

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION



PPM Energy, Inc.
230-KV Transmission Line
Application

Case No. PU-05-305

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

_____, 2005

Appearances

Commissioners Tony Clark, Susan E. Wefald and Kevin Kramer.

Lawrence Bender, Attorney at Law, Pearce & Durick 314 East Thayer Avenue, Bismarck, North Dakota 58501, on behalf of the Applicant, PPM Energy, Inc.

William W. Binek, Chief Counsel, Public Service Commission, Capitol, Bismarck, North Dakota 58505, on behalf of the Public Service Commission.

Allen C. Hoberg, Administrative Law Judge and Director, Office of Administrative Hearings, 1701 N. 9 Street, Bismarck, ND 58501-1882, as Procedural Hearing Officer.

Preliminary Statement

On January 26, 2005, PPM Energy (PPM) filed a Letter of Intent (LOI) with the Commission indicating that it planned to file applications for both a certificate of corridor compatibility and a route permit for the proposed transmission facilities.

On February 9, 2005, PPM filed a supplement to its LOI requesting that the Commission shorten the prescribed one year between when the LOI is submitted and when PPM could file applications for both the certificate of corridor compatibility and route permit.

On March 1, 2005, the Commission shortened the one year notice period to one day.

On June 16, 2005, PPM filed a consolidated application for a waiver of procedures and times schedules, a certificate of corridor compatibility and a route permit authorizing construction of approximately 9.5 miles of 230 kV electric transmission line and a new substation (project substation) that will step-up the voltage from 34.5 kV to 230 kV collectively referred to as the proposed electric transmission facility in Pierce County, North

Dakota (Application).

On June 29, 2005, the Commission deemed the application complete and issued a Notice of Filing and Notice of Hearing, scheduling a public hearing for July 29, 2005 at 9 a.m. CDT at the Pierce County Courthouse, 240 2 Street SE, Rugby, North Dakota. The notice identified the following issues to be considered:

1. Will the location, construction, and operation of the proposed electric transmission facility produce minimal adverse effects on the environment, natural resources, and upon the welfare of the citizens of North Dakota?
2. Is the proposed electric transmission facility compatible with the environmental preservation and the efficient use of resources?
3. Will the proposed electric transmission facility corridor and route minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?
4. Is it appropriate for the Commission to waive the procedures as requested in the application including the request for a single consolidated application for Corridor Certificate and Route Permit?

A public hearing on PPM's Application was held as scheduled on July 29, 2005 in Rugby, North Dakota. Upon commencement of the hearing, PPM moved (for purposes of expediting the hearing process) that this case be combined and consolidated with Case No. PU-05-47; a companion case filed by PPM for siting of a wind energy facility to be located in Pierce County, North Dakota. The proposed wind energy facility is referred to by PPM as the Rugby Wind Farm. PPM's request to combine and consolidate Case No. PU-05-47 with this case was granted. Following the hearing, the Commission received from PPM certain late filed exhibits as ordered by the Hearing Officer at the hearing.

Having allowed all interested persons an opportunity to be heard and having heard, reviewed and considered all testimony and evidence presented, the Commission makes the following:

Findings of Fact

1. PPM is a diversified energy company headquartered in Portland, Oregon. PPM owns and operates a wide variety of energy facilities in the United States and Canada, such as gas generation, gas storage, wind generation and electric transmission. The 230-kV transmission line as proposed by PPM in this application and its companion

application for the Rugby Wind Farm (N.D. PSC Case No. PU-05-47), if approved, will be the first facilities owned and operated by PPM in the state of North Dakota.

2. PPM proposes to construct a substation to be located approximately eight (8) miles north of Rugby, North Dakota in Section 28, Township 158 North, Range 72 West, (Spring Lake Township) Pierce County, North Dakota, in the area of its proposed Rugby Wind Farm, and a 9.5-mile 230-kV three-phase alternating current electric transmission line to connect the project substation to the Rugby substation located approximately one mile east of Rugby. The purpose of the substation and transmission line is to transmit the energy generated by the proposed Rugby Wind Farm to the transmission grid. Energy transmitted along the proposed transmission line will be sold at the Rugby Substation busbar to a regional utility.

3. The proposed transmission line will be constructed using either wood or steel H-frame structures. Each structure will be approximately 80 feet in height with an average span between each structure of 660 feet.

4. The proposed transmission line will be designed and constructed to meet or surpass all relevant state codes, as well as the National Electric Safety Code (NESC), the Rural Utilities Service (RUS), the Avian Power Line Interconnection Committee (APLIC), the Raptor-Safe Design standards and PPM company standards.

5. The total estimated cost of construction of the PPM proposed transmission facility is \$2.75 million.

6. Section 49-22-16(3), N.D.C.C., provides that an applicant for a route permit from the Commission shall obtain all permits that may be required to construct and operate the transmission facility.

7. The state and federal departments and agencies which have permit or regulatory approval authority relating to the construction and operation of the proposed facility are as follows:

- a. state and local agencies
 - (1) North Dakota Public Service Commission
 - (2) North Dakota Department of Health
 - (3) North Dakota State Historical Society, State Historic Preservation Office
 - (4) North Dakota Department of Transportation
 - (5) Pierce County
- b. federal
 - (1) United States Fish and Wildlife Service
 - (2) United States Army Corps of Engineers

Hearing Exhibit 8 contains a complete listing of all the permits and approvals that must be

obtained for PPM's proposed transmission facility and the status of each of these permits or approvals.

8. Chapter 69-06-08, N.D. Admin. Code, sets forth certain criteria to guide the Commission in evaluating the suitability of granting an application for a certificate of corridor compatibility and route permit. The criteria as set forth in Section 69-06-08-02, N.D. Admin. Code, are classified as Exclusion Areas, Avoidance Areas, Selection Criteria and Policy Criteria. A transmission facility route shall not be sited within an Exclusion Area. A transmission facility route shall not be sited within an Avoidance Area unless the applicant shows under the circumstances there are no reasonable alternatives. In determining whether an Avoidance Area should be designated for a facility, the Commission may consider, among other things, the proposed management of adverse impacts; the orderly siting of facilities; system reliability and integrity; the efficient use of resources; and alternative routes. In accordance with the Commission's Section Criteria, a transmission route shall be approved if it is demonstrated that no significant adverse impacts will result from the location, construction and maintenance of the transmission facility. In accordance with the Commission's Policy Criteria, preference may be given to an applicant demonstrating certain benefits of the transmission facility.

9. The location and route designated by PPM for its proposed transmission facility, as shown on the attached map, does not include any geographical areas listed as an Exclusion Area with one exception, the Rugby Golf Course is located on the western edge of the corridor. The proposed route is over 0.25 miles from the golf course and the transmission line will not have any impact on this exclusion area.

10. The location and route designated by PPM for its proposed transmission facility does not include any geographical areas listed as an Avoidance Area, except as follows:

a. PPM has conducted a Class I Cultural Resources Inventory (CRI) of North Dakota State Historic Preservation Office (SHPO) files within the corridor and route of the transmission facility. A Class III CRI pedestrian survey of transmission structure locations and the route was completed in June 2005. Facility locations will avoid any cultural resources identified during the survey. The Class III CRI of the transmission route identified one isolated cultural find, a Knife River Flint bifacial tool fragment, in a shovel test. No additional archaeological materials were noted during the survey. The placement of structures and project substation will avoid any known cultural resources.

b. There are several occupied residences in the corridor. The route is over 500 feet from all occupied residences. No homes will be impacted by the route.

c. The proposed route will result in the loss of a minimal amount of woodlands. Those woodlands primarily consist of field or farmstead windbreaks and structure placement was requested by landowners to minimize impacts to row crop farming. Consistent with the rules and regulations of the Commission, PPM has agreed that it will replace any destroyed trees or woody vegetation on a two-for-one basis with saplings that are two or more years

old. The Commission finds no reasonable alternative that would further avoid impacts to these woodlands.

d. PPM conducted a wetland delineation of the proposed route. There are numerous wetlands (Avoidance Areas) within the proposed corridor. PPM's proposed structure placement along the proposed route is such that only one wetland will be impacted by the proposed route. A wetland located in Section 33, Township 157 North, Range 72 West (Torgerson Township) is too large to span with the proposed 230-kV transmission line. A U.S. Army Corps of Engineers (USACE) Section 404 permit is required for unavoidable impacts to the wetland adjacent to jurisdictional water in Section 33 of Torgerson Township. The U.S. Fish & Wildlife Service (USFWS) has preliminarily reviewed the wetland delineation and transmission structure placement and does not anticipate impacts to wetlands on USFWS easements. PPM intends to acquire all the necessary permits from the USFWS and USACE before commencement of construction of its proposed transmission facility. The Commission finds no reasonable alternative that would further avoid the wetland impact.

11. The proposed corridor between the point of origin (project substation) and the point of termination (Rugby substation) was evaluated for the exclusion, avoidance, and selection criteria. Based on the analysis of the corridor, it was determined that the best location for the new transmission line would be parallel to the existing Xcel Energy 230 kV transmission line.

12. PPM submitted substantial evidence to demonstrate that the proposed transmission facility would not have any significant impact on the Selection Criteria set forth in Section 69-06-08-01(3), N.D. Admin. Code.

13. PPM submitted substantial evidence to demonstrate its commitment to maximize the benefits of the proposed transmission facility as far as is possible to meet the Policy Criteria set forth in Section 69-06-08-01(4), N.D. Admin. Code.

14. The proposed 9.5-mile transmission line will parallel the existing 230-kV line owned and operated by Xcel Energy for the entire route. PPM proposes placing the new 230-kV transmission line 120 to 150 feet east of the centerline of the existing Xcel Energy transmission line. Transmission pole placements will mirror existing pole placements to the extent practicable to minimize potential visual, avian and structural impacts (*i.e.*, the new poles will be approximately the same height as existing poles, the new poles will be placed at the same spacing and parallel to the existing poles, and the lines will be at approximately the same elevation). In a few locations, the proposed structure location will deviate for the pole placement of the existing poles, primarily to minimize impacts on wetlands.

15. The route for the proposed 9.5-mile transmission line is located within a highly rural area. There is no information to indicate that any new residential construction is contemplated within the corridor or route.

16. The route for the proposed 9.5-mile transmission line crosses areas that are primarily agricultural land. There are several areas within the proposed route where tree and shrub growth may require right-of-way clearing. Significant amounts of grading are not contemplated for preparation of the proposed transmission line right of way.

17. The proposed 9.5-mile transmission line is not anticipated to result in any negative impacts to public services such as local services, electric service, roads, traffic, water supply or telephone and other communication services.

18. Electromagnetic fields are present around any electrical device. The electromagnetic fields which will be generated by the proposed 9.5-mile transmission line are not anticipated to result in any human health effects because of their low level and distance from any residences.

19. The location and route of PPM's proposed transmission facility is located approximately 550 feet to the nearest occupied residence. At that location, noise from the proposed transmission facility is expected to be below rural background levels.

20. No impact to the recreational resources in the area of the proposed corridor and route are anticipated by the proposed transmission facility. The project substation will be a fenced and locked facility.

21. Land use is not expected to change as a result of construction of the proposed transmission facility. Two transmission lines (115 kV and 230 kV) are already present within the corridor. The majority of the area under or adjacent to the transmission line will still be used for agricultural practices following construction of the line.

22. No impact to geologic and groundwater resources are anticipated as a result of the proposed transmission line.

23. Temporary impacts to vegetation will occur in the right of way area and around each structure location during construction of the transmission line. Permanent impact to vegetation will occur at each structure location.

24. Raptors, waterfowl and other bird species may be affected by the construction and placement of the proposed 230-kV transmission line. To help avoid potential impacts to avian species along the proposed route during construction and operation of the transmission line, PPM will utilize H-frame structures placed in parallel with the poles of the existing Xcel Energy structures so that conductors of the existing and new lines are easier for birds to see and avoid. The proposed H-frame design will utilize suspension insulation with a clearance of approximately 84 inches in order to eliminate the potential for electrocution of raptors.

25. No rare or unique resources have been identified in the route. It is not anticipated that the proposed transmission facility will impact rare and unique resources.

26. On July 12, 2005, the Pierce County Board of County Commissioners granted PPM a conditional use permit for the proposed transmission line. Hearing Exhibit 6 is a copy of the Pierce County Conditional Use Permit, dated July 12, 2005, for Rugby Wind Farm 230 kV Transmission Line.

27. PPM plans to submit the transmission line final plan and profile to the Commission 30 days prior to the preconstruction meeting.

From the foregoing Findings of Fact, the Commission now makes its:

Conclusions of Law

1. The Commission has jurisdiction over this proceeding under Chapter 49-22, N.D.C.C.

2. The transmission line proposed by PPM is a transmission facility as defined in Section 49-22-03(12), N.D.C.C.

3. The proposed project is of such design, location and purpose that it will produce minimal adverse effects, as defined under Section 49-22-05.2, N.D.C.C.

4. The Application submitted by PPM meets the corridor and route evaluation criteria required by Chapter 49-22, N.D.C.C.

5. The location, construction, and operation of the proposed transmission facility will produce only minimal adverse effects of the environment and upon the welfare of the citizens of North Dakota.

6. The proposed transmission facility is compatible with the environmental preservation and the efficient use of resources.

7. The proposed transmission facility corridor and route will minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion.

8. The proposed transmission facility is of such length, design, location and purpose that it will produce minimal adverse effects.

From the foregoing Findings of Fact and Conclusions of Law, the Commission now makes its:

Order

The Commission orders:

1. PPM's application for a waiver of procedures and time schedules is granted.

2. Certificate of Compatibility for a Transmission Facility Corridor No. ___ is issued to PPM, designating a Corridor for its proposed transmission facility route as shown on the attached map.

3. Route Permit for Construction of a Transmission Facility No. ___ is issued to PPM granting authority to construct the transmission facility substantially as presented at the hearing.

4. PPM shall conduct a preconstruction conference prior to commencement of any construction, and must include a PPM representative, its construction supervisor, and a representative of Commission staff to ensure that PPM fully understands the conditions set forth in this order.

5. PPM shall comply with the rules and regulations of all other agencies having jurisdiction over any phase of the proposed transmission facility, and shall obtain all other necessary approvals and permits, and shall provide copies of all approvals and permits to the Commission prior to the construction of the transmission line.

6. PPM shall inform the Commission of its intent to start construction on the transmission facility prior to the commencement of construction, and, once construction has started, PPM shall keep the Commission updated of construction activities on a monthly basis.

7. PPM shall construct and operate the transmission facility in the manner described in its Application and at the hearing, and in accordance with all applicable safety requirements.

8. PPM shall promptly report to the Commission the presence in the permit area of any critical habitat of threatened or endangered species, or of bald or golden eagles that PPM becomes aware of and that were not previously reported to the Commission.

9. If any cultural resources or gravesites are discovered during construction of the facility, earth disturbing activities in the immediate vicinity of the discovery would be halted. The resources will be marked, preserved and protected from any further disturbance until a professional examination can be made in consultation with the ND SHPO and clearance to proceed is given by SHPO. A report of such examination will be filed with the SHPO and the Commission.

10. All pre-existing roads and lanes used during construction must be restored to a condition that will accommodate their previous use and areas used as temporary roads during construction must be restored to their original condition.

11. Construction must be suspended when weather conditions are such that construction activities will cause irreparable damage, unless adequate protection measures

approved by the Commission are taken.

12. Reclamation along the right-of-way shall be continuous and coordinated with construction.

13. Reclamation, fertilization and reseeding is to be done by PPM according to the Natural Resource Conservation Service and USFWS recommendations for CRP, native prairie and other non-cropped lands unless otherwise specified by the landowner and approved by the Commission.

14. PPM's obligation for reclamation and maintenance of the right-of-way shall continue throughout the life of the transmission line.

15. Trees or other woody vegetation must be replaced with saplings that are two or more years old at a rate of two for every one removed. Landowners shall be given the option of having replacement trees/shrubs planted off the right-of-way on the landowner's property or waiving that requirement in writing and allowing PPM to plant the replacement trees/shrubs elsewhere. PPM shall inspect tree replacements once a year for three years and send a report on or shortly before December 31st of each year to the Commission documenting work completion and condition of woodlands planting. The Commission may order additional plantings if survival rates are less than 75%.

16. PPM shall work with landowners and residents to mitigate any increase in television and residential radio interference that results from the path of the transmission line.

17. PPM shall repair or replace all fences and gates removed or damaged during all phases construction and operation of the proposed transmission facility.

18. PPM shall obtain approval from the Commission or from Commission staff prior to any changes in structure locations.

19. PPM shall provide the Commission with a copy of the design specifications for construction of the transmission line showing the location of the transmission line as built.

20. The Certificate of Compatibility for a Transmission Corridor No. _____ and Route Permit for Construction of a Transmission Facility No. _____ shall be effective for the life of the project but is subject to modification by order of the Commission if deemed necessary to further protect the public or the environment.

21. The Certificate of Compatibility for a Transmission Corridor No. _____ and Route Permit for Construction of a Transmission Facility No. _____ shall not be transferred without the approval of the Commission, but approval shall not be unreasonably withheld.

PUBLIC SERVICE COMMISSION

Susan E. Wefald
Commissioner

Tony Clark
President

Kevin Kramer
Commissioner