



WOLVERINE POWER'S ROGERS CITY COAL PLANT: TOUGH ON CHECKBOOKS, HARD ON ENVIRONMENT

Wolverine Power Supply Cooperative's Rogers City coal plant would hit members and ratepayers hard in their pocketbooks and harm their health.

COSTLY AND UNNECESSARY

The costs of this plant will put a considerable financial burden on Wolverine's 200,000 co-op members. 26% of those members have an income below the poverty line, and all members will be burdened with the \$2.43 billion cost of constructing the plant. This could lead to 60% higher rates for co-op members, who will pay for a plant that is unnecessary for meeting members' electricity demand.

There Is No Demand for the Power

- There have been declining electricity sales in Michigan and in Wolverine's territory. According to Wolverine's Board, the cooperative's peak electrical demand declined 15% in 2009.
- Wolverine ownership interest in various plants is sufficient to meet current and future demand.
 - In December, 2010, Wolverine purchased a 6.65 percent participation interest in the output of the Ohio Valley Electric Corporation, approximately 150 MW.
 - In early 2010, Wolverine purchased the 340 MW Sumpter Plant.
 - In addition, Wolverine already owned five peaking plants consisting of approximately 225 MW, and a 15 MW interest in Campbell 3.
- In short, Wolverine already owns generating facilities totaling more than 700 MW of power. For a co-op that only needs approximately 500 MW of power, it is unclear why the members should be hit with the cost of constructing an additional 600 MW of unnecessary power.

Construction of the Plant Will Cost \$2.43 billion

- Wolverine severely underestimated the capital cost of the plant when, in 2007, it stated the cost to be \$1.32 billion. The Michigan Public Service Commission, in its 2009 report to MDEQ, noted that Wolverine underestimated its costs by more than 30%.
- The PSC pointed out that Wolverine's own engineering company, Burns and Roe, estimated the capital costs of the plant to be nearly \$2 billion, \$1.9446 billion to be exact.
- The Michigan Public Service Commission predicted that Wolverine's members' electric bills would increase on average \$70 per month if the Rogers City plant were constructed.
- The federal Energy Information Agency noted that capital cost estimates for coal and nuclear power plants are 25 to 37 percent above those in 2009, when the PSC report was written.
- This translates to capital costs of at least \$2.43 billion to build the plant, almost double Wolverine's underestimate.

UNHEALTHY AND LACKING BEST CONTROL TECHNOLOGY

Rogers City citizens do not need a coal-fired power plant located in their community. The Rogers City plant is proposed to be 600 megawatts, many times larger than what is needed to meet Wolverine's current and future demand. The power will likely be sold on the market to meet out-of-state electric needs. The citizens of Rogers City will bear the health and environmental burden of this plant. *The local impacts of this plant will include: respiratory disease, asthma attacks, heart attacks, chronic bronchitis, emergency room visits, and deaths from respiratory ailments.*

Existing coal plants in Michigan already cause severe, negative health impacts.

- *Coal-fired Michigan plants* emit approximately 300,000 tons of sulfur dioxide (SO₂), 125,000 tons of nitrogen oxides (NO_x), 2,000 pounds of mercury, and 75 million tons of carbon dioxide (CO₂)
- CO₂ is a global warming pollutant.
- *Mercury* causes neurological damage to the unborn and young children.
- SO₂ and NO_x cause severe respiratory ailments and heart disease.

The Wolverine plant would be more polluting than other types of coal plants.

- Uncontrolled "circulating fluidized bed" boilers ("CFBs"), which Wolverine would use for its plant, are higher in nitrogen oxide (NO_x) emissions than traditional controlled coal-fired boilers.
- CFBs may be less polluting than uncontrolled pulverized coal boilers ("PCs").
- But all new PC plants are built with pollution control devices.
- Another technology frequently proposed for coal-fired electricity generation is Integrated Gasification Combined Cycle ("IGCC").
- IGCC emits 45% less NO_x pollution than CFBs.
- *So uncontrolled CFBs are not lower-emitting when compared to PC plants with pollution controls, or to IGCC plants. The Wolverine proposal does not use legally required "Best Available Control Technology."*

CFBs emit excessive global warming pollutants.

CFBs also have a disproportionate impact on global warming because N₂O is a potent greenhouse gas.

CFBs emit approximately 15% more global warming pollution than PC plants.

IGCC can be built with technology to capture and sequester carbon dioxide (the main global warming pollutant) and consequently have virtually no global warming impact. CFBs currently cannot capture NO_x or CO₂.

Clean Energy Now coalition includes Sierra Club Michigan Chapter, Michigan Environmental Council, the Natural Resources Defense Council, Clean Water Action, Ecology Center, Environmental Law and Policy Center, Great Lakes Environmental Law Center, MidlandCARES, Michigan Energy Alternatives Project, Citizens for Environmental Inquiry, Progress Michigan, and Michigan Land Use Institute.