



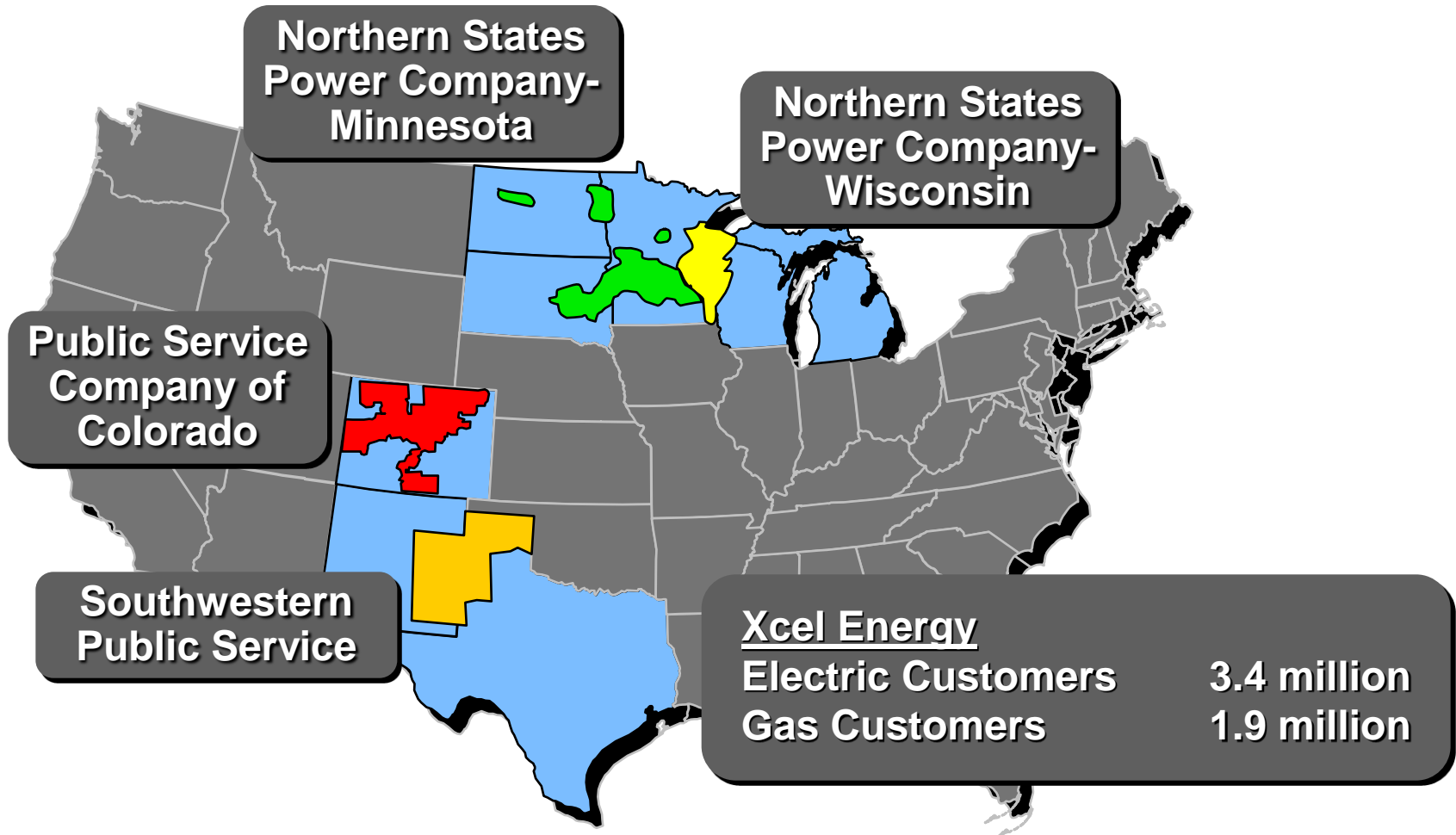
Evolving expectations of utility green power programs

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Xcel Energy

Xcel Energy service territory



Wisconsin

- Program size: 6,000 MWh, 625 residential, 30 business
- Program supply
 - ◆ Divided out of the NSP-MN, NSP-WI interchange agreement
 - ◆ 15% of the RECs generated on our NSP system
- Price: \$1.15 per block
- Key customers
 - ◆ Luther Midelfort
 - ◆ Western Technical College



New Mexico

- Program size: 9,176 MWh, 1158 residential, 42 business
- Program supply
 - ◆ Texico 1.5 MW
- Price: \$3 per block
- Key customers
 - ◆ Cannon AFB
 - ◆ WIPP



Minnesota

- **Program size: 165,000 MWh, 20,000 residential, 250 bus**
- **Program supply**
 - ◆ **19 dedicated wind farms: 40 MW**
 - ◆ **1 semi-dedicated: 50 MW Moraine II split between Windsource and RPS**
- **Price: ~\$1.00 per block**
- **Key customers**
 - ◆ **Vikings**
 - ◆ **Augsburg College**
 - ◆ **Aveda**



Colorado

- Program size: 218,000 MWh, 35,000 residential, 940 bus
- Program supply
 - ◆ Percentage of overall Xcel Energy Colorado portfolio
- Price: \$2.16 per block
- Key customers
 - ◆ Broncos
 - ◆ US Mint
 - ◆ Xcel Energy
 - ◆ CDC





Why are we here?

- **Overcoming regulatory thinking**
- **Meeting customer demand**
- **Regulatory**
 - ◆ **Pricing**
 - ◆ **“Next thing”**
- **Customer attitude**
 - ◆ **“Why now?”**
 - ◆ **“Next thing”**

Stolen from Pat

- Can a Green-e Green Pricing Program survive?
 - ◆ Low price for national REC products
 - ◆ Increasing state RPS
 - ◆ Possible Federal legislation
 - ◆ Decreased electricity sales overall
 - ◆ Regulator attitudes changing toward GPP
- Or will they be soon be a thing of the past for regulated utilities. And does it matter??



Stolen from Pat

- Balancing act between energy (and cost) that is used for RPS compliance and GPP while meeting both requirements
- Green-e requirements puts upward pressure on prices as the newest generation is the most costly
- Some regulators are starting to conclude that a GPP is not necessarily a regulated activity; anyone can sell REC's

Stolen from Pat

- Not only constraints in meeting energy needs, also constraints with building local renewable projects
- Price and Opposition
 - ◆ Same opposition techniques used to delay/stop non-renewable projects work to delay/stop renewable projects
 - ◆ Costs increase – only do compliance projects
- Regulations and impact on customers
 - ◆ Policy – Non-participating customers cannot subsidize participating customers
 - ◆ Increase price, customers drop GPP



Stolen from Pat

- Decreasing demand for electricity
- Decreasing cost of fossil fuels as well as lower LMPs has widened the gap between RE and traditional energy
- RE project costs have increased
- REC Prices and National Marketers



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