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CHC - Letter from Rep. McCollum

1 message

Rachel Granneman <RGranneman@elpc.org>

Thu, Jul 25, 2019 at 10:15 AM

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Cc: Scott Strand <SStrand@elpc.org>, "Mary Gade (mary.gade@yahoo.com)" <mary.gade@yahoo.com>

Dear Mr. Rankin and Ms. Cusick,

We bring to your attention the new attached July 18, 2019 letter from United States Representative Betty McCollum, who serves as Chair of the House Appropriations Committee, Subcommittee on Interior, Environment, and Related Agencies, expressing strong concerns about the proposed Cardinal-Hickory Creek high-voltage transmission line crossing through the protected Upper Mississippi River National Wildlife and Fish Refuge.

We request that this letter be included in the EIS record and that RUS consider it in carrying out its evaluation of the proposed Cardinal-Hickory Creek transmission line.

Best,

Rachel Granneman

Staff Attorney

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 Rep Betty McCollum Letter to USFWS re CHC Crossing Upper Miss NWR.July 18.2019.pdf

10/31/2019

SWCA Mail - CHC - Letter from Rep. McCollum

641K

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UNITED STATES
HOUSE OF REPRESENTATIVES

PSCW 5-CE-146
DALC-WWF's Motion to Supplement the Record
Exhibit A
COMMITTEE ON APPROPRIATIONS

CHAIR,
SUBCOMMITTEE ON INTERIOR,
ENVIRONMENT, AND RELATED AGENCIES

VICE-CHAIR,
SUBCOMMITTEE ON DEFENSE
SUBCOMMITTEE ON AGRICULTURE

SENIOR DEMOCRATIC WHIP
CO-CHAIR EMERITUS
CONGRESSIONAL NATIVE AMERICAN CAUCUS

July 18, 2019

Margaret Everson
Principal Deputy Director Exercising the Authority of the Director
U.S. Fish and Wildlife Service
1849 C Street, N.W.
Washington, DC 20240

Dear Principal Deputy Director Everson:

This letter is to express my concern about the limited scope of alternatives review for the proposed Cardinal-Hickory Creek (CHC) high-voltage transmission line. This transmission line as currently proposed cuts directly across the Upper Mississippi River National Wildlife and Fish Refuge (Refuge). This refuge is at the heart of the Mississippi Flyway for migratory birds and provides critical protected habitat for a number of species. It is also an important recreation and economic resource.

While the state processes in Wisconsin and Iowa will likely decide whether another high-voltage line is genuinely needed, I urge the United States Fish and Wildlife Service (USFWS) to take the necessary steps to ensure that alternatives that avoid negative impacts on the Refuge are fully explored and understood before any decisions are finalized. Reasonable alternatives must be explored. Making the Refuge the de facto route simply because it is determined to be the path of least political resistance is unacceptable in my view. Until alternatives that avoid the Refuge get a full and complete review, this project should not go forward.

The Rural Utilities Service at USDA is now preparing a final environmental impact statement (FEIS) for the CHC project with a consultant, and USFWS is a cooperating agency with specific responsibility to the Refuge and the species that would be impacted by the project.

As you well know, under the *National Wildlife Refuge System Improvement Act of 1997*, P.L. 105-57, the singular mission of the System is “the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.” 16 U.S.C. § 668dd(a)(2). “[T]he fundamental mission of our System is wildlife conservation: wildlife and wildlife conservation must come first.” H. Rep. 105-106. “Compatible wildlife-dependent recreational uses”—hunting, fishing, wildlife observation and photography, environmental

education and interpretation—are deemed the “priority general public uses of the System.” 16 U.S.C. § 668dd(a)(3)(C).

The law provides that the Secretary “shall not initiate or permit a new use of a refuge or expand, renew, or extend an existing use of a refuge, unless the Secretary has determined that the use is a compatible use,” which means that “in the sound professional judgment of the Director, [the use] will not materially interfere with or detract from the fulfillment of the mission of the System or the purpose of the Refuge.” 16 U.S.C. § 668ee(1). Indeed, the Act directs the Fish and Wildlife Service to “provide for the elimination or modification of any use as expeditiously as practicable after a determination is made that use is not a compatible use. 16 U.S.C. § 668dd(d)(3)(B)(vi).

USFWS recognizes that the Upper Mississippi River National Wildlife and Fish Refuge is “unmatched” for its scenic and wildlife value. This Refuge is a crucial migratory pathway and breeding location for birds, such as bald eagles and great blue herons, and is home for many additional species of wildlife, fish and plants.

Given the value of the Refuge and the importance of protecting it, the most stringent review should be conducted of any project that would compromise this protected area. This review must ensure all reasonable non-Refuge-crossing alternatives are appropriately identified, analyzed, fully evaluated, and subjected to public comment and input. This has not been the case in the current review process for the CHC project. In fact, the draft EIS that came out several months ago does not seriously evaluate a single alternative that does not cut through the Refuge at Cassville, Wisconsin.

Failure to fully assess alternatives that avoid the Refuge and protect its resources—including protected species that use Refuge land and waters, such as bald eagles and whooping cranes, and investments made in restoration—raises concerns and will undermine the FEIS.

Thank you for your consideration of my views.

Sincerely,



Betty McCollum
Member of Congress



David Reinhart <comments@cardinalhickorycreekeis.us>

DALC and WWF Comments on the CHC Final Environmental Impact Statement (email 1 of 3)

1 message

Rachel Granneman <RGranneman@elpc.org>

Mon, Nov 25, 2019 at 3:36 PM

To: "comments@CardinalHickoryCreekEIS.us" <comments@cardinalhickorycreekeis.us>, "Dennis.Rankin@wdc.usda.gov" <Dennis.Rankin@wdc.usda.gov>

Good afternoon,

Please find attached the comments of the Driftless Area Land Conservancy and the Wisconsin Wildlife Federation on the Final Environmental Impact Statement for the Cardinal-Hickory Creek transmission line. The attachments will be sent in 2 following emails. Please let me know if you do not receive all attachments (Attach. A through Z).

Thank you,

Rachel Granneman

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 **DALC-WWF CHC FEIS Comments 11.25.19.pdf**
467K



ENVIRONMENTAL LAW & POLICY CENTER

Protecting the Midwest's Environment and Natural Heritage

**DRIFTLESS AREA LAND CONSERVANCY'S AND
WISCONSIN WILDLIFE FEDERATION'S COMMENTS ON THE
RURAL UTILITIES SERVICE'S FINAL ENVIRONMENTAL IMPACT STATEMENT
FOR THE CARDINAL-HICKORY CREEK TRANSMISSION LINE**

Submitted on behalf of the
Driftless Area Land Conservancy and the
Wisconsin Wildlife Federation
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November 25, 2019

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I. INTRODUCTION AND OVERVIEW

The Driftless Area Land Conservancy (“DALC”) and Wisconsin Wildlife Federation (“WWF”) hereby submit the following comments on the Rural Utilities Service’s (“RUS”) Final Environmental Impact Statement (“FEIS”) for the proposed Cardinal-Hickory Creek high-voltage transmission line and high towers that would cut a wide swath across the Upper Mississippi River National Wildlife and Fish Refuge, and through the scenic and ecologically sensitive Driftless Area of Southwest Wisconsin. These comments of DALC and WWF attach and incorporate the scoping comments and Draft Environmental Impact Statement (“DEIS”) comments of the same organizations. Attachment A, Scoping Comments; Attachment B, DEIS Comments. While some of the issues raised in these previous comments have been addressed to some extent in the FEIS, significant problems remain. Failure of this new comment letter to specifically discuss issues or arguments raised in the DEIS comments does not indicate that those concerns have been remedied or that DALC and WWF are waiving or withdrawing those arguments.

The American Transmission Company (“ATC”), ITC Transmission (“ITC”), and Dairyland Power Cooperative (“Dairyland”) (collectively, “Applicants”) are requesting funding and various federal regulatory approvals for the proposed Cardinal-Hickory Creek high-voltage transmission line. The FEIS is legally inadequate for numerous reasons.

First, the Purpose and Need Statement has not been modified to address the significant issues identified in DALC’s and WWF’s earlier comments. The Purpose and Need Statement remains impermissibly narrow and continues to restrict alternatives to make the Applicants’ proposal the only “alternative” that can meet the stated Purpose and Need. Furthermore, the “needs” alleged in the FEIS are not supported, and the FEIS does not respond to comments challenging the need.

Second, the FEIS’s analysis of alternatives is deeply and critically flawed, and has not been meaningfully modified from the DEIS version to address DALC’s and WWF’s comments. The alternatives analysis forms “the heart of the environmental impact statement.” 40 C.F.R. § 1502.14. *Simmons v. U.S. Army Corps of Engineers*, 120 F.3d 664, 670 (7th Cir. 1997). The Rural Utilities Service and other federal agencies did no independent analysis of the reasonableness or feasibility of either route alternatives (*e.g.*, routes that do not cut through the Upper Mississippi River National Wildlife and Fish Refuge or that would largely avoid the Driftless Area) or energy alternatives (*e.g.*, alternative transmission solutions like battery storage and distributed generation that would have the same grid benefits as a new transmission line with a much smaller ecological footprint). Instead, the federal agencies impermissibly relied entirely on the Applicants’ determination that these alternatives are infeasible or cannot meet the Purpose and Need, or both. This complete abdication of the federal agencies’ responsibilities should not stand.

Third, the FEIS’s analysis of impacts is flawed and incomplete. The FEIS fails to adequately address concerns raised in DALC’s and WWF’s comments concerning the scope of actions included within the analysis, the discussion of impacts to various resources, and the cumulative impacts analysis.

II. IMPERMISSIBLY NARROW AND UNSUPPORTED PURPOSE AND NEED STATEMENT

As explained in DALC’s and WWF’s DEIS comments, the Purpose and Need Statement is a vital and cornerstone step in the NEPA process. DEIS Comments at 3. It frames the problem that needs to be solved and defines the range of possible alternatives to be fully evaluated. The United States Court of Appeals for the Seventh Circuit—in which the vast majority of the proposed transmission line project would take place—has consistently held that “an agency should not rely on a private party’s goals” when determining the alternatives to be considered. Daniel R.

Mandelker et al., NEPA Law and Litig., 2d § 9:27 (2019). As explained in *Van Abbema v. Fornell*, 807 F.2d 633, 638 (7th Cir. 1986), “the evaluation of ‘alternatives’ mandated by NEPA is to be an evaluation of alternative means to accomplish the general goal of an action; it is not an evaluation of the alternative means by which a particular applicant can reach his goals.”

Over a decade later, the Seventh Circuit reaffirmed this approach in no uncertain terms: an agency’s claim that it must defer to an applicant’s purpose “is a losing position in the Seventh Circuit.” *Simmons v. U.S. Army Corps of Engineers*, 120 F.3d 664, 669 (7th Cir. 1997). Relatedly, agencies are required “to exercise a degree of skepticism in dealing with self-serving statements from a prime beneficiary of the project.” *Simmons v. U.S. Army Corps of Engineers*, 120 F.3d 664, 669 (7th Cir. 1997) (quoting *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 209 (D.C. Cir. 1991) (Buckley, J., dissenting)).

Even in Seventh Circuit cases where agencies’ NEPA actions have been upheld, the Court of Appeals has not backed away from this position. See *Kickapoo Valley Stewardship Ass’n. v. U.S. Dep’t of Transp.*, 37 F. App’x 810, 814 (7th Cir. 2002) (agency “must consider the alternative plans in reference to the general goals of the project”). Other Circuits have also followed this reasoning. For example, the Ninth Circuit has held that an agency may not simply adopt the developer’s purpose as the Purpose for the EIS. *National Parks Conservation Ass’n v. Bureau of Land Management*, 606 F.3d 1058 (9th Cir. 2010) (an agency may not “adopt[] private interests to draft a narrow purpose and need statement that excludes alternatives that fail to meet specific private objectives”). The fact that an alternative could not be carried out by the applicants is not a legally justifiable reason to not consider that alternative. *Id.* This position is also echoed in guidance from the Council on Environmental Quality:

Section 1502.14 requires the EIS to examine all reasonable alternatives to the proposal. In determining the scope of alternatives to be considered, the emphasis is on what is

“reasonable” rather than on whether the proponent or applicant likes or is itself capable of carrying out a particular alternative. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.

Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, 46 FR 18026-01 (1981).

Here, the FEIS simply adopts the Purpose and Need Statement provided by the Applicants, which is framed such that only a new high-voltage transmission line from Iowa to Wisconsin could meet the Purpose. This is entirely impermissible:

[A]n agency may not define the objectives of its action in terms so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency's power would accomplish the goals of the agency's action, and the EIS would become a foreordained formality.

Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 198 (D.C. Cir. 1991) (internal citations omitted); *see e.g., Simmons*, 120 F.3d at 666 (“[I]f the agency constricts the definition of the project's purpose and thereby excludes what truly are reasonable alternatives, the EIS cannot fulfill its role.”).

A more careful review of the applicants' proffered purpose and need statement illustrates the difference between statements that meet the statutory standard and statements that do not. The FEIS “project purpose and need” statement has six elements:

- (1) Address reliability issues on the regional bulk transmission system and ensure a stable and continuous supply of electricity is available to be delivered where it is needed even when facilities (e.g. transmission lines or generation resources” are out of service;
- (2) Address congestion that occurs in certain parts of the transmission system and thereby remove constraints that limit the delivery of power from where it is generated to where it is needed to satisfy end-user demand;
- (3) Expand the access of the transmission system to additional resources, including 1) lower-cost generation from a larger and more competitive market that would reduce the overall cost of delivering electricity, and 2) renewable energy generation needed to meet state renewable portfolio standards and support the nation's changing electricity mix;

- (4) Increase the transfer capability of the electrical system between Iowa and Wisconsin;
- (5) Reduce the losses in transferring power and increase the efficiency of the transmission system and thereby allow electricity to be moved across the grid and delivered to end-users more cost-effectively; and
- (6) Respond to public policy objectives aimed at enhancing the nation's transmission system and to support the changing generation mix by gaining access to additional resources such as renewable energy or natural gas-fired generation facilities.

FEIS at ES-2 to ES-3.

Five of these “purposes” are broad enough to meet NEPA requirements—addressing reliability, addressing congestion, expanding access to the transmission system, increasing the efficiency of the transmission system, and supporting the changing generation mix. Although DALC and WWF in no way concede that these “purposes” address actual needs, they are general purposes that can reasonably be accomplished by a number of alternatives, including alternative transmission strategies, upgrades to current transmission lines, or high-voltage transmission lines running on a wide range of different routes. The fundamental objection is to #4—increasing the transfer capability of the electrical system between Iowa and Wisconsin. That is not a “purpose”: that is essentially a description of the project itself. Only transmission lines between Iowa and Wisconsin can meet that so-called purpose and need, and the result is that alternative transmission solutions or alternative routes that avoid the Refuge and the Driftless Area are summarily dismissed and not given serious consideration.

Chapter 2 of the FEIS contains the alternatives analysis, and the rationale for dismissing alternatives. Step one is to limit the range of alternatives to those that connect the Hickory Creek substation in Iowa with the Cardinal substation in Wisconsin. FEIS at 33-34. As the FEIS concedes, once you eliminate anything other than “relatively direct” connections between those

two substations, alternative routes that might address the reliability, congestion, and access concerns in the FEIS (purposes 1, 2, 3, 5, and 6) but not cross the Refuge or the Driftless Area are automatically excluded from consideration. FEIS at 33-34. Those alternatives are excluded from the “study area,” they are excluded from the “macrocorridor” study, only “Wisconsin” transmission line corridors get any consideration at all, *id.* at 34-52, and only Mississippi River crossings within the Refuge range (between Wabasha and Rock Island), all of which would necessitate crossing the Driftless Area get included in even the preliminary discussion. *Id.* at 53-58.

The evaluation of “non-transmission alternatives”—the applicants’ term, what the Federal Energy Regulatory Commission orders call “alternative transmission solutions”—gets the same treatment. As explained below, the FEIS uses a divide-and-conquer strategy by analyzing each potential alternative transmission strategy in isolation, and not as a part of a package, but it also simply rejects those alternatives because they do not increase transfer capability between Iowa and Wisconsin. FEIS Vol. I, at p. 60. Obviously, any strategy that takes pressure off existing transmission capacity sufficiently can address reliability, congestion, and access, but only a new power line between Iowa and Wisconsin will increase transfer capacity between Iowa and Wisconsin. When the purpose and need statement is drawn that narrowly, so that only slight modifications to the applicants’ proposed project can be considered, the requirements of NEPA have not been met. Furthermore, the Purpose and Need Statement is not supported by any meaningful demonstration that there is actually a public need for this high-voltage transmission line. RUS regulations state that “[t]he Agency shall not fund the proposal unless there is a demonstrated, significant need for the proposal.” 7 C.F.R. § 1970.4. As explained in DALC’s and WWF’s scoping and DEIS comments (Attachment A, Scoping Comments at 9-15. Attachment B,

DEIS Comments at 5-9), neither the Applicants nor the federal agencies have identified any reliability need for this massive and expensive infrastructure, and other alleged “needs” are similarly unsupported. At the Public Service Commission of Wisconsin (“PSCW”) proceeding in which Applicants sought a Certificate of Public Convenience and Necessity (“CPCN”), a former Mid-Continent Independent System Operator’s (“MISO”) employee testified as an expert witness for DALC and WWF that there is no reliability need, as defined by MISO’s standards, for the project. *See* Attachment C, Surrebuttal Testimony of Konidena, at 7–8; Attachment D, Direct Testimony of Konidena, at 6–11 (“MISO does not consider the CHC project necessary to maintain reliability and address any market emergencies.”).

As explained in DALC’s and WWF’s previous comments, it is impermissible to rely on the inclusion of this line in the MISO Multi-Value Portfolio (“MVP”) as the basis for this project being needed. First, MISO is a private non-profit organization—not a government entity—and has no authority over agency approvals of transmission lines. Second, the MISO MVP analysis is outdated and relied on assumptions about the growth of electricity demand that have not played out in the real world. *See* Attachment D, Direct Testimony of Konidena, at 11–15. Third, MISO never even analyzed this specific transmission line on its own—it only did analyses of the entire portfolio as a whole. *Id.*

DALC’s and WWF’s comments raised other challenges to the alleged need for this line. For example, they questioned the need for the line to help states meet their renewable portfolio standards, explaining in detail which states have already met their standards or would not be able to use Iowa wind to do so. DEIS Comments at 6-7. In response, the FEIS states: “While Wisconsin Utilities are currently in compliance with the Wisconsin RPS for 2015, it is unclear whether the other states that are dependent on the MVP portfolio have also met their requirements.” FEIS Vol.

IV, at p. F-90. Whether or not other states have met their standards is easily obtainable public knowledge. The federal agencies cannot simply punt when provided with evidence that undermines the alleged “need.”

The claim that the line is “needed” because there are renewable energy projects that have generation interconnection agreements (“GIA”) that are labeled as “conditional” on the Cardinal-Hickory Creek transmission line is also faulty. In the PSCW proceeding, the Mid-Continent Independent System Operator (“MISO”) expert admitted during cross-examination that just because a generator’s GIA is “conditional” on the CHC line does not mean that the generator cannot interconnect and operate at its full potential output without the CHC line in operation. In fact, in reference to the generating units that have GIAs that are “conditional” on the Cardinal-Hickory Creek line, he admitted that “[t]here’s no binding limits on those specific units currently.” Attachment E,¹ Cross Examination of Ellis at 723-724. *See also* Attachment F, Rebuttal Testimony of Konidena, at 12-15.

Although the Public Service Commission of Wisconsin approved the Certificate of Public Convenience and Necessity, RUS is required to independently make a “need” determination. This is especially true because the PSCW’s determination that there is a “need” for the project was contrary to the evidence presented in that proceeding. No evidence was provided showing a reliability need, and the Applicants relied on claims of economic benefits, which they asserted qualified as establishing a “need” for the transmission line. Not only is this a dubious understanding of what “need” is, but the PSCW’s own staff questioned whether there were economic benefits. Using Applicants’ own methodology, PSCW Staff’s lead project engineer, Alexander Vedvik, determined that the Project “could have **negative** net benefits to the MISO

¹ Attachment E is selected pages from the party hearing transcript available at http://apps.psc.wi.gov/vs2015/ERF_view/viewdoc.aspx?docid=372325.

footprint” in most of the modeled futures. Attachment G, Direct Testimony of Vedvik at 30-31 (emphasis added).

The FEIS fails to demonstrate a need for the massive and expensive new high-voltage transmission line—or indeed, any real benefit of building the line, other than ensuring a significant profit to the developers—and frames the Purpose and Need statement to preclude any real alternatives to the developers’ proposed project. This is clearly impermissible under NEPA and under RUS’s own regulations.

III. FAILURE TO EVALUATE ALL REASONABLE ALTERNATIVES

NEPA requires RUS to “rigorously explore and objectively evaluate all reasonable alternatives,” including a no-build alternative and alternatives other than building a massive new transmission line through the Upper Mississippi River National Wildlife and Fish Refuge and through the heart of the Driftless Area. 40 C.F.R. § 1502.14. As explained in DALC’s and WWF’s DEIS comments (DEIS Comments at 10, 11-16), the agencies here relied almost entirely on flawed analyses provided by the Applicants about the feasibility and reasonableness of alternative routes and alternative energy solutions, and whether these sorts of alternatives could meet the Purpose and Need—see citations throughout FEIS Section 2.2 relying on Applicants’ materials for critical analysis of why various alternatives were not considered in detail. The FEIS therefore dismisses numerous alternatives without any independent analysis or verification by the agencies, instead taking the Applicants’ self-serving “analysis” as true. This is a critical failing. NEPA does not allow “blind reliance on material prepared by the applicant in the face of specific challenges raised by opponents.” *Van Abbema v. Fornell*, 807 F.2d 633, 642 (7th Cir. 1986).

The FEIS apparently attempts to respond to this concern by stating:

RUS and the other Federal agencies have independently evaluated the impacts to the human and natural environment of the six action alternatives and No Action

Alternative analyzed in the EIS, as required by NEPA. Information provided by the Utilities for informing impact analysis for the natural and human environment was independently reviewed by RUS, cooperating agencies, and SWCA prior to being incorporated into the EIS.

FEIS at Vol. IV, at p. F-165. This misses the point. The problem is that RUS and the other agencies summarily dismissed several reasonable, feasible, and almost certainly less environmentally harmful alternatives before getting to the point of “evaluat[ing] the impacts to the human and natural environment.” Whether or not the agencies adequately examined the impacts of the alternatives that they *did* consider in detail is irrelevant to whether they should have considered other alternatives.

The FEIS dismisses some alternatives on the basis that each alternative technology, on its own, cannot meet the Purpose and Need. Yet as DALC and WWF explained in their DEIS comments, alternative transmission solutions must be considered in combinations to be most effective. DEIS Comments at 10-12. For example, distributed solar generation and battery storage in combination have important synergy and cost savings. Los Angeles, California entered into a contract in September, 2019 for combined solar and battery storage that would provide 6-7% of the city’s power demand for a shockingly low 3.3 cents per kilowatt-hour. Sammy Roth, *Los Angeles OKs a Deal for Record-Cheap Solar Power and Battery Storage*, LOS ANGELES TIMES (Sept. 10, 2019), <https://www.latimes.com/environment/story/2019-09-10/ladwp-votes-on-eland-solar-contract>. The Tenth Circuit rejected the NEPA analysis in *Davis v. Mineta* for this exact same problem:

Many alternatives were improperly rejected because, standing alone, they did not meet the purpose and need of the Project. Cumulative options, however, were not given adequate study. Alternatives were dismissed in a conclusory and perfunctory manner that do not support a conclusion that it was unreasonable to consider them as viable alternatives.

Davis v. Mineta, 302 F.3d 1104, 1122 (10th Cir. 2002).

Expert testimony provided by DALC and WWF in the PSCW CPCN proceeding reaffirms the problems with the FEIS's dismissal of alternative transmission solutions, such as distributed generation, demand response, and battery storage. These resources are less costly, more flexible, and less environmentally damaging than a massive new high-voltage transmission line and towers, and **can provide the same kinds of transmission services as a high-voltage transmission line**, including reducing congestion. Attachment H, Direct Testimony of Kerinia Cusick. Applicants in the PSCW proceeding "failed to evaluate proven, non-wires based solutions such as power electronics, energy storage, solar, and load control, and energy efficiency and demand response approaches in effective combinations to augment the performance of the existing transmission infrastructure, thereby potentially meeting the transmission need more effectively and efficiently." *Id.* at 1. The FEIS relied on this same faulty analysis from Applicants. In fact, alternative transmission solutions **can replicate grid benefits** that the proposed transmission line would create, including any benefits to wind generation, and could therefore meet any alleged need for the line.

The FEIS's discussion of these alternative transmission solutions was proven to be inaccurate in the PSCW proceeding. The FEIS, relying on a flawed and outdated 2016 analysis by the Applicants, found that the alternative transmission solutions could not meet the Purpose and Need and/or were not economically reasonable or technically feasible. FEIS Vol. I, at p. 60-63. Yet in the PSCW proceeding, Applicants hired an expert who created a preliminary design for an alternative using solar, batteries, and energy efficiency, which was "designed to mimic the Project as best as possible by achieving an incremental transfer capability of 1,383 MW between Iowa and Wisconsin and to address some reliability requirements on the transmission system." Attachment I, Rebuttal Testimony of Chao at 16.

Applicants' own expert estimated that this alternative transmission solution, **which was designed to mimic the Cardinal-Hickory Creek line**, would cost between \$193.6 and \$314.3 million (2018 dollars), significantly less than the \$550 million for the Cardinal-Hickory Creek transmission line. In fact, former Federal Energy Regulatory Commission Chairman Jon Wellinghoff explained that Chao's analysis ignored feasible options that would cost even less. Attachment J, Surrebuttal Testimony of Wellinghoff, at 6-10. Although the FEIS failed to analyze what the environmental impacts of an alternative transmission solution option would be, it would certainly be less damaging than building a massive high-voltage line through the ecologically sensitive Driftless Area of Southwest Wisconsin and across the Upper Mississippi River National Wildlife and Fish Refuge. Expert Cusick explained in her testimony before the PSCW that a battery storage alternative would have a "footprint that is akin to the size of a large shopping complex parking lot." Attachment K, Surrebuttal Testimony of Cusick at 5.

The FEIS also attempts to dismiss reasonable alternatives by claiming that "these alternatives may not be pertinent to the applications to which the Federal agencies must respond." *E.g.*, FEIS at Vol. I, at p. 59, 61. This is a red herring argument. Any alternative other than exactly what the Applicants are proposing could arguably "not be pertinent" to their permit applications. This has absolutely no bearing on the NEPA analysis. RUS regulations make clear that RUS "is responsible for all environmental decisions and findings related to its actions" and must "independently evaluate" all environmental information submitted by applicants. 7 C.F.R. § 1970.5(a). NEPA "do[es] not permit the responsible federal agency to abdicate its statutory duties by reflexively rubber stamping a statement prepared by others." *Sierra Club v. Lynn*, 502 F.2d 43, 59 (5th Cir. 1974).

The FEIS could also have considered a route farther south, such as the route proposed for the SOO Green Renewable Rail project, which would cross from Iowa into Illinois. The FEIS argues, “RUS investigated the status of the SOO Green Renewable Rail project and concluded the project was too conceptual and early in the pre-design phase to be deemed a reliable project example to inform alternatives for the C-HC Project.” Vol. I, at p. 67. However, even if the SOO proposal itself is too conceptual to be considered as an alternative, this does not mean that the route suggested for the SOO line shouldn’t be considered.

IV. INADEQUATE ANALYSIS OF IMPACTS

The FEIS retains numerous flaws in the impacts analysis, including: incomplete information and analysis; failure to fully consider the full range and scope of impacts, including impacts outside of the ROW; understating impacts or failure to fully disclose adverse effects; and overstating or assuming success of avoidance, remediation, and restoration efforts. NEPA requires that “[t]he information [in NEPA documents] must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.” 40 C.F.R. § 1500.1(b). The FEIS is not sufficient to “provide a full and fair discussion of significant environmental impacts and to inform the appropriate Agency decision maker and the public of ... any measures that would avoid or minimize adverse impacts.” 7 C.F.R. § 1970.151.

A. Scope of the Actions Included in the Impacts Analysis

As an initial matter, the scope of the analyzed action continues to exclude important impacts. Although the FEIS now includes a discussion of the impacts of removing the existing Dairyland transmission lines through the Upper Mississippi River National Wildlife and Fish Refuge, it still does not evaluate the impacts from relocating or double-circuiting other lower-voltage electric lines along the routes, including the relocation of distribution lines by the local

utilities. *See, e.g.*, FEIS Vol. I, at p. 104. The FEIS must discuss and disclose the impacts from relocating distribution and lower-voltage lines along the Cardinal-Hickory Creek route.

B. Vegetation and Wetlands

The FEIS analysis of impacts to vegetation and wetlands is still insufficient, and many of the concerns raised in DALC's and WWF's comments have not been fixed. For example, the FEIS admits that it is still true that "[t]argeted plant inventories have not been completed for the project," FEIS at Vol. II, at p. 162, and that "[c]omprehensive vegetation community surveys and mapping has not been completed for the project." FEIS at Vol. II, at p.165. Mark Mittelstadt, who has been a forester in southwest Wisconsin for four decades, explained in his comments that the "desktop" sources consulted by RUS are incomplete, and likely miss many instances of rare species along the transmission line route. Attachment L, Comments of Mark Mittelstadt. He explains that the list of special status plants found in the project area does not include numerous species that he has personally seen growing in the area. The FEIS is not complete without on-the-ground surveys.

The FEIS did not incorporate any information provided in the comments about the importance and valuation of wetlands ecosystem services. DEIS Comments at 31-32. Monetizing the benefits of a project but not the negative impacts is not appropriate. *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172 (9th Cir. 2008). Without this information, it is impossible for the reader to understand the true consequences of degradation of wetlands.

Perhaps most problematically, the FEIS continues to assume that all mitigation and restoration measures will be entirely successful, and for the most part, able to prevent any permanent injuries to wetlands or other vegetative communities. Yet the FEIS provides no support for this assumption, and does not address the concerns raised by commenters about how successful

mitigation and restoration measures really are. DEIS Comments at 32-34. It is widely recognized in the scientific community that restoration of disturbed ecosystems is incredibly difficult to do well, and impacts from disruptions often last decades or are permanent. *See, e.g.,* Moreno-Mateos, D. et al., *Anthropogenic Ecosystem Disturbance and the Recovery Debt*, Nature Communications 8, 14163 doi: 10.1038/ncomms14163 (2017). Experts in the PSCW CPCN proceeding also raised concerns that best management practices (“BMPs”) may not be sufficient to protect wetlands and other resources, especially as extreme weather events (including flooding) become more severe and frequent. Dr. Waller explained that even if BMPs are adequate for normal weather conditions, they “fail to function adequately under these extreme events.” Attachment M.² Environmental monitoring reports from previous ATC and ITC projects demonstrates the validity of this concern, revealing numerous instances of wetland timber “matting” floating off of the right-of-way and silt and turtle exclusion fencing being overwhelmed. Attachment N (selected pages from environmental monitoring reports for recent ITC and ATC high-voltage transmission line construction). Additionally, permit conditions and BMPs are not necessarily complied with, and former Wisconsin DNR Secretary George Meyer testified before the Wisconsin Public Service Commission, the DNR often lacks the practical ability to enforce these requirements. Attachment O, Direct Testimony of Meyer, at 30–32. NEPA does not permit federal agencies to sweep aside important environmental impacts by simply asserting that mitigation and restoration actions will minimize those impacts.

The FEIS is also legally deficient because it does not provide adequately detailed and specific information to make the mitigation and restoration measures binding and enforceable. “Mitigation measures described in the environmental review and decision documents must be

² Attachment M is a PDF with selected pages from the party hearing transcript for June 21, 2019, available at <http://apps.psc.wi.gov/pages/viewdoc.htm?docid=372328>.

included as conditions in Agency financial commitment documents.” 7 C.F.R. § 1970.5. These mitigation measures must be incorporated in the plans and construction contracts for the project, and must be maintained “for the life of the loans.” *Id.* Such measures are meaningless if they are not described with specificity and in a way so as to be meaningfully binding. Measures that only are required “as necessary” or “to the extent possible” are insufficient.

Dr. Joy Zedler, Aldo Leopold Professor Emerita of Restoration Ecology at UW-Madison, raises several of these concerns in her comments on the FEIS. Attachment P. For example, she notes that information about when and how mitigation and restoration measures will be carried out is lacking and allows for too much on-the-spot discretion by the Applicants. She also questions the effectiveness of various “best management practices” and states that some proposed approaches are inadequate to protect wetlands. *E.g.*, Attachment P, at 3.

Other issues raised in comments have similarly not been addressed. For example, the FEIS continues to use a 300-foot analysis area for vegetation and wetlands impacts, despite the fact that commenters explained that many impacts, including those from runoff and invasive species, can extend well beyond that area. DEIS Comments at 30-31. The FEIS must fully and fairly analyze all direct, indirect, and cumulative impacts to vegetation and wetlands.

C. Wildlife and Birds

The FEIS does not meaningfully address the concerns raised by commenters about the inadequacy of the discussion around impacts to wildlife and especially to birds. *See, e.g.*, DEIS Comments at 35-39. First, RUS still apparently has not conducted a complete species survey. FEIS Vol. II, at p. 170, 186. The FEIS necessarily then cannot disclose or discuss with any detail which species will be affected and to what degree.

The FEIS also does not remedy the DEIS's inadequate discussion of bird impacts, specifically regarding impacts from collisions with the high-voltage transmission line. The FEIS brushes off the significance of bird mortality, noting that the line “would *present the potential* for avian collisions” and that “[u]nder high wind, fog, or poor light conditions, avian collisions with the transmission line *may occur*.” FEIS Vol. II, at p. 203 (emphasis added). This downplaying of collision impacts is incredibly misleading. The proposed transmission line would cut east-west over 100 miles, across the Mississippi Flyway, “a migration route of continental significance for over 300 species of migrant birds.” Attachment Q, Direct Testimony of Waller, at p.4. Significant bird mortality is guaranteed if this transmission line is built. In the PSCW proceeding, expert biologist Dr. Donald Waller explained that the most careful and rigorous study he found on bird collisions, Barrientos et al. 2012 (Attachment R), found that the power lines studied resulted in a mean collision rate of 8.2 collisions per km per month. Dr. Waller explained: “If we multiply that by the 125 miles or 201 kilometers of the proposed preferred route, we come up with a figure of 1,648 bird collisions per month, which translates into 19,778 collisions, fatal collisions of birds, per year.” Attachment S,³ at p. 1813. In other words, **Dr. Waller estimates that this transmission line will kill nearly 20,000 birds every year.** Despite the existence of scientific studies on bird collisions with transmission lines, the FEIS provides **no estimate of bird mortality from collisions** and indeed, fails to even acknowledge that such impacts will certainly occur. Dr. Waller also explained that the Barrientos study found that marking lines with flight diverters, one of the BMPs mentioned in the FEIS, reduced bird mortality by less than 10%. *Id.*

The FEIS also acknowledges that there may be lighting along the line, including on transmission line structures, and at the Hill Valley Substation. FEIS Vol. II, at p. 265-66, 270, 355.

³ Attachment S is a PDF with selected pages from the party hearing transcript for June 21, 2019, available at <http://apps.psc.wi.gov/pages/viewdoc.htm?docid=372328>.

The FEIS does not, however, discuss how artificial lighting would affect wildlife, such as bats, migrating birds, insects, etc. “Light pollution affects ecological interactions across a range of taxa and negatively affects critical animal behaviours including foraging, reproduction and communication.” Emma Louis Stone et al., *Impacts of Artificial Lighting on Bats: A Review of Challenges and Solutions*, *Mammalian Biology* (2015), https://www.researchgate.net/publication/272889669_Impacts_of_artificial_lighting_on_bats_A_review_of_challenges_and_solutions. “Light pollution is now recognised as a key biodiversity threat and is an emerging issue in biodiversity conservation.” *Id.* Artificial light can affect many aspects of bat behavior, *id.*, as well as negatively impact migratory birds. “Point sources of [artificial light at night] disorient and attract birds actively engaged in migration. . . High-intensity urban light installations can dramatically alter multiple behaviors of nocturnally migrating birds even to distances of several kilometers from the source.” Sergio A. Cabrera-Cruz et al., *Light Pollution Is Greatest Within Migration Passage Areas for Nocturnally-Migrating Birds Around the World*, *Scientific Reports* (2018), <https://www.nature.com/articles/s41598-018-21577-6>. Many bird species migrate at night, including “most songbirds, waterfowl and shorebirds.” *Id.* Lights at the Mississippi River crossing could be especially problematic, given that many migrating birds closely follow the River.

Impacts to specific bird species are also discounted. In DALC’s and WWF’s comments on the DEIS, they explained that whooping cranes migrate through the area that would be affected by the line, and provided evidence, including a photograph from U.S. Fish and Wildlife Service of whooping cranes in the area of the Upper Mississippi River National Wildlife and Fish Refuge through which the transmission line would run. DEIS Comments at 36-37. The DEIS’s statement that “there are no records of whooping cranes using land within the analysis area or near the Refuge” (DEIS at 177) was modified in the FEIS to state that “whooping cranes using land within

the analysis area or near the Refuge is uncommon and impacts to the species are not anticipated.” FEIS Vol. II, at p. 195. Yet it is well documented that whooping cranes migrate through the project area. In the PSCW proceeding, Clean Wisconsin’s staff scientist Dr. Paul Mathewson testified that records from multiple sources showed whooping crane observations in the project area. Attachment T, Direct Testimony of Mathewson, at p. 13-14. Dr. Mathewson explained that while the 100 cranes that summer in Wisconsin (called the Eastern Population) are an “experimental” population, they make up 15% of the total number of whooping cranes in the wild. Furthermore, Dr. Mathewson noted that “[t]ransmission line collisions represent a significant source of whooping crane mortality, including 18% of known mortality in the Eastern Population.” *Id.* The FEIS cannot ignore the likelihood of whooping crane deaths from collisions with the transmission line.

The discussion of impacts to bald eagles is also woefully inadequate. While the FEIS acknowledges that there are numerous bald eagle nests in the counties through which the line would run, a bald eagle nest survey has not been done, and the FEIS fails to even disclose just how close the line would run to known bald eagle nests. In the PSCW proceeding, the developers admitted that based on Wisconsin DNR records, the centerline of the transmission right-of-way would run within 600 meters of four known bald eagle nests, and because no surveys had been done, could in fact run within 50 meters of a nest. Attachment U,⁴ Cross Examination of Bub, at 876-877. It is not sufficient to say that if bald eagle nests are encountered, mitigation measures will be taken. First, the fact that bald eagles nest in close proximity to the line exist must be disclosed. Second, specific mitigation measures must be identified and committed to. Third, the

⁴ Attachment U is a PDF of selected pages from the party hearing transcript for June 18, 2019, available at <http://apps.psc.wi.gov/pages/viewdoc.htm?docid=372325>.

FEIS must acknowledge that even if mitigation measures are taken—such as not constructing the line during active nesting season—there may still be significant impacts to bald eagles. For example, fledgling eagles learning to fly from their nests and a nearby high-voltage transmission line could be a deadly combination.

D. Water Quality

The FEIS's discussion of water quality impacts still contains many flaws identified by commenters in the DEIS. As explained in DALC's and WWF's DEIS comments, some impacts are not discussed in sufficient detail to inform the decision, such as vegetation removal, dewatering, and impacts to floodplains. DEIS Comments at 39-42. The conclusion that many impacts would be only minor or short term relies heavily on the success of BMPs and mitigation measures, but the DEIS does not discuss those practices and mitigation measures in sufficient detail to justify that conclusion. This is a key concern raised by Dr. Barbara Peckarsky, Emeritus Professor of Stream Ecology, Cornell University, and an Honorary Fellow in the Departments of Integrative Biology and Entomology at the University of Wisconsin Madison, in her comments on the FEIS. Attachment V. Dr. Peckarsky explains, "information is still lacking with regard to avoidance, mitigation or restoration measures associated with construction and maintenance of the required structures for the transmission line."

E. Air Quality and Climate Change

While the FEIS makes an attempt to change its greenhouse gas impacts analysis in response to DALC's and WWF's comments, it misses the mark. The FEIS responds to comments that it should analyze carbon impacts from the generation of electricity that would be carried on the line. Instead of making a reasonable estimate of carbon emissions, or even giving a likely range, it provides the carbon emissions that would be associated with the transmission line carrying either

100% coal-generated electricity or 100% wind power. Yet neither of these is actually a likely scenario. Instead, the FEIS says the true carbon impact would lie somewhere in between, although it would certainly carry electricity from fossil-fuel generation. The Citizens Utility Board expert Mary Neal specifically testified in the PSCW proceeding that the transmission line would carry power generated by coal plants. Attachment W, Direct Testimony of Mary Neal. Giving two extreme situations and saying that the actual impact will be somewhere in between is not a sufficient analysis. The FEIS does not “provide the information necessary for the public and agency decisionmakers to understand the degree to which the [federal action] at issue would contribute to [climate change] impacts.” *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d 41, 51 (D.D.C. 2019). Several recent federal court rulings have overturned NEPA analyses for failure to adequately address climate impacts. In fact, in light of these decisions and additional pending suits, the Bureau of Land Management suspended 130 oil and gas leases in September, seemingly acknowledging the legal vulnerability of its usual NEPA practices. Nicholas Kusnetz, *U.S. Suspends More Oil and Gas Leases Over What Could Be a Widespread Problem*, Inside Climate News, <https://insideclimatenews.org/news/17112019/oil-gas-leases-suspended-climate-impact-federal-nepa-assessment-blm-utah-colorado-wyoming> (Nov. 17, 2019). RUS should likewise rethink its approach to assessing climate impacts.

The greenhouse gas analysis is also flawed in that it acknowledges that trucks and construction equipment will emit greenhouse gases, but then erroneously claims that the emissions “would not result in any long-term climate change impacts.” FEIS Vol. II, at p. 245. All greenhouse gases that are emitted into Earth’s atmosphere will necessarily contribute to climate change. Even **if** trucks and construction equipment for the project would only emit a small amount of greenhouse gases—note that RUS did not even attempt to estimate the amount of greenhouse gases that would

be emitted—that would not mean that there would be no climate impacts. RUS’s analysis is unsupportable.

DALC and WWF commented that the FEIS should include an analysis of carbon impacts based on the social cost of carbon. DEIS Comments at 45-47. RUS argued in its response to comments that it is not required to monetize impacts to any resource. FEIS Vol. IV, at p. F-175. However, the FEIS does attempt to monetize many other impacts of the project. For example, the FEIS quantifies the “positive impacts to employment and income” (FEIS Vol. I, at p. ES-22) and alleged energy cost savings. FEIS Vol. I, at p. 17. Federal courts have found NEPA analyses to be inadequate when they monetize benefits of an action but not costs. *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172 (9th Cir. 2008). And another federal court has stated that NEPA’s “hard look” requirement includes “a ‘hard look’ at whether this tool [the social cost of carbon], however imprecise it might be, would contribute to a more informed assessment of the impacts than if it were simply ignored.” *High Country Conservation Advocates v. United States Forest Serv.*, 52 F. Supp. 3d 1174, 1193 (D. Colo. 2014). RUS should provide an estimate of the social cost of the project’s GHG emissions and, if it chooses not to use the social cost of carbon to create this estimate, must explain its reasons for that choice. *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d 41, 74–75 & n.30 (D.D.C. 2019).

F. Noise

The FEIS does not remedy or adequately respond to the problems with the noise impacts analysis identified in DALC’s and WWF’s comments. DEIS Comments at 48-49. For example, DALC and WWF identified problems with the qualitative description of noise levels from construction. To demonstrate this point, DALC and WWF noted that the DEIS describes helicopter noise impact as “minor,” while stating that noise level at nearby residences would be “in the range

of about 83 to 87 dBA,” DEIS at 231, which is characterized as “very loud” and approaching a level that can cause hearing damage. DEIS at 224. RUS responds by explaining why helicopter noise would not actually cause hearing damage. FEIS Vol. IV, at p. F-177. RUS’s response misses the point—DALC and WWF were not asserting that helicopter use would actually cause hearing damage, but rather that the noise level generated could in no way be considered a “minor” impact.

The FEIS also discounts the impacts on noise to wildlife, limiting this analysis to a single short paragraph that acknowledges that noise “could . . . disrupt wildlife life-cycle activities.” FEIS Vol. II, at p.247. This is not an adequate discussion. A recent meta-analysis providing a “holistic quantitative assessment[] on the potential effects of noise across species” reveals that noise impacts on wildlife may be much broader and more significant than previously realized. Hansjoerg P. Kunc and Rouven Schmidt, *The Effects of Anthropogenic Noise on Animals: A Meta-Analysis*, BIOLOGY LETTERS, <https://royalsocietypublishing.org/doi/10.1098/rsbl.2019.0649> (Nov. 20, 2019). The FEIS must fully disclose noise impacts.

G. Cultural and Historic Resources

The FEIS necessarily is unable to fully evaluate and disclose the impacts that the high-voltage transmission line would have on cultural and historical resources, because only a small portion of the project route has actually been inventoried for cultural resources as of yet and cultural consultation with tribes is ongoing. FEIS Vol. II, at p. 283. RUS must inventory the full route before the FEIS is finalized in order to adequately disclose what the impacts to cultural and historical resources will be.

H. Land Use and Agriculture

The FEIS’s discussion and analysis of impacts to land use, agriculture, and recreation is also inadequate for a number of reasons.

1. Conservation Land Uses

Like the DEIS, the FEIS notes the existence of privately-held conservation easements in the analysis area but provides only a cursory discussion, which does not attempt to consider the actual impacts on individual conservation easements. DALC's and WWF's comments on the DEIS noted that the DEIS did not even provide the list of already identified affected easements that was included in the developers' application to the PSCW, DEIS Comments at 53, but that information was apparently not added in the FEIS despite being easily and publicly available.

The FEIS also does not analyze impacts on DALC's conservation easements, such as the easement on the Thomas Stone Barn property, which was purchased with funds from both federal (USDA Farm and Ranch Lands Protection Program) and state (Knowles-Nelson Stewardship Program) programs, and which includes a historic stone barn listed on the National and State Register of Historic Places. In response to DALC's and WWF's comments on the lack of discussion of conservation easements, RUS stated: "EIS Section 3.10 has been revised to disclose potential impacts to lands enrolled in conservation programs such as the CRP and MFL." FEIS Vol. IV, at F-183. Yet the Farm and Ranch Lands Protection Program ("FRPP") is a different sort of program than the CRP and MFL. Under the FRPP, which has now been consolidated in the Agricultural Conservation Easement Program ("ACEP"), land is entered into a permanent conservation easement with rights of enforcement for the Natural Resources Conservation Service ("NRCS"). The FEIS fails to explain how the high-voltage transmission line would be built without violating any requirements of the ACEP. For example, USDA's Title 440 – Conservation Programs Manual, Part 528, Subpart R provides that "NRCS easement lands are not subject to condemnation through eminent domain proceedings." And any "easement administrative action,"—which includes any subordination, modification, or termination of the rights of the United States in an ACEP easement—constitutes a federal action subject to review under NEPA.

“NRCDC must evaluate the consequences of, and alternatives to, the requested easement administrative action.” 440 CPM 528.170(C)(2). The Conservation Programs Manual also notes that any easement administrative action on an ACEP Agricultural Land Easement must be evaluated under the Farmland Protection Policy Act. This current FEIS for the Cardinal-Hickory Creek certainly does not provide this required analysis. The FEIS must include an actual evaluation of impacts to the conservation easements along the transmission line route.

2. Land Cover

The FEIS discussion of land cover impacts continues the flaws from the DEIS. For example, the “Land Cover Permanent Impact Summary” table continues to list “>1” as the affected acres of grassland, urban, barren, and wetlands for each of the six alternatives. Stating that greater than 1 acre of each of these four land cover types will be impacted says virtually nothing and certainly does not provide the level of detail required by an EIS. The FEIS must disclose all direct, indirect, and cumulative impacts to land cover, and simply acknowledging that there will be impacts is not sufficient.

3. Development Plans

While the FEIS discussion of local development and comprehensive land use plans was improved in response to DALC’s and WWF’s DEIS comments, it is still inadequate. The FEIS adds a paragraph briefly summarizing provisions from county and municipality land use plans that explicitly deal with transmission lines. However, it ignores entirely that many of the other provisions of such plans, such as those that discuss protecting local community feel, agricultural land, and the scenic natural landscape, are also relevant when considering the construction of a new high-voltage transmission line. The FEIS lists municipalities that submitted letters and resolutions opposing the transmission line, but apparently only included those that submitted the

documents specifically as part of the federal review process. Numerous additional local governments submitted resolutions opposing the transmission line in the PSCW proceeding, and others actually intervened in that proceeding to oppose the line. This information is public record, and available in the PSCW's docket at <http://apps.psc.wi.gov/vs2017/dockets/content/detail.aspx?id=5&case=CE&num=146>. Besides the entities listed in the FEIS, the following submitted resolutions or letters opposing the line: Dane County; Grant County; Iowa County; Mount Horeb Area School district; Barneveld Board of Education; the Towns of Brigham, Clyde, Cross Plains, Dodgeville, Eden, Ellenboro, Liberty, Lima, Mifflin, Mount Ida, Platteville, Potosi, Ridgeway, Wingville, and Wyoming; and the Villages of Arena, Barneveld, Montfort, and Ridgeway. See PSCW and DNR FEIS at 23–24, available in the PSCW's docket at <http://apps.psc.wi.gov/vs2017/dockets/content/detail.aspx?id=5&case=CE&num=146>.

Furthermore, the following legislators submitted comments urging the PSCW to consider alternatives: State Senators Shilling, Marklein, and Erpenbach, and State Representatives Pope, Considine, and Hesselbein.

Additionally, the FEIS was not modified to include information about consistency with development and management plans for local resources, such as conservation and recreation areas. The FEIS must fully explore and disclose the extent of inconsistencies between the proposed project and local land use plans and values.

4. Agriculture

The FEIS continues to acknowledge that construction of the CHC line may lead to some farms losing their organic certifications due to introduction of chemicals or herbicides that are prohibited in organic crops. Yet there is still no analysis of how many organic farms may be affected, nor is there any discussion or quantification of the economic impact that this loss of

certification would have. The economic impacts could be significant, both for individual farmers and for the region's tourism, which is, as discussed further below, partly driven by the region's reputation as a hub for small, conservation-minded, and organic farms. This information must be included to provide a fair analysis of direct and indirect impacts of the line.

I. Visual Quality and Aesthetics

Despite extensive comments from DALC and WWF on the inadequacies of the discussion of visual and aesthetic impacts, DEIS Comments at 58-61, RUS responded by making a single change: the FEIS acknowledges that the high-voltage transmission line and 17-story tall towers will have “major” (rather than “moderate”) visual impacts to homes within 150 feet on either side of the transmission line. Yet the FEIS continues to rely on very specific and narrowly focused quantification of impacts—for example, it does not consider visual impacts to homes more than 150 feet away from the line, or to visitors to nearby parks who are not at specific scenic outlook points. This crabbed view of aesthetic impacts is insufficient.

J. Socio-Economic and Environmental Justice Impacts

The FEIS's discussion of socio-economic and environmental justice impacts also continues to be insufficient and flawed.

1. Tourism

Like the DEIS, the FEIS seems to fail to understand that the degradation of the natural and visual environment from this proposed large transmission line would affect tourism to the Driftless Area as a whole—it will go beyond specific discrete impacts to the view at specific, discrete tourism sites. The Driftless Area as a region draws tourists. As conservation biologist, environmental historian, and Driftless Area authority Curt Meine explained in his testimony before

the PSCW, the line's "potential harmful impacts involve not only specific sites within and near the proposed corridors, but the Driftless Area as a whole." Attachment X, Direct Testimony of Meine, at 9. As Mr. Meine also explained in the PSCW proceeding, the four-county region in Wisconsin through which the line would run "has emerged as an incubator for innovative agricultural enterprises, a home to thriving local and organic food economies, and a destination for visitors who appreciate the area's scenic beauty, recreational opportunities, and attractive communities." Attachment Y, Rebuttal Testimony of Meine, at 4. The natural beauty of the region as a whole is a vital part of its appeal as a tourism destination (Attachment V at 12–15) which is ignored by the FEIS's narrow description of impacts to tourism at specific recreation sites.

2. Property Values

While the FEIS section on property value impacts now incorporates one of the studies referenced in DALC's and WWF's comments, the FEIS still does not discuss the valuation guidance report by Appraisal Group One that found that "it can be stated with a high degree of certainty that there is a significant negative effect ranging from -10% to -30% of property value due to the presence of the high voltage electric transmission line."⁵ DEIS Comments at 65-66.

Several other concerns raised by DALC and WWF are similarly not addressed. For example, the FEIS makes no attempt to give an estimate of the total lost value for properties affected by the construction of the high-voltage transmission line. A percentage decrease in value does not provide information about the actual overall impacts to the value of property along the whole line. These gaps in the analysis must be addressed.

⁵ Kurt C. Kielisch, Appraisal Group One, Inc., *Valuation Guidelines for Properties with Electric Transmission Lines*, <http://fieldpost.org/StarkEnergy/Studies/Valuation%20Guidelines%20for%20Properties%20with%20Electric%20Transmission%20Lines%201.pdf> at 6.

3. Environmental Justice

The FEIS does not adequately address environmental justice considerations. First, the FEIS improperly relied on the U.S. Census Bureau’s poverty threshold to define which populations were “low income.” FEIS Vol. II, at p. 310. The poverty threshold is, however, a very low threshold, and not appropriate for defining low income populations. For example, a family living above the poverty line may still be unable to afford housing and other basic human needs. An agency conducting an environmental justice assessment should define low income populations “more broadly than just those that fall below the poverty threshold (e.g., to include families whose income is above the poverty threshold but still below the average household income for the United States).” Technical Guidance for Assessing Environmental Justice in Regulatory Analysis, U.S. ENVIRONMENTAL PROTECTION AGENCY, at 7–8 (June 2016). Data on other socioeconomic characteristics—such as education, health, health insurance coverage, etc.—that are collected by the Census Bureau and other federal agencies should also be used to define low income populations. *Id.* at 8. EPA guidance defines “low income” as “households where the household income is less than or equal to twice the federal poverty line.” EPA, Frequent Questions about EJSCREEN, EPA.GOV, <https://www.epa.gov/ejscreen/frequent-questions-about-ejscreen#main-content> (last visited Nov. 19, 2019). Because households above the poverty level may still struggle to afford the basic necessities of life in Wisconsin, and because EPA guidance suggests using double the poverty threshold to identify “low income” environmental justice communities, it was unreasonable for the FEIS to use the poverty level to define environmental justice communities. The FEIS should utilize another metric to identify low income populations.

Second, the FEIS does not make an adequate comparison between the impacted community and an outside reference area to properly evaluate the impact on environmental justice communities. Tool Kit for Assessing Potential Allegations of Environmental Injustice, U.S.

ENVIRONMENTAL PROTECTION AGENCY, at 71, <https://www.epa.gov/sites/production/files/2015-02/documents/ej-toolkit.pdf> (Nov. 3, 2004). The FEIS compares the impacts that environmental justice communities would experience under each action alternative to “those experienced by non-environmental justice communities overlapped by the C-HC Project.” FEIS at 439. However, this does not properly address whether the impact on the environmental justice communities is “disproportionately high in the affected area compared with the reference community.” Tool Kit for Assessing Potential Allegations of Environmental Injustice, at 21. The FEIS must compare the environmental justice communities to communities that don’t have several high voltage transmission lines in order to properly determine that the environmental justice communities impacted by the CHC line do not face a disproportionate impact from the CHC project.

Third, the FEIS does not adequately analyze potential electromagnetic field (EMF) impacts. During the scoping phase of the CHC project, the U.S. EPA advised that the EIS should “analyze potential health and environmental effects associated with electromagnetic fields induced by one or more transmission lines.” Letter from Kenneth A. Westlake, Chief of NEPA Implementation Section, U.S. Env’tl. Prot. Agency Office of Enforcement and Compliance Assurance, to Dennis Rankin, Env’tl. Specialist, U.S. Dept. of Agric., Rural Util. Servs, at 7–8 (Jan. 6, 2017). The EPA further instructed RUS to identify the disproportionate impact that electromagnetic fields may have on environmental justice communities. *Id.* However, the FEIS does not mention how electromagnetic fields may disproportionately affect such communities.

Fourth, the FEIS does not adequately assess downwind particle pollution. The FEIS does acknowledge that one study found that individuals “downwind of power lines might have 20% to 60% more [corona ion] particles deposited in their lungs than those upwind.” FEIS Vol. II, at p.

462. The FEIS asserts that these particles are unlikely to cause health effects, but it concedes that more studies are needed to determine the effects these particles cause. *Id.* Because the analysis fails to identify which environmental justice communities are located downwind of power lines, the analysis of the possible health effects of electromagnetic on environmental justice communities is inadequate.

K. Public Health and Safety

The analysis of fire risks has not been improved to address the various issues raised in DALC's and WWF's DEIS comments. DEIS Comments at 68-70. There is still no quantitative analysis of the risks posed by transmission lines generally or this line specifically. The FEIS does not acknowledge how climate change may increase fire risk in the coming decades—for example, due to more extreme weather and potentially longer and more serious dry spells. Nor does it discuss any of the actual impacts that would occur if the Cardinal-Hickory Creek transmission line started a fire—what impacts would a wildlife have on the surrounding environment and communities? The FEIS was also not updated to provide any additional information on fire risk BMPs and does not adequately explain how fire risks would be addressed or reduced. The FEIS must fully explore these issues.

L. Upper Mississippi River National Wildlife and Fish Refuge

While the FEIS's analysis of impacts to the Upper Mississippi River National Wildlife and Fish Refuge now at least acknowledges the impacts from taking down the existing transmission lines, the discussion of impacts to the Refuge is still flawed. For example, the aesthetic impacts are downplayed, and the success of mitigation measures, as well as restoration measures for the existing right-of-way, are assumed. Note that comments on the United States Fish and Wildlife Service's Draft Compatibility Determination from DALC, WWF, the National Wildlife Refuge

Association, and Defenders of Wildlife, are provided in a separate submission, which DALC and WWF incorporate herein by reference. Attachment Z.

M. Cumulative Impacts

The “hard look” requirement extends to cumulative impacts, and the analyses must include enough “detail and quantification . . . such that an objective reviewer cannot be confident that the agency took the hard look at environmental consequences that NEPA requires.” *Habitat Educ. Ctr., Inc. v. Bosworth*, 363 F. Supp. 2d 1090, 1101 (E.D. Wis. 2005). The Cumulative Impacts section in the FEIS is still very problematic. First, much of the analysis is vague and provides only generalities rather than the acknowledgement of specific cumulative impacts. For example, the cumulative impacts analysis for wildlife does little more than list other infrastructure projects in the area and acknowledge that the projects will cumulative destroy, degrade, and fragment habitat. This is not sufficient, and is actually significantly less detailed than the species-specific analysis that was found inadequate in *Habitat Educ. Ctr., Inc. v. Bosworth*, 363 F. Supp. 2d at 1100-02.

In addition, the FEIS claims that because past actions are now part of the “affected environment” described in other places in the FEIS, it is appropriate to exclude all past actions from its cumulative impacts analysis. To the contrary, describing the current setting for the proposed transmission line is in no way a legally adequate substitute for examining the cumulative impacts from the line in combination with previous projects. *Delaware Riverkeeper Network v. F.E.R.C.*, 753 F.3d 1304, 1319 (D.C. Cir. 2014), explains that a cumulative impacts analysis must consider “other actions—past, present, and proposed, and reasonably foreseeable—that have had or are expected to have impacts in the same area,” along with “the impacts or expected impacts from these other actions,” and “the overall impact that can be expected if the individual impacts are allowed to accumulate.” The FEIS necessarily does not consider the cumulative impacts from

past actions when it considers those past actions part of the baseline status quo. For example, the FEIS should discuss cumulative impacts with other recently built high-voltage transmission lines in the area, such as the Badger-Coulee or CapX2020 lines.

The geographic scopes for the various elements of the cumulative impacts analysis are improperly narrow. For example, the cumulative aesthetics impacts analysis is limited to a 2-mile area around the line. Yet as people who live, work, and recreate in the Driftless Area drive through the region, the Cardinal-Hickory Creek line, in combination with additional infrastructure projects, like other high-voltage transmission lines, will affect the overall nature of the landscape, even if the other projects are more than two miles away. Similarly, the public health and safety cumulative impacts analysis is limited to a 300 foot area. Yet individuals who will experience potential health risks from this transmission line may certainly encounter other transmission lines in their daily lives, with resulting cumulative impacts. As another example, the impacts analysis for the Refuge is limited to Pool 11 of the Refuge, yet numerous bird species migrate up and down miles and miles of the Refuge every spring and fall, and impacts to those species from collisions with the Cardinal-Hickory Creek line will be cumulative with other transmission lines and man-made infrastructure along their migration route. It is especially important that the FEIS consider cumulative impacts from other transmission lines, not only those already built, but also those that are planned, such as the Rock Island Clean Line.

And while the FEIS's expansion of the temporal scope from 40 to 60 years is a step in the right direction, 60 years is the estimated life of the transmission line, not the duration of impacts. Even if the Cardinal-Hickory Creek line is decommissioned in 60 years, the habitat destruction and many other impacts will not disappear at that time. The FEIS also continues to ignore

cumulative impacts from the various lower-voltage transmission and distribution lines that would be relocated to make room for the Cardinal-Hickory Creek line.

V. MITIGATION AND REMEDIATION

Like the DEIS, the FEIS fails to provide adequate details about mitigation and remediation measures. For example, the FEIS provides very little in the way of commitments to specific measures or information showing that the proposed measures would be at all effective in reducing impacts. RUS is required to “seek to mitigate potential adverse environmental impacts resulting from Agency actions” and ensure that “[a]ll mitigation measures will be included in Agency commitment or decision documents.” 7 C.F.R. § 1970.16. CEQ regulations require that agency records of decision for which an EIS was prepared must “[s]tate whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not. A monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation.” 40 C.F.R. § 1505.2. These standards have not been met.

Similarly, RUS has also not explained how it will fulfill its duty to “monitor implementation of all mitigation measures during development of design, final plans, inspections during the construction phase of projects, as well as in future servicing visits.” 7 C.F.R. § 1970.16. CEQ guidance on mitigation states that “mitigation commitments should be carefully specified in terms of measurable performance standards or expected results,”⁶ and that agencies should implement a mitigation monitoring program that both “tracks whether mitigation commitments are being performed as described in the NEPA and related decision documents (i.e., implementation

⁶ Council on Environmental Quality, *Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact*, at 8, https://ceq.doe.gov/docs/ceq-regulations-and-guidance/Mitigation_and_Monitoring_Guidance_14Jan2011.pdf.

monitoring), and whether the mitigation effort is producing the expected outcomes and resulting environmental effects (i.e., effectiveness monitoring).”⁷ Fully describing these aspects of proposed mitigation is important because, without appropriate documentation and monitoring, “the use of mitigation may fail to advance NEPA’s purpose of ensuring informed and transparent environmental decisionmaking. Failure to document and monitor mitigation may also undermine the integrity of the NEPA review.”⁸

The FEIS has not been updated to provide any information on what will happen to the transmission infrastructure after the estimated 40 to 60-year “life” of the project (nor is it even clear what the precise projected life is). Will the transmission line, 17-story high towers, substation, and other structures be removed? Will they be left up? Will the developers continue to maintain the ROW? This important consideration is completely neglected in the FEIS.

VI. CONCLUSION

For the reasons detailed above and in DALC’s and WWF’s earlier comments, the FEIS does not meet the requirements or purpose of NEPA. It fundamentally fails to take a “hard look” at the need for the proposed high-voltage transmission line and at reasonable alternatives, and fails to provide a full and fair analysis of the impacts of the transmission line and tall towers. NEPA requires that decisionmakers and the public are provided with a fair and unbiased analysis. DALC and WWF are confident that such a review would demonstrate that better alternatives exist than building this massive new transmission line through the Driftless Area of Southwest Wisconsin.

⁷ *Id.* at 11.

⁸ *Id.* at 2.

Respectfully submitted on behalf of the
Driftless Area Land Conservancy and the
Wisconsin Wildlife Federation by:



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Comment on CHC Draft Compatibility Determination

1 message

Rachel Granneman <RGranneman@elpc.org>

Mon, Nov 25, 2019 at 3:40 PM

To: "comments@CardinalHickoryCreekEIS.us" <comments@cardinalhickorycreekeis.us>, "Dennis.Rankin@wdc.usda.gov" <Dennis.Rankin@wdc.usda.gov>

Good afternoon,

Please find attached comments on the U.S. Fish and Wildlife's Draft Compatibility Determination for the Cardinal-Hickory Creek transmission line, submitted on behalf of the Driftless Area Land Conservancy, Wisconsin Wildlife Federation, National Wildlife Refuge Association, and Defenders of Wildlife.

Thank you,

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 **Comment on Draft Compatibility Determination w Attachments 11.25.19.pdf**
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ENVIRONMENTAL LAW & POLICY CENTER
Protecting the Midwest's Environment and Natural Heritage

COMMENT ON DRAFT COMPATIBILITY DETERMINATION

**UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE AND FISH REFUGE
CARDINAL-HICKORY CREEK HIGH-VOLTAGE TRANSMISSION LINE**

Thank you for the opportunity to comment on the draft Compatibility Determination for the proposed crossing of the Upper Mississippi National Wildlife and Fish Refuge (the Refuge) by the new Cardinal-Hickory Creek 345-kilovolt transmission line (CHC Project). The proposed CHC Project would run above ground through land owned or managed by the U.S. Fish and Wildlife Service (USFWS) in the Refuge in Iowa, before crossing the Mississippi River to Cassville, Wisconsin.

The CHC Project would open a new right-of-way (ROW) 260 feet wide through the Refuge and cross the River near the now-demolished Nelson Dewey coal-fired power plant in Cassville. From there, the CHC Project will proceed through the Driftless Area in southwestern Wisconsin and eventually connect to a substation in Middleton, WI, just outside of Madison. The CHC project will include fourteen high-voltage transmission towers on Refuge land. Twelve of them will be H-style towers, typically 75 feet high, but at the River crossing, two of the towers will be approximately 195 feet high. The 260-foot ROW will be clearcut and vegetation strictly controlled through herbicide application throughout the 60-year (or more) life of the Project.

There is an existing 150-foot transmission right-of-way, not on the same route, that crosses the Mississippi River about a mile south of where the proposed CHC Project would cross. That right-of-way has been occupied by transmission lines, one 161 kV, one 69 kV, on 75-foot single pole structures. The applicants have said that, if the CHC Project is approved, they intend to tear down the existing line, at the so-called "Stoneman crossing," and restore the clearcut land on that corridor so it will someday again be suitable for wildlife habitat.

This comment is submitted by the Environmental Law & Policy Center on behalf of the Driftless Area Land Conservancy and the Wisconsin Wildlife Federation, and by the National Wildlife Refuge Association and the Defenders of Wildlife (collectively, "Commenters"). Contrary to the draft Compatibility Determination, Commenters submit that the CHC project (1) cannot meet the requirements for a "compatible use" under the National Wildlife Refuge System Administration Act of 1966 (1966 Act), as amended by the National Wildlife Refuge System Improvement Act of 1997 (1997 Act), 16 U.S.C. §§ 668dd, 668ee; and (2) cannot be justified as merely a "realignment" or "minor extension or expansion" of an existing transmission line right-of-way. Allowing the CHC Project to proceed through the Upper Mississippi Refuge sets a dangerous precedent. A number of our national wildlife refuges are currently crossed by pipelines or transmission lines that predate the 1966 and 1997 Refuge Administration Acts and, under the best of circumstances, it will be many years before those incompatible uses can be reduced and eliminated. Under the theory outlined in this draft Compatibility Determination, however, those

incompatible uses will *never* be eliminated, and indeed will be used to allow the construction of new infrastructure that would expand or even, as in this case, extend to additional Refuge land in perpetuity.

The expansion or extension of infrastructure to additional Refuge land is contrary to both the letter and spirit of the 1966 and 1997 Acts. We therefore urge that the draft Compatibility Determination be withdrawn, and that the joint Application for Transportation and Utility Systems and Facilities on Federal Lands from applicants ITC Midwest and Dairyland Power Cooperative be denied.

Background on the Upper Mississippi River National Wildlife and Fish Refuge

The Upper Mississippi River National Wildlife and Fish Refuge was established by an Act of Congress in 1924. Upper Mississippi River National Wildlife and Fish Refuge Act, Pub. L. No. 68-268, 43 Stat. 650 (1924). Today, it covers approximately 240,000 acres of Mississippi River floodplain along a 261-mile corridor running from near Wabasha, Minnesota to near Rock Island, Illinois. The 1924 Act describes the purposes of the Refuge as follows:

- a. [A]s a refuge and breeding place for migratory birds included in the terms of the convention between the United States and Great Britain for the protection of migratory birds, concluded August 16, 1916, and
- b. [T]o such extent as the Secretary may by regulations prescribe, as a refuge and breeding place for other wild birds, game animals, fur-bearing animals, and for the conservation of wild flowers and aquatic plants, and
- c. [T]o such extent as the Secretary may be regulations prescribe as a refuge and breeding place for fish and other aquatic animal life.

16 U.S.C. § 723. The Refuge’s own informational material describes it as “an invaluable natural legacy recognized by Congress as part of a nationally significant ecosystem.” The Refuge’s Comprehensive Conservation Plan (CCP) describes it as a “seemingly endless panorama of river, backwaters, marshes, islands, and forest, framed by steep bluffs” and as “a national scenic treasure.” It is the most heavily visited national wildlife refuge in the System, with an estimated 3.7 million annual visitors. The CCP also calls it “perhaps the most important corridor of fish and wildlife habitat in the central United States”:

- 306 bird, 119 fish, 51 mammal, and 42 mussel species recorded;
- Up to 40% of the continent’s waterfowl use the Mississippi Flyway during migration, with up to the 50% of the world’s Canvasback ducks and 20 % of the eastern U.S. population of Tundra Swans stopping on the Refuge during fall migration;
- 167 active Bald Eagle nests in 2005, up to 2,700 eagles on the Refuge during spring migration; and
- Approximately 5,000 heron and egret nests in up to 15 colonies.

The Refuge has National Scenic Byways on both sides. It has been designated as a Globally Important Bird Area, and has been designated a floodplain Wetland of International Importance by the Ramsar Convention on Wetlands.

Governing Law

The statute governing management of the Refuge is the National Wildlife Refuge System Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997, 16 U.S.C. § 668dd, 668ee. The 1997 Act for the first time clarified that the *sole* mission of the National Wildlife Refuge System is:

[T]o administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

16 U.S.C. § 668dd(a)(2). That mission includes the obligation to “ensure that the biological integrity, diversity, and environmental health of the System are maintained... .” 16 U.S.C. § 668dd(a)(4)(B).

The 1997 Act was enacted in response to a series of reports finding that incompatible uses, including transmission lines, were threatening the biological integrity and purposes of the national wildlife refuge. *See generally* U.S. Gov’t Accountability Office, GAO-RCED-89-196, *National Wildlife Refuges: Continuing Problems with Incompatible Uses Call for Bold Action* (1989), <https://www.gao.gov/assets/150/148073.pdf>. The GAO report recommended that, to address that weakness in the 1966 statute, “compatibility determinations” needed to be based *solely* on biological criteria to prevent nonbiological considerations from influencing such decisions. *Id.* at 24. It also recommended that existing “secondary uses” like pipelines, powerlines, and business activities on Refuge land be periodically reevaluated, and that incompatible uses be eliminated as soon as practicable. *Id.* at 33.

Consistent with that newly clarified mission, the 1997 Act provides that the Secretary [USFWS] “shall not initiate or permit a new use of a refuge or *expand, renew, or extend an existing use* of a refuge, unless the Secretary has determined that the use is a compatible use and that the use is not inconsistent with public safety.” 16 U.S.C. § 668dd(d)(3)(A)(i) (emphasis added). Even more specifically, the Act provides that USFWS may not grant easements for “purposes such as but not necessarily limited to, powerlines, telephone lines, canals, ditches, pipelines, and roads, including the construction, operation, and maintenance thereof” unless it has first “determine[d] that such uses are compatible with the purposes for which these areas are established.” 16 U.S.C. §668dd(d)(1)(B).

The statute also requires that *existing* incompatible uses be eliminated as soon as possible. It explicitly requires the Secretary to “provide for the elimination or modification of any use as expeditiously as practicable after a determination is made that the use is not a compatible use.” 16 U.S.C. § 668dd(d)(3)(B)(vi). The statute requires USFWS to reevaluate existing uses whenever “conditions under which the use [was] permitted change significantly, or there is

significant new information regarding the effects of the use, but not less frequently than every 10 years, to ensure that the use remains a compatible use.” 16 U.S.C. § 668dd(d)(3)(B)(vii). Projects such as transmission lines with easements extending more than 10 years are still to be reevaluated at least every 10 years, but only to “examine compliance with the terms and conditions of the authorization, not examine the authorization itself.” *Id.*

The 1997 Act says “[c]ompatibility determinations in existence on October 9, 1997, shall remain in effect until and unless modified,” 16 U.S.C. § 668dd(d)(3)(A)(iv), but conspicuously does not grandfather in existing incompatible uses anywhere.

The 1997 Act also established a much clearer standard for “compatibility.” “Compatible use” is now defined as:

[A] wildlife-dependent recreational use or any other use of a refuge that, in the sound professional judgment of the Director, will *not materially interfere with or detract from* the fulfillment of the mission of the System or the purposes of the refuge.

16 U.S.C. § 668ee(1) (emphasis added). “Sound professional judgment,” in turn, is defined as a “determination or decision that is consistent with principles of sound fish and wildlife management and administration, available science and resources, and adherence to the requirements of [the Improvement] Act and other applicable laws.” 16 U.S.C. § 668ee(3).

The regulations adopt the same general definitions as the statute. 50 C.F.R. §§ 25.12, 29.21; *see generally* Final Compatibility Regulations Pursuant to the National Wildlife Refuge System Improvement Act of 1997, 65 Fed. Reg. 62,458 (Oct. 18, 2000). The “policy” USFWS adopted at that same time, Final Compatibility Policy Pursuant to the National Wildlife Refuge System Improvement Act of 1997, 65 Fed. Reg. 62,484 (Oct. 18, 2000), largely incorporated into part 603 of the USFWS Manual, fws.gov/policy/manuals, contains the same general definition as well, but the policy also adds a number of substantive clarifications to the compatibility definition.

First, it squarely places the burden of proving compatibility on applicants:

Compatibility, therefore, is a threshold issue, and the proponent[s] of any use or combination of uses must demonstrate to the satisfaction of the Refuge Manager that the proposed use[s] pass this threshold test. The burden of proof is on the proponent to show that they pass, not on the Refuge Manager to show that they surpass.

603 FW § 2.11.B(1), 65 Fed. Reg. at 62,489. And it makes clear that in the “incomplete information” situation, the applicant will not have met its burden of proof. “If information available to the Refuge Manager is insufficient to document that a proposed use is compatible, then the Refuge Manager would be unable to make an affirmative finding of compatibility, and we must not authorize or permit the use.” 603 FW § 2.11.E; 65 Fed. Reg. at 62,490.

Second, the rules and policy emphasize that proposed “economic” uses for a Refuge are to receive stricter scrutiny than uses that support wildlife conservation or wildlife-dependent recreation. As the rules provide: “We may only authorize public or private economic use of the natural resources of any national wildlife refuge . . . where we determine that the use *contributes to* the achievement of the national wildlife refuge purposes or the National Wildlife Refuge System mission.” 50 C.F.R. § 29.1 (emphasis added). That section of the rules then states that “economic” use “includes *but is not limited to* grazing livestock, harvesting hay and stock feed, removing timber, firewood or other natural products of the soil, removing shell, sand or gravel, cultivating areas, or engaging in operations that facilitate approved programs of national wildlife refuges.” *Id.* (emphasis added). This proposed high-voltage transmission line is, of course, a purely “economic” use that would do nothing to “contribute to” wildlife conservation or wildlife-dependent recreation.

Third, the Policy expressly requires Refuge managers to complete a review of indirect and cumulative impacts, considering both other existing and likely future proposed uses:

The Refuge Manager must consider not only the direct impacts of a use but also the indirect impacts associated with the use and the cumulative impacts of the use when conducted in conjunction with other existing or planned uses of the refuge, and uses of adjacent lands or waters that may exacerbate the effects of a refuge use.

603 FW § 2.11.B(3); 65 Fed. Reg. at 62,489.¹

Fourth, the Policy prohibits using “compensatory mitigation” to make a proposed use compatible. Refuge managers may not allow incompatible uses on Refuge land in exchange for applicant commitments to provide additional wildlife habitat elsewhere. “We will not allow compensatory mitigation to make a proposed refuge use compatible. . . . If the proposed use cannot be made compatible with stipulations we cannot allow the use.” 603 FW § 2.11.C; 65 Fed. Reg. at 62,489.

Fifth, the Policy takes a very strong position against permitting habitat fragmentation:

Fragmentation of the National Wildlife Refuge System’s wildlife habitats is a direct threat to the integrity of the National Wildlife Refuge System both today and in the decades ahead. Uses that we reasonably may anticipate to reduce the quality or quantity or fragment habitats on a national wildlife refuge will not be compatible.

603 FW § 2.5.A; 65 Fed. Reg. 62, 486.

¹ *E.g.* future high-voltage transmission lines crossing the Refuge. Mike Hughlett, *Minnesota Utilities Will Study if the \$2B CapX2020 Grid Improvements Were Enough*, StarTribune (Aug. 19, 2019), <http://www.startribune.com/minnesota-utilities-will-study-if-the-2b-capx2020-grid-improvements-were-enough/554442792/> (describing likely “CapX2050” project to expand existing CapX2020 transmission lines).

Consistent with that, the USFWS Manual states unequivocally that “[i]t is the policy of the Service to discourage the types of uses embodied in right-of-way requests. On areas in the National Wildlife Refuge System (System) if a right-of-way cannot be certified as compatible with the purposes for which a unit was established, it cannot be granted without authorization by Congress.” Manual, 340 FW § 3.3.

Analysis—Compatibility

To their credit, the Refuge managers who prepared the draft Compatibility Determination did not attempt to argue or even suggest that the CHC Project could pass the “compatible use” test if it were a new project. It is clear that the proposed CHC Project would significantly negatively impact and interfere with the purpose of the Refuge. As Kevin Foerster, former supervisor for the Upper Mississippi River Refuge, outlined in a letter related to a prior high-voltage transmission line proposal:

By their nature, right-of-ways and some construction projects can cause habitat fragmentation; reduce habitat quality; degrade habitat quality through the introduction of contaminants; disrupt migration corridors; alter hydrology; facilitate introduction of alien, including invasive, species; and disturb wildlife. Proposed uses which would conflict with the legal requirement to maintain biological integrity, diversity and environmental health are not appropriate or compatible.

Letter from Kevin Foerster, Refuge Supervisor to Stephanie Strength, RUS Environmental Protection Specialist (Feb. 23, 2012) (Attachment A). Construction and operation of a new high-voltage transmission line would certainly cause many, if not all, of these impacts. The likely frequency of fatal bird collisions is especially concerning considering that the CHC Project would run east-west across the north-south Mississippi Flyway and the protection of migratory birds is the first statutory purpose of the Refuge.

Consistent with that view, when first consulted about the CHC project, the current Refuge managers made it very clear that, although there are existing transmission lines crossing the Refuge, those uses are incompatible and potential applicants could not meet the burden necessary to secure approval today. Minutes from a multi-agency meeting on September 18, 2012 reported as follows:

Tim Yager [deputy Refuge manager] said that any proposed impact to the refuge would require demonstration of avoidance. Both Rich King [Driftless Area Refuge manager] and Tim Yager said the alternatives that have been discussed today were presenting minimization and mitigation measures. Tim said that the existing transmission lines were authorized many years ago and would likely not be permitted or considered a compatible use today. Tim said he is very uncomfortable with moving forward with only Cassville options being considered, since all of these alternatives have impacts to the refuge.

Meeting Minutes, ATC Cardinal Bluffs Project – Multi-Agency Meeting, at 6 (Sept. 18, 2012) (Attachment B). Throughout this process, the Refuge managers have stated their strong

preference that the CHC Project avoid crossing the Refuge if at all possible. During the scoping phase of the federal environmental review for the CHC project, the Environmental Protection Agency (EPA) took the same position—that the project should not go forward without serious consideration of non-Refuge-crossing alternatives. Letter from Kenneth A. Westlake, Chief of NEPA Implementation Section, U.S. EPA Office of Enforcement and Compliance Assurance, to Dennis Rankin, Env'tl. Specialist, U.S. Dep't of Agriculture, Rural Utilities Service, at 2 (Jan. 6, 2017) (Attachment C).

The draft Compatibility Determination itself outlines many of the negative impacts that justify that position:

- (1) Negative visual impacts, significantly greater with the selected Nelson Dewey right-of-way;
- (2) Permanent disruption of forest succession patterns, especially for the “young” forest established by the Turkey River restoration project; and
- (3) The “loss, degradation, and/or fragmentation of breeding, rearing, foraging, and dispersal habitats, and increased noise/vibration levels,” especially during construction but also from maintenance activities.

Likewise, the final environmental impact statement for the CHC project (the “FEIS”),² currently out for comment, describes how the project will “materially interfere with and detract from” the Refuge’s purposes:³

- Temporary or permanent removal, degradation, or alteration of vegetation within the Refuge (primary land cover class being wetland), FEIS at 157;
- Project will cross 15 identified wetlands, 41 acres within the ROW, including 27 acres of mature forested wetland, FEIS at 419;
- The Project will diagonally cross the Turkey River restoration area, resulting in habitat fragmentation of the restoration area. That habitat fragmentation will, according to the EIS, “adversely impact forest interior species that need large contiguous tracts of forest to complete their life cycles.” (The Turkey River restoration area is currently “young forest,” with the goal, at least before the CHC project, being a long-term restoration of the Turkey River floodplain so it can grow into bottomland forest within 100 years.), FEIS at 421;
- If the Project is approved, the existing low-voltage line along the “Stoneman crossing” ROW will be retired and revegetated, but it will take 25 to 50 years for the area to return to surrounding vegetative conditions, FEIS at 420;
- Adverse impact on recreational users, during construction and then permanently by “altering the visual environment from an undeveloped landscape to a developed landscape,” FEIS at 421;

² Final Environmental Impact Statement for the Cardinal-Hickory Creek Transmission Line Project, Rural Utilities Service (Oct. 2019), available at <https://www.rd.usda.gov/publications/environmental-studies/impact-statements/cardinal-%E2%80%93-hickory-creek-transmission-line>.

³ The draft Compatibility Determination is based on Segment B-1A2, in the environmental impact statement, a version of the “Nelson Dewey crossing.”

- “Long-term, major adverse impacts to scenic resources within the Refuge”—new transmission line structures and conductors which will “dominate the landscape and detract from current user activities” along Oak Road, and “additional visual impacts to visitors, fishermen, and wildlife photographers as well as car ferry users in the area,” FEIS at 422;
- New avian collision risk, “particularly for larger species and in areas of dense bird congregations, such as migrating waterfowl corridors in the Mississippi Flyway. . . . Migratory waterfowl would be especially susceptible to transmission line collisions where the proposed transmission lines are near migration staging areas and natural flight corridors such as the Mississippi River. FEIS at 185.

For all of those reasons, the draft Compatibility Determination does not attempt to deny the proposition that the CHC Project will indeed “materially interfere with or detract from” the Refuge’s purposes. There is likewise no suggestion that the CHC Project will somehow “contribute to” the Refuge’s purposes, or that applicants have in any way met their burden to prove that their proposal would be a “compatible use.” Under the 1997 Act, the rules, and the policy, then, that means the compatibility determination should be negative.

Analysis—Claimed Exemption for “Existing Rights-of-Way”

Instead of addressing the compatibility issue head on, the draft Compatibility Determination tries to avoid the issue by contending that Congress *prohibited* them from considering negative Refuge impacts, because this is only a “reauthorization” of an “existing right-of-way.” The draft relies almost entirely on an interpretation of a sentence in 50 C.F.R. § 25.21(h), which reads “When we prepare a compatibility determination for re-authorization of an existing right-of-way, we will base our analysis on the existing conditions with the use in place, not from a pre-use perspective.” The draft interprets that sentence to mean “[i]n other words, only modifications from the historic permitted use are to be analyzed.” Draft Compatibility Determination at 9. Then, based on that interpretation, the draft attempts to minimize the size of the modification by making calculations about affected acreage. As the draft says, if one assumes that the entire existing right-of-way is successfully and completely restored instantly, and therefore can be subtracted from total affected acreage, there will in the end only be a net increase of 2.5 acres of affected habitat with the new right-of-way. And the draft says applicants have agreed to provide compensatory mitigation with habitat on land now in private ownership.⁴

That interpretation and application of the rule is simply incorrect.

First, the CHC project is not a “re-authorization of an existing right-of-way.” It is an entirely new right-of-way, in a different location, on different property. It is much larger than the existing right-of-way; 260 feet wide instead of 150 feet, nearly 75% wider. Unlike the existing right-of-way, it travels through the Turkey River restoration area, a Refuge priority and significant financial commitment, just as new trees are getting established. It will involve towers up to 195 feet high, more than double the height of the current 161-kV towers, and wider H-shaped towers instead of the single-pole towers that currently exist. The proposed use will be more intensive—

⁴ This despite the USFWS’s express policy against using compensatory mitigation to reach a positive compatibility finding.

two 345 kV high-voltage lines instead of two lower-voltage 69 kV and 161 kV lines. And, instead of smaller lines near the end of their useful life, the Refuge will feel the impacts of the larger lines for at least the next 60 years. That is not a “reauthorization” of an existing use. That is permitting a new use, or, at best, permitting applicants to dramatically “expand, renew, or extend an existing use.” 16 U.S.C. § 668dd(d)(3)(A)(i). In either case, the Act requires a full compatibility determination.

Nor can this Project somehow be characterized as routine “maintenance of an existing right-of-way.” The USFWS Manual does say that “maintenance of an existing right-of-way” can include “minor expansion or minor realignment to meet safety standards.” 603 FW § 2.11.D. But the examples provided are truly minor: “expand the width of a road shoulder to reduce the angle of the slope, expand the area for viewing on-coming traffic at an intersection; and realign a curved section of a road to reduce the amount of curve in the road.” *Id.* Granting a new right-of-way 260 feet wide on different land, 110 feet wider than any existing right-of-way in the area, for high-voltage transmission towers, two of which will be nearly 200 feet high, designed to last for 60 years is considerably less minor than expanding the width of a road shoulder to make it safer. There are, of course, no safety standards at issue here. This is a proposed large scale, stand alone construction project, pure and simple, that has no connection whatsoever to any reasonable concept of “maintenance.”

Second, by its own terms, it is not at all clear that 50 C.F.R. § 25.21(h) applies to this situation at all. Subsection (h) is about “compatibility *re*-evaluations” not initial “compatibility determinations.” The 1997 Act directs USFWS to reevaluate compatibility determinations at least every 10 years to account for new information and experience. There is no evidence, however, that the existing transmission line ROW—the Stoneman ROW—ever went through a compatibility determination evaluation under the terms of either the 1966 Act or the 1997 Act. The existing lines were built back in the 1950’s. Consequently, there is no existing compatibility determination to reevaluate, and subsection (h) simply does not apply. The statute’s language does not permit any other interpretation. Section 668dd(d)(3)(A)(iv), which is the only provision that addresses what would be “grandfathered in” makes it clear that only “compatibility determinations” would be, not all preexisting uses. The existing transmission line ROW is almost certainly one of the incompatible uses that drove the GAO report in 1989, U.S. Gov’t Accountability Office, GAO-RCED-89-196, *National Wildlife Refuges: Continuing Problems with Incompatible Uses Call for Bold Action* (1989), <https://www.gao.gov/assets/150/148073.pdf>. GAO-RCED-89-196, and led to the passage of the Act in 1997, the kind of incompatible use the 1997 Act was intended eventually to eliminate.

Third, while the legislative history of the 1997 Act suggests a concern about eliminating existing rights-of-way, H.R. Rep. 105-106, at 13 (1997), there is no evidence that Congress intended to give existing right-of-way easement or permit holders the right to continue their incompatible uses in perpetuity. There is certainly no evidence that Congress intended to allow right-of-way holders to expand and extend their otherwise incompatible uses of Refuge property. The key term is “existing.” If USFWS were to order the existing low-voltage transmission line at Cassville torn down before the easements expire, without recompense, the owners would have a legitimate beef. Nothing in that House Report suggests, however, that easement holders have a

permanent right, not only to keep their easements, but also to expand or extend them, or to swap them for new easements in new locations.

Fourth, USFWS policy flatly prohibits using compensatory mitigation like the applicant's proposal to restore the Stoneman ROW (and create habitat on private property elsewhere) to justify a project. 603 FW § 2.11.C. Even if this project could be reasonably characterized as maintenance of an existing right of way, which it cannot, USFWS policy sets minimum requirements that have not been met here, particularly the requirement that all restoration work be completed before any new easement is recorded:

We will not make a compatibility determination and will deny any request for maintenance of an existing right-of-way that will affect a unit of the National Wildlife Refuge System, unless (1) the design adopts appropriate measures to avoid resource impacts and includes provisions to ensure no net loss of habitat quantity or quality; (2) restored or replacement areas identified in the design are afforded permanent protection as part of the national wildlife refuge or wetland management district affected by the maintenance; and (3) all restoration work is completed by the applicant prior to any title transfer or recording of the easement, if applicable.

603 FW § 2.11.D. Here, as the draft freely acknowledges, achieving “no net loss” of habitat will require the restoration of the Stoneman ROW and the unidentified private property to succeed, a result which may not be achievable at all, but which will certainly involve a process that will likely take decades to complete.

Fifth, the draft's interpretation cannot be reconciled with analogous zoning law principles governing nonconforming uses. The general rule, of course, is that any right to continue a nonconforming use—a use that violates the zoning code but is grandfathered in—does *not* include a right to expand or enlarge it. Patricia E. Salkin, *Expansion of Nonconforming Use*, 2 Am. Law of Zoning § 12.19 (2019). As the Iowa Supreme Court explained:

The prohibition against expanding or enlarging a non-conforming use defends against the growth of a pre-existing aggravation. That pre-existing aggravation, the non-conforming use, survives as a matter of grace. The public is not required to expand upon that grace to its increasing aggravation.

Perkins v. Madison Cty. Livestock & Fair Ass'n, 613 N.W.2d 264, 270 (Iowa 2000) (citing *Stan Moore Motors, Inc. v. Polk County Bd. Of Adjustment*, 209 N.W.2d 50, 53 (Iowa 1973)). To the extent a zoning ordinance allows expansion of nonconforming uses, the rule is to construe that strictly against the owner, consistently with the policy of restraining and eventually eliminating nonconforming uses. Rathkopf et al., *Zoning Treatment of Nonconforming Uses*, 4 Rathkopf's The Law of Zoning and Planning § 73.16 (4th ed., 2019). When the proposal uses more land than the existing use, or increases the height of structures, or proposes to use a different parcel of land, the courts have uniformly rejected the idea that the owner has a right to the modification. *Id.* at §§ 73.18, 73.22, 73.25. The USFWS's authority to prohibit uses that are not compatible with Refuge purposes works very much like a zoning ordinance. Like a zoning code, the goal is to

eventually eliminate incompatible uses. The 1997 Act differs with the typical zoning ordinance by expressly requiring incompatible uses to be eliminated as soon as practicable, but even to the extent preexisting rights-of-way are allowed to remain for the length of their easement terms, nothing allows them to be expanded or enlarged. Reading the rules in any other way would mean that the Service would be forced to allow transmission lines, pipelines, and roads now crossing Refuges, not only to serve out their useful life or their easement terms, but to expand whenever the owners want, even to build on different property, and to expand in perpetuity. That is not what Congress intended in 1997.

What Congress intended was that, when a proposal came in to expand or extend an existing use in a Refuge, the Refuge managers would treat it just like a proposal for a new use. They would assess whether the applicants had proven that their proposed use would not “materially interfere with or detract from” the Refuge’s purposes, 16 U.S.C. § 668ee(1), or, in the case of a proposed “economic” use, that the proposed use would “contribute[] to” those purposes, 50 C.F.R. § 29.1. If the applicants could not meet their burden of proof, the application would be denied.

Conclusion

The CHC project would impose a new incompatible use on a part of our nation’s public lands system that needs more, not less, protection. This draft Compatibility Determination sets a terrible precedent by granting old right-of-way easement or permit holders a permanent right to shelter huge new construction projects bearing no resemblance to the original projects from the strict application of the 1966 and 1997 Refuge Acts. A river valley migratory bird refuge should be the last place—not the first place—to build huge new transmission lines. Establishing this precedent will do yet more damage to wildlife habitat and wildlife-dependent pursuits in our National Wildlife Refuge System. That is not what Congress intended; that is not something USFWS should allow, nor is it something that the USFWS has the legal authority to allow. USFWS’s duty under the statute is to “ensure that the biological integrity, diversity, and environmental health of the System are maintained,” 16 U.S.C. § 668dd(a)(4)(B), not to find ways to accommodate the kind of incompatible economic activities that drove passage of the statute in the first place.

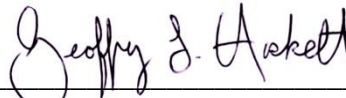
For all of the reasons set forth in these comments, the Service should withdraw its draft Compatibility Determination and reject the project proponents’ application.

Dated: November 25, 2019

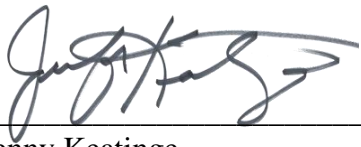
Respectfully submitted,



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COMMENT ON DRAFT COMPATIBILITY DETERMINATION

UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE AND FISH REFUGE
CARDINAL-HICKORY CREEK HIGH-VOLTAGE TRANSMISSION LINE

ATTACHMENT A:

**Letter from Kevin Foerster, Refuge Supervisor
to Stephanie Strength, RUS Environmental Protection Specialist
(Feb. 23, 2012)**



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Upper Mississippi River National Wildlife and Fish Refuge
51 E. Fourth Street - Room 101
Winona, Minnesota 55987



February 23, 2012

Stephanie A. Strength
Environmental Protection Specialist
Engineering and Environmental Staff
Rural Utilities Service
1400 Independence Ave. SW
Mail Stop 1571, Room 2242
Washington, DC 20250

Dear Ms. Strength:

As a cooperating agency in preparation of National Environmental Policy Act documentation for the CAPX2020 project, we are appreciative of your efforts to produce an environmental impact statement for the project which provides full and fair disclosure of impacts to deciding officials within the U.S. Department of Agriculture, Rural Utilities Service (USDA-RUS).

As a follow-up to our telephone conversation on February 22, 2012 we are providing information to assist USDA-RUS with responding to public comments regarding the decision to not include expansion of an expired right-of-way across the Upper Mississippi River National Wildlife and Fish Refuge (Refuge) as an alternative project route.

As discussed on February 22nd and reiterated through multiple communications over several years with the project applicant and your agency, expansion of the expired right-of-way across the Black River bottoms is not an appropriate use of Refuge lands. Enclosed you will find further description, rationale and justification for why expansion of the expired right-of-way is not an appropriate use of the national wildlife refuge. This appropriate use finding is only applicable to the 345kv line issue at the Black River bottoms.

If you require any clarification on the enclosed documents, please contact me or Deputy Refuge Manager Tim Yager at (507) 452-4232.

Sincerely,

Kevin S. Foerster
Refuge Supervisor

Attachments

cc: Tony Sullins, TCFO

Why is expansion of the existing Q1 line (route) not considered an alternative in the Federal EIS for the proposed 345 kV line?

An existing 161 kV power line (known as the Q1 line and operated/maintained by Dairyland Power, Inc.) crosses the Upper Mississippi River National Wildlife and Fish Refuge (Refuge) on an expired right-of-way. The right-of-way permit for the Q1 line was issued by the Bureau of Land Management (BLM) in 1951. Prior to December 19, 1969, permits for rights-of-way across lands under the primary jurisdiction of the U.S. Fish and Wildlife Service (Service) were issued by the BLM in accordance with regulations now published in 43 CFR 2800. After December 19, 1969, the Service's basic authority for granting right-of-way permits and/or easements is the National Wildlife Refuge System Administration Act of 1966 as amended by the National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 668dd-668ee).

The expired Q1 right-of-way was authorized in 1951 for a period not to exceed 50 years. As noted in the U.S. Fish and Wildlife Service decision document dated December 12, 1950, the right-of-way "*...shall be limited specifically to an area lying within 20 feet on both sides of the centerline of the proposed right-of-way as shown in the application and on the maps therewith designated*" drawing of *Power Line for Easement on Federal Lands, La Crosse County Wisconsin, No L-91, Reference Drawing P-16 SHT 14 S.*" In effect, this permitted a 40-foot wide by approximately 5,000-foot long corridor on the Refuge through the Black River Bottoms near the Village of Trempealeau, WI and the Village of Holmen, WI.

The project applicant contacted the Upper Mississippi River National Wildlife and Fish Refuge as early as 2006 to explore opportunities/alternatives for utilizing the expired Q1 right-of-way in constructing a new 345 kV power line as part of the CAPX2020 project. As described by the project applicant, utilization of the expired right-of-way would require expansion of the "footprint" of the expired right-of-way. It should be noted that the right-of-way expired in 2001 and is nearly 60 feet beyond the authorized 40-foot corridor. The expanded right-of-way for the CAPX2020 project would require a significant increase to an approximate 155-foot wide by 5,000-foot long corridor.

"Renewal" and/or reissuance of a right-of-way permit for the existing Q1 line as well as expansion of the expired right-of-way to accommodate a new, larger 345 kV line would be subject to review/evaluation following policy and procedures established in the Fish and Wildlife Service Manual, Chapter 603 FW 1, Appropriate Refuge Uses. This chapter provides a national framework for determining appropriate refuge uses. In addition, this chapter provides the policy and procedure for Refuge Managers to follow when deciding if uses are appropriate on a refuge. Refuge Managers are delegated authority to decide if a new or existing use is an appropriate refuge use. If an existing use is not appropriate, the Refuge Manager will eliminate or modify the use as expeditiously as practicable. If a new use is not appropriate, the Refuge Manager will deny the use without determining compatibility. This threshold "appropriate use" finding can aide project applicants from

needlessly and wastefully dedicating resources to projects that simply are not feasible or appropriate.

The appropriate use policy also clarifies and expands on the compatibility policy established under the National Wildlife Refuge System Improvement Act of 1997. The Fish and Wildlife Service Manual, Chapter 603 FW 2, Compatibility describes when Refuge Managers should deny a proposed use without determining compatibility. When we find a use appropriate, we must then determine if the use is compatible before we allow it on a refuge. This policy applies to all proposed and existing uses in the National Wildlife Refuge System (Refuge System) where we have jurisdiction over the use.

Refuges are managed in accordance with an approved comprehensive conservation plan (CCP). The CCP describes the desired future conditions of the refuge or refuge planning unit and provides long-range guidance and management direction to accomplish the purpose(s) of the refuge and the Refuge System mission. We prepare CCPs with State fish and wildlife agencies, public involvement, and include a review of the appropriateness and compatibility of existing refuge uses and any planned future public uses. If, during preparation of the CCP, we identify previously approved uses we can no longer consider appropriate on the refuge, we will clearly explain our reasons to the public and describe how we will eliminate or modify the use. When uses are reviewed during the CCP process, the appropriateness finding is documented using FWS Form 3-2319 and maintained in refuge files. The documentation for both appropriateness findings and compatibility determinations should also be included in the documentation for the CCP. The CCP for the Upper Mississippi River National Wildlife and Fish Refuge was completed in October 2006. The CCP can be viewed at www.fws.gov/midwest/planning/uppermiss/index.html.

When a refuge manager finds that a proposed use is not appropriate, the finding is documented for the refuge files using FWS Form 3-2319. This finding does not require refuge supervisor concurrence. However, if outside the CCP process a refuge manager finds that an existing use is not appropriate, the finding requires refuge supervisor concurrence.

Attached is Form 3-2319 which documents the Refuge's finding that expansion of the expired right-of-way through the Black River bottoms to accommodate a new 345 kV transmission line is not an appropriate use. A discussion of the rationale behind this determination is also included.

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Upper Mississippi River National Wildlife and Fish Refuge

Use: CapX 2020 345 kV Transmission Line Proposal - Black River

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

Decision Criteria:	YES	NO
(a) Do we have jurisdiction over the use?	✓	
(b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)?	✓	
(c) Is the use consistent with applicable Executive orders and Department and Service policies?		✓
(d) Is the use consistent with public safety?	✓	
(e) Is the use consistent with goals and objectives in an approved management plan or other document?		✓
(f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed?	✓	
(g) Is the use manageable within available budget and staff?		✓
(h) Will this be manageable in the future within existing resources?		✓
(i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources?		✓
(j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future?		✓

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes No

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate

Appropriate

Refuge Manager: 

Date: February 24, 2012

If found to be Not Appropriate, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found Not Appropriate outside the CCP process, the refuge supervisor must sign concurrence.

If found to be Appropriate, the refuge supervisor must sign concurrence.

Refuge Supervisor: 

Date: February 24, 2012

A compatibility determination is required before the use may be allowed.

FWS Form 3-2319
02/06

Kevin S. Foerster
Refuge Supervisor

Rationale for appropriate use determination regarding expansion of the expired right-of-way (Q1 line) through the Black River bottoms of the Upper Mississippi River National Wildlife and Fish Refuge to accommodate a new 345 kV transmission line.

Refuge Manager's determine appropriateness of use based on 10 criteria. A discussion of the Refuge's position in regards to expansion of the expired Q1 right-of-way through the Black River bottoms to accommodate a new 345 kV transmission line follows.

a) Do we have jurisdiction over the use? If we do not have jurisdiction over the use or the area where the use would occur, we have no authority to consider the use.

YES. The expired Q1 right-of-way through the Black River bottom is on/over lands owned in fee title by the Department of the Interior and managed as part of the Upper Mississippi River National Wildlife and Fish Refuge. The Refuge has full jurisdiction over uses of this expired right-of-way and adjacent lands.

b) Does the use comply with all applicable laws and regulations? The proposed use must be consistent with all applicable laws and regulations (e.g., Federal, State, tribal, and local). Uses prohibited by law are not appropriate.

YES. It is unknown at this time if the proposed 345 kV line is compliant with all applicable laws and regulations. However, for the purposes of this analysis it is assumed that construction of the new 345 kV line at any location would only be permitted and/or funded if it were found to be consistent with all applicable laws and regulations. Accordingly, we answered yes.

c) Is the use consistent with applicable Executive orders and Department and Service policies? If the proposed use conflicts with an applicable Executive order or Department or Service policy, the use is not appropriate.

NO. It is the policy of the Fish and Wildlife Service (see Fish and Wildlife Service Manual, Chapter 340 FW 3, Rights-of-Way and Road Closings) to discourage the types of uses embodied in right-of-way requests. On areas in the National Wildlife Refuge System, if a right-of-way cannot be certified as compatible with the purposes for which a unit was established, it cannot be granted without authorization by Congress. The National Wildlife Refuge System Improvement Act of 1997 mandates the maintenance of biological integrity, diversity and environmental health on units of the National Wildlife Refuge System. Consistent with its purpose, each refuge is required to protect and, where appropriate, restore natural, historic ecological conditions including associated processes (such as natural forest succession/regeneration). Historic conditions are those which were present prior to substantial, human-related changes to the landscape (see Fish and Wildlife Service Manual, Chapter 601 FW 3.6D). By their nature, right-of-ways and some construction projects can cause habitat fragmentation; reduce habitat quality; degrade habitat quality through introduction of contaminants; disrupt migration corridors; alter hydrology; facilitate introduction of alien, including invasive, species;

and disturb wildlife (see response to item e below). Proposed refuge uses which would conflict with the legal requirement to maintain biological integrity, diversity and environmental health are not appropriate or compatible (see Fish and Wildlife Service Manual, Chapter 603 FW 2.5). Additionally, Executive Order 11988 – Floodplain Management, discourages the construction and/or placement of infrastructure within floodplains of rivers.

d) Is the use consistent with public safety? If the proposed use creates an unreasonable level of risk to visitors or refuge staff, or if the use requires refuge staff to take unusual safety precautions to assure the safety of the public or other refuge staff, the use is not appropriate.

YES.

e) Is the use consistent with refuge goals and objectives in an approved management plan or other document? Refuge goals and objectives are designed to guide management toward achieving refuge purpose(s). These goals and objectives are documented in refuge management plans, such as CCPs and step-down management plans. Refuges may also rely on goals and objectives found in comprehensive management plans or refuge master plans developed prior to passage of the Improvement Act as long as these goals and objectives comply with the tenets and directives of the Improvement Act. If the proposed use, either itself or in combination with other uses or activities, conflicts with a refuge goal, objective, or management strategy, the use is generally not appropriate.

NO. The Upper Mississippi River National Wildlife and Fish Refuge was established by an Act of Congress on June 7, 1924 as a refuge and breeding place for migratory birds, fish, other wildlife, and plants. The Refuge encompasses approximately 240,000 acres of Mississippi River floodplain in a more-or-less continuous stretch of 261 river-miles from near Wabasha, Minnesota to near Rock Island, Illinois.

The 1924 act set forth the purposes of the Refuge as follows:

a. as a refuge and breeding place for migratory birds included in the terms of the convention between the United States and Great Britain for the protection of migratory birds, concluded August 16, 1916, and

b. to such extent as the Secretary of Agriculture may by regulations prescribe, as a refuge and breeding place for other wild birds, game animals, fur-bearing animals, and for the conservation of wild flowers and aquatic plants, and*

c. to such extent as the Secretary of Commerce may by regulations prescribe as a refuge and breeding place for fish and other aquatic animal life.”*

**changed to Secretary of the Interior pursuant to reorganization and transfer of functions in 1939 (16 USC 721-731).*

The Refuge is an invaluable natural legacy recognized by Congress as part of a nationally significant ecosystem. It is: a National scenic treasure – river, backwaters, islands, and forest framed by 500-foot high bluffs; National Scenic Byways on both sides; designated as a Globally Important Bird Area; a continentally significant migration corridor/flyway; and designated a floodplain Wetland of International Importance by the Ramsar Convention on Wetlands.

The Refuge is a part of the National Wildlife Refuge System which includes more than 556 national wildlife refuges and 38 wetland management districts totaling over 148 million acres of lands and waters set aside for fish and wildlife habitat. The Refuge System is administered by the U.S. Fish and Wildlife Service, Department of the Interior.

The Refuge Improvement Act of 1997 mandates that the Secretary of the Interior, and thus the Service, prepare Comprehensive Conservation Plans for all units of the National Wildlife Refuge System by October, 2012. The CCP for the Refuge was completed in 2006 and guides management of the Refuge through 2021. The CCP ensures that management and administration of the Refuge meets the mission of the Refuge System, the purpose for which the Refuge was established, and the goals for the Refuge.

The mission of the National Wildlife Refuge System set forth in the Refuge Improvement Act of 1997 is:

“To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.”

The 1924 Refuge act set forth the purposes of the Refuge, which remain valid to this day, and guide planning, management, administration, and use of the refuge:

“a. as a refuge and breeding place for migratory birds included in the terms of the convention between the United States and Great Britain for the protection of migratory birds, concluded August 16, 1916, and

b. to such extent as the Secretary of Agriculture may by regulations prescribe, as a refuge and breeding place for other wild birds, game animals, fur-bearing animals, and for the conservation of wild flowers and aquatic plants, and

c. to such extent as the Secretary of Commerce may by regulations prescribe as a refuge and breeding place for fish and other aquatic animal life.”

The vision for the Refuge provides a simple statement of the desired, overall future condition of the Refuge. From the vision flow more specific goals which in turn provide the framework to craft more detailed, and measurable objectives which are the heart of the CCP. The vision and goals are also important in developing alternatives, and are

important reference points for keeping objectives and strategies meaningful, focused, and attainable.

Refuge Vision: The Upper Mississippi River National Wildlife and Fish Refuge is beautiful, healthy, and supports abundant and diverse native fish, wildlife, and plants for the enjoyment and thoughtful use of current and future generations.

Refuge Goals:

- 1. Landscape. We will strive to maintain and improve the scenic qualities and wild character of the Upper Mississippi Refuge.*
- 2. Environmental Health. We will strive to improve the environmental health of the Refuge by working with others.*
- 3. Wildlife and Habitat. Our habitat management will support diverse and abundant native fish, wildlife, and plants.*
- 4. Wildlife-Dependent Public Use. We will manage public use programs and facilities to ensure high quality and sustainable hunting, fishing, wildlife observation, wildlife photography, interpretation, and environmental education opportunities for a broad cross-section of the public.*
- 5. Other Recreational Use. We will provide opportunities for the public to use and enjoy the Refuge for traditional and appropriate non-wildlife-dependent recreation that is compatible with the purpose for which the Refuge was established and the mission of the Refuge System.*
- 6. Administration and Operations. We will seek adequate funding, staffing, and facilities, and improve public awareness and support, to carry out the purposes, vision, goals, and objectives of the Refuge.*

Expansion of the expired right-of-way across the Black River bottoms to accommodate a new 345 kV line would not contribute to the purposes of the Refuge or the Refuge System. In fact, expansion of the expired right-of-way would detract from the Refuge purpose and Refuge goals. Some of the anticipated effects of expansion of the expired right-of-way are discussed below. A description and discussion of the significance of the forest community and species composition in the Black River bottoms can be found on page 130, Chapter 7 of the Final Environmental Impact Statement, CapX2020 Alma-La Crosse 345 kV Transmission Project, Volume 1, Public Service Commission of Wisconsin, Wisconsin Department of Natural Resources, January 2012.

Scenic qualities. Power lines present a significant visual intrusion on scenic viewsheds such as those found in the Black River bottoms.

Invasive Plants. Invasive plants continue to pose a major threat to native plant communities on the Refuge and beyond. Invasive plants displace native species and often have little or no food value for wildlife. The result is a decline in the carrying capacity of the Refuge for native fish, wildlife, and plants. Control of invasive plants on a predominantly floodplain environment is extremely challenging due to difficulty of access and the rapid dispersal of plants. In addition, control has been hampered by staff and funding limits for basic inventory, direct control, and research into species-specific biological controls. An invasive plant, reed canary-grass is abundant within the expired Q1 right-of-way. Reed canary-grass is a “disturbance adapted” species which aggressively colonizes natural areas which are disturbed by both natural and human activities. Removal of woody vegetation through cutting, mowing and/or pesticide application is an example of disturbance activities which encourage establishment of invasive species such as reed canary-grass, European buckthorn, Japanese knotweed and others. Expansion of the expired Q1 right-of-way through the Black River bottoms would increase the risk of negative interactions between invasive plants and adjacent forested/grassland habitats.

Threatened and Endangered Species. There is currently one federally-listed threatened or endangered species (Higgins’ Eye pearlymussel) and two candidate species (eastern massasauga rattlesnake and sheepsnout mussel) confirmed on the Refuge. One candidate species, the spectaclecase mussel, may occur on the Refuge but there are no recent records. Threatened and endangered species are issues due to their often precarious population status, and the need for special considerations and protection which influences Refuge use and management activities. The eastern massasauga rattlesnake is known to inhabit the forested/grassland habitats found in the Black River bottoms, the location of the expired Q1 right-of-way.

Nationally Important Species. The American Bald Eagle was removed from Federal designation as a threatened species in 2007. However, the bald eagle remains protected under the Golden and Bald Eagle Protection Act and is a nationally important species. Moreover, it is the symbol of the United States of America. Bald eagles are known to nest, roost and feed within the Black River bottoms. The Black River forest is prime nesting habitat for bald eagles. There are currently three active bald eagle nests within 0.75 miles of the expired Q1 right-of-way. As is the case with many species of birds, as discussed below, transmission lines present a significant hazard.

Migratory Birds. The floodplains forests on and adjacent to the Mississippi River, including the Black River bottoms, provide critical migration habitat for many neotropical migrants. Continuous forest corridors which are relatively unfragmented, like the forest community in the Black River bottoms, and free of hazards are important for these migrants. Transmission lines greatly increase the risk of bird strikes, especially for migrant species which may be unfamiliar with the presence of power lines. Additionally, local/resident birds may avoid areas where power lines are present due to the day to day hazard present.

***Forest Management.** The Refuge includes approximately 51,000 acres of floodplain forests, one of the largest contiguous areas of floodplain forest in the Midwest. This habitat is critical to the river ecosystem, providing habitat for a variety of wildlife including songbirds, wood ducks, bald eagles, red-shouldered hawks, herons, egrets, and numerous mammals and amphibians. It also provides scenic beauty, a welcome place for recreation, protects soils, and improves water quality.*

The floodplain forest of the Refuge has undergone a series of changes since Refuge establishment. A more diverse forest gave way to a more monotypic forest dominated by silver maple. The current forest is even aged, growing old, and in many cases, not regenerating itself. In many areas, reed canary grass is replacing former forest areas by choking tree regeneration. If current trends continue, there could be a marked loss of forest within the Refuge and elsewhere in the river floodplain. As discussed under Invasive Species above, the expired Q1 right-of-way provides a corridor for invasion of adjacent forest habitat by invasive species.

***Habitat Fragmentation.** Many species, but in particular forest interior species, prefer large unbroken tracts of habitat. Transmission lines which pass through habitats result in habitat fragmentation, whereby a large contiguous habitat is divided. The expired Q1 right-of-way through the Black River bottoms has damaged and fragmented the floodplain forest. Expanding the expired right-of-way through the Black River bottoms would lead to further unacceptable habitat fragmentation.*

f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed? If we have already considered the proposed use in a refuge planning process or under this policy and rejected it as not appropriate, then we should not further consider the use unless circumstances or conditions have changed significantly. If we did not raise the proposed use as an issue during a refuge planning process, we may further consider the use.

***YES.** Expansion of the expired right-of-way through the Black River bottoms was not considered as a proposed use during preparation of the CCP for the Refuge.*

g) For uses other than wildlife-dependent recreational uses, is the use manageable within available budget and staff? If a proposed use diverts management efforts or resources away from the proper and reasonable management of a refuge management activity or wildlife-dependent recreational use, the use is generally not appropriate. In evaluating resources available, the refuge manager may take into consideration volunteers, refuge support groups, etc. If a requested use would rely heavily on volunteer or other resources, the refuge manager should discuss the situation with the refuge supervisor before making an appropriateness finding. The compatibility policy also addresses the question of available resources (603 FW 2.12A(7)).

***NO.** Powerline right-of-ways require frequent and recurring management of vegetation through herbicide application, cutting, mowing and/or other vegetation control actions. These vegetation management activities are typically conducted by the utility company*

but do require oversight by Refuge staff to ensure compliance with any stipulations set forth in the right-of-way permit. In many cases, work conducted within right-of-ways also requires access and/or additional work outside of the right-of-way. Work outside of right-of-ways, if permissible, is permitted through issuance of a special use permit from the refuge. The commitment of staff can be minimal and manageable within existing resources, however, in this case the presence of important natural resources (T&E species, nesting bald eagles, etc. and the potential for invasion of adjacent refuge lands by invasive plants) would require substantial commitment of staff resources and time to ensure compliance with right-of-way stipulations and any special use permit requirements. Those resources are currently not available.

h) Will the use be manageable in the future within existing resources? If the use would lead to recurring requests for the same or similar activities that will be difficult to manage in the future, then the use is not appropriate. If we can manage the use so that impacts to natural and cultural resources are minimal or inconsequential, or if we can establish clearly defined limits, then we may further consider the use.

NO. Powerline right-of-ways require frequent and recurring management of vegetation through herbicide application, cutting, mowing and/or other vegetation control actions. These vegetation management activities are typically conducted by the utility company but do require oversight by Refuge staff to ensure compliance with any stipulations set forth in the right-of-way permit. In many cases, work conducted within right-of-ways also requires access and/or additional work outside of the right-of-way. Work outside of right-of-ways, if permissible, is permitted through issuance of a special use permit from the refuge. The commitment of staff can be minimal and manageable within existing resources, however, in this case the presence of important natural resources (T&E species, nesting bald eagles, etc. and the potential for invasion of adjacent refuge lands by invasive plants) would require substantial commitment of staff resources and time to ensure compliance with right-of-way stipulations and any special use permit requirements. Those resources are unlikely to be available in the future.

Due to the size, location and landscape juxtaposition the Refuge will likely receive future requests for various civil service infrastructure projects (powerlines, gas lines, railroads, highways, etc.). As per the appropriate use policy and procedure, all requested uses will be considered on a case-by-case basis, and in some cases the proposed impacts may be minimal and therefore considered appropriate. However, expansion of an expired right-of-way across a biologically diverse and relatively unfragmented portion of the Refuge does not have minimal impacts and has and will continue to require a significant commitment of Refuge staff time and resources to manage. Therefore, if expansion of the expired right-of-way were to be considered appropriate, it is not unreasonable to assume that future similar requests would follow and/or potentially increase. This would increase the demand for currently unavailable (see criteria g above) resources needed to manage similar requests.

i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources? If not, we will generally not further consider the use.

NO. Expansion of the expired right-of-way through the Black River bottoms to accommodate a 345 kV line would not contribute to the public's understanding and appreciation of the Refuges' natural and cultural resources. It is damaging to the natural and cultural resources of the Refuge. In particular, the scenic quality and values of the Black River bottoms would be compromised by the right-of-way.

j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D), compatible, wildlife-dependent recreation into the future? If not, we will generally not further consider the use.

NO. The Refuge stretches over 260 river miles and encompasses approximately 240,000 acres providing a wide range of wildlife-dependent recreational opportunities for the visiting public. Eleven criteria for "quality" wildlife-dependent recreation are defined in the Fish and Wildlife Service Manual, 605 FW1, Section 1.6 and include providing opportunities for the public to experience wildlife. Although open to the public, the Black River Bottoms does not provide improved access (i.e. paved trails and roads) that would encourage high public use. Therefore, it provides a unique opportunity for the public to conduct wildlife-dependent recreation in a relatively isolated setting. The Black River bottoms is one of the largest contiguous tracts of floodplain forest in the region, particularly when adjacent State of Wisconsin protected lands are also considered. Expansion of the expired right-of-way would impact wildlife-dependent recreational opportunities due to reduced habitat quality which directly impacts wildlife species upon which recreation is based. Additionally, the scenic qualities of the Black River bottoms would be compromised by the presence of a much larger right-of-way clearing. Allowing an expansion of the expired right-of-way would impair the quality of the visitor experience and likely reduce the public's opportunity to experience wildlife.

COMMENT ON DRAFT COMPATIBILITY DETERMINATION

UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE AND FISH REFUGE
CARDINAL-HICKORY CREEK HIGH-VOLTAGE TRANSMISSION LINE

ATTACHMENT B:

**Meeting Minutes, ATC Cardinal Bluffs Project –
Multi-Agency Meeting (Sept. 18, 2012)**



Stantec

Meeting Minutes

ATC Cardinal Bluffs Project – Multi Agency Meeting

Date / Time: September 18, 2012 / 1:00 PM to 3:00 PM

Location: Four Mounds Inn and Conference Center in Dubuque, Iowa

Attendees:

Amy Lee, ATC Environmental	Ken Rineer, PSCW
Andy Schaeve, ATC Project Manager	Dan Sage, PSCW
Chris Zibart, ATC Legal Counsel	Simone Kolb, USACE – Regulatory
Justin Funk, Stantec Consulting	Rich King, USFWS – Dist. Mgr. McGregor
Barry Lindahl, Dubuque – City Attorney	Tim Yager, USFWS – Deputy Refuge Mgr.
Dave Heiar, Dubuque – Economic Development	Jim Sundermeyer, IUB
Cheryl Laatsch, WDNR	
Shari Koslowsky, WDNR	

On Tuesday September 18, 2012 at 1:00 PM, the above referenced attendees met at the Four Mounds Inn and Conference Center in Dubuque, Iowa. The purpose of the meeting was to discuss Mississippi River crossing alternatives for the Cardinal Bluffs 345kV Transmission line project. The meeting minutes follow the agenda items below.

1. Introductions

Amy Lee (ATC) began the meeting by having attendees introduce themselves. Hardcopy handouts of the meeting agenda and project maps were distributed. The goals of the meeting were to provide a brief project review and update the attendees on the progress of ATC's evaluation of alternatives for crossing the Mississippi River; obtain feedback and answer questions about the project; and discuss each regulatory entity's approval processes.

2. Project Overview

Amy provided a brief overview of the project since most attendees have had an introduction to the project during previous meetings. Amy reviewed the general project endpoints and referenced ATC's 10-Year Transmission System Assessment map showing the general project area from the Madison area to the Dubuque area. As part of this project a crossing of the Mississippi River is necessary. Both the Upper Mississippi Fish & Wildlife Refuge (UMFWR) and City of Dubuque are located in potential crossing locations.

Amy explained that in Iowa, the City of Dubuque has regulatory authority over siting transmission lines within their municipal boundaries. This differs from Wisconsin where the state (PSCW) has jurisdiction within cities as well. This is why other municipalities are not amongst the attendees. Barry Lindahl added that the City of Dubuque has jurisdiction through zoning and building permits. There was additional discussion regarding the city's jurisdiction of the Mississippi River itself through Dubuque's Charter City status from the State of Iowa.

3. River Crossing Analysis - Overhead Alternatives

Amy Lee discussed that four potential river crossing locations are being evaluated as part of the project. These alternatives were selected based on the project endpoints, lack of better alternatives north of Cassville or south of Dubuque, and the width of the river between Dubuque and Cassville. Amy directed the attendees to the project maps that were provided and displayed.

Dubuque – USH 151 Bridge – Amy Lee introduced the southernmost alternative at the highway bridge. Known constraints include the riverfront development in downtown Dubuque and dense residential development further west.

Shari Koslowsky asked about potential routing corridors to this location in Wisconsin. Andy Schaeve pointed out USH 151 would be a potential corridor to the east, eventually connecting with other transmission lines and corridors. The Wisconsin side has some bluffs with scattered residential development.

Dubuque – Lock and Dam #11 – Amy Lee proceeded to discuss the lock and dam. The corridor on the WI side would be Eagle Point Road. This corridor may provide construction/maintenance access. This road is heavily used by the Corps and the public. It would likely require structures in the backwaters adjacent to the road. Amy pointed out that ATC met with Simone Kolb and Corps operations staff regarding this location. There is significant crane activity at the lock and dam and potential lock and dam expansion, both of which cause operational and clearance concerns for ATC and the Corps.

There are two options for routing a transmission line on the Iowa side of the river. One option would be to cross Eagle Point Park, which is a large city park located on a bluff overlooking the river. It's a nationally recognized park for its landscape architecture. Clearing for a 345 kV ROW would significantly change the landscape and be a concern. The other potential option would be routing south around the park through a dense residential area.

Dave Heiar asked how ATC could route a transmission line through the city. Andy Schaeve recognized those challenges, but discussed that there are existing ITC transmission line routes that run through some of the city in close proximity to residential and commercial buildings – detailed corridor reviews would be necessary to confirm feasibility of a 345kV line in the same areas. There was additional discussion about existing transmission line right-of-way. Amy Lee clarified that the existing ITC right of way width is not known, but the 345kV line would generally be greater than the 69kV or 161kV lines that exist now.

Andy Schaeve asked Jim Sundermeyer about the IUB role within the city of Dubuque. Jim briefly explained that the IUB has regulatory authority for routing and siting within areas outside a municipal boundary. Dubuque has authority within the city. However, the IUB does have safety jurisdiction everywhere, including within municipalities.

Cassville – Stoneman – Amy Lee proceeded to discuss potential options at the existing double circuit transmission line at the Stoneman Power Plant location in Cassville. This location has extensive forested wetlands on the Iowa side within the UMFWR. Routing through Cassville is challenging with options going north along railroad tracks through dense residential areas, past high school and church up the bluff; or around high school and up the bluff. ATC has been

talking to ITC at a high level about this project, and in more detail to DPC regarding these potential options, as their facilities would be impacted by some of these options.

One option would be to parallel the existing transmission line crossing on new ROW at the Stoneman Power Plant. Another option would be to remove the existing 69kV and rebuild as a double circuit 161kV/345kV. This option requires a new 69kV line to Stoneman from Nelson Dewey through or around Cassville, with potential routes similar to the previous Nelson Dewey transmission project that was previously proposed. A triple circuit stacked configuration does not work at this location because of nearby airport/FAA height limitations combined with navigational clearance requirement.

Tim Yager stated that a new transmission line crossing through the refuge would be subject to a compatibility determination.

Cheryl Laatsch asked about the height of the existing transmission structures versus what would be required with new structures. Andy Schaeve discussed that the height of the new structures would be dependent on the line configuration while maintaining clearance for navigability on the Mississippi and the height restrictions at the Cassville airport. Generally a lower height would require a wider right-of-way.

Simone Kolb added that there might be some flexibility in the clearance requirements outside the main channel of the river.

Tim Yager stated that generally a lower transmission line height, below the tree tops is preferable to reduce bird impacts.

Andy Schaeve also stated that there are height thresholds for transmission towers where anything greater than 200 feet requires lighting. Shari Koslowsky added that lights are not preferable for potential bird impacts. Tim Yager added that APLIC has some recommendations on the subject.

Cassville – Nelson Dewey/Oak Road – Amy Lee continued on to discuss potential options at the Nelson Dewey Power Plant.

Single circuit 345kV. Existing lines at Stoneman would remain untouched

Double circuit 345/161kV. Eliminate the existing lines at Stoneman. Requires a new 69kV line to Stoneman (from NED, through/around Cassville).

Triple circuit 345/161/69kV. Eliminates existing lines at Stoneman crossing, still requires a new 69kV connection through/around Cassville from NED to Stoneman.

Cheryl Laatsch asked about potential interference with the Cassville Ferry. Amy Lee responded that ATC has not specifically discussed operational issues with the ferry, but would work to address that issue.

Ken Rineer said that Alliant Energy has plans for retirement of the Nelson Dewey plant. Andy Schaeve responded that ATC is aware of the upcoming retirement.

Cheryl Laatsch asked about potential future electric generation along the river, for example at Lock and Dam #11. If there are any future plans for generation, ATC should take that into

consideration with this project. Andy Schaeve responded that he is unaware of any future plans and that this project would be needed regardless.

Shari Koslowsky asked about potential routing corridors through WI to the Cassville area. Andy Schaeve pointed out that there are several existing transmission lines along the bluffs that would be considered. Shari asked about the feasibility of double circuiting these existing lines. Andy said that the preliminary studies show that in this particular case, a double circuit along these existing lines appears to be feasible.

Amy Lee stated that based on the evaluation of alternatives, ATC prefers the crossing to be at the Oak Road/Nelson Dewey plant location.

- Constructability – most of the route through the refuge is upland, good access
- Minimizes impacts to the Cassville community
- Significant less cost for the single circuit 345kV configuration
- Environmental benefits to the options that remove the existing crossing (double or triple circuit)
- Length of refuge crossing is shorter at Oak Road/Nelson Dewey plant

4. River Crossing Analysis - Underground Alternatives

Amy Lee discussed that ATC is working with HBK Engineering to evaluate feasible underground alternatives at the river. Preliminary options include a 345kV underground either parallel to the existing Stoneman crossing, near the Oak Rd/Nelson Dewey power plant, or moving one or both of the existing lines underground and building the 345kV overhead.

Cheryl Laatsch asked about methodology for underground and the potential right-of-way requirements. Amy Lee responded that the likely methodology would be the directional bore under the main channel, but other options are being evaluated. Open trench construction within Oak Road would be considered due to accessibility. The ROW width requirement for an underground alternative is likely less than overhead, but exact requirements are not known at this time.

Amy Lee added that any of the underground options require transition stations on both sides of the river where the line transitions from overhead to underground. A picture of a typical transition station was shown to the attendees. Typical dimensions of these stations are 50'x50' or 70'x100'. Additionally, underground vaults with manholes are required due to cable reel lengths; every 2000 feet is the current spacing assumption. Their typical size is about 30'x14'x10'.

Simone Kolb asked about tree clearing and whether or not the ROW needs to be maintained over the underground line. Amy Lee said that it was her understanding that trees or woody vegetation could not be allowed above an underground line to maintain integrity. Andy Schaeve agreed.

Cheryl Laatsch asked about construction related impacts along with potential dewatering, flooding, etc. She also pointed out that there would be sending and receiving pits for the directional bore. Amy Lee agreed and responded that there would be a need for dewatering the vaults and that construction impacts have not been fully evaluated; however, a typical sending/receiving pit size is 25'x15'.

Tim Yager asked about dewatering the vaults. Andy Schaeve clarified that the vaults would need to be dewatered during construction and for maintenance; otherwise they could be designed to fill with water during operation, although that is not preferable. Andy added that ATC has an underground fact sheet that could be provided to explain some of the details of underground transmission lines.

5. Agency Review and Approval Processes

Amy Lee asked if any of the attendees had comments or questions, and asked about their approval processes.

Tim Yager briefly discussed the purpose of the UMFWR and its extent along the Mississippi River. He stated that he appreciated the underground analysis and other information presented. He went on to discuss that any changes to the refuge would require a compatibility review that would take into consideration any physical alteration of habitat. New ROW or expansion of existing ROW within the refuge would need to follow an 'avoid, then minimize, and then mitigate' evaluation. Tim went on to discuss that any impacts to the refuge would require an EA or EIS through the USACE 404 or USFWS ROW process.

Cheryl Laatsch discussed the CAPX project and USFWS involvement. She stated that the Rural Utility Service (RUS) completed an EIS for the Mississippi River crossing.

Tim Yager discussed several issues regarding the locations within the refuge. The visual and migratory bird impacts would be evaluated as part of any crossing. Additionally there are known archeological sites in the nearby Turkey River Mounds area and there could be additional sites within the refuge property. This would be especially problematic for underground construction. There has been southern migration of the Turkey River within the floodplain just north of Oak Road. He also said that the federally endangered Higgins' eye mussel is present in the area and has a very fragile population.

Cheryl Laatsch added that erosion control would be of significant importance, since the sedimentation of mussel beds are a significant threat to the Higgins' eye.

Tim also said that there is a significant eagle population, and that the Bald and Golden Eagle Act would certainly come into play. He felt that a take permit for eagles would likely be necessary. Shari Koslowsky agreed and encouraged ATC to coordinate early since the process can take a long time. Tim also encouraged ATC to work with the Rock Island Ecological Field Office on Endangered Species Act issues.

6. Next Steps

Amy Lee stated that ATC is considering introducing the project to the general public in November, with meetings with local officials starting in October. ATC would like to only include Cassville options going forward.

Tim Yager said that any proposed impact to the refuge would require demonstration of avoidance. Both Rich King and Tim Yager said the alternatives that have been discussed today were presenting minimization and mitigation measures. Tim said that the existing transmission lines were authorized many years ago and would likely not be permitted or considered a compatible use today. Tim said he is very uncomfortable with moving forward with only Cassville options being considered, since all of these alternatives have impacts to the refuge.

Ken Rineer said that the PSCW would not be in favor of excluding Dubuque options if the USFWS is uncomfortable with this decision. Cheryl Laatsch agreed.

Dave Heiar asked if the Lock and Dam #11 option had impacts to the UMFWR. Amy Lee said that there is refuge land adjacent to Eagle Point Road, and there could be impacts depending on the location of the structures. There was further discussion about potential routing at the Lock and Dam including potential underground alternatives. An underground option would need to consider potential expansion and operational issues at the dam.

Simone Kolb said that the Corps Section 404 and Section 10 permits would incorporate Corps operational concerns.

Dave Heiar said that the Mississippi River is very important to commerce, and that the aging lock and dam system may need improvements in the future to compete in a global economy. He felt there would likely be future infrastructure improvements to the lock and dam to system that could conflict with a crossing at that location. Andy Schaeve said that during the Corps meeting, there was some discussion about expansion that would need to be considered. Dave Heiar also said that the intense development of Dubuque in the downtown area would make the USH 151 option very difficult.

Jim Sundermeyer discussed the IUB's role and approval process. Jim reiterated that the IUB has regulatory authority for routing and siting within areas outside municipal boundaries and that Dubuque has approval authority within the city.

There was additional discussion regarding the Cassville options. Tim Yager said that the existing transmission lines in the UMFWR were authorized many years ago and would likely not be permitted or considered a compatible use today. The USFWS would prefer that the existing lines were removed altogether. There was some discussion with Simone Kolb and Tim Yager about reducing impacts within the refuge, including reducing the height of the lines and changing configuration to specifically reduce potential bird impacts. Simone Kolb said that the Nelson Dewey/Oak Road corridor could be wider to avoid forested wetland impacts and reduce bird impacts. Shari Koslowsky said that bird flight diverters would be needed. Tim Yager referenced the National Wildlife Refuge Improvement Act from the 1990s and the need to explore other alternatives that would avoid the refuge.

Based on the USFWS feedback during the meeting, more routing and siting analysis will be performed in the Dubuque area. ATC will re-evaluate their outreach plan and next steps; ATC will remain in contact with the agencies involved with the discussion.

COMMENT ON DRAFT COMPATIBILITY DETERMINATION

UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE AND FISH REFUGE
CARDINAL-HICKORY CREEK HIGH-VOLTAGE TRANSMISSION LINE

ATTACHMENT C:

**Letter from Kenneth A. Westlake, Chief of NEPA Implementation
Section, U.S. EPA Office of Enforcement and Compliance
Assurance, to Dennis Rankin, Environmental Specialist, U.S. Dep't
of Agriculture, Rural Utilities Service (Jan. 6, 2017)**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JAN 06 2017

REPLY TO THE ATTENTION OF. E-19J

Dennis Rankin
Environmental Protection Specialist
U.S. Department of Agriculture, Rural Utilities Service
1400 Independence Avenue SW
Room 2244, Stop 1571
Washington, DC 20250-1571

Re: Scoping Comments for the Environmental Impact Statement for the Cardinal-Hickory Creek
345 kV Transmission Line Project, Dubuque County, Iowa to Dane County, Wisconsin

Dear Mr. Rankin:

The United States Environmental Protection Agency has reviewed the U.S. Department of Agriculture's (USDA) Notice of Intent (NOI) to Prepare an Environmental Impact Statement (EIS) and Hold Public Scoping Meetings related to the connection of the Hickory Creek Substation in Dubuque County, Iowa to the Cardinal Substation in Middleton, Wisconsin dated October 21, 2016. In accordance with EPA's responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, we are providing scoping comments regarding issues that we recommend should be considered during preparation of the EIS for the proposed project.

The NOI identifies that Dairyland Power Cooperative, American Transmission Company LLC by its corporate manager, ATC Management Inc., and ITC Midwest LLC (collectively, Utilities) propose to construct and own a 345-kilovolt (kV) transmission line (approximately 125 miles) connecting the Hickory Creek Substation to the Cardinal Substation. The project is proposed to address multiple needs:

- address reliability issues on the regional bulk transmission system;
- cost-effectively increase transfer capacity to enable additional renewable generation needed to meet state renewable portfolio standards and support the nation's changing energy mix;
- alleviate congestion on the transmission grid to reduce the overall cost of delivering energy; and
- respond to public policy objectives aimed at enhancing the nation's transmission system and reducing carbon-dioxide emissions.

The proposed project would create a 345-kV connection between the two substations and include in the following facilities:

- a new 345-kV terminal within the existing Hickory Creek Substation in Dubuque County, Iowa;

- a new intermediate 345/138-kV substation near the Village of Montfort in either Grant or Iowa County, Wisconsin;
- a new 345-kV terminal within the existing Cardinal Substation in the Town of Middleton in Dane County, Wisconsin;
- a new 45- to 65-mile (depending on the final route) 345-kV transmission line between the Hickory Creek Substation and the intermediate substation;
- a new 45- to 60-mile (depending on the final route) 345-kV transmission line between the intermediate substation and the existing Cardinal Substation;
- a rebuild of the Mississippi River Crossing at Cassville to accommodate a section of the 345-kV transmission line between Hickory Creek and the intermediate substation, and Dairyland's 161-kV transmission line;
- a short, less than one-mile, 69-kV line in Iowa to enable the removal of the 69 kV line that crosses the Mississippi River at Cassville;
- facility reinforcement needed in Iowa and Wisconsin due to the addition of the Hickory Creek Substation/Cardinal Substation 345-kV transmission line and the removal of the existing 69-kV Mississippi River crossing at Cassville; and
- rebuild the Turkey River Substation in Dubuque County, Iowa with two 161/69-kV transformers, four 161-kV circuit breakers, and three 69-kV circuit breakers.

In addition to the topics covered in the Macro-Corridor Study dated September 28, 2016, the Alternatives Evaluation Study dated July 2016, and the Alternatives Crossing Analysis dated April 2016, EPA recommends that Rural Utilities Service also address the following topics in the Draft EIS: alternatives analysis, project features, connected actions, aquatics impacts, air quality and resilience, human health, wildlife, and non-native, invasive species.

Our detailed scoping comments are provided in the enclosure to this letter. Because the Upper Mississippi National Wildlife and Fish Refuge encompasses one of the largest blocks of floodplain habitat in the lower 48 states, lies within the Mississippi Flyway, and is designated as a Wetland of International Importance and a Globally Important Bird Area, impacts to fish and wildlife habitat can be detrimental to sustaining wildlife populations. Therefore, EPA strongly recommends that potentially significant impacts to species and to the Refuge be avoided.

For any natural resources potentially affected by the proposed action, EPA recommends USDA commit in the Record of Decision (ROD) to monitoring efforts based on the respective resource agencies' frequency and methods as well as committing to address adverse monitoring results. Monitoring data should be publicly available, allowing individuals interested in the project access to this information.

USDA may find NEPAAssist,¹ EPA's free, publically available, web-based tool that provides immediate screening of environmental assessment indicators for geographic areas defined by the user, useful when developing the draft EIS. EPA's "EJSCREEN" tool can be used to screen for potential impacts to communities living with or vulnerable to environmental justice concerns.² Lastly, EPA recommends any coordination with Federal or state agencies should become part of


¹ NEPAAssist is available for public use at: <http://nepassisttool.epa.gov/nepassist/entry.aspx>

² EPA's EJSCREEN Environmental Justice and Mapping Tool is available at: <https://www.epa.gov/ejscreen>

the draft NEPA documentation as an appendix. Aerial photographs are recommended to provide the reader with a visual representation of habitat.

We appreciate the availability of extensive scoping documents and the opportunity to provide input at the earliest stages of project preparation. Please send future NEPA documents to me at the address listed in the letterhead. If you have any questions concerning these comments, please contact Kathleen Kowal ((312) 353-5206 or via email at kowal.kathleen@epa.gov) or Amber Tilley (913-551-7665 or via email at tilleyamber@epa.gov).

Sincerely,



Kenneth A. Westlake, Chief
NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Enclosure: U.S. EPA's Scoping Comments dated January 6, 2017
EPA's Suggested Construction Emission Controls

cc: Thomas Melius, Regional Director, US Fish and Wildlife Service
Kevin Foerster, Refuge Manager, UMNWFR, US Fish and Wildlife Service
Tim Yager, Assistant Refuge Manager, UMNWFR, US Fish and Wildlife Service
Kraig McPeck, Ecological Services Field Office, US Fish and Wildlife Service
Michael Hayes, USACE, Rock Island District
Curt Kemmerer, Iowa Department of Natural Resources
Preston Jehn, Wisconsin Department of Natural Resources, South Central Region

U.S. EPA's Scoping Comments Concerning the
Cardinal-Hickory Creek 345 kV Transmission Line Project
Dubuque County, Iowa to Dan County, Wisconsin

January 6, 2017

Alternatives Analysis

While EPA appreciates efforts to locate the proposed transmission line along existing crossing locations consistent with the intended Project configuration, the development of the study area and alternative crossing locations, focusing solely on existing crossing locations, is too narrow. The scoping materials exclude evaluation of new Mississippi River crossings that would occur outside the Refuge. As stated in the Alternative Crossings Analysis (Analysis), the Utilities have identified seven potential crossings of the Mississippi River, four of which are located outside Refuge boundaries and three of which are located within Refuge boundaries. The scoping materials present two Refuge crossings as the only viable crossings for consideration. While the use of existing utility corridors is typically less impactful, the use of an existing corridor in this project will likely adversely impact the Refuge.

Recommendations: EPA recommends the Draft EIS present and evaluate one of more alternative(s) located outside Refuge lands. The selection of only two Refuge alternatives carried forward for further evaluation leaves USDA and the Applicant vulnerable to permit denial by USFWS and an ultimate decision of no action by USDA. EPA believes one or more non-Refuge alternatives is needed in order to compare and contrast impacts that would occur within and outside of the Refuge.

The Analysis indicates, "*Key characteristics, constraints, and opportunities for the Galena 16-kV Line crossing are:*

- *If selected, the existing 161-kV and 69-kV lines through the Refuge at Stoneman would remain in place.*
- *The crossing would be located on lands outside the Refuge.*
- *The crossing requires routing through urban residential development and downtown Dubuque.*
- *The corridor would cross numerous residential properties (61 homes would be within 100 feet of centerline of transmission line corridor, nine of which would be within 25 feet). All trees within the easement area would need to be removed.*
- *Requires routing new 345-kV line through Schmitt Island and Riverview Park; the new line would cross recreational fields for which federal funds were obtained, the use of which may limit or prohibit redevelopment of these areas.*
- *It provides an opportunity to co-locate with an existing 161-kV overhead line."*

Recommendations: EPA recommends the Draft EIS clarify the following: if a 161-kV overhead line currently passes through an urban residential development and downtown Dubuque, what additional impacts would occur by adding a 345-kV line? Could the 161-kV and the 345 kV lines be co-located on the same towers, thereby not causing a change to the existing corridor footprint? EPA recommends this alternative be augmented by additional analysis, including diagrams or photographs to illustrate the existing corridor, what co-location of the 161-kV and the 345-kV lines would look like, and the impacts to the human environment from co-locating these two lines. Additional discussion of the different impacts associated with additional voltage within the existing corridor is warranted.

The Analysis indicates “*Alternative alignments at the Stoneman location are limited by the presence of the Cassville Municipal Airport (the runway is located approximately 2,000 feet from the crossing location). Due to the airport and the height of the bluff immediately east of Cassville, transmission line structures located in the airport’s conical surface would likely require additional design and evaluation by the Federal Aviation Administration, and may be limited in height.*”

Recommendations: EPA recommends the Draft EIS address whether coordination regarding the above was conducted with the Federal Aviation Administration (FAA). We recommend the results of that coordination should be included in the Draft EIS and correspondence should be included in an appendix to the Draft EIS. EPA recommends this issue be addressed with FAA, particularly in light of the possibility of co-locating the proposed line with the existing 161 kV line.

The Analysis indicates, “*While the current needs are for the existing 161 kV-line and the proposed 345-kV line, the Utilities are presenting in this ACA a design with 345-kV/345 kV specifications within the Refuge. The facilities would be operated at 345-kV/161-kV, but be capable of operating at 345-kV/345-kV in case future system conditions warrant it. Constructing the line in its ultimate configuration, a typical technique when crossing a refuge or major river, is a prudent and cost-effective investment to accommodate future needs in a manner that avoids future impacts to the Refuge if another 345-kV transmission line between Iowa and Wisconsin is needed. As with the other transmission features planned for the Refuge, the final design of the transmission facilities would be determined in consultation with the USFWS.*”

Recommendations: EPA recommends the Draft EIS discuss impacts resulting from constructing a 345-kV/161-kV line, then switching to a 345-kV/345-kV line. We recommend discussing whether any differences exist in monitoring/maintaining the two different configurations.

The Analysis indicates “*USFWS’s Mitigation Policy adopted the definition of mitigation used in the Council on Environmental Quality’s (CEQ) National Environmental Policy Act (NEPA) regulations (40 Code of Federal Regulations [CFR] 1508.20). That definition consists of five sequential steps:*

1. *Avoiding the impact altogether by not taking a certain action or parts of an action*
2. *Minimizing impacts by limiting the degree or magnitude of the action*
3. *Rectifying the impact by repairing, rehabilitating, or restoring the affected environment*
4. *Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action*
5. *Compensating for the impact by replacing or providing substitute resources or environments.”*

According to the scoping documents, the existing Stoneman 69-kV transmission line would be removed and natural revegetation (in consultation with the USFWS) of the existing transmission corridor would occur, including both wetland and woodland habitat, present at the existing Stoneman crossing through the Refuge.

Recommendations: EPA recommends the Draft EIS clearly discuss how the USDA and the Utilities will comply with USFWS’s Mitigation Policy as it pertains to relocating the existing 161-kV transmission line and right-of-way (ROW) from the Stoneman crossing to the proposed Nelson Dewey crossing. In particular, the Draft EIS should clarify the nature of “natural revegetation” that USDA and the Utilities propose if the Nelson Dewey crossing is selected.

USFWS's position regarding revegetating and controlling non-native, invasive species, if they exist in the Stoneman corridor, should be included in the Draft EIS and whether USFWS' recommendations will be followed. EPA strongly recommends USDA and the Utilities commit to seeding and/or planting species native to the ecoregion, determine measures of success for the revegetation/restoration (e.g., a maximum of 15 percent non-native, invasive species), and provide a monitoring and adaptive management plan. The utility ROW also presents an opportunity to establish or enhance habitat for pollinator species. EPA recommends that opportunity be evaluated and, if feasible, implemented. The details of revegetation/restoration should be coordinated with USFWS and included in the Draft EIS.

Additionally, EPA recommends the Draft EIS describe conceptual mitigation agreed upon with USFWS if any Refuge property is used for the proposed project.

Connected Actions

The Study indicates, "Because of the existing limitations on transfer from Iowa to Wisconsin, the development of additional wind generation in Iowa is dependent on increasing transfer capability. Indeed, there are a number of wind generation projects in the Midcontinent Independent System Operator Inc. system (MISO) that are explicitly dependent upon completion of the Project. MISO has informed these wind generators that they are only eligible for conditional interconnection agreements ("IAs") until the Cardinal-Hickory Creek Project is built and operational." The Study includes a table listing 12 interconnection requests conditional on the proposed project being in service (see Table 2-2 of the Study).

The Study also indicates, "Over several years, MISO completed hundreds of computer modeling runs to determine the best alternatives to achieve the specified purpose and need. MISO selected the 345-kV MVP Portfolio because it was shown to "more reliably enable the delivery of wind generation in support of the renewable energy mandates of the MISO states in a cost-effective manner" (MISO, 2012, p. 87). **The Project is one component of a Portfolio that was designed assuming all of the components would be built and work together as a whole.** Because this Portfolio benefitted all of the MISO states, the states agreed to share in the costs of building the Portfolio." (emphasis added)

Recommendations: When analyzing the proposed project and alternatives, USDA should consider actions that result as a direct or indirect consequence - that is, as connected actions.¹ These actions should be incorporated into the description of the proposal (and alternatives, if relevant). If other additional system enhancements will be needed to meet current load demands, those enhancements should also be discussed and evaluated in the Draft EIS as connected actions.

¹ 40 CFR 1508.25: Connected actions are those that are "closely related" to the proposal and alternatives. Connected actions automatically trigger other actions, they cannot or will not proceed unless other actions have been taken previously or simultaneously, or they are interdependent parts of a larger action and depend on the larger action for their justification.

Project Description

The Alternatives Evaluation Study (Study) indicates the typical ROW width for the Project would be 200 feet in Iowa and 150 feet in Wisconsin.

Recommendations: The Draft EIS should explain why different ROW widths are proposed for Iowa and Wisconsin. Additionally, the Draft EIS should indicate if these widths are the narrowest practicable widths to accommodate transmission line; reducing impact to the surrounding habitat is beneficial from three perspectives: less impact to the natural or human environment, fewer mitigation costs, and less land susceptible to non-native, invasive plants due to disturbance.

The Study indicates the new 345-kV line may be co-located with existing transmission lines.

Recommendations: EPA supports co-location with existing transmission lines, unless use of an existing ROW poses other impacts (see above discussion on alternatives that avoid the Refuge). The Draft EIS should indicate all possible sites where co-location is possible. In areas where the transmission line could be co-located but is instead proposed to travel across a new corridor, the rationale behind selecting a new corridor rather than co-locating should be clearly explained in the Draft EIS. For each section of new corridor, the social and environmental impacts should be clearly described.

The Alternative Crossings Analysis (Analysis) indicates the connection between the Hickory Creek Substation and the intermediate substation requires a crossing of the Mississippi River at a location that includes the Refuge. Coordination with USFWS regarding a potential crossing of the Refuge is ongoing. The Utilities have provided the analysis to USFWS for evaluation of the Mississippi River crossings. After completing its environmental review, USFWS will ultimately make a determination regarding whether the proposed power line corridor is compatible with the Refuge and, therefore, permissible.

Recommendations: EPA recommends the Draft EIS incorporate USFWS's comments regarding a potential crossing of the Refuge, as well as USDA's responses to those comments and USDA's attempts to minimize impacts to the Refuge. EPA also recommends that correspondence with USFWS concerning a potential crossing of the Refuge be added to the Draft EIS as an appendix.

The Study indicates, *"Power flow has also increased on the Dairyland owned Stoneman-Nelson Dewey 161-kV line. Power usually flows from the 345-kV transmission source at the Hickory Creek Substation near Dubuque towards Wisconsin on the 161-kV transmission lines causing high flows on these 161-kV lines. These lines could overload under certain contingencies. Without the Project, Dairyland would likely need to rebuild the Stoneman-Nelson Dewey 161-kV line to increase its capacity, and would likely need to replace equipment at the Stoneman Substation to increase the capacity for the Turkey River-Stoneman 161-kV line. The Project will likely allow Dairyland to avoid these transmission upgrades that would be necessary if the Project were not constructed."* (emphasis added)

Recommendations: EPA recommends the Draft EIS describe the contingencies under which the existing lines from Dubuque toward Wisconsin could overload and what the results for users would be. Additionally, EPA requests clarification of the following: "...will likely allow Dairyland to avoid these transmission upgrades..." to the Stoneman-Nelson Dewey 161-kV line and the Stoneman Substation to increase capacity for the Turkey River-Stoneman 161-kV line.

The Study indicates, "... Section 2.4.1.2 of the AES, ... describes the need to develop and implement local operating guides for the southwestern Wisconsin area to protect transmission lines from potential overload during high load times. A last resort in one of these operating guides is the potential for shedding load to maintain equipment loading under their maximum loading capabilities. This includes some Dairyland member load in southwestern Wisconsin. Once complete, the Project will allow for the retirement of the operating guides. The Project will add transmission capacity and improve system performance during peak load times. Completion of the Project will reduce the risk of potential loss of load to maintain adequate equipment loading during a contingency."

Recommendations: EPA recommends the Draft EIS indicate whether the proposed upgrades will allow all current load demands in the project area to be met. If additional system enhancements will be needed to meet current load demands, those enhancements should be discussed and evaluated in the Draft EIS as connected actions². Additionally, the Study indicates the closures of the Nelson Dewey and Stoneman power plants are changing the electricity flows on the regional grid in southwestern Wisconsin and the Utilities are presently investigating an interim response to these changing flows. The Draft EIS should clearly discuss:

- changes to electricity flows on the regional grid in southwestern Wisconsin experienced as a result of the closures of the two generating plants in 2012 and 2015,
- how those changes affect the proposed project, and
- whether additional enhancements will be needed in the foreseeable future to provide electricity to meet all current demands in the study area.

Recommendations: EPA recommends the Draft EIS include the proposed maintenance cycle for the corridor and the general types of activities included in maintaining a transmission line corridor. The type of habitat that would be impacted to provide access points/roads required for maintenance and/or repairs should also be described in the Draft EIS.

Aquatic Resources

For aquatic resources potentially affected by the proposed action, EPA recommends USDA commit in the ROD to monitoring efforts based on the respective resource agencies' frequency and methods as well as committing to address adverse monitoring results. Monitoring data should be publicly available, allowing individuals interested in the project access to this information.

The analysis indicates impacts to wetlands and streams in the ROWs are expected.

Recommendations: Under Section 404 of the Clean Water Act (CWA), a permit is required from the U.S. Army Corps of Engineers (Corps) for the discharge of dredge or fill material into waters of the U.S. Identification and assessment of the various alternatives' direct, indirect and cumulative impacts to waters of the U.S. (e.g., wetlands, streams, rivers, and lakes) should be included in the Draft EIS. The Draft EIS should also discuss measures taken to avoid and minimize impacts to wetlands and streams. Additionally, conceptual mitigation for the remaining acreage of wetlands and linear feet of stream that could not be avoided should be

² Connected actions, as defined in NEPA, are those that are "closely related" to the proposal and alternatives. Connected actions automatically trigger other actions. They cannot or will not proceed unless other actions have been taken previously or simultaneously, or they are interdependent parts of a larger action and depend on the larger action for their justification (40 CFR 1508.25).

included in the Draft EIS. The identification of appropriate compensation mitigation sites should take place in consultation with the Federal and state resource agencies.

The analysis indicates impacts to waterways are expected.

Recommendations: The Draft EIS should describe water bodies and groundwater resources within the Study Area that may be impacted by each of the alternatives. Special attention should be given to work that would occur in an identified drinking water wellhead protection zone, or upstream of a drinking water intake, if applicable. While the Draft EIS would most likely not identify the specific locations of public and private drinking water supply intakes or wells, impacts to these resources should be evaluated and mitigation measures identified, if applicable.

Impacts of the various alternatives on water quality should address, but not be limited to, a water body's designated use and compliance with state water quality standards and Clean Water Act, Section 401 Water Quality Certification. The Draft EIS should also identify whether or not water bodies located in the various proposed project areas are listed by a state as impaired, and, if so, are part of a Total Maximum Daily Load (TMDL) plan. If impaired waters are identified, the Draft EIS should identify the impairment(s) and the reason(s) for the impairment(s).

Details regarding the widths of proposed stream crossings and how these crossings will be accomplished should be identified and discussed. If any placement of underground utilities is considered in this project, EPA recommends, where feasible, the use of directional drilling for water crossings, including directional drilling of associated floodplains, wetlands and unique wildlife habitats, such as forest land.

The Draft EIS should identify and discuss whether National Pollution Discharge Elimination System Clean Water Act Section 402 direct discharge and/or storm water construction permits may be required. We recommend the permitting agency and contact information for each state, as applicable, be disclosed in the Draft EIS. We recommend that the DEIS included a draft Erosion Control Plan and draft Stormwater Pollution Prevention Plan.

EPA recommends the Draft EIS analyze effects to water quality, habitat, aquatic species, and commercial and recreation navigation from constructing crossing structures on the banks of the Mississippi River.

Per the Public Service Commission of Wisconsin's Publication³ regarding environmental impacts of transmission lines, woodlands and shrub/scrub areas along streams are a valuable buffer between adjacent land uses such as farm fields and corridors of natural habitats. Vegetation protects water quality, maintains soil moisture levels in stream banks, helps stabilize the banks, filters nutrient-laden sediments and other runoff, maintains cooler water temperatures, and encourages a diversity of vegetation and wildlife habitats, while removal of vegetative buffers could raise water temperatures. Existing vegetative buffers should be left undisturbed or minimally disturbed, whenever possible. For areas where construction impacts cannot be avoided, low-growing native tree and shrub buffers along these streams should be allowed to regrow and/or should be replanted so as to maintain the pre-construction water quality in the

³ Public Service Commission of Wisconsin. "Environmental Impacts of Transmission Lines." 2013. Accessed online 12/2016 at <http://psc.wi.gov/thelibrary/publications/electric/electric10.pdf>.

streams. Establishment and/or preservation of pollinator habitat is encouraged. EPA strongly recommends the above measures become commitments in the ROD.

Air Quality and Resilience Planning

Impacts to air quality that may occur from construction and operation of a transmission and associated substations should be analyzed in the Draft EIS.

Recommendations: The Draft EIS should identify and discuss the potential impacts to air quality from construction and operation of the proposed project. The air quality analysis should address and disclose the project's potential effect on: 1) all criteria pollutants under the National Ambient Air Quality Standards (NAAQS), including ozone; 2) any significant concentrations of hazardous air pollutants; and 3) protection of public health. Mitigation measures should be identified. We recommend the project proponents pursue opportunities to use clean diesel equipment, vehicles and fuels in construction of the project. The Draft EIS should evaluate the protective measures outlined in the enclosure, *EPA's Suggested Construction Emission Controls*. We strongly recommend applicable measures become commitments in the EIS and ROD in order to reduce potential health impacts, particularly for workers.

Section 7.6 of the Study indicates the 2011 MISO Transmission Expansion Plan designated a portfolio of 17 multi-value projects (MVP Portfolio), which includes the proposed project. This section also indicates this portfolio of 17 projects reduces carbon emissions by 9 to 15 million tons annually; however, the Study does not indicate estimated carbon emission reductions from the proposed project, individually.

Recommendations: The Draft EIS should include an estimate of the net reduction in greenhouse gas (GHG) emissions, in CO₂ equivalent terms, that will be realized by the proposed project.

The U.S. Global Change Research Program's National Climate Assessment (NCA)⁴ section on the Midwest provides a useful starting place for analyzing changing climate conditions. The report finds that, in the Midwest, extreme heat, heavy downpours, and flooding will affect infrastructure, health, air and water quality, and more.

Recommendations: The potential impacts of a changing environment on the proposed action should be addressed, as appropriate, in the project design or analysis of alternatives and identification of resilience measures in the Draft EIS. This may include a discussion of steps to ensure reliable service during extreme events.

Health Concerns

EPA recognizes that the public may have health concerns regarding electromagnetic fields created by a high-voltage transmission line.

Recommendations: The Draft EIS should analyze potential health and environmental effects associated with electromagnetic fields induced by one or more transmission lines. Any disproportionate impacts to communities with environmental justice (EJ) concerns should be identified in the Draft EIS. Tools are available to assist USDA in the EJ analysis for the Draft

⁴ U.S. Global Change Research Program, 2014 *National Climate Assessment*, available at: <http://nca2014.globalchange.gov/report>

EIS.⁵ In addition, EPA released “EJSCREEN,”⁶ which is a publically-available mapping tool designed to screen for potential impacts to communities living with or vulnerable to EJ concerns.

Hazardous Materials

The construction and operation of substations and associated facilities can generate used oils on-site (e.g., transformer oil, dielectric fluids, fluorinated hydrocarbons, etc.). Spills can result in substantial adverse impacts to surface and ground water quality and aquatic habitats.

Recommendations: The Draft EIS should discuss the frequency or likelihood of such events for the proposed activity, and describe spill and release response capabilities. Appropriate state-identified and USDA-identified BMPs to reduce potential non-point sources of pollution from proposed project activities should be designed into the project and identified in the Draft EIS.

Noise

Construction of the transmission line and operational activities associated with substations may cause an increase in local noise levels.

Recommendations: The Draft EIS should identify the sources of noise pollution and provide details of any mitigation measures that will be implemented to decrease noise pollution to acceptable levels. Mitigation measures may include, but are not limited to, restricting construction to daylight hours, the use of noise barriers, placement of trees and shrubs, sound-proofing structures, and the use of transformers that emit the lowest levels of noise practicable.

Impacts to Local Communities

The project may have other impacts on the communities in the project area.

Recommendation:

The Draft EIS should identify and address the social and economic impacts this project may have on the different communities through which the transmission line, terminals, and substations would pass. This would include, but is not limited to, identifying the number of outside workers that would be brought into the communities to construct the project and the duration of proposed construction activities through the various communities. The Draft EIS should also consider environmentally related socio-economic impacts to the local communities, such as housing for project workers, burdening existing solid waste and wastewater handling facilities, increased road traffic with associated dust and hazardous materials spill potential, and easier human access to wildlife habitat (with associated increased disturbances). If applicable, methods to avoid or minimize such impacts should be discussed.

Non-native Invasive Plant Species (NNIS)

Impacts to Refuge land, private conservation easements, and state or local public lands are expected. Studies show that new roads and pipeline/utility ROWs can become a pathway for the

⁵ The Inter-agency Workgroup for EJ recently released a report entitled, “Promising Practices for EJ Methodologies in NEPA Reviews” available at: <https://www.epa.gov/environmentaljustice/ej-iwg-promising-practices-ej-methodologies-nepa-reviews>. The report includes examples of methodologies used across the Federal government for EJ analyses in the NEPA process.

⁶ EPA’s EJSCREEN Environmental Justice and Mapping Tool is available at: <https://www.epa.gov/ejscreen>

spread of NNIS. The spread of NNIS is a threat to biodiversity as many NNIS can out-compete native plants and produce a monoculture that has little or no benefit to wildlife. Early recognition and control of new infestations is essential to stopping the spread of infestation and avoiding future widespread use of herbicides, which could correspondingly have more adverse impacts on biodiversity and nearby water quality.

Recommendations: EPA recommends the Draft EIS include a vegetation management plan (Plan) to address control of existing NNIS along the corridor as well as new infestations of NNIS that occur as a result of construction/maintenance activities. The Plan should list the NNIS plants that occur in the study area, as well as a strategy for prevention, early detection, and control of each species. The state Departments of Natural Resources are valuable sources of information in the fight against NNIS. Additionally, BMPs to reduce the possibility of spreading NNIS should be included as an appendix (e.g., washing construction equipment before entering or leaving an area).

Habitat

The analysis indicates impacts to woodlands and Refuge lands are expected. Any new corridor would convert uplands into non-forested utility ROW and fragment existing forestland.

Recommendations: The Draft EIS should describe upland habitat (e.g., type, quality, species, acreage) within the Study Area that may be impacted by each of the alternatives. EPA recommends the effects of proposed activities on wildlife and their habitats, as well as recreational or tribal, if applicable, activities should be disclosed and evaluated in the Draft EIS. We also recommend the Draft EIS identify and discuss the important functions that upland forest play in protecting water quality in the immediate watershed, providing wildlife habitat and their role in carbon sequestration and climate change.

EPA recommends a discussion of steps that will be taken to avoid or minimize adverse impacts to upland habitat and wildlife should be presented in the Draft EIS. For example, seasonal construction restrictions to avoid impacting breeding individuals are strongly advised. USFWS and state Departments of Natural Resources can assist in determining appropriate seasonal restrictions. We encourage a commitment to seasonal construction restrictions is included in the ROD.

EPA strongly recommends USDA and the Utilities commit to voluntary mitigation for upland trees that will be removed during construction. Part of this voluntary mitigation might include, but is not limited to, assisting local, county or state agencies with any on-going or planned forest reclamation projects in the watershed and/or planting native tree saplings as upland buffers at the wetland compensatory mitigation sites. The state Departments of Natural Resources are valuable sources of information regarding potential planting locations and native tree species. We encourage a commitment to replant native tree species at a 1:1 ratio is included in the ROD.

Wildlife

The Analysis indicates impacts to Refuge lands are expected. Habitat conversion and habitat fragmentation have the potential to impact wildlife (e.g., movement of avian species along the Mississippi Flyway).

Recommendations: The Draft EIS should describe impacts to wildlife associated with habitat conversion/fragmentation. In particular, potential impacts from construction and operation of the proposed transmission line to migratory birds (e.g., collisions with power lines, electrocutions) that typically use the Mississippi Flyway should be discussed in the Draft EIS. Additionally, the Draft EIS should discuss how flight diverters and shield wires will be used to reduce avian collisions with power lines. Coordination with USFWS regarding appropriate measure to reduce avian collisions and electrocutions should be included as an appendix to the Draft EIS. EPA encourages USDA to incorporate suggestions to reduce avian impacts from USFWS as commitments in the ROD.

The analysis indicates, “... numerous transmission lines exist within the Mississippi Flyway and Refuge and are incorporated into the population level persistence and movement of avian species. Although potential impacts to individual birds or groups may occur, the Stoneman ACA route is not anticipated to have potential impacts at the population level for avian species or to migratory pathways.”

Recommendations: EPA recommends the above statements are supported in the Draft EIS. Because USFWS has jurisdiction for avian species under the Migratory Bird Treaty Act and Bald and Golden Eagle Treaty Act, we recommend supplanting the above statements with evidence obtained by USFWS regarding impacts of transmission lines in the Refuge.

Cumulative Impacts Analyses

In addition to an analysis of direct and indirect impacts, the Draft EIS should provide a cumulative impacts analysis for each resource that will be impacted by the proposed project. The purpose of a cumulative impacts analysis is to assess the incremental impacts on each resource of concern due to connected and unconnected actions that take place in a geographic area over time (i.e., past, present and future) no matter which entity (public or private) undertakes the actions. At this time, we recommend that a cumulative impacts analysis should be undertaken for each of the following resources: surface waters (quality, quantity, and aquatic habitat), wetlands, habitat (e.g., effects of other transmission lines crossing the Refuge and/or other projects located within proximate range of the proposed project with the potential to pose effects on habitat within the Refuge such as the Hampton-Rochester-La Crosse 345-kV transmission line), wildlife, air quality, and climate. A cumulative impacts analysis aids in identifying the level of significance of those impacts on a particular resource and the appropriate type and level of mitigation required to offset the current proposal's contribution to these impacts.

The appropriate area of consideration and the temporal scope to use when assessing cumulative impacts will vary for each resource under consideration. For example, forested wetland loss is probably best considered in the context of historical forested wetland losses in a particular watershed. Incremental forested wetland losses due to past, present, and future actions when viewed in a cumulative context may result in a significant impact due to the time it takes to replicate a forested wetland. Consequently, impacts to a forested wetland resource, no matter how small for a particular proposal, may be significant. This would dictate that all efforts be made to avoid and minimize impacts to forested wetlands, and require adequate mitigation for any unavoidable loss.

U.S. Environmental Protection Agency
Suggested Construction Emission Controls

Diesel emissions and fugitive dust from project construction may pose environmental and human health risks and should be minimized. In 2002, EPA classified diesel emissions as a likely human carcinogen, and in 2012 the International Agency for Research on Cancer concluded that diesel exhaust is carcinogenic to humans. Acute exposures can lead to other health problems, such as eye and nose irritation, headaches, nausea, asthma, and other respiratory system issues. Longer term exposure may worsen heart and lung disease.¹ We recommend that USDA and the Applicant consider the following protective measures and commit to applicable measures in the forthcoming Draft EIS.

Mobile and Stationary Source Diesel Controls

Purchase or solicit bids that require the use of vehicles that are equipped with zero-emission technologies or the most advanced emission control systems available. Commit to the best available emissions control technologies for project equipment in order to meet the following standards.

- On-Highway Vehicles: On-highway vehicles should meet, or exceed, the EPA exhaust emissions standards for model year 2010 and newer heavy-duty, on-highway compression-ignition engines (e.g., long-haul trucks, refuse haulers, shuttle buses, etc.).²
- Non-road Vehicles and Equipment: Non-road vehicles and equipment should meet, or exceed, the EPA Tier 4 exhaust emissions standards for heavy-duty, non-road compression-ignition engines (e.g., construction equipment, non-road trucks, etc.).³
- Marine Vessels: Marine vessels servicing infrastructure sites should meet, or exceed, the latest EPA exhaust emissions standards for marine compression-ignition engines (e.g., Tier 4 for Category 1 & 2 vessels, and Tier 3 for Category 3 vessels).⁴
- Low Emission Equipment Exemptions: The equipment specifications outlined above should be met unless: 1) a piece of specialized equipment is not available for purchase or lease within the United States; or 2) the relevant project contractor has been awarded funds to retrofit existing equipment, or purchase/lease new equipment, but the funds are not yet available

Consider requiring the following best practices through the construction contracting or oversight process:

- Use onsite renewable electricity generation and/or grid-based electricity rather than diesel-powered generators or other equipment.
- Use ultra-low sulfur diesel fuel (15 ppm maximum) in construction vehicles and equipment.
- Use catalytic converters to reduce carbon monoxide, aldehydes, and hydrocarbons in diesel fumes. These devices must be used with low sulfur fuels.
- Use electric starting aids such as block heaters with older vehicles to warm the engine.
- Regularly maintain diesel engines to keep exhaust emissions low. Follow the manufacturer's recommended maintenance schedule and procedures. Smoke color can signal the need for maintenance (e.g., blue/black smoke indicates that an engine requires servicing or tuning).
- Retrofit engines with an exhaust filtration device to capture diesel particulate matter before it enters the construction site.

¹ https://www3.epa.gov/region1/eco/diesel/health_effects.html

² <http://www.epa.gov/otaq/standards/heavy-duty/hdci-exhaust.htm>

³ <http://www.epa.gov/otaq/standards/nonroad/nonroadci.htm>

⁴ <http://www.epa.gov/otaq/standards/nonroad/marineci.htm>

- Repower older vehicles and/or equipment with diesel- or alternatively-fueled engines certified to meet newer, more stringent emissions standards (e.g., plug-in hybrid-electric vehicles, battery-electric vehicles, fuel cell electric vehicles, advanced technology locomotives, etc.).
- Retire older vehicles, given the significant contribution of vehicle emissions to the poor air quality conditions. Implement programs to encourage the voluntary removal from use and the marketplace of pre-2010 model year on-highway vehicles (e.g., scrappage rebates) and replace them with newer vehicles that meet or exceed the latest EPA exhaust emissions standards.

Fugitive Dust Source Controls

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative, where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

Occupational Health

- Reduce exposure through work practices and training, such as turning off engines when vehicles are stopped for more than a few minutes, training diesel-equipment operators to perform routine inspection, and maintaining filtration devices.
- Position the exhaust pipe so that diesel fumes are directed away from the operator and nearby workers, reducing the fume concentration to which personnel are exposed.
- Use enclosed, climate-controlled cabs pressurized and equipped with high-efficiency particulate air (HEPA) filters to reduce the operators' exposure to diesel fumes. Pressurization ensures that air moves from inside to outside. HEPA filters ensure that any incoming air is filtered first.
- Use respirators, which are only an interim measure to control exposure to diesel emissions. In most cases, an N95 respirator is adequate. Workers must be trained and fit-tested before they wear respirators. Depending on the type of work being conducted, and if oil is present, concentrations of particulates present will determine the efficiency and type of mask and respirator. Personnel familiar with the selection, care, and use of respirators must perform the fit testing. Respirators must bear a NIOSH approval number.

NEPA Documentation

- Per Executive Order 13045 on Children's Health⁵, EPA recommends the lead agency and project proponent pay particular attention to worksite proximity to places where children live, learn, and play, such as homes, schools, and playgrounds. Construction emission reduction measures should be strictly implemented near these locations in order to be protective of children's health.
- Specify how impacts to sensitive receptors, such as children, elderly, and the infirm will be minimized. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.

⁵ Children may be more highly exposed to contaminants because they generally eat more food, drink more water, and have higher inhalation rates relative to their size. Also, children's normal activities, such as putting their hands in their mouths or playing on the ground, can result in higher exposures to contaminants as compared with adults. Children may be more vulnerable to the toxic effects of contaminants because their bodies and systems are not fully developed and their growing organs are more easily harmed. EPA views childhood as a sequence of life stages, from conception through fetal development, infancy, and adolescence.



David Reinhart <comments@cardinalhickorycreekeis.us>

Joinder Notice of ELPC for CHC Draft Compatibility Comments

1 message

Adrienne Dunham <ADunham@elpc.org>

Tue, Nov 26, 2019 at 8:38 AM

To: "comments@CardinalHickoryCreekEIS.us" <comments@cardinalhickorycreekeis.us>, "dennis.rankin@wdc.usda.gov" <dennis.rankin@wdc.usda.gov>

Cc: Rachel Granneman <RGranneman@elpc.org>, Scott Strand <SStrand@elpc.org>, Howard Learner <HLearner@elpc.org>

Hello,

Please find attached the Joinder Notice submitted on behalf of the Environmental Law & Policy Center pertaining to the Comments on Draft Compatibility Determination for the Cardinal-Hickory Creek high-voltage transmission line that were submitted yesterday.

Thank you,

Adrienne Dunham

Legal Assistant

Environmental Law & Policy Center

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 **ELPC Joinder Comments on CHC Draft Compat.pdf**
199K



ENVIRONMENTAL LAW & POLICY CENTER
Protecting the Midwest's Environment and Natural Heritage

November 26, 2019

Dennis Rankin
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RE: Comments on Draft Compatibility Determination for the
Cardinal-Hickory Creek high-voltage transmission line

Dear Mr. Rankin,

The Environmental Law & Policy Center (“ELPC”), as represented by its attorneys, hereby joins the comments on the U.S. Fish and Wildlife’s Draft Compatibility Determination for the Cardinal-Hickory Creek high-voltage transmission line filed yesterday on behalf of the Driftless Area Land Conservancy, Wisconsin Wildlife Federation, National Wildlife Refuge Association, and Defenders of Wildlife. ELPC fully adopts these comments as its own.

Sincerely,

Scott Strand
Senior Attorney
Environmental Law & Policy Center
60 S. Sixth Street, Suite 2800
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