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- **Minnesota Department of
Commerce**

Hiawatha 115 kilovolt (kV) Transmission Line Advisory Task Force Report

PUC Docket No. E002/TL-09-38

August 28, 2009

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Introduction

On April 24, 2009, Xcel Energy (Applicant) submitted a high voltage transmission line route permit application to the Minnesota Public Utilities Commission (Commission) for a 115 kilovolt (kV) transmission line in Minneapolis, Minnesota (project). The proposed project constructs two new distribution substations and two 115 kV transmission lines in south Minneapolis, in an area known as the Midtown District. The applicant has identified four separate alternative routes and five design options for consideration in the application. Further, the applicant identified two locations for the proposed Hiawatha Substation and two locations for a proposed Midtown Substation. (See Appendix A for a map of the proposed alternatives).

On May 26, 2009, the Commission authorized the Department of Commerce, Office of Energy Security (OES) to establish and charge, as appropriate, an advisory task force (ATF) to assist OES staff in determining the scope of the environmental impact statement (EIS) to be prepared for the proposed project. The Hiawatha ATF was charged with (1) identifying impacts and issues to be evaluated in the EIS, and (2) identifying alternative transmission line routes and substation locations to be considered in the EIS (See Appendix B).

On June 12, 2009, the OES appointed sixteen persons to the Hiawatha ATF (See Appendix C).

Methodology

The Hiawatha ATF met three times – June 24, July 15, and August 5, 2009. The task force, through a facilitated process, discussed the proposed project and the charge given to the task force. Task force meetings were open to the public, and additional people frequently attended to listen to the discussion.

The first task of the ATF was to determine the impacts and issues, within the task force's geographical bounds, that should be evaluated in the EIS for the project. This task was the focus for the first meeting. Task force members, through small and large group discussions, identified impacts and issues. Additionally, task force members submitted "homework" identifying specific impacts and issues that would be important to consider for the project.

At the second meeting, a task force member presented a resolution for the task force to review and discuss. Any action on the resolution was tabled until the third meeting. Task force members then reviewed the impacts and issues identified at the first meeting and determined that all the impacts and issues were important and decided not to prioritize any one or ones above the others. Following this, task force members took up the second part of their charge – identifying alternative routes and substation locations. Task force members identified additional substation location alternatives and route alternatives. They then discussed and identified pros and cons for each of the alternatives.

At the third meeting, the task force members reviewed and approved the member resolution. The members then reviewed the alternatives identified at the second meeting and identified three more options for substation locations and an alternative transmission line route. The task force then brainstormed alternative energy generation options that could reduce or eliminate the need for a transmission line and/or substations. The task force also brainstormed options to mitigate the impact of the transmission lines and substations on the area.

The task force's work was captured in meeting notes recorded on flip charts by the meeting facilitator. Meeting notes and supporting materials for all meetings are available online: <http://energyfacilities.puc.state.mn.us/resource.html?Id=24544>

Impacts and Issues to Evaluate

Task force members identified impacts and issues by responding to the following 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 members' responses were identified and categorized into thirteen areas:

Damage to historic resources

- Historic character of trench (plus others)
- Aesthetics and visual historic preservation – trench, bridge, exchange, etc.

Regional impacts

- Who benefits? Who pays?
- Employees and customers of, large employers from outside project area
- Midtown Greenway is a regional resource

Cumulative impact of future potential extension of high voltage transmission line

Impact on current city, state, and federal policies, for example, city plan retains or expands 29th Street; state/federal emission reduction (how compliant)

Health and safety: access to safe green space, bike paths, and walking paths

- Electro-magnetic health issues; the possible negative effects of EMF, especially children and elderly
- Health: environmental justice – disproportionate; overlay – cumulative health
- Induced voltage in long pieces of metal, for example, proposed rail line

Visual impact on linear green space and elsewhere

- Visual pollution of overhead lines
- Impact of scale of towers: 70 – 100-ft. towers and 20 – 30 ft. buildings and substation to Sabo Bridge
- Visual issues

Current and long-term livability impact

- Routes above ground will have major negative impacts on current residents, recent economic development, and historic resources along the lines
- Interference: radio, TV, Wi-Fi, cell signals
- Construction – above or below
 - Noise
 - Dust (arsenic)
 - Traffic congestion and air quality
- Noise from HVTL and substation

Environmental justice

- Dislocation of existing residents: impact on residents living in poverty is disproportionate
- Indigenous people, particularly Little Earth
- Environmental justice
 - Line will disproportionately impact communities of color, women, children and indigenous people
 - These groups are under-represented in this process
 - Seniors, disabled, kids

Impact on current and future development

- \$430 M in development in parkway, 10 years
- Plan calls [for] intensifying land use with emphasis on residential and economic development
- Commercial and residential development – “community works”; district infrastructure, promotion to development
- Property values, structural historic preservation
- Above-ground option antithetical to multifamily-midrise residential development land use plans
- East substation “future expansion” area is in designated employment district – city plan
- Jobs, transportation and future development
- Route A, both underground and aboveground – discourages or prevents new development along corridor – especially around transit stations (see Minneapolis City adopted land use planning documents. Like Midtown Greenway Land Use and Development Plan)
- Development potential (this will set the tone)
- Hinders urban population recovery

Future and current alternate transportation issues

- Hinder rail transit implementation, west station, not sure on Route A, both overhead and underground; Midtown Greenway corridor will have to have the trench floor widened – more land needed for this, especially at rail transit stations
- Negative impact on nonmotorized transportation and transit on greenway

Green space/aesthetics impact, both line and substation

- Limited supply, large investment, heavy use
- Hiawatha substation west – will destroy green space that is much needed and make a bike route to Lake Street nearly impossible (tunnel image)
- Hiawatha East substation and expansion area will sever Greenway – must come up with a convenient alternative route

Hiawatha substation issues

- Hiawatha East substation and expansion area will sever Greenway – must come up with a convenient alternative route
- Hiawatha substation west – will destroy green space that is much needed and make a bike route to Lake Street nearly impossible (tunnel image)

The proposed project discourages several energy solution options

- With conservation and distributive generation, as mitigation, will avoid more of these impacts and avoid future Hiawatha Project expansions, for example, page 17 of application refers to making Hiawatha substation expandable to 345KV
- As we increase supply, we are less inclined to reduce demand, and we lose green jobs

Identification and Review of Substation Locations, Alternative Routes, and Route Segments

The task force identified seven specific alternative substation locations, four general alternative substation locations, and one alternative route for consideration in the EIS. (See Appendix D for a map of the specific ATF-generated alternatives). The task force reviewed many of the alternatives generated by the ATF and the applicant's proposed routes, and identified pros and cons for each. Pros and cons for each alternative (and keyed to map names where appropriate), as well as task force discussion, are noted here:

Substation alternatives

Applicant-proposed Hiawatha Substation West (See Appendix A)

Pros

- Closest to underground 28th Street route
- Existing vacant land, no buildings on site
- Not in residential area
- MnDOT owns land

Cons

- Eliminates largest green space on the Greenway
- At major intersection for bikes and cars
- Loss of community investment by removing landscaping and trees
- Planning in the area
- Interferes with Greenway that goes between existing buildings
- Impairs site lines to downtown skyline from light rail train
- Area is center of “green space;” a transportation hub; “place making”

Applicant-proposed Hiawatha Substation East (See Appendix A)

Pros

- Industrial area
- Close proximity to transmission line and proposed routes
- Not Hiawatha West

Cons

- City spent 25 years working on building the building the substation would replace
- In a state approved and funded designated employment area
- Existing building houses two businesses that would be replaced (one business is “Crew 2”)
- Violation of City of Minneapolis comprehensive plan that has been approved by Met Council
- Deterrent to future development
- Site was cleaned up with funds from state Department of Trade and Economic Development with requirements for creation of jobs; City of Minneapolis moneys were also involved (Would funds be repaid? If so, by whom?)
- Divides industrial developed areas, isolates south building

Applicant-proposed Hiawatha Substation South (See Appendix A)

Pros

- Industrial area
- Vacant land
- Allows relocation of greenway to preferred route
- Not Hiawatha West – impacting green space
- Could be interior building (discussion on whether this item is an option; applicant stated that the substation could have walls but is not a option to be fully enclosed)
- Substation could be shielded
- Divides green space from industrial area

Cons

- Industrial area
- Divides green space from industrial area
- In a state approved and funded designated employment area

- Violation of City of Minneapolis comprehensive plan that has been approved by Met Council
- Deterrent to future development
- Site was cleaned up with funds from state Department of Trade and Economic Development with requirements for creation of jobs; City of Minneapolis moneys were also involved (Would funds be repaid? If so, by whom?)
- Divides industrial develop areas, isolates south building

ATF-proposed Gary’s Substation Alternative 1 – south and west of intersection of Minnehaha Avenue and East 26th Street – See G-1 in map in Appendix D

Pros

- Vacant land
- Industrial area
- Site cannot be developed

Cons

- Is site too small for substation?
- On key intersection of 26th and Hiawatha
- In employment zone (mentioned earlier)
- Impairs major entrance to neighborhood
- Visible from 26th street
- Site is further from transmission line
- Impacts businesses, school, charter school
- Encourages the transmission line on 26th Street

AFT-proposed Gary’s Substation Alternative 2 – existing parking lot west of 21st Avenue South, south of building on East 28th Street – See G-2 in map in Appendix D

Pros

- Land now mainly asphalt (about 75 percent asphalt)
- Underutilized as a parking lot

Cons

- Impacts jobs – loss of business
- Not next to Hiawatha line
- Across from Green Institute
- Site may be too small for substation

ATF-proposed Gary’s Substation Alternative 3 – triangle shape of land, east of Hiawatha and north of Lake Street – See G-3 on map in Appendix D

Pros

- Land is currently vacant
- May be undevelopable
- Further away from Alliance housing than Hiawatha West option

Cons

- Along active railroad
- Behind Target building and Alliance
- May block access to Target
- Site identified for a possible expansion of bike trail
- Site may be too small for substation location

ATF-proposed Former Xcel Substation Alternative (also Gary's Alternative 4) – triangle shape of land, east of Hiawatha Avenue from just north of where East 31st Street would intersect with Hiawatha to just north of where East 32nd Street would intersect with Hiawatha – See Fmr Xcel SS on map in Appendix D

Pros

- Existing vacant land
- Less disruptive of sight lines
- Partially owned by Xcel
- Undevelopable as residential, commercial, industrial; no access
- Area is not planned for any use
- Currently a temporary parking lot, not used
- Not close to residential areas
- No impact on Greenway
- Close proximity to existing power lines
- Size of area should be large enough for substation
- Discussion on option to expand site into foundry area

Cons

- May be tough to connect line to where other substation is located
- Size of land, may be too small
- Possible loss of jobs at foundry if use to increase size of land space

AT- proposed Gary's Substation Alternative 5 – triangle shape of land east of Hiawatha Avenue north of East 26th Street – See G-5 on map in Appendix D

Pros

- Land is currently vacant
- Land is owned by MnDOT and/or Met Council

Cons

- May be in employment zone mentioned earlier (need to check)
- Met Council potential building site, light rail
- Other side of freeway wall so cannot see from Little Earth
- Residential area nearby
- Near bike path, greenway to downtown
- Close to charter school
- Impact on businesses

Applicant-proposed Midtown North Substation Alternative (See Appendix A)

Pros

- Land owned by Xcel Energy
- Only one house displaced

Cons

- One house displaced, affordable housing
- Inconsistent with City of Minneapolis adopted Greenway Development Plan, part of city's comprehensive plan
- Adjacent to Greenway
- Phillips project development area
- Hinders access to Greenway
- Adjacent to site on National Register of Historic Places
- Mature trees on site have to be removed

Applicant-proposed Midtown South Substation Alternative (See Appendix A)

Pros

None identified

Cons

- Impacts businesses and loss of jobs
- Future site of density development
- Inconsistent with land use plan; Midtown Greenway Land Use Plan – Approved by City of Minneapolis
- Possible historical site
- Residential area with diverse population
- Adjacent to Greenway
- Phillips project development area
- Hinders access to Greenway
- Adjacent to site on National Register of Historic Places
- Mature trees on site have to be removed

ATF-proposed Midtown 28th Street North Substation Alternative – north of East 28th Street between 4th Avenue South and Interstate 35W – See Mt-28N on map in Appendix D

Pros

- More isolated than other substation options
- Away from residential area
- No buildings currently on site
- Borders freeway
- Could be a convenient site for substation if Xcel expansion of Hwy 62 and Nicollet
- Useful if route went around neighborhood – Interstates 35W and 94 option
- Negative impacts born by major user

Cons

- Area is currently a green space
- May be used for Well Fargo expansion
- Impact on electrical equipment of salt spray from freeway
- Impact on Well Fargo employees

ATF-proposed Midtown 28th Street South Substation Alternative – south of East 28th Street between the Well Fargo building and Interstate 35W – See Mt-28S on map in Appendix D

Pros

- Higher and better use than existing use
- Better site than Midtown 28th Street North
- Not a fully used parking lot, currently being used as a temporary parking lot during the Children’s Hospital expansion
- Borders freeway
- Could be a convenient site for substation if Xcel expansion of Hwy 62 and Nicollet
- Useful if route went around neighborhood – Interstates 35W and 94 option
- Negative impacts borne by major user

Cons

- On Greenway
- Potential changes with the intersection of East 28th Street and Interstate 35W
- Close to soccer fields
- Close to high school across the Greenway
- Disruption of Wells Fargo future expansion plans
- Hinders sight lines to downtown

ATF-proposed Additional Midtown Option

- Xcel should review options for substation location west of Interstate 35W

ATF-proposed buried underground substation somewhere around 28th Street East, if possible (not reviewed and not on map)

ATF-proposed having no substation at all

ATF-proposed substation at the southeast corner of Highway 55 and Franklin Avenue or somewhere else to allow for an alternative transmission line along the following new transmission line route proposed (not reviewed and not on map)

Transmission line route alternatives

Applicant-proposed Routes A, B, and C (See Appendix A)

Pros

- Lower cost than placing line underground
- Distributes power to identified location

Cons

- Impacts historic property
- Next to residents; diverse populations including impact on residents living in poverty; indigenous people, particularly Little Earth; communities of color, women, children, and indigenous people; seniors; disabled, kids (especially Route B)
- Compounds environmental health issues
- Loose development options (especially Route A); example noted of FHA note providing homeowner insurance in transmission line pathway
- Reduces esthetics quality in area; impacts sight lines
- Limitation on boulevard trees and loss of tree canopy in area
- Decreases options for non-motorized commuters in area; this may also be a negative health impact (especially Route A)
- Impact on green space equivalent to parkland; loss of parkland in urban area (especially Route A)
- Impacts trail users and may reduce number of users on trail (especially Route A)
- Impacts the possible expansion of transit and especially light rail transit in the area (especially Route A)
- Noise and interference
- Contrary to land use planning documents that have been adopted by City of Minneapolis, violates plans
- Impacts core city wildlife area; wildlife in Greenway (especially Route A)
- Cumulative health impacts on vulnerable populations, EMF health issues

Applicant-proposed Route A Underground (See Appendix A)

Pros

- Reduced impact on potential future development
- No or minimal visual impact, not able to see
- Eliminates noise issue
- Less harm to historic sites
- It was noted that a developer for a biomass heating company stated there was a “clear corridor” in the Greenway

Two questions were raised during discussion on this route:

- How close to the buried transmission line can development in the area occur?
- How close will Xcel place the buried transmission line to existing structures and/or developed areas?

Cons

- Impacts the condo development on the south side of the Greenway
- Potential health impacts
- Impacts future rail development in the Greenway
- Impacts future development in the Greenway
- Potential impact to residents in the area; also to residences
- Concern about insurance issues
- Potential interference to other utilities; for example, pipelines
- Watershed concerns because line will be buried
- Potential to impact city water lines on bridges
- Potential to impact just redone gas mains along 15th Avenue

Applicant-proposed Route D Underground (See Appendix A)

Pros

- Reduced impact on potential future development
- No or minimal visual impact, not able to see
- Eliminates noise issue
- Less harm to historic sites
- Does not violate land use plans

Cons

- Impacts the condo development on the south side of the Greenway
- Potential health impacts
- Concern about insurance issues
- Potential interference to other utilities; for example, pipelines
- Watershed concerns because line will be buried
- Impacts or close to existing residences
- Street is currently full of other utilities

ATF-proposed “Route E” – from 28th Street East along Highway 55 to Interstate 94 (I-94) then following the I-94 corridor to Interstate 35W (I-35), and turn south to follow I-35W to roughly 28th Street East. (not on map)

Pros

- Uses existing transportation corridor
- Does not go through green space
- Lower cost than to place line underground (option for underground along freeway)

Cons

- Impacts major high-rise housing at Cedar Box site
- Impacts transit stations on interstates
- Conflicts with MnDOT policy
- Higher cost than overhead transmission lines
- Visual impact along interstates
- Residences/houses along Interstate 35W

Applicant Response to ATF Member Questions

During the meeting, task force members identified a series of questions for the applicant's response. At the third meeting, the applicant provided a written and verbal response to these questions. See Appendix E for the response.

Member Resolution

Tim Springer, a task force member representing the Midtown Greenway Coalition, offered a resolution containing nine points that he asked the task force to review, discuss, and vote on for approval. The task force approved the resolution by a vote of eight members supporting, no members opposing, and five members abstaining (Mark Stenglein, Hennepin County; Chuck Lutz, City of Minneapolis, Gary Schiff, City of Minneapolis; Robert Lilligren, City of Minneapolis; Elizabeth Glidden, City of Minneapolis; Cam Gordon, City of Minneapolis arrived late to the meeting and was not present for this vote) because of their role as officials of political subdivisions that had asked to be a intermediary in the process. The resolution as approved is below:

**Resolution of the Hiawatha Transmission Line Advisory Task Force
Regarding the Public Utilities Commission docket #: E002/TL-09-38
Adopted August 5, 2009**

If Xcel Energy's proposed Hiawatha Project High Voltage Transmission Lines must go in, the Advisory Task Force recommends:

1. The Hiawatha Project should not route overhead high voltage transmission lines through any south Minneapolis neighborhood, including but not limited to routes A, B and C.
2. Xcel should recover all costs for any alignment of the Hiawatha Project from its entire northern U.S. rate base (includes customers in the states of MN, ND, SD, WI, and MI) rather than from local ratepayers only.
3. The alignment of any Hiawatha Project underground high voltage transmission lines, including Route D along East 28th Street, must minimize adverse impacts on trees and maximize distance from homes.
4. Potential expansion plans east to a new substation near Highway 280, and west and south to a new substation near Nicollet Avenue and Highway 62, and potential capacity expansions of the proposed Hiawatha and Midtown Substations and high voltage transmission lines between them, must be explained fully to determine if the Hiawatha Project is being segmented out of a larger project, thereby skirting the Certificate of Need process, and to understand how such expansions could be avoided.
5. No green spaces or trees along the Greenway should be adversely impacted.
6. The Advisory Task Force opposes underground high voltage transmission lines on

- the south shoulder of the Midtown Greenway (on Hennepin County Regional Railroad Authority Land or in the 29th Street right of way) unless it is determined that there are no major adverse impacts related to (a) implementing future rail transit alongside the Midtown Greenway trails and the replacement of bridges that span the Midtown Greenway, and/or (b) future higher density development along 29th Street. In explanation, implementing trail transit in the Midtown Greenway alongside the cycling and walking trails will require widening the floor along many segments of the Greenway trench, such as with retaining walls to replace part or all of the north and/or south embankments, or moving the south embankment farther south or the north embankment farther north, or some other solution. At future rail transit stations in particular, the south embankment and adjacent land may be excavated to create space for station platforms and plazas. Finally, over time the roughly 100-year-old bridges spanning the Greenway will need to be replaced (two more are scheduled for replacement in 2010), and this will require a clear zone around the south bridge abutments for excavation, demolition and reconstruction. Regarding future development, the Midtown Greenway corridor is characterized in the City of Minneapolis-approved Midtown Greenway Land Use and Development Plan as a growth corridor where higher density residential development is anticipated along its edges over time. The legal and practical distance requirements for a new building foundation from an underground high voltage transmission line are unknown to the Task Force, as is the degree of developer resistance to building and marketing new housing very close to such lines. More information is needed regarding all of the above planned corridor uses or edge developments before it can be determined whether underground high voltage transmission lines on the Greenway's south shoulder should be allowed, and in the meantime this alignment is not acceptable.
7. Regarding the Hiawatha Substation: Xcel's proposed Hiawatha West site is not acceptable given the ten-year community process of planning public green space at this site; the new substation site should be decided by the community.
 8. Regarding the Midtown Substation: additional sites should be studied besides Xcel's proposed Midtown North and Midtown South, which are both bordered by affordable housing and contiguous with the Midtown Greenway at Oakland Avenue. If either of these sites is implemented, mitigation should include, but not be limited to, capital funding and ten years of maintenance funding for a previously planned public walkway on the north rim of the Midtown Greenway between Elliot to Portland Avenue.
 9. The Hiawatha Project, as part of any transmission line project approved, should include alternative means of addressing the electricity needs in South Minneapolis including aggressive commercial and residential conservation, electricity generation within the Midtown area such as with co-generation and photovoltaic panels, storage of electricity during off-peak time for use during peak times, along with grid updates and smart grid enhancements to manage a new mix of power demands, generation and storage.
-

Additional note from Jim Walsh, Advisory Task Force member representing the Corcoran Neighborhood Organization (CNO): There was a discussion about this resolution at the CNO Executive Committee. That committee liked the resolution, but they would like to see it go even further in terms of questioning the appropriateness of an underground high voltage transmission line related to potential negative health impacts.

Options for Alternative Energy Sources and to Mitigate Impact

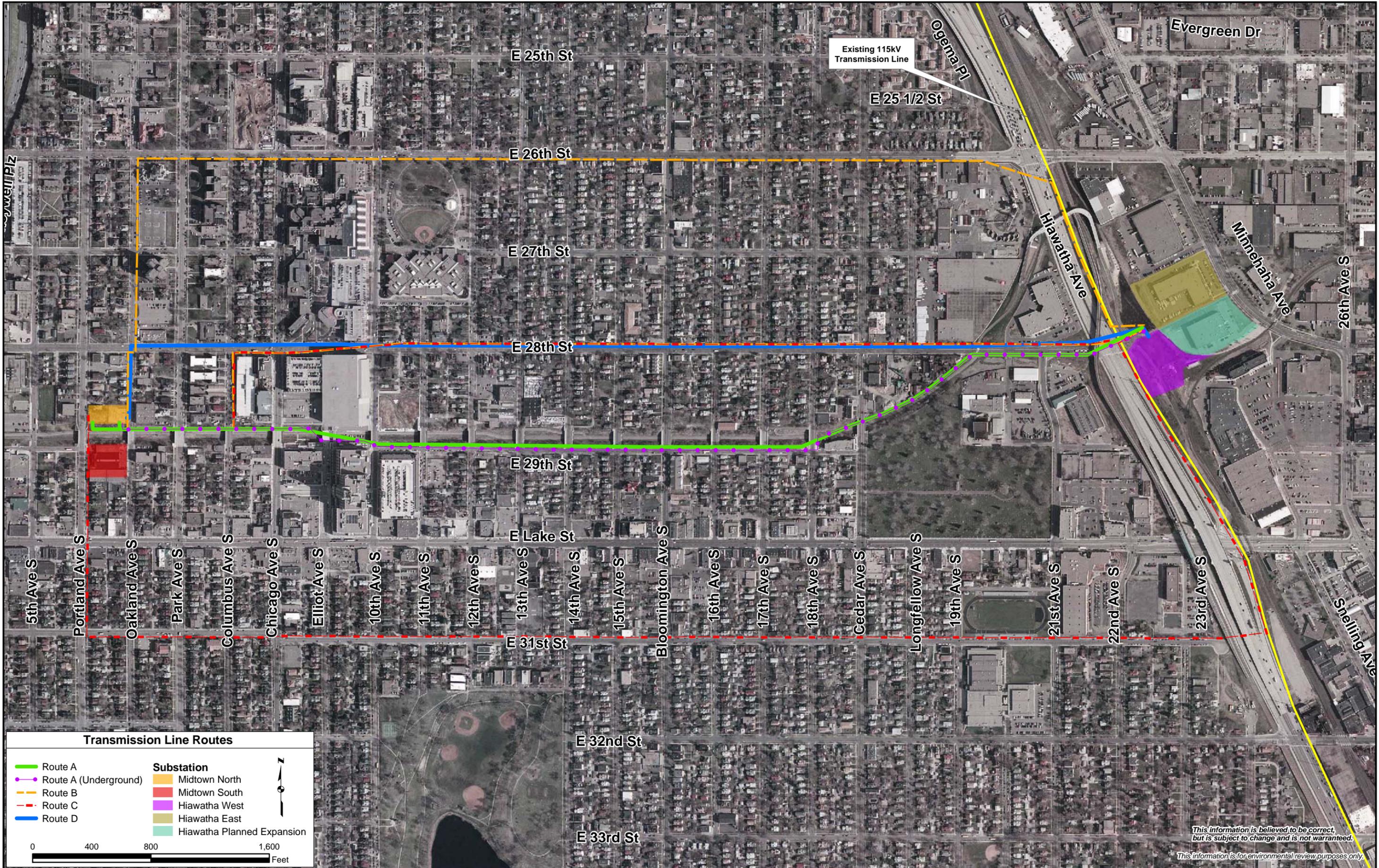
At the third meeting, the ATF was given the opportunity to identify alternative energy generation options for the area and options to mitigate the impact of the lines and/or substations on the area. These topics were not part of the task force's original charge but were discussed because of requests from ATF members and the unique situation of the transmission lines and substations being in a densely populated urban area. The brainstormed lists generated by the ATF are attached in Appendix F of the report.

Conclusions

- 1. Study all of the alternative substation locations and line routes identified by the task force.** A good amount of effort and thought went into the creation of the task force's alternative substation locations and alternative transmission line routes. The task force could not find consensus around a particular substation location or route, or recommend a particular alternative. Thus, the task force recommends that all alternatives be carried forward in the EIS process with the pros and cons identified by the task force.
- 2. All impacts and issues identified by the task force are important.** The impacts and issues identified by the task force are all important and should be evaluated in the EIS. A wide range of issues and impacts were identified and because of the urban setting, the ATF thought it appropriate that all issues and impacts be evaluated.
- 3. Consideration of alternative energy options and other options to mitigate the impact of the substations and transmission lines is warranted.** The Hiawatha Project involves the placement of substations and the routing of transmission lines through an urban area. This unique setting raises challenging issues to be reviewed and addressed. The options raised by the task force in the adopted resolution and brainstorm session provide additional opportunity for way to address local concerns.

Appendices

- A – Project Overview Map
- B – Advisory Task Force Charge
- C – Notice of Appointment
- D – Map of ATF Identified Alternative Substation Locations
- E – Applicant Response to ATF Questions
- F – Brainstormed List of Options for Alternative Energy Sources and to Mitigate Impact



Transmission Line Routes

- | | |
|---|---|
| — Route A | Substation |
| — Route A (Underground) | Midtown North |
| — Route B | Hiawatha West |
| - - - Route C | Hiawatha East |
| — Route D | Hiawatha Planned Expansion |



This information is believed to be correct, but is subject to change and is not warranted.
This information is for environmental review purposes only.

Appendix B

ADVISORY TASK FORCE PROPOSED STRUCTURE & CHARGE

XCEL ENERGY HIAWATHA TRANSMISSION PROJECT

PUC DOCKET #E002/TL-09-38

May 21, 2009

Prepared by the Staff of the



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INTRODUCTION and BACKGROUND

The OES EFP staff has developed a proposed structure and charge for an advisory task force to assist the Department in the scoping of the environmental review for the Hiawatha Transmission Line Project.

The statutes and rules governing the review of Xcel Energy's Application for a HVTL Route Permit for the Hiawatha Project (PUC Docket E002/TL-09-38) contain provisions for the establishment of an Advisory Task Force; these provisions can be found in Minn. Stat. 216E.08 and Minn. Rule 7849.5270, respectively.

For dockets undergoing review in accordance with the Power Plant Siting Act (Minn.Rule 7849.5270 and Minn. Stat. 216E.08, subdivision 1), the Commission has the authority to appoint a citizen advisory task force, determine its charge and size, and appoint its members.

The ATF may be comprised of as many persons as may be designated by the Commission, but shall include at least one representative from each of the following: Regional Development Commissions, counties and municipal corporations and one town board member from each county in which a site is proposed to be located.

The Commission must specify in writing the charge to the ATF upon appointment. The charge shall include the identification of additional routes or particular impacts to be evaluated in the environmental impact statement.

The ATF expires upon completion of its charge, release of the Scoping Decision, or a date specified by the Commission, whichever occurs first. This termination language was added to Minn. Stat. 216E.08 during the 2001 legislative session (Chapter 212, article 7, section 18, 19).

STRUCTURE

The intent of the legislation in assuring that members of regional and local governments have a seat on the ATF is to ensure that conflicts with, or issues relative to regional and local planning are identified for consideration. The propose structure attempts to adapt this intent to the highly urbanized setting of the Hiawatha Project. The advisory task force members will be solicited from the following:

- A. Local units of government:
 - Hennepin County
 - The city of Minneapolis

- B. Political Subdivision
 - Regional Railroad Authority

Midtown Greenway Coalition
Minneapolis Ward 9
Minneapolis Ward 8
Minneapolis Ward 6
Minneapolis Ward 2

C. Non-Governmental Organizations

Central Area Neighborhood Development Organization
Corcoran Neighborhood Organization
East Phillips Improvement Coalition
Midtown Phillips Neighborhood Association
Longfellow Community Council
Seward Neighborhood Group
Powderhorn Park Neighborhood Association
Phillips West Neighborhood Association

The Task Force will be comprised of no more than 16 members.

CHARGE

The Advisory Task Force members will assist the OES EFP staff in developing the scope of environmental review for the EIS being prepared for the Hiawatha 115 kV Transmission line project currently before the Commission (PUC Docket E002/TL-09-38).

Tasks relating to development of the scope of the environmental review will include:

1. Familiarize the membership of the ATF with the proposed project by reviewing the HVTL Route Permit application;
2. Review the Draft Scoping Document produced by the OES EFP staff;
3. Develop potential route or route segment alternatives, and
4. Develop specific impacts and issues of local concern that should be assessed in the EIS by adding detail to the Draft Scoping Document.

The Task Force will expire upon completing the above charge or upon designation by the Director of the OES of Scoping Decision, whichever occurs first.



Energy Facility Permitting

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<http://energyfacilities.puc.state.mn.us>

June 12, 2009

PLEASE TAKE NOTICE that the Minnesota Department of Commerce (DOC) Office of Energy Security (OES) has selected the following individuals to serve as members on an Advisory Task Force (ATF) for the Xcel Energy Hiawatha Transmission Line Project. The ATF will assist OES staff in developing the scope of the Environmental Impact Statement (EIS) and in determining specific impacts and issues of local concern that should be assessed in the EIS.

Hiawatha Transmission Line Project - Advisory Task Force

| Name | Organization |
|-----------------------------|--|
| LUG | |
| Mark Stenglein | Hennepin County |
| Chuck Lutz | Minneapolis |
| Poltital Subdivision | |
| Peter McLaughlin | Hennepin County Regional Railroad Authority |
| Tim Springer | Midtown Greenway Coalition |
| Gary Schiff | Ward 9 |
| Robert Lilligren | Ward 6 |
| Cam Gordon | Ward 2 |
| Elizabeth Glidden | Ward 8 |
| NGO | |
| Jim Walsh | Corcoran Neighborhood Organization |
| Shirley Heyer | Midtown Phillips Neighborhood Association |
| Eric Hart | Longfellow Community Council |
| Alexandra Ellison | Powderhorn Park Neighborhood Association |
| Ryan Brueske | East Phillips Improvement Coalition |
| Amanda Dlouhy | Phillips West Neighborhood Association |
| Sheldon Mains | Seward Neighborhood Group |
| Jim Parsons (TBD) | Central Area Neighborhood Development Organization |

The ATF will meet three times, Wednesday, June 24, 2009, Wednesday, July 15, 2009, and Wednesday, August 5, 2009. The meetings will be held in the Midtown Globe Market from 6:00 pm to 9:30 pm. The ATF will, through a facilitated process, discuss and make recommendations to the Director of the OES in accordance with its charge. The meetings are open for viewing to the public; however, participation in the discussions is limited to members of the ATF.

The ATF will expire upon completing the above charge or upon designation by the Director of the OES of Scoping Decision, whichever occurs first.

To learn more about the proposed Hiawatha HVTL project, visit the project webpage at:

<http://energyfacilities.puc.state.mn.us/Docket.html?Id=19981>

Questions about the ATF should be directed to Bill Storm (bill.storm@state.mn.us), Department of Commerce, Office of Energy Security, 85 7th Place East, Suite 500, St. Paul, MN 55101. Telephone 651.296.9535, facsimile 651.297.7891 (TTY relay service 800.627.3529).

Sub-station Alternative Locations 7-15-09



This information is for informational review purposes only.

Project Area



Appendix B.1 Project Area Aerial Map Hiawatha Project Xcel Energy Minneapolis, MN



Xcel Energy – Informal Data Request Responses from the Hiawatha Advisory Task Force Meeting on 7/15/2009

- City Council Member Glidden requested information from Xcel regarding number 4 of the Resolution. She wanted to hear first hand from Xcel what their current expansion plans are for new substations near Highway 280, Nicollet Avenue and Highway 62, and potential capacity expansions of the proposed Hiawatha and Midtown Substations. Members of the ATF deem this information necessary to determine if the Hiawatha Project is part of a larger project. Glidden requested this information for the next ATF meeting.

There are currently no plans to move forward on the new substation near Highway 280. This substation was part of an exploratory study for a new 345/115 kV source to supply the Arden Hills area in 2011. This plan was not pursued due to the need to re-conductor a 115 kV line between Lexington and Goose Lake. If the 345/115 kV substation was built, this exploratory study looked at the possibility of creating a line to the Hiawatha area in the year 2020 or beyond time frame. We are constantly studying the transmission system and will revisit this area in future studies to determine what is the best solution.

The distribution substations that have been mentioned near Nicollet Ave and Crosstown are potential sites only. Transmission planning has received no new requests for interconnection to the transmission system from distribution capacity planning regarding these two sites.

- Mr. Springer wanted information from Xcel regarding number 6 of the Resolution. He explained they did not have vital information needed to determine if Route A – underground would have adverse impacts to rail transit along the Greenway and/or future higher density development along 29th Street. Mr. Lutz wanted to know what the regulations state about development near underground transmission lines. It was unclear if they wanted OES or Xcel to respond to the question.

Xcel Energy would welcome the opportunity to meet with city and county engineering staff to fully understand and evaluate any issues that relate to future rail transit development in the Greenway corridor. We don't anticipate any conflict that could not be resolved. With the proposed location for underground transmission along 29th Street either within the HCRRA property or in street ROW, we see no conflicts that would impair or hinder higher density development along this corridor.

- Regarding number 7, ATF members wanted to know from an engineering standpoint if a smaller footprint for the Hiawatha Substation is feasible. They also want Xcel to hire an architect/artisan early on to help design the substation. A specific inquiry regarding whether or not Xcel would hire an artist was not made but the point was stressed by Mr. Springer.

To design the exterior appearance of the substations, Xcel Energy would hire an architect and would work with the City of Minneapolis on the final design.

A smaller footprint for the Hiawatha Substation is possible if a high-profile versus low-profile design were used for the 115kV portion of the substation. The difference between the two designs is similar/analogous to the difference between a rambler and a split-level/2-story home. The high-profile 115kV design is taller i.e. more visible from further away, and therefore is used when space constraints exist.

The following dimensions are based on preliminary drawings and assumptions that have not been drawn out in detail and are therefore approximate and subject to possible change after the detailed design has been finalized.

The dimensions for the low-profile Hiawatha West substation are approximately 400 ft in the North-South direction and 250 ft in the East-West direction.

The dimensions for the high-profile Hiawatha West substation would be approximately 10-40% less in the North-South direction and would remain unchanged in the East-West direction. This decrease in size could only occur on the South side since the Hiawatha West substation is being laid out for future expansion capability to the East and transmission line interconnections routes to the West.

- The ATF requested information from Xcel regarding their proposed route (number 10). They wanted to know what issues Xcel has with their proposed I-94/I-35W route. Are there any huge “red flags”? Xcel indicated that Mn/DOT would not allow transmission structures in the freeway ROW, and OES confirmed Xcel’s response.

Substation and Route Options Discussion

- Issue: Page 65 of the need study – Color from figure did not print accurately. Mr. Mains brought this issue up and stated that the color showed the feeder lines extending beyond the substations.

This figure shows the first step in a multi-step process of configuring the 10 new feeders that will be installed with this project. It shows the initial connections that will be made with 5 feeders from each new substation, increasing the number of feeders serving the study area from 39 to 49.

The final configuration of those 5 feeders has not been determined because it is dependent upon the final location of the substations. There will be a substantial amount of re-configuration of the distribution system needed to alleviate overloads on the existing system. This is done by switching portions of feeders to adjacent circuits via switches that are installed on the distribution lines at various locations.

It should be noted that the distribution system is not laid out to serve individual neighborhoods. Planners take a high level view of the distribution system in order to balance loads between feeders and substation transformers and to provide the highest level of reliability achievable. The study area encompasses the entire area shown within the polygon of the figure and each substation will serve portions of that area.

- Hennepin County & HCRRA Commissioner McLaughlin wanted to know exactly how much additional space is needed for a substation (referring to former Xcel Hiawatha substation site and adjacent parking lot). This question was asked in response to Mr. Mains' inquiry of why Xcel ruled out this option. The ATF suggested a portion of or the entire foundry might work as a substation location.

The former Hiawatha Substation site located at 3147 Hiawatha Ave. together with the adjacent parking lot directly to the North were considered as a possible substation location.

The reasons this site was not pursued is that it only has sufficient space for the initial 115 kV to 13.8 kV portion of the substation, even if the Acme Foundry property is included. The Acme Foundry property has an area of 0.59 acres, while a possible future expansion of the substation located at the proposed site has approximate dimensions of 480 X 240 ft, or 2.6 acres. This site, even with the addition of the foundry property, is insufficient in size for the high side equipment that is needed.

Given the potential for load growth in the study area and the need to add additional equipment, we deem it prudent to find a site that can accommodate expansion.

- Mr. Lutz requested information from Xcel regarding details about the underground transmission line options (occurred during discussion of Route A). Specifically, he wants to know details about how deep the line will be buried, and how close the line will be to developments.

Although Xcel Energy does not have specific location information at this time, the minimum depth required was provided within the route permit application in Figure 21. This shows a minimum depth to the top of the concrete encased duct bank of 36 inches. The depth can be deeper as required to work around obstructions in the ground such as water lines. There is no maximum depth limit.

- Ms. Heyer wanted more information about the location of Route D. How close will it come to residences?

Although Xcel Energy does not have specific location information at this time the preliminary plan that was evaluated along Route D (28th Street) was within the street right of way. In this plan the underground lines would come no closer than the existing sidewalk to any residential units.

The 30-foot wide easement is required for construction area in order to construct and maintain the concrete duct and splice vaults that the underground transmission line conductor will be installed within. In addition to working area, it is used to control the planting of vegetation on top of the duct and vaults and excavation or other activities that could interfere with the installation. All other activities or installations, such as sidewalks or roads that do not interfere with the facility are permissible within the 30-foot wide easement.

APPENDIX F

Alternative energy generation options for the area

At the August 5, 2009 ATF meeting, the task force brainstormed alternative energy generation options that could reduce or eliminate the need for a transmission line and/or substations. Options identified included:

- Options identified in application: Appendix D-2, pages 14 – 18, 2.4 Alternatives; Appendix D-3, pages 53 – 67, 6.2.2 Standard Alternatives
- Look at bundling energy alternatives, not just a single options but a collection of options to address the issue.
- Options for alternative energy sources either singular or for bundling include: batteries, wind, solar, co-generation, combine heat and power, geothermal, energy conservation, energy storage, smart grid, thermal energy storage, natural greening (shade treed) and other alternative energy sources
- Encourage a focused conservation of energy by large users in the area
- Demand side management for energy resources; money to be spent on Hiawatha line to be used to work with large energy users to reduce demand and achieve the same goals as the new line
- Cost sharing with larger businesses
- Plan out and fund energy use over time for large users; use private financing to do
- Look into what large users in the area are already doing to conserve energy; engage large energy users to assist in generating solutions
- Work on a district-wide solution; look to others in the area to provide put together a package of energy generation and/or reduction options
- Distribution options; look at demand based on how energy is distributed using a variety of users
- Upgrade and enhance distribution lines already in the area
- Include large users in the discussion of options to reduce energy consumption or generate additional energy from alternative sources; include Midtown Community Works Partnership
- Focus on demand side solutions rather than supply side solutions
- Review Xcel policy of limiting substations to only three transformers
- Examination of criteria for certificate of need in urban areas; 10 miles is too long, other criteria in legislation introduced in 2009 legislative session.
- Incorporation of alternative into projects similar to Hiawatha line
- Paint roofs white

Options to mitigate impact

At the August 5, 2009 ATF meeting, task force brainstormed options to mitigate the impact of the transmission lines and substations on the area. Options identified included:

- Shield the lines and substations to reduce the impact of electromagnetic fields
- Noise mitigation; reduce or buffer the hum

- All ratepayers should pay for the placement of the lines underground
- Review rate base; who pays for delay in action to bury line; line should have been buried when Lake Street was torn up a few years ago
- Relocation of Greenway; if the substation location(s) close the Greenway
- Green space mitigation of lands and trees impacted by the lines and substations; put/plant trees back at relatively the same location and age as those removed; no loss of green space
- Financing for housing and homeowner insurance; issue of FHA not providing loans for homes affected by transmission lines
- Loss of future tax base in the area from future development
- Provide access to green space; walkway along north rim of Greenway (Elliot and Portland)
- Bury substations
- Reimburse city for loss of land in employment zone; loss of federal and/or state funds; loss of jobs
- Relocation costs; businesses and homes
- Replacement costs for affordable housing
- Substations as art and other mitigation options
- Loss of tax base and “red lining” of area because of insurance and FHA issue
- Relocation of structure that are uninsurable
- Reimbursement to Hennepin County and other public entities for rail yard clean up mitigation measures needed to establish the industrial area
- Relocation of rail route(s), if impacted
- Investigate phytoremediation and mycoremediation to absorb toxins around substations, e.g. sunflowers absorb radioactive cesium
- Carbon offsets to mitigate environmental impacts
- Study: the health impacts of transmission lines; proper mitigation around transmission lines; cumulative impacts in area and the added impacts of additional lines
- Greenway mitigation; measures similar to state park impact when a transmission line or highway would go through; reduced use and enjoyment of Greenway
- Social and cultural mitigation; e.g. location impacted is identified as a Latino community
- Move or protect historical resources
- Monitor and study the impacts of electromagnetic fields on Blanding’s Turtles; Blanding’s turtle site near proposed 31st Street transmission line route.
- Loss of opportunity for federal funds for job creation in the area
- Alternative energy is part of mitigation to lessen future impact in the area; protect public investment in this project so it last longer (don’t have to add more lines sooner)
- A number of the items in the Impacts and Issues section of the report which was generated by the task force at the first meeting include mitigation options.