



Minnesota's Renewable Electricity Standard

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Overview

- **Overview of Policy Context**
- **Renewable Electricity Standard**
 - **Details of MN RES**
 - **Key components of legislative deal**
- **Biggest Barrier to Implementation**



Better, Cleaner, More Secure



"We cannot, as a strategic plan for the future, just . . . experience the cost crisis, the environmental impacts, and the supply questions that flow from just embracing the status quo. We need a different and better energy future."



Policy Context

- **To provide Minnesotans with energy resources that are:**
 - **Reliable**
 - **Low cost**
 - **Environmentally superior**



25% x '25: All Energy



To have 25% of all the energy we use come from renewable resources by 2025

- Early endorser of National 25x'25
- Led MGA to endorse in 2006
- State law in 2007, as part of Governor's Next Generation Energy Initiative

Why 25x'25?

To reduce the environmental and climate impacts of our energy choices

To further unhinge our state's economy from unstable fuel supplies

To benefit and stabilize Minnesota's rural economies

To provide alternatives to Minnesota consumers





MN Renewable Electricity Standard

- **25% by 2025 for most utilities**
- **30% by 2020 for Xcel Energy**
- **Aggressive “ramp rates”**
 - **From a starting point of about 3.5% for most utilities in 2006 (8% for Xcel)**
 - **7% by 2010 (15%)**
 - **12% by 2012 (18%)**
 - **17% by 2016 (25%)**
- **Eligible Technologies: solar; wind; hydro with a capacity of less than 100 megawatts; hydrogen or biomass (includes waste to energy)**



MN Renewable Electricity Standard

- **Objective until 2010: “good faith effort”**
- **Imposed on electric utilities with wholesale responsibilities**
- **Financial penalties based on estimated cost of compliance**
- **Potentially the most aggressive in the nation**
 - **Most new renewable generation required as a percentage of statewide sales (3rd in gross amount of new renewable behind Calif. & Illinois)**



MN Renewable Electricity Standard

Key parts of the legislative deal:

- **Protections for Minnesota ratepayers**
 - “Offramps” for significant rate & reliability impacts
 - Allows the MN Public Utilities Commission to modify or suspend the RES for a particular utility
- **Encourages local ownership of energy production**
 - Must take reasonable steps to find locally-owned projects
 - MPUC to maximize local benefits to Minnesota citizens
- **Renewable Energy Credits allowed**
 - Currently must be from Illinois, Iowa, Manitoba, Minnesota, Montana, North Dakota, South Dakota, and Wisconsin



Biggest Barrier is Transmission

- **“I have 28,000 MW of interconnection requests for 2,000 MW of capacity”**
 - Clair Moeller, VP, St. Paul Operations for Midwest ISO
- **Legislature ordered two studies**
 - **RES Transmission Study**
 - What high voltage transmission infrastructure is needed?
 - **Dispersed Generation Potential Study**
 - How to use the existing electric grid most efficiently?



Transmission for Renewables

Studies are interlocked

- **DG Study must incorporate RES transmission Study results and vice versa**
- **MN Utilities and MISO will do analytical work for both studies**
- **An OES-appointed Technical Review Committee (TRC) will review methods and results for both studies**

Renewable Energy Zones & Transmission Corridors

- **Build on studies, and develop least delivered cost infrastructure plan**
- **Get it approved and “wires in the air”**

Thank you!

Questions & Contact info

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