September 20, 2019

Re: Application of Northern States Power Company-Wisconsin for a Certificate of Authority to Construct the Bayfield Second Circuit Transmission Project, to beLocated in Bayfield County, Wisconsin

To the Person Addressed:

The Public Service Commission of Wisconsin (Commission) received an application from Northern States Power Company-Wisconsin (NSPW) for the construction of the Bayfield Second Circuit Transmission Project. The project is located in the towns of Barksdale, Bayfield, Bayview, Eileen, and Washburn, and the cities of Bayfield and Washburn, all in Bayfield County.

In this project, NSPW proposes to: 1) build a new 34.5 kilovolt (kV) transmission line; 2) build a new 115/34.5 kV transmission substation (Fish Creek Substation) on the existing 115 kV Stinson to Bayfront transmission line corridor west of the city of Ashland; 3) build a new 34.5 kV transmission switching substation (Pikes Creek Substation) west of the city of Bayfield. NSPW states that the project is needed to improve electric reliability and to provide voltage support to communities on the Bayfield peninsula.

This is a Type II action under Wis. Admin. Code § PSC 4.10(2), which requires the preparation of an environmental assessment (EA) to determine whether an environmental impact statement (EIS) is necessary under Wis. Stat. § 1.11. Based on the EA prepared by Commission staff, a preliminary determination indicates that the project would have some temporary and long-term effects on natural resources and social/community impacts. Strategies to avoid or mitigate some of the temporary and long-term impacts are available and would be implemented if the project is approved. Thus, the proposed project is not expected to significantly affect the quality of the human environment and preparation of an EIS is not required.

Commission staff from the Division of Digital Access, Consumer and Environmental Affairs completed an environmental review of the proposed project and prepared an EA to determine if an EIS is necessary. A notification of the Commission’s intent to prepare an EA, including a solicitation for comments on the environmental aspects of this project, was mailed to landowners, local and regional media, affected municipal entities, the regional planning commission, and area legislators in the project area on May 9, 2019.

The preliminary determination indicates that no significant impacts on the human or natural environment are likely to occur as a result of the construction and operation of this project. Therefore, preparation of an EIS is not required. Comments regarding this determination can be directed to the contact person listed at the end of this letter.
describes the primary impacts of the project and summarizes the conclusions of the EA. To obtain a copy of the EA, please request a copy from the contact person listed at the end of this letter.

**Project Routes**

*The last pages of this letter are maps of the project routes.*

The project would be located in the towns of Barksdale, Bayfield, Bayview, Eileen, and Washburn, and the cities of Bayfield and Washburn, all in Bayfield County.

The proposed West Route includes a 21.9-mile 34.5 kV transmission line connecting the proposed Fish Creek Substation and proposed Pikes Creek Substation. The West Route also would require a 4.1-mile 34.5 kV tie line from the West Route to the Washburn Switch. The total length of new transmission line would be 26 miles. The first 3.5 miles of the West Route would be double-circuited with the existing 34.5 kV transmission line, and therefore that section would require a temporary bypass line during construction. The remaining 22.5 miles of the West Route would be single-circuit line along a new transmission right-of-way, primarily following existing roads and/or distribution lines.

The proposed East Route includes an 18.9-mile 34.5 kV transmission line connecting the proposed Fish Creek Substation and the proposed Pikes Creek Substation. The East Route would be double-circuited with NSPW’s existing 34.5 kV transmission line, almost entirely within existing easements. The tie line connecting the new line with the existing line would be only one span length, rather than the longer tie line that would be needed for the West Route. Because the line would be double-circuited for its entire length, it would be necessary to construct a temporary bypass line between the Bayfield and Gingles Substations to provide power to Washburn and Bayfield during construction of the project along the East Route. The 26-mile temporary bypass line would follow roads for its entire length. The bypass line would be removed after construction of the project is complete.

**Natural Resources Impacts**

**Wetlands and Waterways**

Temporary wetland fill along the proposed East Route, including its temporary bypass line and off-right of way (ROW) access, is anticipated to be 96.53 acres, due to the placement of construction matting for vehicle access and staging. Temporary wetland fill along the proposed West Route, including its temporary bypass line and off-ROW access, is anticipated to be 75.71 acres due to the placement of construction matting for vehicle access and staging.

The Pikes Creek Substation would require 0.26 acre of permanent wetland fill. The East Route, including its temporary bypass line and both proposed substations, would require the permanent fill of a total of 0.32 acre of wetland. The West Route, including its temporary bypass line and both proposed substations, would also require 0.32 acre of permanent wetland fill.
Forested wetland is present along both routes, and clearing of these wetlands is proposed. The resulting wetland conversion along the East Route, including its temporary bypass line, is anticipated to be 29.10 acres. Wetland conversion along the West Route, including its temporary bypass line, is anticipated to be 53.15 acres.

A total of 68 waterway crossings are located on the East Route, including its temporary bypass line and off-ROW access roads. Eighteen of these crossings are designated as trout streams and Areas of Special Natural Resource Interest (ASNRI) by the Wisconsin Department of Natural Resources (DNR). A total of 48 waterway crossings are located on the West Route, including its temporary bypass line and off-ROW access roads. Thirteen of these crossings are designated as trout streams and ASNRI by the DNR.

Along the East Route, including its temporary bypass line and off-ROW access roads, a total of 17 waterway crossings would require the installation of a temporary clear span bridge (TCSB) to accommodate equipment access for vegetation clearing, construction, and site restoration. None of these waterways with a proposed TCSB are trout streams. The remaining 51 waterway crossings would not be traversed with equipment or would be crossed with equipment via existing bridges and culverts.

Along the West Route, including its temporary bypass line and off-ROW access roads, a total of 7 waterway crossings would require the installation of a TCSB to accommodate equipment access for vegetation clearing, construction, and site restoration. None of these waterways with a proposed TCSB are trout streams. The remaining 41 waterway crossings would not be traversed with equipment or would be crossed with equipment via existing bridges and culverts.

**Woodlands**
Between 2.7 and 68.8 acres of forest would be permanently cleared of tall growing trees, depending on the transmission line route selected. An additional 4.7 to 47.2 acres of forest would be cleared for temporary bypass line and off-ROW construction access routes. These areas could be allowed to reforest. Both privately-owned and Bayfield County-owned forests would be impacted. Approximately 3.25 acres of forest would be permanently cleared for the construction of the Pikes Creek Substation. Timing restrictions for tree clearing and slash management procedures can be implemented by NSPW to prevent the spread of oak wilt, emerald ash borer, and gypsy moth in forested areas.

**Rare Species**
This project has the potential to impact rare resources found along the project routes. The East Route has one threatened and five special concern birds, one threatened reptile, one threatened mammal, three rare plant species, and two natural forest communities that may be present within its vicinity. Similarly, the West Route has four special concern birds, one threatened reptile, and one natural forest community that may be present within its vicinity. The majority of the
possible impacts to these species could be minimized or avoided entirely if NSPW follows DNR-recommended and required measures.

Both routes and the Fish Creek Substation are located within the Lower Chequamegon Important Bird Area (IBA). This site hosts the oldest and arguably most important of Wisconsin’s four active common tern colonies. The bay area also is an important migratory staging and stopover area for shorebirds, waterfowl, and waterbirds. Thousands of raptors migrate through this area in the spring. It is highly recommended by the DNR that Bird Flight Diverters and other minimization measures be considered within this IBA.

Because the West Route proceeds cross country through forests over a greater portion of its ROW than the East Route, greater impacts could occur to those species that depend on large tracts of woodlands to survive. As a result of these impacts, it would be highly recommended to conduct additional bird surveys along the West Route to determine where impact minimization measures (i.e. bird diverters) should be installed.

Social/Community Impacts

Agriculture
Substation construction at the Fish Creek Substation site would permanently convert 7 acres of cropland owned by NSPW to non-agricultural use. Temporary impacts to agriculture could occur in the farmlands along the transmission line routes. Transmission line construction could compact soils. Crops could be damaged or lost if construction traffic crosses cropland during the growing season.

Recreation Impacts
The West Route crosses or is near four parks and recreation areas and the East Route crosses or is near seven parks and recreation areas. Both the West and East Route cross ATV/UTV, snowmobile, and silent sport trails.

Potential long-term impacts on the affected properties would be minimized primarily by utilizing NSPW’s existing transmission line corridor to the extent practicable and/or routing the transmission line with existing linear facilities, such as roads and distribution lines.

Construction of the temporary bypass line could result in some medium-term impacts, particularly in locations where trees would need to be trimmed or removed. However, once the temporary line is removed, trees would be allowed to grow back over time.

Short-term impacts would include an increase in ambient noise. Short-term construction impacts for affected areas on the selected route would be mitigated, in coordination with the corresponding land managers, through strategic construction scheduling and the application of construction BMPs.
Residential Impacts
One home is within 25 feet of the centerline of the East Route, on Segment 3. Another home is a similar distance from the centerline of Segment 1 of this route’s temporary bypass line. One home is between 50 and 100 feet of the centerline on Segment 1. The bypass line has 10 homes at this distance. The route has 32 homes at a distance of between 100 and 300 feet. The bypass line has 35 homes at this distance from its centerline.

For the West Route, one home is located within 25 feet of the centerline, on Segment 4. Another home is a similar distance from the centerline of Segment 1 of this route’s temporary bypass line. Six homes are between 50 and 100 feet of the centerline of this route (three on Segment 4). The bypass line has 4 homes at this distance. The route has 58 homes at a distance of between 100 and 300 feet. The bypass line has five homes at this distance from its centerline.

Aesthetics
Because the existing transmission line corridor for the East Route is largely cross country, passing through forested areas, the new line on this route would mainly be shielded from view, being visible primarily where the corridor crosses roads and highways. Where visible, the incremental change in the appearance of the existing ROW would less than would result from building a new line on an entirely new corridor. The temporary bypass line for this route would be more visible, however, because it follows existing roads. The clearing required for the bypass line along this heavily wooded route would noticeably change the roadside environment along this lengthy route. Once the temporary bypass line is removed, the right of way could reforest over time.

The visual impact resulting from building the new transmission line on the West Route would be considerably different, in that a much shorter temporary bypass line would be built, but the permanent line would create miles of new transmission line corridor, much of it adjacent to roads running through forested areas, that would be permanently cleared. The existing transmission line in the East Route corridor would also remain, continuing to present visual impacts in the project area.

The Pikes Creek Substation would be well-screened by trees surrounding the site. The Fish Creek Substation would be screened by woodland on three of its four sides.

Conclusion
The project as proposed in the application and subsequent filings, including use of the stated construction methods and implementation of the mitigation plans, is not expected to cause any significant environmental effects.

The use of best management practices and impact mitigation strategies by NSPW could limit some of the long-term adverse effects on natural resources. The direct and indirect environmental effects of the proposed project should not have a significant environmental effect
on the human environment. Thus, preparation of an EIS, as described in Wis. Stat. § 1.11, is not required for this project.

Copies of the EA are available upon request, either in electronic or paper format (for a paper copy, an address must be provided). Requests for a copy of the EA should be made to Adam Ingwell at the Public Service Commission of Wisconsin by telephone at (608) 267-9197, by e-mail at adam.ingwell@wisconsin.gov, or by regular mail directed to the Public Service Commission, P.O. Box 7854, Madison, Wisconsin 53707-7854.

Comments on the finding of no significant impact for this proposed project should be made to Adam Ingwell at the address above, or by email at adam.ingwell@wisconsin.gov.

All comments must be received by Monday October 7, 2019.

Sincerely,

Adam Ingwell
Environmental Affairs Coordinator - Supervisor
Division of Digital Access, Consumer and Environmental Affairs

ACI:prr:kle DL:01700267

Attachments: Maps
Figure 1 - East Route