

Shifting Winds: Structural changes to the business of Windsource®

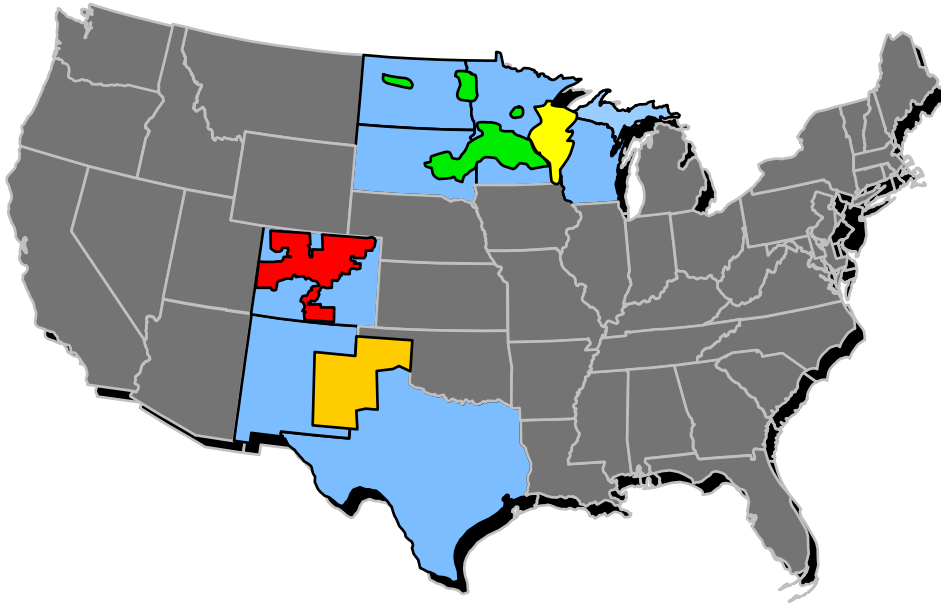
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Renewable Energy Markets

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About us



*Xcel Energy
by the numbers*

8 States

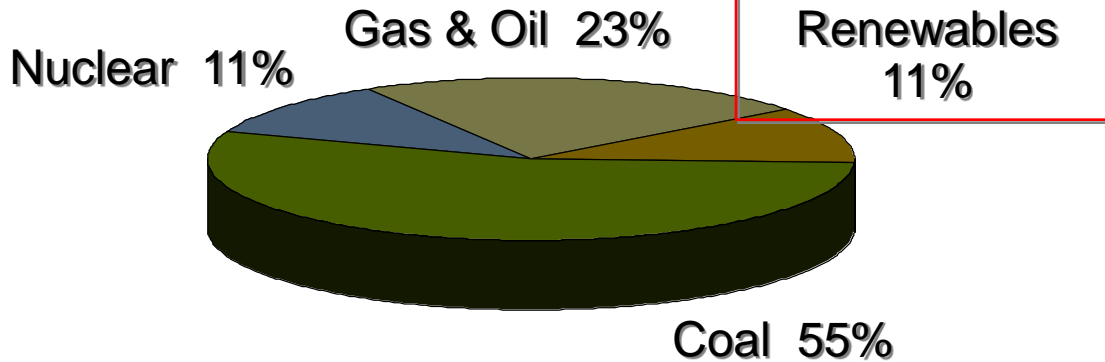
Customers

**3.4 million electricity
1.9 million natural gas**

**Revenue
>\$9 Billion**

About us

2008 Energy Supply



***Xcel Energy
by the numbers***
**3700+ MW of
renewable resources**
#1 in Wind
#4 in Solar

Windsource

Nation's most popular voluntary green power program

Colorado (1998): Over 45,000 customers

New Mexico (1999): Over 1,200 customers

Minnesota (2003): Over 24,000 customers

Wisconsin (2009): ~350 customers

Landscape: late 90's

- **Marketplace:** Isolated, but vocal customer demand for wind energy
- **Business:** Reluctance to risk shareholder dollars on “unproven” wind technology
- **Compromise:** Windsource



Windsource structure: 1998

- **Supply:** Ponnequin
 - *First commercial wind farm in Colorado*
- **Rate:** \$2.50 per 100 kWh block
- **Message:** Support wind, buy a block



Windsource structure: v1.5

Costs of supplying the wind energy

Peetz PPA
Ponnequin PPA
Ponnequin Revenue Requirement

- *Stable and predictable*

(less)

calculated capacity credit

A calculation of the value that non-Windsource customers received due to having Ponnequin and Peetz on the system

- *Variable due to fuel cost changes*
- *As we added RPS wind, the value decreased*



Landscape: mid 00's

- **Marketplace**

- Amendment 37 creates 20x20 renewable portfolio standard, including a solar set aside and a customer-sited solar set aside
- Increased customer demand, particularly on the business side

- **Business:** Shift to aggressively add renewables in anticipation of steep RES mandates



Landscape: mid 00's

- **Challenge**

- Designated Windsource assets were out of capacity

- **Option 1:** Add another wind farm to the Windsource portfolio

- Continued complexity in terms of customer rates and portfolio management
- Internal competition for the “good” wind projects
 - *With 1235 MW of wind online, how do you choose whether general ratepayers or Windsource customers receive the less expensive wind?*



The portfolio approach v2.0: program supply

- **Key tenants**

- Shift from a facility-based supply system to a REC-based system
- Manage one single renewable resource portfolio
- Windsource customers RECs come from not only wind, but now also solar facilities

- **Benefits**

- Insulates Windsource from the risk of failure of specific assets
- Enables customers to support “new” renewable technologies
- Creates a virtually unlimited supply of renewable energy for Windsource customers
- Creates a more cost-effective approach to adding renewables



The portfolio approach: program pricing

- **Renewable Energy Standard Adjustment (RESA)**
 - Xcel Energy's mechanism to recover costs related to Amendment 37
 - Capped legislatively at 2% of customer bills
 - Windsource premiums are now added to the RESA, freeing up room under the cap
 - Five-year average cost of adding renewables
- **Benefits**
 - Creates a forward-looking mechanism whereby Windsource dollars are used to fund "new" renewables

Key benefits

- Ability to meet customer fluctuating demand with reduced risk
- Reduce balance challenges between supply and demand
- Eliminate competition between Windsource participants and non-participating customers for renewable energy
- Reduce volatility and complexity in pricing, administration, and accounting





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