Nemadji Trail Energy Center

Tomorrow’s Energy. Together.

Minnesota Power, Dairyland Power Cooperative and Basin Electric Power Cooperative are building a state-of-the-art natural gas plant in Superior, Wisconsin, to ensure the delivery of safe, reliable and affordable energy to our customers and members. The Nemadji Trail Energy Center is a connection to a clean energy future, serving the electricity this region needs while enabling the integration of renewable energy resources.

Project Benefits

- Reduces carbon, supports renewables and ensures reliability
- One of the largest private investments in Douglas County
- Creates 350 jobs during peak construction and up to 25 full-time permanent jobs
- Approximately $1 million in local tax benefit, annually

Why was this location selected?

Key reasons the Superior location is the best site for the Nemadji Trail Energy Center:

- Neighboring existing industries
- Access to existing gas and grid infrastructure
- Affirmed by the extensive regulatory review process
- Support regional grid reliability

NemadjiTrailEnergyCenter.com
Energy in Action

The facility will generate electricity to maintain reliable service when renewable resources—like solar and wind—are not available.

1. **Combustion Energy**
   A supply line carries natural gas fuel to the facility. Inside, natural gas is used to spin a turbine and produce electricity.

2. **Steam Energy**
   The facility captures heat and uses it to create steam that powers a second turbine, generating more electricity.

3. **Delivering Electricity**
   Energy from both turbines flow to a transformer and is delivered via the electric grid to power homes and businesses.

Our Community

Many of us call this area home. We work here, live here and enjoy the local recreation. Maintaining the surrounding environment for our community is a cornerstone of our project. Over the past several years, we have analyzed and reviewed our facility plans to better understand its potential impacts and how we can best address, modify and mitigate them.

- **Facility Water Usage**
  The facility will use an efficient air-cooled heat exchanger that requires much less water usage than other technologies. The facility’s water needs will be met by the existing municipal water system. No new wells or surface water withdrawals will be needed.

- **Air Quality**
  The Nemadji Trail Energy Center will lead to emission reductions as this efficient plant will displace higher-emitting fossil fuel plants and allow more renewable energy sources because of its flexibility. The facility will not cause or contribute to significant adverse ambient air quality impacts. The facility has obtained all regulatory emission permits and approvals. The Nemadji Trail Energy Center will be built with state-of-the-art emission control equipment.

- **Noise**
  Noise levels from the facility to the adjacent neighborhood are expected to be between 40 and 55 decibels. This is significantly quieter than the landfill that was recently approved by the Superior City Council.

- **Lighting**
  The facility will have exterior lighting for safety and security. All outdoor light fixtures will be fully shielded and directed downward to minimize light visible from adjacent properties. The trees being added to the property will also help minimize light visibility.

- **Wetlands**
  The Nemadji Trail Energy Center has been designed to minimize its impact on wetland and water resources. The construction of the Nemadji Trail Energy Center will not result in a loss of wetlands in Wisconsin due to a mitigation plan that would replace any impacted wetlands with additional wetland resources.

Project Timeline

- **2017-2024**
  Regulatory Review and Approval
  - USDA
  - PSC
  - MnDOT
  - USACE

- **2024-2027**
  Construction and Commissioning
  - Bid Process
  - Contract Negotiation
  - Letting (Award Contract)
  - Pre-Construction Activities (Surveying, Vegetation Clearing, Site Grading)
  - Construction
  - Testing and Commissioning

- **2028**
  Operational and Delivering Energy to the Grid

*Pending regulatory approval.