

**STATE OF MINNESOTA
BEFORE THE PUBLIC UTILITIES COMMISSION**

Katie Sieben, Chair
Joseph K. Sullivan, Vice Chair
Valerie Means, Commissioner
Matthew Schuerger, Commissioner
John Tuma, Commissioner

In the Matter of a Xcel Energy’s 2019 – 2034
Upper Midwest Integrated Resource Plan

Docket No. E002/RP-19-368

Reply Comments of the
Monticello Labor Coalition

INTRODUCTION

These comments are filed on behalf of the Minnesota Building & Construction Trades Council, Pipefitters Local 539, and Construction & General Laborers Local 563, (collectively, “Monticello Labor Coalition”) in support of approving Xcel’s proposal to extend operation of its 671 MW Monticello nuclear facility by 10 years as part of its pending Integrated Resource Plan (“IRP”). The Minnesota Building Trades represents more than 70,000 union construction professionals affiliated with 15 international unions, including the Laborers International Union of North America and the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada. LIUNA Local 563 represents roughly 10,000 skilled construction laborers in the Twin Cities, Central and Southwestern Minnesota, and North Dakota, while Pipefitters Local 539 represents members across Minneapolis and 22 counties in Central Minnesota.

Extending the Monticello plant’s license is probably the single most important and consequential component of its pending resource plan. It is, in fact, essential to ensure Xcel’s ability to meet its carbon reduction goals while simultaneously continuing to meet the high standards of reliability and resilience that Minnesota rightly expects from its public utilities. At the same time, extending Monticello will contribute enormously to the State’s economy and the economic vitality of the region where it is located while mitigating the negative impact of planned coal plant retirements.

In effect, the Monticello plant extension is where the State’s public interest objectives of decarbonization, reliability, affordability and socioeconomic benefit intersect. Failure to approve this extension as part of Xcel’s IRP would jeopardize these objectives and represent a step backwards in Minnesota’s thus far successful energy transition.

DISCUSSION

I. The Monticello Plant Produces Compelling Socioeconomic Benefits and Its Extension is Essential to a Just and Reasonable Energy Transition.

Xcel's Monticello and Prairie Island nuclear facilities directly employ approximately 1,400 people in and around the Monticello and Red Wing communities. Monticello specifically employs 460 workers. Importantly, these jobs generate sustainable, family supporting compensation while also creating employment opportunities and economic benefits well beyond direct employment. The plants also generate approximately \$42 million in state and local taxes annually, while contributing around \$1 billion in annual economic benefits.¹

Union members represented by the Monticello Labor Coalition have built and maintained Minnesota's fleet of thermal power generation plants for generations. Jobs associated with the Monticello nuclear facility have been lifelines for our members and their families, supplying middle-class wages, health insurance, retirement benefits and advancement opportunities through best-in-class registered apprenticeship programs.

Based on a survey of Building Trades unions, whose members perform maintenance work at the Monticello plant, we estimate that the facility employs 150 skilled construction tradesmen and tradeswomen who complete more than 100,000 hours of work in a year. For example, in 2019, contractors working at the plant provided more than 110,000 hours of work to some 150 union Boilermakers, Carpenters, Electricians, Laborers, Painters, Pipefitters, Roofers, and Sheetmetal Workers. These are family-supporting jobs that pay hourly wages that range from \$38 for a Laborer to \$49 for a pipefitter (\$57 to \$76 with overtime) on top of health, retirement and training benefit packages that are worth between \$21 and \$31 hourly. Foremen, Superintendents, and workers with specialized skills can earn even more.

Along with Xcel's other thermal power plants, the Monticello facility provides full-time employment to trades that staff their regular maintenance crews. Moreover, those plants also provide significant work opportunities during maintenance turnarounds, including nuclear refueling operations, and on facility construction projects. Maintenance and refueling turnarounds are a particularly important source of income for many area

¹ Xcel Upper Midwest Integrated Resource Plan 2020-2034, Initial Filing (July 1, 2019) ("Xcel IRP"), Appendix O3.

workers, because large deployments of trades and extensive use of overtime are required to minimize down time.

During a typical turnaround, crews spend roughly a month working 12 hours per day and six days a week. The schedule is grueling, but it allows tradesmen and women to bank enough in wages, health and pension contributions to compensate for periods of unemployment. According to Minnesota Building & Construction Trades President Joe Fowler, facility upgrades and efficiency measures have shortened a typical planned maintenance or refueling outage (“turnaround”) at Monticello from two months to a month, reducing costs associated with maintenance and lost power production. Nevertheless, turnarounds remain a critical source of income for area trades and their families.

Turnarounds also provide opportunities for registered apprentices to learn skills and gain experience in the power sector. For example, Pipefitter Local 539 Business Agent Jake Pettit observes that:

Monticello has unique working conditions that are very hard to replicate in another area and losing the plant would mean losing the ability to get real world, hands-on experience that our membership needs. Once a member has done a job successfully at the Monticello Plant, it gives that member and future employers confidence that the member has the skills to go anywhere and handle the job successfully.

Registered apprenticeship offers a pathway to family-supporting trades careers and a proven strategy for producing the skilled workforce needed to ensure the safe, efficient, and reliable operation of our energy utilities. A 2019 report on Minnesota’s construction industry registered apprenticeship programs, published by the Midwest Economic Policy Institute (MEPI), found that these programs make significant contributions to Minnesota’s economy and the development of the state’s workforce, and offer a preferable alternative to college for many Minnesota families.² The authors estimate that Minnesota’s leading apprenticeship programs deliver \$617 million in long-term economic value to the state for a return-on-investment of \$21 for every dollar invested by participating contractors and labor unions.³ One in five participants in construction apprenticeship programs are people of color and/or women.

The Monticello facility and other area power plants have provided an economic and social mainstay for trades, plant workers, and local communities, as Center for Energy

² Manzo, Jill, Frank Manzo IV, and Robert Bruno. *The Impact of Construction Apprenticeship Programs in Minnesota: A Return-on-Investment Analysis*. Midwest Economic Policy Institute, September 16, 2019. <https://mntrades.org/wp-content/uploads/2019/10/mepi-uiuc-impact-of-apprenticeships-programs-in-minnesota-final.pdf>

³ Ibid.

and Environment documented in a recent comprehensive report on the impact of planned plant retirements on host communities (included as Attachment A). The report sums up the relationship well in a section that quotes Mr. Fowler:

The local LIUNA representative, whose father was a union member who worked at Xcel Energy plants for nearly 30 years, spoke from personal experience describing the benefits that he, his family, and his community have experienced from the high-quality jobs and the tax base that utility-owned power plants provide. “Xcel Energy built up this whole area,” he stated. “That’s how I grew up. I had a very good childhood because we didn’t necessarily want for anything. I had healthcare. I never had to worry about that. Xcel itself has sustained thousands of households in our communities.”⁴

The benefits of the high-quality plant operations and maintenance jobs supported by the Monticello facility cannot be viewed solely in terms of the number of jobs and paychecks. For example, we estimate that construction contractors working at the plant contribute nearly \$1 million annually to Building Trades health plans that provide care for hundreds of area families and help to fund the operation of local hospitals and clinics. These contractors also contribute additional millions of dollars to union retirement funds annually, allowing Building Trades members to enjoy retirement before their bodies give out from years of work in the field.

Further, Building Trades jobs are just part of the picture. The Monticello plant also supports an additional 200 union operations jobs and accounts for roughly 50% of the tax base for the city of Monticello. Direct employees of the Monticello plant earn an average wage of \$108,991 in a county where the median *household* income is \$24,017 lower at \$84,974.⁵

These benefits of direct employment at the Monticello plant overwhelmingly accrue to local communities because they support families that live in Monticello and surrounding communities. The wages earned at the Monticello plant are reinvested in the local economy, fueling additional economic opportunity and generating additional local tax revenues. Roughly a third of the Monticello plant’s union workforce lives in Wright County,⁶ and many more reside in neighboring counties. Local spending and investment associated with these jobs, wages, and benefits in turn have economic multiplier effects that have been well documented by North Star Policy Institute and others.⁷

⁴ Partridge, Audrey and Brady Steigauf. “Minnesota’s Power Plant Communities: An Uncertain Future.” Center for Energy and Environment. February 2020.

⁵ US Census: <https://www.census.gov/quickfacts/fact/table/wrightcountyminnesota/PST045219>

⁶ Partridge and Steigauf, p. 64

⁷ Hatt, Katie and Lucas Franco. “Catching the Wind: The Impact of Local vs. Non-local Hiring Practices on Construction of Minnesota Wind Farms.” North Star Policy Institute. June 2018.

These significant socioeconomic benefits would be jeopardized if the licenses were not extended and the plant were forced to close. A 10-year extension to the life of the Monticello nuclear plant will provide more time for current workers to transition into new jobs and more time for Monticello and Wright County to compensate for significant tax revenue losses. Further, the fate of the Monticello plant cannot be considered in a vacuum. As the Commission contemplates Xcel's proposed extension of the Monticello nuclear plant, Xcel is proposing early retirement of its neighboring Sherco coal-fired power plants by 2030. Those coal plants employ roughly 300 workers, provide three-quarters of the tax base for Becker and generate nearly a sixth of tax receipts for Sherburne County.

Like the Monticello plant, the Sherco facilities have been a major source of employment for workers represented by the Monticello Labor Coalition. The simultaneous loss of all these plants could be devastating both to our members and to the regional economy. Simultaneous retirement of these facilities could make it difficult, if not impossible, for Xcel to mitigate the impact of transition by redeploying workforce from the Sherco plants to Monticello. Extending the Monticello plant's operating license, on the other hand, could cushion the blow of Sherco plant retirements by providing a continuing source of work for both Xcel's operations workforce and area trades workers.

II. The Monticello Extension is Essential to Ensure Xcel's Ability to Provide Highly Reliable, Cost-Effective Electric Service and Achieve its Carbon Reduction Goals

The Monticello Labor Coalition comes before the Commission in this case not only out of concern over potentially losing a resource that supports thousands of high-paying jobs essential to those who work there, their families and their local communities. The Coalition also views Xcel's proposed Monticello extension through the lens of reliability – as workers who take pride in delivering highly reliable, carbon-free power to Minnesotans, and as Xcel customers who count on the reliability enabled by the Monticello plant. Coalition members are likewise mindful of the compelling need to reduce carbon emissions to address global climate change and the Monticello plant's valuable role in that effort.

It is inescapable that Xcel's ability to deliver reliable, lower-carbon electric power to its customers over the IRP's planning period and beyond depends on the extension of the Monticello plant. To achieve its 80% carbon emission reduction goal by 2030, Xcel will have to retire its remaining coal-fired generation before 2030.⁸ Those retirements represent 2400 megawatts of baseload generation that will no longer be available at the

<https://northstarpolicy.org/catching-the-wind-the-impact-of-local-vs-non-local-hiring-practices-on-construction-of-minnesota-wind-farms>

⁸ Xcel IRP, Appendix K, p.1.

end of this decade.⁹ Against that backdrop, Xcel's system can ill-afford to lose Monticello's 671 megawatts of highly reliable carbon-free baseload generation.

As Xcel observed in its initial filing, "carbon-free nuclear generation has been a cornerstone of [its] generation fleet for nearly fifty years, and its continued role on [Xcel's] system is critical to ensuring that [they] continue to make progress in reducing [their] carbon emissions."¹⁰ Currently, the Monticello and Prairie Island nuclear plants provide around 1,700 MW of baseload capacity, which is over half of Xcel's existing carbon-free generation and over 30% of Xcel's total generation.¹¹ As Deputy Commissioner Ranade noted in his initial comments, Monticello alone provides "nearly a quarter of carbon-free electricity in the state of Minnesota."¹² Not surprisingly, Xcel was unequivocal in asserting that it cannot reliably and economically achieve its carbon-reduction goals without Monticello's nuclear generation on its system. As Xcel stated:

Absent a Monticello operating extension, based on the reliability needs of the system, any suitable replacement resource would add carbon to our portfolio. We simply could not maintain our system reliably, or affordably, given the massive renewable additions and corresponding transmission infrastructure that would be required to replace our Monticello nuclear plant, if it were even possible by 2030, given MISO's current transmission expansion issues.¹³

As a 671 MW facility, the Monticello plant obviously provides a substantial portion of Xcel's electric generation, which will be particularly important as Xcel retires its remaining coal plants. Equally important is the fact that the Monticello plant runs at a capacity factor of over 96%,¹⁴ which means it is almost always available to reliably ensure the availability of electricity around the clock for Xcel's customers. Xcel's Baseload Study indicates that its system will need a significant amount of firm dispatchable generation to ensure around-the-clock reliability, at least in the near and mid-term horizon, as it transitions to even more intermittent renewable resources.¹⁵

As the Commission knows, the MISO interconnection queue is highly congested. Therefore, whether Xcel could add enough renewable generation to its system to replace Monticello is highly questionable. And even if replacing Monticello with carbon-free

⁹ Xcel IRP, Executive Summary, p. 8.

¹⁰ Xcel IRP, Appendix K, p. 1.

¹¹ Xcel IRP, Chapter 3, p. 57 and Appendix K, pp. 1-2

¹² Comments of Deputy Commissioner, Minnesota Department of Commerce, Division of Energy Resources (Feb. 11, 2021) ("Deputy Commissioner Comments"), p. 1.

¹³ Xcel IRP, Chapter 1, p. 10.

¹⁴ Xcel IRP, Appendix K, p. 5.

alternatives before 2040 is theoretically possible, the cost would be enormous. As Xcel points out, replacing Monticello would require over 1,000 MW of additional wind and nearly 3,000 MW of additional solar along with \$400 million in additional transmission costs. This would significantly increase system costs and could negatively impact affordability. In fact, there is no plausible or cost-effective carbon-free alternative to extending the Monticello plant.

Any feasible alternative to extending Monticello would not only increase carbon emissions; it would eliminate an important source of fuel diversity on Xcel's system and, thereby, reduce the resilience and reliability of that system. Unlike renewable alternatives, the Monticello plant is not a variable resource subject to time-of-day, weather-related and seasonal variations. Moreover, unlike natural gas generation, the Monticello facility is not subject to seasonal fuel supply limitations, natural gas price spikes or pipeline interruptions like we saw in this year's February Polar Vortex.

In fact, Xcel's nuclear fleet operated at 100% capacity during the 2019 Polar Vortex in the upper Midwest without any corresponding increase in its operational cost, and it has consistently operated at or near full capacity during recent summer peaks.¹⁶ While natural gas prices tend to spike during a Polar Vortex or summer peaking event, a nuclear plant's fuel and production costs generally will not. As Xcel correctly observed, its nuclear fleet "provides a hedge against not only gas price volatility, but also the uncertainty of technological development, future renewable pricing and the future of solar capacity values."¹⁷ It also provides a hedge against increasing weather volatility that can cause major spikes in demand while simultaneously compromising supply from gas and other types of generation facilities.

No existing resource, carbon-emitting or not, can provide these critical reliability and economic attributes associated with the Monticello plant. It might be theoretically possible to replace Monticello with renewable and natural gas resources. But as Commissioner Ranade noted, "there are significant uncertainties associated with these replacements, namely lifecycle greenhouse gas emissions for natural gas and the feasibility of significant transmission construction required to connect utility scale renewable energy to the grid."¹⁸ And no feasible replacement portfolio can adequately compensate for losing the fuel diversity and resulting resiliency or stability that Monticello provides. Moreover, as Xcel noted, "Monticello contributes to the affordability of [its] plan by leveraging an existing, high-performing asset on [its] system."¹⁹

¹⁶ Xcel IRP, Appendix K, p. 3.

¹⁷ Xcel IRP, Appendix K, p. 3.

¹⁸ Deputy Commissioner Comments, p. 1

¹⁹ Xcel IRP, Ch. 4, p. 74.

The Department of Commerce Staff comments refer to the extension of the Monticello Plant as a “high-risk plan.” However, their comments fail to explain the basis for that characterization. Moreover, that characterization fail to recognize: (1) Xcel’s recent success in reducing the operational costs of its nuclear facilities as reflected in the Department of Commerce Consultant’s Report;²⁰ or (2) the additional value the Monticello plant can potentially provide through more flexible operation of its output or by leveraging its output to produce green hydrogen – two potential value streams Xcel is currently piloting.²¹

Failing to extend the Monticello Plant would pose a far greater risk than anything the Department Staff identified in their critique of the proposed extension. Accordingly, the Monticello Labor Coalition agrees with Deputy Commissioner Ranade that the significant uncertainties associated with theoretical alternatives to Monticello support its extension. The Deputy Commissioner’s comments specifically identify those uncertainties while also explaining why they are problematic and support the Monticello extension. Those uncertainties associated with alternatives to extending Monticello represent substantial risk.

In effect, extending the Monticello plant is a critical hedge against risks to reliability, carbon reduction and affordability. Declining to approve the proposed extension as part of Xcel’s IRP would pose an unacceptably high risk to Minnesota energy consumers and the public interest generally in at least the following ways:

1. ***It would jeopardize the State’s energy decarbonization efforts*** by creating the need for incrementally more carbon-emitting generation resources to replace the substantial baseload contribution of the Monticello plant with its plus 95% capacity factor.
2. ***It would jeopardize the resiliency/reliability of Xcel’s system and expose Xcel customers to more economic risk*** by eliminating a major source of highly reliable baseload generation and important fuel diversity. Monticello’s around-the-clock reliability and contribution to fuel diversity helps insulate Xcel’s system and customers from extreme weather events, fuel-supply disruptions, and gas commodity price spikes.

²⁰ Xcel IRP, Appendix K, pp. 5-6. (e.g., Monticello’s production costs, which consist of fuel plus O&M have declined by over 26% between 2015 and 2018, falling from \$39.11 per MWh to \$30.91). *See also*, Final Report to the Department of Commerce Energy Division of the State of Minnesota, Independent Investigation of Cost Overruns and Cost Estimates for Xcel Energy’s Monticello and Prairie Island Nuclear Power Plants, Global Energy & Water Consulting, LLC (Dec. 15, 2020) (“DOC Nuclear Report”).

²¹ Xcel IRP, Appendix K, pp. 3-4, Appendix F6.

3. ***It would jeopardize Xcel's ability to control costs and ensure affordable service over time.*** Xcel's modeling indicates that extending Monticello is least cost and that all the least-cost scenarios include extensions of Prairie Island and Monticello.²² Compared to the base case, Xcel's analysis shows that the Preferred Plan (which includes the Monticello extension) yields \$203 million of benefits on a present value revenue requirements (PVRR) basis and \$461 million of benefits on a present value societal costs (PVSC) basis. In contrast, according to Xcel, replacing Monticello would require substantial new investments in additional renewable generation, load-supporting resources and at least \$400 million in additional transmission investment.
4. ***It would jeopardize hundreds of family-supporting jobs as well as the enormous local and statewide economic and social benefits that flow from the operation of the Monticello Plant.*** The Monticello Plant provides a source of economic security for the families of those employed at the plant while also generating economic stimulus and tax revenues for local communities. The proposed extension of the Monticello license would extend those benefits and help to mitigate the potentially devastating local impact of coal unit retirements.

CONCLUSION

The Monticello plant provides essential carbon-free reliability and stability to Xcel's system. It also produces enormous socioeconomic benefits for Minnesota, including hundreds of family-supporting jobs, investments in health care, retirement security, and unique workforce development opportunities through registered apprenticeship programs. Any one of these benefits makes a persuasive case for Xcel's proposed 10-year extension. In combination, the case for extension is compelling. On the flip side, rejecting Xcel's proposed extension of the Monticello facility would pose imprudent and unacceptable risks to the public interest.

Accordingly, the Monticello Labor Coalition joins with Deputy Commissioner Ranade in recommending that the Commission approve the Monticello plant extension as part of Xcel's IRP.

²² Xcel IRP, Appendix K, p. 9.