BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of American Transmission Company LLC, as an Electric Public Utility, for a Certificate of Public Convenience and Necessity to Construct and Operate the Mill Road-Granville Transmission Line Project, Consisting of Two New 138 kV Transmission Lines, Rebuilding Two Existing Double-Circuit 345/138 kV Transmission Lines, and Constructing the 345 kV Mill Road Substation Located Primarily in the City of Milwaukee, Milwaukee County, and the City of Brookfield and the Village of Menomonee Falls, Waukesha County, Wisconsin.	Docket No. 137-CE-212

DIRECT TESTIMONY OF STEPHAN HOFFMANN IN SUPPORT OF THE APPLICATION

INTRODUCTION

Q. Please state your name, employer, title and business address.

A. My name is Stephan Hoffmann. I am employed by ATC Management Inc., the corporate manager of American Transmission Company LLC (collectively, ATC) as a Senior Project Manager. My office is located at W234 N2000 Ridgeview Parkway Court, Waukesha, Wisconsin 53188-1000.

Q. On whose behalf are you testifying in this proceeding?

A. I am testifying on behalf of ATC in support of its Application (Application) for a Certificate of Public Convenience and Necessity (CPCN) and Utility Permit from the Public Service Commission of Wisconsin (PSCW or Commission) and Wisconsin Department of Natural Resources (WDNR) for the Mill Rd to Granville Rebuild Project (Project).

Q. Please describe your educational and professional background as it relates to this proceeding.

A. I graduated from Marquette University in Milwaukee, Wisconsin in 1993 with a Bachelor of Science in Civil Engineering and am licensed as a professional engineer in Wisconsin. Prior to joining ATC, I served as a Senior Project Manager at an engineering consulting firm. In that role, I managed consultant design teams responsible for delivering transportation facility design projects. I have worked as a Senior Project Manager at ATC since 2017. As a Senior Project Manager at ATC, I am responsible for design and construction activities related to substation and transmission infrastructure projects, including budgeting, scoping, scheduling, authorizing, and overall oversight for those projects.

Q. What are your responsibilities at ATC?

A. As a Project Manager, I convene and lead an interdepartmental team of subject matter experts assigned to plan and execute a project. The Project team is responsible for the design and construction activities that include budgeting, scoping, scheduling, authorizing, and securing permits for transmission system projects. I also coordinate activities performed by contractors retained by ATC.

In my role as Project Manager, it is my responsibility to ensure that the Project is completed on-time and within budget. I manage Project costs, budgets, and resources, oversee the various functional areas of the Project team, and participate in all significant Project-related senior management decisions. I will also oversee the design and construction of the new Mill Rd Substation as well as all other ATC construction activities associated with the Project.

Q. What is the purpose of your direct testimony?

A. The purpose of my testimony is to introduce into the record ATC's Application. I generally describe the proposed Project and provide a brief overview of the need for the Project, the process used to develop the proposed routes, the estimated cost of the Project, and the Project schedule. I then discuss transmission line and substation construction practices, the constructability of the proposed Project (with a focus on terrain and access), and some of the permits that ATC will need to obtain to construct the Project and put it into operation.

Q. Are you sponsoring any exhibits in support of your testimony?

A. Yes. I am sponsoring the Application (Ex.-ATC-Application).

Q. Did you prepare or cause this exhibit to be prepared?

A. Yes.

THE PROPOSED PROJECT

Q. Please provide a general description of the Project.

A. ATC proposes to construct a new Mill Rd Substation located on the south side of Mill Road approximately 0.5 miles east of Lannon Road in the Village of Menomonee Falls, Waukesha County, Wisconsin. To support the Project, ATC proposes modifications to the existing Tamarack, Butler, and Granville Substations, as well as an expansion of the yards at the Tamarack and Butler Substations. Additionally, ATC proposes minor remote-end substation work at the existing Germantown, Cypress, Bark River, Sussex, Arcadian, Tosa, and Bluemound Substations.

ATC expects to place the Project in service by October 2027, with construction commencing in the first quarter of 2026. The major components of the proposed Project are the following:

- The Mill Rd Substation, which will be a new substation containing a 345 kilovolt (kV) six position ring bus, a 138 kV five position ring bus, and a 345 kV/138 kV autotransformer;
- A rebuild of 7.5 miles of an existing 345 kV/138 kV transmission line as double-circuit 345 kV transmission lines from the Mill Rd Substation to the Granville Substation;
- A new 1.5-mile 138 kV transmission line from the Mill Rd Substation to the Tamarack Substation;
- A new 5-mile 138 kV transmission line from the Tamarack Substation to the Butler Substation;
- Modifications to the Granville, Butler, and Tamarack Substations; and
- Modifications to existing 138 kV and 345 kV transmission lines.

PROJECT NEED

Q. Describe the general need for this Project.

A. There are several reasons the Project is needed, each of which address certain limitations of the existing transmission facilities in western Milwaukee County and eastern Waukesha County. The 345 kV network in the Project area is constricted. There are three 345 kV lines to the north and three 345 kV lines to the south of this geographic area. In the area between those lines, there are only two 345 kV circuits and associated 138 kV facilities running in parallel, which have a relatively low capability to support high power flows during contingency situations.

These unique conditions of the western Milwaukee and eastern Waukesha County area have been a historical focus area that ATC has monitored for many years, which led ATC to propose the Project now based on three primary need drivers: First, the Project is

necessary to comply with North American Reliability Corporation's (NERC) TPL reliability standards. Second, system reinforcements in the area are needed to support numerous generator interconnection requests, many of which are for new renewable generators located in Wisconsin. Third, ATC has received multiple new large load interconnection requests associated with a new data center in the Electronics and Information Technology Zone (EITMZ) in Southeast Wisconsin, which will further stress the facilities in the area.

In addition to these three primary need drivers, the Project also aims to alleviate the historical economic congestion in the Project area, which exists because of its limited local and regional transfer capability, and to update aging transmission facilities.

SUBSTATIONS

Q. Please describe any substation-related work required for the Project.

A. The Project will encompass the following substation work:

Mill Rd Substation: A new 345/138 kV substation (Mill Rd) will be constructed on the south side of Mill Road approximately 0.5 miles east of Lannon Road in the village of Menomonee Falls, Waukesha County, WI. The construction will include: (1) a new greenfield 345 kV six position ring bus with future plans for an ultimate five rung breaker-and-a-half configuration; (2) 345 kV circuit breakers with motor operated line disconnect switches and manual bus side disconnect switches; (3) a new 500 MVA 345/138 kV autotransformer with space in the station allotted for a future second transformer at ultimate build out; (4) a new 138 kV five position ring bus with future plans for an ultimate four rung breaker-and-a-half configuration; (5) 138 kV circuit breakers with motor operated

line disconnect switches and manual bus side disconnect switches; and (6) a 138 kV 10 Ohm series reactor on Line 36341.

Butler Substation: The existing Butler Substation will be modified, and the yard at this substation will be expanded as part of the Project. The construction will include: (1) a reconfiguration of the Butler bus to install a 10 Ohm series reactor between Bus 1 and Bus 2; (2) a repositioning of Line 5051 termination to Bluemound Substation to Butler Bus 2; (3) a repositioning of Line 5061 termination to Bluemound Substation to Butler Bus 3; (4) Line 3443 from Granville to Tosa will be sectionalized and go into Butler Bus 1; (5) new Line X-198 to Tosa will be terminated at Butler Bus 2; (6) new Line X-197 will terminate at Butler Bus 1 at one end and will proceed to terminate at Tamarack Substation at the other end; and (7) all line positions will have new dead-end structures, new bus and line disconnect switches, and new 138 kV breakers.

Tamarack Substation: The existing Tamarack Substation will be modified, and the yard at this substation will be expanded as part of the Project. The construction will include: (1) the retirement of the existing 138 kV line terminal for Line 3444 to the Granville Substation; (2) retaining existing Line 3444 A-frame terminal and high bus disconnect switch stand for future line expansion; (3) reusing and relocating existing Line 3444 138 kV GCB 9250, associated line and bus disconnect switches, and surge arresters to a new east facing H-frame terminal to accommodate the new 138 kV circuit to Butler Substation; and (4) replacing the entire bus section 5 and expanding the substation footprint 25 feet to the east in the northeast portion of the yard to accommodate the new 138 kV circuit to Butler Substation.

Granville Substation: The existing Granville Substation will be modified within the existing substation footprint that will be expanded as part of a separate project at the Granville Substation during 2024 and 2025.

Minor Remote End Substation Work: Minor remote end substation work is also proposed at the existing Germantown, Cypress, Bark River, Sussex, Arcadian, Tosa, and Bluemound Substations to support the Project.

ROUTING AND SITING PROCESS

Q. Please generally describe ATC's process for routing and siting and how it was applied to this Project.

A. ATC has extensive experience routing and siting transmission lines. ATC's routing and siting process started with an appreciation for Wisconsin's statutory transmission siting priorities. Generally speaking, the Wisconsin Siting Priorities Law provides that, "consistent with economic and engineering considerations, reliability of the electric system and protection of the environment," electric transmission facilities should be sited first utilizing existing utility corridors, then highway and railroad corridors, then recreational trails (subject to specific requirements), and lastly within new corridors.[1] ATC's routing and siting process followed these statutory requirements.

Early in the Project's development, ATC established a Project team with deep expertise in subject areas that are relevant to identify and evaluate route options. The Project team identified a study area, which encompassed the likely routes that would meet the system configuration requirements for connecting the Mill Rd, Tamarack, Granville, and Butler Substations.

[1] Wis. Stat. § 1.12(6).

To identify the routes proposed in the Application, ATC used a multi-stage process that involved the following: (1) reviewing maps, aerial photographs, and other geographic information about potential segments; (2) evaluating engineering, constructability, and cost considerations for potential segments; (3) performing field inspections of potential segments (where accessible); and (4) following the transmission line siting priorities established by state law.

As part of the routing and siting process, ATC identified Project criteria that maximized the use of existing transmission lines in the Project area. Where no existing transmission lines exist to connect route segments, ATC used the state statutory siting priorities under Wis. Stat. § 1.12(6) to identify potential connecting segments. Possible transmission line routes were screened against several criteria, including those specified in Wis. Stat. § 196.491(3)(d).

Finally, the Project Team completed a multidisciplinary review and evaluation considering and balancing quantitative as well as qualitative factors along with design, engineering, economic, and operational considerations, to identify the two route alternatives (the Proposed Route and the Alternate Route) proposed in the Application.

ATC's analysis demonstrates that both proposed routes are reasonable, permittable, buildable, and satisfy the requirements of the Siting Priorities Law. Additional details regarding ATC's routing and siting process can be found in Direct-ATC-Fennessy and Ex.-ATC-Application-Application: Section 5.0.

Q. Please describe the routes proposed in the Application.

A. ATC has presented two proposed routes in the Application: the Proposed Route and the Alternate Route. The locations of the routes are shown on the maps in Ex.-ATC-

Application-Appendix A. The segments comprising each route are described in Ex.-ATC-Application-Application: Section 5.3.

Q. What has ATC attempted to do in proposing these route alternatives?

A. ATC has attempted to present well-studied, permittable, and buildable routes that comply with the Siting Priorities Law and can be reasonably constructed under the conditions identified in the Application. ATC has provided two such routes in this proceeding and will endeavor to construct the Project on any route that the Commission selects and that the WDNR and other agencies permit.

Q. With that said, does the Applicant have a route preference?

A. Yes. As its name suggests, ATC favors the Proposed Route. Direct-Applicant-Fennessy provides a detailed comparison between the Proposed Route and the Alternate Route and explains why ATC prefers the former over the latter. Comparisons of impacts between the two routes are also described in Ex.-ATC-Application-Application: Section 5.0 and Ex.-ATC-Application-Appendix. B.

COST ESTIMATE

Q. What cost estimates did ATC prepare for this Project?

A. ATC prepared estimates for pre-certification costs, transmission line construction costs, and substation construction costs. Pre-certification costs are those costs related to preparing and defending the Application and conclude upon the receipt of a CPCN and a WDNR Utility Permit. I reviewed the estimates for pre-certification costs. I also oversaw the cost-estimating activities for the entire Project.

Q. Please describe how the estimate was calculated for pre-certification costs included in the Application.

A. As is ATC's standard practice, ATC calculated the original pre-certification cost estimate based on estimates provided by each discipline or functional area represented on the Project team. These functional areas include Engineering, Environmental, Real Estate, Planning, Local Relations, Communications, Regulatory, Legal, and Project Management. An experienced member of each functional area developed an estimated cost based on that individual's experience and on the expected complexity of the Project. These separate estimates were combined into an overall pre-certification cost estimate for the Project and reviewed as a whole by the team.

Q. Did ATC exclude any cost categories from its estimated Project costs?

A. Yes. The estimated Project costs do not include Allowance for Funds Used During Construction (AFUDC). ATC has received MTEP Appendix A approval from MISO for this Project, which allows for Construction Work in Progress (CWIP) in rate base treatment and no AFUDC costs.

Q. Turning to the cost-estimating process for the entire Project, who was involved in calculating those cost estimates?

A. The entire Project team assisted in assembling the overall Project cost estimate. As with the pre-certification costs, ATC assembled estimates for transmission line and substation costs based on input from various functional areas using information gathered during the review of individual transmission line routes, materials, and substation construction and modifications. Each team member prepared an estimate representing costs associated with their functional area, which was based on experience and current, known cost information. The results were then reviewed and updated based on ATC's recent experience with material and construction labor costs.

Q. How were the cost estimates calculated for the Project?

A. After each team member prepared an estimate representing costs associated with their functional area, the results were updated and reviewed, and a twenty percent (20%) contingency amount was applied to all line items in the cost estimate for this Project. Because an application for PSCW approval of a project is filed very early in a project's overall development timeline, applying a contingency amount to the cost estimate is necessary to account for unforeseen costs. As the Project progresses through its timeline, the amount of contingency is reviewed and may be reduced as key activities are completed. It is difficult to determine if/when contingency dollars may need to be used, and often, the contingency associated with one line item may not be necessary. However, contingency dollars greater than what was associated with other line items may exceed the budgeted amount. Thus, ATC initially applies an across-the-board amount to allow for flexibility throughout the Project.

Q. Please provide the current estimated cost for the proposed transmission facilities.

A. The estimated total Project cost for the Proposed Route is approximately $424 million in year-of-occurrence dollars, and the estimated total Project cost for the Alternate Route is approximately $449 million in year-of-occurrence dollars. These estimates are based on a projected in-service year of 2027. ATC's cost estimates are found in Ex.-ATC-Application-Application: Section 4.0.

CONSTRUCTION SCHEDULE

Q. What is the proposed construction schedule for the Project?

A. As outlined in Ex.-ATC-Application-Application: Section 1.8.1, ATC has the following estimated construction schedule for the Proposed and Alternate Routes:

- Application for PSCW CPCN and WDNR Utility Permit October 2024

•	Anticipated PSCW Order	December 2025
•	WDNR Utility Permit Issuance – Anticipated	January 2026
•	Start Construction	February 2026
•	Project In-Service Date	October 2027

PUBLIC OUTREACH AND COMMUNICATIONS

Q. What has ATC done to inform the public about this Project and solicit input concerning it?

A. As described in Ex.-ATC-Application-Application: Section 7.0, ATC mailed Project notifications on October 1, 2024. Copies of the public outreach are included in Ex.-ATC-Application-Appendix E: Exhibit 1. The mailing contained information about the Project, including the docket number and information regarding submission of electronic or written comments to the Commission, references to a Project website with information about the Project, a Project map, and ATC local relations contact information.

The mailing was sent to landowners within 300 feet of the proposed centerlines and to landowners on either side of highways along the proposed routes. In addition, a small number of landowner parcels were added to provide a contiguous universe of selected parcels along certain roads and to avoid selection gaps. Mailings were also sent to relevant county and municipal local officials and staff.

Prior to sending the Project mailers, ATC launched a dedicated Project webpage (https://atc-projects.com/Mill-Granville). This page also provides additional resources like an interactive Project map, a video describing the project, FAQs, direct contact information for the Project representatives, and the PSCW docket information.

CONCLUSION

Q. In your opinion, is the Project as proposed in the public interest?

A. Yes. As described in my testimony, the Project is in the public interest and ATC's robust routing and siting process ensures that the design and location of the routes follows the Wisconsin Siting Priorities Law.

Q. Does this conclude your direct testimony?

A. Yes.