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PUBLIC SERVICE COMMISSION OF WISCONSIN

Joint Application of American Transmission Company LLC, ITC Midwest LLC, and Dairyland Power Cooperative, for Authority to Construct and Operate a New 345 kV Transmission Line from the Existing Hickory Creek Substation in Dubuque County, Iowa, to the Existing Cardinal Substation in Dane County, Wisconsin, to be Known as the Cardinal-Hickory Creek Project

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FINAL DECISION

On April 30, 2018, pursuant to Wis. Stat. § 196.491 and Wis. Admin. Code chs. PSC 4 and 111, American Transmission Company LLC (ATC), ITC Midwest LLC (ITC), and Dairyland Power Cooperative (DPC) (together, applicants) filed with the Commission an application for a Certificate of Public Convenience and Necessity (CPCN) to construct new 345 kilovolt (kV) electric transmission facilities. ([PSC REF#: 371665.](#)) The project, to be known as the Cardinal-Hickory Creek project (project), includes construction of a new 345 kV electric transmission line from the existing Cardinal Substation in Dane County, Wisconsin to the Hickory Creek Substation in Dubuque County, Iowa. The project also includes construction of a new Hill Valley Substation, in Grant County, Wisconsin. The CPCN application is APPROVED subject to conditions and as modified by this Final Decision.

Introduction

The Commission found the application in this docket to be complete on October 4, 2018. ([PSC REF#: 351224.](#)) A Notice of Proceeding was issued on November 8, 2018. ([PSC REF#: 352880.](#)) Wisconsin Stat. § 196.491(3)(g) requires that the Commission take final action within 180 days after it finds a CPCN application complete unless an extension of no more than

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180 days is granted by the Commission Chairperson. On March 13, 2019, the Commission Chairperson granted an 180-day extension. ([PSC REF#: 361333](#).) The Commission must take final action on or before September 30, 2019, or the application is approved by operation of law. Wis. Stat. § 196.491(3)(g).

Prehearing Conferences were held on January 3, 2019, and February 22, 2019. ([PSC REF#: 354985](#), [PSC REF#: 359325](#).) Requests to intervene were granted to the intervenors listed in the Commission's March 26, 2019, Prehearing Conference Memorandum. ([PSC REF#: 362093](#) at 1-2.) The parties, for the purposes of review under Wis. Stat. §§ 227.47 and 227.53, are listed in Appendix A.

Subsequently, requests for intervenor compensation (IC) were filed by Citizens Utility Board of Wisconsin (CUB), Clean Wisconsin, Inc. (Clean WI), the Driftless Area Land Conservancy and Wisconsin Wildlife Federation (DALC/WWF), and the Village of Montfort in dockets 1-IC-512, 1-IC-513, 1-IC-519, and 1-IC-518, respectively. ([PSC REF#: 352887](#), [PSC REF#: 353664](#), [PSC REF#: 357909](#), [PSC REF#: 357720](#).) By Orders dated February 22, 2019, February 26, 2019, and March 5, 2019, the Commission modified and approved the applications for IC of CUB, Clean WI, DALC/WWF, and the Village of Montfort in the amounts of \$35,745, \$39,730, \$39,730, and \$21,612, respectively. ([PSC REF#: 360039](#), [PSC REF#: 360048](#), [PSC REF#: 360188](#), [PSC REF#: 360744](#).) On March 21, 2019, CUB filed an application for supplemental IC in the amount of \$22,875 in docket 1-IC-521. ([PSC REF#: 361905](#).) By Order dated May 14, 2019, the Commission granted CUB's request. ([PSC REF#: 366881](#).)

The project is a Type I action as defined in Wis. Admin. Code ch. PSC 4. Accordingly, the Commission worked jointly with the Wisconsin Department of Natural Resources (DNR), and

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consulted with the Department of Agriculture, Trade and Consumer Protection (DATCP), and on February 28, 2019, produced a draft environmental impact statement (draft EIS). With publication of the draft EIS, a 45-day comment period began with comments accepted through April 14, 2019. On May 8, 2019, the Commission and DNR issued a final EIS regarding the project, pursuant to Wis. Stat. § 1.11 and Wis. Admin. Code chs. NR 150 and PSC 4. ([PSC REF#: 370355.](#))

After the Commission and DNR issued the final EIS, Jewell Jenkins Intervenors (JJI) filed a motion seeking to compel the Commission to undertake a supplemental EIS under Wis. Admin. Code § PSC 4.35. ([PSC REF#: 367901.](#)) After the administrative law judge (ALJ) denied this motion, JJI filed a Motion for Interlocutory Review with the Commission seeking an order to supplement the final EIS to study, develop, and analyze a route alternative utilizing interstate highway U.S. (USH) 151 discussed in the final EIS. ([PSC REF#: 370239.](#)) The Commission did not take up this motion within 10 days after it was filed, and therefore the motion was denied as provided in Wis. Admin. Code § PSC 2.27. As discussed later in this Final Decision, the Commission's denial by operation of law of JJI's Motion for Interlocutory Review was appropriate.

The Commission held technical hearing sessions in Madison from June 17, 2019, through June 21, 2019. ([PSC REF#: 364523](#), [PSC REF#: 371395.](#)) At the technical sessions, expert witnesses offered testimony and exhibits on behalf of: the applicants; CUB; Clean Energy Organizations (CEO); Clean WI; Dane County; DALC/WWF; JJI; Midcontinent Independent System Operator, Inc. (MISO); village of Montfort; RENEW Wisconsin (RENEW); S.O.U.L. of Wisconsin, Inc. (SOUL); Ten Old Order Amish; Town of Vermont; DATCP; DNR; the Wisconsin Department of Transportation (WisDOT); and Commission staff. Additional

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testimony and exhibits were received from individuals that participated in the proceeding as intervenors, including: Dr. Gloria Belkin (Belkin); Michael and Michelle Dubis (Dubis); Susan Ehlers and Michael Russell (Ehlers-Russell); Linda E. Grice (Grice); Chris and Louise Klopp (Klopp); Joel C. Kurth (Kurth); Patrick and Marlene Patterson (Patterson); George Schwarzmans, Jr. (G. Schwarzmans); Joe Schwarzmans (J. Schwarzmans); J. David Stanfield (Stanfield); Mark G. Sukowaty (Sukowaty); Alexander Tanke (Tanke); and, Lila Zastrow and David Hendrickson (Zastrow-Hendrickson). Public comment hearing sessions were held in the project area on: June 25, 2019, in Lancaster, Wisconsin; June 26, 2019, in Madison, Wisconsin; and June 27, 2019, in Dodgeville, Wisconsin. At the public comment hearings, the Commission accepted both oral and written testimony from members of the public. The Commission also accepted comments from members of the public through its Internet web site.¹ The Commission conducted the hearings as Class 1 contested case proceedings, pursuant to Wis. Stat. §§ 196.491(3)(b), 227.01(3)(a), and 227.44.

The issue for hearing, as determined at the January 3, 2019, prehearing conference, was:

Does the project comply with the applicable standards under Wis. Stat. §§ 1.11, 1.12, 196.025, 196.49, and 196.491, and Wis. Admin. Code chs. PSC 4, and 111?

([PSC REF#: 361296](#) at 2.)

Initial and reply briefs were filed on July 12, 2019, and July 24, 2019, respectively.

Initial briefs supporting the project, or aspects of it, were filed by the applicants, CEO, and MISO. Initial briefs opposing the project, or aspects of it, were filed by Kerry Beheler (Beheler), Jim Campbell (Campbell), CUB, Clean WI, Dane County, DALC/WWF, JJI, Dubis, Grice, Iowa

¹ The Commission's list of evidence accepted at the Party and Public hearings is contained in the Received Evidence list ([PSC REF#: 374519](#)) or Commission staff's public comment exhibit ([PSC REF#: 372384](#)).

County, Klopp, Kurth, Village of Montfort, SOUL, G. Schwarzmann, J. Schwarzmann, Stanfield, Tanke, and Zastrow-Hendrickson. Reply briefs were filed by the applicants, CEO, CUB, Clean WI, Dane County, DALC/WWF, Dubis, Grice, Iowa County, Klopp, Kurth, MISO, Village of Montfort, SOUL, G. Schwarzmann, J. Schwarzmann, and Zastrow-Hendrickson. In addition, an Amicus Brief opposing the project was filed by and on behalf of the Attorneys General of the States of Illinois and Michigan.² The applicants, CEO, and MISO filed responses to the Amicus Brief.

The Commission discussed the record³ in this matter at its open meeting of August 20, 2019. On September 20, 2019, DALC/WWF filed a Motion for Recusal and Disqualification of Commissioner Mike Huebsch and Chairperson Rebecca Cameron Valcq. At its open meeting of September 26, 2019, the Commission discussed this motion and the draft Final Decision.

Findings of Fact

1. ATC and ITC are Wisconsin public utilities, and DPC is a generation and transmission cooperative engaged in providing electric service in Wisconsin pursuant to Wis. Stat. § 196.01(5)(a). Pursuant to Wis. Stat. § 196.491(3), these entities are subject to the Commission's jurisdiction over their application for a CPCN for the project.

² The Amicus Brief was filed after the deadline established in the Prehearing Conference Memorandum. Pursuant to Wis. Admin. Code § PSC 2.20(3), the Commission accepted the Amicus Brief and allowed parties an opportunity to file a reply prior to the Commission's discussion of the application at its open meeting of August 20, 2019. Commission Nowak dissented from the decision to accept the Amicus Brief.

³ Prior to the Commission's discussion of the application at the August 20, 2019 open meeting, Commission staff, the applicants, and DALC/WWF filed Motions to Supplement the Record. There were no objections to Commission staff's and DALC/WWF's requests and the information offered therein were admitted into the record. ([PSC REF#: 373346](#), [PSC REF#: 372733](#).) Parties filed objections to applicants' request, and by order dated August 12, 2019, the ALJ admitted the information offered by applicants into the record. ([PSC REF#: 374021](#).)

2. The applicants propose to construct a new 345 kV electric transmission line and related facilities, as described in their application, the final EIS, and as modified by this Final Decision. The total gross estimated project cost is between \$474 and \$560 million, depending on the route chosen.

3. Energy conservation, renewable resources, or other energy priorities listed in Wis. Stat. §§ 1.12 and 196.025, or their combination, are not cost-effective, technically feasible, or environmentally sound alternatives to the project.

4. The approved transmission line route utilizes priority siting corridors listed in Wis. Stat. § 1.12(6) to the greatest extent feasible, consistent with economic and engineering considerations, reliability of the electric system, and protection of the environment.

5. The high-voltage transmission line facilities as approved by this Final Decision will adequately address the present needs of the applicants' electric system and are necessary to satisfy the reasonable needs of the public for an adequate supply of electrical energy. Wis. Stat. § 196.491(3)(d)2.

6. The design, location, and route of the high-voltage transmission line facilities as approved by this Final Decision are in the public interest considering alternative sources of supply, alternative locations or routes, individual hardships, engineering, economic, safety, reliability, and environmental factors. Wis. Stat. § 196.491(3)(d)3.

7. The high-voltage transmission line facilities as approved by this Final Decision are not located in the Lower Wisconsin State Riverway. Wis. Stat. § 196.491(3)(d)3m.

8. The high-voltage transmission line facilities as approved by this Final Decision provide increased transmission import capability into the state, and use existing rights-of-way

(ROW) to the extent practicable. In addition, the routing and design of the project minimizes environmental impacts in a manner consistent with achieving reasonable electric rates. Wis. Stat. § 196.491(3)(d)3r.

9. The high-voltage transmission line facilities as approved by this Final Decision provide usage, service, or increased regional benefits to wholesale and retail customers or members in this state, and the benefits of the facilities are reasonable in relation to their cost. Wis. Stat. § 196.491(3)(d)3t.

10. The high-voltage transmission line facilities as approved by this Final Decision will not have undue adverse impacts on environmental values including ecological balance, public health and welfare, historic sites, geological formations, aesthetics of land and water, and recreational use. Wis. Stat. § 196.491(3)(d)4.

11. The general public interest and public convenience and necessity require completion of the project. Completion of the project at the estimated cost will not substantially impair the efficiency of the applicants' service, will not provide facilities unreasonably in excess of probable future requirements, and when placed in operation, will not add to the cost of service without proportionately increasing the value or available quantity thereof. Wis. Stat. §§ 196.491(3)(d)5 and 196.49(3)(b).

12. The high-voltage transmission line facilities as approved by this Final Decision will not unreasonably interfere with the orderly land use and development plans for the area. Wis. Stat. § 196.491(3)(d)6.

13. The high-voltage transmission line facilities as approved by this Final Decision will not have a material adverse impact on competition in the relevant wholesale electric service market. Wis. Stat. § 196.491(3)(d)7.

14. The high-voltage transmission line facilities as approved by this Final Decision will affect local farmland, and DATCP has issued an agricultural impact statement.

15. The high-voltage transmission line facilities as approved by this Final Decision will affect state highways and will require permits from WisDOT.

16. The high-voltage transmission line facilities as approved by this Final Decision will affect waterways and wetlands, and will require permits from DNR for construction in waterways and wetlands, construction site erosion control, and storm water handling.

17. The high-voltage transmission line facilities as approved by this Final Decision may affect endangered and threatened species, and the applicants will need to consult with the DNR Bureau of Natural Heritage Conservation to ensure compliance with the state's endangered species law.

18. The high-voltage transmission line facilities as approved by this Final Decision will require the applicants to obtain permits from, provide notifications to, and coordinate with various federal agencies, e.g., U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), and the Federal Aviation Administration (FAA).

19. The high-voltage transmission line facilities as approved by this Final Decision may affect historic properties listed with the Wisconsin Historical Society, and in accordance with Wis. Stat. § 44.40, its direction will be required to avoid or minimize adverse impacts to archeological resources.

20. Critical proposed facilities that could be damaged by flooding are not located in the 100-year flood plain. Consequently, there is no flood risk to the project per 1985 Executive Order 73.

Conclusions of Law

1. The Commission has jurisdiction under Wis. Stat. §§ 1.11, 1.12, 44.40, 196.02, 196.025, 196.395, and 196.491 (CPCN law), and Wis. Admin. Code chs. PSC 4 and 111, to issue a CPCN authorizing the applicants to construct and place in operation the proposed electric transmission facilities as described in their application, the final EIS, and this Final Decision, and to impose the conditions specified in this Final Decision.

2. The project complies with the Energy Priorities Law as required under Wis. Stat. § 1.12 and 196.025(1), and the approved route utilizes priority siting corridors as per Wis. Stat. § 1.12(6) to the greatest extent feasible.

3. In issuing a CPCN, the Commission has the authority under Wis. Stat. § 196.491(3)(e) to include such conditions as are necessary to comply with the requirements of Wis. Stat. § 196.491(3)(d).

4. This is a Type I action under Wis. Admin. Code § PSC 4.10(1), and requires the preparation of an EIS under Wis. Stat. § 1.11.

5. The Commission prepared an EIS and finds that the project, as modified and conditioned by this Final Decision, will not have an undue adverse impact on other environmental values as defined in Wis. Stat. § 196.491(3)(d)4.

6. The project meets the requirements of Wis. Stat. § 196.491(3)(d).

Opinion

The Commission has a responsibility to ensure that Wisconsin receives adequate, reliable, and economical electric service, now and in the future. The applicants' project addresses the need to improve electric system reliability locally and regionally, deliver economic savings for Wisconsin utilities and electric consumers, and provide infrastructure to support the public policy of greater access to renewable-based electric generation. The Commission's proceeding on this CPCN application developed an extensive record from the public and parties on all of the issues that the Commission must consider in reviewing a project under Wisconsin law. Members of the public commented both in writing and through appearances at the public hearing about the impact that this line may have on them and their communities. Parties, as noted in the Introduction section above, ranging from interest groups to individual landowners, intervened in the proceeding to present expert and lay testimony on issues ranging from the need for the project to the environmental impacts. The Commission acknowledges the thoughtful and helpful testimony from both the public and intervenors in this proceeding. This information assisted the Commission in its review of the application, in understanding the different perspectives toward the project, and in making its determinations on the application.

The Commission is authorized to review and approve applications to construct large electric transmission projects under the CPCN law. Wis. Stat. § 196.491(3). After reviewing the record compiled in the contested case proceeding, the Commission must determine whether the project serves the public convenience and necessity based on a number of factors relating to the need for and impacts of the project based upon the criteria outlined in the CPCN law and related statutes. Since 1907, the Commission has regulated public utilities to ensure that "reasonably

adequate service and facilities” are available to the public at rates that are “reasonable and just.” Wis. Stat. § 196.03(1). The Commission’s expertise in administering Wis. Stat. § 196.491 to determine what proposed projects are appropriate and in the public interest has long been recognized by Wisconsin courts. *Wisconsin Power & Light Co. v. Pub. Serv. Comm’n of Wisconsin*, 148 Wis. 2d 881, 888, 437 N.W.2d 888, 891 (Ct. App. 1989); *see also Clean Wisconsin, Inc. v. Public Service Commission of Wisconsin*, 2005 WI 93, 282 Wis. 2d 250, 700 N.W.2d 768 (recognizing the Commission’s expertise in reviewing proposed construction projects under Wis. Stat. § 196.491).

Determining whether a proposed project is in the public interest often requires a high degree of discretion, judgment, and technical analysis. Such decisions involve intertwined legal, factual, value, and public policy determinations. The Commission, as the finder of fact, is charged with sifting through all of the information and applying the statutory criteria to reach a well-reasoned decision. In doing so, the Commission uses its experience, technical competence and specialized knowledge to determine the credibility of each witness and the persuasiveness of the highly technical evidence presented on each issue.

Project History, Description, and Purpose

The applicants propose to construct a 345 kV transmission line from the existing Cardinal Substation in the Dane County, Wisconsin to the existing Hickory Creek Substation in Dubuque County, Iowa. The project also includes construction of a new Hill Valley Substation, in Grant County, Wisconsin, and would be known as the Cardinal-Hickory Creek project. Additionally, modifications to, and relocation of, existing transmission and distribution lines will be required. (Ex.-PSC-FEIS-r, [PSC REF#: 366195](#) at 1-3.) The project is the final project subject to state

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regulatory review of the 17 projects that comprise MISO's Multi-Value Project (MVP) portfolio. The project constitutes a portion of the second MVP located in Wisconsin, and the third docket that the Commission has decided that involves an MVP project.⁴ (Ex.-PSC-FEIS-r, [PSC REF#: 366195](#) at 60-104.)

In late 2008, the governors of Wisconsin, Minnesota, Iowa, North Dakota, and South Dakota formed the Upper Midwest Transmission Development Initiative (UMTDI).⁵ The overall goal of the UMTDI was to identify and begin to resolve some of the regional transmission design issues and cost allocation issues associated with the delivery of large amounts of new renewable energy from areas with better wind resources into the MISO energy market. The UMTDI executive committee's final report, issued September 2010, indicated five transmission projects in the area which would likely be first-movers.⁶ Included in this list and located in Wisconsin were the North La Crosse-North Madison,⁷ and Dubuque (Iowa)-Spring Green-Cardinal (West Middleton) 345 kV transmission line projects.⁸ The project is one of the projects listed in the UMTDI as likely to work in the MISO real-time energy market. (*Id.* at 60-104.)

⁴ *Application by American Transmission Company to Construct a New 5.8-Mile 345 kV Transmission Line from the Existing Pleasant Prairie Switchyard in the Village of Pleasant Prairie, Kenosha County, Wisconsin, to the Existing Zion Energy Center in the City of Zion, Lake County, Illinois*, Docket no. 137-CE-161, 2012.

Joint Application of American Transmission Company LLC and Northern States Power Company-Wisconsin, as Electric Public Utilities, for Authority to Construct and Operate a New Badger-Coulee 345 kV Transmission Line from the La Crosse Area, in La Crosse County, to the Greater Madison Area in Dane County, Wisconsin, Docket no. 5-CE-142, 2015.

⁵ The original UMTDI summary report as cited in the final EIS is no longer searchable on the MISO website. However, a copy can be found on the PSC Electronic Records Filing System, [PSC REF#: 218112](#).

⁶ *Id.*

⁷ Filed with the Commission as docket 5-CE-142, Badger Coulee, 2015.

⁸ Filed with the Commission as this project.

Besides the UMTDI, other more detailed and broader transmission system expansion initiatives were conducted by various entities which considered then-existing individual state renewable portfolio standards (RPS) mandates and goals within the regional energy markets. The first of these studies, the Strategic Midwest Area Renewable Transmission (SMARTransmission) Study,⁹ analyzed various combinations of 345 kV, 765 kV, and high-voltage direct current transmission lines to deliver renewables to real-time energy markets. The study concluded that if wind energy development increased in the upper Midwest, then more transmission was effective in the delivery of the wind energy to load. The study estimated that approximately 57,000 megawatts (MW) of wind energy could be generated in the Midwest and be injected into the MISO and PJM systems. (*Id.* at 60-104.)

Another study, the MISO 2008 Regional Generation Outlet Study (RGOS),¹⁰ identified the drivers of transmission expansion, including the individual state RPS mandates and goals for renewable energy, and all of the proposed generation in the MISO queue. The study identified a transmission plan to accommodate all of the MISO states with their individual RPS requirements and minimize real-time Locational Marginal Pricing (LMP) costs. The RGOS study determined the balance of the capital investment in wind generation and extra high-voltage transmission. This balance resulted in a blend of local and remote wind energy and energy supplied by conventional, synchronous generation. (*Id.* at 60-104.)

⁹ http://www.smartstudy.biz/include/pdf/phase_one_report.pdf and http://www.smartstudy.biz/include/pdf/phase_two_report.pdf.

¹⁰ The original RGOS study is no longer searchable on the MISO website; however, RGOS is discussed in detail in the original MISO Multi-Value Project portfolio report.

As a result of these studies, a list of projects was developed for bringing renewable energy into the real-time energy market. These projects comprise the MVP portfolio, and were approved by the MISO board of directors as part of MISO's Transmission Expansion Plan from 2011 (MTEP11) process in December 2011.¹¹ On January 10, 2012, the final MVP portfolio report was issued, stating that the projects would provide reliability, public policy, and economic benefits. The MVP criteria are described in MISO Attachment FF88 to its tariff. The three main criteria include:

- Criterion 1 – The projects to be developed deliver energy in a reliable and economic manner to support the law enacted or adopted through state or federal legislation or other regulatory requirements.
- Criterion 2 – The MVP must provide multiple types of economic value across multiple transmission pricing zones with MVP benefit to cost ratios of 1.0 or higher.
- Criterion 3 – An MVP must address at least one transmission issue associated with a projected violation of NERC or Regional Entity standards and at least one economic-based transmission issue across multiple transmission pricing zones.

(*Id.* at 60-104.)

The project¹² is included in the final MVP portfolio report which recognizes that integrating non-dispatchable wind generating facilities into the real-time LMP market requires a balance of locating wind generators in areas with better wind resources, while minimizing transmission investment by balancing the transmission system with existing and future conventional synchronous generation under various scenarios. This concept was initiated in the

¹¹ The MISO Multi-Value Project Portfolio report, <https://cdn.misoenergy.org/2011%20MVP%20Portfolio%20Analysis%20Full%20Report117059.pdf>.

¹² At the time of the issuance of the original MVP portfolio report, the project was known as the Dubuque Co.-Spring Green-Cardinal project, as the second half of the larger N. La Crosse-N. Madison-Cardinal & Dubuque Co.-Spring Green-Cardinal project.

UMTDI and RGOS, and is discussed in greater detail in the final MVP portfolio report. The MVP portfolio report concluded that the MVP portfolio projects would result in benefit to cost ratios greater than one for all seven MISO north and central Local Resource Zones when considering a range of future scenarios. (*Id.* at 60-104.)

The cost of the approximately \$5.2 billion¹³ MVP portfolio is allocated 100 percent to load based on a load ratio share. The justification for this approach to cost allocation was that all users of electricity share the benefits of these projects. Cost allocations are determined by a formula that balances the costs of the MVP projects with the benefits of meeting:

- state renewable energy targets,
- reduced market prices, and
- avoided local reliability projects.

The applicants estimate that load balancing authorities (LBA) in the ATC footprint will be assigned 13.42 percent of the MVP portfolio charges. In addition, the applicants estimate that Northern States Power Company will be responsible for 10.16 percent (with Northern States Power Company-Wisconsin being responsible for 1.52 percent) of MVP portfolio charges and DPC for 0.10 percent of MVP portfolio charges. (*Id.* at 60-104.)

The cost of each MVP is allocated on a system wide basis to all transmission customers who withdraw energy from the MISO system. The annual carrying charges are set by LBA and can be found in MISO Schedule 26-A.¹⁴ MISO Schedule 26-A is updated twice annually. (*Id.* at 60-104.)

The transmission line would be constructed using a combination of steel, single-circuit, H-frame structures and steel, single-pole, single-circuit and multi-circuit structures, depending on

¹³ MISO MTEP17 MVP Triennial Review report, p. 19, <https://cdn.misoenergy.org/MTEP17%20MVP%20Triennial%20Review%20Report117065.pdf>.

¹⁴ Available at <https://www.misoenergy.org/> by searching for “Schedule 26-A.”

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the route segments selected. The route segments and proposed structure and line configurations are described in more detail below. (Ex.-PSC-FEIS-r, [PSC REF#: 366195](#) at 37-38.)

For the purposes of the Commission's review, the applicants' proposed alternative routes for the transmission line are divided into four geographic areas:

- Mississippi River Routing Area
- Western Routing Area
- Eastern Routing Area
- Dane County Routing Area

(Ex.-PSC-FEIS-r, [PSC REF#: 366195](#) at 3.)

For the Mississippi River, Western, and Eastern Routing Areas, the applicants proposed two route alternatives. The Dane County Routing area includes primarily a single segment, referred to as a common segment, for which no alternative is proposed. Portions of the Dane County Routing Area include shorter segments where two alternatives exist. Route segments and proposed structure and line configurations are described in more detail below.

The applicants' stated purpose for the project is to: (1) improve electric system reliability locally and regionally; (2) deliver economic savings for Wisconsin utilities and electric consumers; and (3) expand infrastructure to support the public policy of greater use of renewable-based electric generation. (Ex.-PSC-FEIS-r, [PSC REF#: 366195](#) at 1.)

The applicants estimate the total gross cost of the project to be from \$474 million to \$560 million depending on the route selected. The applicants estimate the Wisconsin portion of the cost for the project to be from \$67 million to \$72.7 million. Specific modifications identified subsequent to the application, if authorized, could affect the final authorized cost of the project. Items of increased cost generally relate to the length or structure configuration of a

modified segment, additional corner structures, or additional required studies. Some route modifications would result in a lower authorized cost. (Ex.-Applicants-Application-r3, [PSC REF#: 352698](#) at 67-69.)

Project Need

The Commission’s assessment of need requires that the Commission find that the project, if constructed, will satisfy the reasonable needs of the public for an adequate supply of electric energy. The Commission may reject the project if it finds that it would substantially impair the efficiency of utility service, would provide facilities unreasonably in excess of probable future requirements, or would add to the cost of service without proportionately increasing the value or available quantity of service. The Commission’s assessment of whether the project is needed is not limited to determining whether there is an adequate supply of electric power in the area; rather, the inquiry may include additional relevant factors “such as increased reliability, economic benefits, and public policy considerations.” *Town of Holland v. Pub. Serv. Comm'n of Wis.*, 2018 WI App 38, ¶¶ 31-32, 382 Wis. 2d 799, 817–18, 913 N.W.2d 914, 924–25 (finding that the Commission’s interpretation of “reasonable needs” comports with the intent of CPCN law). In assessing need, the Commission must assess the “future energy needs of the state and [forecast] the economic impact of proposed plans.” *Clean Wisconsin, Inc. v. Pub. Serv. Comm'n of Wisconsin*, 2005 WI 93, ¶¶ 141-142, 282 Wis. 2d 250, 352–53, 700 N.W.2d 768, 818. The courts have recognized that “[a]ccounting for the myriad of economic factors that affect demand and energy prices is an incredibly complex task.” *Id.* “Examining the numerous requirements listed in Wis. Stat. § 196.491(3)(d)2.–8. and forecasting future energy needs and prices is a highly technical exercise that the PSC is *charged with performing*. (*Id.* at ¶ 151, 282 Wis. 2d at

357, 700 N.W.2d at 820.) (emphasis added.) In sum, the Commission’s interpretation and application of the CPCN law, including its assessment of need, “inherently calls for a variety of policy determinations. . . .” (*Id.* at ¶ 138.)

The applicants propose to construct the project to provide needed improvements to electric grid reliability, economic benefits by relieving system constraints and reducing system losses associated with power transmission (congestion), and improved access to renewable wind electric generation located to the west of Wisconsin. The applicants stated that the facts in the record paint a clear picture that the project produces reliability, economic, and public policy benefits in all plausible futures studied, and that there is no viable alternative that would perform better than the project.

To assess the merits of the project as compared to potential alternatives, the applicants provided a planning analysis that studied three alternatives in greater detail: the project, a low-voltage alternative (LVA), and a non-transmission alternative (NTA). (Ex.-Applicants-Application-r3 at 32-33.) For each alternative, the applicants quantified four categories of economic benefits: energy cost savings, capacity cost savings, insurance value, and avoided reliability and asset renewal benefits.¹⁵ The applicants then calculated the net benefits and costs of each alternative using five different future scenarios, called “futures,” where each future includes specific assumptions about the key factors or drivers of the electric industry in the 2021, 2026, and 2031 study years. The applicants then compared the economic benefits of each

¹⁵ Energy Cost Savings: The Energy Cost Savings represent each alternative’s ability to lower overall energy costs for Wisconsin customers. Capacity Loss Savings: These are the savings resulting from the reduction in capacity costs that occur for each alternative. Insurance Value: The Insurance Value is the reduction in the economic impact of severe generation or transmission outages if each alternative is constructed. Avoided Reliability Project Benefits: These are the benefits from avoiding the need to construct future reliability projects if each alternative is constructed. Asset Renewal Benefits: These are the benefits associated with avoiding the need to renew and replace existing transmission lines if each alternative is constructed. (Ex.-Applicants-Application-r3 at 33.)

alternative using a formula to assess the overall benefits produced by each alternative as compared to the base case, or no-build alternative, to determine the alternative that produced the greatest net benefits in the most futures. The net benefits were defined as either the greater of the energy cost savings plus insurance value or the avoided reliability plus asset renewal benefits, plus capacity loss savings and subtracting the cost of the project to Wisconsin customers over the projected life of the project. (Direct-PSC-Grant-p at 25.) After the application was filed, the applicants made changes to their models at the request of Commission staff and evaluated the project under three additional futures, resulting in a total of eight futures being studied. (Direct-Applicants-Dagenais at 8-10.) The applicants also evaluated how each alternative would improve competition in the ATC footprint, increase transfer capability between Iowa and Wisconsin, and achieve other qualitative reliability and public policy benefits. The methodology used to assess the project as compared to alternatives was generally accepted by the parties and Commission staff.

Analysis of Total Net Economic Benefits

The applicants asserted that their economic analysis demonstrates that the project would produce between approximately \$23 and \$350 million in net economic benefits in excess of the projected project costs on a net present value revenue requirement (PVRR) basis over the expected 40 years life of the project. ([PSC REF#: 372104](#) at 1.) Practically speaking, the total net benefits being evaluated for this project take the form of reduced energy costs derived from a reduction in congestion on the transmission lines between Iowa and Wisconsin that would otherwise compel the dispatch of higher cost-fuel resources east of the congestion, or the reliability benefits generated by the project, whichever is greater. (Direct-Applicants-Dagenais

at 7-8.) When these reduced costs or reliability benefits exceed the cost of the project or alternative being analyzed, it is anticipated that the project or alternative will produce net benefits over the cost of the project or alternative. As discussed below, the Commission finds that the applicants demonstrated substantial evidence that the project is likely to provide total net economic benefits greater than its costs.

A. Economic Modeling and Analysis of Energy Cost Savings

The applicants used the PROMOD software package to determine the energy cost savings benefits for Wisconsin customers from the various alternatives in the futures that were analyzed. The PROMOD model is recognized by electric utilities and utility regulators as a standard tool in economic system planning. (Direct-PSC-Grant at 3-4.) PROMOD is a model that provides electric market simulations incorporating generating unit operating characteristics, transmission grid topology and constraints, and market system operations. (*Id.*) Results of PROMOD modeling predict benefits of energy costs and losses that could result from a project. Several PROMOD model runs were performed by the applicants to analyze the benefits associated with a no-build alternative and other transmission system alternatives. (*Id.*) These PROMOD results were then analyzed using the framework described above to determine total net benefits of the project as compared to costs for various futures and as compared to alternatives and the cost of those alternatives.

The applicants' economic analysis included consideration of multiple futures that were analyzed for the years 2021, 2026, and 2031. These futures are referred to as: Existing Fleet (EF), Existing Fleet with Foxconn and PSCW Changes (EFPCW), Policy Regulations with Low Energy (PRLE), Policy Regulations (PR), Policy Regulations with Foxconn (PRFoxconn),

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Policy Regulations with Foxconn and PSCW Changes (PRPSCW), Accelerated Alternative Technologies (AAT) and Accelerated Alternative Technologies with Foxconn and PSCW Changes (AATPSCW). (*Id.* at 9.) These futures incorporated varying assumptions regarding demand and energy forecasts, generating unit retirements and additions, fuel cost, use of renewable energy, and other assumptions. (*Id.* at 10-11.) The applicants stated that the use of multiple futures for determining economic benefits increases the probability of a robust project if it performs well across many of the tested futures. (*Id.* at 11.)

The applicants based their initial PROMOD analysis on MTEP17. (*Id.*) At the request of Commission staff, the applicants performed additional modeling that served as the basis for additional analysis. (*Id.* at 12.) These updated futures were requested by Commission staff to update the original modeling provided by the applicants, to reflect known retired generating facilities and to more accurately reflect known changes to the transmission system. ([PSC REF#: 343192](#) at 17-19.) The applicants' modeling demonstrated net benefits to Wisconsin customers in all cases, and the net economic benefits of the project exceed the net economic benefits of all other studied alternatives in every scenario modeled. (Direct-Applicants-Dagenais at 8-10.)

Opposing intervenors raised a number of criticisms of the applicants' economic benefits analysis. Only the most significant will be addressed here. Intervenors criticized the applicants for not updating underlying modeling assumptions since the MISO MVP portfolio was first developed in 2011, noting changing electrical generation and transmission topology, including the expansion of distributed energy resources, battery storage, and solar energy. ([PSC REF#: 372116](#) at 1-2.) As stated above, MISO updated its Transmission Expansion Plan in 2017, and the applicants conducted their modeling using this updated plan. Further, Commission staff

conducted additional modeling that included recent approved or proposed wind and solar generation in Wisconsin that still showed net benefits for the project, although benefits were reduced in many of these runs. Intervenors, alternatively, did not perform any PROMOD or other modeling of their own to test assumptions of either the applicants or Commission staff. As Commission staff noted throughout this proceeding, the complexity of modeling programs such as PROMOD make it nearly impossible to predict or state with certainty the outcome of any modeling inputs or assumptions without actually running the modeling program. This reality must be considered when assessing critiques posed by intervenors of the modeling performed by the applicants and Commission staff.

Opposing intervenors contended that the applicants overstated the estimated benefits of the project by not studying a zero or negative load growth projection. ([PSC REF#: 360182](#) at 4-5 and associated attachment 8.4.) However, Commission staff assessed the benefits of the project under a 10 percent load reduction scenario to represent any possible combination of energy efficiency, localized distributed generation, demand side management, and other items that could reduce load or demand. The 10 percent load reduction analysis demonstrated that even under such an extreme and unlikely scenario, there was a minimal effect on the benefits of the project when compared to a case without the significant load reduction. In fact, the load reduction showed a small increase of the energy cost savings benefit over the life of the project when compared to the same case without the load reduction. The applicants also performed modeling assuming zero or negative load growth and found an increased benefit for the project when compared to modeling without load reductions. (Direct-PSC-Grant-p at 30-31.)

Opposing intervenors also asserted that scenarios developed by Commission staff resulted in negative economic benefits in futures that the intervenors find plausible and that greater certainty could be developed for the project by delaying the in-service date until December 31, 2025. ([PSC REF#: 372116](#) at 4.) Concerns were raised about the discount rate used to evaluate the project, which could result in significantly reduced project benefits depending on what rate is assumed. (*Id.* at 10-11.) However, the applicants asserted that none of the scenarios studied by Commission staff except the EFPSCW, PRPSCW, and AATPSCW are representative of the expected benefits from the project and that Commission staff's methodologies and assumptions were implausible, biased against the project, and/or incomplete.

The Commission determines that delaying the in-service date of the project is not an option under Wisconsin law. The Commission is tasked with approving, modifying, or denying a project application under Wis. Stat. § 196.491(3)(g) within 360 days of the day the application is deemed complete, or the application is approved by operation of law. Therefore, the Commission lacks the authority to delay a requested project unless it finds that that the project should be denied. Procedurally, the Commission must make the same factual and legal findings under the criteria in Wis. Stat. § 196.491(3)(d) that support denying the project in order to find that a project should be delayed, and practically, the effect is the same as the applicants would need to file a new application in either case. Even if the Commission could legally delay the project, the Commission is not persuaded that the modeling or other record evidence supports such a result. Commission staff developed scenarios that tested several assumptions, but these did not provide a conclusive basis to find that the project should be delayed. The Commission

finds that the applicants' assumptions are reasonable and based on substantial evidence to approve the project.

The discount rate assumptions used in the competing models significantly impacts the results. A higher discount rate assumption will result in less economic benefit, and a lower discount rate will result in more economic benefit. The applicants used a discount rate of 6.4 percent, which represents a long-term, historical average of the interest rate the Federal Energy Regulatory Commission (FERC) has used to compensate utility customers for refunds. Commission staff suggested that use of a higher discount rate based on the weighted cost of capital for financing the project may be more appropriate. The Commission appreciates the exchange of ideas, but declines to adopt any specific discount rate as preferred or more reasonable. Substantial support was provided for the use of both discount rates, but as with any other predictive methodology, no one can be certain which rate more accurately will predict the future. The evidence in the record suggests that which discount rate may be more appropriate depends in large part on whether it is being used to measure the value of customer money or investor money, rather than either being preferable over the other. Therefore, the Commission finds that the applicants provided substantial and credible evidence that their discount rate was reasonable for use in measuring the economic benefits of this project, and does not find sufficient evidence to adopt a different methodology.

The metric used to calculate the energy cost savings of the project also significantly impacts the results. Commission staff provided testimony that assessed the relative merits of the assumptions and metrics used by the applicants in their economic analysis. Commission staff provided testimony that evaluated the differences in benefits from using the Adjusted Production

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Cost (APC) metric as opposed to ATC's Customer Benefit Metric (CBM) metric. These metrics are used to create values for use in PROMOD modeling runs to compare the difference in energy cost savings between the base case and the alternative (Cardinal-Hickory Creek, LVA, NTA) being studied. If the studied alternative is less expensive than the base case, a project energy cost savings benefit is realized; if the studied alternative is more expensive, then a cost is realized. These project benefits or costs are established for a given year and future using the differential between the studied alternative and the base case. The applicants used the APC method to calculate the benefits for DPC and Northern State Power Company customers, and the CBM metric for ATC customers.

Commission staff testified that the internal Financial Transmission Rights (FTR) recovery percentage is an important variable in the CBM metric because of the impact on energy cost savings when the number is increased or decreased from the applicants assumed 85 percent. (Direct-Grant-PSC-p at 38.) Commission staff did not provide a basis to believe this number was not appropriate, however. The applicants testified that the assumed 85 percent recovery was based on internal discussions with their customers (utilities) as well as data from MISO. The applicants also stated that the swing in benefits demonstrated by Commission staff analysis supported their use of CBM because the less utilities are able to hedge against congestion costs (i.e. the FTR recovery percentage is lowered) the more utilities would benefit from a project that reduces congestion, and vice versa. (Applicants-Direct-Pfiefenbgerger-r at 39-41.)

The Commission finds the applicants' use of the APC and CBM metrics is reasonable and supported by the record. This same methodology was used in Commission docket

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5-CE-142¹⁶ to evaluate the economic benefits of that project, and has been used by ATC in a number of dockets before the Commission. No party or witness provided credible evidence that these or any other metrics used to evaluate the projected benefits of the project are so unreliable as to be dismissed by the Commission. The Commission also finds important that while a number of party witnesses raised questions about assumptions and data used by applicants that they assert may have shown different outcomes, none of these witnesses actually performed independent modeling to bear out these concerns. Many of the expert witnesses emphasized that reliance on any particular modeling run outcome is not advised, as the future is difficult to predict. Rather, it is more important that a project provide benefits over a range of modeling assumptions to account for an uncertain future. And in using both metrics to evaluate the energy cost savings of the project, Commission staff found that in almost all cases the project showed net economic benefits regardless of what metric was used. (Direct-PSC-Grant-p at 39; Surrebuttal-PSC-Grant-pr at 2.)

B. Analysis of Reliability Benefits

All transmission owners are required to maintain an adequate and reliable transmission system that meets the needs of their transmission customers. Further, Wis. Stat. § 196.491(3)(d)3t. requires that the Commission assess whether a proposed high-voltage transmission line such as the project provides usage, service or increased regional reliability benefits to the wholesale and retail customers or members in this state and the benefits of the high-voltage transmission line are reasonable in relation to the cost of the high-voltage

¹⁶ *Application of American Transmission Company LLC and Northern States Power Company-Wisconsin, as Electric Public Utilities, for Authority to Construct and Operate a New Badger-Coulee 345 kV Transmission Line from the La Crosse Area, in La Crosse County, to the Greater Madison Area in Dane County, Wisconsin*, docket 5-CE-142 (PSC April 23, 2015).

transmission line. The transmission system in southwest and southcentral Wisconsin is comprised mainly of 69 kV facilities with some 138 kV and 161 kV facilities intended for local load serving purposes. Much of the existing infrastructure is aging and expected to be replaced in the next 30 years. The applicants evaluated how each alternative would impact the reliability of the transmission system in southwest and southcentral Wisconsin. The applicants quantified two categories of benefits: Avoided Reliability Benefits and Asset Renewal Benefits. The applicants asserted that together, these quantitative benefits provided by the project exceed Wisconsin's share of the cost of the project even without considering potential energy cost savings. (Dagenais-Applicants-Direct at 43.)

To quantify the avoided reliability benefits, the applicants conducted a steady state reliability analysis of the transmission system to develop a preliminary list of capital improvements that would be required to maintain an adequate level of reliability under the No Action alternative (i.e., the base case). The applicants performed this analysis in accordance with the applicants' planning criteria and the North American Electric Reliability Corporation (NERC) reliability standards. The applicants then ran this analysis with a particular alternative included in the analysis to determine if that alternative would eliminate the need for any of the capital improvements in the preliminary list.

Based on this analysis, the applicants asserted that constructing the project would eliminate the need to construct approximately \$42.2 million in reliability projects and would also result in avoided overloads on a variety of transmission lines during NERC Load Loss Allowed, Planning Event P3 and P6 contingencies.

To quantify the asset renewal benefits provided by the project, the applicants examined the age and condition of transmission lines in the project area. In the application, the applicants stated that many transmission lines in southwestern Wisconsin were constructed in the 1950s and many will be candidates for a partial or complete renewal in the future. The 69 kV and 138 kV lines in the project area are typically either single wood poles or wood H-Frame structures. The service life of typical wood construction lines is 60 to 70 years. This life can vary due to several factors including weather, pole deterioration and decay, woodpecker damage, below-grade decay, partially or fully rejected poles, and how well the lines are maintained. Given this information, the applicants' engineering assessment of the existing structures on the various potential transmission routes showed that many of these wood structures are expected to require renewal within the 40-year lifespan of each of the applicants' proposed alternatives. If constructed, the transmission alternatives considered in the application (i.e., the project and the LVA) would involve the replacement, refurbishment, or a combination of both, of various existing transmission system components along the route selected. The applicants stated that Wisconsin customers would benefit by avoiding the cost of rebuilding or refurbishing these components in the future by including the rebuild as a part of the transmission alternatives studied by the applicants. The applicants' calculated asset renewal benefits for the project is \$45.0 million.

Commission staff also analyzed the assumptions underlying the applicants' calculation of reliability benefits. Commission staff investigated whether the avoided reliability benefits were accurately assessed because certain transmission lines included in the calculation of benefits may need to be rebuilt regardless of whether the project is constructed. The largest cost Commission

staff excluded from its analysis was the applicants' inclusion of the need to construct a new 345 kV Hickory Creek–Nelson Dewey river crossing transmission line if the project is not approved, accounting for \$31,900,000 of the applicants' estimated \$42,200,000 in avoided reliability benefits. If these lines are excluded, the avoided reliability benefits could be as low as \$897,474. (Vedvik-Direct-PSC at 18-19.) Similarly, Commission staff investigated whether the applicants accurately calculated the asset renewal benefits of the project. Commission staff's primary concern was that the early asset renewal of these transmission lines sacrifices some the remaining useful life of these assets, diminishing the total asset renewal benefits provided by the project. If Commission staff's calculation of the remaining useful life of these assets is taken into account, the asset renewal benefits are reduced from \$45,000,000 to \$36,950,000. (Vedvik-Direct-PSC 21-22.) Using these revised estimates, Commission staff calculated an alternative estimate of the total reliability benefits of the project of \$37,840,000.

As explained above, these anticipated reliability benefits are incorporated into the applicants' equation to determine the total net benefits of the project. The applicants' analysis found that reliability benefits provided more total net benefits than the energy cost savings plus insurance value for the project only in one future out of the eight that were studied. (Dagenais-Applicants-Direct at 45.) When Commission staff's estimate of the total reliability benefits of the project is used in the equation using the same metrics as applicants, the project produces positive total net benefits in seven of eleven futures. (Ex.-PSC-Vedvik-1.)

Commission staff raised important considerations for the Commission's assessment of the value of the reliability benefits created by the project, but as Commission staff recognized, the lack of consensus in results from the modeling is indicative of the limits of predicting

economic benefit based on modeling alone. While these considerations may show reduced total net benefits in a few scenarios, together with the applicants' modeling the results demonstrate that the project is likely to deliver substantial total *net* benefits across most futures attributable to energy cost savings from reduced congestion rather than reliability benefits generated by the project. Further, the reliability benefits anticipated from the project are not only economic, as the project will support interconnection of planned renewable generation projects in Wisconsin and the MISO region as discussed below. As Wisconsin courts have explained, the Commission's assessment of need includes considering the "future energy needs of the state and [forecast] the economic impact of proposed plans." *Clean Wisconsin*, 2005 WI 93, ¶¶ 141-142, 282 Wis. 2d at 352-53, 700 N.W.2d at 818. The modeling demonstrated that the more renewable generation interconnected to the grid to the west of Wisconsin, the greater the potential economic benefit provided by the project. Furthermore, the reliability benefits for Wisconsin and the electrical grid realized from this project cost will be cost-shared, rather than paid for by Wisconsin customers exclusively. For these reasons, the Commission finds that the project provides usage, service or increased regional reliability benefits to the wholesale and retail customers or members in this state and the benefits of the high-voltage transmission line are reasonable in relation to the cost of the high-voltage transmission line.

Access to Renewable Energy Sources

The Commission finds that the project represents an important step in moving towards a future with increased renewable generation. The project would allow access to renewable generation that is currently being developed in states west of the Mississippi River, and expected economic benefits for the project increases in futures with greater amounts of assumed

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renewable generation. ([PSC REF#: 372104](#) at 1-2.) Other intervenors, including MISO and CEO, expressed the same opinion. ([PSC REF#: 372099](#) at 7-8, [PSC REF#: 372125](#) at 5.) Opposing intervenors, including CUB and DALC/WWF, questioned how much of the power transmitted along the line would be generated by fossil fuel stations or is overstated by the applicants' modeling. ([PSC REF#: 372105](#) at 4 and [PSC REF#: 372116](#) at 2.) The Commission finds there is substantial evidence that supports the applicants' finding that the project will support the interconnection of an additional 8.4 gigawatts (GW) of new renewable generation located both in Wisconsin and to the west of the state. In addition to the inclusion of this project as part of the required network upgrades that support interconnection of these resources, the applicants and supporting intervenors presented evidence that until the project is constructed, these "conditional generators" could be subject to annual or quarterly operating studies that could limit their ability to deliver their full output to the grid. (Direct-MISO-Ellis-32; Direct-CEO-Craven-r at 6-7; Rebuttal-Applicants-Dagenais-r at 28-29.)

The Commission further recognizes that while there certainly is, and will continue to be, some renewable development occurring in Wisconsin (as evidenced by recently proposed or approved projects), it is not going to be enough for utilities to achieve the renewable or carbon-free goals they and the state of Wisconsin have set. Further, Wisconsin does not have the wind capacity or land space to have all of the generation located within the state. The project will help Wisconsin realize the full benefit of the lower-cost renewable generation being developed to the west. Commission staff and the applicants studied the addition of solar generating units in Wisconsin and both analyses determined that the addition of solar or renewable generation in Wisconsin does not erase the economic benefits of the project. Further, the Commission finds

that the applicants and intervenors such as MISO demonstrated that the vast majority of renewable generation development in the MISO region is planned to, and is more likely to, happen in areas to the west of Wisconsin. This supports the Commission's finding that the project is needed to relieve congestion that is likely to increase as a result of the substantial amount of renewables planned to come online over the course of the life of the project, and the economic analysis shows that as this renewable development increases, the economic benefits of the project are likely to increase.

Therefore, the Commission finds that this project is necessary to support interconnection of renewable resources among other public policy benefits.

Alternatives

Transmission System Alternatives

The applicants studied several other transmission system alternatives and non-transmission alternatives to assess their relative benefits compared to the project. ([PSC REF#: 372104](#) at 8.) These alternatives included:

1. Low voltage alternative – a 345 kV line from Hickory Creek substation to Cassville, then a 138 kV line from Cassville to Montfort to the Cardinal substation;
2. Non-transmission alternative – different generation resources, including 2 MW of residential-scale solar, a 30 MW solar plant at Nelson Dewey, 2.6 MW of energy efficiency, and 31.5 MW of demand response; and
3. Revised non-transmission alternative – using a resized utility solar facility based on the Badger Hollow cost information.

Multiple opposing intervenors also referenced Commission staff's base with asset renewal alternative as a lower cost option that could have been utilized. (See [PSC REF#:](#)

[372110](#), [PSC REF#: 372122](#), and [PSC REF#: 372106](#), among others.) The Commission finds that Commission staff's base with asset renewal alternative provides a targeted solution to specific reliability issues, and is not an approvable, feasible, or robust alternative to the project. The project, unlike the alternatives studied that may also provide certain benefits, provides economic, reliability, and public policy benefits, the costs of which would not fall exclusively on Wisconsin customers. (Direct-Applicants-Dagenais at 31.) While the project clearly provides reliability benefits, the need identified for this project was not simply to address reliability contingencies projected on existing lines. Rather, it also ensures low cost delivery of new wind generation resources west of Wisconsin, reduces congestion costs, improves the flexibility of the transmission system, and avoids the cost to rebuild certain existing transmission lines. The base with asset renewal alternative has also not been developed or studied in any detail other than as a modeling comparison to the project. Therefore, the Commission does not have any certainty based on the record that such an alternative is truly feasible or implementable. Rather, the applicants and other intervenors provided substantial evidence that denying the project and pursuing projects like the base with asset renewal alternative would entail unknown costs that fall directly on Wisconsin ratepayers and would add uncertainty into the interconnection of a substantial number of renewable generation projects in the MISO interconnection queue, including some in Wisconsin. (Rebuttal-Applicants-Pfeifenberger-r at 11-12.)

Intervenors DALC and WWF presented a critique of the applicants' choice of alternatives to compare to the project. DALC/WWF asserted that an alternative utilizing some combination of solar PV and energy storage, in combination with technologies such as enhanced power line monitoring and power electronics should have been studied by the applicants in more detail.

([PSC REF#: 372116](#) at 13-14.) Specifically, DALC/WWF cited the applicants' assessment of a battery storage and solar solution as evidence that more consideration of alternatives was necessary. (*Id.* at 16.) DALC/WWF argued that because the projected cost of the battery storage and solar solution was projected to be less than the cost of the project, additional study of these alternative transmission solutions was necessary to justify the project.

The applicants asserted that such a solution is not a feasible alternative because the transmission asset is needed to consistently and reliably relieve congestion and transfer large amounts of power to the east from the wind-rich states of Iowa, Minnesota, and the Dakotas. The applicants argued that battery storage is not a technically feasible substitute for transmission to relieve congestion because battery or energy storage can typically only discharge for a few hours, whereas congestion on the transmission system in southwest Wisconsin lasts double or even triple that amount of time many times during the year. The applicants further asserted that the non-transmission alternative was designed only to achieve a transfer capability equivalent to the project, and that to achieve this single objective, this alternative has a present value cost of \$194 to \$314 million, which well exceeds the cost of the project to Wisconsin customers (\$67 million). The applicants argued that developing a battery storage alternative to achieve the other economic, reliability, and public policy benefits of the project would cost likely billions of dollars. (Sur-surrebuttal-Applicants-Chao at 3-4; Dagenais Hearing Tr. 569:16–573:18.)

The Commission finds the project provides the highest amount of benefits to Wisconsin transmission customers across plausible futures, and provides a robust long-term solution for Wisconsin's energy needs. The Commission finds no other alternatives evaluated by the applicants, Commission staff, or intervenors are feasible or provide the amount of benefits as the

project. The Commission did not find testimony regarding the viability of a battery or no-wires alternative to be sufficiently credible. Intervenors failed to demonstrate that such alternatives would be as effective at interconnecting new low-cost renewable generation, as the project is expected by the applicants to facilitate an additional 8.4 GW of new low-cost renewable energy resources in Wisconsin and in states to the west of Wisconsin. There was no credible evidence that a battery solution would be approved by MISO to interconnect the renewable generation projects currently conditioned on construction of the project at their full capacity. While non-transmission alternatives such as battery storage might be able to replicate aspects of the benefits of the project, these alternatives do not have the same breadth of benefits as the project, and there is no credible evidence that such a limited solution would be eligible for cost-sharing by MISO states like the project. (Rebuttal-Applicants-Pfeifenberger-r at 29.) For the purposes of this proceeding, the Commission deems reasonable the applicants' consideration of transmission system alternatives. The Commission further finds that the applicants' basis for choosing the project over other transmission system alternatives is reasonable and supported by substantial evidence.

Energy Efficiency and Conservation and Alternative Sources of Electric Supply

In making its decision, the Commission considers whether there are technically feasible and environmentally sound alternatives to building the project, per Wis. Stat. §§ 1.12(4) and 196.025(1). The Commission has an obligation to consider these priorities in all energy related decisions. *Id.* However, when applying the energy priorities in the context of a proposed high-voltage transmission line such as this project, the Commission may not impose requirements on a public utility in such a proceeding. Wis. Stat. § 196.025(1)(d). This limitation

may narrow the Commission's application of the energy priorities law to this project, but the Commission's practice has been to consider the state's energy policy when making all energy related decisions to the extent possible. The Commission sees no reason to change course here. Recognizing that this project is a transmission line that cannot discriminate against what sources of energy flow through it, only the first energy priority under Wis. Stat. § 1.12(4) (meeting state energy needs through efficiency or conservation) is at issue here. In applying the energy priorities to this project, the Commission assesses whether energy efficiency and conservation, load management, lower-voltage transmission, or solar and other distributed generation are reasonable alternatives to the project.

The applicants studied energy efficiency and conservation, load management, and distributed generation including solar generation as alternatives to meet the need for the project. The applicants concluded that these alternatives would not provide the benefits of the project. As discussed above, Commission staff also performed a sensitivity analysis to assess the impact of load reductions on the economics of the project, which could be achieved through non-transmission alternative means such as energy efficiency, demand response, and distributed generation resources. ([PSC REF#: 365082](#) at 30-32.) The sensitivity was implemented by assuming a ten percent load reduction across each of the load serving entities in the ATC service territory. In this sensitivity, the result was that the project had similar economic benefits with a ten percent load reduction future as the applicants' demand and energy forecasts. This sensitivity demonstrated that the projected economic benefits associated with the project may still be present in situations where large amounts of alternative supply sources have been implemented, regardless of what form they may take. This result authenticates other PROMOD analyses performed by the

applicants, modeling zero and negative load growth scenarios while maintaining, or boosting the potential positive economic benefits for the project. ([PSC REF#: 360184](#) at 4-5.)

The Commission finds that energy efficiency and conservation and other sources of electric supply are not technically feasible, cost-effective alternatives to the project. The analysis performed by Commission staff and the applicants show that even substantial reduction in load from whatever combination of energy efficiency increases, distributed generation, or other method of reducing energy demands would not significantly reduce congestion or reduce the economic benefits of the project. In addition, the Commission's finding that battery storage or other non-transmission alternatives to the project have not been demonstrated to be cost-effective or technically feasible alternatives to the project further support the Commission's finding here.

Material Adverse Impact on the Wholesale Electric Market

In making its decision, the Commission must consider whether the project will have a material adverse impact on competition in the relevant wholesale electric service market under Wis. Stat. § 196.491(3)(d)7.

The Commission finds that the addition of the project by the applicants will not have a material adverse impact on competition in the relevant wholesale electric service market in that it will increase access to lower cost generation from outside of the project area. Commission staff raised concerns that although the MVP portfolio as a whole was anticipated to provide net benefits to the wholesale market, this project alone could potentially have a negative impact in certain futures. (Direct-PSC-Vedvik at 32.) MISO and the applicants provided evidence that because the benefits to the wholesale market were calculated on a portfolio basis, the impact the project has on the benefits from other MVP projects are an important consideration missing from

Commission staff's evaluation. (Rebuttal-MISO-Ellis-r2 at 23; Tr. 413:10-23.) The question before the Commission is whether the project will have a material adverse impact on competition in the wholesale market. The Commission finds that the analysis by MISO and the applicants that the project, as part of the MVP portfolio, will provide net benefits and increased competition to the region in the form of increased access to low cost generators.

Routing

Transmission Line Route

As noted previously, for the purposes of its review and preparation of the final EIS, the Commission divided the applicants' proposed alternative route segments for the transmission line into four geographic areas. The Commission is tasked with determining whether the design and location or route is in the public interest considering alternative sources of supply, alternative locations or routes, individual hardships, engineering, economic, safety, reliability, and environmental factors. The Commission must also assess whether the project route selected has utilized, to the greatest extent feasible that is consistent with economic and engineering considerations, reliability of the electric system, and protection of the environment, the following corridors in the following order of priority:

- (a) Existing utility corridors.
- (b) Highway and railroad corridors.
- (c) Recreational trails, to the extent that the facilities may be constructed below ground and that the facilities do not significantly impact environmentally sensitive areas.
- (d) New corridors.

Wis. Stat. § 1.12(6). Therefore, the Commission must weigh and balance these requirements against the different attributes of the proposed routes to determine which route, or combination

of routes, is in the public interest. The applicants, Commission staff, DNR, DATCP, WisDOT, intervenors, and members of the public provided substantial detail and opinions on the merits of the route alternatives that created a robust record upon which the Commission could base its routing decision considering the factors identified above.

Mississippi River Routing Area

The Mississippi River Routing Area is located near Cassville, Wisconsin, and lies entirely within Grant County. The applicants provided two separate locations (referred to as the Nelson Dewey and Stoneman crossings) for the crossing of the Mississippi River. A new Mississippi River crossing is proposed that would connect the Wisconsin portion of the project at the Nelson Dewey Substation. At the Stoneman crossing, there are existing 161 kV and 69 kV electric transmission lines that cross the Mississippi River connecting at the existing Stoneman Substation. Each of these crossing options includes two separate route alternatives (North and South) that connect to route alternatives in the Western Routing Area.

The route alternatives under consideration in this routing area are:

- Nelson Dewey-North which only connects to Western-North
- Nelson Dewey-South which only connects to Western-South
- Stoneman-North which only connects to Western-North
- Stoneman-South which only connects to Western-South

The Nelson Dewey-North alternative consists of route Subsegments A01A, A01B, A02, and A03. The Nelson Dewey-South alternative consists of route Subsegments A01A, C02A, C02B, and C04. The Stoneman-North alternative consists of route Subsegments B01, B02, C01, and C03. The Stoneman-South alternative consists of route Subsegments B01, B02, B03, and B04. (Ex.-PSC-FEIS, [PSC REF#: 366195](#) at 222-270.) An additional subsegment is under

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consideration by Rural Utilities Service (RUS) that would replace Subsegment A01B.

(Ex.-PSC-FEIS, [PSC REF#: 366195](#), Appendix C.) The subsegment under consideration by RUS is not proposed by the applicants.

Western Routing Area

The Western Routing Area is located in Grant, Iowa, and Lafayette Counties. The area is comprised of two main route alternatives (Western-North and Western-South) that connect the Mississippi River Routing Area and the Eastern Routing Area:

- The Western-North Route Alternative travels northeast from the village of Cassville to the village of Montfort.
- The Western-South Route Alternative travels east from the village of Cassville to the city of Platteville and then north to the village of Montfort.

The Western-North Route Alternative consists of route Subsegments D01, D03, D04, D05, D08, and D09A. The Western-South Route Alternative consists of route Subsegments E01, E03, E04, E06, E07, E09, E10, E12, E13, E14, E16, E18, E19, G01, F01, F02, F03, G06A, G06B, G08, G09, H01, H02, H03, H06, H07, H09, I01, I02, I05, I06, I07, I08, I09, K01, L01, L02, L03, L04, and D10C. Subsegments D10A, D10B, and L05 are common to both route alternatives, and are located in the area entering the proposed Hill Valley Substation.

(Ex.-PSC-FEIS, [PSC REF#: 366195](#) at 271-333.)

Additional routes are under consideration by RUS in the vicinity of Platteville and Livingston. Subsegments replaced near Platteville include F02, F03, and G06A. Subsegments replaced near Livingston include I01, I02, I03, I04, I05, I06, I07, I08, and I09. (Ex.-PSC-FEIS, [PSC REF#: 366195](#), Appendix C). Neither the Platteville nor the Livingston routes under consideration by RUS were proposed by the applicants.

Eastern Routing Area

The Eastern Routing Area is located within Iowa and Dane Counties. The area is comprised of two main route alternatives that connect the Western Routing Area near the Village of Montfort and the Dane County Routing area near the Village of Cross Plains.

- The Eastern-North Route Alternative generally travels north and east from the village of Montfort to the village of Cross Plains.
- The Eastern-South Route Alternative generally travels east and north from village of Montfort to village of Cross Plains.

The Eastern-North Route Alternative consists of route Subsegments P01, P02, P03, P04, P05, P06, P07, P08, P09, W01, and W02. The Eastern-South Route Alternative consists of route Subsegments Q01, Q02, Q03, Q04, Q05, Q06, S01, S04, S05, S08, S09, S10A, S10B, S10C, S10D, S12, S13, T01, T02, T03, T04, T05, V01, V02, V03, V04, V05, and V06. Subsegments N07 (138kV only), N01, N03, N04, N05, and N06 are common to both route alternatives.

(Ex.-PSC-FEIS, [PSC REF#: 366195](#) at 334-431.)

Additional routes are under consideration by RUS in the vicinity of Dodgeville, Barneveld, and Mount Horeb. (Ex.-PSC-FEIS, [PSC REF#: 366195](#), Appendix C.) None of the routes under consideration by RUS were proposed by the applicants, although the Dodgeville and Barneveld options were brought forward into the EIS during the Commission's review of the project.

In the area of Dodgeville, the Eastern-South: Dodgeville Option consists of Subsegments L04, R01, R02, R03, R04, R05, R06, R07, R08, R09, R10, R11, R13, and R14. Subsegments replaced include N01, N03, N04, N05, N06, N07-138kV only, Q01, Q02, Q03, Q04, Q05, Q06. (Ex.-PSC-FEIS, [PSC REF#: 366195](#) at 471-512.) The additional options are under consideration

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by RUS in the vicinity of N01, N03, and N07 were not proposed by the applicants.

(Ex.-PSC-FEIS, [PSC REF#: 366195](#), Appendix C.)

Brought forward and supported by WisDOT, the Barneveld option is similar to RUS options referred to as Barneveld-North Extended and Barneveld-North, as described in the Commission's final EIS. This option may include combinations of Subsegments S11A, S11B, S11C, and S11D. Subsegments affected may include S10A, S10B, S10C, and S10D.

(Ex.-PSC-FEIS, [PSC REF#: 366195](#), Appendix C.)

Additional route options exist in the area of the transition between the Eastern and Dane County Routing Areas, referred to as the Stagecoach Options. These options include:

- Eastern-North: Stagecoach
- Eastern-South: Stagecoach

The Eastern-North: Stagecoach Option consists of Subsegments X01 and X02. Subsegments affected include W01, W02, W03, and W04. The Eastern-South: Stagecoach Option consists of Subsegment X02. Subsegments replaced by these options include W03 and W04. (Ex.-PSC-FEIS, [PSC REF#: 366195](#) at 471-512.)

Dane County Routing Area

The Dane County Routing Area is located entirely within Dane County, and connects the Eastern Routing Area near the village of Cross Plains to the Cardinal Substation near the City of Middleton. The Dane County Routing Area starts near Village of Cross Plains and follows common route subsegments east to Cleveland Road where it separates into two route alternatives, Black Earth Creek-North and Black Earth Creek-South.

The Black Earth Creek-North Route Alternative is located just west of the Cardinal Substation in the Dane County Routing Area and travels straight east from the intersection of

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USH 14 and Cleveland Road, through Black Earth Creek Wildlife Area, along existing transmission ROW, to the north of USH 14. The Black Earth Creek-South Alternative is located just west of the Cardinal Substation in the Dane County Routing Area and travels southeast adjacent to the north side of USH 14, then crosses to the south side of USH 14, and then travels northeast adjacent to the south side of USH 14. The proposed route travels east along common route subsegments until it terminates at the Cardinal Substation in Middleton, Wisconsin.

The Dane County Routing Area consists of common Subsegments W03, W04, Y01A, Y01B, Y01C, Y05, Y06A, Y07, and Y08. The Black Earth Creek-North Route Alternative consists of Subsegment Y06B. The Black Earth Creek-South Route Alternative consists of Subsegment Z02 and Z01B. (Ex.-PSC-FEIS, [PSC REF#: 366195](#) at 432-470.)

Additional routes are under consideration by RUS in the vicinity of Subsegments W03, W04, Y06A, Y06B, and Z02. (Ex.-PSC-FEIS, [PSC REF#: 366195](#), Appendix C.) None of the additional routes under consideration by RUS were proposed by the applicants.

Authorized Project Route

As discussed below, the Commission authorizes a route utilizing either the Nelson Dewey or Stoneman river crossings, including the corresponding Nelson Dewey-North or Stoneman-North segments, the Western-North, the Eastern-South along with the WisDOT modification, Stagecoach-South, and Black Earth Creek-South, and the common segments comprising the Dane County Routing Area, with the modifications described in this Final Decision to minimize adverse impacts to the environment, communities and landowners. The Commission finds, considering alternative sources of supply, alternative locations or routes, individual hardships, engineering, economic, safety, reliability and environmental factors, that

these segments together comprise the most reasonable route. The authorized route is superior to other route alternatives and modifications evaluated. When compared to the alternate route proposed, this route combination consisting of the applicants' preferred route and the Commission's segment modifications is 42 percent within shared ROW by area.

(*See, e.g., PSC REF#: 358850* at 5.) As such, it impacts fewer acres of new ROW, crosses less agricultural land, impacts less new ROW forest, impacts less new ROW forested wetlands, and impacts less non-forested wetlands, and has a lower cost to Wisconsin customers.¹⁷

Mississippi River Routing Area

Both USFWS and USACE are required to authorize the route through the Upper Mississippi National Fish and Wildlife Refuge (Refuge) through both realty agreements (from both USACE and USFWS) and Clean Water Act 404 permitting (by USACE). Recognizing that USFWS has primary siting authority for the project within the Refuge, that no determination by USFWS is yet available, and that both crossings in Wisconsin are permissible and constructible, the Commission finds it reasonable to authorize the applicants to use either the Nelson Dewey or Stoneman river crossings, though the Commission prefers the Nelson Dewey crossing.

The Nelson Dewey-North alternative consists of route Subsegments A01A, A01B, A02, and A03, and extends from the Nelson Dewey crossing to the western end of the Western-North route.

The Stoneman-North alternative consists of route Subsegments B01, B02, C01, and C03, and extends from the Stoneman crossing to the western end of the Western-North route. If Stoneman-North is used, then the Commission finds it reasonable to require that the applicants

¹⁷ *See, e.g., PSC REF#: 358850* at 5.

shall consult with Commission staff regarding the siting and design of the existing and new facilities, more specifically the potential to multi-circuit the existing 161 kV and 69 kV facilities with the proposed 345 kV facilities, along Subsegment B02, to minimize the environmental and socioeconomic impacts to the greatest extent practicable.

DALC/WWF argued that the applicants' determination that the only feasible and prudent river crossing alternatives for the project were located in the Refuge was not reasonable or lawful. The applicants presented evidence that they evaluated possible river crossings along more than 46 miles of the Mississippi River. (Direct-Applicants-Proctor at 4.) The applicants asserted they assessed engineering constraints and potential environmental and social impacts of seven possible Mississippi River crossings to determine the appropriate crossing locations for the project starting points in Wisconsin, soliciting and receiving feedback from federal, state, and local entities. At USFWS' request, the applicants prepared an Alternative Crossing Analysis report to identify and evaluate potential Mississippi River crossings. (Ex.-PSC-Data Request: Attachment to Response 4.17.)

Contrary to DALC/WWF's assertions, the proposed crossings are reasonable and lawful. The crossings are located in areas with existing utility substations, corridors, and an existing transmission line river crossing at the Stoneman Crossing. The proposed crossings are reasonable considering the project termini. The question of whether either crossing through the Refuge is legal and permissible will be determined by USFWS through a federal EIS. The final EIS in this proceeding did not identify any impacts to the environment that rose to the level of undue adverse impacts, and the Commission has imposed conditions to further protect environmental values that have the potential to be impacted by the project. The Commission

finds that the applicants provided substantial evidence that proposed river crossing locations are reasonable and permissible.

Western Routing Area

Both Western-North and Western-South route alternatives presented constructability challenges in the steep hilly terrain of the Driftless Area. However, Wis. Stat. § 1.12 establishes a siting priority policy that, to the greatest extent feasible that is consistent with economic and engineering considerations, reliability of the electric system, and protection of the environment, existing utility corridors are prioritized over highway, rail, or recreational, or new corridors. Western-South is approximately 18 miles longer, and its segments consist of more highway corridors that are considered a lower priority under Wisconsin Siting statutory priority. Alternatively, Western-North follows existing utility corridors for most of its length. Therefore, the Commission finds Western-North as the more reasonable alternative. The Western-North alternative consists of route Subsegments D01, D03, D04, D05, D08, D09A, D10A, D10B, and L05. No additional route modifications were selected in this routing area.

Eastern Routing Area

Eastern-North primarily traverses remote, steep, and hilly terrain which presents access and constructability challenges. Eastern-South primarily parallels the USH 18 corridor and adheres better to Wisconsin Siting statutory priority, whereas Eastern-North primarily utilized new corridors, the lowest siting priority. As a result, the Commission finds Eastern-South as the more reasonable route alternative. The approved Eastern-South alternative consists of route Subsegments Q01, Q02, Q03, Q04, Q05, Q06, S01, S04, S05, S08, S09, S10A, S10B, S10C,

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S10D, S12, S13, T01, T02, T03, T04, T05, V01, V02, V03, and V04 with modifications described below.

During the review process, public comments requested that Subsegments X01 and X02 be considered as a viable route option between the Eastern and Dane County routing areas just south of Cross Plains. ([PSC REF#: 366195](#) at 471-473.) In addition, intervenor Michael Dubis provided persuasive testimony regarding the Eastern-South: Stagecoach option. Mr. Dubis provided evidence demonstrating this route option does not impact any homes within 300 feet and avoids six residences that would have been within 300 feet of the centerline to the north along Stagecoach Road and Hwy P under Eastern-South Route. Also, this route option reduces forest, grassland, and wetland impacts, and is cheaper. Therefore, the Commission finds it reasonable to require the applicants to construct Subsegment X02, which is the Eastern-South: Stagecoach option.

During the review process, WisDOT also requested a modification to the Eastern-South route near Barneveld along Subsegments S10B and S10C.¹⁸ WisDOT presented testimony that such a modification would reduce impacts to land encumbered by a conservation easement, limit or eliminate the need for guardrail, and reduce the effect of line blowout on private property. (Direct-WisDOT-Fasick at 4.) The Commission finds it reasonable to require the applicants to work with appropriate WisDOT staff to construct the requested route modification.

During the public hearing sessions, it came to the Commission's attention that a Veterans Memorial would be affected by Eastern-South. The Commission finds it appropriate for the

¹⁸ [PSC REF#: 366195](#) at 343, [PSC REF#: 367275](#) at 3, and [PSC REF#: 367277](#) at 1.

applicants to work with appropriate entities to minimize the impacts of the project on the Mount Horeb Veterans Memorial to the extent practicable.

During the scoping meeting sessions in November of 2018, it came to the Commission's attention that the Thomas family in Cobb would sustain significant permanent impacts to their property if the Eastern-South alternative is approved. After discussions with the Thomases, the applicants submitted plans for two alignment modifications that would reduce impacts to the Thomas property. ([PSC REF#: 366195](#) at 390.) The Commission finds it reasonable to require the applicants to allow the Thomases at 826 USH 18, Dodgeville, Wisconsin 53533 to choose their preferred route modification on Subsegment Q02. If the Thomases refuse or otherwise fail to make this selection within a reasonable time after which the applicants have requested a selection, the applicants shall select the route modification to be constructed.

During the review process, it came to the Commission's attention that Eastern-South is in close proximity of Military Ridge State Trail for approximately 20 miles. ([PSC REF#: 366195](#) at 425-427.) The Commission finds it reasonable to require the applicants to work with appropriate staff from DNR to minimize the impacts of the project on the Military Ridge State Trail.

Dane County Routing Area

The approved route in the Dane County routing area consists of common subsegments, alternative subsegments, and additional route options in the following configuration from west to east: Y01A, Y01B, Y01C, Y05, Y06A, Z02, Z01B, Y07, and Y08. Subsegments Z02 and Z01B are part of the Black Earth Creek-South alternative on the north side of USH 14 in the town of Middleton.

During the review process, it came to the Commission's attention that existing transmission lines along Subsegment Y06B could be relocated to fit in a multi-circuit configuration with the proposed 345 kV line if Black Earth Creek-South were approved. ([PSC REF#: 366195](#) at 442-443.) The applicants agreed to implement this solution if this route modification were approved by the Commission, including removal of the existing transmission line, release of the easement, and restoration of the corridor. (Direct-DC-Marsh at 4.) The Commission finds it reasonable to require the applicants to remove the existing facilities associated with Line 6927 along Subsegment Y06B, release the existing easement rights associated with these facilities, and reimburse Dane County for the costs to restore the area within the utility ROW back to its natural landscape in an amount not to exceed five percent more than the estimated costs for restoration set forth in Surrebuttal-DC-Marsh-2.

Environmental Review

The project was reviewed by the Commission for environmental impacts. The Commission and DNR issued a joint final EIS regarding the project, pursuant to Wis. Stat. § 1.11 and Wis. Admin Code chs. NR 150 and PSC 4. ([PSC REF#: 370355](#).) The Commission is required to determine that the project will not have an undue adverse impact on other environmental values such as, but not limited to, ecological balance, public health and welfare, historic sites, geological formations, the aesthetics of land and water and recreational use. The final EIS focused on a broad range of ecological and socioeconomic impacts that could occur as a result of the construction and operation of the approved project that include, but are not limited to, local and regional natural resource areas, landowner rights, aesthetics, agricultural lands, airports and airstrips, archaeological and historic resources, cultural resources, electric and

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magnetic fields, property values, radio and television reception, recreation and tourism, safety, stray voltage and dairy livestock, highways, communication facilities, vegetation management activities and the rights related to ongoing vegetation management, endangered resources, forested lands, grasslands, invasive species, waterways, wetlands, and wildlife.

DALC/WWF, along with many public commenters, argued that the Driftless Area where the project is proposed to be built contains unique and irreplaceable ecological, historic, cultural and aesthetic features. (Direct-DALC/WWF-Meine-r2 at 6-9). DALC/WWF asserted that the damage from constructing the project in the Driftless Area would cause undue adverse impacts to aesthetics and tourism, birds, forests, grasslands, waterways, wetlands, and land use plans. The Commission does not find that the project will have an undue adverse impact on the Driftless Area. This decision addresses each area of concern identified by DALC/WWF and others in detail below, and the Commission included conditions to address the environmental impacts from this project that require specific mitigation. The Commission agrees that the Driftless Area is a unique and important ecological area, but does not find that the record demonstrates that the resources in the project area are so unique or rare that a combination of best management practices and other known mitigation measures and conditions cannot adequately protect the environmental resources along the project route. The Commission finds the testimony and conclusions of the experts on its staff and at DNR and DATCP who determined that the project was permissible and that the project would not have an undue adverse impact on the Driftless Area more credible. The Commission finds that substantial evidence supports its finding that the project will not have an undue adverse impact on environmental values.

Compliance with the Wisconsin Environmental Policy Act (WEPA)

Wisconsin Stat. § 1.11 requires all state agencies to consider the environmental impacts of “major actions” that could significantly affect the quality of the human environment. In Wis. Admin. Code ch. PSC 4, the Commission has categorized the types of actions it undertakes for purposes of complying with this law.

Opposing intervenors asserted that the final EIS was insufficient because it did not adequately consider a U.S. Hwy 151 route alternative as well as ecological and socioeconomic factors, such as alleged effects on cultural and natural resources, ecological balance, wildlife habitat, historic sites, property values, health, and aesthetic values as required by Wis. Admin. Code § PSC 4.30(1)(b). ([PSC REF#: 370576](#) at 20, [PSC REF#: 370579](#) at 30 and 36, [PSC REF#: 370239](#)).

The Commission’s assessment of the project requires the Commission to determine whether it has complied with Wis. Stat. § 1.11 and Wis. Admin. Code ch. PSC 4, and if so, has the final EIS identified any undue adverse impacts to environmental values. The final EIS for this project contained over 600 pages documenting potential environmental and socioeconomic impacts, detailed descriptions of potential alternatives to the proposed action, and a comprehensive and detailed analysis of the proposed routes for the Commission’s consideration. The final EIS did not identify undue adverse impacts that would result from the project. Moreover, the final EIS incorporated public input, party recommendations, and the expertise of DNR, DATCP, and WisDOT to provide a list of 80 potential conditions for the Commission’s consideration to mitigate potential impacts of the project, many of which are incorporated into this Final Decision. The use of best management practices and the applicants’ adherence to the

conditions described below will preserve the ecological balance, public health and welfare, and aesthetics of the region while balancing the needs of the applicants to construct and operate this line.

Intervenors including DALC/WWF and JJI questioned whether the applicants' proposed route alternatives for siting the project complied with the requirements under Wis. Stat. § 1.11. For purposes of assessing a proposed transmission line under the CPCN law, the Commission and DNR are required "to consider only the location, site, or route for the project identified in the application and one alternative location, site, or route." Wis. Stat. § 196.025(2m)(c). The applicants provided two route alternatives for all segments of the project with the exception of the Dane County Routing area where only one viable path can connect the project to the existing Cardinal substation.¹⁹ The route alternatives consisted of a "preferred" route consisting of the applicants' preferred combination of route segments, an "alternative" route consisting of a different combination of route segments, and a number of additional segments proposed by the RUS in the preparation of its environmental impact statement, intervenors, and WisDOT. These route segments were designed to follow the two highest priority siting corridors under Wis. Stat. § 1.12(6), with the preferred route following existing utility corridors and the alternative route following a combination of existing utility and highway corridors. Considering the starting and end point for the project and the location of the proposed Hill Valley substation, the Commission finds the proposed routes were reasonable and complied with siting priority law.

¹⁹ No party suggested that the short Dane County Routing Area segment of the project where there is only one segment alternative constitutes a failure to provide an alternative location, site, or route under Wis. Stat. § 196.025(2m)(c).

JJI filed a Motion for Interlocutory Review with the Commission arguing that the final EIS was deficient for failing to analyze a potential route alternative generally following USH 151 from Platteville to Dodgeville. This route was not an alternative provided in the application or analyzed by the applicants; and, once the Commission deems an application complete, neither the applicants nor the Commission is required by WEPA to develop additional potential routes not included in the application. (*See* Wis. Stat. § 196025(2m)(c).) Rather, the Commission's charge is to assess the "location, site, or route for the project identified in the application and one alternative location, site, or route." *Id.* The USH 151 route was discussed in the final EIS for purposes of comparison to the numerous proposed route segments in the application, not as a fully developed route alternative. Furthermore, it is under the Commission's exclusive authority to decide whether a supplemental EIS is required. Wis. Admin. Code § PSC 4.35. While a party may challenge the sufficiency of an EIS through the contested case process as an element of the requirements for Commission approval of a project, neither a party nor the ALJ can compel the Commission to prepare a supplemental EIS any more than a party can compel the Commission to make any finding that is ultimately a Commission decision. Wis. Admin. Code § PSC 2.04. For these reasons and others, the denial by operation of law of JJI's Motion for Interlocutory Review was appropriate.

The Commission has fulfilled its requirements under WEPA through the preparation and issuance of the final EIS and the creation of the record of the technical and public hearings held in the project area. The joint final EIS was prepared by the staffs of the Commission and DNR. The Commission finds that its review of the project is adequate in both of these respects.

Standard Conditions Associated with Electric Transmission Line Projects

Typically, the Commission's Final Order for transmission line projects includes several conditions that it considers standard in transmission line projects. These standard order conditions have been included in recent transmission line orders, such as that in *Joint Application of American Transmission Company LLC and Northern States Power Company-Wisconsin, as Electric Public Utilities, for Authority to Construct and Operate a New Badger-Coulee 345 kV Transmission Line from the La Crosse Area, in La Crosse County, to the Greater Madison Area in Dane County, Wisconsin*, Docket No. 5-CE-142 (PSC April 23, 2015). The Commission finds it reasonable to include, as conditions of approval, the following standard order conditions:

- Specifying the facilities to be built;
- Requiring notification if the cost of the project exceeds the authorized cost by more than 10 percent;
- Requiring notification of any substantial change in project scope;
- Specifying the authorized route;
- Requiring notice if ownership of the project changes;
- Requiring that all necessary permits be obtained for a construction spread before work begins on that construction spread;
- Specifying a process for minor route adjustments;
- Requiring the applicants to work with landowners and DNR to minimize impacts to wetlands;
- Requiring that the applicants provide a geographic information system database of the project as constructed;
- Requiring quarterly construction progress reports;
- Requiring reporting of actual costs;
- Specifying the period during which the authorization is valid;
- Specifying a process to extend the period during which the authorization is valid;
- Specifying the date that the Final Decision takes effect;
- Requiring pre- and post-construction stray voltage testing; and
- Retaining jurisdiction.

The Commission finds that the imposition of the same standard conditions is reasonable and in the public interest. These conditions mitigate potential impacts and ensure the Commission and the public are informed as construction proceeds. Commissioner Nowak dissented, in part, on the addition of DNR to the condition requiring the applicants to work with DNR regarding minimizing impacts to wetlands.

Minor Routing Flexibility

The Commission recognizes that minor routing adjustments (MRA) may be needed for any approved route for the protection of social, cultural, or environmental resources based on the final design of the project, subsequent to Commission review and authorization. Situations may be discovered in the field that were not apparent based on the information available to the applicants in the development of the proposed routes or to the Commission in making its decision. When applicants identify such situations which involve a change in the authorized centerline of the project, they shall consult with Commission staff regarding whether the change rises to the level where Commission review and approval is appropriate. If Commission review as an MRA is appropriate, the applicants shall request MRA authorization. A request for MRA authorization shall take the form of a letter to the Commission describing:

1. The nature of the requested change;
2. The reason for the requested change;
3. The incremental cost difference from that of the approved route;
4. The incremental difference in any environmental impacts;
5. Communications with potentially affected landowners regarding the change;
6. Documentation of discussions with other agencies regarding the change; and
7. A map showing the approved route and the proposed modification, property boundaries, relevant natural features such as woodlands, wetlands, waterways, and other sensitive areas.

The requests will be reviewed by Commission staff knowledgeable about the project. Approval of the requests is delegated to the Administrator of the Division of Energy Regulation and Analysis.

The requested change may be granted if the proposed change:

1. Does not affect new landowners on the selected route who have not been given proper notice and hearing opportunity;
2. Does not impact new resources or cause additional impacts that were not described in the EIS; and,
3. Is agreed to by affected landowners, and agreement is affirmed in writing.

Changes that do not meet all three of the criteria listed above would require reopening of the docket.

The Commission finds that it is reasonable that the applicants be granted minor routing flexibility. The Commission spends considerable time reviewing and selecting a route, and it is therefore of utmost importance that if the chosen route must be changed, the Commission must receive appropriate notification. The applicants shall follow the described process to obtain authorization for any MRAs.

Existing Easements

The applicants stated that in areas where the new line would be multi-circuited with existing lines, they would purchase new easement rights for the project at the stated ROW widths (e.g. 150 feet) and, unique to the approved project, retain all existing easement rights where the project overlaps with existing transmission facilities. ([PSC REF#: 370355](#), at Sections 6.1.3.3, 7.1.3.3, 8.1.3.3, and 9.1.3.3.) The applicants indicated that they would release existing easements where the easements would not be needed for the long-term operation and maintenance of the transmission line, but because the applicants stated that they cannot make

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these determinations until after the project is built they cannot commit to releasing any existing easements. In one exception, the applicants have stated that they could release the existing easement through the Black Earth Creek Wildlife Area Sunnyside Unit.

If the easements for existing facilities are retained, then the environmental and socioeconomic impacts of the project may be greater than stated in the application materials. The proposed width of the project corridor would be significantly greater along several subsegments, which would impact existing natural resources, landowners, and communities in many different ways. For example, for the Western-North alternative Segments D01, D04, and D08 are proposed to be double-circuited with line X-16, totaling approximately 31.6 miles of double-circuited transmission corridor. This means that absent a condition regarding use of existing ROW, the applicants could potentially add a 150-foot wide and 31.6-mile long new corridor to the existing ROW where the proposed line would be double-circuited with the existing line.

The Commission finds it reasonable to require the applicants, as a condition of authorization of the project, to minimize the amount of new ROW necessary by maximizing the use of existing easements where the line is multi-circuited with existing transmission facilities. Where the project is multi-circuited with existing transmission lines, the existing easement rights and ROW must be used for purposes of locating the new transmission line to the greatest extent practicable. In no segment of the approved route where the proposed transmission line is to be multi-circuited with existing transmission lines shall the combined width of existing and new ROW exceed 150 feet unless the applicants request and receive approval to exceed this width through the MRA process provided herein.

The Commission further finds it reasonable to require the applicants, as a condition of authorization of the project, to minimize the amount of new ROW necessary by maximizing the use of existing easements where the line is constructed in a parallel configuration with existing transmission facilities. In those segments where the project is built in a single-circuit configuration adjacent to existing transmission line corridors owned by an applicant or applicants, the existing easement rights and ROW must be used for purposes of locating the new transmission line to the greatest extent practicable by locating the new 345 kV line as close to existing infrastructure as allowed under applicable law and operational standards, and to minimize the need to acquire additional ROW to the greatest extent practicable.

Hazard Tree Easements

Most transmission line easements contain language that specifically grants the utility the right to remove hazard trees outside of the easement, along with the permission to enter off-ROW areas in a reasonable manner in order to conduct tree removal activities. The applicants have stated that such language is standard in their easement contracts. Utilities can identify and respond to potential power line natural hazards under Wis. Admin. Code § PSC 113.0512(3).

For the project, the applicants intend to use the eminent domain authority granted them through the Commission's CPCN to acquire additional land rights through the use of a "hazard tree easement" for properties outside of the proposed ROW that would not otherwise be encumbered by a standard transmission line easement. The applicants contend that the Commission lacks authority to alter the Wis. Stat. ch. 32 processes and should not establish any condition regarding condemnation and hazard trees. The applicants stated that they will use the

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statutorily defined process in Wis. Stat. ch. 32 to acquire all necessary land rights for the safe and reliable operation of the transmission line. (Rebuttal-Applicants-Benzschawel-24 to 25; Surrebuttal-Applicants-Benzschawel-5; Rebuttal-Applicants-Stuart-3 to 4, 7; Ex.-Applicants-Stuart-1; Ex.-Applicants-Stuart-2; Direct-Applicants-Valentine-15.)

JJI, SOUL, and J. Schwarzmans supported an order condition that would prohibit use of eminent domain authority granted through a Commission CPCN to acquire hazard tree easements for properties not encumbered by a standard transmission line ROW easement. (Ex.-PSC-FEIS-r, [PSC REF#: 366195](#) at 143; Valentine Tr. 1767:3-8; Initial Br.-Joe Schwarzmans at 17.)

Eminent domain is governed by Wis. Stat. ch. 32. In granting a CPCN to the applicants, the Commission authorizes the applicants to use eminent domain to acquire lands and interests needed for the project as described in the Certificate, and the propriety of the applicants' use of eminent domain is for the courts to determine if necessary. Evidence in the record establishes that the right to remove hazard trees is necessary for the safe operation and reliability of the transmission system and, when justified, properly acquired through the use of eminent domain. Accordingly, the Commission declines to include a condition addressing when applicants can use eminent domain to acquire hazard tree easements, and instead authorizes the applicants to acquire all necessary property rights and interests necessary to construct and operate the project as approved herein. Because the question of whether lands or interests the applicants acquire through eminent domain are needed for the project is left to the courts, the Commission will not dictate what circumstances justify the applicants' acquisition of hazard tree easements.

Independent Construction Monitors

While pre- and post-construction conditions specified in the Commission's order and the DNR's permit can avoid, minimize, or mitigate the potential adverse impacts of an approved project, it can be useful to employ an independent environmental monitor (IEM) and/or an independent agricultural monitor (IAM). These independent construction monitors assist the regulatory agencies in ensuring compliance with regulatory requirements and have stop work authority. ([PSC REF#: 370355](#), at Sections 4.2.5 and 11.4.1.)

For several recent major transmission line projects, the Commission has authorized the hiring of an IEM. An IAM has also been found useful for the most recent high-voltage transmission projects, such as Rockdale to West Middleton and Alma-La Crosse, for construction activities that impact agricultural lands. For Badger-Coulee and North Appleton-Morgan, the Commission combined the roles of the IEM and the IAM into one position under the IEM title; however, when the IEM was working in the capacity as the IAM it did not have stop work authority. Similar to IEMs, the benefits of an IAM are for the regulatory agencies to obtain a current record of construction activities and agricultural protection measures and to actively prevent or minimize potential impacts. Independent monitors are typically required by the Commission after considering the scope of the project, the diversity of landscapes through which the transmission line would be constructed, and the presence of sensitive natural resources. The independent monitors would be funded by the applicants, would report directly to Commission, DNR, and DATCP staff, and would, when authorized by the Commission, have stop work authority. Independent monitors (IEM and IAM) may be appropriately considered for the project given the length of the proposed routes and the corresponding broad range, large number, and high

quality of natural resources and agricultural lands that would be impacted as a result of the construction and continued operation of the project.

The Commission finds that because the project includes a number of locations with environmental and agricultural issues and because of the complexity and scope of the project, it is reasonable to employ an independent construction monitor (a combined IEM/IAM) during the construction phase of the approved project. The Commission requires the applicants to assist Commission staff in the preparation of a request for proposal (RFP) to hire the IEM/IAM. The RFP shall be issued in consultation with the Commission, DNR, and DATCP. The applicants are to fund the salary and expenses of the IEM/IAM. The IEM/IAM will report to and consult with the Commission to ensure the applicants adhere to this Final Decision and all permits. The IEM/IAM will have stop work authority when acting as an IEM but not when acting as an IAM. The IEM would have the authority to stop work on any construction spread if the work would violate this Final Decision or any regulatory permit condition. The applicants and their contractors shall promptly stop work on a construction spread if directed to do so by the IEM.

Chairperson Valcq dissented and would have required separate IEM and IAMs with stop work authority for both.

Construction and Mitigation Plan

A Commission-approved construction and mitigation plan (CMP) was required by the Commission in previous dockets prior to the start of construction. (Ex.-PSC-FEIS-r, [PSC REF#: 369179](#), Table 11-56, item 28.) The CMP serves to lay out the baseline requirements for implementing environmental requirements, statutes, rules, and the conditions of the Commission's Final Decision. A CMP provides a mechanism for the applicants to identify

sensitive resources and mitigation measures that would be implemented along an approved route prior to construction. A CMP reviewed by the Commission ensures that sensitive sites are identified and properly protected from impacts that could occur as a result of the construction and continued operation of the project. In previous dockets, CMPs were useful tools for communicating appropriate mitigation measures, and also served as a training tool for construction contractors, construction crews, IEM(s), Commission staff, and other regulatory agencies. (Ex.-PSC-FEIS-r at 546.)

The Commission finds it reasonable to require the following:

- a. The applicants shall develop and submit CMPs on a segment-by-segment²⁰ basis for Commission staff review to ensure all of the requirements in this Final Decision are addressed sufficiently in each plan. At least 45 days prior to the commencement of construction, ATC and ITC shall file their CMPs using the Commission's Electronic Records Filing (ERF) System. ATC and ITC shall also include all updates to their CMPs with their quarterly construction reports.
- b. The CMP shall address environmental and agricultural issues identified in this docket and include, at a minimum, roles and responsibilities of the IEM and IAM, a revegetation/restoration plan, an invasive species management plan, a sediment and erosion control plan, a wetland and waterway mitigation plan, a final sequencing and scheduling plan, and a post-construction monitoring plan.

Best Management Practices (BMP)

There are a range of BMPs that are commonly implemented during the construction and maintenance phases of electric transmission line projects. They are not route-specific and shall be applied at any location along an approved route depending on the habitat, species

²⁰ "Segment-by-segment" may also be interpreted as "construction spread" which is defined in the final EIS as "any subpart or segment of the project established by the applicants for the purposes of managing construction of the project."

composition, or applicable conditions. BMPs are generally considered to be effective and practical ways of preventing or reducing impacts from project construction or activities. Many of the BMPs selected by the Commission have previously been ordered by the Commission to address potential impacts of a project.

The Commission finds that the following conditions are reasonable for the purposes of mitigating some of the ecological and socioeconomic impacts that could occur as a result of the actions implemented by the applicants during the construction and maintenance phases of the project:

- a. The applicants shall install and maintain proper erosion controls during construction to minimize run-off of topsoil and disturbances to natural areas. ([PSC REF#: 370355](#), Table 11-56, item 30)
- b. The applicants shall use wide-track vehicles and matting to reduce soil compaction and rutting in sensitive soils and natural areas. ([PSC REF#: 370355](#), Table 11-56, item 31)
- c. The applicants' revegetation plan shall include monitoring of the ROW for the presence of new or spreading invasive species for at least three growing seasons with results submitted to Commission staff annually. ([PSC REF#: 370355](#), Table 11-56, item 69)
- d. The applicants shall conduct field surveys prior to construction to identify the locations and extent of invasive plant species on the approved route. These surveys shall be used to develop access plans and construction schedules that avoid the spread or introduction of invasive species. ([PSC REF#: 370355](#), Table 11-56, item 70)
- e. The applicants shall follow BMPs from DNR and Wisconsin Council on Forestry to comply with Wis. Admin. Code ch. NR 40 and prevent the introduction and spread of invasive species in the project area. ([PSC REF#: 370355](#), Table 11-56, item 71)
- f. The applicants shall implement all necessary mitigation methods when working in and adjacent to waterways, including when working on slopes leading to waterways, to minimize the impacts of the project to waterways. ([PSC REF#: 370355](#), Table 11-56, item 79)
- g. The applicants shall implement all necessary mitigation methods when working in and adjacent to wetlands, including when working on slopes leading to wetlands, to minimize the impacts of the project to wetlands. ([PSC REF#: 370355](#), Table 11-56, item 80)

Avian Impacts

The project will be constructed through several areas of known high bird use in southwestern Wisconsin where rare and/or sensitive bird species are located, including Important Bird Areas, state- and federally-owned public lands, and public and private conservation easements. The majority of avian impacts associated with high-voltage transmission lines result from birds colliding with transmission line infrastructure. An Avian Risk Review was provided by the applicants for the project. The terms “Avian Mitigation Plan” and “Avian Protection Plan” were used interchangeably by different parties throughout this proceeding. “Avian Mitigation Plan” often is used in the planning stages prior to the commencement of construction, and an “Avian Protection Plan” is commonly used once construction has started.

Some intervenors raised concerns that the project could increase avian collisions, specifically in the Mississippi River Routing Area, and the effect this could have on avian populations. Concerns were also raised concerning the loss of habitat for the birds, citing declines attributable to loss of wild grassland (prairie and savanna) habitats and more extensive and intensive agricultural practices in the region. The Commission shares these concerns, but is persuaded by the applicants and DNR witnesses that sufficient mitigation measures can be implemented to minimize and mitigate these impacts. DNR staff suggested that the applicants could work with DNR and Commission staff to implement bird mitigation strategies such as reducing tower height, structure selection, and bird diverters that can successfully reduce the potential for avian collisions. In addition, concerns regarding loss of prairie and grassland habitat will be addressed by the conditions in this order that require the applicants to restore the ROW of the project with appropriate native prairie seed mixes. Required surveys will assist in

assessing the effectiveness of these measures and addressing any deficiencies in the implemented mitigation measures. Accordingly, the Commission finds it reasonable to include the following conditions to mitigate some of the avian impacts that could occur as a result of the construction, operation, and maintenance of the project:

- The applicants shall work with DNR, Commission staff, and other applicable partners to create a project specific Avian Protection Plan that would include project specific bird mitigation strategies (i.e. reducing tower height, horizontal wire arrangement, and bird diverters) and consider pre- and post-construction surveys/studies.
- The applicants shall work with DNR and Commission staff on the locations along any approved route that should include the installation of bird diverters to minimize bird collisions.

Commissioner Nowak dissented, in part, on the inclusion of post-construction surveys/studies in the Avian Protection Plan. Chairperson Valcq dissented, in part, and would have required additional conditions relating to the Avian Protection Plan.

Agricultural Impacts

Stray Voltage

There are numerous confined animal operations in the area in which the project would be located. (Ex.-PSC-FEIS, [PSC REF#: 366195](#) at 168-169.) Since it is unclear whether the project would have any effect on such operations, it is reasonable for the applicants to coordinate testing for stray voltage at those operations before and after the project is placed in service. It is also reasonable for the applicants to provide to Commission staff reports of the results of the testing. If, as a result of the testing, it is found that problems have developed as a result of the project, it is reasonable for the applicants to work with the applicable distribution utility and affected farm

owners to resolve the problems. Specifically, the applicants shall coordinate tests for stray voltage at all dairy operations along the approved route prior to construction and again after the project is energized. The applicants shall work with the distribution utilities and farm owners to rectify any stray voltage problems arising from the construction and operation of the project. Prior to any testing, the applicants shall work with the applicable distribution utility and Commission staff to determine the manner in which stray voltage measurements will be conducted and on which properties.

Other Agricultural Conditions

The four counties potentially affected by the project are all top agricultural producers. Agriculture in this region includes cropland used for corn and soybeans as well as small grains, pasture for dairy and beef cattle, tree farms, and farm forests. The area is also home to a wide range of organic farms. Most of the potential routes for this project are cross-country and will impact agricultural resources. Constructing through the middle of farms and fields often increases the impact of a project on agricultural operations and resources. Unmanaged areas around electric poles can attract weed and insect pests that require additional management. Poles in fields may also become obstacles to landowners, which could lower the efficiency of farming these fields. Cross-country routes also require increased construction and use of access roads that can impact additional acres of farmland.

The Commission finds it reasonable to include the following additional conditions that could mitigate some of the impacts to agricultural lands and landowners that would occur as a result of the construction, operation, and maintenance of the project:

- a. The applicants shall decompact soils in agricultural areas to allow soil structure to redevelop and reduce impacts to crop yields;

- b. Significant rutting shall be defined in environmental documents as ruts of 6 inches or greater. If project construction causes significant ruts in cropland or pasture, the applicants shall repair the ruts as soon as practicable.
- c. The applicants shall avoid or mitigate impacts to agricultural erosion controls and water management practices and facilities in farmland.
- d. The applicants shall keep renters of agricultural land, if known, as well as farm owners affected by the project up-to-date and informed of construction schedules and potential impacts so that farm activities can be adjusted accordingly;
- e. The applicants shall train and document appropriate construction procedures for lands with organic practices;
- f. The applicants shall work with landowners with agricultural buildings located within the approved ROW to minimize and mitigate impacts to farming operations.
- g. The applicants shall work with landowners with properties enrolled in tax incentive programs so as to minimize the impacts to their participation in the program and compensate them for any reduction in payments because of the project.
- h. The applicants shall work with the county drainage boards to minimize impacts to properties within drainage districts.
- i. If project construction activities during the growing season create inaccessible cropland or cropland that is too small or irregularly-shaped to be farmed, the applicants shall properly compensate the property owners for the temporary loss of the use of the land;
- j. Many of the proposed routes include double-circuiting an existing lower-voltage line onto the new poles with the new 345 kV line. This will require the removal or "wrecking out" of the existing structure. During the process of removing these poles, top soil can be mixed with poorer quality subsoils, topsoil can be lost, and compaction can occur to a greater extent than during typical construction techniques. Construction personnel shall be trained on the proper protection of agricultural fields and soils during the removal of existing poles (i.e. "wrecking out") and a project-specific wreck out procedure document shall be included with the construction and mitigation plan(s). The applicants shall follow the procedure from a previous 345 kV ATC project;
- k. The applicants shall consult with affected landowners to determine the least damaging locations for transmission structures and off-ROW access roads.
- l. The applicants shall undertake post-construction monitoring to ensure that any damage to agricultural fields or operations from construction activities has been repaired or mitigated. Where construction activities have caused damage to agricultural fields or operations, the applicants shall work with landowners to address the problems as soon as practicable. Problems could involve construction debris, erosion control devices, altered or damaged fencing, altered field drainage, settled areas, or newly wet areas. This post-construction monitoring could be

within the scope of work for the IEM/IAM and/or included in the construction and mitigation plan(s).

Archeological and Historic Resources

Archaeological and historic resources include artifacts and archaeological sites that contribute to our understanding of human history, historic buildings that promote cultural heritage and tourism, and sacred places that contain the burials of Native American ancestors.

The Commission finds it reasonable to include the following conditions to reduce disturbances to these archaeological and historic resources within the approved project area:

- For Stoneman-North, if used, the applicants shall complete determinations of eligibility for the National Register of Historic Places and assess potential project effects on seven late 19th and early 20th century residences (AHI 44243, 236270, 236271, 236272, 236273, 236274, and 236275) as well as the St. Charles Borromeo Catholic Church (AHI 236278) in Cassville. The results shall be used by the applicants to work with the property owners to reduce or avoid impacts to properties that are potentially eligible for listing in the National Register of Historic Places. The applicants shall also work with the Cassville Historical Society to reduce or avoid impacts to their historic walking tour of these buildings.
- For Eastern-South
 - The applicants shall assess the potential effects of the project on the National Register of Historic Places property, Thomas Stone Barn (AHI 89885). The applicants shall work with the property owner to reduce or avoid any impacts to the property's historic character and use in heritage tourism.
 - The applicants shall complete surveys of archaeological sites IA-0418, IA-0438, IA-0503, IA-0504, and IA-0506 in order to determine boundaries, historic significance, integrity, and potential project effects. The applicants shall avoid and protect any sites that are potentially eligible for listing in the National Register of Historic Places.
- For Western-North:
 - The applicants shall complete new surveys of human burial site GT-0792/BGT-0420 within the final project alignment to map the burial locations and determine the presence, nature, and extent of any subsurface archaeological deposits. The results of the surveys shall be used to design construction procedures that will avoid and protect burials and related

archaeological deposits. Archaeological monitors shall oversee ground-disturbing construction activities near the site.

- The applicants shall complete surveys of archaeological site GT-0158 in order to determine boundaries, historic significance, integrity, and potential project effects. The applicants shall avoid and protect the site if it is potentially eligible for listing in the National Register of Historic Places.

Endangered Resources Conditions

Endangered resources include rare or declining species, high quality or rare natural communities, and unique or significant natural features. Endangered resources within and adjacent to an approved ROW could be affected by the construction, operation, and/or maintenance activities associated with the project throughout the life of the constructed facilities. The applicants submitted a project specific Endangered Resources Review where DNR identified “recommended” and “required” actions that the applicants should implement if the project is approved in order to minimize or avoid take of listed endangered resources. The main difference between these two types of actions is that DNR can require applicants to perform “required” actions, but does not have authority to require the applicants to perform "recommended" actions. The Commission has commonly included DNR “recommended” actions as order conditions as a practical and informed mitigation method to minimize or avoid impacts to endangered resources.

Intervenors raised concerns that endangered resources would not adequately be located and protected during construction and operation of the project, and also questioned who would be monitoring the applicants’ operations to ensure compliance with order conditions and DNR required actions. As described above, the Commission’s requirement that an IEM with stop work authority be engaged for the project will help ensure that the applicants comply with applicable laws and implement best practices to mitigate and avoid impacts to endangered

resources. DNR staff recommended that the applicants be required to work with DNR's Natural Heritage Conservation program to conduct additional surveys where rare species information is lacking. Inclusion of these practices and requirements will help ensure that endangered resources are effectively located, protected, and impacts mitigated.

The Commission finds it reasonable to include the following additional conditions to mitigate impacts to endangered resources within the project area:

- The applicants shall work with DNR and Commission staff to implement all of the actions listed in the Endangered Resources review for the project, including recommended actions, to the extent practicable and feasible.
- The applicants shall work with the DNR Natural Heritage Conservation program prior to the commencement of construction to develop plans for additional surveys in areas where rare species information is lacking, particularly within and adjacent to Important Bird Areas and Conservation Opportunity Areas.

Chairperson Valcq dissented, in part, and would have included an order condition relating to providing the Commission with an updated endangered resources review.

Landowner and Community Impacts

General Landowner and Community Impacts

The proximity of properties to a high-voltage transmission line is important because of real and perceived concerns about local aesthetics, changes to valued viewsheds, personal enjoyment and use of one's property, potential impacts to property values, magnetic fields, and other electrical phenomenon, and personal and public safety. By way of example, the village of Montfort argued that the project would contribute to a \$3 million diminution in property tax revenues ([PSC REF#: 372139](#) at 7-8), and SOUL estimated that properties directly impacted by the project could experience a blanket 15 percent devaluation ([PSC REF#: 372122](#) at 3-4).

While property valuation concerns deserve consideration, the concerns identified by the intervenors are not supported by substantial evidence. The Commission finds the testimony regarding the alleged diminished value relating to the project to be unpersuasive and rebutted by credible evidence. (Rebuttal-Applicants-Rolling-r-19-26).

A number of landowner intervenors expressed concerns that mitigation measures to avoid the effects of the proposed transmission lines on property and personal safety would be impractical or insufficient. However, the applicants and Commission staff provided evidence that the applicants can modify structure placement and implement other measures to effectively reduce these impacts.

The Commission finds it reasonable to include the following conditions to mitigate some of the impacts that would occur as a result of the actions performed by the applicants during construction and maintenance phases of the project:

- The applicants shall work with landowners to develop mitigation strategies that optimize minimization of impacts to residences and property to the extent practicable.
- Depending on the route selected, the applicants shall consult with Alliant Energy, the DNR, the Prairie Enthusiasts, the Nature Conservancy, the Driftless Area Land Conservancy and any other landowners that have established/managed prairies to determine appropriate measures to avoid or minimize impacts during construction and ongoing management. The applicants shall document the results of this consultation to the Commission.

Chairperson Valcq dissented, in part, and would have required additional conditions relating to other mitigation strategies identified in the final EIS.

Working with Landowners on Facility Placement

Off-ROW access paths will be needed for the construction of this project. The applicants stated in their application that these access routes will be based on field review of the approved route, negotiations with local landowners, and/or contractor requirements. The applicants support working with landowners to the extent practicable regarding the placement of facilities on their properties. The applicants also support working with landowners and holders of conservation easements regarding facilities placement to minimize the effects on properties and their conservation easements.

Off-ROW access routes can potentially reduce construction impacts on wetlands and waterways. DNR supports the use of such routes to avoid impacts. The applicants testified that at all stages of the project planning process, they have attempted to avoid impacts to wetlands and waterways and that they will continue to make decisions that avoid and minimize these type of impacts throughout construction. The applicants support working with property owners to take advantage of access that further reduces potential impacts to waterways and wetlands to the extent practicable, provided that the landowner voluntarily grants access opportunities to the applicants. The Commission finds this approach to be reasonable.

Seed Mixes Used During Restoration

The project occurs in a unique part of the state where some of the last tallgrass prairie remnant communities remain. If the project is approved, enhancing the ROW for pollinators (e.g. utilization of native flora that blooms throughout the growing season), could have a positive effect on native and rare pollinators within and adjacent to the ROW. The applicants have provided examples of pollinator-enhanced seed mixes that could be utilized for the project and

state that the costs of implementing pollinator-enhanced seed mixes for the project have been accounted for in its estimated project cost.

The Commission finds it reasonable to include the following additional conditions that could mitigate some of the ecological impacts that could occur as a result of the restoration practices implemented by the applicants within and adjacent to an approved ROW during the construction and maintenance phases of the project:

- The applicants shall implement pollinator-enhanced seed mixes in grassland areas to the greatest extent practicable. The applicants shall work with DNR and Commission staff when determining where and when to use these seed mixes, and the contents of the mixes.
- In upland areas that are not agricultural crops, or road ROW, the applicants shall use a seed mix comprised of native grasses and forbs to minimize the spread of non-native plants and maintain species diversity. Pollinator-enhanced seed mixes shall be considered in these areas. The applicants shall work with DNR and Commission staff when determining where and when to use these seed mixes, and the contents of the mixes.
- In areas subject to DNR permitting, the applicants shall use a DNR-approved seed mix.
- The applicants shall revegetate ROW with appropriate seed mixes, include native species to the greatest extent practicable, and select plant species with season-long sources of pollen and/or nectar to ROWs for declining pollinator species.

Vegetation Management

Utility vegetation management practices were discussed in detail throughout this docket, and vegetation management activities implemented by transmission owners within utility ROWs was a major source of concern for landowners and intervenors. The ecological and socioeconomic impacts of vegetation management varies by the region, landscape, and methods

implemented by each easement owner. Vegetation management includes management of vegetation in an approved ROW for construction and maintenance, including the process of preventing vegetation from interfering with the safe operation of transmission facilities. The impacts of vegetation management practices implemented within utility ROWs occur throughout the life of constructed facilities. It is up to each transmission owner/utility to choose how it manages vegetation within its ROWs. The transmission owner's/utility's right to manage vegetation within its ROWs are written into easement agreements with landowners.

For the project, ITC and DPC would own, operate, maintain, and acquire easements for an approved route in the Mississippi River and Western Routing Areas; ATC and DPC would own, operate, maintain, and acquire easements for an approved route in the Eastern and Dane County Routing Areas. Therefore, the types of vegetation management practices that would be implemented within an approved ROW for the project may differ depending who maintains that portion of the ROW. ATC and ITC submitted information regarding their vegetation management practices confidentially and have not disclosed their policies or programs to each other.

The Commission has authority to assess whether the vegetation management practices of the applicants present undue environmental impacts or inflict unnecessary individual hardships. The record in this case indicates that landowners are very concerned about the types of vegetation the applicants will allow in the ROW once the project is constructed. The Commission reviewed the substantial record devoted to the applicants' vegetation management practices and finds that such practices fall within accepted industry practices and are in accordance with established utility vegetation management practices. Further, no credible evidence was presented that such practices have an undue adverse effect on the environment, but

may not allow for certain vegetation preferred by affected landowners. Ultimately, the right to manage vegetation within the project ROW is a right acquired by the applicants and for which the landowner will be compensated. Unless such practices implicate undue environmental or individual hardships, the Commission declines to dictate in detail how the applicants conduct vegetation management.

Recognizing the need to balance the need to maintain a reliable transmission system and the desire of landowners to maintain their preferred aesthetic on their property, the Commission finds it reasonable to include a condition to mitigate some impacts that may occur as a result of the utility vegetation management practices implemented by the applicants within an approved ROW during the construction and maintenance phases:

- The applicants shall allow compatible tree and shrub species to grow within an approved ROW, particularly along the edge of existing forests or natural areas.

Such a condition protects a landowner from unnecessary loss of vegetation without preventing the applicants from upholding their responsibility to clear vegetation that poses a hazard to transmission facilities upon which the public relies.

Commissioner Nowak dissented.

Flood Hazard Review

The project was reviewed for potential flood hazard exposure per 1985 Wisconsin Executive Order 73. As no flood-sensitive facilities are to be located in or near any designated floodplain or flood prone areas, there is no significant flood risk to the project.

Environmental Impact Fees

Wisconsin law imposes a one-time environmental impact fee and an annual impact fee for construction of high-voltage lines with a nominal voltage of 345 kV or higher. Wis. Stat.

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§ 196.491(3g)(a.). Under Wis. Stat. § 16.969(2), the applicants must pay the Wisconsin Department of Administration (DOA) 0.3 percent of the cost of the approved line annually for the annual impact fee and 5 percent of the cost of the approved line for the one time environmental impact fee. DOA distributes these fee payments among cities, towns, villages, and counties through which the transmission line passes, allocated proportionate to the number of miles of transmission line that will be built within each municipality. (*See Id.*, Wis. Stat. § 16.969(3)(a).) The Commission is responsible for determining the 345 kV cost basis from which the impact fees will be calculated and the percentage of that line cost attributable to the affected municipalities and counties. (*See Id.*, Wis. Stat. § 196.491(3g)(m).)

The above stated statute defines “high voltage transmission” as “a conductor of electric energy . . . together with associated facilities,” but does not specifically define “associated facilities.” (*See Id.*, Wis. Stat. § 196.491(1)(f).) A recurring question in this and past dockets is whether the relocation of lower-voltage transmission and distribution lines and the lower-voltage components at the affected substations should be included in the 345 kV cost basis for calculating the high-voltage impact fees.

The applicants argued that all lower-voltage costs should be excluded, consistent with recent Commission decisions, particularly the decision for the CapX project in docket 5-CE-136 and the Badger-Coulee project in docket 5-CE-142.

The Commission finds that for the project, the 345 kV cost basis for the environmental impact fees is the cost of the 345 kV transmission line and the 345 kV and lower-voltage components at the Cardinal and Hill Valley Substations. The 345 kV cost basis does not include costs of lower-voltage transmission and distribution lines, operation and maintenance costs during

construction, pre certification costs, allowance for funds used during construction (AFUDC), the impact fees themselves, and the estimated contingency costs. As required by the applicable statutes and administrative code noted above, the one-time environmental impact fee will be trued up based on the final cost of the project. Similarly, the annual impact fees will be adjusted going forward based on the final cost. Based on initial cost estimates for the approved route, the 345 kV cost basis for the fees is \$281,644,000. (Ex.-PSC-FEIS-r, [PSC REF#: 366195](#) at 48.)

Further, the Commission recognizes the impact that transmission lines, including the project, place on all affected landowners and communities. Such impacts are the unfortunate but necessary result of the construction and operation of an electric transmission system that is required to meet the needs of the public for an adequate supply of electricity. The one time environmental and annual impact fees, as established by statute, are intended to address this impact.

To verify the appropriate distribution of the impact fees, the applicants shall work with Commission staff to determine the percentage of the route that passes through each municipality and county and shall provide adequate information to determine the distribution of impact fees. Commission staff will then provide to DOA the 345 kV cost basis from which the impact fees will be calculated and the percentage of the high-voltage line cost that will be attributed to the affected municipalities and counties.

Land Use and Development Plans

Wisconsin Stat. § 196.491(3)(d)6. requires the Commission to determine that a project requiring a CPCN not unreasonably interfere with orderly land use and development plans for the area involved. The applicants stated that they have developed routing alternatives that will not unreasonably interfere with the orderly land use and development plans for these areas.

([PSC REF#: 352698](#).) Opposing intervenors stated that the project would unreasonably interfere with land use and development plans of numerous communities and local governments along the route. ([PSC REF#: 368853](#) at 13 through 15, [PSC REF#: 366002](#) at 8, and [PSC REF#: 365053](#) at 5.)

The Commission recognizes that the project, as with any major construction project, will create impacts on the land use and development plans of affected areas, but finds that the project will not unreasonably interfere with the orderly land use and development plans of the project area.

Public Health and Welfare

As the Wisconsin Supreme Court has declared, issuing a CPCN is a legislative determination involving public policy and statecraft. *Clean Wisconsin, Inc. v. Pub. Serv. Comm'n of Wisconsin*, 2005 WI 93, ¶ 35, 282 Wis. 2d 250, 700 N.W.2d 768. Wisconsin Stat. § 196.491 assigns to the Commission the role of weighing and balancing many conflicting factors. Applying Wisconsin's Siting Priority Laws requires a similar weighing and balancing. In order to choose a transmission line route that is reasonable and in the public interest, the Commission must not just apply the priority list in Wis. Stat. § 1.12(6), but also must examine the conditions written into that law and consider the purpose of the legislation.

These statutes require that when the Commission reviews a CPCN transmission line application, it must consider the reasonable needs of the public for an adequate supply of electric energy, alternative routes, individual hardships, engineering, economics, safety, reliability, a host of environmental factors, the use of existing ROW, corridor sharing, the effect on electric rates, any interference with orderly local land use and development plans, and potential impacts to wholesale electric competition. Ultimately, the Commission must determine whether granting or

denying the applicants’ CPCN request will promote the public health and welfare. After weighing all of these factors and all of the conditions that it is imposing, the Commission finds that issuing a CPCN for this project promotes the public health and welfare and is in the public interest.

Project Cost and Construction Schedule

The applicants estimate the total gross project cost of the project to be \$492,216,000, an estimated \$429,325,000 of which would be located in Wisconsin. The applicants’ estimated cost does not include modifications to the project identified during the Commission’s review and required by this Final Decision. The estimated costs are based on 2023 dollars, the projected in service year for the project, and include transmission line, substation, existing transmission and distribution line relocation and AFUDC.

The estimated total gross project cost is detailed as follows:

| Estimated Project Cost | |
|--|-----------------------------|
| Transmission Line Costs | |
| Mississippi River to Hill Valley Substation | \$133,697,000 |
| Hill Valley Substation to Cardinal Substation | 191,851,000 |
| Subtotal Transmission Line Costs | <u>\$325,548,000</u> |
| Substation Costs | |
| All Substation Costs | \$38,274,000 |
| Subtotal Substation Costs | <u>\$38,274,000</u> |
| Other Project Costs | |
| One-time environmental impact fee | \$14,082,000 |
| Annual impact fees (during construction) | 1,914,000 |
| AFUDC (ITC) | 18,779,000 |
| AFUDC (DPC) | 626,000 |
| Precertification Costs (ATC) | 16,000,000 |
| Precertification Costs (ITC) | 10,490,000 |
| Precertification Costs (DPC) | 1,577,000 |
| Post-Wisconsin Order Costs (DPC) | 2,035,000 |
| Subtotal Other Project Costs | <u>\$65,503,000</u> |
| Total Gross Project Cost – Wisconsin | <u>\$429,325,000</u> |
| Total Project Cost – Iowa | \$62,891,000 |
| Total Gross Project Cost – Wisconsin and Iowa | <u>\$492,216,000</u> |

(Ex.-PSC-FEIS-r, [PSC REF#: 366195](#) at 1-3.)

Construction is expected to begin in October 2020 with completion by December 2023.

Motion for Recusal and Disqualification

On September 20, 2019, DALC/WWF filed a Motion for Recusal and Disqualification of Commissioner Mike Huebsch and Chairperson Rebecca Cameron Valcq (Motion). ([PSC REF#: 376074](#).) DALC/WWF asserted that Commissioner Huebsch and Chairperson Valcq's participation presents conflicts of interest and "at least an appearance of bias and lack of impartiality when the totality of the circumstances are considered." (*Id.* at 1.)

With regard to Commissioner Huebsch, DALC/WWF asserted that his representation of the Commission in the Organization of MISO States (OMS) and his participation in that capacity with MISO, including his membership on the MISO Advisory Committee, precluded his participation in this proceeding. (*Id.* at 3, 14-17). DALC/WWF alleged that Commissioner Huebsch received *ex parte* communications in his interactions with OMS and MISO and that such interactions "raises, at a minimum, an impression of impropriety and appearance of bias" (*Id.* at 17.) In connection with Chairperson Valcq, DALC/WWF contended that "[t]he breadth and depth of Chair Valcq's relationship with We Energies, . . . when objectively and reasonably viewed, creates an appearance of bias in light of WEC Energy Group's 60% controlling ownership interest in ATC, and her participation in previous joint WE/ATC applications to the Commission." (*Id.* at 20.)

DALC/WWF requested that: 1) Commissioner Huebsch recuse himself from further deliberations on the merits in this case; 2) Chairperson Valcq recuse herself from further deliberations on the merits in this case; and 3) that Commissioners should refrain from approving

the applicants' requested Certification of Public Convenience and Necessity (CPCN) for the proposed Cardinal-Hickory Creek transmission line. (*Id.* at 24.)

As a threshold matter, the Commission finds that the Motion was not timely filed and did not comply with applicable legal standards. DALC/WWF intervened in this matter on April 27, 2018, and November 22, 2018, respectively.²¹ Commissioner Huebsch was already a Commissioner at the time of DALC/WWF's intervention and it was publicly known that Commissioner Huebsch was the Commission's OMS representative.²² Chairperson Valcq's appointment was effective January 7, 2019, and her past affiliation with We Energies was well known at that time.²³

This Motion was filed 91 days after the conclusion of the party hearing, 31 days after the Commission made its preliminary determinations that were adverse to DALC/WWF's position, and only days before the Commission was on the verge of review and approval of the Final Decision in this proceeding. Further, this Motion filing post-dates, by at least many months, the alleged conduct or activities which allegedly give rise to the Motion. DALC/WWF failed to explain why, despite widespread public knowledge of Chairperson Valcq's past affiliation with We Energies at the time of her appointment, it waited for more than eight months to seek her recusal and disqualification. While DALC/WWF alleged it only became aware of Commissioner Huebsch's involvement with MISO after the Commission's open meeting of August 20, 2019, that excuse rings hollow given he has had that position for more than four years. Further, his

²¹ DALC/WWF are both represented by counsel with the Environmental Law and Policy Center.

²² See, e.g., [PSC REF#: 232851](#), [PSC REF#: 233531](#).

²³ See, e.g., <https://www.bizjournals.com/milwaukee/news/2018/12/21/evers-appoints-more-to-cabinet-including-quarles.html>; <https://www.quarles.com/news/quarles-brady-attorney-appointed-to-wisconsin-governor-elects-public-service-commission/>.

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appointment to and participation in the MISO Advisory Committee was also public knowledge for approximately one year.²⁴ DALC/WWF argued that Commissioner Huebsch's participation on the Advisory Committee was troubling in this case given MISO's intervention and the existence of a "common interest" arrangement between MISO and the applicants. However, MISO filed for intervention eleven months ago ([PSC REF#: 353201](#)), was granted intervention in this proceeding more than eight months ago ([PSC REF#: 357500](#)), and submitted discovery to DALC/WWF identifying the "common interest" arrangement between MISO and applicants cited in the Motion more than five months ago. It is clear that the information DALC/WWF cited to support its Motion was available to it months (if not years) before the party hearing and the Commission's discussion of the record at the open meeting of August 20, 2019.

Viewed in the best light, the filing reflects a lack of diligence and knowledge of administrative and Commission procedures. Alternatively, DALC/WWF's delay in bringing the Motion can reasonably be perceived as intentional, keeping these allegations in reserve to spring upon the Commission if it decided the matter adversely to DALC/WWF's interests. This latter scenario carries some weight considering DALC/WWF's unsupported argument that even upon recusal of both Commissioner Huebsch and Chairperson Valcq, because they both participated in the discussion of the record, a decision by Commissioner Nowak alone would be "tainted." (Motion at 22-23.)

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https://www.misostates.org/images/stories/Minutes_Agendas/2018/October_25_2018_Annual_Meeting_Minutes_and_Agenda.pdf

A party with information that it believes goes to the fairness of an official or judge has an obligation to bring that information forward in a timely fashion before a decision is made.²⁵

DALC/WWF, either through lack of diligence or intentionally, failed to do so. In light of the foregoing, the Commission concludes that the Motion is untimely.

There are also other procedural issues associated with the Motion. DALC/WWF did not file an affidavit verifying any of the alleged facts in the Motion or the documents referenced therein that purport to show the basis for disqualification.²⁶ Nor did the Motion provide any witness who may have personal knowledge of any of the alleged facts in the motion.²⁷ The requirement to file an affidavit supporting the allegations of impartiality or bias tracks basic due process requirements and the practice and procedure of the Commission.²⁸

²⁵ *Guthrie v. WERC*, 111 Wis. 2d 447, 453 fn. 7, 331 N.W.2d 331(1983)(“We recognize, however, that it is contrary to general principles of court administration to permit a party to proceed in the face of full knowledge of a cause for objection and then to allow an initial objection only when the proceeding has produced an untoward result.”); *Storms v. Action Wisconsin Inc.*, 2008 WI 110, ¶ 30, 314 Wis. 2d 510, 529, 754 N.W.2d 480, 490 (“in fairness to the parties and the court, if a party has information while a case is pending that goes to the issue of a judge’s or justice’s participation in the matter, that party has an obligation to promptly bring the matter to the individual judge’s or justice’s attention before a decision has been rendered.”); *Pure Milk Prods. Corp. v. Nat’l Farmers Org.*, 64 Wis. 2d 241, 249, 219 N.W.2d 564 (1974)(“We cannot permit a litigant to test the mind of the trial judge like a boy testing the temperature of the water in the pool with his toe, and if found to his liking, decides to take a plunge.”); *In re United Shoe Mach. Corp.*, 276 F.2d 77, 79 (1st Cir. 1960) (“a party, knowing of a ground for requesting disqualification, cannot be permitted to wait and decide whether he likes subsequent treatment that he receives”). *See also generally* Wis. Stat. § 227.46(6).

²⁶ *See generally* Wis. Stat. § 227.46(6).

²⁷ Wisconsin Admin. Code § PSC 2.23(1) requires that a party seeking and order by motion “shall state with particularity the grounds for the motion” The Prehearing Conference Memorandum issued by the ALJ, which governs the procedures the parties are to follow in this proceeding, provides that a party must “[f]ile the affidavit of any witness attesting to the truthfulness and accuracy of that witness’s written testimony and exhibits offered into the record in the absence of a live oath or affirmation” ([PSC REF#: 357500](#), Facilitating Matters Ordered in a Contested Case Proceeding at 13.) Similarly, any party wishing to present evidence after the hearing has concluded must “[r]equest leave to present additional evidence by showing 1) the additional evidence is material; and 2) good reason exists for failure to present the evidence according to the schedule. Simultaneously, but separately, file the evidence at issue *verified by affidavit*.” ([PSC REF#: 357500](#), Facilitating Matters Ordered in a Contested Case Proceeding at 14.)

²⁸ Federal law mirrors the standard under Wis. Stat. § 227.46(6) and the Commission’s practice and procedure. *See* 28 U.S.C. § 144 (alleging that a judge has bias or prejudice requires that a party submit an affidavit stating the facts and the reasons for its belief that bias or prejudice exists). “[R]ecusal is required only upon the filing of a ‘timely and sufficient affidavit.’” *Klayman v. Judicial Watch, Inc.*, 278 F. Supp. 3d 252, 255–56 (D.D.C. 2017), *citing* 28

The Commission finds the DALC/WWF's filing fails to comply with the applicable legal requirements. Absent an affidavit based on personal knowledge, the facts in the Motion constitute unsupported conclusory allegations, rather than verified facts. Seeking recusal or disqualification of a Commissioner is a serious matter, and the filing of allegations of this nature should not be taken lightly or made without attestation that the facts supporting such a request are in fact true. Absent such requirements, a party is free to throw out baseless allegations against a Commissioner without any consequences. Therefore, the Commission finds that the Motion was not properly brought before the Commission and lacks a legitimate factual basis to support recusal or disqualification.

Although the Commission finds that DALC/WWF's Motion is untimely and was procedurally deficient, the nature of the allegations require some response to maintain the public's trust in the Commission's impartiality. Each commissioner must comply with Wis. Stat. ch. 19, subch. III, Wis. Stat. §§ 15.06(3)(a) and 15.79(2). Chairperson Valcq, as a licensed attorney, must also comply with SCR 20:1:11. In addition to these statutory requirements, the due process clause requires that an adjudicator in an administrative hearing be fair and impartial. *State ex rel. DeLuca v. Common Council*, 72 Wis. 2d 672, 242 N.W.2d 689 (1976). This due process requirement has been supplemented by enactment of statutory prohibitions on impermissible bias. Wisconsin Stat. § 227.46(6), provides that an administrative adjudicator must be impartial. *See* Wis. Stat. § 227.46(6) (“The functions of persons presiding at a hearing or participant in proposed or final decisions shall be performed in an impartial manner.”)

U.S.C. § 144. “The certification requirement is key to the integrity of the recusal process and ‘guard[s] against the removal of an unbiased judge through the filing of a false affidavit.’” *Id.*, citing *SEC v. Loving Spirit Foundation, Inc.*, 392 F.3d 486, 496.

There is a presumption of honesty and integrity in those serving as adjudicators in state administrative proceedings. *DeLuca*, 72 Wis. 2d at 684. An administrative decision can violate due process either by bias in fact on the part of the decisionmaker or when the risk of bias is impermissibly high. *Guthrie*, 111 Wis. 2d at 454. Examples where the risk of bias is impermissibly high include: 1) cases in which the adjudicator has a pecuniary interest in the outcome of the proceeding; 2) cases in which the adjudicator has been the target of personal abuse or criticism from the party before him or her; 3) cases where the decisionmaker has previously acted as counsel to any party in the same action or proceeding; and 4) cases where the decisionmaker has prejudged the facts and the application of law. *DeLuca*, 72 Wis. 2d at 684; *Guthrie*, 111 Wis. 2d at 455, 460; *Marris v. City of Cedarburg*, 176 Wis. 2d 14, 26, 498 N.W.2d 842 (1993).

None of these circumstances have been alleged by DALC/WWF or are present here. DALC/WWF has submitted no information or documentation that either Chairperson Valcq or Commissioner Huebsch made or received any information relative to the merits of the project.²⁹ Moreover, DALC/WWF has not set forth any alleged facts that show that either Commissioner Huebsch or Chairperson Valcq: 1) has a pecuniary interest in the outcome of the proceeding; 2) has been the target of personal abuse or criticism from the party before him or her; or 3) has represented any party in this proceeding.³⁰ Nor has DALC/WWF set forth any facts, verified or not, that otherwise show any actual instances, statements, communications, or other substantiated events that show bias, prejudice, or improper contacts as to Commissioner Huebsch and

²⁹ The only information that Commissioner Huebsch received that could even be reasonably construed as related to the merits of the project was disclosed to all of the parties. ([PSC REF#: 373368.](#))

³⁰ Chairperson Valcq provided a statement as to her objectivity. ([PSC REF#: 376345.](#))

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Chairperson Valcq. Additionally, the fact that Commissioner Huebsch “led” the discussion at the open meeting simply means that he went first when discussing his positions on the issues before the Commission. Each Commissioner made their own independent findings on each of the issues in this proceeding.

Nor does Commissioner Huebsch’s participation in MISO or OMS disqualify him.³¹ DALC/WWF cites to no instances of actual *ex parte* communications received by Commissioner Huebsch. The only example DALC/WWF provided consists of a public presentation on MISO’s work on Storage as Transmission-Only Asset and Non-Transmission Alternatives presented at the March 20, 2019, MISO Advisory Committee meeting. Nothing in the Motion indicates that the storage or non-transmission alternative solutions in this proceeding were discussed. Further, there is no evidence in the Motion that Commissioner Huebsch’s assessment of the alternatives to the project were based on anything other than evidence in the record. Accordingly, the Commission finds that Commissioner Huebsch and Chairperson Valcq participation complied with all applicable ethical and legal standards and DALC/WWF’s Motion lacks any merit and is therefore denied.³²

Certificate

The Commission grants the applicants a CPCN for construction of the Cardinal-Hickory Creek 345 kV transmission project using either the Nelson Dewey or Stoneman crossings and the corresponding Nelson Dewey-North or Stoneman-North routes; the Western-North alternative; the

³¹ Commissioner Huebsch provided a statement as to his objectivity. ([PSC REF#: 376346](#).)

³² Even if Chairperson Valcq and Commissioner Huebsch were to have recused themselves or be disqualified, Commissioner Nowak’s vote to approve the project is sufficient. *See* Wis. Stat. § 15.06(6); 63 A.L.R.3d 1072; *State ex rel. Burdick v. Tyrrell*, 158 Wis. 425, 149 N.W. 280 (1914); No. OAG 97-79, 1979 WL 42069 (Wis. A.G. Nov. 1, 1979).

Eastern-South along with the Wisconsin Department of Transportation and the Eastern-South: Stagecoach modifications; and the Black Earth Creek-South alternative, as described in this Final Decision, the Commission's final EIS and Ex.-Applicants-Application-r3, and as modified by this Final Decision, at an estimated cost of \$492,216,000, with an estimated \$429,325,000 of which would be attributable to the portion of the project to be located in Wisconsin.

Order

1. The applicants are authorized to construct the facilities as approved by this Final Decision at a total estimated cost of \$492,216,000, an estimated \$429,325,000 of which would be attributable to the portion of the project to be located in Wisconsin.

2. This authorization is for the specific project as described in this Final Decision at the stated cost. If it is discovered or identified that the project cost, including *force majeure* costs, may exceed the estimated cost by more than 10 percent, the applicants shall promptly notify the Commission as soon as they become aware of the possible change or cost increase.

3. The applicants shall notify and obtain approval from the Commission before proceeding with any substantial change in the scope, design, size, or location of the approved project.

4. The applicants shall construct the project using either the Nelson Dewey or Stoneman crossings and the corresponding Nelson Dewey-North or Stoneman-North routes; the Western-North alternative; the Eastern-South along with the Wisconsin Department of Transportation and the Eastern-South: Stagecoach modifications; and the Black Earth Creek-South alternative, as described in this Final Decision, the Commission's final EIS, Ex.-Applicants-Application-r3, and as modified by this Final Decision.

5. If Stoneman-North is used, the applicants shall consult with Commission staff regarding the siting and design of the existing and new facilities, more specifically the potential to multi-circuit the existing 161 kV and 69 kV facilities with the proposed 345 kV facilities, along Subsegment B02, to minimize the environmental and socioeconomic impacts to the greatest extent practicable.

6. The applicants shall construct Subsegment X02, the Eastern-South: Stagecoach option.

7. The applicants shall work with WisDOT to construct the requested modification to the Eastern-South route near Barneveld along Subsegments S10B and S10C.

8. The applicants shall work with appropriate entities to minimize the impacts of the project on the Mount Horeb Veterans Memorial to the extent practicable.

9. The applicants shall allow the Thomases at 826 USH 18, Dodgeville, Wisconsin 53533 to choose their preferred route modification on Subsegment Q02. If the Thomases refuse or otherwise fail to make this selection within a reasonable time after which the applicants have requested a selection, the applicants shall make the selection.

10. The applicants shall work with appropriate staff of the DNR to minimize the impacts of the project on the Military Ridge State Trail.

11. The applicants shall remove the existing facilities associated with Line 6927 along Subsegment Y06B, release the existing easement rights associated with these facilities, and reimburse Dane County for the costs to restore the area within the utility ROW back to its natural landscape in an amount not to exceed five percent more than the estimated costs for restoration set forth in Surrebuttal-DC-Marsh-2.

12. If the applicants cancel the project or enter into any arrangement with another party regarding ownership or operation of the proposed facilities, the applicants shall provide prior notice to the Commission. All of the applicants' commitments and all conditions of this Final Decision apply to the applicants and to their successors, assigns, agents, and contractors.

13. The applicants shall obtain all necessary necessary federal, state, and local permits for a construction spread prior to commencement of construction, as defined by Wis. Stat. § 196.491(1)(b), on that construction spread. For the purposes of this order condition, construction spread means any subpart or segment of the project established by the applicant for the purposes of managing construction of the project.

14. The applicants may propose minor adjustments in the approved route for the protection of social, cultural, or environmental resources, but any changes in alignment from the approved centerline may not affect resources or cause impacts not discussed in the final EIS, nor may they affect new landowners who have not been given proper notice and hearing opportunity. The applicants shall consult with Commission staff regarding whether the change rises to the level where Commission review and approval is appropriate. For each proposed MRA for which Commission review is appropriate, the applicants shall submit for Commission staff review and approval a letter describing: the nature of the requested change; the reason for it; the incremental cost; environmental impact differences based on the approved route; the applicants' communications with the affected landowners; documentation of discussions with other agencies regarding the change; and a map showing the approved route and the proposed modification, property boundaries, relevant natural features such as woodlands, wetlands, waterways, and

other sensitive areas. Approval of the requests is delegated to the Administrator of the Division of Energy Regulation and Analysis.

15. Where the project is multi-circuited with existing transmission lines, the existing easement rights and ROW must be used for purposes of locating the new transmission line to the greatest extent practicable. In no segment of the approved route where the proposed transmission line is to be multi-circuited with existing transmission lines shall the combined width of existing and new ROW exceed 150 feet unless the applicants request and receive approval to exceed this width through the MRA process provided herein.

16. In those segments where the project is built in a single-circuit configuration adjacent to existing transmission line corridors owned by the applicants, the existing easement rights and ROW must be used for purposes of locating the new transmission line to the greatest extent practicable by locating the new 345 kV line as close to existing infrastructure as allowed under applicable law and operational standards, and to minimize the need to acquire additional ROW to the greatest extent practicable.

17. The applicants shall work with Commission staff in the preparation and issuance of an RFP to hire a combined IEM/IAM that shall report directly to the Commission. The RFP shall include the scope of duties, responsibilities, and authority of each position. The applicants shall fund the salaries and expenses of the monitor. The IEM/IAM shall have the authority to stop work at any construction spread if a violation of this Final Decision or any regulatory permit condition is identified; however such stop work authority shall not extend when acting in the capacity of the IAM. The applicants and their contractors shall promptly stop work on a construction spread if directed to do so by the IEM.

18. The applicants shall develop and submit CMPs on a segment-by-segment or construction spread basis for Commission staff review to ensure all of the requirements in this Final Decision are addressed sufficiently in each plan. At least 45 days prior to the commencement of construction, ATC and ITC shall file their CMPs using the Commission's ERF System. ATC and ITC shall also include all updates to their CMPs with their quarterly construction reports.

19. The CMP shall address environmental and agricultural issues identified in this docket and include, at a minimum, roles and responsibilities of the IEM and/or IAM, a revegetation/restoration plan, an invasive species management plan, a sediment and erosion control plan, a wetland and waterway mitigation plan, a final sequencing and scheduling plan, and a post-construction monitoring plan.

20. The applicants shall comply with the conditions regarding BMPs included in this Final Decision as follows:

- a. The applicants shall install and maintain proper erosion controls during construction to minimize run-off of topsoil and disturbances to natural areas. ([PSC REF#: 370355](#), Table 11-56, item 30)
- b. The applicants shall use wide-track vehicles and matting to reduce soil compaction and rutting in sensitive soils and natural areas. ([PSC REF#: 370355](#), Table 11-56, item 31)
- c. The applicants' revegetation plan shall include monitoring of the ROW for the presence of new or spreading invasive species for at least three growing seasons with results submitted to Commission staff annually. ([PSC REF#: 370355](#), Table 11-56, item 69)
- d. The applicants shall conduct field surveys prior to construction to identify the locations and extent of invasive plant species on the approved route. These

surveys shall be used to develop access plans and construction schedules that avoid the spread or introduction of invasive species. ([PSC REF#: 370355](#), Table 11-56, item 70)

- e. The applicants shall follow BMPs from the DNR and Wisconsin Council on Forestry to comply with Wis. Admin. Code ch. NR 40 and prevent the introduction and spread of invasive species in the project area. ([PSC REF#: 370355](#), Table 11-56, item 71)
- f. The applicants shall implement all necessary mitigation methods when working in and adjacent to waterways, including when working on slopes leading to waterways, to minimize the impacts of the project to waterways. ([PSC REF#: 370355](#), Table 11-56, item 79)
- g. The applicants shall implement all necessary mitigation methods when working in and adjacent to wetlands, including when working on slopes leading to wetlands, to minimize the impacts of the project to wetlands. ([PSC REF#: 370355](#), Table 11-56, item 80)

21. The applicants shall work with DNR, Commission staff, and other applicable partners to create a project specific Avian Protection Plan that would include project specific bird mitigation strategies (i.e. reducing tower height, horizontal wire arrangement, and bird diverters) and consider pre- and post-construction surveys/studies.

22. The applicants shall work with DNR and Commission staff on the locations along any approved route that should include the installation of bird diverters to minimize bird collisions.

23. The applicants shall work with the applicable distribution utility to test for stray voltage at each agricultural confined animal operation along the approved route, prior to construction and after the project is energized. The applicants shall work with the distribution utility and farm owner to rectify any identified stray voltage problem arising from the

construction or operation of the project. Prior to testing, the applicants shall work with the applicable distribution utility and Commission staff to determine where and how they will conduct the stray voltage measurements. The applicants shall report the results of their testing to Commission staff.

24. The applicants shall comply with the other agricultural conditions included in this Final Decision as follows:

- a. The applicants shall decompact soils in agricultural areas to allow soil structure to redevelop and reduce impacts to crop yields;
- b. Significant rutting shall be defined in environmental documents as ruts of 6 inches or greater. If project construction causes significant ruts in cropland or pasture, the applicants shall repair the ruts as soon as practicable.
- c. The applicants shall avoid or mitigate impacts to agricultural erosion controls and water management practices and facilities in farmland.
- d. The applicants shall keep renters of agricultural land, if known, as well as farm owners affected by the project up-to-date and informed of construction schedules and potential impacts so that farm activities can be adjusted accordingly;
- e. The applicants shall train and document appropriate construction procedures for lands with organic practices;
- f. The applicants shall work with landowners with agricultural buildings located within the approved ROW to minimize and mitigate impacts to farming operations.

g. The applicants shall work with landowners with properties enrolled in tax incentive programs so as to minimize the impacts to their participation in the program and compensate them for any reduction in payments because of the project.

h. The applicants shall work with the county drainage boards to minimize impacts to properties within drainage districts.

i. If project construction activities during the growing season create inaccessible cropland or cropland that is too small or irregularly-shaped to be farmed, the applicants shall properly compensate the property owners for the temporary loss of the use of the land;

j. Many of the proposed routes include double-circuiting an existing lower-voltage line onto the new poles with the new 345 kV line. This will require the removal or "wrecking out" of the existing structure. During the process of removing these poles, top soil can be mixed with poorer quality subsoils, topsoil can be lost, and compaction can occur to a greater extent than during typical construction techniques. Construction personnel shall be trained on the proper protection of agricultural fields and soils during the removal of existing poles (i.e. "wrecking out") and a project-specific wreck out procedure document shall be included with the construction and mitigation plan(s). The applicants shall follow the procedure from a previous 345 kV ATC project;

k. The applicants shall consult with affected landowners to determine the least damaging locations for transmission structures and off-ROW access roads.

l. The applicants shall undertake post-construction monitoring to ensure that any damage to agricultural fields or operations from construction activities has been

repaired or mitigated. Where construction activities have caused damage to agricultural fields or operations, the applicants shall work with landowners to address the problems as soon as practicable. Problems could involve construction debris, erosion control devices, altered or damaged fencing, altered field drainage, settled areas, or newly wet areas. This post-construction monitoring could be within the scope of work for the IEM/IAM and/or included in the construction and mitigation plan(s).

25. The applicants shall comply with the conditions to mitigate impacts to archeological and historic resources included in this Final Decision as follows:

a. For Stoneman-North, if used, the applicants shall complete determinations of eligibility for the National Register of Historic Places and assess potential project effects on seven late 19th and early 20th century residences (AHI 44243, 236270, 236271, 236272, 236273, 236274, and 236275) as well as the St. Charles Borromeo Catholic Church (AHI 236278) in Cassville. The results shall be used by the applicants to work with the property owners to reduce or avoid impacts to properties that are potentially eligible for listing in the National Register of Historic Places. The applicants shall also work with the Cassville Historical Society to reduce or avoid impacts to their historic walking tour of these buildings.

b. For Eastern-South

1. The applicants shall assess the potential effects of the project on the National Register of Historic Places property, Thomas Stone Barn (AHI 89885). The applicants shall work with the property owner to reduce or avoid any impacts to the property's historic character and use in heritage tourism.

2. The applicants shall complete surveys of archaeological sites IA-0418, IA-0438, IA-0503, IA-0504, and IA-0506 in order to determine boundaries, historic significance, integrity, and potential project effects. The applicants shall avoid and protect any sites that are potentially eligible for listing in the National Register of Historic Places.

c. For Western-North:

1. The applicants shall complete new surveys of human burial site GT-0792/BGT-0420 within the final project alignment to map the burial locations and determine the presence, nature, and extent of any subsurface archaeological deposits. The results of the surveys shall be used to design construction procedures that will avoid and protect burials and related archaeological deposits. Archaeological monitors shall oversee ground-disturbing construction activities near the site.

2. The applicants shall complete surveys of archaeological site GT-0158 in order to determine boundaries, historic significance, integrity, and potential project effects. The applicants shall avoid and protect the site if it is potentially eligible for listing in the National Register of Historic Places.

26. The applicants shall work with DNR and Commission staff to implement all of the actions listed in the Endangered Resources review for the project, including recommended actions, to the extent practicable and feasible.

27. The applicants shall work with the DNR Natural Heritage Conservation program prior to the commencement of construction to develop plans for additional surveys in areas

where rare species information is lacking, particularly within and adjacent to Important Bird Areas and Conservation Opportunity Areas.

28. The applicants shall work with landowners to develop mitigation strategies that optimize minimization of impacts to residences and property to the extent practicable.

29. The applicants shall consult with Alliant Energy, DNR, the Prairie Enthusiasts, the Nature Conservancy, the Driftless Area Land Conservancy, and any other landowners that have established/managed prairies to determine appropriate measures to avoid or minimize impacts during construction and ongoing management. The applicants shall document the results of this consultation to the Commission.

30. The applicants shall implement pollinator-enhanced seed mixes in grassland areas to the greatest extent practicable. The applicants shall work with DNR and Commission staff when determining where and when to use these seed mixes, and the contents of the mixes.

31. In upland areas that are not agricultural crops, or road ROW, the applicants shall use a seed mix comprised of native grasses and forbs to minimize the spread of non-native plants and maintain species diversity. Pollinator-enhanced seed mixes shall be considered in these areas. The applicants shall work with DNR and Commission staff when determining where and when to use these seed mixes, and the contents of the mixes.

32. In areas subject to DNR permitting, the applicants shall use a DNR-approved seed mix.

33. The applicants shall revegetate ROW with appropriate seed mixes, include native species to the greatest extent practicable, and select plant species with season-long sources of pollen and/or nectar to ROWs for declining pollinator species.

34. The applicants shall allow compatible tree and shrub species to grow within an approved ROW, particularly along the edge of existing forests or natural areas.

35. The applicants shall work with property owners and DNR to take advantage of access opportunities that further reduce potential impacts to waterways and wetlands to the extent practicable, provided that the landowner voluntarily grants access to the applicants.

36. Not more than 30 days from the date of this Final Decision, the applicants shall provide to Commission staff adequate information to determine the distribution of environmental impact fees.

37. The applicants shall work with affected landowners to determine the least damaging locations for transmission structures and off-ROW access roads.

38. The applicants shall identify the location of each transmission structure using global positioning system technology and transfer this data to a geographic information systems database, using software compatible with state government standards. The applicants shall provide this data to the Commission as soon as it becomes available.

39. Beginning with the quarter ending December 31, 2019, and within 30 days of the end of each quarter thereafter and continuing until the facilities are fully operational, the applicants shall submit quarterly progress reports to the Commission that include all of the following:

- a. The date that construction commences.
- b. Major construction and environmental milestones, including permits obtained, by agency, subject, and date.

- c. Summaries of the status of construction, the anticipated in service date, and the overall percent of physical completion.
- d. Actual project costs to-date segregated by line item as reflected in the cost breakdown listed in this Final Decision.
- e. Once each year, a revised total cost estimate for the project.
- f. The date that the facilities are placed in service.
- g. CMP updates.

40. Upon completion of the project, the applicants shall notify the Commission and report the actual costs segregated by plant account and comparable to the cost breakdown included in this Final Decision. For any account or category where actual cost deviates significantly from those authorized, the final cost report shall itemize and explain the reasons for the deviation.

41. The CPCN is valid only if construction commences no later than one year after the latest of the following dates:

- a. The date this Final Decision is served.
- b. The date when applicants have received every federal and state permit, approval, and license that is required prior to commencement of construction by construction spread under the CPCN.
- c. The date when the deadlines expire for requesting administrative review or reconsideration of the CPCN and of the permits, approvals, and licenses described in par. (b.)

d. The date when the applicants receive the Final Decision, after exhaustion of judicial review, in every proceeding for judicial review concerning the CPCN and the permits, approvals, and licenses described in par. (b.)

42. If the applicants do not begin on-site physical construction of the authorized project within one year of the effective date of this Final Decision, the Certificate authorizing the approved project for which construction has not commenced shall become void unless applicant:

a. files a written request for an extension of time with the Commission before the effective date on which the Certificate becomes void, and

b. is granted an extension by the Commission.

43. This Final Decision takes effect one day after the date of service.

44. Jurisdiction is retained.

Dated at Madison, Wisconsin, the 26th day of September, 2019.

By the Commission:

A handwritten signature in black ink that reads "Steffany Powell Coker". The signature is written in a cursive, flowing style.

Steffany Powell Coker
Secretary to the Commission

SPC:JAL;jlt:DL: 01699809

See attached Notice of Rights

PUBLIC SERVICE COMMISSION OF WISCONSIN
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**NOTICE OF RIGHTS FOR REHEARING OR JUDICIAL REVIEW, THE
TIMES ALLOWED FOR EACH, AND THE IDENTIFICATION OF THE
PARTY TO BE NAMED AS RESPONDENT**

The following notice is served on you as part of the Commission's written decision. This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

PETITION FOR REHEARING

If this decision is an order following a contested case proceeding as defined in Wis. Stat. § 227.01(3), a person aggrieved by the decision has a right to petition the Commission for rehearing within 20 days of the date of service of this decision, as provided in Wis. Stat. § 227.49. The date of service is shown on the first page. If there is no date on the first page, the date of service is shown immediately above the signature line. The petition for rehearing must be filed with the Public Service Commission of Wisconsin and served on the parties. An appeal of this decision may also be taken directly to circuit court through the filing of a petition for judicial review. It is not necessary to first petition for rehearing.

PETITION FOR JUDICIAL REVIEW

A person aggrieved by this decision has a right to petition for judicial review as provided in Wis. Stat. § 227.53. In a contested case, the petition must be filed in circuit court and served upon the Public Service Commission of Wisconsin within 30 days of the date of service of this decision if there has been no petition for rehearing. If a timely petition for rehearing has been filed, the petition for judicial review must be filed within 30 days of the date of service of the order finally disposing of the petition for rehearing, or within 30 days after the final disposition of the petition for rehearing by operation of law pursuant to Wis. Stat. § 227.49(5), whichever is sooner. If an *untimely* petition for rehearing is filed, the 30-day period to petition for judicial review commences the date the Commission serves its original decision.³³ The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

If this decision is an order denying rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not permitted.

Revised: March 27, 2013

³³ See *Currier v. Wisconsin Dep't of Revenue*, 2006 WI App 12, 288 Wis. 2d 693, 709 N.W.2d 520.

APPENDIX A

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