

Appendix C –Comment Summary Tables

Table C-1: Federal and State Agency and Other Official Comments from Scoping for the Proposals

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Purpose and Need			
Senate – State of Minnesota	The USDA should perform an independent review of Project proponents' claims and stated need of Project.	Independent review of Project	The justification document which has been accepted by the RUS is the Alternative Evaluation study which is available at: http://www.rurdev.usda.gov/UWP-CapX2020-Hampton-Rochester-LaCrosse.html
	The current peak needs of the region need to be further examined.	Electric needs	The basis of Dairyland's need for the Proposal is discussed in detail in Section 1.1.2.3. As noted in that discussion, since the need for the Proposal was originally identified, Dairyland experienced a record peak demand in 2010 of 916 MW and a new record peak in the summer of 2011 of 979 MW.
Process			
Federal Aviation Administration	Has FAA been in on the process and study completed on possible RFI?	Agency Involvement	Applicants have coordinated with FAA.
State of Minnesota Public Utilities Commission	Minnesota's PUC record and docket should be included in RUS' review of the Project.		RUS reviewed the docket and has referenced relevant documents from the docket throughout this Draft EIS.
Minnesota Department of Natural Resources	MDNR EIS Scoping comments should be used in determining final scope of Project.		The scope of this Draft EIS includes issues identified and addressed in the MN Draft EIS, as well as issues raised in comments on the MN Draft EIS. While RUS reviewed MNDR EIS scoping comments, RUS assumes that the MN Draft EIS incorporated these comments.

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Project Alternatives			
Mississippi River Parkway Commission of Minnesota	The Commission requests that routing and river crossing decision-making processes in Minnesota are aligned with those in Wisconsin.	Inter-Agency Cooperation	Except where there are differences in state laws and regulations, RUS has endeavored to apply the same standards in evaluating impacts in Minnesota and Wisconsin. As discussed in Section 2.3.1.1, the elimination from detailed consideration of all potential Mississippi River crossing locations except the Alma location was based on considering impacts on both sides of the Mississippi River.
USFWS	Any new crossing should consider use of existing ROWs or easement.	Mississippi River crossing	Use of existing ROWs is discussed in Section 2.3.1.1.
USFWS	Any new crossing should consider use of existing ROWs or easement.	Mississippi River crossing	Use of existing ROWs is discussed in Section 2.3.1.1.
Senate – State of Minnesota	Alternative energy should be considered to reduce environmental impact. Existing, planned, and potential local generation should be considered in meeting reliability needs in the Rochester and La Crosse area. Conservation and distributed generation should be considered.	Alternative energy	Energy-based alternatives, including demand side management, use of existing generation, new generation, and decentralized systems are addressed in Section 2.2.

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Senate – State of Minnesota	Smart Grid technology that can address peak energy needs should be considered.	Use of Smart Grid technology	<p>Smart grid technology is characterized in Energy Independence and Security Act of 2007 (EISA 2007; Title XIII), which also includes smart grid appropriations. As described in EISA 2007, there are a number of components to smart grid. Some of these components are related to “deployment and integration of distributed resources and generation, including renewable resources” and demand-side management. These alternatives are discussed in Section 2.2. Some components are related to encouraging increased use of digital information and control technology, including real-time information, to improve the reliability and efficiency of the transmission system. In its draft 2011 MTEP the Midwest ISO has incorporated smart grid into its future scenario assessment (Midwest ISO 2011c, pp. 83-84). The inclusion of smart grid has the effect of lowering the growth of overall demand; however, it does not impact the need for the Proposal (Midwest ISO 2010c, Appendix A). See Section 1.1.2 for a discussion of the Midwest ISO role in determining the need for transmission improvements.</p>

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Route Alternatives			
USFWS	<p>The USFWS believes that any new connecting lines should be kept away from the Mississippi River corridor. The USFWS believes that the Alma crossing may pose least environmental impact, La Crosse would be second, and Winona and Trempealeau crossings would likely not be acceptable to USFWS because of the need for new ROW across refuge land. The Alma ROW is the only ROW wide enough to accommodate the transmission line configuration that would have the least impact to birds and meet the conditions of 50 CFR 26.41 (c). USFWS recommends the use of the I-90 corridor. Underground options should be considered.</p>	Mississippi River crossing - Alma	<p>Alternative river crossings are addressed in the Section 2.3.1.1 discussion of the elimination from detailed consideration of all potential Mississippi River crossing locations except the Alma location. The elimination of the other locations also eliminated the I-90 corridor. Undergrounding is addressed in Section 2.4.2.1.</p>
USFWS	<p>Commenter suggests that the removal of any existing lines not used and doubling of lines should be considered.</p>	Routing - general	<p>Where practicable and where allowed under relevant NERC standards, alternatives consider placement of existing lines on the new structure.</p>

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Minnesota Department of Natural Resources	The proposed crossing of Shady Lake occurs at a location with no existing infrastructure. Flood damage to the dam at Shady Lake recently caused this waterbody to change from a reservoir to a river. Regional MDNR staff have reported possible plans for a restoration project in this area. Avoiding a greenfield crossing in this area is preferred and would likely correspond well with future restoration plans.	Shady Lake Crossing	Note that the Route 2P-002 crossing of the former Shady Lake follows the US 52 ROW. The concept restoration plans for the former Shady Lake are referenced in Section 2.5.1.2.
Federal Aviation Administration	The red line runs just east of Federal microwave repeater station. This microwave link is a primary communication path from Kansas City to Minneapolis.	Routing – potential conflict	The presence of microwave stations could impact pole placement, as the pole structures could potentially interfere with the beam path. Poles will be placed so that they do not interfere, and this will be addressed during design.
Minnesota Department of Natural Resources	A comparative analysis of various corridor alternatives should be included in the EIS to determine which corridor will minimize negative environmental impacts.	Routing – minimizing impacts	See Section 2.5 for a comparative analysis of alternatives.
	If the Alma alternative is chosen, the proposed alignment adjacent to the Woodbury WMA should be relocated one mile north to an existing alignment for a 69kV line.	Existing corridors	This comment was from the EIS scoping. The Woodbury WMA is not directly impacted by any alternatives. The closest route is 1B-003, which is approximately 1,300 feet north.

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
	MDNR prefers the use of the existing disturbed corridors of Highway 52 and I-90.	Existing corridors	Alignments following US 52 are included in the Draft EIS. I-90 alternatives are not included in the Draft EIS. The elimination from detailed consideration of the Mississippi River crossings at Winona and La Crescent, discussed in Section 2.3.2.1, also eliminated the use of I-90 as an alternative.
Minnesota Department of Natural Resources	The line following the west side of Haverhill WMA would pose as a barrier to birds. Though there is an existing 69kV line west of this alignment, the proposed line would be significantly taller and increase avian impacts.	Avian impacts	This comment was from the EIS scoping. None of the alignments studied in the Draft EIS are in the vicinity of the Haverhill WMA. Corridors near the Haverhill WMA were associated with the Mississippi River crossings at Winona and La Crescent, which were eliminated from detailed consideration, as discussed in Section 2.3.2.1
Mississippi River Parkway Commission of Minnesota	The MRPC opposes the alternate route that parallels the Mississippi Great River Road for 1.3 miles because it would destroy scenic value. MRPC opposes any route that parallels the Great River Road for the sake of impacts to scenic value and travelers.	Scenic impacts	Potential impacts to the Great River Road and the MRPC concerns are addressed in Section 3.7. Potential impacts are also addressed and compared in Section 2.5.
Minnesota DOT	In the routing process, MnDOT information should be considered regarding proposed route area terrain, soil stability, potential rock fall, and water drainage.	Agency Involvement	Section 3.1.3.

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Minnesota Department of Natural Resources	Discussion of shared ROW with highways, railroads, transmission lines and pipelines should be included.	Information availability - ROW	Sharing ROW with transmission lines, highways and railroads is discussed throughout the Draft EIS, and the results are summarized in Tables 2-4 and 2-12. Pipelines were not considered, as corridor sharing with pipelines, compared to sharing with highways, transmission lines and railroads, has little benefit and some disadvantages. Pipeline ROWs often run cross-country with little or no visual or agricultural effects. For safety reasons, gas pipelines often require a transmission line ROW to parallel the pipeline ROW with no or minimal overlap. Sharing a corridor with a gas pipeline may require the installation of cathodic protection to prevent pipeline corrosion caused by induced currents (PSC-WDNR 2011 p. 48).
	The MDNR recommends using variations of the Preferred Route during Project development to avoid public water crossings and associated natural resource impacts to the extent practicable.	Routing – minimizing impacts	Public water crossings are unavoidable, given the Proposal end points. Crossing locations were identified to minimize impact to the associated natural resources, and, throughout the Draft EIS, all alternatives are compared in terms of impacts to these natural resources.
	If final routing does cross a State forest, single pole construction is preferred to reduce the acreage of forest clearing.	Structures	Single pole construction is proposed, except in certain situations where H-frame structures may result in less impact. See discussion in Section 2.4.2.1.
	DNR encourages utilization of Highway 42 (Route 3B-003) near the McCarthy Lake Wildlife Management Area to avoid DNR State-managed forest and natural resource impacts.	Routing – minimizing impacts	This alternative is included in the Draft EIS as Route 3B-003.

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Minnesota Department of Natural Resources	A proposed bypass to follow the west property line on the McCarthy Lake WMA for over a mile (3A-Kellogg or 3P-Kellogg) would cross a wetland mitigation bank currently being constructed.	Routing – potential conflict	Impacts to wetlands are included in the Draft EIS.
	Will the existing line near the Kellogg Crossing and the proposed line be co-located on the same poles?	Structures	Yes.
Connected Action			
Senate – State of Minnesota	The degree to which the La Crosse Project will permit transmission of coal from North and South Dakota and associated air emissions and global warming impacts should be discussed.	Air quality, coal transmission	The Proposal purpose and need is discussed in Section 1.2 and is not specifically related to electric generation in North and South Dakota. Because the Proposal will allow an outlet for bottled up generation (Section 1.1.2.3), it provides for more efficient use of electricity that is generated, and thus reduces the need for additional generation. Note that coal-generated electricity has the same access to transmission facilities as electricity generated by other means.
Senate – State of Minnesota	The connection of La Crosse Project with other CapX2020 projects extending into South Dakota and North Dakota should be discussed.	Potential for other transmission projects to be connected actions	The specific needs for the Proposal are discussed in Section 1.1.2 and its relationship to other actions is discussed in Section 1.6.

Geology and Soils			
Minnesota Department of Natural Resources	There are undeveloped deposits of sand and gravel in the original alternative route – in the northwest corner of New Haven Township. Avoidance of this rare resource is recommended.	Avoid rare resources	Mines and future reserve areas are discussed in Section 3.1.1. This information has been added to Section 3.1.1.
Mississippi River Parkway Commission of Minnesota	There are negative impacts associated with the alternate alignment on TH 42 including highly erodible side slopes and bluffs that would be vulnerable due to the construction and long-term vegetation management practices.		Section 3.1.2.
Biological Resources			
Minnesota Department of Natural Resources	The following MDNR databases should be included in the EIS: Natural Heritage Information System (NHIS), including MCBS databases: Native Plant Communities, Sites of Biodiversity Significance, Railroad-Rights-of-Way prairies. The Rare Features Database, Rare Species Guide, Tomorrow's Habitat for the Wild and Rare, and An Action Plan for Minnesota Wildlife, January 2006 should be used to determine state-listed species, Species of Greatest Conservation Need, and locations.	MDNR databases	These databases were used to prepare the detailed route maps in the MN FEIS, which are included as Appendix E of this Draft EIS (Appendix A in the MN FEIS). These maps were used as the basis for comparison of alternatives and assessment of impacts in this Draft EIS. The MDNR website was used for state-listed species information.

Minnesota Department of Natural Resources	Rare species surveys should be conducted if native prairie remnants or other potential habitat of state-listed threatened or endangered species will be impacted, or if more information is needed to address areas with limited data.	Habitat impacts, endangered species, information availability	Section 3.5.3.5.
Minnesota Department of Natural Resources	A transmission line through the I-90 corridor would cause habitat fragmentation; the negative impacts of transmission line through bluff lands near the I-90 corridor should be discussed.	Habitat impacts – I-90 corridor	The I-90 corridor is not included as an alternative route in the Draft EIS.
Senate – State of Minnesota	Alternative routes will widen existing ROW through Upper Mississippi River National Wildlife Refuge.	Impacts to Upper Mississippi River National Wildlife Refuge	Section 2.4.2.1.
Senate – State of Minnesota	The potential impacts to migratory birds using the Mississippi Flyway should be considered.	Avian impacts	Section 3.5.1.4
Senate – State of Minnesota	The potential impacts to resources in the Mississippi River corridor should be considered.	Potential impacts	Sections 3.5 and 3.6.
Wisconsin Department of Natural Resources	The potential impacts to the La Crosse Marsh and the Van Loon State Wildlife Area should be considered.	Potential impacts	Section 3.6.

Minnesota Department of Natural Resources	The MDNR recommends avoiding construction work within the fence of the Elk Run Development, emphasizing use of construction BMPs, and removing soil from equipment to avoid movement of Chronic Wasting Disease prions and invasive species.	Construction processes	Section 3.5.3.4.
Minnesota Department of Natural Resources	Power line corridors are typically chemically treated to keep brush and trees down which may put many native plants at risk.	Potential impacts – chemical treatment, flora	Section 3.5.3.1.
Minnesota Department of Natural Resources	Impacts to McCarthy Lake Wildlife Management natural resources, such as the Blanding’s turtle, waterfowl, migratory birds, Henslow’s sparrows, and grassland songbirds should be discussed.	Potential impacts - wildlife	Section 2.5.1.3 and Section 3.5.
Minnesota Department of Natural Resources	An assessment of state-listed species of concern should be included in the FEIS.	Listed species	Section 3.5.1.5 and 3.5.2.5.
Minnesota Department of Natural Resources	The applicant should coordinate with the DNR regarding any required surveys for threatened or endangered species. Threatened and endangered species must be identified along the selected route. Surveys may be required during a specific time and may affect Project planning and scheduling.	Agency Involvement, listed species	Section 3.5.2.5.

Minnesota Department of Natural Resources	Possible preventive and management techniques for invasive species should be discussed. DNR invasive species standards will apply to state administered lands and water, including cleaning of equipment, use of clean weed-free straw for mulch, and use of Best Management Practices.	Invasive species	Sections 3.5.1.2, 3.5.2.2 and 3.5.3.2.
USFWS	USFWS recommends that the applicant apply for a permit under BGEPA.		
River Crossings			
National Park Service	<p>Cannon River and Mississippi River crossings in Minnesota are located downstream from segments listed on the National Rivers Inventory.</p> <p>The Cannon River crossing is designated as part of Minnesota's Wild and Scenic Rivers Program. Two Cannon River crossings are State Recreation River segments and would substantially impact the river; Cannon River crossings should be limited to existing disturbed corridors.</p> <p>Adverse impacts caused by Cannon River and Mississippi River crossings should be avoided and mitigated.</p>	National Rivers Inventory, Wild and Scenic Rivers – Cannon River, Existing Corridors	Section 3.2.1.4.
National Park Service	The proposed line will cross a NRI-listed segment of the Black River in Wisconsin. This should be avoided and mitigated.	National Rivers Inventory -	Section 3.2.1.4.

Mississippi River Parkway Commission of Minnesota	Underground crossing should be used to minimize visual impacts and partner with other efforts related to river crossing, such as the installation of an invasive species barrier.	Visual impacts, river crossings, invasive species	Undergrounding: Section 2.4.2.1. Invasive species: Section 3.5.1.2, 3.5.2.2 and 3.5.3.2.
Minnesota Department of Natural Resources	The Alma Mississippi River crossing would significantly impact the McCarthy Lake Management Area and various state-listed endangered and threatened species and native plants.	Mississippi river crossings – Alma, McCarthy Lake, SGCN	Impacts to the McCarthy WMA and alternatives to avoid the impacts are discussed in various places throughout the Draft EIS.
Minnesota Department of Natural Resources	The Zumbro River should be crossed where existing infrastructure exists and there is least impact to resources from clearing or construction activities. The Zumbro River crossing at the White Bridge in Segment 3 appears to result in the least impact from clearing, and utilizes an existing river crossing.	Zumbro River concerns, existing corridors	Comment noted. The Zumbro River crossing alternatives are discussed in Section 2.5.1.3.
Minnesota Department of Natural Resources	The Mississippi River flyway is one of four primary flyways for all migratory species in North America. Consider that this situation warrants use of an underground crossing configuration. A thorough analysis of underground routing, including engineering alternatives should be conducted. Other locations than previously listed for aerial crossings may be considered if underground engineering is more practical at another location.	Avian impacts, underground crossing	The Mississippi Flyway is a broad area that covers much of the Upper Midwest. Potential impacts to migratory birds are discussed extensively in Section 3.5. Undergrounding is discussed in Section 2.4.2.1.

<p>Minnesota Department of Natural Resources</p>	<p>Analysis of an underground crossing at an existing transmission crossing, such as the Kellogg/ Alma location, should include collocation of existing transmission and new transmission so that the possible benefits of underground transmission are not lessened in the analysis.</p> <p>Whether underground or aerial crossing is planned for this Project, further coordination regarding details such as pole placement, pole type and underground line placement should be coordinated with the DNR to address vegetation and wildlife impacts, possible rare species impacts, and for preparation of a License to Cross Public Lands and Waters.</p>	<p>Underground crossing, Mississippi river crossings</p>	<p>Section 2.4.2.1. Coordination with the MDNR and the USFWS is on-going.</p>
<p>Minnesota Department of Natural Resources</p>	<p>Coordinate with the DNR regarding the Mississippi River Crossing and other public land or water crossing and associated structures.</p>	<p>Mississippi river crossings, Agency Involvement</p>	<p>Section 1.3.1.</p>

Wetlands and Other Waters of the United States			
National Park Service	Disturbances to riparian areas should be minimized.	Avoid riparian areas	Sections 3.5.1.3, 3.5.2.3, and 3.5.3.3
National Park Service	A riparian management plan should be developed to ensure a 120-foot river buffer and upkeep of native plant species except those interfering with the ROW. Project activities should be kept within the ROW, and boundaries should be clearly delineated with barriers within 120 feet of river. Equipment should be kept away from riparian zone and off river banks, and removed upon completion.	Construction near rivers	Sections 3.5.1.3, 3.5.2.3, and 3.5.3.3
National Park Service	Appropriate erosion control should be maintained. If bank stabilization is necessary, bioengineering techniques and natural materials should be implemented.		Sections 3.5.1.3, 3.5.2.3, and 3.5.3.3
National Park Service	Trees along Project boundary in riparian areas should be protected from abrasion or root zone compaction, and the drip line of the trees should be clearly delineated. Trees should be cut within 120 feet of rivers flush to the ground. It is essential that rootwads continue to provide bank stability. Trees should only be removed when absolutely necessary. Excessive woody debris should be removed and placed at least 120 feet from the top of the river bank.	Construction near rivers	Sections 3.5.1.3, 3.5.2.3, and 3.5.3.3

USFWS	The Upper Mississippi River Floodplain Wetlands, including the national wildlife refuge and adjacent state-managed areas such as the McCarthy Lake Wildlife Management Area, were designated as "wetlands of international significance" under the Ramsar Convention. Although Ramsar designation does not in any way restrict existing management authority or decision-making ability on the designated wetlands, it helps justify accelerated efforts to understand ecological functions, balance sometimes competing demands, and demonstrate wise resource management.	Important wetland areas	Section 3.5.1.3.
Land Use			
Minnesota Department of Natural Resources	Storm water management should be evaluated, including specific mitigation practices for runoff from construction, operation, and maintenance activities.	Storm water management	Sections 3.1.3, 3.2.2.2, and 3.2.2.4.

Recreation			
Minnesota Department of Natural Resources	MDNR will not permit construction of transmission lines within a State Park Statutory Boundary.	Lines in State Parks	No routes under consideration are in State Parks.
Minnesota Department of Natural Resources	The Douglas State Trail should be avoided to the greatest extent possible. The trail was purchased using LAWCON funding which includes stipulations that the land cannot be converted to uses other than for outdoor recreation unless replacement of land of at least fair market value and reasonable equivalent usefulness is provided (16 USC, 45.2509).	Avoid Douglas State Trail	Section 3.6.1.3.
Minnesota Department of Natural Resources	The Applicant should coordinate with the DNR if public land is crossed to determine if the lands have LAWCON funding. If LAWCON funding applies, further steps will be required and the EIS should explain this topic.	Public land	Section 3.6.1.3.
Visual Impacts			
Wisconsin Mississippi River Parkway Commission	The Wisconsin Great River Road National Scenic Byway should be preserved and the impacts on the viewshed should be discussed.	Visual impacts	Section 3.7.
Mississippi River Parkway Commission of Minnesota	Construction mitigation plans to repair scenic value on the Great River Road should be discussed.	Mitigation on Great River Road	Section 3.7.

Minnesota Department of Natural Resources	Potential visual impacts to the Douglas Trail should be discussed.	Visual impacts - Douglas Trail	Section 3.7.2.
Transportation and Access			
Minnesota DOT	MnDOT requires a permit for any line affecting MnDOT ROW. General placement for aerial lines is within 5 feet of trunk highway right of way. Transmission lines should adhere to the MnDOT Utility Accommodation Policy.	MnDOT permitting and regulations	Sections 1.3.1 and 2.4.2.2.
Minnesota DOT	MnDOT's current and future projects should be considered in the HVTL site selection process.	MnDOT planning	Section 3.8.1 and Section 4.
Mississippi River Parkway Commission of Minnesota	There are negative impacts associated with the alternate alignment on TH 42 including visual impairment of the GRR and Mississippi River Valley due to substantial vegetation removal. The view from the river toward the west would reveal a new cut versus the current wooded bluff line.		Section 3.7.2.

Agriculture			
Minnesota Department of Natural Resources	Additional information on the effects to existing Farmland Natural Areas Program easements adjacent to the Applicant's Preferred Route should be provided.		Sections 3.6.2.3 and 3.8.1.
Cumulative Impacts			
Minnesota Department of Natural Resources	Wind farms site their facilities near HVTLs. Cumulative impacts of wind farms siting their facilities near the chosen corridor should be included.	Cumulative Impacts of wind farms siting near Project corridor	Section 4.4.
USFWS	Will development of wind energy create the need for more lines and river crossings?	Cumulative impacts of wind development	Section 4.4.

Table C-2: Other Agency Comments from Scoping for the Proposal

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Purpose and Need			
(Representing) Farmington Township	Why is the Project needed?	Project need	Section 1.1.
Process			
General	<p>Commenter requests that in the routing decision, the Applicant considers the following: Land productivity, parcel size, proximity to transportation and job centers, proximity to agricultural markets, historic land uses, school districts, and other services, as well as factors that influence land economics.</p>	Routing criteria	<p>Items related to agricultural, socioeconomic and cultural resources are addressed in Section 3 of the Draft EIS, based on relevance to alternatives analysis and impacts, consistent with CEQ regulations stating that EISs should be . . . Items noted are addressed as appropriate in the Draft EIS, however, not all items listed appear to be “analytic rather than encyclopedic” and with impacts “discussed in proportion to their significance” (40 CFR 1502.2):</p>

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Project Alternatives			
Holden Township	Commenter believes that alternative energy should be considered in energy conservation.	Alternative energy	Section 2.2.4.3.
Bridgewater Township Board of Supervisors	Commenter believes that local power generation should be used.	Local involvement	Section 2.2.2.
Route Alternatives			
Wabasha County Administrator	Commenter supports the southern route, as it is most consistent with Wabasha County's Comprehensive Land Use Plan.	Local involvement	Comment noted. See Sections 3.6.1.1 and 3.6.2.1.
Warren Township Chairman	Commenter suggests that the line should be routed through woodland or wetlands, with a strong suggestion against the northern option through Warren Township, believing that agricultural land should be avoided.	Routing - to avoid agricultural land	Comment noted.
Goodhue County Board Commissioner	Commenter suggests that transmission lines should be routed along US-52 instead of MN-56 and -60 for the following reasons: to adhere to Goodhue County's land-use plan to maintain agricultural heritage; because these industrial and commercially zoned areas continue to grow and have greater energy demand; and because those homes near MN-56 and -60 are closer to highways and will be impacted more.	Routing - along US-52 instead of MN-56 and MN-60	Comment noted. See Tables 2-4 and 2-12.

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Pine Island EDA Director, Holden Township, (Representing) Minnesota Township, (Representing) Roscoe Township	<p>Commenters suggest that the transmission lines should be routed along US-52 to avoid future residential and neighborhood commercial areas, family farm neighborhoods, and wildlife habitat in farmland fence lines. Commenter representing Minnesota Township stated that alternative routes IP004 and IP005 go through too many homes, would require clearing new ROW, and would impact wildlife. In addition, Commenter representing Roscoe Township believes that the line should be routed along US-52 or Highway 56 and 14 to avoid environmental impact.</p>	Routing - along US-52	Comment noted. See Tables 2-4 and 2-12.
City of Hampton, Pine Island EDA Director, Oronoco Township, La Crosse Director of Zoning, Planning & Land Information Department Administrative Center	<p>Commenters believe that the proposed line should be routed to avoid existing and future residential and commercial developments, and that any impacts on present and future developments should be discussed.</p> <p>There were specific concerns that in the case of the City of Hampton, the line should be routed to the eastern city limits, and additional suggestion that the northern route near Pine Island should be chosen.</p>	Routing - to avoid existing and future residential and commercial areas	Sections 3.6.1.1 and 3.6.2.1.

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Oronoco Township	<p>Commenter believes that the structure designs should be highlighted according to each alternative; that the beginning and end of each alternative segment should be adequately defined, and differences between route alternatives should be clarified; that the location of transmission lines, pole placement, staging areas, and access roads within corridors or macro corridors should all be shown; and that locations where lines will be co-located with existing lines through wooded areas should be displayed on a map.</p> <p>Commenter from Oronoco Township also inquires: Is the location limited to only the 1000 ft. corridors or within 1.25 miles of the centerline as allowed in Minn. Stat. 116E.02 subd 1?</p>	Information availability, maps and structure designs	Regarding corridor width, see Section 2.3, third paragraph.
Zumbro Township Board	Commenter is concerned that the 3A route alternative has no existing corridor through the Zumbro Township and violates the MN Non-Proliferation Policy and Wabasha County Comprehensive Plan.	Existing corridors	The MN non-proliferation policy is considered in route selection and analysis. Local plans were also considered, as appropriate.
Connected Action			
Bridgewater Township Board of Supervisors	Commenter believes that this Project should be considered with the other CapX2020 power lines, which mostly bring power to Wisconsin and Illinois.	Potential for other transmission projects to be connected actions	Section 1.6.

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Geology and Soils			
Oronoco Township	Commenter asserted that geologic factors should be considered across all alternatives, including grounding in high pH soils, with respect to any changing geologic factors.	Geologic factors	Section 3.1.
Noise			
Warren Township Chairman	Commenter believes that noise impact should be limited.	Noise	Section 3.4.
Biological Resources			
Oronoco Township	Commenter is concerned that there is limited ecological data for private land, stating that most of the data came from MDNR Natural Heritage database, which is limited to areas where MDNR has conducted field surveys.	Inadequate information	Specific locations identified by private parties have been and will be considered. See also Section 3.5.3.5.
	<p>Commenter believes that new standards from IEEE Standards association relating to reducing bird deaths should be referenced and that detailed field assessments of the unique Oronoco/White Bridge migratory bird occurrences along the 3P route should be conducted, as well as bird counts and studies to qualify exactly what species will be impacted.</p> <p>Commenter is also concerned that the 3P route crosses Lake Zumbro, a habitat of large flocks of migrating waterfowl, including American White Pelicans (State Special Concern), ducks, and geese. Commenter is also concerned that the Lake Zumbro crossing is home to Bald Eagles and believes that the potential impact on their habitat should be considered.</p>	Avian standards and assessment	Sections 3.5.1.4 and 3.5.2.4.

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Oronoco Township	<p>Commenter inquires how the applicant will mitigate impacts to birds within one mile of proposed transmission line, as well as what the likelihood is of avian collision with power lines and injury from electrocution.</p>	Avian impact mitigation	Sections 3.5.1.4 and 3.5.2.4.
	<p>Commenter believes that State Species of Greatest Concern and non-status species affected in Minnesota should be addressed, and that MDNR management plans for SGCN should be considered.</p>	SGCN	<p>These were addressed in detail in the MN FEIS; relevant mapping from the MN FEIS has been adopted throughout the Draft EIS.</p>
	<p>Commenter believes that areas should be identified along proposed routes that require the completion of biological surveys, and that route-specific wildlife data should be collected.</p> <p>Commenter suggests that quarterly schedule breakdown of construction activities should be provided and should list impacts to small birds and mammals.</p>	Biological surveys, wildlife impacts	<p>Section 3.5.3.5; see also response above regarding conciseness of the EIS and related issues, for compliance with CEQ regulations.</p>
	<p>Commenter inquires as to what the intended amount of clearing in forested areas will be, and requests that impacts to trees cleared should be quantified.</p>	Quantify forest clearing	Tables 2-4 and 2-12.

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
River Crossings			
National Park Service	Commenter is concerned that the Cannon River and Mississippi River crossings in Minnesota are located downstream from segments listed on the National Rivers Inventory.	National Rivers Inventory	Section 3.2.1.4.
Oronoco Township	Commenter believes that impacts to the three Zumbro River crossings should be addressed, and that underground and aerial crossings for the Zumbro River crossings should be compared.	Impact on Zumbro River Crossing	Undergrounding was considered for the Mississippi River crossing and considered to be cost-prohibitive (Section 2.4.2.1). The same rationale would apply to the Zumbro River crossing. Impacts are assessed under specific resource areas in Section 3. The three alternative crossings are compared in Section 2.5.1.3.
Wetlands and Other Waters of the United States			
La Crosse Director of Zoning, Planning & Land Information Department Administrative Center	Commenter believes that impacts on shoreland districts and wetlands should be considered.	Wetlands	Sections 3.2 and 3.5.

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Land Use			
Wanamingo City Administrator, Pine Island City Administrator	<p>Commenters are concerned that transmission lines may conflict with Comprehensive plans and potential current and future land use conflicts along the 161 kV preferred route in the Pine Island area.</p> <p>Commenter from Oronoco Township inquires why the Applicant would choose routing that disrupts a city's land use plan, referring specifically to the Olmsted County Land Use Plan.</p>	Interference with current and future development and city planning	Sections 3.6.1.1 and 3.6.2.1.
Oronoco Township Board	Commenter is concerned that the 3P Route crosses Oronoco Township without consideration for future land use and settlement patterns. Commenter suggests that Oronoco's Township and County Land Use Plans and Zoning Ordinances should be applied to avoid conflict, stating that recent land use and land value information for Oronoco Township is available in the Olmsted County General Land Use Plan (dated March 8, 2011).	Local involvement and interference with city planning	Sections 3.6.1.1 and 3.6.2.1.
Dakota County, Holden Township	Commenters request that potential impacts on Dakota County's FNAP easements and impacts of easements through small farmland parcels be discussed,	Easements	Section 3.6.2.3 and 3.8.1.
Land Rights and Easement Acquisition			
City of Pine Island	Commenter is concerned that setbacks may conflict with zoning requirements in Pine Island and create two conflicting standards concerning road ROW within the same Highway Commercial district – one at 30' (without the power lines) and another at 45' (with power lines).	Potential impact on zoning requirement	Sections 3.6.1.1 and 3.6.2.1.

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Conservation Easements			
Dakota County	Commenter noted that county-held conservation easement agreements preclude utility easements on several properties near route options and inquired whether or not other counties have similar conservation easements in place.	Utility Easements	Section 3.6.2.3 and 3.8.1.
Recreation			
Oronoco Township	Commenter believes that the recreational resources that will be spanned for all routes and alternatives should be specifically explained, and in regards to the 3P route, that the unique nature of Lake Zumbro should be considered and that the value of Lake Zumbro's recreational uses and any impacts to the economic value of Lake Zumbro recreation be discussed and included in the EIS.	Information availability, Lake Zumbro concerns	Sections 3.6.1.3 and 3.6.2.3 and 3.7.
Florence Township Planning Commissioner	Commenter believes that the proximity of the Kellogg crossing to the Eagle Center in Wabasha and impacts on tourist eagle watching should be discussed.	Scenic impacts	Sections 3.5.1.4, 3.5.2.4 and 3.5.3.4.
Visual Impacts			
Bridgewater Township Board of Supervisors, Oronoco Township	Commenters believe that transmission lines will cause environmental harm in scenic corridors, homes, and major roads. Commenter from Oronoco Township was specifically concerned with the visual impacts of the 3P Route transmission lines on traveled roads near the Zumbro River Valley in Oronoco Township and suggested that a viewshed analysis be conducted considering impacts within a 4-mile buffer surrounding the proposed routes, and should specifically address how homes are impacted.	Scenic impacts	Section 3.7

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Transportation and Access			
Oronoco Township	<p>Commenter believes that there should be a specific focus on where future road expansions and/or realignments are likely to occur along the three route segments, especially areas where power line ROW will overlap with road ROW, requiring certain roadside structures to be displaced or relocated. Commenter suggests that this information is provided on the appropriate map(s) and that maps should be provided even if there is no conflict. Commenter believes that impacts on roadway management plans, including costs of relocating utility poles, should be discussed. Commenter requests that the applicant provide values for the following variables: traffic volume, design speed, roadside geometry, radius of horizontal curve, presence of a curb and presence of urban or rural roads, collectors, arterials, or freeways; stating that these influence the clear zone and road side obstruction requirements.</p>	Roadway planning.	<p>Section 3.8.1 discusses roadway issues as appropriate. See also response above regarding conciseness of the EIS and related issues, for compliance with CEQ regulations.</p>
	<p>The Lake Zumbro Seaplane Base guide slope restrictions and how these restrictions will be mitigated should be identified and discussed.</p>	Aviation concerns	Section 3.8.2.
Historic and Cultural			
Oronoco Township	<p>Commenter requests that the number of sites not evaluated for NHRP eligibility be quantified. Commenter also suggests that the completion date for the NHRP assessment should be indicated, inquiring why this assessment will not be conducted until after a route has been selected.</p>	NHRP	<p>See Section 3.9. The cost and time required for detailed assessments of all potential routes would not be justified when impacts can be adequately avoided and mitigated by assessing the selected alternative.</p>

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
	<p>Commenter inquires what the protocol is for handling cultural resources or human remains that are inadvertently discovered during construction. Commenter suggests that an appendix discussing related training and construction processes should be included.</p>	Construction processes	Section 3.9.5.
	<p>Commenter inquires as to which route alternatives have the least impacts on cultural or archaeological resources.</p>	Cultural/ archeological impacts	Tables 2-5 and 2-13.
Health and Safety			
(Representing) Farmington Township	<p>Undetermined long-term health problems caused by transmission lines should be discussed.</p>		Section 3.10.
Warren Township Chairman, Holden Township	<p>Commenters inquire as to the effects of stray voltage on dairy cattle and request that more information regarding dairy cattle health near transmission lines should be included.</p>	Livestock health	Section 3.10.1.2, Section 3.11.2.2.
Pine Island City Administrator	<p>Commenter is concerned that the perception of potential health risks of the 161 KV line going through a healthy living campus dubbed the "<i>Healthiest Place on Earth</i>" will prevent such concept from realizing its full potential.</p>	Public health perceptions	Section 3.10.
Oronoco Township	<p>Commenter believes that all health risks should be adequately disclosed, and that more recent health studies relating to EMF should be provided considering human exposure, stray voltage, livestock, swimming pools, metallic pipelines, and energized conductive objects at ground level. Commenter also requests that mitigation for EMF exposure be explained.</p> <p>In addition, Commenter requested how EMF affects persons with implantable medical devices and mitigating measures?</p>	EMF – information availability and mitigation	Section 3.10.

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
	<p>Commenter has concerns about health problems caused by EMF, and suggests minimizing any risks by avoiding as many individuals as possible. Commenter also suggests that the safe setback distance of structures from centerlines should be explained, with elaboration on the distance's adequacy.</p>	<p>Health concerns - routing</p>	<p>Section 3.10.</p>
Electrical Characteristics			
<p>Oronoco Township</p>	<p>Commenter requests that interference of electronic communications from corona, including electronic interference on homes, businesses, telecommunications, and GPS devices (including GPS-based farming equipment) should be discussed. Commenter specifically inquired as to why radio frequency, microwave path, and broadcast (TV and radio) studies will not be completed by the Applicant until a final route is selected.</p> <p>Commenter also specifically suggested that effects on properties within 1.25 miles of proposed 3P corridor should be modeled and reviewed.</p>	<p>Electronic interference</p>	<p>Section 3.11.2.2.</p>
	<p>Commenter suggests that the risk of transmission line-induced stray voltage when crossing service and distribution lines should be analyzed, and that the number of areas that are at risk for stray voltage should be listed. Commenter inquired who is responsible for detecting and mitigating stray voltage.</p>	<p>Stray voltage</p>	<p>Section 3.10.1.2</p>
	<p>Commenter suggests that magnetic fields at the edge of the ROW conform to state standards, with further inquiry into what standards determine that 300 feet is an acceptable outer limit distance for evaluating impacts of EMF.</p>	<p>EMF - Standards</p>	<p>Section 3.10.2.1, Tables 3-8 and 3-9.</p>
	<p>Commenter requests that maps with microwave communication towers, FCC licensed microwave beam paths that cross proposed routes, and location of MnDOT's existing emergency towers should be provided, with an explanation of how close transmission lines can be located to these towers.</p>	<p>Maps - towers</p>	<p>Selected route will comply with FAA and FCC requirements related to tower proximity.</p>

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Oronoco Township	Commenter requests that the "corona effect" emission values for ozone and oxides of nitrogen be provided in parts per million (ppm), and that impacts be modeled to air quality.	Air quality	Section 3.3.
Social and Economic			
(Representing) New Market Township	Impacts on property values should be discussed.	Property values	Section 3.11.2.1.
Wanamingo City Administrator, Oronoco Township	There were many Commenter concerns with sale of property. Commenters believed if these transmission lines are built, that development lots will be impossible to sell if Commenter from Oronoco Township stated that FHA or HUD loans cannot be acquired if a dwelling or related property improvements are located within the fall distance of any line structure, concluding that buyers would not be able to obtain loans for this property. Commenter was concerned that the market of purchasers would be caused to shrink, essentially reducing the property owner's ability to sell.	Property sales	Section 3.11.2.1.
Oronoco Township	Commenter inquired as to what happens when a transmission line structure falls.	Fall hazard	Section 3.10.2.3.
	Commenter believes that MDNR forestry stands should be avoided.	State forest impacts	Comment noted. Impacts are addressed.
Agriculture			
Warren Township Chairman, Bridgewater Township Board of Supervisors	Commenters are concerned that transmission lines will cause the loss of prime agricultural land, and believe that impact on farmland should be avoided.	Agricultural impacts	Sections 3.6.1.2 and 3.6.2.2.

Agency	Comments	Issue	Response/Reference to Draft EIS Discussion
Oronoco Township	<p>Commenter requests that the amount of arable land eliminated for each route alternative be quantified and compared, and that all mitigation and BMPs are implemented in agricultural areas during construction, operation, and maintenance.</p> <p>Additionally, Commenter is concerned that the 345 kV line has no benefits to locals but significantly impacts the township.</p>		<p>Sections 3.6.1.2 and 3.6.2.2; and Sections 3.11.1.1 and 3.11.2.4..</p>
Residential			
Oronoco Township	<p>Commenter requests that the number of homes displaced by each route be quantified and that a table showing homes within 1000 feet of proposed routes should be included, inquiring as to which route will have the least impacts.</p>	<p>Information availability - property, route alternatives</p>	<p>Section 2.5</p>

Table C-3: Public Scoping Comments

Comments	Response/Reference to Draft EIS Discussion
Purpose and Need	
Rural communities will not benefit from the Project. The perception is that only larger urban areas such as Rochester, MN and Chicago, IL will benefit. One specific comment questioned whether the Project is appropriate for borrowing per the Rural Electrification Act due to the lack of rural benefit.	Section 1.1.2.
Commenters generally question the need for the Proposal, requested that the EIS independently verify the need for the Project and review the background data used to create the justification including load forecasts, assumptions, data, and projections.	Section 1.1.2.
The EIS should also explain the regulatory criteria for approval of load forecasts applicable to the Proposal and provide a thorough and independent review of all forecast data and assumptions.	See Section 1.1.2 for a discussion of the project need.
Some commenters suggested that the real need for the Project is to create profit for the private power suppliers that have ownership in CapX2020.	See Section 1.1.2 for a discussion of the project need.
Process	
Commenters believe decisions have already been made and the scoping and public comment process is not meaningful.	Section 1.4.
Is a new certificate of need and an EIS required if additional lines are proposed in the future?	Sections 1.1.2.1, 1.2.3.
Commenters are concerned about insufficient opportunity for public input and lack of public notification.	Section 1.4.
How is information disseminated for those who do not have internet access? Also, one commenter felt that property ownership records seemed to be the only ones used for public notification, rather than the established Project contact lists.	Section 1.4. The Draft EIS will be available for review in local repositories.
What factored into decisions made when deciding the route and various alternatives?	Section 2.3
Commenters are concerned that alternatives added during the Minnesota scoping process will not be adequately evaluated.	All alternatives included in the MN DEIS are included in the federal EIS.

Comments	Response/Reference to Draft EIS Discussion
An inquiry was made regarding the purpose of the scoping process, and specifically why public comments were not gathered prior to public scoping on the AES and MCS documents.	Section 1.4.1
Consideration should be given for “no-build” options.	Section 2.4.1
Public notices in the paper should include more detailed information, possibly including maps.	The Draft EIS notice provides detailed information.
Commenters also requested that other federal, state, and local regulations are met and agencies be provided the opportunity to be involved in the process. Specific agencies mentioned include the FAA, USFWS, MDNR, WDNR, and other state and local agencies, as well as the Ho-Chunk Nation Tribe, the Oneida Nation of Wisconsin, Mille Lacs Band of Ojibwe, and other tribes in Wisconsin.	Section 1.3.
Project Alternatives	
Commenters expressed support for locally produced wind and solar power.	Section 2.2.2, Section 2.2.4.3.
Commenters suggested that reasonable system alternatives be included in the EIS, such as local generation and transmission, conservation, alternative sources of energy, renewable energy, nuclear energy, incentivized conservation, postponement, undergrounding, decentralized energy, load management, upgrading existing transmission lines, and smart grid technology.	Section 2.2.
Other alternatives should be considered, such as expanding the size of Rochester’s power plant, expanding other coal plants, and nuclear power.	Section 2.2.
Route Alternatives	
The commenter believes that residential density and plans for future residential development should be considered.	Tables 2-4 and 2-13; Sections 3.6.1.1 and 3.6.2.1.
Commenters believe underground routes should be considered for certain areas such as river and stream crossings (in particular the Mississippi River crossing), and in scenic or populated areas.	Section 2.4.2.1.
Commenters believe Route 3A is a violation of the Minnesota Non-proliferation policy.	Comment noted; see also Table 2-4.
The proposed North route uses the highest amount of established ROW at ~51%, in accordance with Minn. Stat. 216E.03, Subd. 7(b)(8).	Comment noted; see also Table 2-4.

Comments	Response/Reference to Draft EIS Discussion
Commenters believe that existing corridors, ROWs, roads, property lines and transmission lines should be paralleled and used when choosing the final route.	Section 2.5.
General comments included recommendations that existing residences and farms, rural river valleys, farmland, bluff country, dairy farms, the Richard Dorer Memorial Forest, the Hammond Creek Trout Stream and the Zumbro River Valley be avoided when choosing the final route.	These items are addressed throughout Sections 2 and 3.
Commenters requested that the shortest and least expensive route be chosen.	Comment noted; see also Tables 2-4 and 2-12.
The preferred routing utilizes existing utility right-of-ways, whereas the alternative routing would impede private field lines and it would impact trails as well.	Comment noted; see also Tables 2-4 and 2-12.
A common request was to underground the entire project.	Section 2.4.2.1.
Connected Action	
Commenters suggested that the EIS include all four CapX2020 transmission projects because they were studied and developed as a whole.	Section 1.6.
Commenter suggested that, at a minimum, the Brookings County to Hampton project be analyzed in the EIS for Hampton-Rochester-La Crosse because the projects are electrically connected at the proposed Hampton Substation.	Section 1.6.
Geology and Soils	
The Nature Conservancy has identified the confluence of the Zumbro and Mississippi Rivers and the sand delta that formed behind it as a high priority conservation area for its characteristic sand dunes, dry sand prairie and many rare species that occur there. The Conservancy refers to this area as the Weaver Dunes-Zumbro Delta conservation area.	Section 3.5.1.3. The area will not be impacted by the Proposal.
Commenters expressed concern about potential erosion, especially in bluff areas along the Mississippi, Cannon and Black Rivers.	Section 3.1
Slope and grade need to be considered when finalizing the route.	Section 3.1.2.2.
Have gravel pits been identified on the maps?	See Sections 3.1.1.2, 3.1.1.3, 3.1.2 and 3.1.3.
Have sinkholes been identified on the maps?	

Comments	Response/Reference to Draft EIS Discussion
<p>Commenter expressed concerns about karst and referenced a siting for nuclear waste that found Goodhue County almost entirely lacking suitable sites because of karst features.</p>	<p>See Sections 3.1.1.2, 3.1.2 and 3.1.3. Potential karst impacts associated with nuclear waste are very different from those associated with transmission lines.</p>
<p>The commenter believed an in-depth analysis of the potential impacts on karst features needed to be included.</p>	<p>Section 3.1.1.2.</p>
<p>It was also requested that mitigation of soil compaction and damage caused during construction and operation of the Project be considered in the EIS.</p>	<p>Section 3.1.</p>
<p>Commenter was concerned about siltation impacts to ponds within drainageways of proposed construction access roads.</p>	<p>Section 3.2.</p>
<p>Noise</p>	
<p>Commenters expressed concerns about noise from transmission lines, focusing on the audible hum of transmission lines or the whistling that occurs in windy conditions.</p>	<p>Section 3.4.</p>
<p>Commenters requested that noise impacts to quiet rural areas, noise, residential, recreational, and wildlife preservation areas where background noise is generally quiet be analyzed in the EIS.</p>	<p>Section 3.4.</p>
<p>Biological Resources</p>	
<p>Commenter expressed concerns about impacts to habitat from tree removal.</p>	<p>Section 3.5.2</p>
<p>The flight path of migratory waterfowl would be negatively impacted.</p>	<p>Sections 3.5.1.4, 3.5.2.4, and 3.5.3.4</p>
<p>Commenters are concerned about impacts to various MDNR trout streams.</p>	<p>Section 3.2.1.4</p>
<p>Commenters were concerned that tree removal would increase the risk of Buckthorn infestation.</p>	<p>Sections 3.5.1.2, 3.5.2.2 and 3.5.3.2</p>

Comments	Response/Reference to Draft EIS Discussion
Commenters expressed concerns about impacts to fauna including, but not limited to: Bald Eagle, turkey, white-tailed deer, pheasant, grouse, Pileated Woodpecker, White Egret, Blue Heron, owls, wood turtles, short-tailed weasels, Henslow's sparrows, loggerhead shrikes, prairie voles, trout lily, wild ginger, prairie bush clover, and kitten tails and Monarch butterflies.	Section 3.5
Commenters expressed concerns about impacts to flora including, but not limited to: Dwarf Trout Lilies, Yellow Lady's Slipper Orchid, Nodding Trillium, Grandiflora Trillium, Prairie Bush Clover, red/white oaks, black walnut, black cherry, white ash, silver maple, and red/white/scotch pine.	Section 3.5
River Crossings	
The Nature Conservancy expressed concern that an additional high voltage transmission line crossing the Mississippi River will lead to an increase in avian mortality as this is a major migratory bird flyway and commended the applicants for working with the U.S. Fish and Wildlife Service.	Sections 3.5.1.4, 3.5.2.4, and 3.5.3.4.
We understand an alternative route across the Mississippi River is required by Minnesota rules. We do not see anywhere, in any of the maps available to us, where a second river crossing would be operated.	Section 3.2.1.1.
Commenters expressed concerns about impacts on wetlands at river crossings.	Section 3.5.
Commenter stated that the Cannon River be avoided because it is designated as part of the Minnesota Wild, Scenic, and Recreational Rivers Program.	Crossing the Cannon River is unavoidable. Section 3.2.2.3.
Land Use	
Commenters believe the Proposal is inconsistent with land-use plans of the local government agencies, including the City of Pine Island, City of Oronoco, Oronoco township, or Olmsted County.	Section 3.6.1.1, 3.6.2.1.
Commenter believes that route should not cross land identified by a municipality or township as future residential.	Section 3.6.1.1, 3.6.2.1.
Commenter believes the transmission line should be placed on lower value property and not on land "slated for residential development within a high powered school district."	Section 3.11.2.5.
Residents are concerned that their land will become unusable for home construction.	Sections 3.6.1.1, 3.6.2.1 and 3.11.2.1.
Residents are concerned that future land use (in general, no specifics given) will be affected.	Sections 3.6.1.1, 3.6.2.1 and 3.11.2.1.

Comments	Response/Reference to Draft EIS Discussion
Commenter expressed concern about impacts on their property which they are planning to develop for commercial/industrial use.	Sections 3.6.1.1, 3.6.2.1 and 3.11.2.1.
Commenters requested that the direct and indirect impacts to current and future land be examined in the EIS, including agriculture, forests, river valleys, MDNR forest management areas, sensitive land uses, businesses, recreational land, residential areas, and commercial land use.	Sections 3.6 and 3.11.2.1.
Land Rights and Easement Acquisition	
ROW requirements along the route should be clarified, and all Project activities must remain within the ROW.	Section 2.4.2.1
What impact will the right-of-way (ROW) have on residences and businesses along the various routes?	Impacts are discussed by resource throughout the Draft EIS. Sections 3.10 and 3.11 are most applicable.
Commenters questioned the safe and allowable distance between a home and a transmission line.	Section 3.10.
Routes should follow existing ROW corridors to eliminate need for new ROW agreements.	Criteria for identifying routes is described in the Draft EIS and includes consideration of existing corridors.

Comments	Response/Reference to Draft EIS Discussion
<p>Comment on Minnesota DEIS: Section 8.1.4.11 states that most portions of rural US-52 are constructed on approximately 280 feet of right-of-way, and also that the Applicant has proposed that 70 feet of the transmission line right-of-way overlap the highway right-of-way. It is important to note that the width of the highway right-of-way is not uniform and may vary in width along any highway. Also, 70 feet of occupation of the highway right-of-way implies a pole placement approximately 5 feet outside the right-of-way boundary line. As MnDOT noted in its letter on the scoping of the DEIS, US-52 is a four-lane divided highway that carries a high volume of vehicle traffic daily. US-52 has been designated as a high priority Interregional Corridor and the vision for US-52 is to develop it as a fully access controlled freeway facility. Therefore, MnDOT's intent is to apply freeway standards to any permit applications by the Applicant, including the restriction on static occupation of the highway right of way. This would imply a pole position approximately 25 feet outside the right-of-way boundary line.</p>	<p>Section 2.4.2.2.</p>
<p>Conservation Easements</p>	
<p>Does the Reinvest in Minnesota (RIM) program allow for electric transmission lines to cross affected property? Are permits required for land in the RIM program?</p>	<p>Section 3.6.2.3.</p>
<p>Commenters requested that land in conservation easements be avoided and the potential impacts assessed if the Project passed through a conservation easement. Specific concerns include easements in Oakwood Township, Minnesota and land enrolled in the Minnesota Land Stewardship Program.</p>	<p>Section 3.6.2.3.</p>

Comments	Response/Reference to Draft EIS Discussion
Recreation	
<p>Commenters requested that recreational areas be preserved and avoided, specifically citing Lake Zumbro, the Zumbro River Valley, Lake Byllesby, the Cannon River, the Woodland Camp, Camp Victory, useable lakes and rivers in southeastern Minnesota, Steeplechase Ski and Snowboard Area, the bluffs near the Mississippi River, hunting grounds on private and public property, fishing areas, hiking areas, campgrounds, trails and parks.</p>	<p>Impacts on land resources, including parks and recreation area, are discussed in Section 3.6. Ski areas will not be directly affected. River crossings are unavoidable. Surface water impacts are discussed in Section 3.2. Impacts to recreation will generally be limited to visual impacts (Section 3.7).</p>
<p>Proposed highway layout changes and interchange additions outlined in MnDOT plans need to be taken into account when the final route is decided.</p>	<p>Section 3.8.1.</p>
<p>Citizens are concerned about Project interference with recreational activities including: biking, snowmobiling, flight, water skiing, fishing, kayaking, hunting, canoeing, walking/hiking, golf, horse riding, bird watching, and ice fishing.</p>	<p>Recreational impacts will be generally be limited to visual impacts (Section 3.7). Airports are discussed in Section 3.8.2.</p>
Visual Impacts	
<p>Part of any environmental discussion should also include the visual effect to the land. The preferred route will see little additional impact, whereas the alternative routes will be greatly visually scarred.</p>	<p>Section 3.7.</p>
<p>Commenter believes that keeping the alignment on U.S. 52 would reduce visual impacts.</p>	<p>Section 3.7.</p>

Comments	Response/Reference to Draft EIS Discussion
Commenter expressed concern about visual impacts on Lake Zumbro, Lake Byllesby, and/or the Zumbro River Valley. One commenter was especially concerned about impacts on weekends when more recreational users are present.	Section 3.7.
The commenter expressed concerns about visual impacts on the Nansen Agricultural historic district.	Section 3.7.
The commenter expressed concerns about visual impacts on the bluffland areas of Winona and Wabasha counties.	Section 3.7.
Commenters requested that the EIS address direct and indirect visual impacts to specific resources ranging from the National Scenic Byway located in Minnesota and Wisconsin, the Mississippi River channel, Van Loon Wildlife Area, scenic byways, neighborhoods and homes, Lake Zumbro, rural agricultural communities, waterways, wetlands, and recreational areas.	Section 3.7.
Commenters expressed concerns about visual impacts on residences and/or the area in general.	Section 3.7.
Transportation and Access	
Construction will affect 65 th Street –it’s already in need of major repairs and has poor visibility. Has this been taken into consideration?	Section 3.8.1.
The effect of transmission lines and pole structures on Stanton's Automated Weather Observation Station (AWOS).	Section 3.8.2.
Stanton caters to gliders and small general aviation aircraft. Gliders, with only a few exceptions, are not powered by an engine and therefore are severely limited in their ability to alter altitude on final approach. FAA guidelines do not address the special limitations of gliders.	Section 3.8.2.
Commenter expressed concern about one of the advisory committees placing a line too close to the Stanton Airport, especially after the applicant had been coordinating with airport personnel.	Section 3.8.2.
Takeoff and landing areas for aerial crop spraying and dusting should be addressed.	Section 3.8.2
Impacts on both public and private airports should be considered, even if FAA rules are not applicable.	Section 3.8.2.
The Project will interfere with recreational airplane flight.	Section 3.8.2.

Comments	Response/Reference to Draft EIS Discussion
The transmission line route will interfere with road access that would allow future property development.	The line will cross major highways and will not interfere with road access.
Commenter is concerned that wooded buffers along U.S. 52 will be eliminated to satisfy ROW requirements for the transmission line.	Section 3.7.2.
Commenter requested that private airports be considered during the routing process.	Section 3.8.2.
Commenter requests that impacts to private drives be avoided.	The Draft EIS details the criteria used to locate routes and avoid and minimize impacts. Private drives were not included in the criteria. The line will cross major highways and will not affect access for private driveways.
Historic and Cultural	
Impacts to the Nansen Agricultural Historic District, which was established as the nation's first rural historic landscape district, should be considered.	Section 3.9
Agricultural heritage in general, and specifically farms designated as "Century Farms", will be negatively impacted.	Section 3.7.2 and 3.9.
Route 1P-009 will encroach upon Urland Lutheran Church, a 130 year old congregation.	Section 3.9.
Proposed route 2C3 will affect the Old Stagecoach Trail along the Goodhue-Wabasha county line.	Section 3.9.
Commenters requested avoidance of the Laura Ingalls Wilder historic trail and homestead.	Section 3.9
The route that follows Hwy 52 through Pine Island appears to affect the Pine Island Cemetery.	Section 3.9

Comments	Response/Reference to Draft EIS Discussion
Our property [Mary Lazaretti] has 3 building sites with nearly 25 farm buildings on them. After we purchased we decided that since we had the means, we wanted to restore all the buildings on the property in order to preserve the story they tell. Our farm buildings are representative of farm life from the late 1800's through the 1950's and the story they tell of our history is worth preserving.	Section 3.9
Indian mounds have been noted in Warsaw Twp, Section 8.	Section 3.9
Investigation has been requested on the identification and registration of Native Indian burial sites on the east bluff above the Zumbro River on route 3A (Section 15, T109N R14SW of Wabasha County).	Section 3.9
The Hampton to Randolph route will affect St. Mark Lutheran Church.	Section 3.9
Commenter requested that impacts on Century Farms and stagecoach routes and associated facilities be addressed.	Section 3.9
Our family farm [John Peterson] is not noted as a historic farm, as we were named by MnDOT within the past few years. A MnDOT representative cataloged information about our farm, and subsequently we were named as a historic farm. This historic designation should be noted (it doesn't appear currently) on the EIS, given that two of the proposed routes would travel through our property and alter our farm forever. In particular, the route IP-001 would cut right through the heart of our farm.	Section 3.9.
Commenters noted a “historic Sears home” in Oronoco Township.	Section 3.9.
Within 100 yards of my house [Ann Troost] multiple Native American Ojibwe Indian arrowheads have been found in the garden. Dr. Alan and Karen Bard unearthed many artifacts on this property in the 1980's and surrounding decades. The original owner Mr. Rusch stated that the Indians used to camp here, prior to the Homestead Act of 1862.	Section 3.9.
Commenters requested that resources be avoided, such as century farms, places currently or nominated to be on the National Registry of Historic Places, historic farms, historic school houses, cemeteries, archeological sites, historic trails, and homesteads, citing specifically Mount Trempealeau and Laura Ingalls Wilder Historic trails and homestead.	Section 3.9.

Comments	Response/Reference to Draft EIS Discussion
Tribal representatives explicitly asked that specific areas of tribal importance be avoided including active tribal ceremonial sites, grave sites along the Mississippi River protected under Native American Graves Protection and Repatriation Act (NAGRPA), Native American cave and mound burial sites, vision quest sites, and architectural property, archeological sites, culturally sensitive sites, or traditional cultural properties significant to the Ho Chunk Nation. In addition, tribes requested to be included in the formal Section 106 process by being provided with cultural resource studies and archeological reports and offered to host site visits with the RUS.	Section 3.9.3.
Health and Safety	
Commenters have concerns about the human and animal health effects of EMF, stray voltage, the lack of U.S. exposure standards for EMF, use of estimates rather than design capacities to calculate magnetic fields. Specific concerns are related to impacts on implanted medical devices and hearing aids, fertility and milk production in cattle, potential to cause cancer or other diseases, and catastrophic failure due to adverse weather, requesting that the EIS include assessment of the detrimental direct and indirect impacts.	Section 3.10, Section 3.11.2.2
In the event of a fault with a high voltage line, fiber optic lines have transferred current into homes causing fires and electrocution, with no solution, as of an EPRI report released in 1997. The FEIS should take into consideration risks of fiber-optic.	Section 3.10.2.3.
Commenter is concerned about spread of chronic wasting disease (CWD) through movement of contaminated soil.	Section 3.5.4.1, 3.5.2.4, 3.5.3.4
Commenter is concerned about potential impacts to emergency medical helicopters.	Section 3.8.3.
Commenter is concerned about stray voltage and/or storm damage.	Section 3.10.1.2
Do transmission lines affect 911 emergency service systems?	No.

Comments	Response/Reference to Draft EIS Discussion
<p>Commenter is concerned that a failure of a dam upstream of the transmission line would destroy the line.</p>	<p>A dam failure is a low-probability event that could result in widespread damage to structures, including transmission lines. See Section 3.10.2.3 for discussion of electrical safety issues.</p>

Comments	Response/Reference to Draft EIS Discussion
<p>Commenter is concerned about ice falling from transmission lines onto nearby residences during high winds.</p>	<p>Excessive ice buildup can cause lines to fail. Ice storms are dangerous and can cause damage, and the combination of an ice storm and high winds is especially dangerous. However, power lines do not pose any particular hazard relative to other structures or natural features (e.g., trees) that may accumulate ice. Because no residences are within the ROW, power lines would seem to be of relatively low concern for impacts to residences in the event of combined ice and wind storm.</p>
<p>Commenter is concerned about the impact of the transmission line on windbreaks.</p>	<p>Section 3.11.2.3.</p>
<p>Electrical Characteristics</p>	
<p>Commenters are concerned about impacts of stray voltage on distribution lines.</p>	<p>Section 3.10.1.2.</p>
<p>Commenters are concerned about potential impacts of transmission lines on cell phones and internet.</p>	<p>Section 3.11.2.2.</p>

Comments	Response/Reference to Draft EIS Discussion
A table such as Exhibit C underestimates the Magnetic Field that would be created if the transmission line was utilized to its full potential capacity, or to 80% of its full potential capacity.	Section 3.10.1.1.
Commenters are concerned about potential impacts of transmission lines on GPS, specifically for usage on agricultural equipment, including questions about compensation or mitigation if interference does occur.	Section 3.11.2.2.
How big is the magnetic field created by the transmission lines?	Section 3.10.2.1, Table 3-8.
Commenters questioned the potential effects of EMF on humans and livestock, as well as static electricity and stray voltage issues, and how they would be mitigated.	Section 3.10, Section 3.11.2.2
Social and Economic	
Commenters are concerned about impacts on Veteran's Administration (VA) financing for home loans.	Section 3.11.2.1.
Commenter believes impacts on FHA mortgages should be further addressed and states that FHA insured over 37% of all mortgages.	Section 3.11.2.1
Commenters are concerned about impacts to property/home values.	Section 3.11.2.1.
What is the financial compensation for potential decreases in property values?	Section 3.11.3.1
Commenters are concerned about a potential increase in taxes resulting from the transmission line.	If property values increase, taxes would increase.
Commenters are concerned about impacts to land- and property- based income.	Section 3.11.2.1.
The transmission line may affect visual resources that provide value.	Section 3.7 and 3.11.2.1.
Commenter is concerned about potential impacts on tourism.	Section 3.11.2.1.
Commenter is concerned about potential increases in electricity rates to pay for the transmission lines	Funding and evaluation of rates are outside the scope of the EIS.
Commenters are concerned about general impacts on businesses, including those that are agriculture-based, or recreational.	Section 3.11.2.

Comments	Response/Reference to Draft EIS Discussion
Commenters questioned the continued viability of small farms that might be part of a final alignment and therefore host an easement.	Sections 3.11.2.2 and 3.11.3.2.
How will this Project affect the new water tower for the City of Wanamingo?	The Proposal will not impact the new water tower.
Commenters are concerned about impact on future development of property.	Section 3.11.2.1.
Commenters questioned the source of Project funds and wondered about other potential use for the money.	The purpose and need for the Proposal is discussed in Section 1.2. Funding is outside the scope of the EIS.
Why would the Project be routed in rural land and affect rural landowners when users in urban centers would be the principal beneficiaries of this Project?	Nearly all landowners, urban and rural, benefit from electricity. Routes are identified based on the criteria described in detail in the Draft EIS.
Agriculture	
Is the Proposal consistent with Minnesota's policy of agricultural preservation (Minn. Stat. 17.80)?	Section 3.11.3.2.
Commenters are concerned about the impacts of transmission lines on crop production (corn, soybeans, wine grapes, pumpkins), grazing land (dairy cattle, hogs, goats, turkeys), tree farms, vineyards, livestock and dairy farms.	Sections 3.11.2.4 and 3.11.3.2.
Commenter is concerned about impact of poles on contoured terraces in farm fields.	Sections 3.11.2.4 and 3.11.3.2.
Commenter is concerned about potential impacts on certified organic farms, including the loss of productive farmland and revenue associated with production, interference with farming equipment and operations, compaction of soil, and the health and safety of livestock (especially dairy cattle).	Section 3.11.3.2.

Comments	Response/Reference to Draft EIS Discussion
Commenters are concerned about the impact to operations including tile drainage and possible destruction, center pivot irrigation systems, and the aerial application of chemicals.	Section 3.11.3.2.
Commenters also questioned the ability of farms to navigate farm equipment around transmission line structures and if compensation for damages and losses would be provided by the utilities.	Section 3.11.3.2.
Residential	
Commenters request avoidance of residences, family farms, and/or future home sites.	Impacts to residences, including farm residences, have been avoided to the extent practicable. Future home sites were not accounted for.
Commenters request more specific information on locations of residences.	Locations of residences can be found on the detailed maps in Appendices E (MN) and G (WI).
Environmental Justice	
Commenter questioned proper and timely notification of the Project for the Trempealeau County area, noting that the population is small and displays low income characteristics, indicating that the residents would be uniquely disadvantaged.	Section 3.11.2.3.

Comments	Response/Reference to Draft EIS Discussion
Cumulative Impacts	
Residences already impacted by a utility easement should not be affected by another, specifically citing the Williams pipeline.	Minnesota and Wisconsin regulations require consideration of co-location in existing utility corridors (Section 2.3).
Commenter questioned the cumulative impact to migratory birds and waterfowl within the Mississippi Flyway.	Section 4.4.

Comments	Response/Reference to Draft EIS Discussion
<p>Commenter questioned the cumulative impacts if this Project were enabling a new coal generation in the Dakotas, and its impact on global warming.</p>	<p>The Proposal purpose and need is discussed in Section 1.2 and is not specifically related to electric generation in North and South Dakota. Because the Proposal will allow an outlet for bottled up generation (Section 1.1.2.3), it provides for more efficient use of electricity that is generated, and thus reduces the need for additional generation. Note that by law coal-generated electricity has the same access to transmission facilities as electricity generated by other means.</p>
<p>Commenter requested that the cumulative impacts of new wind farm development correlated to the final route alignment for the proposed Project be analyzed in the EIS.</p>	<p>Cumulative impacts from the Proposal, including those resulting from wind farm development, are discussed in Section 4.4.</p>

Table C-4: Responses to Comments on Draft EIS by Category

Note: Comment responses to agency comments are included in Appendix S and are not included in this table. Responses to other comments (non-agency) are included in Appendix T. Because many reviewers made the same or similar comments, general responses were developed for many, but not all, of the comments in Appendix T. This table includes the general response by category, as identified in the individual comment responses contained in Appendix T.

Comments	Response/Reference to EIS Discussion
CATEGORY A: GENERAL/OTHER	
A01 – Miscellaneous	
<p>Commenter had concerns that the Interagency Rapid Response Team for Transmission (RRTT) involvement may affect private input and thorough evaluation.</p>	<p>The RRTT, created by the Obama Administration, aims to improve the overall quality and timeliness of electric transmission permitting, review and consultation by the federal government. The Proposal is one of seven transmission proposals initially being addressed by the RRTT (CEQ n.d.). The RRTT does not affect any requirements of NEPA and the CEQ regulations, such as the requirements for public involvement, review or analysis.</p>
<p>Will guy wires be used?</p>	<p>The Proposal design relies on self-supporting structures. In a few areas with difficult access guying may be considered to reduce the structure size. See Section 2.4.2.3.</p>
<p>Commenter is concerned that new lines will encourage people to use more electricity and wants to know if RUS would “allow funding for projects in economically deprived areas.”</p>	<p>As discussed in Section 1.1.2.1, one of the goals of transmission system improvement projects is increased efficiency in the system. In general, increased efficiency is considered a positive attribute as it can contribute to resource conservation and lower cost for goods and services. While presumably most consumers, given a choice, would prefer that their electricity rates not increase, there may be a relationship between the cost of electricity and the amount used. For example, residential users in states with high-cost electricity have been shown to have better energy-efficiency ratings (Kandel et al 2008, Figure 3). RUS authority is described in Section 1.2.1. As described in Section 3.11.2.5, RUS complies with Executive Order 12898, <i>Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations</i>.</p>

Comments	Response/Reference to EIS Discussion
Commenter is concerned that RUS is “rubber-stamping” information prepared by the applicants.	RUS has used, and independently verified, information provided by the applicant. CEQ regulations [40 CFR 1506.5(a)] allow agencies to use information prepared by others, provided that it is independently verified: “It is the intent of this paragraph that acceptable work not be redone, but that it be verified by the agency
How can federal jurisdiction extend beyond federal lands?	Federal jurisdiction can extend beyond federal lands based on laws that give federal entities authority beyond federal lands. See Section 1.3.1 and Table 1-1 for more information.
Commenter was concerned that comments submitted in August 2011 would not be considered in the Draft EIS.	Comments received in August 2011 were considered in the Draft EIS.
Some commenters felt there is too much information to review in the EIS.	While the document is long, the Executive Summary (32 pages) identifies the major issues. The table of contents can also help a review focus on areas of interest. All documents are available on the internet in searchable Adobe pdf™ format, so reviewers can find areas of interest by searching on key words.
Commenter was concerned about the potential for involvement for people without internet access.	While the internet makes involvement easier for people with access, RUS still uses (in addition to internet resources) all the same methods for public involvement that were used before the internet became available, such as mailings, newspaper notices, public meetings, and repositories. Therefore, those without internet access have the same opportunities for public participation they have always had.
Commenter noted that the estimated cost of the project has increased since 2007.	The estimated cost has increased. RUS updates documents with cost information as it becomes available.
Some commenters had concerns about conservation easements.	Conservation easements are addressed in various places in the EIS as appropriate. See also responses to Categories C09 and I09.
A02 – General opposition	
A number of commenters expressed general opposition to the Proposal.	The EIS evaluates the need for the Proposal and assesses impacts related to the Proposal.

Comments	Response/Reference to EIS Discussion
A03 – Connected actions	
Some commenters opined that because the Proposal will be connected to other elements of the transmission grid, the other parts that it connects to (or that may be connected to it) are “connected actions” under NEPA.	See Section 1.6 for a discussion of connected actions.
A04 – Grammatical and minor corrections	
Some commenters noted grammatical or typographical corrections that were needed.	These corrections were made.
A05 – Reliance on Minnesota and/or Wisconsin EIS	
Some commenters felt that the Draft EIS used too much material from the EISs prepared by the state agencies.	The use of existing material prepared by the state agencies, independently verified, complies with the CEQ regulations [40 CFR 1506.2(b)]: “Agencies shall cooperate with State and local agencies to the fullest extent possible to reduce duplication between NEPA and State and local requirements...” At all locations in the EIS where materials prepared by the states are used, the Minnesota/Wisconsin sources are referenced. Joint EISs were not feasible as the Minnesota and Wisconsin processes do not lend themselves to joint preparation. See also A01 response regarding independent verification of materials provided by others. (Note that publically available GIS files from agencies are used as-is; there is no practicable way to verify this type of information.)
Commenter asked for documentation of errors found in the state EISs.	RUS did not necessarily agree with everything that was included in the state EISs and used only material with which it concurred.

Comments	Response/Reference to EIS Discussion
A06 – Comments unrelated to the RUS Draft EIS	
<p>RUS received comments on material that appeared on the CapX website that was not prepared by RUS and comments on other proposed transmission projects. RUS also received copies of letters that were sent to the State of Minnesota or Wisconsin.</p>	<p>No response is required for comments not relevant to the RUS Draft EIS. Regarding letters to state agencies, RUS has addressed items in those letters that are relevant to the RUS Draft EIS.</p>
A07 – Questions related to USDA funding	
<p>Some commenters believe that RUS does not have the authority to provide funding for this type of project.</p>	<p>See Section 1.2.1 for a discussion of RUS authority and responsibility.</p>
<p>Some commenters believe that USDA should limit its activities to promoting agriculture and/or “countryside preservation.”</p>	<p>See Section 1.2.1 for a discussion of RUS authority and responsibility.</p>
<p>Commenter believes that Dairyland does not have the authority to enter into funding agreements with RUS.</p>	<p>It is RUS’ opinion that Dairyland has the authority to enter into funding agreements with RUS.</p>
<p>Some commenters felt that because this is primarily a project proposed by large private utilities, that RUS should not consider providing funding.</p>	<p>RUS is considering providing financing assistance only for Dairyland’s 11 percent ownership share (Section 1.3.2.1).</p>
A08 – Future addition of circuits	
<p>Would the lines be designed to accommodate future additional circuits?</p>	<p>At the request of the State, in Minnesota, Proposal structures and substation locations in Minnesota would be designed to accommodate a future second 345 kV circuit on the 345 kV poles and at substation locations (Section 2.4.2.1).</p>

Comments	Response/Reference to EIS Discussion
A09 – Request for clarification	
Category not used.	
A10 – Transmission of electricity generated by burning coal	
<p>Some commenters were concerned about the transmission lines being used for electricity generated by burning coal. Some felt the use should be restricted to renewable energy. One commenter wanted to know what percent of renewable energy the lines would carry.</p>	<p>RUS actively supports the development of renewable energy and in 2008 suspended funding for coal-fired electric generating plants. An efficient transmission system is essential for the effective development of wind power and can help postpone the need for new fossil sources. However, the transmission grid is not designed to allow segregation by source. The grid is essentially a “pool” of electricity, undifferentiated by source (and continually fed by many sources), that is tapped by users as needed. Since approximately 45 percent of U.S. net electricity generation is from coal (EIA 2012a) and some of this is in the Proposal area, the Proposal lines would carry some electricity generated by burning coal. The future percent of renewable energy to be carried by the lines is not known and an estimate was not needed to assess the environmental impacts of the Proposal; therefore, an estimate of the percent renewable to be carried by the Proposal is not included in the EIS.</p>
A11 – General environmental impact	
<p>Some commenters expressed general concerns about environmental impacts and some listed various resource areas, but did not provide specifics.</p>	<p>RUS verified that the listed resource areas of concern have been addressed in the EIS or in more specific comments on the Draft EIS. General environmental concerns are noted.</p>
<p>Commenter was concerned about spillage that may be harmful.</p>	<p>Spill prevention and control measures are discussed in Sections 3.1.3 and 3.2.3.1.</p>
<p>Some commenters noted that the environment included not only the natural environment.</p>	<p>Many parts of the EIS address impacts to the human environment (e.g., Sections 3.7, 3.8, 3.9, 3.10 and 3.11).</p>

Comments	Response/Reference to EIS Discussion
<p>Commenter felt that the Draft EIS presented “false alternatives”; that the transmission line alternatives either unduly impacted the natural environment or the human environment, and that alternatives that had little impact on either were not included.</p>	<p>As detailed in Sections 2.2 and 2.3 of the EIS, RUS believes that EIS addresses the full range of reasonable alternatives. Some alternatives or parts of alternatives do have more impact on the natural environment and some have more impact on the human environment. See also Category C12 below.</p>
<p>A12 – NEPA summary or interpretation</p>	
<p>Some commenters presented summaries of the CEQ regulations or their general interpretation of what the law or regulations mean.</p>	<p>These comments did not require responses. Comments addressing specific regulatory issues are included in other categories.</p>
<p>A13 – General comments not requiring responses</p>	
<p>Some general comments did not require a response.</p>	<p>The response to this type of comment is entered in the detailed comment response document (Appendix T) as “Comment noted.”</p>
<p>A14 – Unneeded edit</p>	
<p>A few commenters suggested minor, non-substantive edits to the EIS.</p>	<p>The response to this type of comment is entered in the detailed comment response document as “Comment noted.”</p>
<p>A15 – General regulatory compliance</p>	
<p>Commenter believes that RUS is not in compliance with the public involvement requirements of 7 CFR 1794.13(a).</p>	<p>RUS’ need to comply with its Environmental Policies and Procedures (7 CFR 1794) is documented in Table 1-1. 7 CFR 1794.13(a) specifically addresses public involvement and requires the following: “In carrying out its responsibilities under NEPA, RUS shall make diligent efforts to involve the public in the environmental review process through public notices and public hearings and meetings.” RUS believes the material in Section 1.4 <i>Public Participation</i> documents its compliance with 7 CFR 1794.13.</p>

Comments	Response/Reference to EIS Discussion
<p>Commenter believes that RUS is not in compliance with 7 CFR and 40 CFR scoping requirements.</p>	<p>Scoping is addressed in RUS' regulations at 7 CFR 1794.51, 1794.52 and 1794.60 and in the CEQ regulations at 40 CFR 1501.7. RUS believes the material in Section 1.4 <i>Public Participation</i> documents its compliance with all scoping regulations.</p>
<p>Commenter believes that RUS is not in compliance with the interagency involvement and coordination requirements of 7 CFR 1794.14.</p>	<p>The focus of 7 CFR 1794.14 is the 40 CFR requirement (40 CFR 1506.2) for cooperation with state agencies in the joint preparation of EISs when possible. RUS has, when possible, prepared joint environmental documents with state agencies. However, in this case, a joint document with MN and another joint document with WI would have been required, as the two states could not prepare a joint document because of differences in schedule and state-specific requirements. Preparing two joint documents and participating in all the attendant meeting activities would have resulted in far greater effort and cost for RUS than preparing a single EIS; therefore, RUS prepared its own document, incorporating to the extent practicable information from the EISs prepared by the states, both of which were published before the RUS draft EIS. RUS also incorporated responses to comments that had been received on the MN draft EIS, and other comments submitted through the PUC and PSC dockets. Similarly, public meetings were held separately as MN and WI have different requirements for public meetings, and it was more cost-effective for RUS to hold its own meetings than to participate in all the MN and WI meeting.</p>
<p>Commenter thought the state EISs should be included as appendices to the RUS EIS.</p>	<p>Because these documents are readily available on the internet through the state review processes and the PUC and PSC electronic dockets, and they would have added considerable material, RUS did not include them as appendices, but rather provided references.</p>

Comments	Response/Reference to EIS Discussion
CATEGORY B – PURPOSE AND NEED	
B01 – General/other	
<p>Commenter noted that reliability would depend on the accessibility of the transmission line (e.g., a line near a roadway compared to a line far from a roadway). In his experience as an airplane electrician, a repair in an easily accessible location was not as serious as one in a hard-to-access location and resulted in much shorter delays.</p>	<p>The analogy is not directly relevant. A single plane out of service (whether for a short repair or a longer repair) does not jeopardize the entire system, while a single element of a transmission system out of service at peak loading, even for a very short duration, may jeopardize the system. In their reliability assessments or other evaluations, the Midwest ISO and/or utilities may take line accessibility into account; however, that level of detail is not germane to the need assessment as presented in the EIS.</p>
<p>Commenter, whose family members have experienced living without electricity, suggested that those who have it may take it for granted, expressed his appreciation for the personal and economic benefits of electricity, and noted that it's needed everywhere.</p>	<p>The response to this comment was entered in the detailed comment response document as "Comment noted."</p>

Comments	Response/Reference to EIS Discussion
B02 – Need questioned	
<p>Many commenters questioned the basic need for the project. Objections included the following: insufficient “hard data,” overreliance on MISO’s analysis and decisions, and outdated analyses. Some commenters questioned MISO’s authority. Some objections were based on projections of flat growth rates in demand for electricity for Wisconsin from various sources. Others noted that MISO’s community need analysis dated from 2008, before the most recent recession, and the projections are no longer valid. One commenter objected to the way local reliability was assessed. Some commenters expressed the belief that the Proposal would have no value without other physically connected transmission projects. Once commenter believes that Dairyland does not have the authority to participate in the Proposal. One commenter felt the updated need information has addressed primarily “transfer capacity.”</p>	<p>The AES contains extensive details and “hard data” on project need, including Dairyland’s. References to the AES discussions have been added to Section 1.1.2.1, however, the EIS itself does not include all this data. Transmission systems are highly complex, governed by thousands of pages of standards and tariffs, and run by many trained and specialized technical experts. The EIS, in Section 1.1.2.3, explains, on a conceptual level, the needs that the Midwest ISO has identified, which addresses both Minnesota and Wisconsin. This approach appears to be consistent with the CEQ directive of “emphasizing the portions of the environmental impact statement that are useful to decisionmakers and the public...and reducing emphasis on background material” [(40 CFR 1500.4(f)).</p> <p>The legal and regulatory basis for MISO’s authority and responsibility for identifying needed transmission system projects is described in detail in Section 1.1.2.1. Section 1.1.2.3 describes MISO’s member transmission owner’s (of which Dairyland is one) legal obligation to “make a good faith effort to design, certify, and build” transmission facilities that the Midwest ISO has determined are needed. The Alternatives Evaluation Study (AES) and the Macro-Corridor Study (MCS), which were reviewed, modified and approved by RUS and are available on the RUS website (link provided in Executive Summary on p. 4 of Draft EIS), were incorporated by reference into the Draft EIS (p. 54).</p> <p>Regarding the use of dated material, the <i>Community Reliability</i> and <i>Regional Reliability</i> discussions in Section 1.1.2.1 has been updated with new information provided by MISO in a brief to the Wisconsin PSC on March 30, 2012. (Although the brief was submitted to the PSC, it also updates the Minnesota needs). The <i>Community Reliability</i> discussion also clarifies the independent utility of the Proposal. Updated peak usage has been added. The benefit of transfer capacity has been added to the <i>Regional Reliability</i> discussion.</p> <p>Note that the US Department of Energy projects a 0.8% annual growth rate in energy demand from 2010-2035, with a per capita annual decline in consumption of 0.5% (EIA 2012b, p. 1).</p>

Comments	Response/Reference to EIS Discussion
<p>Commenter noted that Dairyland has submitted a more recent IRP than the one cited in the EIS, and suggested that the reference be updated.</p>	<p>The reference in Section 1.1.2.1 to Dairyland's 2008 IRP has been updated to its 2011 IRP.</p>
<p>A number of commenters noted that the PSC-WDNR EIS questioned the need for the Proposal, and reported that the PSC has also questioned the need, independent of the PSC-WDNR EIS.</p>	<p>The PSC-WDNR EIS and other documents referenced by reviewers are not decision documents. It is ultimately the PSC's decision whether or not to approve the Certificate of Public Convenience and Necessity (CPCN) application, and construction of the line cannot begin until the CPCN application is approved. Among the conditions that the PSC must determine are present before approving a CPCN application is the following: "For a high-voltage transmission line that is designed for operation at a nominal voltage of 345 kilovolts or more, the high-voltage transmission line provides usage, service or increased regional reliability benefits to the wholesale and retail customers or members in this state and the benefits of the high-voltage transmission line are reasonable in relation to the cost of the high-voltage transmission line" [Wis Stat 196.491(3)(d)(3t)].</p>
<p>Commenter wanted to know if Dairyland's 11% participation included both Minnesota and Wisconsin.</p>	<p>Yes. Dairyland's 11% participation is in the Proposal. See Section 1.1.1.</p>
<p>Commenter objected to what she characterized as repeated citations to the "CapX 2020 Vision Study (2004-2005)."</p>	<p>There are no citations to this study in the EIS.</p>
<p>Commenter felt that Jeffrey Webb is not a credible source.</p>	<p>The following footnote has been added to the discussion of the Webb testimony in Section 1.1.2.1: At the time of his testimony in 2008, Webb was Director of Expansion Planning for MISO. He has also served on the NERC Planning Standards Committee, in which capacity he participated in development of NERC Reliability Standards related to transmission planning (Webb 2008, pp. 2 and 3)</p>

Comments	Response/Reference to EIS Discussion
B03 – Benefit to local customers questioned	
<p>A number of commenters, particularly in Wisconsin, felt that the Proposal would not benefit local customers. Some felt the only purpose of the Proposal is to transfer electricity to urban areas.</p>	<p>See the <i>Community Reliability</i> discussion in Section 1.1.2.1 for a description of local benefit and need, including for Wisconsin. The community reliability discussion was based largely on MISO analysis. See response to Category B02 regarding MISO's legal and regulatory authority and responsibility. As discussed in addition to the <i>Regional Reliability</i> discussion in Section 1.1.2.1, transfer capacity is a benefit of the Proposal, though not part of the basic need for the Proposal.</p>
<p>Some commenters were concerned about rate increases to pay for the line.</p>	<p>The EIS does not address potential rate increases. The cost of transmission expansions, like any utility infrastructure improvements, is passed along to customers. Costs for the Proposal would be allocated through the MISO tariff, which has various cost allocation methods for different project types, all intended to follow a cost-benefit methodology whereby customers pay in proportion to benefits received (MISO 2012b, p. 25).</p>
B04 – Dairyland Power Corporation need questioned	
<p>Some commenters felt that Dairyland should not be participating in the Proposal. Much of the basis for these opinions were the reported low growth rate in Wisconsin, the perception that the Proposal will not benefit Dairyland customers, and the belief that Dairyland's need was not documented in the EIS. One commenter brought up the issue of the Wis Stat 196.491(3)(d)(3t) benefit to cost standard in relation to Dairyland's need.</p>	<p>Dairyland has customers within the area that the community reliability part of the need will address (see <i>Community Reliability</i> discussion in Section 1.1.2.1, which also specifically addresses the need in Wisconsin). Dairyland's share has been determined to be 11%, as noted in the EIS. See also response to Category B03. See response to Category B02 regarding Wis Stat 196.491(3)(d)(3t).</p>

Comments	Response/Reference to EIS Discussion
<p>Some commenters noted that Dairyland recently shut down three units at Alma, and questioned the need for a new transmission line when generating units are being retired.</p>	<p>Dairyland retired three aging coal-burning units (circa 1950) at the Alma plant because of the projected costs of maintenance and compliance with regulations. Dairyland had been phasing out these units: while the three units had a combined generating capacity of 60 MW (5% of Dairyland's total generating capacity), they generated only about 0.4% of Dairyland's energy resource through October 2011. Dairyland reports that the move aligns with its generation resource plans "that include the continued addition of renewable resources" (Eau Claire Leader Telegram 2011, Dairyland Power 2011c). The retirement of these units does not affect the updated peak load scenario upon which MISO based its community need assessment (Section 1.1.2.1).</p>
<p>Some commenters questioned Dairyland's need in view of its public announcement that it may pull out of the project if the Q1 Route is not selected.</p>	<p>Winona Radio reports that a Dairyland employee made this statement (Winona Radio 2012). This employee's statement does not change any of the information in the EIS.</p>
<p>Commenter felt that changing load projections "reveals a great amount of inconsistency."</p>	<p>Load projections are periodically updated (changed) based on changing conditions. This is standard practice for making projections in any field.</p>
<p>Commenter noted that the area of "bottled up generation" shown in the MISO maps used in Figures 1-5 and 1-6 are almost entirely outside Dairyland's service area.</p>	<p>Providing an outlet for the generation will benefit users of electricity that are adjacent to the areas of bottled up generation, which includes users in Dairyland's service area.</p>
<p>CATEGORY C - ALTERNATIVES</p>	
<p>C01 – General/other</p>	
<p>Many commenters provided listings of non-transmission alternatives.</p>	<p>Non-transmission alternatives are evaluated in detail in Section 2.2. Those comments on non-transmission alternatives that provided more detail are addressed in Categories C02 through C05.</p>

Comments	Response/Reference to EIS Discussion
<p>Commenter referenced the Hahn testimony before the PSC, which concluded that a low-voltage alternative would meet local needs.</p>	<p>Hahn’s proposal is summarized in Section 2.2.5 (which has been retitled <i>Alternatives Considered by MISO and Others</i>).</p>
<p>Some commenters suggested renewable energy (solar, wind, hydroelectric power on the Mississippi River) or waste fuel as an alternative. One commenter suggested evaluating a combination of alternatives such as solar energy + wind energy + energy efficiency.</p>	<p>None of the commenters explained how they believed solar or wind energy (or other renewable sources), alone or in combination, would address the project needs. On-demand peaking units in Rochester and La Crosse to meet the community reliability part of the need are addressed in Section 2.2.2, but wind or solar would not be useful for meeting these specific peaking needs. Wind energy generally requires construction of new transmission lines. See Category C02 for energy efficiency (demand side management).</p>
<p>Some commenters suggested Smart Grid technology as an alternative.</p>	<p>“Smart Grid” refers to using computer-based remote control and automation in transmission grid operations (DOE n.d.). MISO is implementing Smart Grid technology in its system (MISO 2010c). Smart Grid technology can help improve the efficiency of the transmission grid but does not address the capacity issues that are at the heart of the need for the Proposal.</p>
<p>Some commenters suggested reconductoring the existing 345 kV system.</p>	<p>This alternative is not addressed. The only 345 kV line in the area runs roughly from Red Wing to Byron in Minnesota. There are no 345 kV lines in most of the Proposal area. The commenters did not explain how they believed this alternative would address the need for the Proposal.</p>
<p>Commenter stated that Gunderson Lutheran is planning to go off the grid by 2014 by using wind power and that Organic Valley in Cashton is planning to go off the grid by using wind and solar.</p>	<p>RUS applauds Gunderson Lutheran and Organic Valley for their efforts. Very few electricity consumers are able to go off the grid completely by using intermittent sources like wind and electricity. More typically, consumers would participate in net metering (see discussion in Section 2.2.4.1 of the EIS), as approximately 600 consumers in Minnesota do. However, this represents approximately 0.02 percent of consumers; too small a number to have much affect on growth projections.</p>
<p>Commenter supported the no action alternative, even if it results in higher rates.</p>	<p>The Proposal need is based primarily on reliability, not cost. See Section 1.1.2.1.</p>

Comments	Response/Reference to EIS Discussion
<p>Commenter questioned how it could be that Dairyland has surplus capacity and Xcel doesn't have enough and yet they operate in the same area.</p>	<p>The EIS does not address the veracity of this statement; however, without a robust transmission system to get electricity from where it is generated to where it is needed, it can happen that there is excess in one place and not enough in another nearby place. These issues are part of what the Proposal addresses. See Section 1.1.2.1.</p>
<p>Commenter suggested tax incentives for conservation as an alternative.</p>	<p>Energy conservation (without tax incentives), a component of demand side management, is evaluated in the EIS in Section 2.2.1.</p>
<p>Commenter suggested the use of a more technologically advanced material that might increase the carrying capacity of the conductors.</p>	<p>Use of conductor material types is a technical decision made by the utilities and is not addressed in the EIS.</p>
<p>Commenter suggesting the use of local generation in Wisconsin and Illinois as an alternative.</p>	<p>For local generation in Wisconsin, see Category C03. Local generation in Illinois was not addressed. The commenter did not explain how she believed local generation in Illinois would address the need for the Proposal.</p>
<p>What is the difference between the Bluff Route and the Highway 88 Routes?</p>	<p>The Bluff Route and the Highway 88 Route were both developed as alternatives to the Great River Road Q1 Route along the Mississippi River. The Bluff Route was evaluated first and eliminated because it did not follow an existing corridor. At the request of the WDNR, the Highway 88 Routes, which follow Highway 88, were included in the CPCN Application and are addressed in the EIS. See Figure 2-6 for the general locations of both routes.</p>
<p>Commenter suggested an alternative route in Minnesota.</p>	<p>The Minnesota EIS process provides the opportunity for the public to propose alternative routes (see the <i>Minnesota</i> discussion in Section 1.4.1.2). RUS made the decision to include in its EIS all the routes that were evaluated in the Minnesota EIS, including those proposed during scoping. This created consistency between the two documents. Also, the PUC assessed the same alternatives as are included in the RUS EIS. Since the public was given this opportunity during the Minnesota scoping process, additional alternatives were not considered during the RUS process.</p>
<p>The Zumbro Dam Option is not mentioned in the Executive Summary.</p>	<p>A reference to the Zumbro Dam Option has been added to the Executive Summary.</p>

Comments	Response/Reference to EIS Discussion
The Zumbro River crossing is not mentioned in the summary of RUS scoping comments under “River Crossing” in Section 1.4.3.1.	This section is a summary of the RUS Scoping Report, which is included as Appendix B to the EIS. As noted on p. 3-8 of the Scoping Report, the three comments on the river crossing referred to the Mississippi, Black and Cannon Rivers only.
C02 – Demand side management (DSM)	
Commenter thought the EIS concluded that conservation will not appreciably reduce growth in electricity demand. Others felt the EIS DMS discussion is out of date and not reflective of current realities.	The first paragraph of Section 2.2.1 has been expanded to further clarify that utilities’ (and MISO’s) growth projections for electricity demand include the expected effects of DSM (which includes energy efficiency and conservation). DSM <i>does</i> reduce demand and is incorporated into growth projections. The EIA also incorporates DSM into its projections. In EIA’s latest reference case projections for 2010-2035, electricity demand (total, not peak) grows by 0.8 percent per year. This growth rate is relatively low compared to some rates of the past, “reflecting an extended economic recovery and increasing energy efficiency in end-use applications” (EIA 2012b). Thus, anticipated energy efficiency measures will not further reduce this expected growth rate; rather, they are already included in the projection, just as they are included in utilities’ and MISO’s projections.
Commenter wanted to know if Dairyland has looked into offering incentives for net metering for wind, solar or geothermal energy.	Dairyland complies with the net metering requirements of EAct 2005 and does not offer additional incentives for net metering.
Some commenters believe more should be done to increase energy efficiency measures.	More could be done to increase energy efficiency (e.g., Laitner et al 2012, Efficiency Vermont 2011), and this may occur through a combination of legislative and private actions. However, these potential future actions are speculative and not relevant to current projections of future needs.

Comments	Response/Reference to EIS Discussion
C03 – Use of existing generation and transmission lines	
<p>Some commenters felt that French Island Unit 3 should be put back into service and this would eliminate the need for the Proposal. Some commenters referenced the PSC-WDNR EIS and information entered into the PSC docket for the CPCN (Case 5-CE-136). One commenter felt that use of local generation was not seriously considered as an alternative.</p>	<p>The Community Reliability discussion in Section 1.1.2.1 and Section 2.2.2 (new section added – 2.2.2.2) have been expanded to include discussions of fuel oil-burning Units 3 and 4 at French Island, and their potential effect on the need in the La Crosse area.</p> <p>As discussed under Category B02, the PSC-WDNR EIS and other documents referenced by reviewers are not decision documents. The questions of use of local generation and reconductoring have been extensively aired before the Wisconsin PSC. It is ultimately the PSC's decision whether or not to approve the Certificate of Public Convenience and Necessity (CPCN) application, and construction of the line cannot begin until the CPCN application is approved.</p>
<p>Some commenters suggested reconductoring the 161 kV lines in Rochester and/or La Crosse.</p>	<p>An evaluation of reconductoring the 161 kV lines in Rochester and La Crosse has been added to Section 2.2.2 (new Section 2.2.2.3).</p>
<p>Commenter stated that wind farms have not been able to sell all the electricity they generate, suggesting that electricity needs are not growing.</p>	<p>The community reliability issues the Proposal addresses are related to getting electricity where it is needed at peak times (such as hot days in summer) without overloading the lines that are carrying the electricity. Unrelated to these issues, electricity from a given source may not always be in demand when it is generated (and may not be available when it is needed).</p>
C04 – Use of new generation	
<p>Commenter suggested constructing a new gas plant in La Crosse to meet peaking needs.</p>	<p>See EIS Section 2.2.3.</p>
C05 – Use of decentralized generation	
<p>Commenter wanted to know if Dairyland has looked into offering incentives for net metering for wind, solar or geothermal energy.</p>	<p>Dairyland complies with the net metering requirements of EPAct 2005 and does not offer additional incentives for net metering.</p>

Comments	Response/Reference to EIS Discussion
Commenter suggested decentralized generation as an alternative.	See Section 2.2.4 <i>Decentralized Generation</i> .
C06 – Alternatives eliminated	
Commenter wanted to know why I-90 was eliminated as a route.	The I-90 route was eliminated when the Mississippi River crossing at Alma was identified as the river crossing route. The I-90 route fit with the La Crescent crossing, which was eliminated. See Final EIS Section 2.2.6.1.
C07 – Opposition to or preference for a specific alternative	
Many commenters expressed a preference for or opposition to a specific routing alternative.	Route alternatives are described and compared in Sections 2.2.6 and 2.5 and impacts are detailed in Section 3. If a commenter did not provide reasons for his/her preference or if the advantages, disadvantages and potential impacts are already addressed in the EIS, no changes were made in response to the comments. The Final EIS identifies RUS' preferred alternative.
Commenter submitted exhibit suggesting an alternative route around Cannon Falls that would not be near the Penfield addition.	While this suggestion was made in response to a route adjustment suggested by the Applicants after the Minnesota scoping period had ended, the route is not evaluated in the EIS because it does not meet any of the State of Minnesota siting criteria.
C08 – Use of existing corridors	
Many commenters expressed support for using existing corridors, especially transmission corridors.	Use of existing corridors is a priority for both states, and is considered a primary evaluation criterion in the EIS.
C09 – Highway 88 alternatives	
A number of commenters felt that the impacts of the Highway 88 corridor in Wisconsin were not evaluated to the same level of detail as the other Wisconsin routes.	Section 3 has been revised to include more detail for the Highway 88 alternatives.

Comments	Response/Reference to EIS Discussion
C10 – Mississippi River crossing	
<p>Several commenters objected to the decision to evaluate only one river crossing in detail. One commenter felt this decision was inconsistent with the requirements of 7 CFR 1794.15(a) because it limits the choice of reasonable alternatives.</p>	<p>7 CFR 1794.15(a) requires that, until the notice announcing the RUS Record of Decision has been published, “the applicant shall take no action concerning the proposed action which would have an adverse environmental impact or limit the choice of reasonable alternatives being considered in the environmental review process (40 CFR 1506.1).”</p> <p>Neither the CEQ nor RUS regulations require a specific number of alternatives to be evaluated in detail. 40 CFR 1502.14 requires the following of RUS in the EIS: “(a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.” In Section 2.2.6.1, the EIS discusses the reasons for eliminating two of the three original Mississippi River crossings under consideration. It is RUS’ opinion that 7 CFR 1794.15(a), which addresses actions taken by the applicant (in this case Dairyland) is not applicable to RUS’ decisions in general, and specifically to the decision to evaluate only one Mississippi River crossing in detail.</p>
<p>Some commenters felt that the undergrounding alternative at the Mississippi River should have been retained for detailed evaluation, and/or that the costs developed by the Applicants were too high.</p>	<p>Undergrounding a 1.3-mile section at the Mississippi River is considered in the EIS Section 2.2.6.2. The costs were developed by Power Engineers, a consulting company that specializes in underground transmission line development. The relative cost difference between the underground and above ground estimates is consistent with that found in other sources (e.g., NEI Electric Power Engineering 2009, PSC 2011f). For the most part, commenters did not explain why they felt that placement of the line underground at the Mississippi River should have been evaluated in detail. Aesthetically, there is already a transmission line and a major power plant at the River at this location; addition of the 345-line would have an incremental impact. There is potential risk for bird impact, but that is also a potential with the existing line.</p>

Comments	Response/Reference to EIS Discussion
<p>Commenter suggested that more aesthetically pleasing towers be considered, for example, those designed by Choi+Shine: http://www.choishine.com/port_projects/landsnet/landsnet.html.</p>	<p>The referenced designs are aesthetically pleasing in their context, but require much more ground space and require guy wires. The self-supporting single-pole design proposed results in the smallest footprint, thereby minimizing ground impacts (important for wetlands, agricultural areas, etc.). The absence of guy wires reduces the potential for bird impact.</p>
<p>C11 – Reasonable alternatives</p>	
<p>Commenter believes the Draft EIS “fails to provide you with reasonable and prudent alternatives.”</p>	<p>This comment was made in reference to the elimination of the Blair Route from detailed consideration. The discussion of the Blair Route in Section 2.3.2.1 has been revised and expanded to better explain the rationale for elimination of the Blair Route from detailed evaluation.</p>
<p>C12 – Blair Route</p>	
<p>Commenter believes that the elimination of the Blair Route from detailed consideration was not justified.</p>	<p>The discussion of the Blair Route in Section 2.3.2.1 has been revised and expanded to better explain the rationale for elimination of the Blair Route from detailed evaluation.</p>

Comments	Response/Reference to EIS Discussion
C13 – Q1 Rebuild	
<p>Some commenters expressed preferences and/or concerns regarding the location of the Dairyland's Q1 Line, and/or the presentation of information regarding alternatives for the Q1 Line.</p>	<p>Dairyland anticipates that RUS financing may be requested to rebuild its 60-year old, 39-mile long North La Crosse – Alma 161 kV line (Q1) which is located in the Proposal area (Q1 Rebuild). The rebuild is needed to address the age and degraded condition of the transmission structures and conductors, regardless of whether or not it is rebuilt with the Proposal. The Draft EIS noted that, if the new 345 kV line can be co-located with a portion of the Q1 on the existing route, the costs of rebuilding the Q1 will be included in the Proposal costs. Under RUS' preferred alternative, as described in this Final EIS, 26 miles of Dairyland's 161 kV Q1 Line would be rebuilt as part of the Proposal. Dairyland is considering alternatives for the remaining 13 miles of the Q1 161 kV Line, from Trempealeau to Holmen. Because, under RUS' preferred alternative, the same alternatives for the Q1 161 kV Line from Trempealeau to Holmen are available if the route is further evaluated now or later, and because the Q1 Rebuild is on a slightly different schedule than the Proposal, evaluation of alternatives for the Q1 161 kV Line from Trempealeau to Holmen is not included in this Final EIS. Dairyland may apply for financial assistance for rebuilding the remaining portion of the Q1 161 kV Line, from Trempealeau to Holmen. If so, at that time, RUS will assess the impacts of the alternatives routes, using the information included in Appendix L of the Draft EIS (which is not included in the Final EIS).</p>
<p>Commenter asked why the WI-88 alternatives were not included in Table 2-8.</p>	<p>Table 2-8 of the Draft EIS was for Q1 Rebuild alternatives, not for alternatives for the Proposal. The Q1 Rebuild (except for the part co-located with the Proposal) is not included in the Final EIS, and therefore Table 2-8 is also not included in the Final EIS.</p>
C14 – Zumbro River crossing	
<p>Commenter felt that the EIS did not include enough information on the Zumbro River impacts, and referred extensively to the MDNR comments on the Zumbro River.</p>	<p>This comment is addressed through the changes made based on the MDNR comments (which are addressed individually in Appendix S).</p>

Comments	Response/Reference to EIS Discussion
CATEGORY D – CONSULTATION, COORDINATION AND PUBLIC INVOLVEMENT	
D01 – General/other	
<p>Commenter was concerned that a specific route option was under consideration but was not included in the Macro Corridor Study (MCS).</p>	<p>Some changes to macro-corridors under consideration (based on additional route options) were made in the Minnesota and Wisconsin EIS processes. The new routes are addressed in the RUS Draft EIS. See discussion in Section 1.4.2.3.</p>
<p>Commenter felt that the facilitator for the public meetings was biased and discourteous and that, referring to speakers at the public meetings, “almost every person was cut off” and this “meant the conclusions and import of peoples’ testimony was often not presented.”</p>	<p>RUS believes the facilitator was unbiased and her behavior appropriate, and an explanation of the process may help clarify. Attendees at each of the five public meetings held to receive comments on the Draft EIS were greeted at the meeting room entrance and asked to sign in. As people signed in, an RUS or RUS contractor staff person explained the meeting setup: when people signed in they could check a box indicating whether or not they wanted to speak during that portion of the meeting, which began shortly after 6 PM; between 5 and 6 PM, people had the opportunity to present oral comments to a court reporter, or to submit written comments. Shortly after 6 PM the facilitator presented the rules for speaking, which were established to give all meeting attendees an opportunity to speak: each individual had three minutes allotted, after which time a phone chime would signal their time was up. Anyone who wanted could come back for another three minutes after everyone else who wanted to speak was given an opportunity. The facilitator introduced and welcomed each person who spoke.</p>
<p>Some commenters felt adequate notice was not provided to affected property owners on near the Highway 88 alternatives.</p>	<p>As discussed in Section 1.4.2.3, some landowners were inadvertently omitted from the list of landowners affected by the Highway 88 alternatives. These landowners were notified as soon as the oversight was discovered, and the Draft EIS comment period was extended by two weeks to provide them additional time for review and comment.</p>
D02 – Notices and meetings	
<p>Some commenters thought there should be public meetings in more locations, such as in Arcadia.</p>	<p>Each of the five meetings held from January 9 to 13, 2012 was located so that no one in the area affected by the Proposal had to travel more than 20 or 25 miles to get to a meeting location. Arcadia is approximately 20 miles from Galesville, the location of the January 13 meeting.</p>

Comments	Response/Reference to EIS Discussion
How was it determined who did and did not get a notification letter?	Landowners who may be directly affected by an alternative received notification letters.
Commenter noted that RUS website was down during part of the June to August 2011 comment extension period.	Comments that were received after the end of the comment period are addressed in the EIS. See Section 1.4.2.3.
Some commenters felt that newspaper notices of the public meetings should have been placed in more newspapers or in newspapers other than the ones used.	Notices were placed in the same newspapers of general circulation as were used for the Scoping meetings (Scoping Report, Appendix B of EIS, Table 1.1-1), except that some newspapers had consolidated, and notices were not placed in the small town newspapers in areas where corridors were eliminated from consideration.
D03 – Notice for Highway 88 alternatives	
Some landowners on or near the Highway 88 route alternatives in Wisconsin did not receive a notice of the addition of the Highway 88 Route for consideration in the CPCN application and the RUS EIS.	These landowners were inadvertently left off the mailing list. This is discussed in Sections 1.4.2.3 and 1.4.4. As discussed in Section 1.4.4, the Draft EIS comment period was extended by two weeks to allow additional time for review and comment for these landowners.
Commenter objected to a statement in the Draft EIS that the PSC solicited comments in a letter dated July 5, 2011. Commenter states that Highway 88 landowners did not receive the letter.	The Final PSC-WDNR EIS had the same statement as the draft. The RUS EIS text was revised to state that the PSC reports that it solicited comments.
CATEGORY E – GEOLOGY AND SOILS	
E01 – General/other	
Category not used.	

Comments	Response/Reference to EIS Discussion
E02 – Mines/quarries, general	
Encumbrance of aggregate resources should be addressed.	Information on aggregate and sand resources has been added to Section 3.1.1.3 and a discussion of potential impacts from encumbrance has been added to Section 3.1.2.1.
E03 – Karst areas	
Category not used.	
E04 – Fossil sites	
Commenter is concerned that Alternative Routes 1P-009 and –B-005 could adversely impact the Wangs fossil site on the Highway 56 ROW ¼ mile north of Country Road 9.	Discussion of this site has been added to Sections 3.1.1.1 and 3.1.2.1.
E05 – Erosion and slopes	
Commenter requested that specific locations of access roads, type of surfacing of access road, and season and duration of use be identified and impacts assessed. Other commenters requested that specific locations of all construction activity be shown.	Section 2.4.2.3 has been expanded to include more detail on construction procedures. Impacts to soil and water from construction activity are discussed in Sections 3.1.2.2 and 3.2.2.2, respectively and the corresponding measures to reduce impacts are discussed in Sections 3.1.3 and 3.2.3.1. While the EIS addresses issues like these on a broad level, specific issues may be addressed in greater detail during permitting and final design.
Some commenters were concerned about soil left exposed (which can lead to erosion and potentially to slope instability); erosion, especially on steep slopes; slope instability revegetation; erosion protection for stream banks and wildlife friendly erosion control measures.	These concerns are addressed in Section 3.1.3 (revised), except that wildlife friendly erosion control measures are not specifically addressed. Both states have extensive requirements for erosion control that will be implemented. These requirements are also applicable for stream banks.

Comments	Response/Reference to EIS Discussion
How much vegetation will be removed on stream banks?	See added discussion of construction in Section 2.4.2.3 <i>Transmission Line Construction</i> . Herbaceous vegetation can remain in place within the ROW. Trees and brush would be removed in the area directly beneath the structures; within the ROW but bushes or shrubby vegetation could remain in the part of the ROW beyond the edges of the structures. Herbaceous vegetation can remain in place within the ROW.
Commenter thought Figures 3-1 and 3-2 are inconsistent.	Figure 3-1 shows steepness of slopes and Figure 3-2 shows erosion potential. While these are related, other factors affect erosion potential, with primary factors being soil type and land use. Crop land, for example, is highly susceptible to erosion, especially when crops are planted using conventional tillage.
E06 – Planned sand quarries	
Commenter noted there are plans for sand quarries near Arcadia.	The Arcadia Route passes near Arcadia and follows an existing 161-kV line. One advantage of following an existing transmission line is that it does not result in additional encumbrances of surface mines, except to the extent the ROW is widened. See revised discussions in Sections 3.1.1.1 and 3.1.2.1.
CATEGORY F – WATER RESOURCES	
F01 – General/other	
If there are impacts to potable water supplies, would the utilities provide water?	Dewatering is not expected, but very minor and localized dewatering could be needed in certain situations during construction. Although impacts to water supplies are highly unlikely, a statement that the Applicants would be responsible for supplying water if a supply is affected by dewatering, has been added (Section 3.2.3.3).
How long will construction last?	The total time for construction of the Proposal is approximately 3 years (Section 1.1.1.1); however, different parts would be constructed at different times during the three years.
What will be the impacts on surface water and groundwater during construction and operation?	See Section 3.2 and Categories F02 and F03 below.

Comments	Response/Reference to EIS Discussion
Commenters are concerned about impacts to cool water fisheries (trout streams) in Waumandee Creek from sedimentation and clearing.	Sections 3.2.1.2, 3.2.2.3, 3.2.2.4, 3.2.3.1 and Figure 3-7 have been revised to address these concerns.
F02 – Surface water	
What will be the impacts on surface water during construction and operation? Commenter concerned about summer warming of streams from clearing.	See Sections 3.2.2.1, 3.2.2.2, 3.2.2.4 and 3.2.3.1. See also response under Category F01 regarding trout streams.
F03 – Groundwater	
What will be the impacts on groundwater during construction and operation?	See Sections 3.2.2.1 and 3.2.3.3.
CATEGORY G – AIR QUALITY	
G01 – General/other	
Consider impacts on global warming.	See Section 3.3.2.2.
CATEGORY H – ACOUSTIC ENVIRONMENT	
H01 – General/other	
Commenter is concerned about the “hum” from the transmission lines.	Noise impacts of the Proposal are discussed in Section 3.4.2.
H02 – Construction noise	
Commenters are concerned about construction noise and expected noise levels.	A discussion of construction noise has been added to Section 3.4.1.1.
How long will construction last?	The total time for construction of the Proposal is approximately 3 years (Section 1.1.1.1); however, different parts would be constructed at different times during the three years.

Comments	Response/Reference to EIS Discussion
CATEGORY I – BIOLOGICAL RESOURCES	
I01 – General/other	
Some commenters were concerned about general animal/wildlife impacts.	See Sections 3.5.1.4, 3.5.2.4, and 3.5.3.4. Note that the focus is on birds, which have a higher potential for impacts.
Comments on Figure 3-6: one commenter thought the figure was too small in scale and one thought some biodiversity sites were missing.	Figure 3-6 is intended as a very general overview map. A reference to the detailed maps in Appendix E, which include locations of MDNR biodiversity sites, was added to Section 3.5.1.1. The MDNR biodiversity sites shown in Figure 3-6 are from the MDNR database.
Commenter was concerned about a native prairie restoration near Dennison that would be within 1,000 to 1,500 feet of one of the alternative alignments.	No impacts to a prairie outside the ROW would be expected.
I02 – Wetlands	
Some commenters were concerned about impacts on wetlands, including wetlands values and habitat, particularly wetlands within the Upper Mississippi River National Wildlife and Fish Refuge.	See Sections 3.5.1.3, 3.5.2.3 and 3.5.3.3.
I03 – Birds	
Commenter suggested contacting Mags Rheude with the USFWS for information on bald and golden eagles.	RUS worked with Ms. Rheude during DEIS development. Based on Ms. Rheude's input, the Stantec report on bald and golden eagles, referenced in Section 3.5.2.4, was completed in February 2012.
Commenter suggested referring to Partners in Flight (PIF) conservation plan and concept.	A note describing the PIF conservation plan has been added to the first mention of PIF in Section 3.5.1.4.
Some commenters noted that bald eagles feed on chicken carcasses at chicken farms.	See revised discussions in Sections 3.5.1.4 and 3.5.2.4.

Comments	Response/Reference to EIS Discussion
<p>One commenter reported that many bald eagles have been observed on a section of the Zumbro River that doesn't freeze over. Another commenter provided other information relative to the Zumbro River and eagles.</p>	<p>See revised discussions in Sections 3.5.1.4 and 3.5.2.4. The report of bald eagles and the information from the other commenter were addressed in the confidential Stantec report discussed in Section 3.5.2.4. (The report is confidential because it shows specific locations of eagle nests and roosts).</p>
<p>One commenter, with reference to Table 2-1, noted that there are potential concerns with eagle nests, large numbers of migratory birds, and/or heron rookeries at all the potential Mississippi River crossings.</p>	<p>See Section 3.5.2.4.</p>
<p>Some commenters noted that the USFWS has stated that no lines should be within 2 miles of important eagle use areas (which include nests); however, all alternatives have eagle's nests within 2 miles. Commenter wanted to know if any eagle nests would be removed.</p>	<p>See Section 3.5.3.4 for a discussion of take permits that would be required if eagle nests may be disturbed.</p>
<p>Commenter had many concerns about potential bird collision impacts.</p>	<p>Sections 3.5.2.4 and 3.5.3.4 have been revised to address the USFWS concerns regarding potential bird collisions, and also address the commenter's concerns related to bird impacts.</p>
<p>Commenter wanted to know if there would be one shield wire or two, and if two, why.</p>	<p>Based on engineering considerations there would be two shield wires (Figure 2-11).</p>
<p>One commenter felt that bird diverters should be installed nearly everywhere on the lines.</p>	<p>See Sections 3.5.2.4 and 3.5.3.4. USFWS is working with the Applicants to identify high bird use areas where diverters would be appropriate.</p>

Comments	Response/Reference to EIS Discussion
I04 – Special status species	
Comments about state-listed species.	See Sections 3.5.1.5, 3.5.2.5 and 3.5.3.5.
Comments about federally-listed species.	RUS has informally consulted with the USFWS regarding potential impacts to federally endangered species. The USFWS is a cooperating agency for the EIS. See discussions in Sections 3.5.1.5, 3.5.2.5 and 3.5.3.5.
I05 – Invasive species	
Concern about spread of invasive species from construction equipment.	See Section 3.5.2.3.
I06 – Wildlife, general	
Commenters concerned about impacts on wildlife.	See Sections 3.5.1.4, 3.5.2.4, and 3.5.3.4. Note that the focus is on birds, which have a higher potential for impacts.
I07 – Forests	
Commenter concerned about impacts on large contiguous tracts of forest land because of the importance of unfragmented forest for wildlife, especially birds.	While the Proposal would have impacts on forests, location of forest impact are generally at existing transmission lines or roadways; thus, the impacts would be at forest edges. No large contiguous tracts of forests would be bisected by any of the alternative routes.
I08 – Vegetative management practices	
Commenter had concerns regarding vegetative management.	See Sections 3.5.3.1 and 3.5.3.2.
I09 – Conservation easements	
Commenter was concerned about potential impacts to land enrolled in Wisconsin’s Managed Forest Law program.	Impacts to Managed Forest Law (MFL) land are discussed and analyzed in revised Sections 3.11.1.1 and 3.11.2.3. Monetary impacts related to the MFL would be addressed in the negotiated easement payment with the utility (Section 3.11.3.1)
Commenters had concerns about conservation easements.	Conservation easement impacts are discussed in Section 3.6.2.3.

Comments	Response/Reference to EIS Discussion
Commenter requested that all scenic easements be identified.	While scenic easements are not mapped, they are discussed in detail in the EIS (Sections 3.7.2 and 3.7.3). Note that transmission lines are allowed in the scenic easements.
Commenter felt that all potentially impacted conservation easements should be identified in the EIS.	Identification of all potentially impacted conservation easements is not necessary in evaluating environmental impacts of the Proposal. See Section 3.6.2.3 for a discussion of lands with conservation easements.
I10 – Fish	
Some commenters were concerned about the impacts of tree clearing on cool water trout fisheries in Waumandee Creek, and impacts of erosion in Waumandee Creek on trout habitat.	See revised Section 3.2.1.4, 3.2.2.3, and 3.2.3.1 for discussion of trout streams. Trout streams in Wisconsin are shown in Figure 3-8. Note that there are no designated trout stream segments in Waumandee Creek within the Proposal area. A discussion of water quality in Waumandee Creek is included in Section 3.2.1.2
Commenter noted that trout streams in Wisconsin are not discussed in the Draft EIS.	See revised Section 3.2.1.4, 3.2.2.3, and 3.2.3.1 for discussion of trout streams. Trout streams in Wisconsin are shown in Figure 3-8.
Comment on mapped trout streams.	Trout streams are shown in Figure 3-8.
Commenter noted that the Zumbro is a state water trail.	See Section 3.2.1.5 for a discussion of state water trails.
CATEGORY J – LAND RESOURCES	
J01 – General/other	
Commenter concerned about the use of public and private land for transmission line ROW.	See Sections 3.6.2 and 3.6.3.
Commenter concerned about impacts to Minnesota State Water Trails.	See Sections 3.2.1.4 and 3.7.2 for discussions of State Water Trails and impacts.
Commenter forwarded previous comment from MDNR regarding preferred crossing of the Zumbro River.	The MDNR prefers the Route 3P crossing, which is included in the preferred alternative, because there is existing infrastructure at this location.

Comments	Response/Reference to EIS Discussion
J02 – Land use and zoning	
Commenter felt that zoning at the Briggs Road Substation site is incompatible with a substation.	See Section 3.6.2.1. A discussion of current zoning at the Briggs Road Substation site has been added.
Some commenters felt that more consideration for local development plans should be given.	See Section 3.6.2.1.
J03 – Farmland	
Commenter noted that on the Highway 88 alternative, most poles would be in agricultural fields, but Figure 3-13 was too small in scale to see that.	This will be the case for most alternatives. See Sections 3.11.2.4 and 3.11.3.2 for impacts to agricultural lands. Large scale maps are included in Appendices E and G.
J04 – Refuge	
Commenter felt that the Draft EIS did not sufficiently address impacts to Trempealeau Wildlife Refuge.	Potential impacts to Trempealeau National Wildlife Refuge are addressed in Sections 3.5.2.4 and 3.6.2.3.
J05 – Other public lands	
Commenter suggested showing statutory boundaries of public lands.	Actual boundaries of public lands are shown and evaluated.
Commenter felt that impacts to Van Loon State Wildlife Refuge were not adequately addressed.	Impacts to Van Loon State Wildlife Refuge are discussed in Section 3.6.2.3.

Comments	Response/Reference to EIS Discussion
<p>Some commenters are concerned about potential impacts to Lake Byllesby from alternatives that pass through or near the park. One commenter was concerned about the planned regional bike trail that would be very close to some alternative routes. The Dakota County Board of Commissioners submitted a resolution requesting that routes that directly impact Lake Byllesby not be selected.</p>	<p>See revised Section 3.6.2.3.</p>
<p>CATEGORY K – VISUAL RESOURCES</p>	
<p>K01 – General/other</p>	
<p>Many commenters were concerned about visual impacts to homes that would be near the power line.</p>	<p>See Section 3.7.2.</p>
<p>Some commenters felt that the WI-88 alternatives, which were added as options to avoid the GRRNSB, are more scenic than the part of the GRRNSB they would replace.</p>	<p>A comparative description of the WI-88 alternatives and that part of the Q1 routes the WI-88 alternatives provide an option for, has been added to Section 3.7.2.</p>
<p>Commenter concerned about visual impacts to the Black River.</p>	<p>See Section 3.7.2.</p>
<p>Some commenters were concerned about impacts to the GRRNSB, particularly from tree removal. The Mississippi River Parkway Commission opposes any alternative that paralleled the GRRNSB.</p>	<p>See the photosimulations in Appendix K for before and after views of the Proposal along the GRRNSB. Note that very little tree removal would be needed. See also Sections 3.7.1.1, 3.7.2, and 3.7.3.</p>

Comments	Response/Reference to EIS Discussion
One commenter suggested making the supports into works of art, and referenced a project in Iceland (Choi + Shine 2011).	The Choi + Shine work is impressive in its setting. This type of design would result in more impacts to agriculture compared to single-pole construction. The guy wires that are required to support the structures would result in additional agricultural and other impacts, and would present collision hazards for birds.
K02 – Great River Road, Wisconsin	
Some commenters were concerned about impacts to the Wisconsin GRRNSB, including potential violations of WisDOT scenic easements. One commenter felt that impacts were insufficiently evaluated and that not enough of the history and significance of the GRRNSB was presented. The WI-MRPC opposes routes that impact the GRRNSB.	RUS believes the description and assessment is appropriate; however, some additional language has been added. See Sections 3.7.1.1, 3.7.2, 3.7.3 and Appendix K. The WisDOT concerns about scenic easements have been added to Section 3.7.2.
K03 – Great River Road, Minnesota	
The MN-MRPC opposes routes that impact the GRRNSB.	See Sections 3.7.1.1, 3.7.2, 3.7.3 and Appendix K.
K04 – Highway 88	
One commenter wanted to know why WI-88 is not an NSB.	The process requires an application and acceptance. See: http://byways.org/learn/program.html
Some commenters felt that there was inadequate discussion of the visual impacts to WI-88.	See revised Section 3.7.2.
CATEGORY L - TRANSPORTATION	
L01 – General/other	
Category not used for general responses.	

Comments	Response/Reference to EIS Discussion
L02 – Highways	
Category not used for general responses.	
L03 – Gleiter air strip	
Several commenters noted that the Gleiter air strip near WI-88 was not evaluated. One commenter felt that a conflict with an airstrip would eliminate an alternative.	The analysis from the Wisconsin Final EIS has been added to Section 3.8.3; see also added discussion in Section 3.8.5. As discussed in Section 3.8.5, if an airstrip needed to be relocated, the utilities would be financially responsible and would work with the owner to find a suitable site.
L04 – Other airport or air strip	
One commenter noted that he had an airstrip that hadn't been used in many years, but that he may want to use it at some time in the future.	The EIS evaluates impacts on actual airstrips, but not potential airstrips. The one in question appears to be a former airstrip.
CATEGORY M – HISTORIC AND CULTURAL RESOURCES	
M01 – General/other	
Commenters concerned about potential impacts to a chimney left from a “CCC camp” or “CC camp” on WI-88. Commenter noted the summary of potential archaeological sites in the WI-88 route.	The WI-88 alternatives are not included in RUS' preferred alternative. If this changes, sites identified by area residences would be further investigated. The known sites listed in the EIS would also be evaluated.
Commenter concerned about impacts to burial mounds and the previous existence of a stagecoach route in the area. Commenter concerned about impact to potentially historic structure.	See Section 3.9 for a discussion of significance criteria for inclusion on the National Register of Historic Places, the methods for assessment of impacts, and opportunities for consultation related to historic properties. See also Appendix W for a description of the work that will be done prior to construction to assess potential for impacts to sites on or eligible for the National Historic Register.

Comments	Response/Reference to EIS Discussion
M02 – Archaeological	
Some commenters were concerned about potential impacts to archaeological resources on the Black River.	See Section 3.9.2.4.
M03 – Historic	
Some commenters thought impacts on Century Farms should be evaluated.	“Century Farm” is an honorific for farms that have remained in the same family for over 100 years. This designation alone (apart from cultural and historic significance as described in Section 3.9) is not considered sufficient to warrant an assessment of impacts different from farms in general.
CATEGORY N – PUBLIC HEALTH AND SAFETY	
N01 – General/other	
Some commenters had general concerns about health effects of transmission lines.	See Section 3.10.2.1.
N02 – Health effects of EMF	
Some commenters had concerns about various possible health effects of EMF, including potential relationships with childhood leukemia, Alzheimer’s disease, senile dementia and other diseases.	See Section 3.10.2.1.
Some commenters felt the information presented in the Draft EIS is outdated, particularly the 1997 NAS study.	The EIS includes the most recent available health effect information from U.S. and international agencies and organizations. The National Academy of Sciences (NAS) has not completed a health effects evaluation of EMF since the 1997 study. It is still considered relevant because the concerns about a potential link between EMF and childhood leukemia is based in large part on studies that were completed before 1997 and are included in the 1997 NAS study. NAS makes this document available on its website and has not retracted its conclusions.

Comments	Response/Reference to EIS Discussion
N03 – EMF effects on medical devices	
<p>Some commenters had concerns about EMF effects on various implantable and other medical devices.</p>	<p>These issues are discussed in general in Section 3.10.2.2. Since EMF is all around us, these concerns are not specific to the Proposal. Patients need to consult with their physicians about precautions needed with the use of any specific medical device.</p>
<p>Some commenters believe that more recent animal studies have shown that power line EMF contributes to cancer development. In support of this statement, the commenter cited “Fedrowitz and Loscher 2008” but did not provide a full reference.</p>	<p>Because the epidemiological link to childhood leukemia is weak, as described in the EIS and Appendix H and biophysics suggests that a link is implausible (Kabat 2008), animal studies are critical for evaluation. In a review of approximately 100 reports of laboratory studies assessing a link between cancer and power-frequency magnetic fields, Moulder (1998) found “no replicated evidence that power-frequency magnetic fields have the potential to either cause or contribute to cancer.” Moulder noted that of the few studies that have shown some evidence for carcinogenic activity, “most have used exposure conditions with little relevance to real world exposure, none have been replicated, and many have failed at direct attempts at replication.” More recent reviews, including those referenced in the EIS and other (e.g., Kabat 2008), confirm Moulder’s conclusion. RUS found a Fedrowitz and Loscher 2008 reference for a study that compared the effect of MF exposure “on cell proliferation in the mammary gland of various outbred and inbred rat strains” and found that “Fischer 344 was the only inbred strain that exhibited a marked increase in cell proliferation.” The exposures used were 1,000 mG, which are well above exposures from power lines. No information on replication of this study was found. In addition, many other studies, in addition to the epidemiological studies, have not found a link between breast cancer and EMF. For example, WHO (2007) reports that the evidence is sufficient “to give confidence that magnetic fields do not cause” breast cancer and “For adult breast cancer more recent studies have convincingly shown no association with exposure to ELF [extremely low frequency] magnetic fields. Therefore further research into this association should be given a very low priority.” (WHO 2007 pp. 12 and 18). SCENIHR reached similar conclusions (SCHNIHR 2009).</p>

Comments	Response/Reference to EIS Discussion
<p>Commenter suggested including recent studies but did not provide full references (However, all the full references were found in an on-line slide presentation <i>Health Risks of Power Lines</i> by Philip Stoddard)..</p>	<p>Belson 2007 and Marcilio et al are reviews, not a studies. Greenland et al. 2000 was a pooled analysis of earlier studies that was included in WHO 2007 (included in the EIS). Foliart et al evaluated survival among children with leukemia (comparing those with higher exposure and lower exposure) and concluded “the small numbers limited inferences” for their results. Draper 2005, Lowenthal 2007, Huss et al. 2009 and Yang et al. 2008 all used distance from a power line as a surrogate for actual EMF measurements. Other studies have found that distance from a power line is not a reliable surrogate for EMF (e.g., Kabat 2008, NAS 1997). Yang et al. also did not use controls and concluded their results “suggest a possible association between electric transformers and power lines” and childhood leukemia. Draper et al (2005) found a higher incidence of childhood leukemia for persons living within 49 meters of a power line; however, their results did not show a dose-response relationship (e.g., leukemia “relative risk” was higher for persons living 500-599 meters from a power line than for those living 200-299 meters from the line), and the results showed a relationship far beyond the extent where effects could be plausible (599 meters). In addition, the strongest relationship Draper et al found was a <i>negative</i> relationship between brain tumors and distance from power lines (e.g., people living with 49 meters of a power line had a lower “relative risk” for brain tumors than those living 600 meters or more from a power line).</p>
<p>Some commenters felt the calculated magnetic fields are incorrect.</p>	<p>The calculated magnetic fields (Table 3-12) were provided by the Applicants, based on their engineering analysis and projected usage. The information is comparable to other published results.</p>
<p>Commenter concerned about transmission lines attracting radon, and the resulting health effects.</p>	<p>See PSC review in Appendix H, p. 13, <i>Cosmic radiation, radon and power lines</i>. As summarized in the PSC review, the attraction of radon to power lines (“Henshaw hypothesis”) has not been replicated in other scientific studies. In addition, the concentrations reported by Henshaw would be insignificant in comparison to other naturally occurring sources of radon.</p>
<p>N04 – Stray voltage</p>	
<p>Some commenters had concerns about stray voltage.</p>	<p>See Sections 3.11.2.4 and 3.11.3.2.</p>

Comments	Response/Reference to EIS Discussion
N05 – Other electrical safety	
One commenter was concerned about poles falling and electrocuting people.	As discussed in Section 3.10.2.4, transmission lines are designed to automatically trip out-of-service (become de-energized) if they fall or contact trees. Note that this does not necessarily apply to distribution lines.
CATEGORY O – SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE	
O01 – General/other	
Some commenters were concerned about impacts on property values and tourism.	See Section 3.11.2.1.
Commenter concerned about impacts on Amish and/or the elderly.	No Amish communities would be impacted by the Proposal. The impacts on the human environment described in the EIS are applicable to the elderly. No impacts specific to the elderly were identified.
O02 – Dairy cattle	
Commenters observed that specific locations of dairy farms were not noted in the EIS. Other commenters had general concerns about impacts to dairy cattle, or concerns about impacts of stray voltage to dairy cattle.	Specific locations of dairy farms are not included in the EIS. Potential impacts specific to dairy cattle, including EMF and stray voltage, are addressed in Section 3.11.2.4.
O03 – Organic farms	
Commenter noted that locations of organic farms in Wisconsin are not included in the EIS.	While the State of Minnesota tracks locations of certified organic farms, the State of Wisconsin does not. Potential impacts to certified organic farms are addressed in Section 3.11.2.4.
Commenter concerned about potential impact from chemicals used on ROW, including the potential for loss of certification. Other commenters have general concerns about impacts to organic farms.	See discussion of <i>Certified Organic Farms</i> in Section 3.11.2.4.

Comments	Response/Reference to EIS Discussion
004 – Other agricultural	
<p>Commenter who owns and operates a vineyard is concerned about potential drift of herbicide, particularly from the use of 2,4-D (to which grapes are especially sensitive), due to a larger transmission line. Commenter notes that they “currently have avoided herbicide drift, but with a larger transmission line it may be impossible.”</p>	<p>Herbicides are widely used for agricultural (both crop and non-crop) and non-agricultural purposes. The average annual U.S. use of 2,4-D is approximately 46 million pounds, with 66% used by agriculture (USEPA 2005, pp. 9-10). Approximately 24% of 2,4-D is used on pastures and rangeland. In addition to agriculture, the USEPA identifies the following uses: lawn by homeowners (18%), lawn/garden by contractors (7%), and roadways (3%). Average annual usage in the Proposal area is approximately 5 to 10 pounds/square mile for Wisconsin, and 10 to 25 pounds/square mile for Minnesota (USEPA 2005, Figure 1).</p> <p>Users are legally obligated to use any herbicide in accordance with the label. The USEPA has recently modified the 2,4-D label to reduce potential for drift. Revisions include limitations on droplet size, conditions during application (wind speed, humidity, temperature and temperature inversions), and height of application equipment. The requirements specifically prohibit use when spray drift may render grapes (in the growing stage) “unfit for sale, use or consumption” (USEPA 2005, p. 149-151).</p> <p>The Applicants, like other users, would be required to use any herbicide in accordance with the label requirements.</p>
<p>Commenters concerned about poles interfering with farming operations or dividing farmed property.</p>	<p>See Sections 3.11.2.4 and 3.11.3.2.</p>
<p>Commenters concerned about potential impacts to irrigation systems.</p>	<p>See Section 3.11.1.1 and 3.11.2.4.</p>
<p>Commenter concerned about livestock health impacts.</p>	<p>See Section 3.11.1.1, 3.11.2.4 and 3.11.3.2.</p>

Comments	Response/Reference to EIS Discussion
<p>Commenter concerned about cattle being unwilling to pass beneath a transmission line and referenced “a study done in Germany by a team directed by Hynek Burda and Sabine Begall.”</p>	<p>A study by Begall, Burda and others concluded that domestic cattle and grazing and resting red and roe deer “align their body axes in a roughly north-south direction” and hypothesized that this was related to the earth’s magnetic field (Begall et al. 2008). The same researchers found random orientations of the same types of animals in the vicinity of high voltage power lines, and concluded the randomness resulted from the low-frequency magnetic fields from the power lines interfering with the earth’s magnetic field (Burda et al. 2009). The research did not suggest that cattle movements would be affected by power lines. See also Sections 3.11.1.1, 3.11.2.4 and 3.11.3.2.</p>
<p>Commenter concerned about impacts to tree farms.</p>	<p>As discussed in Section 3.11, landowners will be compensated for their property. See Section 3.11.2.3 for a specific discussion of impacts to woodlots.</p>
<p>Commenter concerned about crop damage caused during line maintenance.</p>	<p>As discussed in Section 3.11, landowners will be compensated for their property and for property damage. See Section 3.11.3.2 regarding mitigation of impacts to agricultural land.</p>
<p>Commenter concerned about general impacts to farms.</p>	<p>See Sections 3.11.1.1, 3.11.2.4 and 3.11.3.2.</p>
<p>O05 – Property values</p>	
<p>Commenters concerned about impacts on property values.</p>	<p>See Sections 3.11.2.1 and 3.11.3.1.</p>
<p>O06 – Housing loans</p>	
<p>Commenters had concerns about ability to obtain housing loans.</p>	<p>See Section 3.11.2.1.</p>

Comments	Response/Reference to EIS Discussion
O07 – Tourism	
<p>Commenters concerned about impacts on tourism in Wisconsin, with particular reference to the Great River Road; and on agro-tourism.</p>	<p>Potential impacts on tourism, including agrotourism, are discussed in Section 3.11.2.1. No commenters provided any data regarding existing tourism in the area. As noted in Section 3.11.2.1, no specific information on tourism in the area was found. Two Wisconsin travel guidebooks were reviewed to assess the potential for impacts to tourism in the Proposal area: Huhti 2008, 547 pp. and Revolinski 2009, 245 pp.). The Great River Road was the only destination in or near the Proposal area featured in either book. Both books included a chapter on the Great River Road; however, Revolinski's (2009) route lies south of the Proposal area. Huhti includes the entire length of the Great River Road in Wisconsin, and notes "There's an astonishing absence of tourist traffic on this road" (Huhti 2008, pp. 349-350).</p>
O08 – Electronic equipment	
<p>Commenters concerned about potential interference with electronic equipment.</p>	<p>See Section 3.11.2.2.</p>
O09 – Tree groves/windbreaks	
<p>Commenters concerned about impacts to tree groves/windbreaks.</p>	<p>See Section 3.11.2.3.</p>
O10 – Animal health	
<p>Commenters concerned about impacts on animal health and behavior.</p>	<p>See Section 3.11.2.4.</p>
O11 – Insurance	
<p>Commenter was concerned about impacts on his/her insurance rates, or inability to obtain insurance.</p>	<p>The commenter did not explain what insurance he/she was concerned about, or the basis for the concern. This could possibly be related to concerns about housing loans (see Item O06 above), as no information was found suggesting that transmission lines may affect insurance rates.</p>
O12 – Environmental justice	
<p>Commenter had concerns about potential environmental justice impacts.</p>	<p>Environmental Justice is addressed in Section 3.11.2.5.</p>

Comments	Response/Reference to EIS Discussion
CATEGORY P – CUMULATIVE IMPACTS	
P01 – General/other	
Commenter was concerned about cumulative impact of transmission line projects.	See Sections 4.4.1.3 and 4.4.2.

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