Capx 2020 Hampton - Rochester - LaCrosse 345k V Transmission Project
PSC Docket 05-CE-136

NoCapX 2020 "01 Series" Data Requests to American Transmission Company/ATC Management

DR No.	Reference	Data Request
01-1		Please provide NoCapx2020 with a copy of all of American Transmission Company and/or ATC Management Data Request responses to all other parties in this proceeding.
01-02	Lobbying	For all lobbyists retained or employed by American Transmission Company and/or ATC Management since 2000, and for each year, provide: 1. Names; lobbyists employer or business organization (i.e. Michael Best & Friedrich, Cullen Weston Pines & Bach), and address; 2. Dates registered to lobby for ATC in that legislative session; 3. For each, identify other entities retaining each American Transmission Company/ATC Management lobbyist, i.e., Lee Cullen, also lobbying for RENEW Wisconsin, Wind on the Wires, , etc.
01-03	CEII & Confidentiality Agreement	For any data request responses containing CEII and/or proprietary information, provide confidentiality agreement for execution.
01-04	CEII Information	For any data request response containing CEII information, provide criteria under which it has been designated CEII.
01-05	SE MN – SW WI	Please provide a copy of "Southeastern Minnesota-Southwestern Wisconsin Reliability Enhancement Study (March 13, 2006) and subsequent iterations.
01-06	Transmission Studies	Provide any and all transmission studies regarding transmission of 138kV or higher voltage connecting in western Wisconsin from at the north, St. Croix Falls and ranging southward through LaCrosse to the southernmost edge of western Wisconsin, and then headed easterly (in western Wisconsin not within an ATC Zone).
01-07	Transmission Studies	Provide any and all ATC transmission studies regarding transmission connecting at LaCrosse, Alma, or any other location, to the CapX 2020 lines coming from Minnesota.
01-08	Transmission Studies	Please provide a copy of all electrical, transmission and or market studies by Applicant, ATC, Minnesota Transmission Owners and/or others, referencing the CapX 2020 Hampton-Rochester-LaCrosse transmission line.
01-09	Transmission Studies	Please provide a copy of all electrical, transmission and or market studies by Applicant, ATC, Minnesota Transmission Owners and/or others, referencing a LaCrosse to Madison area/Columbia/W. Middleton transmission line.
01-10	Transmission Studies	Please provide a copy of all electrical, transmission and or market studies by or reviewed by ATC referencing transfer capacity of CapX 2020 into Wisconsin, and all study appendices.

01-11	Transmission Studies	Please provide a copy of all electrical, transmission and or market studies by Applicant, ATC, Minnesota Transmission Owners and/or others, regarding transmission needs in LaCrosse, WI and surrounding area served by LaCrosse substations listed in Application and Supplemental Need Study.
01-12	Transmission Studies	Please provide copies of complete ATC transmission "plans," "scenario assessments" including but not limited to 10 year Transmission Plan and other reports that address Southeast Minnesota and Western Wisconsin transmission, and provide underlying studies supporting such plans and assessment.
01-13	EIPC/JCP planning	Provide copies of EIPC and JCSP studies that reference transmission through ATC Zones.
01-14	Tranmission Reliability Review	Provide copies of ATC internal reliability reviews for 2000 to present.
01-15	Transmission Reviews	Provide copies of ATC economic planning studies that address Minnesota to Wisconsin transfer capacity, Minnesota to Wisconsin congestion, and energy and demand loss within Wisconsin.
01-16	Economic Planning	Provide copies of studies and/or reports of transfer capacity, in and through ATC territory, by others that have been reviewed by ATC.
01-17	Economic Planning	Provide copies of economic benefits studies and reports commissioned, drafted, participated, funded, and/or studied, all or in part, by ATC, or addressing benefits associated with transmission through ATC Zones.
01-18	Forecasting	ATC's "Load Forecasting Process" is quite different from that of MISO in its "Peak Forecasting Methodology Review." Has ATC adopted MISO Peak Forecasting Metholodogy? Has ATC's Badger-Coulee line utilized either ATC's "Load Forecasting Process" and/or MISO's Peak Forecasting Methodology?" Provide documentation.
		ATC 10 Year Plan
01-19	Transmission planning	Looking at the ATC planing zones, LaCrosse is not within an ATC planning zone. What is ATC's basis for proposing a transmission line beginning in an area not within the planning zone?
01-20	Transmission Planning	Please provide a hard copy of the ATC 10 Year Plan – the website is confusing as to what is in plan, what is not, what order it is in, etc.
		Western Wisconsin Transmission Reliability Study
01-21	Transmission Planning	Please provide a confidentiality agreement for review and execution and, if executed, both an electronic and hard copy of ATC's Western Wisconsin Transmission Reliability Study, September 20, 2010.
01-22		p. 1 – The Western Wisconsin Transmission Reliability Study notes that "This Transmission Study is part of a larger 'combination of benefits' that takes into account the reliability needs of the study area through this study, the economic savings created by the projects under study and the public policy benefits that would be created by these options." Regarding that quotation: 1. Provide documentation of reliability needs referred to above; 2. Identify with specificity "economic savings created by the projects under study" and the "projects under study" and provide any and all studies and/or reports documenting such economic savings; 3. Identify with specificity any and all "public policy benefits that would be created by these options."
01-23		Transmission typically has a useful life of at least 35 years – why was an 8-10 year-out time frame selected for this study? Provide any studies with a 35 year or longer year-out time frame.
01-24		Power flow analyses – provide means to access (software, or terminal with software installed), cases in accessible and

		usable format, and for review power flow analyses.
01-25		p. 1 – "Total wind generation in Minnesota, Iowa and Wisconsin within the MISO region is 10,006 MW, which is approximately the amount of wind needed to meet the RPS requirements of Minnesota, Wisconsin and Iowa in 2020." Do you agree that these states can meet their RPS requirements?
01-26		From the p. 1 statement above, p. 2 jumps into 7 transmission options. Explain the transition from a purpose of identifying and documenting reliability needs to 7 specific transmission proposal options. What is the purpose of each of these transmission options? What reliability needs does each transmission proposal address?
01-27		p. 2 - Three transmission options in this study connect to the 345kV line proposed in this docket. If the CapX 2020 345kV line is not built to LaCrosse, is there any reason to propose a LaCrosse-Cardinal transmission line? If the CapX 2020 345kV line is built only to Alma, would the proposals for Wisconsin begin at Alma? Explain.
01-28		Identify distinctions between this ATC Western Wisconsin Transmission Reliability Study and that which produced the North LaCrosse-Columbia line in the CapX 2020 Vision Plan? See CapX 2020 Technical Update: Identifying Minnesota's Electric Transmission Infrastructure Needs (October 2005); Figure 1-9: Geographic Scope of CapX 2020,CapX 2020 Certificate of Need Application, Three 345kV Projects (August 16, 2007).
01-29		Please refer to WRAO (1998) (online at: http://www.arrowhead-weston.com/pdf/report1.pdf). How is the ATC Western Wisconsin Transmission Reliability Study different from that which produced the Wisconsin portions of the Lakefield-Columbia and/or Prairie Island-Columbia in the WRAO and WIREs studies? Provide documentation of the distinctions that are beyond that contained within the Western Wisconsin Transmission Reliability Study.
01-30		One of the purposes of the WRAO-WIREs study was to determine how to increase transfer capacity into Wisconsin and the amount of transfer capability is similar in both. Did the transmission project recommended in WRAO and built achieve that amount of transfer capacity? Is the transfer capability anticipated in the Western Wisconsin Transmission Reliability Study that same 2,000+MW or is this in addition to the transfer capacity of WRAO-WIREs? See WIREs Table 1, p. 19 at http://www.arrowhead-weston.com/pdf/report1.pdf).
01-31		Regarding quotation in 1-20 above, compare with that on p. 4, "ATC has been analyzing the combined reliability, economic, and policy benefits of these options for approximately two years and has determined that a 345kV project from the LaCrosse area to the greater Madison area (the Badger Coulee Project) would provide multiple benefits. ATC has recently announced its intention to finalize its evaluation of these combined benefits and to begin public outreach on the Badger Coulee Project." Provide the finalized evaluation of the combined benefits referred to on p. 4 but not documented.
01-32		Does selection of the Badger Coulee Project rely on approval and construction of the CapX 2020 Hampton-Rochester-LaCrosse transmission line at issue in this docket? Does selection of the Badger Coulee Project rely on a 345kV transmission line into LaCrosse from the west?
01-33		p. 5, Table ES-2 and Appendix A: Transmission Option details. Are the costs associated with Options inclusive of the itemized listings under each, or are the itemized listings the "Supporting Facilities" in Table ES-2, or those in Appendix D? If in Table ES-2, or Appendix D, are there additional "supporting facilities" required that are not listed?
01-34		p.6 (map) – is the Hampton-Rochester-LaCrosse transmission line at issue in this docket (05-CE-136) depicted on this map?
01-35		p. 9 – "The CapX 2020 Group I project Hampton Corners – North Rochester – North LaCrosse 345kV line… addresses the load serving needs in the Rochester and LaCrosse areas. It was anticipated that extending this 345 kV line to interconnect with the existing Wisconsin 345 kV network will be beneficial to regional reliability as well as the western Wisconsin area." Is this statement referencing the CapX 2020 Vision Study? Anticipated by what entity, when, why, on what basis?

01-36		p. 9 provides a list of "Transmission Owners" and includes "CapX 2020." In what state is CapX 2020 incorporated, address of headquarters, and provide names of all "CapX 2020" personnel participating in this study.
01-37		p. 12 – states that "[t]he non-wind types of future/conceptual generating units sited inside the study area were removed." Why were non-wind types of generating units in the study area removed? How many MW were removed? Identify these generating units by "common name," MISO queue number, location and MW. Under what scenario would these "future/conceptual" generating units not be built? Does RES/RPS prohibit or limit future/conceptual non-wind generating units? Explain.
01-38		p. 13 – Does the list of generation in Table 2.1 contain all the Wind generation in MISO expected to be added by 2018? What is source of information in Table 2.1?
01-39		p. 13 – Does the list of generation in Table 2.2 contain all the Wind generation in MISO expected to be added by 2018? Yes or no, and please explain why these "future wind units" were selected. What is source of information in Table 2.2?
01-40		p. 14 – What is the reason for including only existing, planned and future wind generation on this map and in the study model? Is there no other generation existing, planned or future? Will this ATC transmission project carry only electrons generated by wind?
01-41		p. 15-16 – Where the study area, Monitored Facilities Subsystem and Contingent Facilities Subsystem affect a wide geographic area, why was the Big Stone II generation and transmission facilities not removed from the model?
01-42		p. 16 – What is basis for inclusion of Hampton Corner – North Rochester – North LaCrosse345kV line in the model? Has this project received a Certificate of Convenience and Public Necessity in Wisconsin?
01-43		p. 16 – If the models are run without inclusion of the projects not approved (Brookings generation and transmission; Hazel Creek-Panther-McLeod-Blue Lake (Minnesota "Corridor" project) and the Hampton Corner – North Rochester North LaCrosse project, what would impact be, individually and in combination? If any of these scenarios have been run, provide results.
01-44		p. 17 – Where 3,150 in generation is added, what is basis for selection of this generation? Is this list consistent with the MISO queue for generation interconnection requests in these three control areas (694, 600, 627)?
01-45		p. 19-20 – "These results indicate potential voltage collapse conditions under the three single event Category C contingencies in the base case without a transmission option included." Is it correct that this means that the potential voltage collapse conditions were present before running any of the options listed in Table 4.1 (p. 19)?
01-46		p. 19-20 – Was a sensitivity analysis of the base model run with and without individual and/or combinations of the "Major Planned or Proposed Projects Included in the Base Models" listed on p. 16?
01-47	**Xcel/GRE Press Release**	See attached Press Release 4/3/09, which states, "*Utility transmission planning engineers – representing transmission owners in Iowa, Minnesota, North Dakota, South Dakota, Wisconsin and Manitoba – were consulted to gather information on new generation data and the accuracy of transmission modeling through 2016.*" tuWere ATC personnel part of this effort? What studies did ATC participate in that are referred to in this press release? Provide copies of studies referred to.
01-48		The Xcel/GRE press release states, "*Without a line to the east of Minnesota, the transmission system will reach a "tipping point" where reliability is compromised, according to the studies.*" Is the "tipping point" referenced in this press release related to the "potential voltage collapse conditions" referred to on p. 19-20 of the Western Wisconsin Transmission Reliability Study? If not, are you aware of studies and/or reports demonstrating the premise that "without a line to the east of Minnesota, the transmission system will reach a tipping point where reliability is compromised?"
01-49	Green Power Express	Regarding transfer capacity and capability into and through Wisconsin, what letters, testimony and comments are Applicants aware of from "Eastern" sources critical of transmission proposals from the Midwest to the East Coast, i.e., Letter of

		withdrawal from JCSP announcement by NYISO and ISO-NE; "10 Mid-Atlantic Governors" letters; testimony of New York's Deputy Commissioner of Energy, etc. Provide copies of all critiques of the JCSP plan of which Applicants are aware.
	ATC Zones	What is the extent of ATC's jurisdiction and/or planning regarding the western part of Wisconsin not in an ATC Zone?
01-50	Existing Xmsn System	What plans are there to upgrade Xcel's existing transmission system (over 110kV) in Wisconsin?
01-51	Existing Xmsn System	If the CapX 2020 Hampton-Rochester-LaCrosse 345kV is built, what associated upgrades or supporting facilities are necessary in Wisconsin?
01-52	Upgrades	The CapX 2020 SNS identifies 200 miles of upgrades in the LaCrosse area are needed. Identify which upgrades ATC is involved in planning or construction. Identify those LaCrosse transmission projects on map, and identify which are scheduled for upgrade and when.
01-53	ATC Studies	Provide any and all other studies cited in and/or relied on in the ATC 10 year Plan and Western Wisconsin Transmission Reliability Study.
01-54	DOE Money	Provide copies of any and all applications by ATC to U.S. Dept. of Energy for funds for any and/or transmission in Western Wisconsin, and any and all supporting documents, disbursements and record of monies spent.
01-55	Proliferation	For routing evaluation purposes, please provide map of Wisconsin transmission lines 69kV and under and distribution lines.

From: Sandok, Mary R [mailto:Mary.R.Sandok@xcelenergy.com]
Sent: Friday, April 03, 2009 9:50 AM
To: undisclosed-recipients
Subject: News Release: Upper Midwest Utilities Identify Electric Transmission Upgrades To Meet Renewable Energy Standard Milestones

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News Release
April 3, 2009

Upper Midwest Utilities Identify Electric Transmission Upgrades To Meet Renewable Energy Standard Milestones

Improvements Necessary in Wisconsin to Maintain System Stability

MINNEAPOLIS —Upper Midwest utilities have identified improvements needed in the region's high-voltage electricity transmission system to ensure they can deliver the renewable energy necessary to meet Minnesota's renewable energy milestones beginning in 2016.

Minnesota's 2007 Next Generation Energy Act requires that utilities increase renewables on their systems in increments and by 2025 deliver 25 percent of their energy from renewable sources (Xcel Energy is required to deliver 30 percent by 2020). It's estimated that 4,000 to 6,000 megawatts of renewable energy will be needed to meet Minnesota's Renewable Energy Standard. North Dakota, South Dakota and Wisconsin have 10 percent by 2015 renewable energy targets.

The utilities identified transmission needs in studies published this week. The studies can be downloaded at www.minnelectrans.com.

The studies confirmed that replacing a 60-year-old 230-kilovolt line that runs between Granite Falls and Shakopee with a double-circuit 345-kilovolt line would unlock up to 2,000 megawatts of transmission capacity from wind-rich areas in southern and western Minnesota, North Dakota and South Dakota.

"Upgrading the 230-kilovolt line is the most cost-effective way to meet the 2016 renewable energy standard milestone," said Kent Larson, transmission vice president at Xcel Energy. "The upgrade will optimize capacity from the CapX2020 Group 1 lines, which are moving through the permitting processes, and serve as the next phase of our regional transmission build out to efficiently deliver wind power to our customers."

The 125-mile line would cost an estimated $350 million, with an additional $110 million for underlying system improvements.

The studies also found that further upgrades in Minnesota and the Dakotas (beyond the 230-kilovolt line upgrade) will not provide significant benefit prior to installation of a high-voltage transmission line between the La Crosse, Wis., area and the Madison, Wis., area. Without a line to the east of Minnesota, the transmission system will reach a "tipping point" where reliability is compromised, according to the studies. The studies found that the combination of the new 345-kilovolt double circuit line between Granite Falls and Shakopee and a new Wisconsin line would increase the transmission system transfer capability by 1,600 megawatts for a total increase -- with the 2,000 megawatts from the new 345-kilovolt line in Minnesota – of approximately 3,600 megawatts.

A joint transmission planning study now under way by several utilities aims to determine the need for a new transmission line between La Crosse and Madison. The study is expected to be completed by 2010.

"The renewable energy requirements of states in the Upper Midwest will be efficiently met with further 345-kilovolt transmission line expansion," said Will Kaul, transmission vice president at Great River Energy. "Policy changes, such as the passage of a national renewable energy standard, may lead to the consideration of a 765-kilovolt overlay. However, the 345-kilovolt projects identified in the studies conducted by the Upper Midwest transmission-owning utilities are still required as a foundational component of a 765-kilovolt overlay."

Exhibit A: Sandok Press Release, April 3, 2009

Study Details

- The studies were sponsored by Minnesota load-serving utilities, including: Basin Electric Cooperative (also representing East River Electric Power Cooperative and L&O Power Cooperative), Central Minnesota Municipal Power Agency, Dairyland Power Cooperative, Great River Energy, Heartland Consumers Power District, Minnesota Municipal Power Agency, Minnesota Power, Minnkota Power Cooperative, Missouri River Energy Services (also representing Hutchinson Utilities Commission and Marshall Municipal Utilities), Northern States Power Co.-Minnesota, an Xcel Energy company, Otter Tail Power Company, Rochester Public Utilities, Southern Minnesota Municipal Power Agency, and Willmar Municipal Utilities.

- The study teams conferred with the state Office of Energy Security's technical review committee, which includes representatives from the Minnesota Department of Commerce, Office of Energy Security staff, wind advocacy organizations, the Midwest Independent Transmission System Operator and other regional transmission planners.

- Utility transmission planning engineers – representing transmission owners in Iowa, Minnesota, North Dakota, South Dakota, Wisconsin and Manitoba – were consulted to gather information on new generation data and the accuracy of transmission modeling through 2016.

- For the purposes of Minnesota Renewable Energy Standard compliance, the study teams assumed that wind-energy generation would be the primary source of generation developed.

Also found on Xcel Energy's website:
http://www.xcelenergy.com/Company/Newsroom/Pages/NewsRelease2009-04-03UpperMidwestUtilitiesIdentifyElectrictranmissionUpgrades.aspx

Exhibit A: Sandok Press Release, April 3, 2009