SERVICE DATE
Apr 21, 2016

PSC REF#:285088

Public Service Commission of Wisconsin
RECEIVED: 04/21/16, 1:08:00 PM

PUBLIC SERVICE COMMISSION OF WISCONSIN

Application of American Transmission Company LLC to Build and Place in Service a New 138 kV Transmission Line Between the Spring Valley Substation in Kenosha County and the North Lake Geneva Substation in Walworth County, Wisconsin, to Build a New 138/69 kV Substation in Kenosha County, Wisconsin, and to Build or Rebuild Other Lines and Facilities in the Project Area	137-CE-167

FINAL DECISION

On April 27, 2015, pursuant to Wis. Stat. § 196.491 and Wis. Admin. Code chs. PSC 4 and 111, American Transmission Company LLC (ATC or the applicant) filed with the Commission an application for a Certificate of Public Convenience and Necessity (CPCN) to construct new 138 kilovolt (kV) electric transmission facilities. (*See, e.g.*, PSC REF#: 235551.) The project, known as the Spring Valley-North Lake Geneva project, includes construction of a new 138 kV transmission line between the Spring Valley Substation in Kenosha County and the North Lake Geneva Substation in Walworth County, Wisconsin, a new 138/69 kV substation in Kenosha County, Wisconsin, and construction or reconstruction of other lines and facilities in the project area.

The CPCN application is APPROVED, subject to conditions and as modified by this Final Decision.

Introduction

The Commission determined the application in this docket to be complete on May 27, 2015. (PSC REF#: 236896.) A Notice of Proceeding was issued on July 24, 2015. (PSC REF#: 272360.) 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 180 days

is granted by the Commission Chairperson. On November 3, 2015, the Commission Chairperson granted a 180-day extension. (PSC REF#: 277493.) The Commission must take final action on or before May 21, 2016, or the application is approved by operation of law. (*See* Wis. Stat. § 196.491(3)(g).)

A request to intervene was granted to Wisconsin Power and Light Company (WP&L). (PSC REF#: 274918.) The parties, for the purposes of review under Wis. Stat. §§ 227.47 and 227.53, are listed in Appendix A.

The proposed project is a Type II action as defined in Wis. Admin. Code ch. PSC 4. The Commission served a notification on July 23, 2015, indicating that it would prepare an environmental assessment (EA) pursuant to Wis. Stat. § 1.11 and Wis. Admin Code chs. NR 150 and PSC 4. (PSC REF#: 272361.) Accordingly, the Commission worked jointly with the Wisconsin Department of Natural Resources (DNR) and on October 19, 2015, issued a preliminary determination letter and draft EA regarding the environmental impacts of the proposed project. (PSC REF#: 276435.) The Commission accepted comments on the preliminary determination, and on November 11, 2015, issued a final EA regarding the proposed project, pursuant to Wis. Stat. § 1.11 and Wis. Admin Code chs. NR 150 and PSC 4. (PSC REF#: 278316.)

The Commission held both technical and public hearing sessions in Burlington, Wisconsin, on December 1, 2015. (PSC REF#: 275673.) At the technical session, expert witnesses representing Commission staff, DNR, the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP), and ATC offered testimony and exhibits regarding the application. (PSC REF#: 280475.) At the two public hearing sessions, the Commission accepted both oral and written testimony from members of the public. (PSC REF#: 279057, PSC REF#: 279102.) The Commission also accepted comments from members of the public through its

Internet web site. The Commission conducted its 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 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?

An initial brief was filed by ATC on December 21, 2015, supporting the proposed project. (PSC REF#: 279545.) The Commission discussed the record in this matter at its open meeting of March 3, 2016.

Findings of Fact

1. ATC is an electric utility as described in Wis. Stat. § 196.491(1)(d), and a public utility as described in Wis. Stat. § 196.01(5)(a).

2. ATC is proposing to construct a new 138 kV transmission line between the Spring Valley Substation in Kenosha County and the North Lake Geneva Substation in Walworth County, Wisconsin, a new 138/69 kV substation in Kenosha County, Wisconsin, and to build or rebuild other lines and facilities in the project area, as described in its application, the EA, and as modified by this Final Decision. The total gross estimated project cost is between $70.5 million and $91.1 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 proposed project.

4. Construction and operation of the facilities at the estimated cost will not impair the efficiency of the applicant's 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.

5. The facilities approved by this Final Decision are necessary to provide adequate and reliable service to present and future electric customers.

6. The facilities approved by this Final Decision will adequately address the present needs of the applicant's electric system and are necessary to satisfy the reasonable needs of the public for an adequate supply of electrical energy.

7. The facilities 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.

8. The facility design, location, and route 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.

9. 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.

10. The facilities 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.

11. The facilities approved by this Final Decision will not unreasonably interfere with the orderly land use and development plans for the area.

12. The facilities approved by this Final Decision will not have a material adverse impact on competition in the relevant wholesale electric service market.

13. The facilities approved by this Final Decision will affect local farmland, and DATCP has issued an agricultural impact statement for the proposed project.

14. The facilities approved by this Final Decision will affect state highways and will require permits from the Wisconsin Department of Transportation (WisDOT).

15. The facilities 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.

16. The facilities approved by this Final Decision may affect endangered and threatened species, and the applicant will need to consult with the DNR Bureau of Natural Heritage Conservation to ensure compliance with the state's endangered species law.

17. The facilities approved by this Final Decision will require the applicant to obtain permits from, provide notifications to, and coordinate with various federal agencies, *e.g.*, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service (USFWS), and the Federal Aviation Administration.

18. The facilities approved by this Final Decision may affect historic properties listed with the Wisconsin Historical Society, and in accordance with Wis. Stat. § 44.40, the applicant will be required to avoid or minimize adverse impacts to archeological resources.

19. The facilities approved by this Final Decision are not located in the Lower Wisconsin State Riverway.

20. Approval of the project is in the public interest and is required by the public convenience and necessity.

Conclusions of Law

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

Opinion

The Commission has a responsibility to ensure that Wisconsin receives adequate, reliable, and economical electric service, now and in the future. The applicant's proposed project is driven by the need to remedy the current situation in Kenosha, Walworth, and eastern Rock Counties, where two substations in the WP&L service area and one substation in the Wisconsin Electric Power Company (WEPCO) service area have only radial feeds and unreliable backup sources of electrical supply.

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 proposed project. Members of the public commented both in writing and through appearances at the public hearing sessions about the impact that this project may have on them and their communities. The Commission acknowledges the thoughtful and helpful comments from the public in this proceeding. This information assisted the Commission in its review of the application, in understanding the different perspectives toward the proposed project, and in making its determinations on the application.

Project Description, Purpose, and Cost

The applicant proposes to construct a new 138 kV transmission line from the North Lake Geneva Substation to the Spring Valley Substation. The proposed project includes installation of the following facilities:

- A single-circuit 138 kV transmission line between the Spring Valley and North Lake Geneva Substations;
- A new 138/69 kV substation midway between the Spring Valley and North Lake Geneva Substations;
- A networked tie (either 69 or 138 kV) to the Twin Lakes Substation;
- Rebuild of the Katzenberg-Twin Lakes 69 kV line from the Katzenburg Substation to the Richmond Road Substation or the Twin Lakes Substation, depending on the route alternative, to provide robust support to both substations;
- Expansion of the Spring Valley Substation and add terminal facilities to the North Lake Geneva Substation; and
- Uprate of the Bain-Spring Valley 138 kV line.

Additionally, modifications to and relocation of existing transmission and distribution lines will be required.

The proposed transmission line would be constructed using single-circuit or double-circuit steel monopole structures and wood monopole structures, depending on the route segments selected.

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

- Western Routing Area between the North Lake Geneva Substation and U.S. Highway (USH) 12/State Trunk Highway (STH) 50 junction;
- Central Routing Area between the USH 12/STH 50 and STH 50/County Trunk Highway (CTH) KD junctions; and
- Eastern Routing Area between the STH 50/CTH KD junction and the Spring Valley Substation.

The route segments and proposed structure and line configurations are described in more detail below.

As discussed above, ATC's stated purpose for the proposed project is to remedy the current situation in Kenosha, Walworth, and eastern Rock Counties, where two substations in the WP&L service area and one substation in the WEPCO service area have only radial feeds and unreliable backup sources of electrical supply.

The applicant's estimated cost of the proposed project is between $70.5 million and $91.1 million, depending on the route chosen. The applicant's estimated cost does not include modifications to the proposed project identified during the Commission's review and required by this Final Decision. The estimated costs are based on 2018 costs, the projected in-service year for the proposed project, and include transmission line, substation, and costs associated with relocation of existing transmission and distribution lines.

Project Need

The need for the proposed project was not contested in this proceeding. The proposed project would address transmission and distribution needs in Kenosha, Walworth, and eastern Rock Counties. In Kenosha County, WEPCO and WP&L have load serving areas which are operated at different distribution voltages (24.9 kV and 12.4 kV, respectively). WP&L cannot back up its Twin Lakes and Richmond Road Substation loads under transmission contingency conditions during summer months. WEPCO expects to have the same issue with its Spring Valley Substation. Consequently, two substations in the WP&L service area and one substation in the WEPCO service area have only radial feeds and unreliable backup sources of electrical supply. A distribution solution is estimated to cost $158 million and would require many modifications to the distribution lines, transformers, and breakers in both the WP&L and WEPCO service areas. For WP&L alone, more than 600 miles of distribution lines would need to be converted from 12.47 kV to 24.9 kV operation. In addition, such upgrades would be logistically challenging and would take more than ten years to implement.

The Commission finds that this project is needed to remedy current system deficiencies and to enhance reliability. Transmission elements require periodic maintenance and must be taken out of service during such maintenance. Routine maintenance work may include a planned outage of the transformer, circuit breaker, circuit switcher, disconnects, or the protection system. It is challenging to provide routine maintenance for the North Lake Geneva and Brick Church Substations, as a large number of customers in the area are susceptible to a loss of power in the event of a single contingency during a maintenance outage. In addition, there are issues of thermal overloads with Line Y51-ALE and Line Y125 under contingency conditions and

upgrade needs for Line Y102. The number of customers affected by these issues would continue to increase as loads grow.

Transmission System Alternatives

The applicant studied several other transmission system alternatives and a no-build alternative to assess their relative benefits compared to the proposed project. These alternatives include:

System Alternative 1. ATC would construct a 138 kV line between the existing Spring Valley and North Lake Geneva Substations, convert an existing line from 69 kV to 138 kV operation, and double-circuit a portion of an existing 69 kV line with the new 138 kV line. Additionally, ATC would construct a new 138/69 kV substation near Katzenberg, uprate the 138 kV line from Bain to Spring Valley, replace WP&L's Twin Lakes 69/12 kV transformer with a 138/12 kV transformer, and perform other upgrades in the study area. The planning level cost estimate for this alternative is $90.3 million in 2018 dollars.

System Alternative 2. This is ATC's preferred alternative, and is described in the proposed facilities section of its application and earlier in this Final Decision. The total gross estimated project cost for this alternative is between $70.5 million and $91.1 million, depending on the route chosen.

System Alternative 3. ATC would construct a 138 kV line between the existing Spring Valley and Brick Church Substations, convert an existing line from 69 kV to 138 kV operation, double-circuit a portion of an existing 69 kV line with the new 138 kV line, construct a new 138/69 kV substation near Katzenberg, uprate the Bain-Spring Valley 138 kV line, and replace the existing 69/12 kV transformer at WP&L's existing Twin Lakes Substation with a 138/12 kV

transformer, as well as perform other asset renewal. The planning level cost estimate for this alternative is $102.6 million in 2018 dollars.

System Alternative 2 is ATC's recommended alternative because it has many benefits over the other alternatives and comparable system performance. It has the lowest cost and has fewer constructability issues. System Alternative 3 has the best performance in withstanding multiple outage conditions, followed by Alternatives 1 and 2. System Alternatives 1 and 3, however, require some multi-circuit structures carrying both the new 138 kV line and the existing 69 kV line. Although not a major deficiency, low-voltage and thermal overloads could result if one of these structures were to fail. System Alternative 2 has superior performance in this respect.

For the purposes of this proceeding, the Commission deems reasonable ATC's consideration of transmission system alternatives. The Commission further finds that the applicant's basis for choosing the proposed project over other transmission system alternatives is reasonable. The selected alternative has the lowest costs and fewest constructability and technical issues.

No-Build Options Including 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 proposed project, as required by Wis. Stat. §§ 1.12(4) and 196.025(1). Specifically, the Commission must consider whether energy efficiency and conservation, load management, lower voltage transmission, or solar and other distributed generation are reasonable alternatives to the proposed project.

The applicant studied energy efficiency and conservation, load management, and distributed generation including solar generation as alternatives to meet the need for the proposed project. The applicant concluded that these alternatives would not provide the benefits of the proposed project and, further, ATC and the local distribution companies (LDC) considered non-transmission load and resource options for addressing the needs. Specifically, ATC and the LDCs evaluated the feasibility of reducing load, including programs and efforts to improve energy conservation and efficiency. The evaluation determined load reduction needs to begin immediately (2014) and grow to at least 80 megawatts (MW) at specific, targeted substations by 2024 to eliminate the need for the project during the 2014-2024 period. After 2024, the 80 MW plus any load reduction equivalent to any projected load growth at the targeted substations is necessary to continue to avoid the need for the project. Based on the review of publicly-available data, ATC and the LDCs were unable to conclude that any combination of energy efficiency and load reduction could produce the load reduction required to address all the needs in the planning study area.

ATC and the LDCs also considered theoretical renewable and nonrenewable energy resources as options. For generation to provide reliability benefits comparable to the project, the generators must provide at least 137 MW and be constructed in specific locations (75 MW or more at the Spring Valley Substation and 62 MW or more at the Twin Lakes Substation). Assuming a 75 MW nonrenewable-fired generator and a 62 MW nonrenewable-fired generator were installed in 2019, the total installed cost of at least $105 million exceeds the cost of the proposed project. The installed cost for comparably-sized renewable generation resources would be even greater.

The Commission finds that energy efficiency and conservation and other sources of electric supply are not technically feasible, cost-effective alternatives to the project. None of those alternatives would address the underlying reliability issues which is the major driver for this project.

Siting and Routing

Transmission Line Routes

ATC proposed two overall transmission line routes for the proposed project. In the first route alternative, ATC would construct a new mid-point 138/69 kV substation, to be known as the Balsam Substation, along STH 50 in the town of Wheatland, extend the existing 69 kV line Y102 from the Twin Lakes Substation to the Balsam Substation, and rebuild Y102 between the Katzenberg and Twin Lakes Substations. The total gross estimated project cost of this route is approximately $70.5 million.

In the second route alternative, ATC would tie the new 138 kV line into the Richmond Road and Twin Lakes Substations. Instead of constructing a new substation, the Richmond Road Substation would be expanded. This alternative would rebuild Line Y102 between the Katzenberg Substation and the Richmond Road Substation, where the line would be terminated. Between the Richmond Road and Twin Lakes Substations, LineY102 would be removed. The Twin Lakes Substation would be converted to 138 kV. The total gross estimated project cost of this route is approximately $91.1 million.

While the applicant proposed these two alternative routes, each route consists of separate segments, and the selection of segments could result in an overall approved route that varies from the two alternatives proposed. As noted earlier, the overall project was broken into three routing areas: the western, the central, and the eastern.

Western Routing Area. Alternative 1, consisting of Segment A, is approximately 2.7 miles long. It follows USH 12 for most of its length. The total gross estimated project cost of this alternative is approximately $5.4 million.

Alternative 2, consisting of Segment B, is approximately 3.0 miles long. It follows USH 12 for roughly a third of its length, and county highways and local roads for much of its remaining length. It follows an existing 69 kV line, a local street, and USH 12. The total gross estimated project cost of this alternative is approximately $7.7 million.

Central Routing Area. Alternative 1 consists of Segments D, I and J. Segment D is approximately 9.5 miles long and follows STH 50. The new 69 kV line between the Balsam and Twin Lakes Substations (Segment I), about 4 miles in length, follows STH 50 and CTH O. The rebuild of the existing 69 kV line between the Katzenberg, Richmond Road and Twin Lakes Substations (Segment J) follows CTHs B, O, P, and Z for approximately 5 miles. The total gross estimated project cost of this alternative is approximately $27.0 million.

Alternative 2, consisting of Segment E, is approximately 15.9 miles long, follows USH 12 for roughly half of its length, and county highways and local roads for much of its remaining length. About a mile would be cross country, not following any existing corridor. The existing 69 kV line that would be rebuilt between the Katzenberg and Richmond Road Substations follows CTHs B, O, and P for approximately 2.6 miles. The total gross estimated project cost of this alternative is approximately $35.3 million.

Eastern Routing Area. Alternative 1 consists of Segment F, which is approximately 11 miles long and follows STH 50 for over half its length. The remainder of the segment follows local roads or county trunk highways, except for a cross-country section north of CTH AH. South of the village of Paddock Lake, one of two alternative route segments would be used,

FA or FB. About half the length of FA follows a local road. The remainder is new cross-country corridor. FB follows CTH AH and STH 83. The total gross estimated project cost of this alternative with segment FA is approximately $21.0 million. The total gross estimated project cost of this alternative with segment FB is approximately $21.1 million.

Alternative 2 consists of Segment G, which is approximately 13.6 miles long. It follows CTH K for close to half its length. Other parts follow various highways and local roads. Cross-country portions are located at the Fox River, and for some parts, between STH 50 and CTH C. The total gross estimated project cost of this alternative is approximately $31.8 million.

Authorized Project Route

The Commission determines that the first route alternative, consisting of Segments A, D, F (with Sub-segment FB), I, and J, is the most reasonable alternative as it offers fewer wetland impacts, fewer agricultural impacts, follows more highways and roads, is shorter, and has a lower cost than the alternative route segments. Further, the approved route, as conditioned by this Final Decision, minimizes impacts to the environment and private properties and comprises the most reasonable route. The Commission's rational for selecting the specific segments of the approved route is summarized below.

Western Routing Area. Segment A is preferable because it is further away from a retail area, existing homes, and planned residential development than Segment B. Segment A is also shorter, less costly, and follows highways and roads for a greater share of its length.

Central Routing Area. Route Alternative 1, consisting of Segments D, I, and J, is favored over Route Alternative 2 (consisting of Segment E) because it is less costly to construct and shares all of its corridor with existing utility or highway corridors. While this route runs past a school which elicited some public opposition, those concerns are outweighed by these benefits.

Another advantage of Alternative 1 is that ATC already owns a site for the new Balsam Substation Site, and that site is ideally located for system protection purposes, provides constructability advantages and eliminates the potential need for the use of eminent domain to expand a substation site. Alternative 2 would require one mile of new corridor that is not shared with existing utility, highway, railroad, or recreational corridors, and is significantly more expensive due to the need to underground near a private airport.

In the area of the Balsam Substation Site, a landowner at the public hearing requested that a portion of the centerline of Segment D be moved to the north side of STH 50, onto the Balsam Substation Site, which is owned by ATC. This suggestion was made after the conclusion of the technical hearing, so neither ATC nor Commission staff were able to comment or respond to this particular suggestion for the hearing record. While the proposed modification appears reasonable, it is unclear if there are any technical problems or cost implications associated with this route modification. The Commission finds it reasonable for ATC to work with this landowner on this modification and investigate a possible minor route adjustment to accommodate the landowner's request.

Eastern Routing Area. The Commission prefers Route Alternative 1, consisting of Segment F with Sub-segment FB, because it is less costly to construct than Route Alternative 2 (consisting of Segment G), requires less new right-of-way (ROW), and impacts less cropland and fewer existing homes. The selected route also follows existing ROW to a much greater extent. Sub-segment FB entirely follows state and county highways, whereas Sub-segment FA follows a local road for only about half its length. While this route runs past a school which elicited some public opposition, those concerns are outweighed by these benefits. Other residents voiced

opposition to Segment F asserting potential health impacts. The Commission finds those concerns are without merit and not supported by substantial evidence.

The village of Paddock Lake and several landowners suggested a modified Segment F to reduce impacts to future development. Several members of the public testified or submitted comments favoring Alternative 2 (Segment G), asserting potential impacts to property values. While the selection of Segment F and Sub-segment FB will have some potential impact to development and a tax incremental financing (TIF) district, those impacts are mitigated through the use of existing ROW and are outweighed by the significant reliability benefits of the project and the fewer agricultural and environmental impacts presented by Segment G. With regard to the asserted property value impacts, the Commission finds that those claims are not supported by substantial evidence and that those speculative impacts are outweighed by the documented impacts to agricultural land and woodlands if Segment G were to have been selected.

Commissioner Huebsch dissents on the selection of Route Alternative 1 for the Eastern Routing Area, consisting of Segments F and FB, and would have selected Route Alternative 2, consisting of Segment G.

Land Use and Development Plans

Wisconsin Stat. § 196.491(3)(d)6 requires the Commission to determine that a proposed project requiring a CPCN not unreasonably interfere with the orderly land use and development plans for the area involved. ATC asserts that the proposed project would meet this requirement. Some members of the public provided testimony asserting that various segments of the proposed project would interfere with land use and development plans, including alleged interference with a private airport and a TIF district.

The Commission recognizes that the proposed project, as with any major construction project, will create some impacts on the land use and development plans of affected areas, but finds that with the conditions imposed by the Final Decision, discussed below, the proposed project will not unreasonably interfere with the orderly land use and development plans of the project area.

Conditions Related to Siting and Individual Hardships

Working with Landowners on Facility Placement and Off-ROW Access

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

Off-ROW access routes can potentially reduce construction impacts on wetlands and waterways. DNR supports the use of such routes to avoid impacts. ATC testified that at all stages of the project planning process, it has attempted to avoid impacts to wetlands and waterways and that it will continue to make decisions that avoid and minimize these types of impacts throughout construction. The applicant further stated that it supports 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 applicant. The Commission finds this approach to be reasonable and therefore requires that ATC take the actions identified above, to the extent practicable.

Conditions Related to Agricultural Land Use

Working with Aerial Spraying Users

DATCP surveyed agricultural operations along the project route segments and found farms that use aerial spraying to apply pesticides and fertilizer to cropland. In some cases, they also use aerial spraying for seeding cover crops. Applying chemicals or seed in this manner is very effective and economical for many agricultural operations. The construction of the transmission line and support structures is likely to interfere with existing flying patterns for aerial spraying. The new line might also reduce the amount of cropland that can be safely sprayed by applicators because of these new obstacles in and adjacent to fields. The Commission finds it reasonable to require ATC to ensure that structure heights be minimized, where feasible, and markers be installed on shield wires to improve the visibility of the new line where aerial spraying is used.

Working with Operators of Irrigation Systems

The proposed transmission line has the potential to interfere with existing farm irrigation systems. The applicant states it is willing to work with the landowners on final pole placement to minimize impacts to irrigation systems. If structure locations cannot be moved to eliminate impacting the systems, landowners could be compensated accordingly for the loss of the use of the systems. The Commission finds it reasonable to require that ATC work with the operator of irrigation systems to avoid impacts to the systems, to the extent practicable.

Conditions Related to DATCP Recommendations

The Commission accepted or accepted as modified the following conditions proposed by DATCP:

1. The applicant shall hire an agricultural specialist that would work for and report to the applicant.

2. The applicant shall give advance notice of acquisition and construction schedules so that farm activities can be adjusted accordingly and farm or field damage or disruption can be minimized.

3. Landowners, especially those with livestock, should be notified in advance when helicopters will be used in their area, including a range of dates and times when the use of a helicopter is expected.

4. The applicant shall provide telephone and e-mail contact information for landowners to contact the applicant if impacts from the project arise or continue after project completion.

5. The applicant shall consult with all affected farmland owners and operators to determine, to the extent practicable, the least damaging locations for transmission support structures.

6. The applicant and its contractors shall work with farm operators to determine the most effective techniques to minimize the impact to their aerial spraying applications. Potential mitigation measures could include minimizing structure heights, where feasible, and installing markers on shield wires where aerial seeding and spraying occur.

7. The applicant shall work with operators of organic farms to determine the most effective techniques for minimizing the likelihood of injury to crops or loss of organic certification from herbicide application by the applicant.

8. If transmission line construction divides a pasture, thus restricting access between the divided parcels, the applicant should work with the farmer to develop an access plan for the livestock or compensate the farmer for the cost related to grazing restrictions.

9. The applicant shall work with the operators of irrigation, underground drainage, and aerial seeding/spraying systems and operations to avoid impacts to their systems and operations to the extent practicable. If structure locations cannot be moved to eliminate impacting the operation or system, the landowner shall be compensated accordingly for the loss of the use of or damage to their system or operation.

10. The applicant shall conduct pre-construction farm interviews and combine the results with the landowner response section of the Agricultural Impact Statement to make the project bid packages and line lists fit farm situations more accurately.

11. The applicant shall implement training for all construction supervisors, inspectors, and crews to ensure that they understand the steps needed to protect the integrity of agricultural lands and operations during project construction and restoration.

12. If the applicant removes any existing power line support structures within or immediately adjacent to cropland, the old structure shall be removed to at least four feet below the ground surface to be below the normal plow layer. Clean topsoil shall be imported and placed within the hole left by the removed structure to the level of the ground.

13. The applicant shall follow its current practices for post-construction resolution of damages with agricultural landowners to ensure that any damages have been adequately compensated or mitigated. The applicant shall confirm compliance to Commission staff and DATCP through the use of quarterly reports and availability of signed damage releases and related documentation.

Conditions Related to Environmental Factors

Oak Wilt

Oak trees are likely to be cut or removed during project construction. Cutting oak trees at certain times of the year puts the trees at risk of oak wilt infection. Restricting cutting to low-risk times, as defined in Wis. Admin. Code § PSC 113.0511, would reduce this infection risk. The Commission finds it reasonable to require ATC to use timing restrictions for tree clearing, to prevent the spread of oak wilt.

Northern Long-Eared Bat

Subsequent to the filing of the project application and the initial endangered resources review, USFWS listed the northern long-eared bat as a threatened species. Tree removal can potentially impact this species if it is found in the project area. The Commission finds it reasonable to require ATC, once this Final Decision is issued, to coordinate with USFWS and DNR to determine the potential impacts and the appropriate mitigation measures for the bat.

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 applicant in development of the proposed routes or to the Commission in making its decision. When the applicant identifies such situations which involve a change in the proposed centerline of the project, the applicant shall submit to the Commission a letter 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. 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 EA or environmental impact statement (EIS), as applicable; and
3. Is agreed to by affected landowners, and agreement is affirmed in writing.

The Commission finds that it is reasonable that the applicant 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 even in minor ways, that the Commission receive appropriate notification. The applicant shall follow the described process to obtain authorization for any MRAs.

Impact on Wholesale Competition

In making its decision, the Commission must consider whether the proposed project will have a material adverse impact on competition in the relevant wholesale electric service market under Wis. Stat. § 196.491(3)(d)7. ATC states that the proposed project will not have an adverse impact. No party contested ATC's contention regarding impacts of the proposed project on wholesale competition.

The Commission finds that the addition of the proposed project by the applicant will not have a material adverse impact on competition in the relevant wholesale electric service market because it will increase operational flexibility and provide reliability benefits to the LDCs serving the project area.

Stray Voltage

There are several confined animal operations in the area in which the proposed project would be located. ATC noted in its application that three farms should be tested for pre- and post-construction stray voltage, and approximately one mile of three phase distribution and one mile of single phase distribution should be buried or rebuilt with a dropped neutral configuration. (PSC REF#: 276078.) Since it is unclear whether the project would have any effect on such operations, it is reasonable to require that the applicant coordinate testing for stray voltage at those operations before and after the project is placed in service. It is also reasonable to require that the applicant 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 to require the applicant to work with the applicable distribution utility and affected farm owners to resolve the problems. Specifically, the applicant 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 applicant 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 applicant 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.

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 a CPCN applicant's request will promote the public health and welfare. After weighing all of these factors and all of the conditions 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.

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.

The proposed project is a Type II action under Wis. Admin. Code § PSC 4.10(2). An EA was prepared in accordance with the requirements of Wis. Stat. § 1.11 and Wis. Admin. Code § PSC 4.20. The purpose of the EA is to provide a factual investigation of the relevant areas of environmental concern in sufficient depth to permit a reasonably informed preliminary judgment of the environmental consequences of the proposed action. The EA must include a recommendation whether the proposed action is a major action significantly affecting the quality of the human environment for which an EIS is required. The EA contains a comprehensive assessment of the environmental impacts of the project and concludes that the project will likely not have significant effects on the human environment; therefore, an EIS is not required. As such, the Commission concludes that the final EA meets the requirements of Wis. Stat. § 1.11, Wis. Admin. Code ch. PSC 4, and Wis. Admin. Code § PSC 4.20.

The Commission has fulfilled its requirements under WEPA through the preparation and issuance of the EA and the creation of the record of the technical and public hearings held in the project area. The joint EA was prepared by the staffs of the Commission and DNR.

The Commission finds that its review of the proposed project is adequate in both of these respects.

Project Cost and Construction Schedule

ATC's estimated total gross project cost for the proposed project as modified by the Final Decision is $70,600,000. The estimated cost is in 2018 dollars. The estimated total gross project cost is detailed as follows:

Estimated Project Cost

Transmission Line Costs		
Segment A	$5,395,000	
Segment D	13,936,000	
Segment I	7,390,000	
Segment J	5,699,000	
Segment F with Fb	21,072,000	
Segment H	1,314,000	
Subtotal Transmission Line Costs		**$54,806,000**
Substation Costs		
North Lake Geneva Substation	$646,000	
Balsam Substation	8,003,000	
Spring Valley Substation	3,146,000	
Bain Substation	360,000	
Subtotal Substation Costs		**$12,155,000**
Other Project Costs		
Precertification Costs	$3,639,000	
Subtotal Other Project Costs		**$3,639,000**
Total Gross Project Cost		**$70,600,000**

The applicant intends to begin construction of the proposed project in June 2017 and place the facilities in service by May 2019.

Certificate

The Commission grants ATC a CPCN for construction of the Spring Valley-North Lake Geneva transmission project using route Segments A, D, F (with Sub-segment FB), I, and J, as described in the EA and Ex.-ATC-Application, and as modified by this Final Decision, at an estimated cost of $70,600,000.

Order

1. The applicant is authorized to construct the facilities as approved by this Final Decision at a total estimated cost of $70,600,000.

2. This authorization is for the specific project as described in this Final Decision at the stated cost. Should the scope, design, or location of the project change significantly, or 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 applicant shall promptly notify the Commission as soon as it becomes aware of the possible change or cost increase.

3. The applicant shall construct the proposed project using route Segments A, D, F (with Sub-segment FB), I, and J, as described in the EA and Ex.-ATC-Application.

4. If the applicant cancels the project or enters into any arrangement with another party regarding ownership or operation of the proposed facilities, the applicant shall provide prior notice to the Commission. All of the applicant's commitments and all conditions of this Final Decision apply to the applicant and to its successors, assigns, agents, and contractors.

5. ATC shall obtain all 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 proposed project established by the applicant for the purposes of managing construction of the project.

6. The applicant 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 applicant 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 applicant shall work with the applicable distribution utility and Commission staff to determine where and how they will

conduct the stray voltage measurements. The applicant shall report the results of their testing to Commission staff.

7. The applicant shall coordinate with USFWS and DNR to determine the potential impacts and the appropriate mitigation measures for the federally-listed species the northern long-eared bat.

8. The applicant 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 EA, nor may they affect new landowners who have not been given proper notice and hearing opportunity. For each proposed MRA, the applicant shall submit for Commission staff review and approval a letter describing the nature of the requested change, the reason for the change, the incremental cost, environmental impact differences based on the approved route, and the applicant's communications with the affected landowners.

9. The applicant shall work with property owners 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 applicant.

10. The applicant shall comply with all DATCP recommendations accepted or accepted as modified by this Final Decision.

11. The applicant shall use appropriate landscaping and vegetation retention at the Balsam Substation site to screen the new facilities from nearby existing and future residential development.

12. ATC shall work with the landowner on modification of the approved project route in the area of the Balsam Substation, and investigate a possible minor route adjustment to accommodate the land owner's request.

13. The applicant shall adhere to the restrictions of Wis. Admin. Code ch. PSC 113.0511 to minimize the possibility of spreading oak wilt.

14. The applicant shall work with all landowners, to the extent practicable, regarding the placement of facilities, on their properties including off-ROW access roads.

15. The applicant shall work with landowners and holders of conservation easements to minimize the impacts of the project to the conservation easement.

16. The applicant shall work with WisDOT on the final design of highway crossings and notify Commission staff of any agreed-upon modifications to the approved alignment.

17. The applicant 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 applicant shall provide this data to the Commission as soon as it becomes available.

18. Beginning with the quarter ending June 30, 2016, and within 30 days of the end of each quarter thereafter and continuing until the facilities are fully operational, the applicant 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; and

f. The date that the facilities are placed in service.

19. Upon completion of the project, the applicant 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.

20. 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 the applicant has received every federal and state permit, approval, and license that is required prior to commencement of construction 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 applicant receives 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.)

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

Dated at Madison, Wisconsin, this 21st day of April, 2016.

Sandra J. Paske
Secretary to the Commission

SJP:PRR:jlt:DL: 01370246

See attached Notice of Rights

Docket 137-CE-167

PUBLIC SERVICE COMMISSION OF WISCONSIN
610 North Whitney Way
P.O. Box 7854
Madison, Wisconsin 53707-7854

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.[1] 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

[1] *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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