



**Hollydale
115 kV Transmission Line Project
Advisory Task Force**

**Hollydale Advisory Task Force
First Meeting – October 18, 2011**

Meeting Notes

Welcome and introductions

The facilitator for the task force, Charlie Petersen, State of Minnesota, Management Analysis & Development, welcomed task force members and all present. He asked task force members to, in “around the table” fashion, introduce themselves and to relate one expectation that they had for the work of the advisory task force. Expectations included:

- Comes to a conclusion that is best for Plymouth
- Best outcome for the group
- Open and productive discussion
- Open and fair process
- People’s needs met with fair and open discussions
- Serious dialog on options that have less effect on Plymouth
- Come up with the best outcome for the city and residents of Plymouth
- Bring out details not considered previously, have an open and complete discussion
- Fair and balanced discussion

Why we are here

Charlie reviewed with the task force, the charge of the task force and a draft plan for accomplishing the charge over the course of two task force meetings. Charlie described his role as a facilitator and documenter of the task force’s work. He described the report which will be the product of the task force’s work and how it will be developed. Charlie also provided ground rules for meeting logistics. Questions by task force members were discussed and addressed.

State route permitting process

Scott Ek, Energy Facility Permitting, Minnesota Department of Commerce, discussed the state permitting process and the role of the advisory task force. He discussed the criteria used by the Minnesota Public Utilities Commission in making a route permitting decision and issues typically covered in an environmental assessment. Questions by task force members were discussed and addressed.

Project overview

Joe Sedarksi, Xcel Energy and Marsha Parlow, Great River Energy, provided an overview of the proposed transmission line project and process used by Xcel and Great River Energy to develop the proposed routes and sub-station location. Task force members were provided copies of the application at the meeting.

Information on the project, including the application can be found at:

<http://energyfacilities.puc.state.mn.us/Docket.html?Id=32121>. Information pertaining to the advisory task force can be found at:

<http://energyfacilities.puc.state.mn.us/resource.html?Id=32256>.

Questions by task force members were discussed and addressed. Questions included:

- What types of poles will be used? What is the difference between galvanized and weathering poles? Who decides what types of poles are used?
- Is this the largest the line will ever be, i.e., 115 kV, single circuit?
- What is the distance to houses? Who gathers this information and determines the correct numbers? How is the distance measured, e.g., from the centerline?

Scott and Joe discussed the terms “right-of-way” and “route” – how they’re related and how they’re different.

Issues and Impacts Identified

Charlie led the task force through a small group discussion exercise to identify and categorize impacts and issues that should be considered in the environmental assessment for evaluation of proposed routes. The task force members responded to the question: *What land use planning or other impacts and issues need to be considered in the evaluation of proposed transmission line routes and/or sub-station locations?*

The task force identified six impact and issue areas to be evaluated in the environmental assessment. These issue areas are included in the notes and table below. Worksheets completed by task force members on this same topic are included in Appendix A.

Charlie then led members through an exercise to prioritize impacts and issues identified by the task force. Task force members were asked to indicate their three most important “impact and issue” categories. The issues and impact areas identified include:

Health and Safety Issues (Top priority)

- Magnetic field (real/perceived)
 - Pets
 - Children/ grandchildren
 - Old people
- Electrical fields, magnetic fields, pacemaker interference, childhood leukemia, line drop

Property Values (Top priority)

- Property value, impacts of new line vs. upgrade of existing
- Lower value of homes

- Minimum of 10%?
- Aggregate > \$700M
- Deters buyers
- Knowingly buying a property next to an existing line is a fundamentally different impact than having a new line placed next to an existing home.
- Shifting the line, shifts impacts to other properties and homeowners.
- Buying a property at a 20% discount because of its proximity to a power line; you can't expect your property to appreciate at the same rate when you sell.

Lines too close to houses (Top priority)

- Electromagnetic field
- Danger of falling pole
- Eliminates yard
- Property value decrease
- Fire hazards (decks with grills under lines) 22 foot minimum.
- Parents with children losing safe use (perceived or actual) of back yard in townhome area – no other green space in front of home.
- People in townhomes close to line threatening to move – home values “underwater” or loans – may default on association deals.
- Proximity to homes. Property rights and change in land use
- Route is too close to homes.
- Impact fewest households (least impact)

Environmental impacts (Priority)

- Wetlands damage & trees/shrubs
 - Change drainage in one area
 - Long term impact
 - Spread of invasives
 - Environmental impact
- Watercourses, wetlands & floodplains
 - Aesthetic
 - Problem to repair/time to repair
 - Time to repair reduced reliability
- Wetland impacts
- Loss of trees & vegetation
- Existing line runs through numerous wetlands now. Old rules (1971) did not value wetlands. Aesthetics. Difficult to access to repair. Longer repair time leads to reduced reliability.
- Wetland impacts (during construction)

Right-of-way impacts (Priority)

- Right-of- way impacts (access, trees, railroad, natural areas) During both build & maintain
- Structural interference with road way clearance

Cultural & aesthetic values (Priority)

- Metal vs. wooden poles

- Line through Turtle Lake Park
- Route C only, above ground lines.
- Aesthetic
 - Plymouth as #1 livable city!!
 - Introducing ugly
- Lessened value to parks & trails
- Turtle Lake Park and city path to the north will have reduced aesthetics, use and value. Other parks & trails may have similar.

Hollydale Advisory Task Force

October 18, 2011

Identification of impacts and issues

What land use planning or other impacts and issues need to be considered in the evaluation of proposed transmission line routes and/or sub-station locations?

Health and Safety Issues (Top priority)	Property Values (Top Priority)	Lines too close to houses (Top priority)	Environmental Impacts (Priority)	Right-of-way Impacts (Priority)	Cultural & aesthetic values (Priority)
<ul style="list-style-type: none"> • Magnetic field (real/perceived) <ul style="list-style-type: none"> ○ Pets ○ Children/grandchildren ○ Old people • Electrical fields, magnetic fields, pacemaker interference, childhood leukemia, line drop 	<ul style="list-style-type: none"> • Property value, impacts of new line vs. upgrade of existing • Lower value of homes <ul style="list-style-type: none"> ○ Minimum of 10%? ○ Aggregate > \$700M ○ Deters buyers • Knowingly buying a property next to an existing line is a fundamentally different impact than having a new line placed next to an existing home. • Shifting the line, shifts impacts to other properties and homeowners. • Buying a property at a 20% discount because of its proximity to a power line; you can't expect your property to appreciate at the same rate when you sell. 	<ul style="list-style-type: none"> • Electromagnetic field • Danger of falling pole • Eliminates yard • Property value decrease • Fire hazards (decks with grills under lines) 22' min. • Parents with children losing safe use (perceived or actual) of back yard in townhome area – no other green space in front of home. • People in townhomes close to line threatening to move – home values “underwater” or loans – may default on association deals. • Proximity to homes. Property rights and change in land use • Route is too close to homes. • Impact fewest households (least impact) 	<ul style="list-style-type: none"> • Wet lands damage & trees/shrubs <ul style="list-style-type: none"> ○ Change drainage in one area ○ Long term impact ○ Spread of invasives ○ Environmental impact • Watercourses, wetlands & floodplains <ul style="list-style-type: none"> ○ Aesthetic ○ Problem to repair/time to repair ○ Time to repair reduced reliability • Wetland impacts • Loss of trees & vegetation • Existing line runs through numerous wetlands now. Old rules (1971) did not value wetlands. Aesthetics. Difficult to access to repair. Longer repair time leads to reduced reliability. • Wetland impacts (during construction) 	<ul style="list-style-type: none"> • Right-of-way impacts (access, trees, railroad, natural areas) During both build & maintain • Structural interference with road way clearance 	<ul style="list-style-type: none"> • Metal vs. wooden poles • Line through Turtle Lake Park • Route C only, above ground lines. • Aesthetic <ul style="list-style-type: none"> ○ Plymouth as #1 livable city!! ○ Introducing ugly • Lessened value to parks & trails • Turtle Lake Park and city path to the north will have reduced aesthetics, use and value. Other parks & trails may have similar

Identification of Alternative Routes, Route Segments and Substation Locations

Task force members were asked to work in small groups to identify possible alternative routes and substation locations. Each group was provided with a set of maps representing the Hollydale transmission line area and asked to use markers and tape to indicate route alternatives and to describe the alternative(s), explain what impacts they were trying to avoid, and suggest what new impacts might be created. Questions by task force members were discussed and addressed.

Charlie noted that if task force members wanted to indicate their support for any of the route alternatives evaluated but not proposed by the Xcel Energy and Great River Energy (Alternate Route Segments A, B, C, D), then they should indicate so on their map.

The small groups reported back; their ideas and information about alternatives and potential impacts were shared with all present. Maps depicting the alternatives identified are included in Appendix B (maps will be send out separately).

Next steps

Charlie reminded task force members that their homework for the next meeting was to come prepared to continue to discuss and draw route alternatives that might address the impacts and issues identified in the first meeting. He also reminded task force members to review the various routes (both the applicants' identified routes and the routes that the task force created) and come prepared to discuss the pros and cons of the various route alternatives.

Appendix A

Hollydale Project: Summary of Issues

1. **Issue:** Metal poles verses wooden poles: Inconsistent with City of Plymouth cultural and aesthetic values.

Impact:

- increased awareness of metal poles and power line = decrease in home sale valuation
- mixed message of values for area of route C to have metal poles between homes
- unnecessary when alternative route is available along roads

Location: Route C (see details below)

2. **Issue:** Concentrated number of homes within 20 to 35 feet of line along Route C losing safe use of limited yard space, causing families to move.

Impact:

- real danger in narrow backyards with lit grills, risk of shock from induced voltage, questions about mosquito control
- loss of use of narrow back yards for children, little other green space available in town home association
- families likely to move, may be foreclosed upon, default on association dues

Location: Route C, between Hwy 55 and Dunkirk Lane.

3. **Issue:** Limited access to area near existing pole and right-of-way.

Impact:

- wet lands and homes surround location of current pole
- homes built after line installed are approx. 31 feet from pole and line, some with an additional 9 ft. deck creating approx. 22 feet for construction maneuvering
- risk damaging homes during construction

Location: Route C, Homes on Everest Lane N.

4. **Issue:** Potential health effects warrant use of the ‘precautionary principle.’

Impact:

- discounting the issues above is likely to cause more harm to more people
- choosing an alternative route is likely to cause less harm to fewer people

Location: Routes A and C

Hollydale Project: Details of Issues

1. **Issue:** Establishing taller metal utility poles between homes in Plymouth is inconsistent with the cultural and aesthetic values of the neighborhoods intersected by the proposed route upgrade.

Impact:

We acknowledge that metal poles are necessary to raise 115kV lines as far as possible above human activity. The Application asserts that the “Existing transmission lines are common throughout the viewshed of the Project area.” (Section 6.2.6, p. 87). This statement does not take into account that Route C is in a section of Plymouth that was constructed with buried utility lines. The City of Plymouth in City Code 735.01, citing a cultural value of **safety and convenience**, states: “To this end the Council believes that all existing overhead distribution system and transmission lines of electrical and

communication utilities, excluding high voltage transmission lines of 15,000 volts or more, be eliminated wherever possible, and that distribution lines and systems used in the supplying of electricity as well as communication or similar association services be placed, constructed and installed underground.” The city code creates an aesthetic of no above ground power lines in newer residential neighborhoods in Plymouth. Installing taller transmission poles in the middle of a residential neighborhood as in Route C counters that aesthetic.

We understand that the original 69kV line and the proposed 115kV line do not fall under the jurisdiction of the city, and that high construction costs preclude the 115kV line from being buried. However the 69kV line it is proposed to replace is itself an anomaly. No other above ground utility lines of any type exists between homes or on residential streets in the area of Route C. The only above ground power lines that exist are on the periphery of the area of Route C, along current or former major roads, such on Hwy 55, Rockford Road and Old Rockford Road. The only way the 69kV line has not drawn closer scrutiny by residents or buyers is that it: has not carried electricity for the last 4-5 years (thereby not causing noise or shocks from induced voltage), is nearly even with roof lines, and is on common wooden poles.

Wooden poles are used on Hwy 55 in Plymouth and in other cities for distribution lines; a casual observer makes little distinction between lower voltage distribution lines and higher voltage transmission lines when lines are on wooden poles. In contrast, metal poles proposed for Route C will be taller, thicker, and have an industrial appearance. Tall metal poles between homes in the middle of a residential neighborhood, especially one with no other above ground utilities, are an arresting feature that will draw more attention and scrutiny than shorter wooden poles. Potential home buyers are much more likely to object to transmission lines on tall metal poles more than they would object to lines on common wooden poles. The presence of tall metal poles easy visible in the middle of a neighborhood above homes is more likely to harm property values of homes close to the line, thereby affecting the value of homes of similar construction further from the line.

We acknowledge that another 115kV line in Plymouth runs between homes. However, the line’s poles between homes are mainly H-frame and made of wood. (West of Hwy 101 near Troy Lane N and 26th Ave. N) Where there is a single pole, it is wood. There are also above-ground distribution lines with lines running to homes on several residential streets in that area. The 115kv line is barely distinguishable from any other line to casual observers in that neighborhood.

Using metal poles on Route C close to homes introduces an industrially-associated element into a residential area, with the poles so close to homes that they cannot be hidden with foliage in or near the right-of-way. The route near one pole is only 51 feet wide between buildings, near where the line crosses Garland Lane N. Homes are close to wetlands and residents cannot plant foliage in wetlands to block the view of the pole, especially the view from upper levels of homes.

While other residential areas in the Twin Cities metropolitan area have metal poles through residential areas close to homes as shown by Xcel in photographs in Aug. 5, 2011 correspondence with Tami Carpenter, Route C is different. After examining the

other routes extending beyond the photos provided, we found the other routes were along current or former railroad right-of-ways and/or there was no other viable alternative along parallel roads.

Using metal poles instead of wooden poles on a narrow route between homes sets a new and unnecessary precedent that contradicts the City of Plymouth's cultural and aesthetic values. Metal poles in Plymouth belong along roads and railroad right-of-ways as far as possible from homes whenever that alternative is available, as it appears to be in this case.

Location: Route C. Homes close to wetlands with approx. 51 foot route between are 3961 Garland Ln N. and 3963 Garland Ln N. Also narrow route between 3900 Everest Ln. N and 3960 Everest Ln N; 3920 Black Oaks Ln N and 3910 Black Oaks Ln N; 3920 Zanzibar Ln N and 3910 Zanzibar Ln N.

2. **Issue:** Concentrated number of homes within 20 to 35 feet of line along Route C losing safe use of limited yard space and potentially prompting families to move and cause foreclosures on properties.

Impact: Twelve townhome units run parallel to the existing line, and two others sit at an angle to it, within 25 to 35 feet of the existing center line. (The side of a single family home is 20 feet from the center line in this same area.) These homeowners will lose the use of their yards near the power line. Especially behind the 7 townhomes on Everest Lane, which are closely bounded by wetlands, humid conditions could cause arcing from the power line to gas grills used on elevated decks behind homes with walk-out basements. These decks with grills are potentially closer to the actual line carrying current than the distance from the lowest line to the ground.

Because of the hazard of fires near high voltage lines, Bonneville Power Administration states:

“Smoke and hot gases from a large fire can create a conductive path for electricity. When a fire is burning under a power line, electricity could arc from the wire, through the smoke and to the ground, endangering people and objects near the arc. BPA does not permit burning within the right-of-way.” (*Living and Working around Power Lines* (published by BPA, Portland, OR, 2007.)

Children currently or in the future living in these units would have no safe backyard to play in. Their entire yard is within the right of way. Risk of shocks from induced voltage in the right of way concern parents. There are no front yards for recreation, only short driveways which slope toward the street. The town home community has very little green space in which children can play under supervision when back yards are suspect. Shocks from induced voltage could also occur on cars parked near or under the line where it crosses Garland Lane North.

We also have concerns about the future effectiveness of mosquito control which currently makes living next to wetlands possible. Mosquito control is currently done by a

helicopter, which flies parallel to the existing de-energized line. Would the helicopter need to fly further away from an active 115kV line? If so, it would decrease the amount of pellets dropped over open stagnant water under the line, thus increasing the number of mosquitoes and concerns with disease.

Higher voltage power lines cause concerns among parents who have reviewed studies linking higher rates of childhood leukemia with living close to high voltage lines. Conscientious parents with limited incomes have deliberately chosen to buy in our association because of the excellent school district reputation. Several have expressed dismay at the proximity of the proposed upgrade to Route C to their homes. They have said they would strongly consider moving if the line was installed, because they would be afraid to have their children play near or live in their homes which are close to Route C.

When such sales take too long, owners attempt to rent their homes; however the association has restrictions on the number of rental units to protect all homeowners. The association faces financial hardship if owners who are 'under water' on their loans allow their homes to be foreclosed by banks and end up defaulting on association dues. A brief survey of values and sale prices of the addresses below on the Hennepin County Property Information site shows this is a very real issue.

Location: Route C, between Hwy 55 and Dunkirk Lane. Seven townhomes on Everest Lane include addresses: 3924, 3920, 3916, 3912, 3908, 3904, and 3900 Everest Ln. N. Homes on 39th Ct. include addresses: 17028, 17024, 17020, 17016, 17012, and 17008 39th Ct. N. Also concerns from 3961, 3957, 3953, 3949 Garland Ln. N. Home 20 feet from line is 3963, as noted by Xcel to be the closest to the line.

3. **Issue:** Limited access to area near existing pole and right-of-way.

Impact: Homes were built and land was re-graded near the right-of-way years after the initial line was installed in 1971. There is only a narrow opening from the street between the townhome buildings to the existing pole. There is more than a 10 percent slope near the existing pole, which is presumably the general location of a new pole, since this area is bounded by wetlands. According to section 5.1.3 of the Application, pg. 60,: "Sites with more than 10 percent slope will have working areas graded level or fill brought in for working pads. If the landowner permits, it is preferred to leave the leveled areas and working pads in place for use in future maintenance activities, if any. If permission is not obtained, the site is graded back to its original condition to the extent possible and imported fill is removed."

In addition to hauling and compressing fill for a working pad, a 20 to 30 foot-deep hole will likely be drilled for a pole foundation in the porous soil bordering the wetlands. (Section 5.1.4, pg. 63) The 10 townhomes backing this area risk foundation and structural damage from the vibration and movement of heavy equipment doing work while the ground is frozen, (Section 5.1.4, pg. 64.) Because these homes are exceptionally close to the line, (approx. 30 feet) heavy equipment will have limited room to maneuver close to structures. This space includes decks on stilts projecting out an additional 9 feet from the building at the first floor level above walk-out basements. This leaves approximately 21 feet to maneuver in several areas. The temporary working pad

will also change the drainage slope near these 10 homes. The 2 single-family homes backing this area may also be affected.

Location: Homes on Everest Lane N. Including townhomes: 3936, 3932, 3928, 3924, 3920, 3916, 3912, 3908, 3904, and 3900 Everest Ln. N. Single family homes: 3965 and 3960 Everest Ln. N.

4. **Issue:** Potential health effects warrant use of the ‘precautionary principle.’

Impact:

We acknowledge that the WHO (World Health Organization) has concluded: “that the evidence (of adverse health effects from chronic low intensity exposures) is sufficiently strong to remain a concern and that further research in this area is warranted, but due to the uncertainties about the existence of chronic effects, (like childhood leukemia), international exposure guidelines should not ‘be reduced to some arbitrary level in the name of precaution’ and **only little to no cost precautionary procedures should be used.**” *Emphasis added.* (pg. 8 of XcelexceptionstoALJreport20101025-midtowngreenway.pdf.)

The NIEHS (National Institute for Environmental Health) Assessment of Health Effects from Exposure to Power-Line Frequency Electric and Magnetic Fields, 1998, found weak evidence that short term human exposure to ELF EMF causes changes in sleep disturbance. (4.6.7 Summary) The NIEHS acknowledges that effects of exposure to EMF vary by individual, which makes finding statistically significant effects more difficult, especially in small studies. Developing studies that reliably test long-term residential exposure is not a high priority in research when a very low percentage of the population lives close to high voltage transmission lines.

We acknowledge that research methodology around measuring sleep disturbance from chronic low level exposure to EMF is still developing. However when there is sleep disturbance, the results are startling. According to the credible site Web MD (as reviewed by ConsumerWebWatch.org), poor-quality sleep and “drowsiness can slow reaction time as much as drunk driving.” Sleep deprivation can lead to serious health problems such as heart disease, irregular heart beat, high blood pressure, stroke, diabetes and more. (WebMD)

Therefore, we appeal to the concept of ‘precautionary principle.’

“We as individuals and as a society can and do make decisions under uncertainty. And while the possibility of risk does not in itself justify action, uncertainty does not in itself justify inaction. Rather, both a proposed precautionary action and its alternative (not taking that action) should be evaluated in terms of the probability of false-positive and false-negative errors and their consequences. When societal losses from false negative errors are more compelling than losses from false-positive errors, precautionary action is justified.” Dr. Leeka I Kheifets, World Health Organization, from “THE PRECAUTIONARY PRINCIPLE AND EMF.”

In other words, false negatives would result from installing the line on the proposed route because of lack of conclusive studies indicating harm, as well as discounting other concerns raised in the environmental review, and that decision that was later shown to be in error and harm resulted to the approximately 360 households within 200 feet.

Losses from false-positives would be installing the line on an alternative route along highways and/or rail right-of-ways having little affect on less than a third of the number of households, nearly all further than 50 feet from the line, then finding out there would have been little of the harm realized on the original route.

We believe one option is for Xcel to repair and maintain the existing 69kV line and have it available for emergency restoration capability, which it has stated was an important use (see quote below), while building the 115kV line along existing highway and/or rail right-of-way, at least 50 - 100 feet from almost all residences.

Text of email from Joe Sedarski, Xcel, 9/26/2011 answering question about when lines had current no longer being transmitted: “b) The section of BD transmission line between the Hollydale Substation and the point where line BD intersects with GRE’s 115 kV transmission line WH-PB (located west of the Plymouth Substation) was de-energized in late 2006 or early 2007 when the last portion of the Plymouth-Maple Grove line (WH-PB and WH-PP) was built and the transformers were converted. At this time GRE could convert all of the loads to 115 kV. Line BD is available to provide power if an emergency arises, although some minor line work would be needed to allow this emergency capability. Though the line is not a primary source of power in the Plymouth area currently, *it serves as an important connection to provide the emergency restoration capability.*” (Emphasis added.)

Location: Routes A and C should be avoided.

1) *Issue #1*

- ❖ ***What is the land use planning issue?*** Execution of construction of overhead High Voltage 115 kV line via the “Proposed Route” constitutes an **unprecedented** infringement on residential property for the City of Plymouth, especially the portion of the “Proposed Route” identified as Segment A.

- ❖ ***What is the impact?*** According to a September 2011 report provided by Xcel Energy which detailed the Land Use of Residential versus Non-Residential (in mileage) of 115 kV lines in the 7 county metro area, 115 kV lines through residential areas account for just 84.3 miles as compared to 522.6 miles for Non-Residential areas. These figures constitute a **6:1** ratio of Non-Residential to Residential 115v transmission lines currently. For the Hollydale Project, should the “Proposed Route” be adopted, the ratio of Residential to Non-Residential miles would be **significantly higher**. This affidavit specifically addresses Segment A.

The original utility easements secured in the late 1960s were acquired years before residential subdivisions were conceived and when Plymouth was more of a rural community. Unlike other older communities in Hennepin County that have 115 kV transmission lines, the residences impacted by the “Proposed Route” are newer construction (the majority having been built between the late 1980’s and the early 2000’s).

Long-term planning for a greater use of power by new infrastructure should not impact the existing residences of Plymouth. Plymouth is now a vibrant community, proud of its green-scapes and its lush, tree-lined neighborhoods. Upwards to 90’ galvanized or weathered steel poles to support High Voltage transmission lines routed in very close proximity to Plymouth City Center will create an unnecessary industrial-like environment that will negatively impact the city’s appeal.

Notably, in the structural figure examples that Xcel provided in its application and fact sheet for residents (which show examples of the steel pole structures), **none** of the photographs show the poles in a residential neighborhood but rather the poles are placed on roadways, rural roads, or highways. This reinforces the reality that the **vast majority** of 115 kV transmission lines are erected in Non-Residential areas.

In addition to permanent residences, there will be a disproportionate negative impact on wetlands, through which Segment A of this project is being proposed. Wetlands serve vital functions including storing runoff, regenerating groundwater, filtering sediments and pollutants, and providing habitat for wildlife. Segment A

alone will, first during construction and then due to long-term maintenance, impact **20% additional** wetlands than Alternative A (3,402 feet versus 2,813 feet). The construction and maintenance of power transmission lines can damage wetlands in the following ways:

- ◆ Heavy machinery can crush wetland vegetation and wetland soils;
- ◆ Wetland soils, especially peaty soils (as we have) can be easily compacted compacted, increasing runoff, blocking flows, and greatly reducing the wetland's water holding capacity.
- ◆ Disturbed wetland soils are not easily repaired, and severe soil disturbances may permanently alter wetlands hydrology.
- ◆ A secondary effect of disturbance is the opportunity for the spread of invasive weed species such as purple loosestrife.
- ◆ The introduction of the 115 kV power lines through the wetlands will greatly reduce the aesthetic value associated with having the wetlands located adjacent to (and part of) our property, with the secondary effect of reducing the value of our home.

Summarily, the data clearly indicate that it is more the standard to erect 115 kV lines in Non-Residential areas and the "Proposed Route" will violate that standard. Further, erection of said (approximately) 90' steel poles will result in an unprecedented de-beautification and devaluation of neighborhoods located in the heart of a premier (and award-winning!) metropolitan suburb.

- ❖ ***Where, specifically, is it located?*** The above relates in whole to the entire 8 miles of "rebuild" of 69 kV lines that Xcel is requesting. Since by far the most densely populated residential segment impacted is Proposed Segment A, this Issue must therefore be focused on that segment. The Kingsview Heights neighborhood is representative of this constituency.

2) Issue #2

- ❖ ***What is the land use planning issue?*** Aesthetic and Cultural Value degradation of directly impacted areas and immediate surrounding areas
- ❖ ***What is the impact?*** Xcel Energy's consistent position as described in their Route Application is that because "proposed transmission line will primarily follow an existing 69 kV transmission line" that there will be "minimal impact" to many elements outlined in their application, Aesthetics and Cultural Value to name two.

This is simply not true. The existing line (inert since 2006-7) consists of single pole **wood** structures, 60-75 feet maximum in height. The proposed structures will be of steel, will be upwards of **20% taller** than the existing poles (not the “slightly taller” claim Xcel makes in the application, Section 6.2.6 - Aesthetics). Further, GRE (Great River Energy) who operates the existing 69 kV line, at the time it was active (prior to 2004), regularly trimmed the vegetation around the lines. However, this trimming **rarely** involved complete removal of mature trees and therefore residents’ land and aesthetics were not impacted as severely. Xcel has clearly indicated that any vegetation within the power line right-of-way can be no taller than 15’ – essentially cutting a barren swath across mature, established neighborhoods.

Therefore, Xcel’s assertions in section 6.5.3 Flora and 6.5.4 Fauna **must** be called into question. Specifically, Xcel states: “Transmission line construction impacts to trees and woodlands will be minimized because a majority of the proposed transmission line Project will be a rebuild of an existing transmission line and follow existing right-of-way.” (6.5.3) and “The majority of the Project is located along an existing transmission line route. Because of this, significant new impacts to wildlife species are not anticipated.” (6.5.4). Given the current substantial vegetation and mature trees along the existing right-of-way, the impact will be significant and extensive, not “minimal” as Xcel asserts.

Attached to this affidavit are photographs taken in August and October 2011 of two neighborhoods in Hennepin County (Champlin and St. Louis Park) that have 115 kV lines running through them. In the instance of the Birchwood neighborhood in St. Louis Park, the 115 kV line aligns with a railroad right-of-way. In both cases, the homes appear to have been constructed between the 1950s and 1970s, significantly earlier than the homes that would be impacted in Plymouth.

These photographs provide visual evidence of the impact aesthetically and, further, negative impact to Cultural Value that will occur if the “Proposed Route” is approved. In short, the homes are dwarfed by the power lines, the vegetation has been extensively cleared to the point of barrenness, and the neighborhood aesthetics overall are diminished as a result.

- ❖ ***Where, specifically, is it located?*** The description of GRE vegetation removal applies specifically to Minnesota Lane North in the Kingsview Heights neighborhood. The overall location for what is described above applies to the entire impacted residents along the “Proposed Route”, especially Segment A.

3) Issue #3

- ❖ ***What is the land use planning issue?*** Overhead High Voltage power line using “Proposed Route” Segment A impacts **3x** as many residents as Alternative A route. NOTE: This issue is being raised for comparison purposes. The main issue is impact to residents **at all**.

- ❖ ***What is the impact?*** Segment A of the “Proposed Route” directly impacts **90** residences, compared to **33** residences with Alternative A. Because Alternative A capitalizes on existing right-of-way along Interstate 494, the impact to residences is significantly lessened. While proceeding with the “Proposed Route” is certainly the most expedient (and least expensive) for Xcel, the collateral loss to impacted residences in pure market value of their homes cannot be understated. In short, real estate experts concur that **minimum** decrease in home value when Overhead High Voltage power lines are present is **10%**, constituting an aggregate loss of value of close to **\$2 million**** for the 90 homes along Segment A of “Proposed Route” compared to an aggregate loss of **\$700K** if Alternative A is adopted. (See Appendix to this affidavit for source). Multiply this already significant impact by the remaining 8 miles of the “Proposed Route” and the loss in home value (and the property tax revenue to the City of Plymouth) is staggering. While it is not easy to precisely quantify the amount of financial impact, the 115 kV power line certainly deters people from considering the purchase of the home, thereby reducing the potential market of buyers. This reduction puts the homeowner at a competitive disadvantage. Many homeowners in the Kingsview Heights subdivision have made substantial investments in upgrades to their homes. The property that is proposed to be utilized for this power line upgrade belongs to the homeowners and we strongly urge alternative routes to be considered, namely those that go through commercial areas and that utilize the existing I-494 corridor.

The extent to which the value is affected was studied on a case by case basis over a 3 year period. In several cases once the buyer recognized the location of the transmission lines they went elsewhere to purchase. All across this country realtors offer anecdotal evidence of lost sales due to the undesirability of visibility and proximity of High-Voltage Transmission Lines

**It should be noted that the above estimate is for average home price in zip code 55446 while the residents’ impacted home values collectively are higher in existing value than the average used in this calculation.

- ❖ **Where, specifically, is it located?** This issue is not a single resident issue but one that impacts 90+ homeowners directly and a much higher number of homeowners who, while not within 200' of the proposed 115 kV line, will see their own property values diminished by the negative impact to aesthetics and “drag” on home values due to their neighbors’ decreases. For the purposes of this affidavit this impact includes Minnesota Lane North in the Kingsview Heights neighborhood.

4) Issue #4

- ❖ **What is the land use planning issue?** Replacement of existing **wood** pole structure with **galvanized or weathering steel** to support 115 kV Overhead High Voltage line.
- ❖ **What is the impact?** The easement for our property, executed in June 1968 specifically states and provides “to construct, operate and maintain thereon, and in or upon all streets, roads or highways, abutting said lands, an electric transmission line or system consisting of **single pole wood structures** (bold added for emphasis). Nowhere in the Easement is it indicated that a replacement pole of different material may be erected.

There is the further potential impact from increased exposure to magnetic fields. There is substantial evidence that exposure to extra-low frequency magnetic fields of an average intensity greater than 2 milligauss doubles the risk of a child contacting leukemia. There is a clear and consistent pattern of significant risks for average exposures above 4 mG. There are not only many children living very near the proposed power line upgrade, but there are an equally large number of grandchildren that visit the residents for extended periods of time. Also, there is very good evidence that even momentary exposure to fields greater than 16 mG¹ increase by a factor of 5 that a woman will have a spontaneous abortion within the first 10 weeks of pregnancy. The ubiquity of technology in modern life means that we take a bath in it every day, and the citizens of Kingsview Heights are unanimous in voicing their objections to the increased potential risk being that will be introduced with this power line upgrade. While there are arguments to the effect that there is no overwhelming conclusive evidence regarding the negative effect of exposure to increased magnetic fields, there is nevertheless the perception that the transmission lines cause these health effects and, since perception more often than not becomes reality, this leads to decreased property values.

¹ mG - Milligauss, a unit of measurement of a magnetic field

No one within the geography purchased their homes knowing that the upgrade was planned. Moreover, the planned improvement does not benefit the homeowners directly impacted by the upgrade. The proposed upgrade of the power line to 115 kV along the rear of many homes within Kingsview Heights is a threat to the safety of animals, the elderly and children. It is our understanding that the new developments, such as those that will directly benefit from the upgrade, **must have power lines underground.**

- ❖ ***Where, specifically, is it located?*** Southwest quarter of the Northeast quarter (SW ¼ of NE ¼) of Section 16, Township 118, Range 22, except that part lying South of County Road No. 9. Specifically, Minnesota Lane North in the Kingsview Heights neighborhood.

Appendix

Issue #2:

Birchwood Neighborhood. St. Louis Park



Oregon Avenue N. and Jersey Avenue N., Champlin



Issue #3:

Average home sales price for Zip Code 55446:

According to an online home value tracking service, Trulia , the average sales price of homes in zip code 55446 was \$217595 in the period July-Sept 2011

http://www.trulia.com/real_estate/55446-Minneapolis/market-trends/

Hollydale Advisory Task Force – 2011

Specific Route Issues & Impacts Homework

Lance Stendal

#1

What is the land use planning issue: Constructing a new line along CP Railroad ROW

Impact: Constructing in CP right of way may require additional construction of access points and a maintenance road along the right of away due to infrequent at grade access to railroad tracks. Currently, only at grade access to CP Railroad is at Vicksburg but that is scheduled to be eliminated in 2012 or 2014 (I forget).

Additionally, how would the transmission line address above grade road crossings at Peony Lane, Schmidt Lake Road, and Vicksburg Lane (planned)?

Location: Along the entire proposed alternate route along CP Railroad ROW

#2

What is the land use planning issue: Constructing a new line through wetlands

Impact: The alternate route crosses several naturally occurring wetlands, including a large one to west of Vicksburg that is home to a number of migratory waterfowl, including large waterfowl like trumpeter swans which have larger wingspans requiring longer descents in which a new transmission line may interfere. We have also noted blue heron, white egrets, and sandhill cranes, geese and ducks, some of which are species which have suffered significant population declines.

Location: Two large wetland complexes to west of Vicksburg, between CP Rail and Schmidt Lake Road and wetland between Peony Lane and Holly Lane

#3

What is the land use planning issue: Constructing a new line through established neighborhoods

Impact: The alternate route would be built along neighborhoods where no transmission line has previously existed, consequently those homes would suffer a loss of value.

Those homes along the existing transmission line in many (most?) cases were purchased by the current owner after the transmission line already existed so loss on the value of the

home was already accounted for when the owner purchased the home at a discount. How much additional value would be lost by adding a second circuit? Presumably not as much of a loss as the homes along the proposed new alternate route would sustain. Additionally, an abandonment of that line would result in a net increase in value for those homes in the abandoned right of way.

Location: Along most of proposed route, from Hollydale Substation to just west of Providence Academy.

#4

What is the land use planning issue: Potentially historic farmstead located at 5215 Vicksburg that according to Hennepin County property assessor website was built in 1860.

Impact: The transmission line would be located along the entire northern boundary of this property.

Location: 5215 Vicksburg Lane (Vicksburg where CP Rail crosses)

#5

What is the land use planning issue: Upgrading existing transmission line where homes are close to existing right of way poses significant issues for those homes.

Impact: There are clearly impacts to the property that are within the existing right of way. Is it possible for the transmission line to be buried where the right of way is very narrow? According to Wisconsin Public Service Commission brochure, *Underground Electric Transmission Lines*, an underground transmission line for 138 kV may cost about 4x the cost of an overhead line, however when considering costs of alternative routes this may prove to be less expensive. Only specific sections for underground transmission should be considered, the benefits of the entire line being underground likely cannot be justified.

Additionally, is it possible to consider an alternate route that extends the line east along Rockford Road, through the commercial area at Rockford Road and 494 and then north along 494 to the proposed substation?

Location: Niagara Lane (along the road or the alignment) from 43rd to near Schmidt Lake Road

Hollydale Advisory Task Force – 2011
Specific Route Issues and Impacts

Issue 1: Route proposed is too close to homes

Impacts: A. Health and safety issues:

Electrical and magnetic fields – Many residents are extremely close to the line with dozens of homes less than 50' away. Most of these homes have yards directly under the lines. Many people spend the majority of their time in their home. In some cases residents can be home nearly 24 hours per day. This makes for long exposure periods. Issues range from real (pacemaker interference) to studies with some support (childhood Leukemia), to perceived issues, and possibly issues not yet known. Fall zone hazards are also possible.

B. Residential property values - values of 100+ homes along the proposed route will be negatively impacted. Studies show impacts are more severe the closer a home is to the line. A 10% value reduction in values to homes along the route is easily possible. Marketability: Difficulty/increase in time needed to sell a home.

C. Aesthetics:

Loss of trees and landscaping

Reduced satisfaction and enjoyment in one's yard and surroundings

Where located: The area I have knowledge of is that portion of the route east of Hwy 55. This runs through developed neighborhoods that do not have right-of-ways adequate for the proposed increase in height, size of this transmission line.

Issue 2: Lessened value and use of city park (Turtle Lake Park) and trail. The route runs through a neighborhood park and follows a city trail north to Schmidt Lake Road.

Impacts: Negatives due to health issues (real or perceived), diminished aesthetics, loss of trees and landscaping through the park and especially on the trail. The park and trail will be less of an asset to the city

Where: Turtle Lake Park and city trail from park north to Schmidt Lake Road

Issue 3: Watercourses, wetlands and floodways. Proposed route impacts these natural areas more than any of the alternate routes

Impacts: Reduced value of natural areas

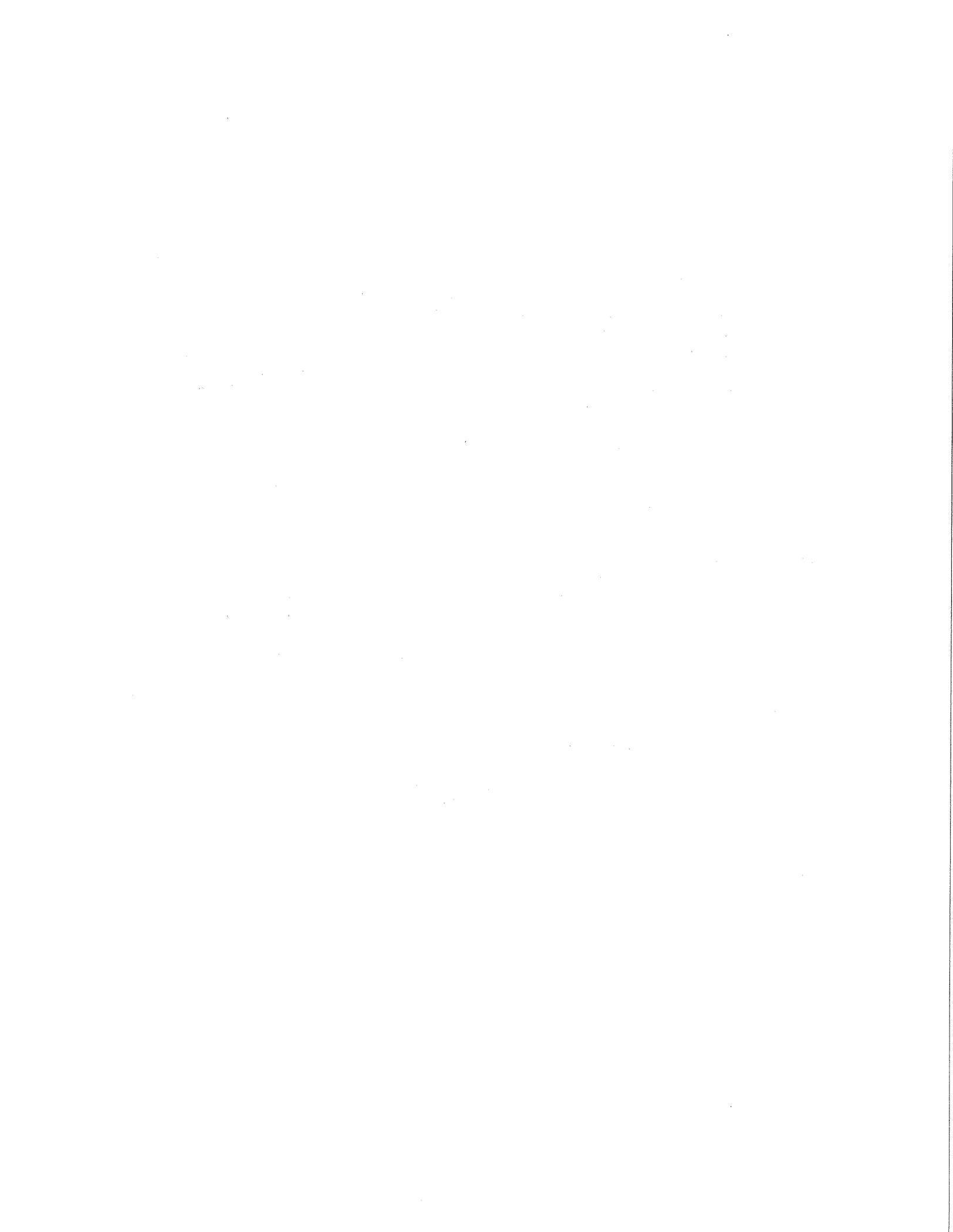
Soil erosion during construction

Aesthetics

Ease and speed of maintenance (and associated reliability of the line)

Where: located: That portion of the route east of Hwy. 55

Dan Callahan





Hollydale Advisory Task Force – 2011

Specific Route Issues and Impacts (Homework)

- 1) With the knowledge that you currently have about the proposed route(s) for the Hollydale transmission line in your community, what specific land use planning route issues and impacts need to be evaluated in the environmental assessment for this project? If the issues are specific to a particular portion of the proposed or alternate route, please identify the location.
- 2) To help organize your thoughts and our process, please identify your top four issues below and bring this document to the first meeting of the Advisory Task Force. We will use the information at that meeting.
- 3) Your name: (optional) Dusty Finke

What is the land use planning issue?

What is the impact? (Why is there an issue?)

Where, specifically, is it located? (What part of your township, city, or county? What part of a proposed route?)

Example A:

Issue: Wetlands

Impact: Destruction of wetlands during construction and future maintenance.

Where located: Section 16 & 15, T145N, R32W (Farden Twp.)

Example B:

Waterfowl flyways. Birds hitting lines or avoiding areas on Route 1: Locations are the north end of Moss Lake to just south of Pike Bay in section 3 of Wilkinson Twp. and between Twin Lake and Camp Lake in section 2 of Wilkinson Twp.

Example C:

Issue: Line is too close to houses in our area

Impact: Aesthetics - we don't want to look at transmission lines

Where located: South of Sucker Lake in Cass County, near and around the boat access.

Examples

What is the land use planning Issue?

What is the Impact? (Why is there an issue?)

Where, specifically, is it located? (What part of your township, city, or county? What part of a proposed route?)

1. *Tree impacts.*
stands of trees & existing tree lines are located along many portions of the route in Medina. Tree removal & trimming should be limited for both environmental + aesthetic reasons
-

What is the land use planning Issue?

What is the Impact? (Why is there an issue?)

Where, specifically, is it located? (What part of your township, city, or county? What part of a proposed route?)

2. *Wetland impacts.*
Construction will impact wetlands along route. Restoration plans should be monitored + enforced following construction
-

What is the land use planning Issue?

What is the Impact? (Why is there an issue?)

Where, specifically, is it located? (What part of your township, city, or county? What part of a proposed route?)

3. *Proximity to homes.*
The route is located very close to homes at 2350 Hollybush Rd, 1495 Medina Rd, 2475 Tamarack Pr., and 2412 Holy Name Pr. Measures to limit property impacts need to be addressed.
-

What is the land use planning Issue?

What is the Impact? (Why is there an issue?)

Where, specifically, is it located? (What part of your township, city, or county? What part of a proposed route?)

4. *Height of poles.*
Visual impacts along entire route should be minimized through use of shortest poles possible.
-



Hollydale
115 kV Transmission Line Project
Advisory Task Force

Hollydale Advisory Task Force – 2011

Specific Route Issues and Impacts (Homework)

- 1) With the knowledge that you currently have about the proposed route(s) for the Hollydale transmission line in your community, what specific land use planning route issues and impacts need to be evaluated in the environmental assessment for this project? If the issues are specific to a particular portion of the proposed or alternate route, please identify the location.
- 2) To help organize your thoughts and our process, please identify your top four issues below and bring this document to the first meeting of the Advisory Task Force. We will use the information at that meeting.
- 3) Your name: (optional) John Sullivan

What is the land use planning Issue?

What is the Impact? (Why is there an issue?)

Where, specifically, is it located? (What part of your township, city, or county? What part of a proposed route?)

Example A:

Issue: Wetlands

Impact: Destruction of wetlands during construction and future maintenance.

Where located: Section 16 & 15, T145N, R32W (Farden Twp.)

Example B:

Waterfowl flyways. Birds hitting lines or avoiding areas on Route 1: Locations are the north end of Moss Lake to just south of Pike Bay in section 3 of Wilkinson Twp. and between Twin Lake and Camp Lake in section 2 of Wilkinson Twp.

Example C:

Issue: Line is too close to houses in our area

Impact: Aesthetics - we don't want to look at transmission lines

Where located: South of Sucker Lake in Cass County, near and around the boat access.

What is the land use planning Issue? Wet land Impact of Construction
What is the Impact? (Why is there an issue?)

Where, specifically, is it located? (What part of your township, city, or county? What part of a proposed route?)

1. County Road 9 between Vicksburg and Minnesota Lane.

What will be done to mitigate damage caused by Reconstruction of Transmission Lines Through the wetlands?

What is the land use planning Issue? Structure Interference with roadway

What is the Impact? (Why is there an issue?) Clearance.

Where, specifically, is it located? (What part of your township, city, or county? What part of a proposed route?)

2. County Road 9 between Vicksburg and 494.

How will The Structures along County Road 9 be placed to not interfere with required Roadway clearances and private property? The Roadway has been significantly widened since the original structures were put in place.

What is the land use planning Issue?

What is the Impact? (Why is there an issue?)

Where, specifically, is it located? (What part of your township, city, or county? What part of a proposed route?)

3. Will there be increased electric and wind noise—especially during storms? Is there any concern about electrical interference

What is the land use planning Issue?

What is the Impact? (Why is there an issue?)

Where, specifically, is it located? (What part of your township, city, or county? What part of a proposed route?)

- 4.