



# Minnesota Department of Natural Resources

Natural Heritage and Nongame Research Program, Box 25

500 Lafayette Road

St. Paul, Minnesota 55155-40\_\_

Phone: (651) 296-7863 Fax: (651) 296-1811 E-mail: sarah.hoffmann@dnr.state.mn.us

RECEIVED

JUL 30 2003

HDR Engineering, Inc.

July 28, 2003

Michelle Bissonnette  
HDR Engineering, Inc.  
6190 Golden Hills Drive  
Minneapolis, MN 55416-1567

Re: Request for Natural Heritage information for vicinity of proposed Xcel Energy Split Rock to Lakefield Junction 345 kV Transmission Line and Nobles to Chanarambie 115 kV Transmission Line; Murray, Nobles, Rock, and Jackson Counties  
NHNRP Contact #: ERDB 20040057

Dear Ms. Bissonnette,

We have reviewed the alternate routes for each of the transmission lines referenced above and offer the following comments regarding impacts to rare species and native plant communities.

### Split Rock to Lakefield Junction

The I-90 route has the potential to impact a mesic prairie remnant located within the right-of-way of the Union Pacific Railroad in T102N R39W Section 4. Sullivant's Milkweed (*Asclepias sullivantii*), a threatened plant species was documented in the railroad prairie remnant just south of this one and may be present at this site as well. The 1997 Minnesota State Legislature directed the DNR to conduct a field review of active railroad rights-of-way (ROW) to identify native prairie. Railway ROW extend from 20 to 200 feet on either side of the track and are safety zones required for safe railroad operations. The DNR surveyed 3240 miles of railroad ROW, of which 487 discontinuous miles of native prairie were identified. The prairie fragments were ranked *very good*, *good*, or *fair* based on the coverage of native prairie plant species, abundance of woody shrubs, and level of disturbance (such as herbicide use or equipment storage). This particular remnant was given a quality ranking of good. Because more than 99% of the prairie that was present in the state before settlement has been destroyed, and more than one-third of Minnesota's endangered, threatened, and special concern species are now dependent on the remaining small fragments of Minnesota's prairie ecosystem, we feel that all prairie remnants merit protection. We strongly encourage Excel Energy to avoid impacting this prairie remnant by, as suggested in your letter, shifting pole locations or modifying construction methods. We further request that any disturbed soil adjacent to prairie areas be revegetated with prairie species native to Minnesota.

The existing 161 kV route also has the potential to impact a mesic prairie remnant within the right of way of the Union Pacific Railroad. This remnant is located in T103N R38W Section 19 on both sides of the railroad. The remnant was given a quality ranking of very good and as with the site above, may contain Sullivant's Milkweed, a threatened plant species. To help protect this rare habitat type, please consider the recommendations provided above.

### Nobles County to Chanarambie

We do not have any specific rare features concerns with either of these routes.

DNR Information: 651-296-6157 • 1-888-646-6367 • TTY: 651-296-5484 • 1-800-657-3929

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## All Routes

Each of the alignments cross several rivers and streams. Topeka shiners (*Notropis topeka*), a federally listed endangered species and state species of special concern species, have been documented within many of these waterways. Topeka shiners are adversely impacted by actions which alter stream hydrology or decrease water quality, including sedimentation, dredging and filling, stream dewatering, impoundment, eutrophication, channelization, and pollution/contamination. We are assuming that the project will not involve any in stream work, in which case direct impacts to this rare fish species are not anticipated, however, it is imperative that all standard precautions available to prevent sediment moving into streams be taken to prevent degradation of their aquatic habitat.

The Natural Heritage database is maintained by the Natural Heritage and Nongame Research Program, a unit within the Division of Ecological Services, Department of Natural Resources. It is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, natural communities, and other natural features. Its purpose is to foster better understanding and protection of these features.

Because our information is not based on a comprehensive inventory, there may be rare or otherwise significant natural features in the state that are not represented in the database. A county-by-county survey of rare natural features is now underway, but has not been completed for Murray, Nobles, Jackson or Rock Counties. Therefore ecologically significant features for which we have no records may exist on the project area.

The enclosed results of the database search are provided in two formats: index and full record. To control the release of locational information which might result in the damage or destruction of a rare element, both printout formats are copyrighted.

The index provides rare feature locations only to the nearest section, and may be reprinted, unaltered, in an Environmental Assessment Worksheet, municipal natural resource plan, or report compiled by your company for the project listed above. If you wish to reproduce the index for any other purpose, please contact me to request written permission. Copyright notice for the index should include the following disclaimer:

"Copyright (year) State of Minnesota, Department of Natural Resources. This index may be reprinted, unaltered, in Environmental Assessment Worksheets, municipal natural resource plans, and internal reports. For any other use, written permission is required."

The full-record printout includes more detailed locational information, and is for your personal use only. If you wish to reprint the full-record printouts for any purpose, please contact me to request written permission.

Please be aware that review by the Natural Heritage and Nongame Research Program focuses only on *rare natural features*. It does not constitute review or approval by the Department of Natural Resources as a whole. If you require further information on the environmental review process for other wildlife-related issues, you may contact your Regional Environmental Assessment Ecologist, Shannon Fisher, at (507) 359-6073.

An invoice for the work completed is enclosed. You are being billed for map and database search and staff scientist review. Please forward this invoice to your Accounts Payable Department. Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources.

Sincerely,



Sarah D. Hoffmann

Endangered Species Environmental Review Coordinator



# Minnesota Department of Natural Resources

Division of Ecological Services  
261 Highway 15 South  
New Ulm, MN 56073

RECEIVED

AUG 11 2003

HDR Engineering, Inc.

8/7/03

Michelle Bissonnette, Project Manager  
HDR Engineering, Inc.  
6190 Golden Hills Drive  
Minneapolis, MN 55416-1567

Dear Ms. Bissonnette:

On behalf of the Minnesota Department of Natural Resources, I would like to thank you for giving us the opportunity to provide some early-stage environmental review of your proposed transmission lines. The following comments are being provided for the alternatives from Split Rock Substation to the Lakefield Junction, including the connection from this line to the Chanarambie Substation near Lake Wilson.

Due to the disturbance already presented by the I-90 corridor, we would prefer that much of the east-west transmission line from Split Rock to Lakefield remain in the I-90 corridor where possible. Therefore, we prefer the I-90 route you are proposing from the Minnesota-South Dakota border to the route option crossover 5 miles west and 2 miles south of the Lakefield Junction Substation. We would prefer that the transmission line follow north along this crossover and then finish its route to the Lakefield Junction Substation along the existing 161 kV route. We request that this northern alignment on the eastern end of this transmission line segment be considered to move lines further away from the Summer's Wildlife Management Area located just south of I-90 near the intersection with State Highway 86.

The new 115 kV transmission line poses a far greater number of challenges. I think you have done a good job of identifying alignment options with the fewest environmental concerns; however, there are some important differences between the two north-south options connecting the 345 kV line to the Chanarambie Substation. This will be difficult to explain, so I have made copies of the maps you provided and highlighted our preferred alternatives in yellow.

To the immediate west of Worthington, the I-90 line alternative takes a turn to the north and then turns back to the east to go around the city of Worthington. At the point where the line turns to go east, we would prefer to see the new lines run along the existing 161 kV lines to Reading. From Reading, we would like to see the line run up Highway 266 to the identified route option crossover located between 2 and 3 miles northwest of Reading. To avoid various environmental management areas, we would prefer that the West option be utilized from this crossover to the Nobles-Murray county line. From the Nobles-Murray county line, we believe that the East option would be the better alternative – allowing greater avoidance of the Chandler Wildlife Management Area while still remaining to the west of the other various Wildlife Management Areas in southern Murray County. Approximately 3.5 miles east and 1.5 miles south of Lake Wilson, another crossover option is available. The DNR would prefer that you utilize this crossover to bring the transmission line south of Lake Wilson and then up to the Chanarambie



Substation. The north and then west route around the north side of Lake Wilson could infringe on Leed's Wildlife Management Area.

Although I cannot identify any specific bird movement hazards, it is generally a good idea to utilize flight diverters if in close proximity to Wildlife Management Areas, lakes, rivers, and wetlands. We again would like to make sure that you are aware of the MN restitution rules for animals killed through your actions. These rules (MN Rules 6133.0030) call for \$50 restitution for geese. By maximizing the distance between transmission lines and resting/feeding areas for waterfowl and using flight diverters where infringement is unavoidable, it is unlikely there will be major bird mortality. We do ask, though, that steps be considered to minimize avian mortality.

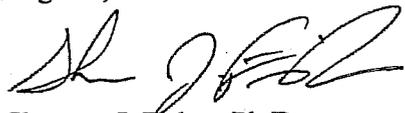
Other environmental issues to keep in mind along the proposed routes include a prairie crossing, Topeka shiners, and northern cricket frogs. Along the transmission line route northeast of Worthington, the proposed line appears to cross Highway 60 and a railroad corridor. In this corridor, our databases indicate the presence of moderate to high quality prairie, including the presence of Sullivant's Milkweed, a rare species. When planning to cross in this area, we request avoidance of prairie remnants by spacing line towers to straddle the sensitive habitats.

Along your proposed routes, many of the streams that you will need to cross may contain Topeka shiners, a federally endangered species. Please be advised that below the tops of the banks along most streams in southwestern Minnesota, no work of any type is allowed prior to August 15<sup>th</sup> to help protect Topeka Shiner reproduction and early life history. Flowing water streams are included in the Topeka shiner restriction; however, slack water, oxbows, and other floodplain wetlands are particularly critical to protect, as Topeka Shiners spend much of the year in out-of-channel habitats.

A record of northern cricket frogs exists in our database along I-90 just west of Adrian. Although I am not sure about the date of that observation, northern cricket frogs are extremely rare in Minnesota. We would ask that efforts be made to avoid shallow wetland habitats and floodplain slack waters when placing transmission lines and towers in this area. Remnant populations of northern cricket frogs could still exist.

In regards to the new potential Nobles County substation, we prefer the location nearest Reading (highlighted on maps). This location maximizes the amount of separation from the substation and local resources that could be sensitive to disturbance. If you have any additional questions regarding these comments or would like any additional input about certain environmental aspects, please do not hesitate to contact me.

Regards,

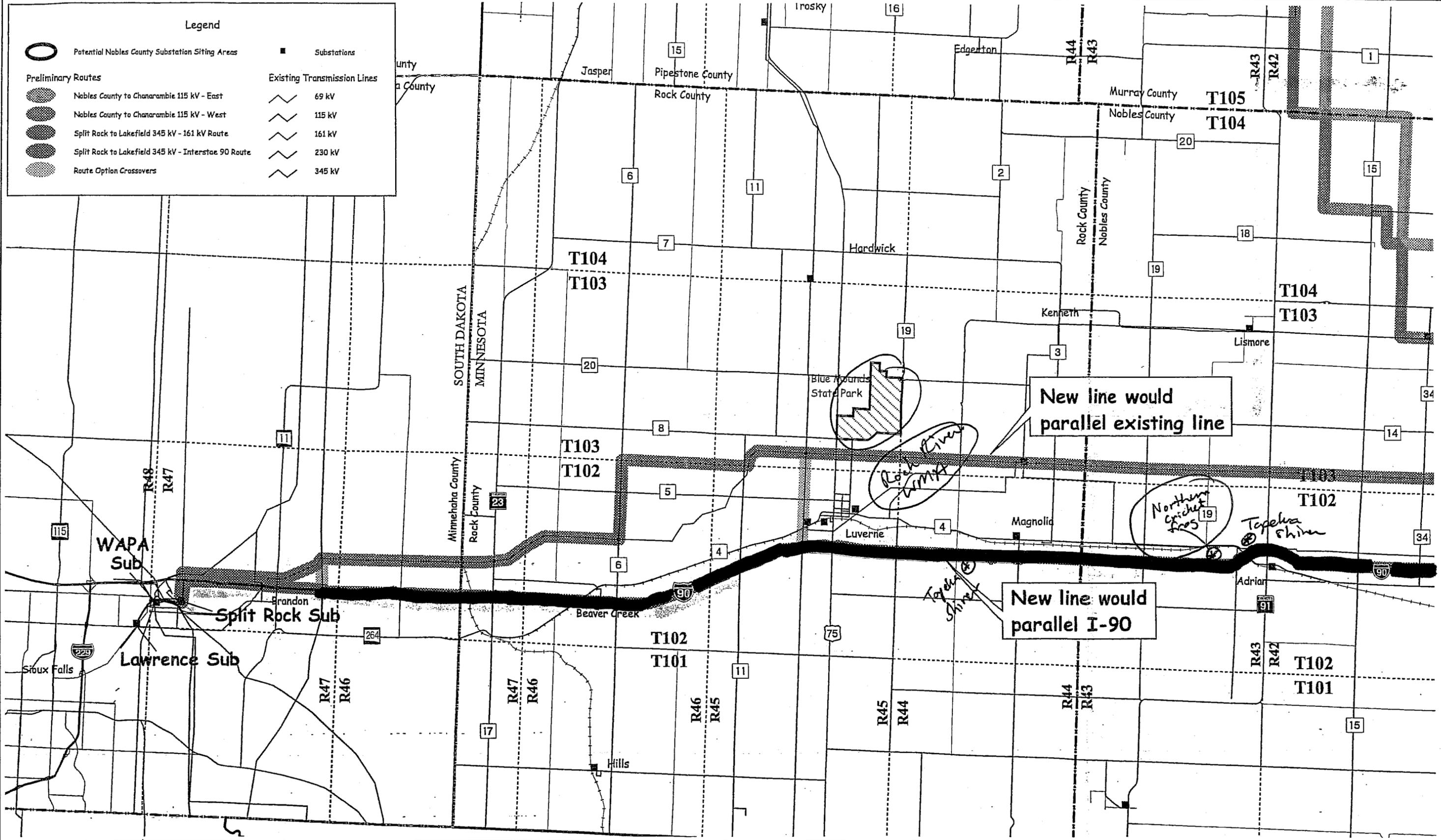


Shannon J. Fisher, Ph.D.  
Environmental Assessment Ecologist  
(507) 359-6073  
[Shannon.fisher@dnr.state.mn.us](mailto:Shannon.fisher@dnr.state.mn.us)

Cc: Bob Hobart, Lands and Minerals, DNR, New Ulm  
Mark Gulick, Wildlife, DNR, Talcot Lake Wildlife Management Area

**Legend**

	Potential Nobles County Substation Siting Areas		Substations
<b>Preliminary Routes</b>			
	Nobles County to Chanarambie 115 kV - East		Existing Transmission Lines
	Nobles County to Chanarambie 115 kV - West		69 kV
	Split Rock to Lakefield 345 kV - 161 kV Route		115 kV
	Split Rock to Lakefield 345 kV - Interstate 90 Route		161 kV
	Route Option Crossovers		230 kV
			345 kV



New line would parallel existing line

New line would parallel I-90

*Rock River WMA*

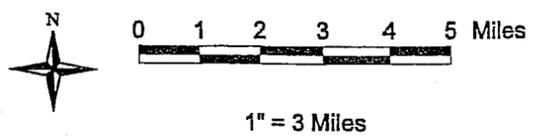
*Northern Cricket frogs*

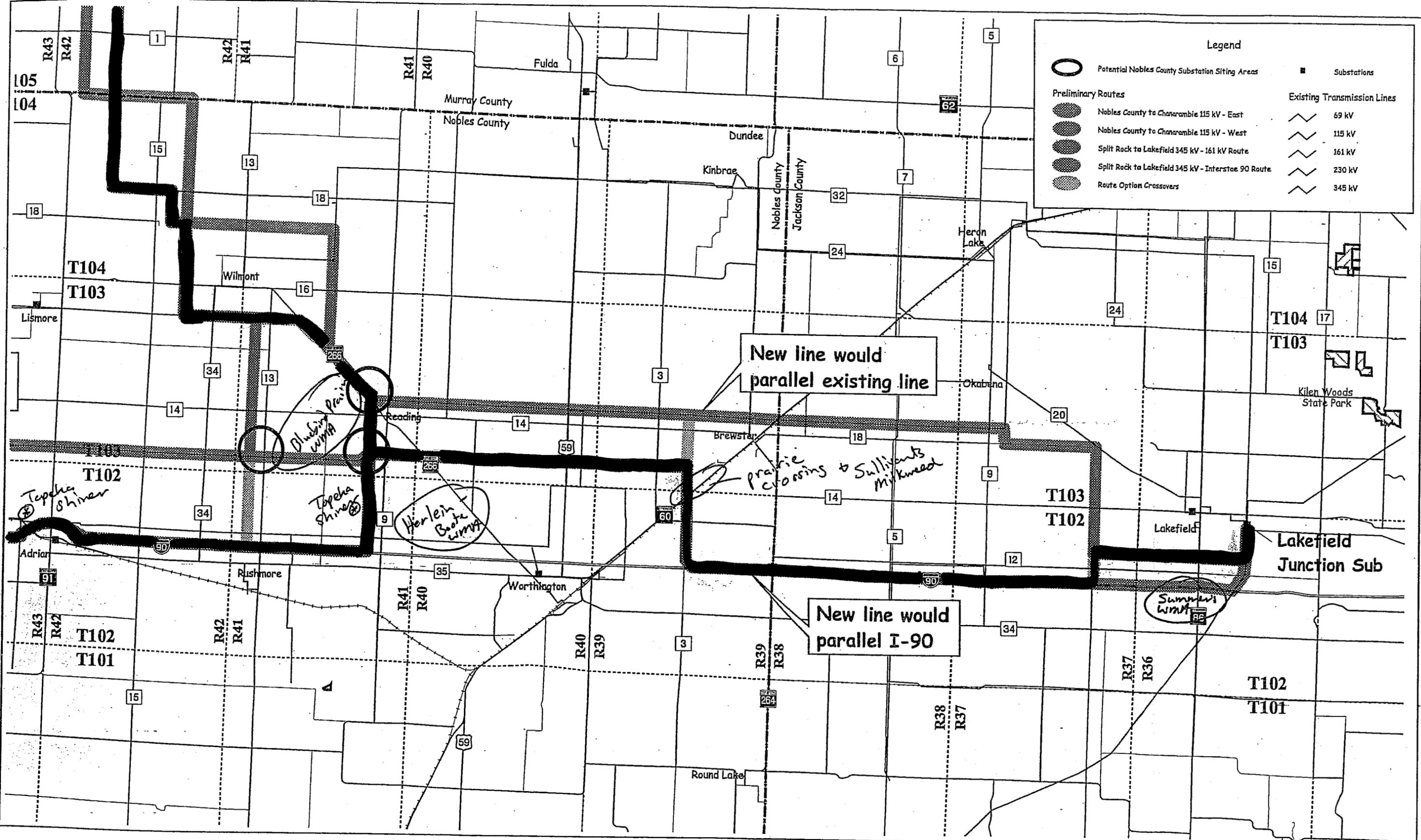
*Tapeha Shiner*

*Tapeha Shiner*



Split Rock to Lakefield Jct 345 kV Line  
 Xcel Energy  
 Preliminary Routes  
 Figure 1





**Legend**

- Potential Nobles County Substation Siting Areas
- Substations
- Preliminary Routes**
  - Nobles County to Chanarambie 115 kV - East
  - Nobles County to Chanarambie 115 kV - West
  - Split Rock to Lakefield 345 kV - 161 kV Route
  - Split Rock to Lakefield 345 kV - Interstate 90 Route
  - Route Option Crossovers
- Existing Transmission Lines**
  - 69 kV
  - 115 kV
  - 161 kV
  - 230 kV
  - 345 kV

New line would parallel existing line

New line would parallel I-90

prairie crossings to Sullivants Milkweed

Dlubing Prairie WMA

Topoka Shiner

Topoka Shiner

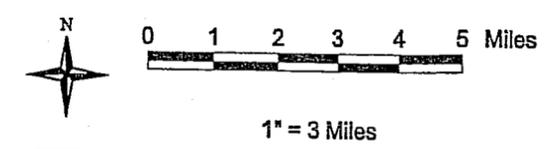
Herkle's Boats WMA

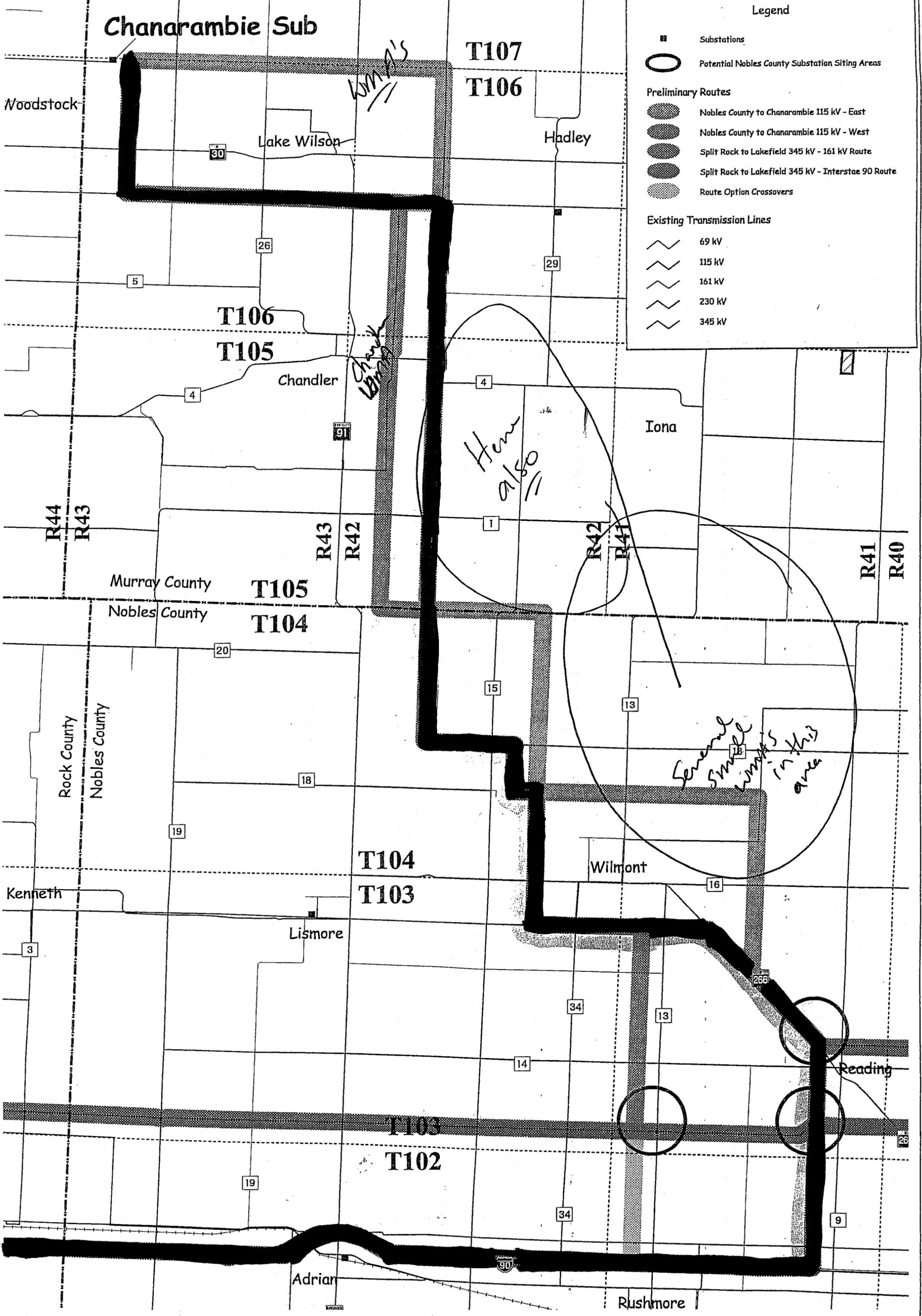
Summer's WMA

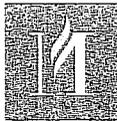


Split Rock to Lakefield Jct 345 kV Line

Xcel Energy  
Preliminary Routes  
Figure 2







MINNESOTA HISTORICAL SOCIETY

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AUG - 8 2003

HDR Engineering, Inc.

August 7, 2003

Ms. Michelle Bissonnette  
HDR Engineering  
6190 Golden Hills Drive  
Minneapolis, MN 55416-1567

Re: Split Rock to Lakefield Junction 345 kV Transmission Line  
Nobles to Chanarambie 115 kV Transmission Line  
SHPO Number: 2003-3018

Dear Ms. Bissonnette:

Thank you for the opportunity to review and comment on the above project. It has been reviewed pursuant to the responsibilities given the Minnesota Historical Society by the Minnesota Historic Sites Act and the Minnesota Field Archaeology Act.

Based on our review of the materials submitted, we do not feel that an archaeological survey of the project area is needed.

However, Buffalo Ridge, which is listed in the State Register of Historic Places, is located in the project area. An assessment of effects to this property needs to be completed.

Contact us at 651-296-5462 with questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Gimmestad'.

Dennis A. Gimmestad  
Government Programs & Compliance Officer



# United States Department of the Interior

FISH AND WILDLIFE SERVICE

Twin Cities Field Office

4101 East 80th Street

Bloomington, Minnesota 55425-1665

AUG 13 2003

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AUG 14 2003

HDR Engineering, Inc.

Michelle Bissonnette  
HDR Engineering, Inc.  
6190 Golden Hills Drive  
Minneapolis, Minnesota 55416-1567

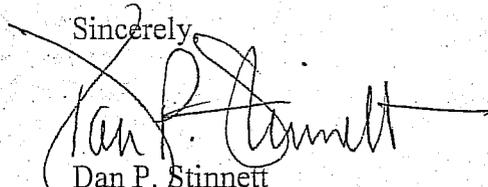
Dear Ms. Bissonnette:

This responds to your letter dated July 2, 2003, requesting information regarding potential effects to threatened and endangered species for the Xcel Energy route permit for the proposed 345 kV transmission line from Split Rock Substation to the Lakefield Junction Substation. The project will be located in Jackson, Murray, Nobles and Rock counties in Minnesota (exact route not yet determined).

Given the locations provided (Township, Range and Sections) and type of activity proposed, we have determined the project is not likely to adversely affect any federally listed or proposed threatened or endangered species or adversely modify their critical habitat. This precludes the need for further action on this project as required under section 7 of the Endangered Species Act of 1973, as amended. Consultation with this office should be reinitiated if the project is modified or new information becomes available which indicates that listed species may occur in the affected area or their critical habitat modified.

We appreciate the opportunity to comment and look forward to working with you in the future. If you have questions regarding our comments, please call Nick Palaia/Laurie Fairchild of my staff at (612) 725-3548, extension 214.

Sincerely,

  
Dan P. Stinnett  
Field Supervisor



Minnesota Department of Transportation

District 8 - Willmar/Marshall/Hutchinson  
2505 Transportation Road  
Willmar, MN 56201

Office Tel: 320-231-5497  
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Fax: 320-231-5168  
www.dot.state.mn.us

July 17, 2003

Michelle Bissonnette  
Senior Environmental Consultant  
HDR Engineering, Inc.  
6190 Golden Hills Drive  
Minneapolis, MN 55416-1567

RE: Nobles to Chanarambie 115 kV Transmission Line

Dear Michelle Bissonnette:

Thank you for your letter dated July 2, 2003, giving us the opportunity to comment on your project.

From the sketches you submitted, Nobles County to Chanarambie, the east route would cross TH 30 and Nobles County to Chanarambie, the west route would cross TH 30 and TH 91 in District 8. These crossings should have minimal impact to State right-of-way. However, we offer the following comments.

1. Mn/DOT Permit TP-02525-03 (7-00), long form permit, shall be acquired by Excel Energy if State right-of-way is involved.
2. Poles not meeting the requirements for clear zone distance will not be allowed on State right-of-way.
3. Poles allowed on State right-of-way shall be placed within 1 to 3 feet of the right-of-way line.
4. If a staging area for construction is located adjacent to a highway, the applicant and/or contractor will prevent vehicles from carrying mud onto the highway.

If you have any questions, you may call Geri Vick, D8 Roadway Regulations Supervisor, at 320-214-3776.

Sincerely,

A handwritten signature in cursive script that reads "David G. Trooien".

David G. Trooien  
Transportation District Engineer

cc: Geri Vick



## DEPARTMENT OF GAME, FISH AND PARKS

Foss Building  
523 East Capitol  
Pierre, South Dakota 57501-3182

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AUG 1 2003

HDR Engineering, Inc.

July 29, 2003

Michelle Bissonnette, Senior Environmental Consultant  
HDR  
6190 Golden Hills Drive  
Minneapolis, MN 55416-1567

Michelle:

Thanks for the opportunity to provide additional comments on the alternative routes. In addition to the species reported in my first letter, you should also consider a bald eagle nest site that is now known on the Big Sioux River just east of the Xcel Power Plant. The nest is located in T102N R48W Sec. 30, SE4. This nest was first reported in May of 2002. The maps provided don't have enough resolution for me to determine if the alternative routes will pass near this nest. If work on this project will occur within ½ mile of the eagle nest during the nesting season, the U.S. Fish and Wildlife Service should be consulted. The bald eagle is a federally threatened species.

According to National Wetlands Inventory maps, numerous wetlands exist within or near the project corridors shown on the maps included with your letter. If a project may impact wetlands or other important fish and wildlife habitats, the South Dakota Department of Game, Fish and Parks, Division of Wildlife, recommends complete avoidance of these areas if possible, followed by minimization of any adverse impacts and replacement of any lost acres. Alternatives should be examined and the least damaging practical alternative selected. Your letter indicated that Best Management Practices would be implemented to avoid any run-off into Split Rock Creek. It also noted that no mechanized equipment will cross the stream and placement of power poles would not occur in the stream. However, the potential of crossing wetland basins was not mentioned. If crossing of wetlands in the area is unavoidable, the following recommendations should be implemented in the construction plans for the placement of any service lines.

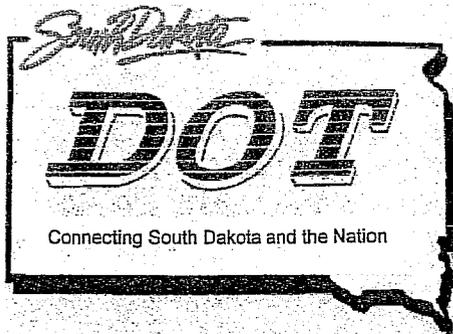
1. Wetland bottoms impacted by construction activities should be restored to pre-project elevations.
2. Removal of vegetation and soil should be accomplished in a manner to reduce soil erosion and to disturb as little vegetation as possible.
3. Grading operations and reseedling of native species should begin immediately following construction.
4. Crossing of wetland basins should be done when dry conditions exist.

Work requiring the alteration or disturbance of wetlands or streams may require a permit from the U.S. Army Corps of Engineers according to regulations set forth in Section 404 of the Clean Water Act. If you haven't already done so, you may contact the COE Regulatory Office at 28563 Powerhouse Road, Room 120, Pierre SD 57501, Telephone (605) 224-8531.

If you have any questions or need additional information, please contact me.

Sincerely,

Doug Backlund  
Wildlife Biologist



# Department of Transportation

## Sioux Falls Area Office

5316 West 60<sup>th</sup> Street North  
Sioux Falls, SD 57107 605/367-5680  
FAX: 605/367-5685

RECEIVED

SEP 23 2003

HDR Engineering, Inc.

September 17, 2003

HDR Engineering, Inc.  
Attn: Michelle Bissonnette  
6190 Golden Hills Drive  
Minneapolis, Minnesota 55416-1567

Ref: Split Rock to Lakefield Junction 345 kV Transmission Line  
Nobles to Chanarambie 115 kV Transmission Line

Mrs. Bissonnette,

I have reviewed the information you submitted in regards to the above referenced transmission lines. Below is a listing of future planned construction projects in South Dakota that may impact the location of this transmission line:

- The interchange at Exit 402 (Eros Exit) may be reconstructed for the City of Sioux Falls East Side corridor at some time in the future as construction of the corridor moves forward.
- The interchange at Exit 406 (Brandon Exit) will be reconstructed and widened out. Currently this project is scheduled for a 2008 letting with work to begin in 2009.
- SD 11 from Corson North to Garretson will be reconstructed in 2004 and 2005.
- The State of South Dakota Rest Area on the South Dakota - Minnesota state border is scheduled to be reconstructed in 2008.

Once a decision has been made on the location of the above referenced transmission line and construction is imminent. Please contact this office for a permit to Occupy The Right-Of-Way. This permit will be required in order for Xcel Energy to gain access to their work site from the Interstate Right-Of-Way. Depending on the final location of the transmission line other permits may be required. Should you have any questions or which to discuss this further please contact this office.

Sincerely,  
SD Department of Transportation  
Craig Smith, Area Engineer

Greg L. Aalberg  
Engineering Supervisor

cc: Week, Smith, file