MINNESOTA’S POWER PLANT COMMUNITIES: AN UNCERTAIN FUTURE

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Center for Energy and Environment
CEE’s Mission and Values

To discover and deploy the most effective energy solutions that strengthen the economy and improve the environment.

WE STAND FOR

- ✔ Collaboration
- ✔ Community
- ✔ Science
- ✔ Expertise
- ✔ Integrity
- ✔ Equity
Agenda

• About the Study
• The Power Plants and Communities
• Key Themes
• Findings and Conclusions
• Panel Discussion with Community Representatives
About the Study
Study funders

- Just Transition Fund
- Coalition of Utility Cities
- Initiative Foundation
- Southern Minnesota Initiative Foundation
- West Central Initiative Fund
- Xcel Energy
- Center for Energy and Environment
Host Community Study Context

- Over half of Minnesota’s electric generation is eligible for retirement in the next 20 years.

- Changing economics, aging infrastructure, and environmental policy are driving a decline in centralized power plants – especially coal-fired plants.

- Minnesota’s host communities and power plant workers face significant uncertainty around the state’s energy transition.
Two Separate Studies

• CEE’s Minnesota Host Community Study
  • Planned and scoped with community representatives
  • Initially to be qualitative (interviews and survey)
  • Evolved based on community needs to include some quantitative data as well

• University of Colorado at Boulder Minnesota Utility Economic Impact Study
  • Used a net analysis to compare different retirement scenarios to currently approved resource plan retirement dates.
  • Shows direct and indirect dollar impact of plant retirement scenarios for state and county
  • Shows direct and indirect job impact of plant retirement scenarios for state and county

https://www.mncee.org/resources/projects/power-plant-transition-in-host-communities/
CEE’s Minnesota Host Community Study - Methodology

- Interviewed over 50 people
- Surveyed over 50 people (Appendix A-2)
- Collected data from communities, counties, utilities
- Reviewed key MN policies (Appendix B)
- Reviewed MN economic development and workforce programs (Appendix C)
- Researched national case studies (Appendix D)
CEE’s Minnesota Host Community Study - Research Questions

What are the direct and indirect economic impacts of power plant closures in Minnesota?

What are the social impacts of power plant closures in Minnesota?

How are communities and workers thinking about and planning for Minnesota’s energy transition?
The Power Plants and Communities
Power Plants Studied
Minnesota Host Communities

- City of Cohasset
- Becker
- City of Monticello
- Prairie Island Indian Community
- City of Red Wing
Minnesota Host Communities

- Cohasset
- Becker
- Monticello
- Prairie Island Indian Community
- Oak Park Heights
- Red Wing
### About the Communities

<table>
<thead>
<tr>
<th>Community</th>
<th>Community Population</th>
<th>County</th>
<th>County Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Becker, MN</td>
<td>4,800</td>
<td>Sherburne</td>
<td>94,600</td>
</tr>
<tr>
<td>Cohasset, MN</td>
<td>2,700</td>
<td>Itasca</td>
<td>45,200</td>
</tr>
<tr>
<td>Monticello, MN</td>
<td>13,600</td>
<td>Wright</td>
<td>134,286</td>
</tr>
<tr>
<td>Oak Park Heights, MN</td>
<td>4,900</td>
<td>Washington</td>
<td>256,348</td>
</tr>
<tr>
<td>Red Wing, MN</td>
<td>16,500</td>
<td>Goodhue</td>
<td>46,304</td>
</tr>
<tr>
<td>Prairie Island Indian Community</td>
<td>200*</td>
<td>Goodhue</td>
<td>46,304</td>
</tr>
</tbody>
</table>

*Approximately 200 tribal members live on the Prairie Island Indian Community reservation. There are approximately 1,000 members of the Prairie Island Indian Community in total.
# About the Power Plants

<table>
<thead>
<tr>
<th>Community</th>
<th>County</th>
<th>Power Plants</th>
<th>Utility Owner</th>
<th>Fuel</th>
<th>Year Built</th>
<th>Estimated Retirement</th>
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</thead>
<tbody>
<tr>
<td>Becker, MN</td>
<td>Sherburne</td>
<td>Sherburne County Generating Station 1, 2, 3</td>
<td>Xcel Energy</td>
<td>Coal</td>
<td>Mid-1970's,</td>
<td>2023*, 2026*, 2030 (unit respective)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1987</td>
<td></td>
</tr>
<tr>
<td>Cohasset, MN</td>
<td>Itasca</td>
<td>Boswell Energy Center 3, 4</td>
<td>Minnesota Power</td>
<td>Coal</td>
<td>1973, 1980</td>
<td>2035†, 2036† (unit respective)</td>
</tr>
<tr>
<td>Monticello, MN</td>
<td>Wright</td>
<td>Monticello Nuclear Generating Station</td>
<td>Xcel Energy</td>
<td>Nuclear</td>
<td>1971</td>
<td>2040</td>
</tr>
<tr>
<td>Oak Park Heights, MN</td>
<td>Washington</td>
<td>Allen S. King Plant</td>
<td>Xcel Energy</td>
<td>Coal</td>
<td>1968</td>
<td>2028</td>
</tr>
<tr>
<td>Red Wing, MN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prairie Island</td>
<td>Goodhue</td>
<td>Prairie Island Generating Station 1, 2</td>
<td>Xcel Energy</td>
<td>Nuclear</td>
<td>1973, 1974</td>
<td>2033, 2034 (unit respective)</td>
</tr>
<tr>
<td>Indian Community</td>
<td></td>
<td></td>
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</tbody>
</table>

*Indicates approved retirement date
†Indicates date of full depreciation (or accounting lifetime)
## Plant Contribution to Tax Base, %

<table>
<thead>
<tr>
<th>Community</th>
<th>Becker</th>
<th>Cohasset</th>
<th>Monticello</th>
<th>Oak Park Heights</th>
<th>Red Wing</th>
<th>Prairie Island Indian Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>75%</td>
<td>69%</td>
<td>56%</td>
<td>38%</td>
<td>54%</td>
<td>0</td>
</tr>
<tr>
<td>County</td>
<td>15%</td>
<td>13%</td>
<td>9%</td>
<td>&lt;1%</td>
<td>22%</td>
<td>0</td>
</tr>
<tr>
<td>School District</td>
<td>57%</td>
<td>19%</td>
<td>46%</td>
<td>5.3%</td>
<td>47%</td>
<td>0</td>
</tr>
</tbody>
</table>
Contributions to the State and Regions

• Local Government Aid
  • MN state policy that provides property tax relief
  • Host communities receive little to no LGA funding

• Fiscal Disparities – Metro and Iron Range
  • Program to share property taxes from commercial and industrial development with region
  • Currently the power plants are large contributors
## Average Jobs and Wages at Plants

<table>
<thead>
<tr>
<th>Power Plant</th>
<th>Number of Jobs</th>
<th>2018 Average Annual Base Wages per Power Plant</th>
<th>2014–2018 Minnesota Median Household Income (2018 Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sherburne County Generating Station</td>
<td>301</td>
<td>$88,556.39</td>
<td></td>
</tr>
<tr>
<td>Boswell Energy Center</td>
<td>170</td>
<td>$88,317.25</td>
<td></td>
</tr>
<tr>
<td>Monticello Nuclear Generating Station</td>
<td>460</td>
<td>$108,990.86</td>
<td>$68,411</td>
</tr>
<tr>
<td>Allen S. King Generating Station</td>
<td>87</td>
<td>$92,830.97</td>
<td></td>
</tr>
<tr>
<td>Prairie Island Nuclear Generating Station</td>
<td>600</td>
<td>$109,023.41</td>
<td></td>
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Key Themes from the Interviews, Survey, and National Case Studies
Interviews
Few businesses could replace the tax revenue and jobs of a power plant.
Communities fear the cascading impacts of losing a plant.
Power plant employees are highly engaged citizens that contribute to the community.

Volunteer Image Credit: https://charity.lovetoknow.com/Examples_of_Volunteerism
Communities received benefits and hardships of hosting power plants.
Host communities are not antithetical to environmental concerns.
Community Survey
How do you feel about the future?

- Concerned: 53%
- Indifferent: 7%
- Unsure: 7%
- Optimistic: 33%
What does the power plant mean for your community?
What concerns would you have if the power plant were to close?
What vision do you have for your community’s future?
National Case Studies
National Case Studies

- Diablo Canyon Power Plant, California
- Maine Yankee Nuclear Plant, Maine
- Colstrip Coal Plant, Montana
- Centralia Coal Plant, Washington
National Case Studies

1. Collaboration and Coalitions Increase Odds of Success

2. Local Investments Can Help Offset Impacts of Plant Retirements

3. Certain Characteristics of a Plant Closure Create Extra Challenges
Findings and Conclusions
Findings and Conclusions

• Power plants play an important role in building vibrant, stable communities in Minnesota.

From left: Oak Park Heights, Red Wing
Findings and Conclusions

- Minnesota’s host communities are currently pursuing a range of strategies to plan and prepare for power plant closures.

- None of those strategies are expected to fully offset the economic impact of a plant closure, but they may help mitigate the negative effects.
Findings and Conclusions

• Planning and preparing for community transitions related to power plant closures requires a long time horizon.

Image Credit: https://harvardmagazine.com/2019/07/patient-capital-investing
Findings and Conclusions

• Uncertainty or lack of information around the timing of a plant closure poses additional challenges for communities and workers.

Findings and Conclusions, continued

- Workers, labor unions, and communities have many shared interests, concerns, and considerations. They may benefit from collaboration and coordination.

Collaboration Image Credit: https://www.nature.com/articles/d41586-018-06037-5
Findings and Conclusions, continued

• Power plant jobs are uniquely high in quality and hard to replace.

• Not all Minnesota host communities receive benefits from the power plant they host.
Panel Discussion
Panelists

• Greg Pruszinske, Becker City Administrator
• Max Peters, Cohasset Director of Operations and Finance Manager
• Jeff O’Neill, Monticello City Administrator
• Mayor Mary McComber, Oak Park Heights
• Heather Westra, Prairie Island Indian Community Consultant
• Mayor Sean Dowse, Red Wing
Thank you!