

CNF-1004

EXHIBIT #  
WUSKWATIM GENERATION  
& TRANSMISSION PROJECT

B.G.H.

CLEAN ENVIRONMENT COMMISSION

## Wuskwatim Generating Project

### Two Energy Paths

Timothy J. Rudnicki, Esq.

MB CEC/ March 16, 2004

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## Feasibility Linchpin

- Proponents
  - US export market
- Justification Need For And Alternative To
  - Business as usual
    - Hydro displace fossil fuel
- Ignores a new reality

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## Bridge the Cross Border Information Gaps

- Midwest
- Individual states
  - Minnesota
    - No new information from proponents
    - One of largest customers (Xcel Energy)
  - Abundant wind energy source
    - Local
    - Environmentally benign
    - Potential exporter

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## Business as Usual Scenario

- Portfolio = standard energy sources
  - Natural gas
  - Existing coal plants
    - Up to 71% capacity factor
    - Fossil fuels dominate

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## Information Sources Include

- Repowering the Midwest
  - Environmental Law & Policy Center
    - Chicago, Illinois
    - Web: [www.elpc.org](http://www.elpc.org)
  - References (100+) from American Council for an Energy Efficient Economy to Tim Woolf

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## ... Business as Usual.

- More fossil fuels, more carbon dioxide
  - 2000
    - 557 million tons
  - 2020
    - 726 million tons
  - Hydro?
    - Mature v. new, local renewables
    - Laws & regulations to protect rivers
    - No emission allowances/ CO2 cap & trade

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## ... Business as Usual

- What about more efficient use of electricity?
  - Potential efficiency savings in Midwest export market
    - 290 one billion kWh
      - 100 coal plants
        - » 500 MW each
  - Wind as an option, not fossil fuel
    - Hydro could displace local renewable

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## Alternative Energy Scenario – Repowering (or something similar)

- Social, Environmental & Economic Benefits
  - Efficiency & Local renewable energy sources
    - 10 Midwest states, including Minnesota
      - Increase annual economic output
        - » 2010 at \$11 billion (US)
        - » 2020 at \$19.4 billion (US)
      - Net job growth
        - » 2010 at 120,000
        - » 2020 at 209,000

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## ... Repower

- Energy efficiency
- New clean renewables (wind, biomass, solar, PV)
- Efficient Nat Gas, e.g., CHP
- Retire select coal plants
- Apply sustainable development strategies
- Minnesota
  - Wind
    - 75,000 MW
    - 8 times demand
  - "...provide Minnesotans with adequate electricity from in-state renewable energy sources for the long term and export to adjacent states."
  - Inventory: social, environmental & economic benefits & burdens – energy sources for electricity sold in Minnesota

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### Continued move toward local renewables

- See, e.g., Certificate of Need process
  - Refurbish or build
    - Evaluate
      - Accuracy of demand
      - Relationship to energy report
      - Efficiency
      - Conservation improvement
  - Renewables
  - Citing & constructing in Minnesota

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### Renewable Energy Objective

- Hydro
  - Less than 60 MW
  - Externalized costs
    - Social
    - Environmental
  - Benefits = heightened scrutiny

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### Legal Matter Before Minnesota Court of Appeals

- \$1 billion (US) power purchase agreement between MH and Xcel Energy/ August 2002
- Issues
  - Energy source selection and approval process

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### Minnesota - New Awareness about Energy Sources

- Minnesota Energy Planning Report 2001
  - Many issues raised about hydro
  - Description of effects from hydro
- Assessment of local renewable energy sources
  - Efficiency
  - Local renewables

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### Kyoto

- Manitoba's leadership role
- Efforts, effective
  - Province
  - Other markets
- Benefits and risks from business as usual
- Far reaching implications
  - MB CEC setting precedent for future reviews
  - Environmental & energy future for North Am
  - Current and future generations

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