "Local Decarbonization" scenario, which found it cost-effective from a customer bill savings standpoint to install up to 13,000 MW of rooftop solar by 2050. Failing to incorporate this scenario could result in Xcel massively overestimating electricity demand, and overbuilding new infrastructure that customers are then on the hook to pay for. For example, the total 2050 electricity demand under Xcel's E3 study is 6-7% higher than in the *Smarter Grid* Study's Deep Decarbonization model with low distributed energy deployment, and 25% higher than the *Smarter Grid* Study's distributed-energy-heavy Local Decarbonization model. This is likely due to a dangerously low forecast of distributed energy and/or energy efficiency deployment.

Lack of Sensitivities that Reflect History

Natural gas price assumptions are a crucial driver of what is considered economical in resource planning models. So far, we have primarily seen scenarios based on marginal price increases of a few percentage points per year, but a cursory look at the history of natural gas prices shows a

² https://ilsr.org/visualizing-calif-booming-solar-market/

trajectory of sudden and often unexpected price swings; as recently at 10 years ago, natural gas prices were roughly 6 times the price today. Natural gas price sensitivities used for analysis should at least encompass the range of prices seen historically.

There are at least three pieces of additional evidence to suggest that smoothly rising curves are a poor projection of natural gas price risk. Some fracking industry analysts suggest that there is a financial bubble in the fracking industry, as low interest rates have allowed Wall Street to provide billions in capital that cannot be recovered at current natural gas prices.³ Additionally, gas price forecasts are unlikely to capture the exploding demand for gas. EIA data suggests utilities have plans for 60 gigawatts of new gas capacity in the next five years, and *Utility Dive* reports nearly 20 gigawatts of new gas plant builds in 2018 alone.⁴ Finally, these two factors will only be exacerbated by long-run rising costs of gas extraction as lower cost resources are depleted. A serious evaluation of future natural gas costs would evaluate current prices against the availability of further reserves that can be extracted at that price, versus reserves that will require higher prices to become feasible; a number of such analyses point to a rapidly depleting reserve of low-cost gas⁵. Due to all of these factors, sensitivity analyses should include the long-tail risk of a rapid escalation in gas prices, especially since customers and not utility shareholders hold all of the fuel price risk.

Evaluate Customer Benefits More Broadly

Resource plans almost always focus on the cost of energy per unit, but this resource plan must accurately analyze actual customer impact. In particular, the scenario analysis should include potential bill impacts, not just rate impacts. As an illustration, the *Smarter Grid* study found that the Local Decarbonization scenario resulted in electricity cost per unit about \$0.01 higher than the default Decarbonization scenario, but because electricity demand was 18 billion kilowatt-hours lower, the total cost to customers was nearly identical. Although uncounted, the Local scenario also likely results in much higher job and economic impacts, as distributed energy resources tend to be more labor intensive and because savings would be more distributed among customers owning distributed energy resources. The regulatory process is intended to guide energy utilities to make decisions in the public interest; evaluating what is in the public interest requires looking at the benefits provided by energy job creation, community wealth building, and the economic multipliers of recirculating energy dollars in local communities, not just a sole factor of rates.

Missing Analysis:

In the stakeholder process, Community Power has not yet seen any meaningful analysis of items b-f required by the PUC's order that the 2020-2034 IRP must:

³ https://www.nytimes.com/2018/09/01/opinion/the-next-financial-crisis-lurks-underground.html

⁴ https://www.utilitydive.com/news/eia-gas-to-outpace-renewables-for-2018-us-gen-additions/522980/

⁵ https://www.scribd.com/document/219405163/Marcellus-Resource-Assessment-for-New-York-April-10-2014

- b. evaluate combinations of supply-side (distributed and centralized), demand-side, and transmission solutions that could in the aggregate meet post-retirement energy and capacity needs as well as contribute to grid support.
- c. explore the role of cost-effective combined heat and power solutions.
- d. report on its solar acquisition progress.
- e. provide a full and thorough cost-effectiveness study that takes into account the technical and economic achievability of 1,000 MW of additional demand response, or approximately 20% of Xcel's system peak in total by 2025.
- f. summarize its investigation and findings concerning the potential for an energy efficiency competitive bidding process for customers that have opted out of CIP.

2. Public Process Designed for Meaningful Input and Participation

Community Power has participated in Xcel Energy's IRP Stakeholder meetings since they began in June 2018. While they have proven informative about Xcel's current approach and work, we have not found them to be a responsive process thats seeks to develop a preferred plan based in community input nor are they accessible to a broad range of energy users who make up Xcel's customer base, a fact that we've brought to Xcel's attention from the beginning of the stakeholder process as needing a remedy. Some of the ways we think the stakeholder process needs to be transformed include:

 Listening to input to help shape the goals rather than defining the goals and presenting them as set, and then requesting feedback on them without being flexible in adapting it. For example, early on in the process, Xcel Energy set decarbonization targets without the input of stakeholders as to what they want the goals to be, or converting coal plants to natural gas without determining whether ratepayers wished that or other resource considerations in the retirement scenarios for Sherco. IRP objectives were defined and ranked by Xcel (Reliability, Cost, Risk, Environment), as a part of the first presentation in June; these items should have been up for consideration and discussion among stakeholders. Ratepayers have a vested interest in the ordering of these priorities, and are paying for them regardless. Also in this first meeting, nuclear energy was stated as a diminishing aspect of the energy mix, while wind, solar, storage and natural gas were considered mainstays. The presence of nuclear and natural gas in the next 5-15 years of the energy resource mix should be a matter of discussion. The presence of energy efficiency and other demand side integrations should be a part of this same discussion to create a complete picture to base responses off of, rather than lightly relegating them to the Integrated Distribution Plan discussions.

- Readiness to evaluate new questions and new approaches, such as using storage as a reliability measure. Conversations in the IRP Stakeholder Workshops indicated that it has been demonstrated that black start certification has been granted to natural gas plants, formerly denied that designation, due to the addition of energy storage being built into the plant. This suggests that the storage media are the black start reliability measure, not the natural gas plant, so while Xcel touts natural gas conversions of coal plants as necessary for reliability, often claiming that certain plant retirements are or might be held up by MISO on reliability grounds, it seems similar solutions for the perceived threat to reliability posed by the variability of renewable energy sources might prove a long term solution to overall systemic reliability and black start potentials in a more renewable energy heavy energy mix. This possibility is worthy of deeper analysis, as it could pose solutions to multiple existing problems the stakeholder process to date has not provided the space or opportunity to evaluate a more innovative approach.
- Presentations that inform and support stakeholders in exploring what is possible, rather than seeking solely to convince. Xcel Energy has used a substantial portion of the time in its stakeholder sessions bringing in speakers whose presentations seek to convince the audience of Xcel Energy's positions rather than give stakeholders the tools and context with which to give input on where we should go. For example, both Jesse D. Jenkins Ph.D and Dr. Christopher TM Clack presented modeling scenarios based upon projected weather, broad based electrification and the addition of renewables, then asserted that natural gas would have to take over for coal and as renewables concentration achieves 85% the benefits start to diminish, while nuclear is declared a requirement for decarbonization. All of those projections were based upon utility scale renewables only. These scenarios needed to include multiple mixes of utility and non-utility scale renewables, "no natural gas" permutations, storage contributions (Jenkins did Clack did not), etc. so that participants could gauge the paths that sound most palatable and propose further models and strategies, instead attendees were simply told what would work (which conveniently aligned with Xcel's desired option).
- Participatory facilitation of stakeholder sessions that allows robust stakeholder dialogue and collects rich input based on the insights and interests of the stakeholders. Xcel Energy stakeholder sessions to date have primarily focused on a small number of formats; primarily presentation of extended technical information verbally and via Power Point followed by limited opportunities for individual questions and comments. While this approach can be helpful in some contexts, using it as the exclusive form of stakeholder engagement dramatically limits stakeholders' ability to meaningfully shape the outcome. In general, large-group formats where significant volumes of information are presented to everyone (when they may or may not be the types of information that each participant is seeking) followed by large-group opportunities to speak is a reliable way to ensure that most of the time is spent on content that is either already known, inaccessible, and/or irrelevant to most of the participants and that feedback is limited, brief, and fragmented. A participatory process could include more interactive design elements including:
 - <u>Multiple learning tables/discussion groups</u> where sub-sets of participants are able to dive deeper into topics that they wish to understand more deeply

simultaneously/without having to spend all the available time superficially covering everything without having deeper questions answered.

- Interactive activities to deepen understanding and engagement such as Gallery Walks (participants writing ideas on butcher paper in response to a series of shared prompts), World Cafe conversations on specific topics, Fishbowl conversations where stakeholders listen to a smaller self-selecting group of stakeholders dialogue on a specific topics, and open-space break-outs based on topics of specific stakeholder interest.
- Adequate time for stakeholders to clarify questions with Xcel representatives
 Opportunities whether verbally, in a large group and in small groups, in writing via flip charts, or post-its, or through a virtual space outside of formal meetings for stakeholders to respond, clarify, and further develop concerns raised by other stakeholders in a way that can further develop recommendations to Xcel and build clarity and unity among stakeholders.
- <u>Genuine opportunity to give collaborative recommendations</u>; After an opportunity for stakeholders to identify questions that they think should be explored further or concerns that they have with the analysis, creating time and space for small groups of stakeholders to work together to provide recommendations for an approach to how Xcel should pursue the question and concern. This would allow stakeholders to work together to provide clear recommendations for how Xcel should proceed with evaluating the issue at hand, rather than simply a list of things Xcel should address, which may end up not being addressed at all or is addressed in a way that does not actually respond to stakeholder concerns.
- <u>Fill the hole in group process expertise hire/contract community-embedded</u> experts in group process design in an ongoing way. The group facilitation tools we have seen used in stakeholder process are rudimentary at best; there is a robust field of group process knowledge out there that can focus on effective process design to maximize creativity, relevance, quality of ideas developed, and opportunities for input. This sort of group process expertise should be brought into the process.
- Accessible and relevant language. Only a small proportion of stakeholders are well-versed in the technical and regulatory language of utility management, and while these stakeholders who already have the lingo to participate are important stakeholders with meaningful input, they are not the only stakeholders with relevant and meaningful input. We know from extensive community experience that many; whether individual homeowners and renters, local businesses and corporations, community organizations and local governments have significant insights into how energy investment decisions, program offerings, and development strategies impact the wealth, health, and choices of their constituents, yet lack the formal lingo of utility-speak. Indeed, we find that the vast majority of what is currently described as a stakeholder process would be unintelligible for the most impacted "stakeholder" the average energy user. While there may be appropriate venues for acronym-heavy formal language even in parts of a stakeholder process designed for stakeholders conversant in this language it is unnecessary in a

significant proportion of situations, and serves only to obfuscate the conversation for many. This is an unacceptable norm if we consider average energy-users (and therefore their input, experience, and goals) as valuable participants rather than passive, disinterested, or even ignorant recipients.

For example, compare the equivalency of meaning and divergence of public comprehensibility between:

- "The 2020-2034 Xcel Energy IRP will evaluate demand forecasting and capacity needs and compare the cost-effectiveness of combinations of supply-side (including thermal generators and DG) resources, DSM, and transmission alternatives to develop a least-cost plan for energy generation over a 15-year time horizon." and...
- "Right now, Xcel Energy is preparing a required proposal for approval by state regulators as to what combination of energy sources will be the most affordable, reliable, and environmentally safe over the next 15 years. As part of this process, called an Integrated Resource Plan or IRP Xcel Energy must evaluate and estimate future energy use across the state, and look at which combinations of large-scale power plants, community-scale energy (like wind and solar), investments to reduce energy usage through energy efficiency, and investments to upgrade our electric grid will best meet these needs over the next 15 years."

While we understand that there may be parts of a stakeholder process that are appropriate to design specifically for technical experts and energy professionals, a stakeholder process that is designed exclusively for these voices to be heard misses the vast majority of interests and concerns of Minnesota communities.

- Meeting Format Allowing Working People to Attend. The current stakeholder workshops have all been held during business hours on a weekday at the Xcel Buildings on Nicollet in downtown Minneapolis and at the Wilder Center in St. Paul.. These locations and format is accessible for stakeholders whose full-time job relates to energy, and who are located in the Twin Cities with easy access to transportation. It is not accessible to the vast majority of energy users, in Xcel territory, who have a stake and will be impacted by these decisions. Many cannot take multiple days off work (per month for several months) to participate in stakeholder discussions, and many live far enough away that coming to meetings in the core metro area is not possible. Additionally, managing an effective stakeholder process that seeks to respond to the needs of all energy users should address barriers such as translation and interpretation for the tens of thousands of non-English speakers in Xcel Energy's customer base, and childcare for parents.
- Partner with Community Organizations to lead Stakeholder Engagement: Many concerned stakeholders cannot be reached by a direct invitation from Xcel, because Xcel does not have an existing relationship with them. Additionally, many communities would be more likely to give feedback were stakeholder input opportunities managed and guided through existing community-based organizations that they trust. To

effectively engage these communities, stakeholder feedback workshops should be run not by Xcel but by trusted community outreach partners, with Xcel representatives present and with suggestions and input here also guaranteed to be taken into account in the IRP process (as ignoring the feedback generated there would foment further alienation and distrust from those communities, and their allies).

To attempt to create opportunities for meaningful public understanding and input into the IRP process, Community Power is, in partnership with other community organizations, conducting a series of public education and engagement activities related to this IRP that we think show promise in terms of an approach to public engagement that reflects the process we should be using. These activities include:

- 5 community meetings in Minneapolis, Saint Cloud, Minnetonka, Stillwater, and Northfield hosted in partnership with the Sierra Club to inform community members about the issues at stake in this IRP and gather initial input into the desired energy vision
- A collaborative deep-dive with 25 community members identified through these initial meetings to evaluate and provide recommendations on the IRP process, important questions the process should evaluate, and solutions members want to see in their communities.
- 2 upcoming Energy Comedy nights focused on the IRP proceedings hosted in collaboration with Theater of Public Policy and including opportunity for attendees to provide impact on the IRP process.

Some feedback generated from these processes is attached to this comment as Appendix A, and will also be provided to Xcel Energy through their stakeholder process.

An important note about these parallel efforts: We do <u>not</u> feel like Community Power or our organizational partners have the capacity as small grassroots organizations to conduct these types of in-depth stakeholder engagements that are accessible and relevant to energy users across Xcel's statewide service territory in the range of communities needed and in a way that meaningfully shapes Xcel Energy's preferred plan. Xcel Energy, as a company with \$11 billion in annual revenues and responsible for meeting the energy needs of almost 1.5 million Minnesota energy users, has both the resources to support these types of real public engagement on the scale needed and the ability to directly incorporate the input gathered as the foundation for its 2020-2034 Integrated Resource Plan. We would like to see that it does so.

3. Commitment to the Regulatory Process without side-steps

In 2017, Xcel Energy supported passage of HF113, allowing the utility to circumvent the statutory authority of the Public Utilities Commission to build a new gas-fired power plant in Becker, Minn. In 2018, Xcel Energy supported passage of SF 3504 to reduce risk exposure for

the company's shareholders at the expense of its customers by pre-determining prudency for its nuclear power plant retrofits.

Given that this extension request places the 2019 IRP filing after the 2019 legislative session, it would be a show of bad faith for Xcel Energy to draft, propose, or support legislation that would undermine the Commission's authority to properly oversee this resource plan. We feel that it is important to get clear commitment from Xcel Energy to use the extra months of the extension to thoroughly pursue the analysis and public engagement processes identified in our first two points and refrain from attempts to secure legislative predetermination of the efforts this IRP is intended to evaluate.

* * *

In conclusion, we appreciate Xcel Energy's desire to prepare a thorough Integrated Resource Plan through thorough and open-minded analysis and meaningful consultation with a full range of stakeholders. We support the granting of Xcel Energy's request for an extension for filing on the condition that Xcel use this extra time to:

- 1. Conduct thorough analysis and modeling that fairly compares all options
- 2. Create a public stakeholder process designed for meaningful input and participation
- 3. Commit to the regulatory process by avoiding side-steps

We ask that the PUC consider defining criteria and objectives for ensuring that Xcel uses the extra five months of the requested extension to effectively meet these outcomes. We appreciate your time and consideration and look forward to continuing to engage in this IRP as the process unfolds.

Respectfully submitted,

/s/ Marcus Mills Vice-President Community Power 2720 E. 22nd St. Minneapolis, MN 55407 marcus@communitypowermn.org **APPENDIX A:** Community Input Exercises & Responses Gathered to date regarding Xcel's upcoming IRP, conducted by Community Power and Sierra Club in 2018

EXHIBIT A. Input gathered at Community Feedback Session, evening of October 25th at Black Forest Inn Community Room, 1 E 26th St, Minneapolis, MN 55404.

Description of method of gathering feedback:

A two hour workshop was held that included:

- Summary of what an Integrated Resource Plan is, why it is significant for our energy future, and what the PUC has required in this Integrated Resource Plan
- Summary of major issues reviewed so far in the Stakeholder process
- Summary of prior community engagement efforts hosted by Community Power and Sierra Club and main themes of feedback from these sessions
- Q&A based on participant interests
- Small group breakouts to identify participant ideas on four major themes (facilitated as small group discussions with major ideas recorded on flip chart paper and transcribed below):
 - **Process:** What would it need to make this process accessible to you and your community? How should Xcel do this? How can we make this happen?
 - **Public Interest:** What should this [IRP] process be able to see? What is energy connected to? How does it connect to your life?
 - **Equity and Community Impact:** How should this process include equity and Community Transition?
 - **Pathways:** What will it take to get to our [energy] vision?
- Gallery walk where all participants review the ideas of the small groups and note support for ideas they agree with
- Identification of interest in further involvement in the stakeholder process

Transcribed feedback:

<u>Prompt</u>: What would it need to make this process accessible to you and your community? How should Xcel do this? How can we make this happen?

Responses:

- Better/more widespread Engagement/advertisement
- Social media engagement !
- Teach-in sessions ! (Maybe at community centers, parks? In places accessible to all)
- Local community orgs/associations; Get community !
- Members aware of their agency more transparency;
- Language transformation and digestibility of concepts;
- Legislative direction toward transparency as well as political/public pressure;
- How is Xcel held accountable to study possibilities that they don't have initial interest in pursuing?

- Debunk what/how PUC works; PUC resources/transparency;
- Change the rules the PUC must obey;
- Market educate folks via factors that affect them and translate into action.

Frocess/Engagemen What would it need to make this process accessible to your your community? How should Xel do this, how can we make this happen? lide spread agement advertise ment memb COW aware aulage no Con

Photo of Group Brainstorm written in black/red and on sticky notes on desired "Process & Engagement" practices that Xcel could adopt for its IRP Stakeholder Process (gathered from October 25th Community Engagement Session in Minneapolis). Prompt is written in purple.

<u>Prompt</u>: What should this [IRP] process be able to see? What is energy connected to? How does it connect to your life?

Responses:

- How do we allow communities to choose their vision? Continue investments or not?
- Financing should be for public good not shareholder return!
- community control-municipalization/community ownership !!
- Smarter grid/decentralized response
- Build neighborhood projects and community
- Post-it: People have more ability to decide where there energy dollars go moved so public interest translate (?),
- Water, Indigenous Rights
- Line 3 no new pipelines !

- Use flat-top buildings for solar !!
- Survey for all solar/RE resources
- Planning Block by block planning
- Participatory planning
- Jobs/training
- Engagement/Ease Should be helping people in an engaged way to make energy saving easy
- Xcel is not being a good public servant
- Shouldn't be paid on amount of energy sold, only doing energy efficiency work reluctantly/when forced
- No corporate takeover of public utilities
- What matters to people? Speak to them from that
- Integrate food, garden, compost, green space and energy !
- Transportation system that's FREE easy, quick !
- Pressure Xcel-->pressure Metro Transit !
- Education for lowering use of energy

Ublic Interest What should this process be able What is energy connected to? How does it connect to your life? 10 SOURS - NO NEWPIPE Water niciPation

Photo of Group Brainstorm written in green and on sticky notes on how Xcel's current IRP should incorporate broader "Public Interest"" from October 25th Community Engagement Session in Minneapolis. Prompt is written in purple. <u>Prompt</u>: How should this process include equity and Community Transition? <u>Responses</u>:

- Social: bulk buying in low income communities also of solar panels and installation
- Targeted taxation or rate increases to subsidize low income energy access
- Facilitate flow of people in and out of community (not sure if this refers to physical community?)
- Should not have to pay more for grid we should all pay for low populated communities
- Workforce development + job training programs;
- Partnerships with trade schools + universities;
- Siting customer-owned generation;
- Ancillary job development;
- RE Policy: Wind/solar!
- Mechanisms for selling energy back onto grid
- Inclusive financing
- More public engagement
- Who is doing the education?
- More Xcel engagement in averting climate crisis.

Equity & -Workforce development & job training Programs - Wind/solar! Siting Partnurships w/ trade schools & Universities! - Ancillary 106 development Bulk buying in low income communities Targeted toxation or rate increases subsidize low income energy access - Mor public engagement Mechanisms for selling energy Kill GI More Xcel eng averting clima

Photo: Group Brainstorm written in orange and on sticky notes on priorities related to "Equity & Community Transition" gathered from October 25th Community Engagement Session in Minneapolis. Prompt is written in purple. <u>Prompt</u>: What will it take to get to our [energy] vision? <u>Responses</u>:

- Post-it Tell Xcel over and over again: embrace the problem, take responsible action to avert climate disaster
- less monopoly more individual/ community choice
- ballot/constitutional amendment
- formalize legally user/consumer input
- reevaluating consumerism
- Alternatives to fossil fuels
- viral spread of new tech
- green jobs + transitions !
- Education
- more options
- mass mobilization
- political pressure
- community voices
- appoint/ influence PUC

Pathways Inst will it take to -ducation Green jobs + transitions Mass Mob Political More individual / communit

Photo of **Group Brainstorm** written in black/green and on sticky notes on "Pathways to Reach Shared Energy Vision" gathered from October 25th Community Engagement Session in Minneapolis. Prompt is written in purple. **EXHIBIT B.** Input gathered at Community Feedback Sessions conducted by Sierra Club with support from Community Power in Stillwater, St. Cloud, Minneapolis, Minnetonka, and Northfield between late July and mid September 2018. Sessions included:

- Summary of what an Integrated Resource Plan is, why it is significant for our energy future, and what the PUC has required in this Integrated Resource Plan
- Q&A based on participant interests
- Small group breakouts to map participant's energy vision and goals
- Opportunities for participants to give feedback via photo petitions and letters
- Identification of interest in further involvement in the stakeholder process

Photos of energy-users and their priorities taken during each feedback session:





















































Letters from energy-users with detailed priorities gathered during each feedback session.

1 9/17/18 Dear Ban Folke, My more is elizabeth and I am a junior at It. Claf College in Northfuez, MN. Even thereits I am not four monouson originally, it has been my beland terme for the past 24 years. I have lead getting to explore and experience the protonal beauty of this inaglishicant shall I am writing to circumate years to revision the 1002, four fuel for every gets and comment to 1002, four fuel for every gets and comment to 1002, four fuel for every gets and comment to to 20, four fuel for every getting optime simplet on the share and people of Minimutoh His well a lange and guerthal everyation, you have here the unique opportunity to crake protonal every that many other large corporate lander in a way that many other large corporations Dear Ben Fake, Hy name is Hongh Read and I am writing to you to unge you to commit to getting more of Minnesota's energy from reneutable source I am a junior Environmental studies and Economic major at St. Olde College, and I can contracently say that this decision would be a win both environmentally and financially As the time approaches to finalize the IRP, we must acknowledge the near danger pixel by natural gas, cal, and char fassil fluels. I carne from Masachivetts, what gas lines award by columbia Cav have explosed, and National Crid is responsive for order of the leak thone were before, and this pose a near public heatth risk. Worked for Environment Masachivetts and Toxics Action center to prevent those pipeling from being built, and Minnesota must follow the some traveler some gas than Coz. Masachivettr has a greenhouse gas than Coz. Masachivettr has a greenhouse gas than Coz. Masachivettr and this the for this to cal power plant; and this the for this to cal power plant; and the future is in penewable. "Let's make it happen, together." Dear Ben Fonke, Leader in a usay that many other large corporations are not. Prestring the intural benity of Manutota is in importing the intural benity of Manutota is in importing to allow for fitting generations to enjoy just as much as we do today. In meany twomess renewable enjoy others, som neve away from only inturnet damaging chall and includer prover plants. Not only us this speer for this environments, it is safer for the people was work in and neur there power plants. In condution, I encourage year to increase your gent of period only to 100% by 2050. Sincerely, Elizabeth Dumsan Sincerely. Hannah Read

Dar Ban Jaloka Jan a log time readert of Mynesoth Jave seen low mineste weather to " May with with no cross courty skiin - Long alleg seems filled by cold - etheren her closed with the cold Gatter open as not filled by cold Gatter open and to the the seems the worst fear be autore Der Ben, Later in Northered, MN My voice and bisted in Northered, MN My voice and the voices of other, your protect the mode are going to their the unitst modes of contract change yet to come modes, time to motion quicks and this is a committed to a discrete levery how while the theory to discrete levery is a motion interference to the discrete as a statistic to the state state they as an attention to the state state response plants to measure except inches deamon for the years due to folder modes plants in Minnesch under considered as an attention to the state state response plants in the state and the states as an attention to energy, encuded to use the state of the constants is post the state of the states and the benefits actuarily goings are advected on a post the state when the opportunit to ency, that is the day way brows to a post the state of the state of a plan the the open your have the opportunit to ency that is the day way to used to a post the opportunit works and the state of the the open your have the opportunit to ency that is the day way to used to a post the opportunit of the states of the the open your have the opportunit to ency the opportunit works of a plan a this to the state of the states of a plant a the the open your have the opportunit to ency the opportunit works of a plant a the opportunit works of a plant a the the opportunit works of a plant a the opportunit works of a p Salso how that moving to clean energy will not hear the economy and it will provide good jobs, and dean air + clean water ag X cel dwelop, it resource plan Sport to see I set a gol -for it a gogl - of 100 % forsal fuel free energy Slock you And Petr northfield MN A

Dear Mr. Eng Fowker

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Dear Ben,

September 17th

2018

clean energy.

Thank you for your time and support,

Kotte Schroeer

Mar Een Tokkes Think two to take an important time to ye at an every t more the way to bac defead taken as a tubus and a set taken entropy and blieft inputs could carry the new pictor of an applicative to relative or relatively as pictor of the will be added to the trade of the new pictor of the trade of an applicative to relative or relatively as pictor of the of an applicative to relative or relatively as pictor of the trade of the trade of the pictor or determine the the with frauence to trade of Norma bills of the pictor of the pictor as pictor of the pictor of the pictor or determine the store of an applicative to complete pictor of the pictor of an applicative to complete pictor of the pictor of an applicative to a store and a genting intermed are have the with the complete pictor of the pictor of an applicative to the pictor and a genting intermed on the antion of the pictor and a genting intermed on the antion of the pictor and a genting intermed the intervent is good with pictor and a genting the store of an applicative to the store and a genting intervent the antion of the pictor and a genting intervent the antion is good with pictor and a genting the store of the pictor of the pictor and a genting the store of the pictor of the pictor and a genting the store of the pictor of the pictor and a genting the store of the pictor of the pictor and a genting the store of the pictor of the pictor and a genting the store of the pictor of the pictor and a genting the store of the pictor and a genting the store of the pictor and a genting the store of the pictor and and genting the pictor and and gent

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Sincerelys Maddi Fraland

Ver Ben Folke,

Der Ben Folke, I am Currently au Constantial Studies projet al Suite Olas College in Northell Mill to an ES projet, I spend a lot of three twinking ited three usy we use and get our energy I also thick a lot about the interstationally of denergy and second issues. The Myority of denergy and second information of the sake of all planet, for the two sake of all planet, for Chinese down to listen to the Scient Colls of ice only possible, its your isspon-sibility to the Public Minnesoda has always been a leader in grean energy. Lets continue that legalg. M at was On hard the time to

thunk you for bothing the time to

Bladen Pohl Pin &

Pear kin toke, Jam a college student in Northfield, MN and Jane deeply about the father of Northfield, MN and Jane deeply about the father of Northfield, MN and Jane deeply about the father of Northfield, MN and Jane dense about the father of Northfield, MN and Indemnshally change the father of our dinate. We can either choire to make the change to remain any and wall a change anay hom the ford fulls that are causing he in the ford fulls that are causing the interest about my that are causing he interest about my that and any change of year stay with the ford fulls that are future of any children I may had. I want my fly and my children I may have the power to have by streme wather where the power to change the destination is a your to have by streme to the prove on the post to have been the destinated that he have been going drun, the hausitan to clean energy can be postshere, healthy, and just. plank you so much by gourtime. MMTEN North

Kristen Koerth

Dear Ben, 11:5 really really important to me that BR Xee Take the extra efforts to produce more econfricting concept 1 mink that it is super important that we stort to finink more about the future of our Earth 1 guess perfectly frank. I Love the Earth' it is such to beautifully magnificent home and it makes consider greener options for your customers' sake and the Earth's sake! Thanks for reading Megan Kartheiser St. Olaf 22 this totally supposed to be Africa in so serry for my awful draming skulls! ACC

Par Ben Folke. I am currently a student at St obs and studing environmental science. As you they know, St older guts a perior of its energy from its wind turbine which serves as a bearing of the student of the figure of MNS energy and the country at long. The more I engage with the studies at college, At this there of MNS energy my Acta has committed to 55% carbon for a guture. X at loss committed to 55% carbon for a guture. X at loss committed to 55% carbon for a second by go do 30, our speak for the this vision can be exceeded. I know the speak for the this vision can be enarge by do 30, our commuting will be deeply disoposited. The path to change is clear and I hape that for the sale of the future of this Earth, you i your team will content this capitor.

Thank you, Addie Powe

9/17/18 Sept. 17, 2018 Dean Mr. Folke, Dear Ben Fille, I would like to see more of an effort to transition to clean energy. I live in Northfield, MW and go to stated at SI. Olif college. One of the things the oneowerd at SI. Olif is the idea that clean energy is not profitche. As we've discoved in my classes, this is simply not thue. A transition to cleaner energies when out in the improve the health of our betweed out and to sheet to dirary company, no and soil you need to sheet to dirary energy - you have the power to ab better. I have you take this more account. I and resident of Northfield Minnessta and the motion of two divides. I have been a customic of teel for Do years and an gratiful die been die to sign up for relevance. as keel begins its planning for the next 15 years i longe you to appent a plan to rathe your coal plants and more toward 100 % rememble plaits and more toward 100 % remainder Sources. Moning away from coal will out up our communities of bittles air quality; lies carbon muscour, and posities? job grantles in the fature is more large, but Minnosotiens have long supported clongs that position on children and our inversement it and many other Minnosotiens oil be notedaing as the IRP is droused this full. Thenk you! Jessica Mitchell St. Olef College '19 Sincerely, Da July L Pamela Fickenschur 2010 Winner St. Nertukiel MN 55057 (3. 1 SOPE. 17, 2018 0 Dear Ben Folke, Dear Mr Found, My name is Honry Horson, and I am a concerned chieve of Northfield NN. As a culture of your energy resources, I would like to left you about how I would like NN every, to change. If know that in the near hubit many of your current cost and nuclear, + named gus plants are up for refirement. I would like to see all of Hese plack retried by 2001. I'm at this committy amount, where we're cell writing your to represent to represent with clean analys. You'd he impressed this a hig room, and fill of pain customer, telling pain tobert they work. I'w but coo wouldn't be pleased? "I'm stre a performinal in the later, where The had the comtaint to work on Kells partnerships "I the lit of st Park on "I'm where to becare has charging status. I'm very impressed on this performance with your part of it." As an or these pairs refined by 20:001 As assert Xcel parry its b decide the fill what the name array part will bot like, I would like b voir an opposit I expect Xcel every to transform towards 1001 researche every to transform towards to your sets grant be held your accordence to your sets grant for the two mission. William an Internet lessure plan that is made up of intervention to according tabline to them our environment of atmosflere. I believe that to Allowed hall a light 0 Thenh your You need to big that sure approach to every fing you do. - Forward looking - Committy - Committy - Committy - Condid load & natural gas are neither of Aluse. Thank you for listening to very comments I'm limbing brown to over metarch that - tolard over from formal (whether for cars offer houses) -Henry - And is powered locally - wind, solar, commutin 6 The los for per work . - Win Schwein 5 105

Examples of Energy Grid Vision exercise detailing customer priorities and responses to Xcel's current IRP from four feedback sessions.

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