

Before the U.S. Senate Energy and Natural Resource Committee

June 17, 2008

William Kaul, Chair, CapX 2020

President, WIRES

Transmission Vice President, Great River Energy

Mr. Chairman, members of the Committee, my name is William Kaul. I serve as the transmission vice president at Great River Energy, a generation and transmission cooperative located in Maple Grove, Minnesota with operations in North Dakota, Minnesota and Wisconsin. I am a founder and chairman of CapX 2020, a collaboration of 10 utilities including Xcel Energy, Minnesota Power, Otter Tail Power, Missouri River Energy Services, Southern Minnesota Municipal Power Agency, Central Minnesota Municipal Power Agency, Wisconsin Public Power Incorporated, Dairyland Power Cooperative and the Rochester Public Utilities. I am also the president of WIRES, a national coalition of transmission providers and customers. Today I will talk about the work of both CapX 2020 and WIRES aimed at the necessary expansion of electric transmission infrastructure.

CapX 2020 collaboration. CapX 2020 was formed in 2004 in recognition of the need for a coordinated vision for grid expansion in the greater Minnesota area. CapX 2020 is a “joint ownership” initiative that involves cooperative, investor-owned and municipal utilities in the planning, financing and ownership of new transmission. A package of materials further describing CapX 2020 and its proposed projects is included with this testimony.

CapX 2020 took a two-pronged approach to planning and implementing a vision for grid expansion by: 1) establishing a coordinated and comprehensive planning process, a “vision study”, for grid expansion in our collective service territories, and 2) seeking a workable regulatory environment that will enable that vision to be realized.

Vision study. CapX 2020 set a planning horizon of 15 years, projected load growth during that period and ran scenario analyses of different generation mixes, assuming a 10% renewable energy component. The result was a conceptual plan, a vision for grid expansion, with transmission line projects prioritized in groups.

Regulatory environment. Regulatory reforms were needed to reduce project risks, ensure cost recovery and make the permitting process more predictable and efficient. We collaborated with stakeholder groups including regulators, environmental groups and others on a legislative initiative that resulted in formula rates for the investor-owned utilities, ensuring predictable revenue recovery and cash flow, streamlined permitting of need and siting, recognition of transmission as regional infrastructure and the ability to transfer assets into a transmission-only company if deemed in the public interest by the Minnesota Public Utilities Commission.

Group 1 project status. CapX 2020 Group 1 projects are currently pending state regulatory review and approval. Group 1 projects include four transmission lines, three at 345 kilovolts (kV) and one at 230 kV, totaling 700 miles in length and projected to cost \$1.7 billion. The 345 kV projects have been grouped into a single certificate of need filing and are supported by all major stakeholders, including the Minnesota Office of Energy Security, the environmental coalition and the Midwest ISO. With this support, the environmental coalition and the Office of Energy Security are recommending these 345 kV projects either be upgraded to a higher capacity or built to support future double circuit capability. The 230 kV project has no interveners in its certificate of need filing.

Minnesota Renewable Energy Standard and Group 2. In 2007, the Minnesota Legislature passed a law (MN RES) requiring all utilities to generate at least 25% of their electricity from renewable sources by the year 2025, with Xcel Energy required to meet a 30% requirement by 2020 – 25% in the portfolio needs to be sourced from wind power. Included in the law is a requirement that utilities develop a transmission plan enabling compliance with the MN RES. This dramatically changed the planning assumptions from the original CapX 2020 Vision Study. CapX 2020 is now in the process of developing another group of 345 kV projects similar in scope to Group 1 that are intended to achieve renewable energy milestones through 2016. CapX 2020 expects to invest more than \$3 billion in the first two groups of projects by 2016.

Bridging beyond the 2016 timeframe and Minnesota's geography. Our planning horizon is now in the 2016 to 2025 timeframe. We realize that the excellent wind resources located in the Upper Midwest can and should be developed for a much broader market. While it is expected that 6000 MW of wind will be developed just to meet the MN RES, the market potential for Midwest states is much greater and we are now shifting our focus beyond the greater Minnesota region.

As the demand for renewable energy in regional markets evolves, the Upper Midwest states will develop renewable energy resources that will need transmission for exporting renewable energy to distant markets. Accomplishing that feat will require an extraordinary level of cooperation among utilities, state regulators and legislators, renewable energy developers and other stakeholders. While CapX 2020 has been a very successful initiative, *it was achieved under very favorable circumstances*: one primary political jurisdiction, a clear state energy policy, an organized energy market and tariffs (MISO), the prospect of significant economic development from wind generation and the support of environmental groups. The challenges of developing major inter-regional transmission infrastructure increase exponentially with additional political jurisdictions, multiple transmission providers, conflicting energy policies, differential economic benefits, etc

New initiatives to address new challenges. Several parallel efforts are underway to address these challenges:

1. **Midwest ISO.** The Midwest ISO has begun an initiative, the Regional Generation Outlet Study (RGO study), that brings together planners from across the MISO footprint to develop an expansion plan for renewable resources that

- meets the needs of the MISO market. In addition, MISO is conducting a joint planning effort with PJM, Tennessee Valley Authority and Southwest Power Pool to evaluate needed transmission under a 20% wind energy mandate for the Eastern Interconnection.
2. **Organization of MISO States.** This is a group of public utility commissioners, one from each state within MISO, that is closely monitoring the activities of MISO and utilities within MISO. The attention of this group to grid expansion planning is critical since it is the public utility commissions who certify the need for new transmission projects, site the lines and rule on cost recover at retail.
 3. **The Midwest Governor's Association.** The Midwest Governor's Association held an environmental summit last fall. Its stated objectives were to improve energy efficiencies, deploy lower-carbon renewable and fossil fuels and implement geologic CO₂ storage and terrestrial carbon sequestrations. The MGA identified the development of transmission for renewable energy as a key strategy for goal achievement. The MGA has working groups now addressing the carbon reduction and transmission expansion issues.
 4. **CapX 2020 future strategy.** The CapX 2020 utilities are developing a strategy on how to plan and partner with other transmission developers in the region such as International Transmission Company (ITC), American Transmission Company (ATCo), Western Area Power Administration (WAPA), Basin Electric Power Cooperative and others, with an objective to develop needed transmission projects to maintain reliability and satisfy the various renewable requirements within the Midwest. Just last week, CapX 2020 convened a forum for transmission system planners from these companies to initiate broader regional transmission plans. CapX 2020 also is actively participating in the MISO RGO study and the MGA working groups.

WIRES. Working at a national level, CapX 2020 is a founding member of WIRES, which was formed in 2006 and is the nation's only pure transmission advocacy group. WIRES membership includes CapX 2020, ITC, Trans-Elect, National Grid, ONCOR, Xcel Energy, FPL Energy, Quanta Services and Northeast Utilities.

WIRES believes that policy issues must be addressed in order to achieve necessary transmission expansion. In 2006, WIRES convened a Blue Ribbon Panel on cost allocation consisting of nationally and internationally recognized economists, engineers and public policy experts. I am providing the Committee with copies of their report submitted with my testimony. One of the critical barriers to transmission expansion is cost allocation – and resolution is paramount in order for large scale transmission grid expansion.

WIRES has just commissioned an additional study to evaluate various proposals for integration of wind and remote clean energy resources into the existing transmission grid. In addition to proposals introduced as legislation in Congress, a number of states, including Texas, California and Colorado have developed and implemented renewable energy zone concepts and related transmission expansion and upgrade policies. WIRES will examine these initiatives with an eye out for what can be learned from the experience

so far and to identify “best practices”. The study is scheduled to be completed this fall and WIRES would be pleased to be able to share the results with the Committee.

On behalf of the CapX 2020 consortium, WIRES and Great River Energy, thank you for inviting us to participate in this hearing. I look forward to answering any questions you may have.