

State Policies Affecting Minnesota's Power Sector – Renewable and Efficiency Standards

1. Mn Renewable Energy Standard
§216B.1691 - 25% by 2025 – Xcel
has higher goals
2. Next Gen Energy Act of 2007
- Statewide 1.5% Annual Energy
Savings Goal

State Policies Cont'd – Statutory Carbon Emission Ban - §216H.03

- Bans new carbon emissions in absence of GHG reduction plan with certain exceptions and exclusions:
 - Statute excludes natural gas plants; peaking, contingent or emergency backup plants; simple cycle or combined cycle turbine technology meeting certain conditions

Carbon Emission Ban Cont'd - §216H.03

- Statute has several exceptions to the ban:
 - Facilities that offset new carbon emissions
 - Large facilities that the PUC determines:
 - Are essential to assure long term reliability of MN electric system
 - Allow electric service for increased industrial demand, or
 - Avoid placing a substantial financial burden on MN ratepayers.
- Certain facilities under review before Apr 1, 2007

State Policies Cont'd –Carbon Emission Ban - §216H.03

- Carbon ban may impact utilities trying to replace old plants
- New plant not expected soon
- Thus, less important in near term unless existing plants are closed and utilities cannot meet one of the statutory exceptions
- May be important in long run if plants cannot meet statutory exceptions

State Policies Cont'd – Nuclear Moratorium

- New Nuclear Moratorium - §216B.243
 - Not a significant issue for planning purposes at this time
 - New plant not likely during modeling period
 - Utilities can buy nuclear power from existing plants in MN or adjacent states

State Policies - Electricity Growth Rate

- MN Projected Electricity Growth Rate – 1.0% to 1.1% annually (from actual 2010 sales) reflects both MN's RES and 1.5% energy savings goal
 - MN DSM modeling reflects actual utility data and projections
 - EPA modeling should reflect MN data as closely as possible; current DSM assumptions are reasonable
 - Several modeling iterations will be necessary to evaluate scenarios

State Policies - Impact of Renewable Energy (RE) on Modeling Assumptions

- Utility needs for energy, capacity, or both will have a major effect on the need for RE
 - Utilities needing energy (not capacity) will have greater need for RE
 - Modeling should reflect a range of actions that can be taken to meet these needs
 - Modeling should also reflect other market variables (e.g. model different natural gas price assumptions)