Freeport to St. Cloud Advisory Task Force
Third Meeting – February 25, 2010

Meeting Notes

Welcome and Agenda Review

The facilitator for the task force, Charlie Petersen, State of Minnesota, Management Analysis & Development, welcomed task force members and all present. Task force members were asked to introduce themselves and share their designation (representing a particular constituency or serving as an individual citizen member of the advisory task force).

Charlie reviewed the task force charge and emphasized that the work of this day, the third meeting, was to discuss in greater detail: (1) the applicant's proposed routes, (2) the alternative routes proposed by the task force at its second meeting, and (3) any additional routes or route segments, and discuss the process for developing the report of the task force. Questions by task force members were discussed and addressed.

Review and Approval of Meeting Notes

Task force members were asked to review the meeting notes from meeting #2 and respond with any questions edits changes, etc. Task force members offered the following edits to the notes:

- On page one in the area of "Review and Approval of Meeting Notes," third bullet; in the second sentence remove the word "additional," and in that same sentence after the period insert: "when it is part of the 150 ft width."
- On page two in the area of "Identification of Alternative Routes. . .," first paragraph; in the fourth sentence after the word homes insert: "and center pivot irrigation systems" and edit the sentence to include the new language.

At the February 4, 2010 meeting of the task force, a request was made of Xcel Energy to provide their rationale for not selecting as an alternative route the 400 kV DC transmission line. A letter, addressed to David Birkholz, Minnesota Office of Energy Security from Darrin Lahr, Xcel Energy, was handed out to task force members explaining this rationale. The letter is attached in Appendix A.

Mr. Birkholz suggested that the 400 kV DC line was "outside of the box" with respect to the task force's work. This does not preclude the task force from discussing the line further, but such

discussion would draw time and energy away from the discussion and further refinement of routing alternatives for this section of the line, particularly those utilizing the I-94 corridor..

Review of ATF Generated Routes, and Route Segments

Advisory Task Force members were provided with maps of the alternative routes and route segments identified at meeting #2 and a table providing comparisons of the routes. The members reviewed each alternative and identified pros and cons for each. Maps and tables for the alternatives are available under the 3rd meeting heading at: http://energyfacilities.puc.state.mn.us/resource.html?Id=25652 (See "Route Alternatives Map" and "Matrix of Alternatives Impacts").

Applicant preferred route

Pros

- Avoids the towns of Albany and Avon
- New routing area is separated from other existing lines and provides redundancy for electrical transmission

Cons

- Proliferation of new corridors, 42 percent of route uses new corridors
- Longest of three applicant routes, 48.3 miles; because of length, higher cost

[Note: Length of applicant routes: Preferred Route – 48 miles; Alternate Route A – 48 miles; Preferred Route Segment Alternative 1 – 44 miles. These routes are determined by applicant from the Quarry Substation area to where the Preferred Route and Alternate Route A converge west of Melrose and east of Sauk Center. This requires extending the Preferred Route Segment Alternative 1 west along the Preferred Route in order to make a true comparison.]

- Seventeen angle structures used at 90 degree turns of line; angle structures are three times the cost of tangent structures
- Long-term impact on St. Wendel tamarack bog
- Impact on native vegetation noted in Stearns County mapping; also lakes impacted
- Proliferation of environmental concerns including: lakes, high value native vegetation, prairie grasses in area (Minnesota Department of Agriculture reseeding program – of native prairie grasses – in area along County Road 2)
- Future development area for City of St. Joseph and Waite Park; land has been identified in comprehensive plan for development; land has been purchased and some infrastructure (sewer and water) has been put in place
- Impacts development area of Tressel(sp) Ridge in Albany Township
- Route crosses area of high rural population in St. Wendel Township; higher density on east side of township: people, small track ownership of farms, and area plotted for development
- Route crosses orderly annexation area in St. Wendel Township west of St. Joseph and Waite Park

- Population growth potential area in St. Wendel Township west of St. Joseph and Waite Park; current homes within 1000 foot of center line for route – 75 identified by applicant with task force members noting some homes were missed or not counted; ATF member noted 105 homes identified as within 1000 foot center line for route in all of St. Wendel Township
- Area noted above in St. Wendel Township has a high concentration of prime farmland; ATF member noted that Stearns County Comprehensive Plan's top priority is the preservation of prime farmland.
- Twenty-seven documented century farms are crossed by route
- Task force member noted that the townships of St. Wendel, St. Joseph, and Collegeville are the three most difficult areas to deal with because of all the demands on the area.

Applicant preferred route segment alternative

Pros

- Avoids towns of Avon and Albany (skirts southern border of Albany)
- New routing area is separated from other existing lines and provides redundancy for electrical transmission
- Shorter route than applicant's preferred route
- Less homes impacted (within 1000 foot center line)

Cons

- Goes around and between many small lakes
- Crosses bog
- Uses a number of angle structures, 90 degree turns of line; angle structures are three times the cost of tangent structures
- Proliferation of new corridors, 23 percent of route uses new corridors
- Higher number of residences per mile impacted; count identified at 224 residences
- Crosses 566 acres of NWI wetlands; 19 percent of these wetlands restorable

Applicant alternative route A

Pros

- Avoids town of Albany, Avon, Melrose and Freeport
- New routing area is separated from other existing lines and provides redundancy for electrical transmission
- Majority of route runs along County Road 17 (existing corridor)

Cons

- Skirts southern city limits of town of Holdingford, industrial area annexed to city
- Affects two center pivot irrigation systems, crosses Myers(sp) farm
- Affects two mile area west of County Road 3 by Holdingford; crosses ½ mile of lowland; crosses 3 farms in a one mile run
- Proliferation of new corridors, 33% new right-of-way
- Ties into and follows area in St. Wendel Township north of St. Joseph and then between St. Joseph and Waite Park (high demand area with multiple land uses)

- Longest applicant route, 42 miles
- Skirts south side of Birch Lake state forest
- Impacts 24 documented century farms
- A number of corner structures needed to right-angle turns in line

ATF alternative route – Group 1, Alt 1 (Primarily I-94 corridor with partial underground)

Pros

- Follows existing right-of-way (Interstate 94) for much of route; ATF preferred route to be inside I-94 fence line
- Ten miles shorter than Applicant Preferred Route
- Underground through Avon (would be buried under Highway 54 approximately 2 miles)
- Would follow Highway 54 east of Avon
- Less environmental impact than applicant routes
- Follow Stearns County plan for economic development corridor
- Part of route would be underground to address issues in congested areas

Cons

- Contingent on ability and cost of going underground
- Length of underground line – 13 miles
- Concerns of being underground: ability to repair, cost of installation and repair, environmental impact of installation, right-of-way issues with installation
- Length of construction time to go underground
- Contingent on use of Interstate 94 corridor and approval from MnDOT and federal DOT [Note: this was not listed on flip chart notes but discussed by the ATF during the meeting.]

Suggestions of alterations to ATF alternative route – Group 1, Alt. 1

- Underground locations discussed: City of Avon, Cities of Albany and Freeport, area along I-94 next to St. Johns University
    - ATF discussed the viability of placing 13 miles of transmission line underground. A member proposed prioritizing the critical area where undergrounding would be most beneficial and studying the feasibility of these options. The ATF discussed the areas prioritized but no consensus was reached.
- ATF discussed following the existing 69 kV line where the ATF alternative route – Group 1, Alt. 1 veers from I-94 east of Avon into St. Joseph. This alteration would be above ground.

ATF alternative route – Group 1, Alt 2 (Line segment follows County Road 3 south from Applicant Alternative Route A in Holding Township into St. Joseph)

Pros

- Avoids St. Wendel bog (this statement was questioned)
- Avoids area in St. Wendel Township north of St. Joseph and then between St. Joseph and Waite Park (high demand area with multiple land uses)
- Shorter by one miles than Applicant Alternative Route A

- Avoids the towns of Albany, Avon and Freeport
- Less proliferation of new corridors, follows exist corridor for County Road 3

Cons

- Goes through areas of high population density than other routes
- Has many of the cons identified for the Applicant Alternative Route A (This route follows Applicant Alternative Route A until the eastern boundary of Holding Township and then follows County Road 3. It avoid the high demand area with multiple land uses in St. Wendel Township and between the city of St. Joseph and Waite Park)
- Skirts environment and/or scientific significant areas: Partch Woods, College of St. Benedict, and crosses St. Wendel bog system
- Environmental concerns when coming close to or crossing Calcareous Fen, Rich/Poor Fen, and Minerotrophic Tamarack Swamp

ATF alternative route – Group 2, Alt 1 (Line segment from Applicant Preferred Route Segment Alternative south of City of Albany, follows County Road 10 to Highway 12 east and then Highway 23 into St. Joseph and Waite Park)

Pros

- Avoids City of Albany
- Follows main trunk road systems, 99% follows existing right-of-way
- Crosses large open farm land with no or minimal impact on center pivot irrigation systems
- Follow Stearns County plan for economic development corridor
- Displaces less agriculture land than Applicant Preferred Route, approximately 500 acres less
- No overhead wires currently exist on County Road 10
- Less acres of wetlands impacted than Applicant Preferred Route, Applicant Preferred Route Segment Alternative, and Applicant Alternative Route A, less need to restore wetlands because fewer impacted

Cons

- Route length is longer by five miles (than Applicant Preferred Route Segment Alternative)
- No representation on ATF from some of the areas impacted by this alternative; specifically: Cities of Richmond, Cold Spring, and Rockwood (it was noted that some of these communities were invited to participate in this task force)
- Number of residents per mile is higher
- Lakes are skirted but none crossed
- Need to assess the impact on scientific areas east of Cold Spring

Suggestions of alterations to ATF alternative route – Group 2, Alt. 1

- In the Cold Spring and Richmond areas: option for underground, short distance detours in this area to address concerns

ATF alternative route – Group 2, Alt 2

[ATF removed this route for consideration prior to any review]

ATF alternative route – Group 3, Alt 1 (Line segment from Applicant Preferred Route Segment Alternative south of Freeport following County Road 11 to County Road 23 then picking up County Road 42 to joining back up with the Applicant Preferred Routes Segments Alternative at County Road 9)

Pros

- Impact primarily large tract farmland
- Avoids town of Albany and Avon, goes around Farming
- Avoid a number of ecological systems, native plant areas, and wetlands

Cons

- Approximately 2 % of line impact 50 acres of environmental areas consisting of biodiversity and native grasslands (from county biological survey)

ATF alternative route – Group 3, Alt 2 (Line from Applicant Preferred Route going south on County Road 237 which becomes County Road 12 to County Road 177 which goes into County Road 23 then follow County Road 42 into Applicant Preferred Route Segment Alternative just north of School Lake)
[Note: This route was not mapped correctly and was re-drawn at the February 25, 2010 meeting to avoid the City of Saint Martin. The description above is tentative and will be confirmed and presented in the task force's report.]

Pros

- Higher utilization of right-of-way of existing routes
- Impacts only large tract farms
- Impacts less wetlands, lakes and has less overall environmental impact
- Less residential areas impacted (need to develop option to avoid New Munich)

Cons

- Line goes through New Munich (need to develop option to avoid New Munich)

ATF alternative route – Group 4, Alt 1(Line segment from Applicant Preferred Route going south on County Road 9 just north of Avon to Queens Road and following Queens Road to where it intersects with Interstate 94 and then following I-94 into St. Joseph)

Pros

- Shorter distance than Applicant Preferred Route
- High percentage of existing right-of-way used
- Less residents impacted than Applicant Preferred Route
- Less non-resident buildings impacted than Applicant Preferred Route
- Less agriculture land use and no center pivot irrigation systems impacted
- Less environmental impact specifically native plants and wetlands
- Less acres in 100 year flood plan than Applicant Preferred Route

Cons

- Crosses new site of Avon Township hall
- Interstate 94 concerns addressed earlier (density and approval from MnDOT and federal DOT)
- Skirts St. John's University (goes on north side of highway)
    - Possible tweaks to place line underground or follow 69 kV line through this area (but 69 kV line route would impact bog and Collegeville town site)
- Crosses St. Benedicts woods
- Crosses Wobegon Trail
- Cons of Applicant Preferred Route west of where this alternative jogs south (County Road 9 north of Avon)
- Impacts Freeport Lake expansion area (along Applicant Preferred Route)

The task force noted that all ATF routes identified above (and not removed from consideration by the task force) should be carried forward.

Report Process

Charlie will draft a report based on the three meetings of the task force, outlining the process and the action of the task force. The report will be e-mailed to task force members for review and comment. The comments will be reviewed and incorporated into the report as appropriate. If the comments are extensive or differ substantially from meeting notes, then a request may me made to have these comments submitted and referenced electronically.

Notes from meeting #3 will be sent to task force members for review and comment prior to development of the final report.

Darrin Lahr, Xcel Energy, asked if anyone knew of discrepancies in the maps or data to please contact him with the current information and noted that, to date, no one had contacted him from the ATF on data issues.

The task force was thanked for its good work, understanding this was a difficult issue to undertake.

Appendix A: Letter to Minnesota Office of Energy Security Concerning 400 kV DC Line

414 Nicollet Mall
Minneapolis, MN 55401

1-800-895-4999
xcelenergy.com

February 24, 2010

David Birkholz
Minnesota Office of Energy Security
85 7th Place E., Suite 500
St. Paul, Minnesota 55101-2198

Re: Paralleling the +/-400 kV DC line

Mr. Birkholz:

At the February 4, 2010 Avon area Advisory Task Force meeting a question was raised about the possibility of paralleling the +/-400 kV DC line. The Applicants were asked to provide an overview as to why following the DC line was not selected.

When developing the proposed routes for the Fargo-St. Cloud 345 kV Project ("Project"), the Project Team evaluated the potential to parallel existing transmission line corridors. One of those transmission line corridors is the +/- 400 DC line connecting the Coal Creek Station in Underwood, North Dakota, to the Dickinson Converter Station near Delano, Minnesota, that was constructed in the late 1970s ("DC Line"). The 435-mile DC line heads generally in a southeast direction from Coal Creek, passing far south of Fargo near the South Dakota border and then toward the Twin Cities south of Alexandria and west of St. Cloud until reaching the Delano area.

The Project Team reviewed the DC Line corridor and determined it was not a route alternative to be carried forward for a number of reasons including, but not limited to the following:

- System reliability would be reduced if the DC Line corridor were selected. Corridor sharing works well when two transmission lines serve different purposes. For example, transmission lines that are intended to move power short distances are more appropriate for sharing with transmission lines that are intended to move power medium or long distances. In this instance if the DC Line corridor were followed, the Fargo-St. Cloud 345 kV transmission line and the DC Line would be the two highest voltage and highest megawatt rated transmission facilities linking Minnesota and North Dakota aligned in a single corridor. Overall system reliability is enhanced when transmission facilities are located in diverse geographic areas. Reliability is reduced when facilities are congregated in close proximity to each other. This is particularly true for the high voltage facilities that comprise the backbone of regional transmission system serving Minnesota and the surrounding region. The more common rights-of-way are propagated, particularly involving high voltage facilities, the more likely it becomes that an outage involving multiple facilities could occur due to a single event. From a system planning perspective it becomes necessary to plan for the loss of both

facilities, therefore no additional system capacity or redundancy would be gained. For transmission lines with a similar purpose, routes that are more geographically distant from each other will provide the most reliability benefit.

- The DC Line corridor would not meet the Project need of interconnecting at Fargo, Alexandria and St. Cloud absent significant additional length of the proposed 345 kV transmission line. The Minnesota Certificate of Need Order requires the new 345 kV line to connect at substations in these communities. At least 60 miles would be added to the overall length of the Project if the DC Line corridor, which would still be required to interconnect in these areas, were considered.

- From an environmental perspective, there are a collective number of sensitive features that occur within immediate proximity (less than 300 feet) of the DC Line, in addition to this corridor diagonally traversing active agricultural lands. The DC Line traverses multiple Waterfowl Production Areas administered by the U.S. Fish and Wildlife Service. At least one calcareous fen is located within 300 feet of the DC Line. Various other environmental features occur within immediate proximity of the DC Line corridor and include, for example, various forms of conservation easements or lands managed for conservation. Further, while it was previously identified that the DC Line diagonally traverses agricultural lands, its general configuration also involves a large number of angle structures. As a result of these considerations, the Project Team perceived the corridor as one that would lead to a substantial increase in agricultural and environmental impacts if the proposed 345 kV line were to be co-located with the existing DC Line.

The Applicants appreciate the opportunity to provide additional insight on the issues to be considered when developing transmission line routes.

Sincerely,

Darrin Lahr
Supervisor, Siting and Land Rights
Xcel Energy