

APPENDIX B

Federal Mitigation Plan

INTRODUCTION

Dairyland Power Cooperative (Dairyland), American Transmission Company LLC (ATC), and ITC Midwest LLC (ITC Midwest) (herein called the Utilities) propose to construct the Cardinal-Hickory Creek Project (C-HC Project), a new 345-kilovolt (kV) transmission line through Dubuque and Clayton Counties in Iowa, extending across the Mississippi River and the Upper Mississippi River National Wildlife and Fish Refuge (Refuge) and into Grant, Iowa, and Dane Counties in Wisconsin. The C-HC Project would include approximately 100 to 125 miles of 345-kV transmission line and interconnecting 345-kV network facilities, depending on the route selected. This C-HC Project Federal Mitigation Plan provides an overview of the different types of mitigation proposed for the C-HC Project, including actions specifically related to the Refuge. The mitigation efforts proposed are based on previous transmission line projects through U.S. Fish and Wildlife Service (USFWS)- and U.S. Army Corps of Engineers (USACE)-managed lands and resources, as well as common mitigation measures associated with new transmission line projects in Iowa and Wisconsin. This Federal mitigation plan supplements the list of environmental commitments presented in this final environmental impact statement (FEIS) in Table 3.1-4. Once a final route is selected for the C-HC Project through the Refuge, the Utilities would continue to consult with the USFWS and USACE on the specific mitigation measures for the project, based on the specific route selected. Additional mitigation may be required as a result of the state regulatory processes in Wisconsin and Iowa and are not the subject of this plan.

Federal Agency Actions

The Rural Utilities Service (RUS), USFWS, and USACE have jurisdiction over the C-HC Project and are required to make decisions regarding funding, authorizing, or permitting various components of the proposed C-HC Project.

- RUS will determine whether or not to provide financial assistance for Dairyland's portion of the project.
- The USFWS will evaluate the Utilities' request for a right-of-way (ROW) easement and a Special Use Permit to cross the Refuge.
- The USACE will review a ROW request as well as permit applications and requests for permission by the Utilities, as required by Section 10 and Section 408 of the Rivers and Harbors Act and Section 404 under the Clean Water Act.

For more information about the agencies' decisions or decision-making process, please see FEIS Section 1.5.

Types of Mitigation Addressed in this Plan

The idea of mitigation is a hierarchical approach to project development and implementation that first strives to avoid negative impacts of a project on resources, and, when it is impossible to avoid impacts, then implements measures to minimize the level or intensity of negative impacts. Lastly, if avoidance and minimization measures do not lessen the negative impact to negligible or tolerable levels, then mitigation measures are used to ensure that resources are protected.

The types of mitigation provided in this document pertain to the C-HC Project ROW crossing of the Refuge and impacts to jurisdictional waters. These measures will be required as part of USFWS and USACE permitting processes. One primary mitigation measure is compensatory mitigation, where restoration, establishment, enhancement, or preservations of parcels or habitats are implemented to

replace parcels or habitats that are impacted by a project. Another mitigation measure is the development and implementation of protection plans where a program is developed, documented, and implemented to reduce identified risks to resources.

RURAL UTILITIES SERVICE

There are no formal mitigation requirements related to RUS at this time. RUS will require the borrower, Dairyland, to follow through with mitigation identified below by other Federal agencies.

U.S. FISH AND WILDLIFE SERVICE

The USFWS would need to issue a Special Use Permit for construction of project features on Refuge-managed lands and may need to authorize additional ROW for crossing the Refuge. Mitigation for the USFWS lands within the Refuge is discussed below under the section titled “Mitigation Required for Right-of-Way Easements.”

ITC Midwest and Dairyland submitted the Application for Transportation and Utility Systems and Facilities on Federal Lands to USFWS on September 13, 2019. The application is currently under review by the USFWS. Additionally, under Section 7 of the Endangered Species Act, all Federal agencies must consult with the USFWS when any action authorized by the Federal agency may affect a listed endangered or threatened species. RUS consulted with the USFWS with a submission of the C-HC Project Biological Assessment in November 2018, and the USFWS prepared a Biological Opinion in March 2019. The Biological Opinion is found in Appendix G.

U.S. ARMY CORPS OF ENGINEERS

Mitigation Required for USACE Non-recreation Real Estate Outgrant

Per Engineer Regulations (ER) 1130-2-550, where required, a mitigation plan must be prepared and approved by the District Engineer prior to issuance of the outgrant instrument. An approved mitigation plan must become a condition of and added as an addendum to the applicable real estate instrument.

Non-statutory mitigation—all measures necessary to make the USACE whole. While specific statutes may not address these measures, when project damages are incurred, appropriate mitigation actions should be provided to address those damages/impacts. Non-statutory mitigation actions may take the form of actions to restore project value, such as land acquisition, replacing trees, soil/bank stabilization, and providing new, relocated, or replacement facilities (ER 1130-2-550). Non-statutory mitigation for the USACE lands within the Refuge is discussed below under the section titled “Mitigation Required for Right-of-Way Easements.”

Statutory mitigation—Statutory mitigation is driven by statutes, executive orders, and regulations that require mitigation to correct negative impacts to the environment based on a proposed action. For example, 33 CFR 320.4(r) and 33 CFR 332 detail the required mitigative actions when wetlands or navigable waterways (e.g., discharge of dredged or fill material into the water) are impacted (ER 1130-2-550). Statutory mitigation for impacts to Waters of the U.S. under Clean Water Act Section 404 is described in the following sections.

ITC Midwest and Dairyland submitted the Real Estate Application to the USACE Rock Island District on September 13, 2019. The application is currently under review by the USACE.

Mitigation Required by Clean Water Act Section 404 Permitting

St. Paul District

Compensatory Wetland Mitigation, if required, will be fulfilled by mitigation bank credits purchased in accordance with the 2013 USACE document entitled *Guidelines for Wetland Compensatory Mitigation in Wisconsin, Version 1*. Preliminary impact calculations indicate that the portions of the project in Wisconsin will qualify for the Utility Regional General Permit; USACE will evaluate each Single and Complete Linear Project to determine whether wetland conversion will require mitigation.

ATC submitted the Pre-Construction Notification (PCN) for Clean Water Act Section 404 permitting to the USACE St. Paul District on September 4, 2019. The PCN covers the portion of the C-HC Project between Hill Valley and Cardinal Substations in Wisconsin. The PCN is currently under review by the St. Paul District.

ITC Midwest submitted the PCN for Clean Water Act Section 404 permitting to the USACE St. Paul District on September 19, 2019. The PCN covers the portion of the C-HC Project between the Hill Valley Substation and the Mississippi River crossing in Wisconsin. The PCN is currently under review by the St. Paul District.

Rock Island District

Preliminary impact calculations indicate that the portions of the project in Iowa may qualify for the Nationwide Permit #12; USACE will evaluate each Single and Complete Linear Project to determine whether wetland conversion will require mitigation. Compensatory Wetland Mitigation, if necessary, would be coordinated with the Rock Island District Regulatory Division.

ITC Midwest submitted the PCN for Clean Water Act Section 404 permitting to the USACE Rock Island District on September 19, 2019. The PCN covers the portion of the C-HC Project in Iowa. The PCN is currently under review by the Rock Island District.

ITC Midwest submitted the Rivers and Harbors Act Section 10 Permit application to the USACE Rock Island District on September 19, 2019. The Section 10 authorization would permit the portion of the proposed C-HC Project that would span the Mississippi River. The Section 10 Permit application is under review by the Rock Island District.

MITIGATION REQUIRED FOR RIGHT-OF-WAY EASEMENTS

The USFWS has the statutory authority on USFWS fee title lands to “permit the use of, or grant easement in” Refuge lands or multiple uses, including “power lines” for a fee, provided the Secretary of the Interior first determines the proposed use is “compatible with the purposes for which these areas are established” (16 United States Code [U.S.C.] 668dd(d)(1)(B) and (d)(2)). Compatible uses are defined as “a wildlife-dependent recreational use or any other use of the 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); 50 Code of Federal Regulations [CFR] 29.21).

The Code of Federal Regulations at 50 CFR 26.41 describes the process for determining if a new or expanded use of a national wildlife refuge is a compatible use. When the proposed use involves maintenance of electrical facilities, which includes a minor expansion or minor realignment of an existing ROW to meet safety standards, the USFWS rules require that the design adopt appropriate measures to avoid resource impacts to USFWS lands and include provisions to ensure no net loss of habitat quantity and quality. Additionally, restored or replacement areas identified in the C-HC Project's proposed design must be afforded permanent protection as part of the national wildlife refuge affected by the use; and, all restoration work is completed by the applicant prior to any title transfer or recording of the easement, if applicable (50 CFR 26.41). The C-HC Project will comply with these requirements as set forth below.

USACE has statutory authority on USACE fee title lands to lease non-excess property of military departments and Defense Agencies (10 U.S.C. §2667). The USFWS Cooperative Agreement with USACE for management of the USACE lands in the area provides the ability for the USACE to issue outgrants on those lands. Any additional specifications necessary to achieve the broadly identified mitigation plans will be requested, formulated, and referenced as needed for the ROW agreements. Any in-kind or monetary consideration paid for the lease will not be considered part of the mitigation.

No Net Loss of Habitat and Quality through Compensatory Mitigation

ITC Midwest and Dairyland are conducting ongoing discussions with the USFWS Refuge staff and USACE staff at the Mississippi River Project Office about compensatory mitigation, or potential ways to provide appropriate replacement lands if a ROW is issued for the C-HC Project. The USFWS and USACE have agreed that the total acres of any new ROW on the proposed routes through the Refuge would have to be replaced with like or better-quality habitat, preferably in a nearby area, to ensure no net loss.

According to USFWS and USACE staff, the footprint of any expanded or realigned ROW in the Refuge would require compensatory mitigation regardless if that additional area is due to expansion of the width of the ROW or realignment of a ROW. The USFWS and USACE have indicated that a 1:1 land-area ratio would be appropriate, provided the replacement land is of equal or better habitat quality. Abandonment of any existing ROW on USACE fee title land would involve restoration as required by the USACE and USFWS and current lease provisions. This restoration would not be associated with mitigation for minor realignment or expansion of ROW areas.

For the Nelson Dewey river crossing option (B-IA2), the proposed ROW has been calculated as 39 acres, as described in the Application for Transportation and Utility Systems and Facilities on Federal Lands submitted to USFWS and the Real Estate Application submitted to the USACE Rock Island District.

ITC Midwest has secured an option to purchase land adjacent to the Refuge up to or exceeding the amount of proposed ROW within the Refuge, which could be used for mitigation for either the Nelson Dewey or Stoneman route. ITC Midwest believes this land includes comparable or better habitat quality than the land underlying the realigned ROW of the route alternatives extending through the Refuge. A habitat survey, similar to what was completed for the proposed rights-of-way in the Refuge, has been conducted on the proposed replacement lands. The results of this habitat survey will be compiled and reviewed with USFWS and USACE staff to confirm that no net loss in habitat quality would occur as a result of the C-HC Project. Consultation with USFWS and USACE may result in the need for forestry and/or habitat improvements on the proposed mitigation lands. If required, ITC Midwest and Dairyland will develop and implement, in consultation with USFWS and USACE, a habitat improvement and management plan for proposed mitigation lands. All surveying and real estate costs, including title, deeds, and environmental surveys, including surveys necessary to complete any forestry/habitat improvements, will be paid for by ITC Midwest and Dairyland.

Other Compensatory Mitigation Required

The proposed routes in the Refuge include both USFWS- and USACE-owned lands. Depending on the route selected, there may be more underlying lands owned by the USFWS or the USACE. The following additional compensatory mitigation is provided for the Utilities' preferred Nelson Dewey river crossing option (B-IA2).

- Merchantable timber replacement—ITC Midwest and Dairyland will notify the USFWS and/or USACE staff in charge of the amount of merchantable timber in the Refuge that would be cut, removed, or destroyed in the construction and maintenance of the C-HC Project, and will pay the United States in advance of construction such sum of money as USFWS and/or USACE staff may determine to be the full stumpage value of the timber to be so cut, removed, or destroyed.

Current values for merchantable timber determined by ITC Midwest and Dairyland in conjunction with information from the USACE is \$1,600.38.

- USACE Clean Water Act Section 404 mitigation for wetland conversion impacts will be determined in coordination with the USACE Rock Island District.

Efforts Proposed to Avoid Impacts in the Refuge

In addition to the proposed mitigation for no net loss of habitat quality and quantity, the Utilities are committed to minimizing potential resource impacts on USFWS- and USACE-managed lands and resources underlying proposed project rights-of-way. The Utilities have identified specific actions to avoid resource impacts; the actions listed below are consistent with past projects that have undergone USFWS and/or USACE review. These actions are not considered as a specific mitigation effort for the C-HC Project, but rather as conditions of the permit that would be granted by the USFWS and/or USACE as part of the C-HC Project. However, the overall intent of the restoration of existing ROW in the Refuge is to reduce potential impacts to Refuge lands and is therefore noted here for reference.

- ITC Midwest and Dairyland will develop and implement an erosion control plan, coordinated with the Iowa Department of Natural Resources (IDNR), for lands underlying the C-HC Project in Iowa, including the Refuge. Once a route is selected and approved, the plan will identify best management practices to be employed near aquatic features (wetlands, streams, waterbodies).
- For the portion of the C-HC Project within the Refuge, preliminary low-profile structures are proposed with a design height to match the existing tree cover within the Refuge (approximately 75 feet) to reduce the potential of avian collisions. All conductors on these low-profile and river-crossing structures would be placed on one horizontal plane and the shield wires would be marked with bird diverters along the entire length of the Refuge.
- The structures directly adjacent to the river must be taller to allow for the line clearance required by the U.S. Coast Guard across the Mississippi River channel. These structures are also designed to allow a horizontal configuration so all conductors spanning the river would be on one plane, rather than the three planes on the existing crossing today, to help reduce the potential for avian collisions. The shield wires for these structures will also be marked with bird diverters for the river crossing.
- Due to known bald eagle territories and potentially active nests in the vicinity of the C-HC Project ROW through the Refuge, all work planned or conducted within the ROW between the months January 15 and June 15 must be approved through a Special Use Permit issued by the USFWS staff prior to the work being undertaken.

- As noted in the FEIS, the Nelson Dewey route alternatives would cross the Turkey River Restoration Area in the Refuge. As noted in the FEIS, Section 3.14.2.2, the Turkey River Restoration Area's vegetation could best be characterized as young forest, as most of the trees present are less than 15 years old. The USFWS intends to manage this restoration area so that natural forest regeneration and succession results in much of the Turkey River floodplain growing into bottomland forest within 100 years. ITC Midwest and Dairyland have had discussions with the agencies about the revegetation of this bottomland forest in areas where the preferred Nelson Dewey ROW would cross the Turkey River Restoration Area. Once a final route is selected, ITC Midwest and Dairyland will work with USFWS staff to identify the appropriate type, size, and quantity of plantings in this area, outside of the ROW and consistent with Federal Energy Regulatory Commission (FERC) and North American Electric Reliability Corporation (NERC) requirements, to assist with the development of bottomland forest in this portion of the Refuge.
- ITC Midwest and Dairyland will develop, in conjunction with the USFWS and USACE, a vegetation management plan for the lands within the permitted use area, to the extent and in the manner directed by USFWS and/or USACE staff in charge; and will dispose of all vegetative and other material cut, uprooted, or otherwise accumulated during the construction and maintenance of the C-HC Project in accordance with such instructions as USFWS and/or USACE staff may specify.
- ITC Midwest and Dairyland will take soil and resource conservation protection measures, including the development of a pest management plan in conjunction with the Refuge, and will address invasive species control on the land covered by the permit as USFWS and/or USACE staff in charge may request. All pesticides applied within the permit area must be approved by USFWS and/or USACE staff prior to their application.
- ITC Midwest and Dairyland will rebuild and repair such roads, fences, property/boundary/survey monuments, structures, and trails in the Refuge as may be destroyed or damaged as a result of the construction work and, upon request by the USFWS Regional Director, build and maintain necessary and suitable crossings for all roads and trails that intersect the C-HC Project or that are constructed, maintained, or operated under the project ROW. Additionally, depending on the route that is selected for the C-HC Project, ITC Midwest and Dairyland will work with the USFWS and USACE to determine the appropriate restoration efforts for the existing ROW currently located across Refuge lands.
- Although no cultural or paleontological resources were identified during the cultural resources survey on either the Nelson Dewey or Stoneman routes, the Utilities will develop an unanticipated discoveries plan prior to construction and immediately report to the Refuge Manager any cultural resources (historic or prehistoric sites or objects including burials or skeletal material) and/or paleontological resources discovered on public or Federal land within the Refuge. The Utilities will suspend all construction operations in the immediate area of the discovery until written authorization to proceed is issued by the authorized officer. Upon any such discovery, the Utilities will take appropriate actions pursuant to the provisions of law including 36 CFR 800.7 (resources discovered during construction) to prevent the loss of any significant cultural or scientific values. The Utilities will be responsible for the cost of any evaluation, and the decisions as to proper mitigation measures will be made by the authorized officer after consulting with the Utilities.
- Vegetation management terms and conditions will be developed in conjunction with and at the satisfaction of USFWS and USACE for provision and inclusion in ROW agreements. Best management practices will be pursued to minimize impacts to habitats while providing appropriate access and conditions for utility line use.

AVIAN PROTECTION PLAN

During the final design and prior to construction of the C-HC Project, the Utilities will work cooperatively to develop an avian mitigation strategy that will reduce impacts to birds during construction of the line, as well as its long-term operation and maintenance. The mitigation strategy will build on existing plans, industry best practices, and project-specific planning that has been completed to date. The mitigation strategy will be organized and summarized in two project-specific Avian Mitigation Plans; one prepared by ITC Midwest as construction manager for the Hickory Creek–Hill Valley portion of the project, and the other prepared by ATC as construction manager for the Hill Valley–Cardinal portion of the project. Each plan will include similar information including regulatory framework, potential impacts evaluated (e.g., habitat, disturbance, and collision), and planned mitigation measures. The Utilities will work cooperatively, as necessary, with the state and Federal regulatory agencies during development of the plans.

Existing corporate plans and guidance, as well as previous work completed for the project that will provide the foundation for the project-specific Avian Mitigation Plans, are summarized below.

- **ATC’s Corporate Avian Protection Procedure** (ATC 2018). ATC’s avian procedure outlines their commitment to avian protection and the measures they take to mitigate impacts to birds.
- **Dairyland’s Corporate Avian Protection Plan** (Dairyland 2013). Dairyland’s avian plan outlines their commitment to avian protection.
- **ITC Midwest’s Alternative Crossing Analysis (ACA)** (Burns and McDonnell 2016). The ACA describes proposed avian mitigation measures specific to the Refuge and the Mississippi River crossing. These measures were developed in consultation with USFWS staff and include limiting structure heights through the Refuge, use of horizontal structure configurations, and installation of bird flight diverters.
- **C-HC Project Avian Risk Review** (Stantec 2018). The Avian Risk Review was completed for the Wisconsin state proceedings. The purpose of the review was to identify areas along the C-HC Project’s proposed route segments where avian electrocutions or collisions have a higher likelihood to occur relative to other portions of the C-HC Project. This review drew upon current knowledge of avian and transmission line interactions, as well as an analysis of the biological and environmental features within and adjacent to the C-HC Project’s proposed route segments that may influence avian risk. The review was a desktop assessment and relied primarily on publicly available data sources. The results of the review are intended to be used for project planning and considerations for risk mitigation strategies.

The Utilities have previously committed to the following avian mitigation strategies, which will be included in the ATC and ITC Midwest project-specific Avian Mitigation Plans described above:

- Design standards will meet avian-safe guidelines as outlined by the Avian Power Line Interaction Committee (APLIC) for minimizing potential avian electrocution risk.
- The Utilities will review and revise, in consultation with IDNR, Wisconsin Department of Natural Resources (WDNR), and USFWS, the information contained in the Avian Risk Review in order to refine the locations where specific avian mitigation measures should be implemented. The Utilities will evaluate these areas during the final design process and identify the specific mitigation measures to be implemented.
- The Utilities will identify specific locations where the installation of bird flight diverters will be recommended to minimize the potential for avian collisions. Areas where the use of bird flight

diverters will be evaluated include designated Important Bird Areas, wetland complexes with an abundance of open water, and large waterway crossings.

- Bird flight diverters will be installed on shield wires when overhead transmission lines are built in areas regularly used by rare birds or large concentrations of birds. If an eagle nest occurs near the ROW, the Utilities will coordinate with the USFWS to determine if and where bird flight diverters are needed to minimize collision risk.
- The Utilities will attempt to more precisely identify the locations of bald eagle nest records summarized in the Avian Risk Review. Nest records within 0.5 mile of a route will be investigated further for planning purposes using aerial photography, and where necessary, supplemented with field surveys, as well as consultation with IDNR, WDNR, and USFWS.
- The Utilities will coordinate with the USFWS if an eagle nest occurs within 660 feet of the edge of the ROW. No construction activities will occur within 660 feet of an active eagle nest between January 15 and June 15 unless authorized by USFWS.
- The Utilities will coordinate with the USFWS if an eagle nest occurs within 660 feet of the edge of the ROW to determine if and which permits are recommended or if mitigation measures are appropriate to minimize impacts.
- The Utilities will work with the IDNR and the WDNR to determine locations where state-listed bird species habitat is present and implement appropriate measures to avoid and/or minimize impacts to those species.
- Vegetation clearing within threatened and endangered avian species habitat will be avoided during migratory bird nesting season.
- Prior to tree clearing during migratory bird nesting season, the Utilities will complete a field review of the final ROW to identify existing stick nests.
- Tree-clearing crews will be trained to stop work and notify environmental staff if they encounter an unanticipated nest.

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