

# CAPX2020:

## What can Colorado Learn?

Presentation to  
Colorado PUC Workshop in  
Docket 08I-227E  
June 22, 2009

# CAPX2020 Website

- Comprehensive plan, a complete story: reliability, generation access, phased development, future options
- Aimed a public support, shows progress toward building needed transmission
- Plan for more than ten years
- User-friendly
- Coordinated, multistate plan, links to utilities in four states:
  - Minnesota
  - North Dakota
  - South Dakota
  - Wisconsin
- Information on past, present and future activities

# CAPX2020 Website

The screenshot shows a Mozilla Firefox browser window displaying the CapX2020 website. The browser's address bar shows the URL <http://www.capx2020.com/>. The website's header features the title "CapX2020" in a large, stylized font, followed by the tagline "Delivering electricity you can rely on". To the right of the title is a photograph of a family and a compact fluorescent light bulb. Below the header is a navigation menu with the following items: Home, Projects, Regulatory, Learn More, Calendar, News Room, Documents, and Contact Us. The main content area is divided into three columns. The left column, titled "Quick Links to Resources", includes a "Public Meeting" link with a thumbnail image of wind turbines and a list of links: Proposed route maps, Virtual open house, Transmission and wind photo gallery, Glossary of electrical transmission terms, FAQs (frequently asked questions), Newsletters, and Fact sheets. The middle column features a section titled "Ensuring electric reliability in Minnesota and the surrounding region" with a sub-section "What's new" containing three news items: 1) Rural Utilities Service to host public environmental scoping meetings June 16-18 and June 23-25 for Hampton-Rochester-La Crosse project, with links to an invitation and route maps; 2) CapX2020 granted Certificate of Need for three 345-kV transmission lines in Minnesota, with a link to a press release; 3) Wisconsin route options being studied for the Hampton-Rochester-La Crosse transmission line project, with a link to route maps. The right column contains a "Google Custom Search" box with the text "Search CapX2020 Site" and a blue box with the text "We'd like to hear from you! Click here to send us a note." Below this is a large image of a transmission tower under construction. The browser's status bar at the bottom shows "Done" and various system icons.

CapX2020 - Delivering electricity you can rely on - Mozilla Firefox

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http://www.capx2020.com/

# CapX2020

Delivering electricity you can rely on

Central Minnesota Municipal Power Agency  
Dairyland Power Cooperative  
Great River Energy  
Minnesota Power  
Minnesota Power Cooperative  
Missouri River Energy Services  
Otter Tail Power Company  
Rochester Public Utilities  
Southern Minnesota Municipal Power Agency  
WPP Energy  
Xcel Energy

Home Projects Regulatory Learn More Calendar News Room Documents Contact Us

## Quick Links to Resources

### Public Meeting

- Proposed route maps
- Virtual open house
- Transmission and wind photo gallery
- Glossary of electrical transmission terms
- FAQs (frequently asked questions)
- Newsletters
- Fact sheets

## The Electric Transmission Planning Process

## Ensuring electric reliability in Minnesota and the surrounding region

The region is experiencing tremendous job and population growth, leading to a steady increase in electricity usage. The last major upgrade of the electric transmission infrastructure took place more than 25 years ago. [ [continues](#) ]

### What's new

- >> Rural Utilities Service to host public environmental scoping meetings June 16-18 and June 23-25 for Hampton-Rochester-La Crosse project  
[See invitation for meeting times and locations](#) (PDF file)  
[See detailed route maps](#)
- >> CapX2020 granted Certificate of Need for three 345-kV transmission lines in Minnesota  
[Download press release of 4-16-2009 PUC decision](#) (PDF file, 32 K)
- >> Wisconsin route options being studied for the Hampton-Rochester-La Crosse transmission line project. [See detailed route maps](#)
- >> Monticello-St. Cloud project Route Permit application filed April 8, 2009.  
[See complete MN PUC filing](#)  
[See detailed route maps](#)

Google Custom Search  
Search CapX2020 Site

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http://www.capx2020.com/Projects/project\_far

## CapX2020

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### Quick Links to Resources

CapX2020 Public Meeting

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### CapX2020 Fargo-St. Cloud-Monticello 345-kV project

The Fargo-St. Cloud-Monticello line will improve regional reliability in north central Minnesota and the growing St. Cloud area.

- Scope: approximately 250 miles, 345-kilovolt
- Targeted in-service: 2013-2015
- [Project communications and public outreach](#)
- [Routing work group meetings](#)
- [Regulatory](#)
- [Open houses](#)
- [Maps with route options for Fargo-St. Cloud](#)
- [Maps with route options for St. Cloud-Monticello](#)
- [Fargo-St. Cloud project update](#) (PDF)
- [St. Cloud-Monticello project update](#) (PDF)

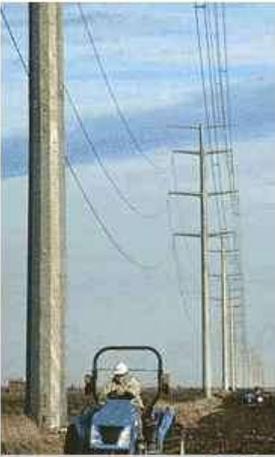
### Minnesota Certificate of Need

Administrative law judge recommends approval of Certificate of Need for 345-kV projects. Administrative law judge Beverly Heydinger issued her [report to the Minnesota Public Utilities Commission](#) on February 27, 2009, recommending a finding of need for all three 345-kV projects.

An [application for Certificate of Need](#) for three 345-kV CapX2020 projects was filed with the Minnesota Public Utilities Commission on August 16, 2007.

Google Custom Search  
Search CapX2020 Site

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# CAPX2020 Website

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http://www.capx2020.com/learn.html

## CapX2020

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### Quick Links to Resources

**Public Meeting**

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### Learn more

**Fact sheets (PDF format)**

- [Bemidji-Grand Rapids project](#)
- [Fargo-St. Cloud project update](#)
- [St. Cloud-Monticello project update](#)
- [Brookings County-Hampton project](#)
- [Hampton-Rochester-La Crosse project update \(6-5-2009\)](#)
- [Minnesota regulatory process for high voltage transmission lines](#)
- [North Dakota regulatory process for high voltage transmission lines](#)
- [South Dakota regulatory process for high voltage transmission lines](#)
- [Wisconsin regulatory process for high voltage transmission lines](#)
- [CapX2020 proposed transmission line projects](#)
- [Birds and power lines](#)
- [CapX2020 proposed transmission line infrastructure](#)
- [Upper Midwest high voltage transmission projects 1967-2007](#)
- [Transmission planning through construction: A decade-long process](#)
- [CapX2020 routing process: Brookings County-Hampton project](#)
- [Electricity usage continues to climb](#)
- [Easements and rights-of-way](#)
- [Electric and magnetic fields \(EMF\): the basics](#)

**Glossary**

- [Energy-related terms and acronyms](#)

**FAQs**

### Photo gallery: High voltage transmission and wind projects



[Click here](#) to see high voltage transmission line and wind turbine construction photos

### Transmission lines construction video

[Click to play](#)



# Xcel's SB 100 Website

- Not a comprehensive plan
- Perspective of a single utility
- 2015 is six years out from now
- Does not address multiple states
- Shows SB 100 stakeholder process meeting agendas and materials, reports
- Does not seek ongoing stakeholder input

# Xcel's SB 100 Website



**2009  
Senate Bill 100**

*"Ensuring measures to ensure the adequacy of Colorado's electric transmission infrastructure, and to construct the earth, requiring utilities to designate energy resource areas and outlining expected cost recovery for the construction of Transmission facilities"*

Select the following links for information related to Senate Bill 100:

**Meetings**

**Adviser and History**  
[Meeting Agenda March 4, 2009](#)  
[Meeting Agenda March 18, 2009](#)  
[Meeting Agenda April 1, 2009](#)  
[Meeting Agenda April 8, 2009](#)  
[Meeting Agenda April 22, 2009](#)  
[Meeting Agenda May 13, 2009](#)  
[Meeting Agenda May 20, 2009](#)  
[House of Representatives Meeting June 19, 2009](#)  
[Meeting Agenda June 19, 2009](#)  
[House of Senate SB 100 Meeting December 26, 2009](#)  
[Meeting Agenda December 26, 2009](#)  
[Commission Meetings Meeting December 11, 2009](#)

**Schedules**  
[Meeting Schedule April - July 2009](#)

**Handouts from Previous Meetings**  
[Subcommittee V-1-1 of Meeting March 4, 2009](#)  
[Adviser Brief List March 4, 2009](#)  
[Action Items List April, 2009](#)  
[Notes April 1, 2009](#)  
[Resource Costs March 4, 2009](#)  
[Expanded ER Survey March 18, 2009](#)  
[Resource Summary April 8, 2009](#)  
[Potential Projects Map May 6, 2009](#)  
[Private Subsidies Meeting June 11, 2009](#)  
[General Subsidies Meeting August 20, 2009](#)  
[Special Subsidies Meeting December 11, 2009](#)

**Transmission Study Group Information**  
[Resource Summary Mar 11, 2009](#)

**Meetings**

[Subcommittee List](#)  
[Subcommittee List Revised April 8, 2009](#)

**Reports**  
[SB 100 Informational Report - Final](#)  
[SB 100 Informational Data Presentation](#)

For questions or further information, please contact Bill Wright  
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e-mail: [William.W.Wright@xcelenergy.com](mailto:William.W.Wright@xcelenergy.com)

# Providers' responses to growing scarcity of AIC/ATC vary

BPA's 2008 open season obtained commitment for 2.8 GW of generator funded transmission service

Several merchant lines are proposed to deliver GWs of wind to CA, NV, and AZ

CAPX 2020 will bring over 8 GW on line from 2016-25 courtesy of ratepayers

TRTP will unlock 4.5 GW of renewables for SCE from 2009-13 with ratepayer financing and generator reimbursement

Texas ratepayers will fund CREZ, facilitating 18 GW of wind generation starting in 2013

EHV Overlay will enable over 13 GW of wind energy to come on line starting in 2013



- Transmission providers across the country are proactively responding to the constraints.
- Abundant studies of Colorado's transmission needs for renewables development have failed to result in any investment to rescuing these stranded resources to date.
- The lack of investment in transmission for renewables will exacerbate this situation.

Source: EER, HWE

# Xcel Energy's Minnesota Renewable Energy Plan

- Minnesota legislation required an Xcel Plan that balanced three priorities:
  - 1 economic development in rural areas
  - 2 reliability of the state's power grid
  - 3 minimizing cost impacts for ratepayers.
- Xcel's December, 2007 Plan: 1/3 utility-owned, 1/3 Community-based Energy Development (C-BED) and 1/3 IPP through PPA.

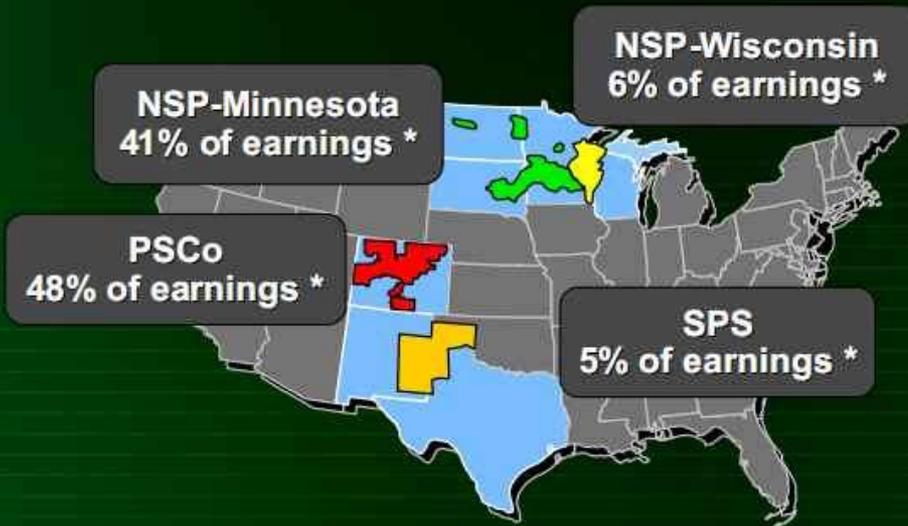
# Minnesota PUC Decision on Xcel's Renewable Energy Plan

- The Minnesota PUC decided:
  - No prejudgment on the appropriate balance between utility ownership, C-BED and IPP renewables
  - Xcel required to analyze and justify, and provide action plan for acquiring peaking resources or ancillary services needed by the whole system to support wind resource integration
  - Xcel to provide analysis to determine total MW amounts to meet each RES milestone, for both resource planning and transmission planning
  - **Xcel to identify new transmission lines needed to meet 2012 RES milestone, and to accelerate study and construction of any additional transmission needed for near-term RES milestones. Allocating human resources in the area of transmission planning must be a priority for the Company.**
  - Commission prefers resource acquisitions based on competitive bidding or the equivalent
  - All ownership options to be evaluated on an equal basis. If such a process is not used, Xcel will have to convincingly demonstrate that the most cost minimizing and cost effective project(s) have been selected.

# Colorado is now Xcel's Profit Center



## Company Profile



*\* Percentages based on 2008 Ongoing Earnings*

**2008 EPS Ongoing: \$1.45; GAAP: \$1.46**

**2008 Dividend \$0.95 per share annualized**

### Traditional Regulation

**Operate in 8 States**

### Combination Utility

**Electric 81% of net income**

**Gas 19% of net income**

### Customers

**3.4 million electric**

**1.9 million gas**

### 2008 Financial Statistics

**NI Ongoing: \$641 million**

**NI GAAP: \$646 million**

**Assets: \$25 billion**

**Equity ratio: 44%**

# CAPX2020: What can Colorado learn?

- It is possible to construct a long term, coordinated, multi-utility and multi-state transmission plan
- A sensible, phased-in approach to build out is possible
- It is important to present transmission plans to the public so they can understand why the lines are needed, what processes are for approval, and how they can participate
- Xcel has the knowledge and experience to do the job
- Resources can, and must, be provided for expeditious transmission planning in Colorado
  - Involving neighboring states and TOs would be bonus for consumers and utilities alike
- The Colorado Public Utilities Commission should act