Minnesota Department of Natural Resources
500 Lafayette Road • St. Paul, MN • 55155-40

June 1, 2010

Scott Ek, State Permit Manager
Energy Facility Permitting
Minnesota Office of Energy Security
85 7th Place East, Suite 500
St. Paul, Minnesota 55101

Re: Route Permit Application and Environmental Assessment Scoping for the Potato Lake 115 kV Transmission Line and Substation in Park Rapids, Minnesota [PUC Docket Number ET2/TL-10-86]

Dear Mr. Ek:

The Minnesota Department of Natural Resources (DNR) has reviewed the route permit application for the Potato Lake 115 kV Transmission Line and Substation Project in Park Rapids, Minnesota and provides the following comments for consideration in scoping the Environmental Assessment (EA). Comments are provided regarding natural vegetation, wildlife, and rare and unique natural features. Information is also provided at this time regarding DNR Land and Water Crossing Licenses.

Natural Vegetation

The Route Permit Application (6.5.3) describes landscape levels and ecological settings using EPA's Level III Ecoregions. EPA's Level III data does not describe habitat at a scale necessary for project level evaluation and does not complement other classification systems used by the DNR (e.g. native plant community classification). In the interest of consistency, the EA should describe the ecological setting of the project using the Ecological Classification System (ECS) to the Land Type Association level. The DNR and the U.S. Forest Service developed the ECS for ecological mapping and landscape classification following the National Hierarchical Framework of Ecological Units (Ecomap 1993). ECS mapping enables resource managers to consider ecological patterns for areas as large as North America or as small as a single timber stand and identify areas with similar management opportunities or constraints relative to that scale.

Recently, preliminary Minnesota County Biological Survey (MCBS) data was provided to the applicant and is described using the Native Plant Community (NPC) classification that integrates with the ECS. This information should be included in the EA.

Every state recently completed a "state wildlife action plan (SWAP)" which identifies conservation needs for species of concern, including threatened and endangered wildlife and other important wildlife species. Minnesota's SWAP titled, "Tomorrow's Habitat for the Wild and Rare" describes conservation concerns for species of greatest conservation need (SGCN) and their *key habitats* within various landscape settings (also characterized using the ECS).

In the interests of consistency and accuracy, Minnesota's SWAP, ECS, NPC descriptions, and preliminary MCBS data should all inform the content and assessment provided by the EA.

Wildlife/Rare and Unique Natural Features

The application (Section 6.5.4) only describes state and federally listed wildlife species. The EA should attempt to identify potential impacts to all significant fish and wildlife resources (e.g. SGCN) and *key habitats* on or near the

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site. As previously mentioned, Minnesota's SWAP should be used to provide this information. Descriptions of measures to avoid or minimize adverse impacts to these wildlife resources should also be included in the EA.

The EA should discuss the effectiveness of the following measures to mitigate potential avian mortality impacts associated with collisions with power lines:

1. Use of line markers - Periods of inclement weather and foggy conditions associated with lakes, water courses and wetlands increase collision risk and have been known to decrease the effectiveness of line marking devices. The EA should assess the effectiveness of various bird flight diverters in mitigating avian mortality due to collision with HVTLs. The assessment should include a review of scientific literature.

2. Underground construction[i] - The EA should assess the effectiveness of underground construction in mitigating visual impacts as described in footnoted Minnesota Rules. It would also be helpful to analyze the effects of an underground crossing at the Potato River crossing (see bird and flyway concentration areas below) as mitigation for avian mortality due to collisions with transmission lines.

3. Pole design (e.g. H-frame vs. single pole) – The effectiveness of various pole designs in mitigating natural resource effects such as bird strikes or vegetation removal should be discussed in the EA. For example, in some locations an H-frame may minimize the number of vertical wires, and therefore minimize bird strikes. In other locations a single pole with a smaller ROW may reduce removal of vegetation providing important habitat.

4. Eliminating usage of ground/shield wires in high-risk areas - Ground wires are installed on transmission lines to dissipate lightning strikes. The effectiveness and practicality of eliminating the use of shield wires through high-risk areas (mentioned below) should be discussed in the EA.

A description of potential impacts such as estimates of annual mortality and specific avoidance, minimization, and mitigation measures for the following bird flyway and concentration areas should specifically be included in the EA:

1. Potato River Crossing – Based on local DNR wildlife staff observations, Trumpeter Swans, Bald Eagle and other waterfowl frequently use the Potato River as a flyway and commonly cross near the bridge area at low altitudes. Bald Eagles also commonly perch in the trees near the dam and hunt the associated waters for waterfowl.

2. Public Water Wetland 514P (T141N R35W, Sections 27 and 34) and adjoining wetlands – The DNR considers this area to have higher risk of waterfowl mortality due to collisions with HVTLs.

3. Public Water Wetland 517P and adjoining wetlands along Hwy#71- Trumpeter Swans are known to frequent these wetlands. The DNR also considers this area to have higher risk of bird collisions with HVTLs.

If other project alternatives are included in the scope of the EA, a description of the aforementioned mitigation measures should also be included for all public waters, public waters wetlands and adjoining floodplains and/or wetlands.

Please see the attached DNR Natural Heritage Information System (NHIS) review letter dated December 16, 2009. Discussion of resources and concerns identified in this heritage review should be included in the EA. The EA should also identify how best management practices suggested in the NHIS review will be implemented.

Other Topics

The EA should discuss disposal or wasting of the back dirt resulting from the excavation of the tower footings.

The EA should describe the functions provided by the project area wetlands and how impacts associated with pole placement (fill placement and type conversion) and maintenance will change those functions. Specific mitigation proposed by the applicant and/or required by laws should also be included in the assessment.

The EA should identify and discuss the impacts associated with additional work areas (e.g. marshaling yards) on or adjacent to the ROW that may be needed for construction, storage, or staging of materials.

DNR Land and Water Crossing Licenses

The review and issuance of DNR land and water crossing licenses are coordinated by the Division of Lands & Minerals. The proposed project in Hubbard County will be handled in the Northwest Region. The Lands & Minerals Realty Specialist in the NW Region is Walter Lindahl (218/308-2683). The applicant should contact Walter Lindahl with any questions about completing the land or water crossing applications.

The project proposer should allow adequate time for review and modification of the license applications after the completion of environmental review. The following information should be included in the license applications:

1. Length and width of each proposed state land and public water depicted on maps and plan sheets. Each crossing must be identified by legal description to the forty.

2. Clearing activities, construction methods, schedule, and staging of operations including equipment and materials storage proposed on state land or in public waters.

3. Permanent and temporary access points to the proposed ROW affecting state land or public waters.

4. Temporary work areas on state land adjacent to the ROW that may be needed during construction. These areas should be clearly delineated and identified in the application materials.

5. General location of existing utility lines or transportation ROWs within or near the proposed ROW on state land or in public waters.

6. State trails or Grant in Aid trails proposed to be crossed.

7. Location and design of tower structures including proposed methods for disposal or wasting of the back dirt resulting from the excavation of the tower footings.

8. Restoration methods including proposed seed mixes and invasive species control measures.

9. ROW maintenance methods and schedule on state land or in public waters.

In addition, the project proposer should be aware of the following points related to the licensing of state land and public water crossings:

1. DNR invasive species standards will apply to state-administered lands and public waters to include cleaning of equipment.

2. Certain pesticides are restricted from use on certified forest lands. Adequate notice of herbicide or pesticide use on state lands will be required and only approved herbicides will be allowed.

3. Use of native species for re-vegetation and clean weed free straw for mulch will be required on certain state land and public water crossings.

4. In-stream work on certain public waters (trout streams, for example) must be avoided at prescribed times to accommodate fish spawning.

5. State lands purchased with the assistance of various Federal grant programs may require mandatory federal aid review and approval before the license can be issued. Supplemental information may be required for the federal review. If federal approval is required, additional time will be needed to process the application.

6. If a state land parcel becomes isolated due to the construction of the ROW, the project proposer must provide access to the isolated state land across the ROW.

7. A monitoring fee will be assessed for DNR projected reasonable costs for monitoring the construction of the utility line and preparing special terms and conditions of the license to ensure proper construction.

8. Permission for temporary access to the ROW across state land is considered a separate transaction and may be granted through a lease. Requests for temporary access are subject to review and approval, and in some cases may not be granted. Allow adequate time for processing access lease requests.

Thank-you for the opportunity to provide review of the route permit application and scoping comments for the Potato Lake Transmission Line and Substation Project EA. Please contact me if any clarification is needed or if you have any questions.

Sincerely,

Jamie Schrenzel
Principal Planner
Environmental Review Unit
(651) 259-5115

Enclosures: 1

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[i] 6135.1200 STANDARDS FOR STRUCTURE DESIGN.

Subpart 1.Location of utility. With regard to locating the utility overhead or under the ground or water:

A. Primary consideration shall be given to underground and underwater placement in order to minimize visual impact. If the proposal is for overhead placement, the applicant shall explain the economic, technological, or land characteristic factors, which make underground placement infeasible. Economic considerations alone shall not be the major determinant. Statutory Authority: *MS* s 84.415 Posted: *June 11,2008*

Minnesota Department of Natural Resources

Division of Ecological Resources, Box 25

500 Lafayette Road

St. Paul, Minnesota 55155-4025

Phone: (651) 259-5109 Fax: (651) 296-1811 E-mail: lisa.joyal@dnr.state.mn.us

December 16, 2009 **Correspondence # ERDB 20100373**

Marsha Parlow
Great River Energy
12300 Elm Creek Boulevard
Maple Grove, MN 55369

RE: Natural Heritage information in the vicinity of the proposed Potato Lake 115 kV Substation and Transmission Line, Hubbard County

Township (N)	Range (W)	Section(s)
141	35	21, 22, 26-28, & 34-36
141	34	31 & 32
140	35	1 & 2
140	34	5 & 6

Dear Ms. Parlow,

I have reviewed the information submitted in your 13 November 2009 letter regarding the above project. As mentioned in your letter, the Minnesota Natural Heritage Information System contains several records of rare features in the vicinity of the proposed project. Many of these rare features have the potential to be impacted by the proposed project, and are discussed below. Please note that the Public Utilities Commission Route Permit Application for this project needs to address the following issues, including any avoidance or mitigation measures that will be implemented.

- Several rare birds have been documented in the vicinity of the proposed project. Trumpeter swans (*Cygnus buccinator*), a state-listed threatened species, have been documented (as recently as 2008) nesting in close proximity to US 71 and the proposed transmission line. Bald eagles (*Haliaeetus leucocephalus*), a state-listed species of special concern, also nest in the area and periodic surveys from 1986 to 1997 have documented red-necked grebes (*Podiceps grisegena*), a Species in Greatest Conservation Need as identified in Minnesota's Comprehensive Wildlife Conservation Strategy (http://www.dnr.state.mn.us/cwcs/index.html), nesting on Potato Lake. These rare birds may be at risk for colliding with or being electrocuted by the overhead transmission line. Given the proximity of past swan nests, construction activities along US 71 may also disrupt nesting swans if construction occurs during the breeding season.

- Blanding's turtles (*Emydoidea blandingii)*, a state-listed threatened species, have been reported from the vicinity of the proposed project and may be encountered on site. If Blanding's turtles are found on the site, please remember that state law and rules prohibit the destruction of threatened or endangered species, except under certain prescribed conditions. If turtles are in imminent danger they should be moved by hand out of harms way, otherwise they should be left undisturbed.

  For your information, I have attached a Blanding's turtle fact sheet that describes the habitat use and life history of this species. The fact sheet also provides two lists of recommendations for avoiding and minimizing impacts to this rare turtle. Please refer to the first list of recommendations for your project. If greater protection for turtles is desired, the second list of additional recommendations can also be implemented. The attached flyer should be given to all contractors working in the area.

- Several mussels, including the creek heelsplitter (*Lasmigona compressa*), a state-listed species of special concern, have been documented in the Potato River in the vicinity of the proposed crossing. As mussels are particularly vulnerable to deterioration in water quality, especially increased siltation, it is important that effective erosion prevention and sediment control practices be implemented and

maintained near this crossing. Please contact me if the project will impact the riverbed, as a mussel survey may be required.

- In addition to the above rare species, the Minnesota County Biological Survey (MCBS) has identified a preliminary Site of Moderate Biodiversity Significance immediately west of US 71 and the proposed line. Sites of Biodiversity Significance have varying levels of native biodiversity and are ranked based on the relative significance of this biodiversity at a statewide level. Sites ranked as Moderate contain occurrences of rare species and/or moderately disturbed native plant communities, and/or landscapes that have a strong potential for recovery. Actions to minimize disturbance in this area may include, but are not limited to, the following recommendations: (1) Place the overhead line on the opposite side of the road; (2) As much as possible, operate within already-disturbed areas; (3) Minimize vehicular disturbance in the area (allow only vehicles necessary for installation); (4) Do not park equipment or stockpile supplies in the area; (5) If possible, do work in autumn or winter, to avoid damaging plants during the growing season; (6) Reduce runoff by completing the work as rapidly as possible and using erosion control measures such as straw bales or silt fencing; (7) Revegetate disturbed soil with native species suitable to the local habitat as soon after construction as possible; (8) Use only invasive-free mulches, topsoils, and seed mixes.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area.

This letter does not constitute review or approval by the Department of Natural Resources as a whole. Instead, it identifies issues regarding known occurrences of rare features and potential effects to these rare features. Additional rare features for which we have no data may be present in the project area, or there may be other natural resource concerns associated with the proposed project. For these concerns, please contact your DNR Regional Environmental Assessment Ecologist, Nathan Kestner at 218-308-2672. Please be aware that additional site assessments or review may be required. Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

Lisa Joyal

Lisa Joyal
Endangered Species Environmental Review Coordinator

enc. Blanding's Turtle Fact Sheet and Flyer

links: DNR Rare Species Guide – http://www.dnr.state.mn.us/rsg/index.html
(information on the biology, habitat use, and conservation measures of Minnesota's rare species)

cc: Jamie Schrenzel
Nathan Kestner
Katie Haws
Kirk English

Environmental Review Fact Sheet Series

Endangered, Threatened, and Special Concern Species of Minnesota

Blanding's Turtle

(*Emydoidea blandingii*)

Minnesota Status:	Threatened	State Rank[1]:	S2
Federal Status:	none	Global Rank[1]:	G4

HABITAT USE

Blanding's turtles need both wetland and upland habitats to complete their life cycle. The types of wetlands used include ponds, marshes, shrub swamps, bogs, and ditches and streams with slow-moving water. In Minnesota, Blanding's turtles are primarily marsh and pond inhabitants. Calm, shallow water bodies (Type 1-3 wetlands) with mud bottoms and abundant aquatic vegetation (e.g., cattails, water lilies) are preferred, and extensive marshes bordering rivers provide excellent habitat. Small temporary wetlands (those that dry up in the late summer or fall) are frequently used in spring and summer -- these fishless pools are amphibian and invertebrate breeding habitat, which provides an important food source for Blanding's turtles. Also, the warmer water of these shallower areas probably aids in the development of eggs within the female turtle. Nesting occurs in open (grassy or brushy) sandy uplands, often some distance from water bodies. Frequently, nesting occurs in traditional nesting grounds on undeveloped land. Blanding's turtles have also been known to nest successfully on residential property (especially in low density housing situations), and to utilize disturbed areas such as farm fields, gardens, under power lines, and road shoulders (especially of dirt roads). Although Blanding's turtles may travel through woodlots during their seasonal movements, shady areas (including forests and lawns with shade trees) are not used for nesting. Wetlands with deeper water are needed in times of drought, and during the winter. Blanding's turtles overwinter in the muddy bottoms of deeper marshes and ponds, or other water bodies where they are protected from freezing.

LIFE HISTORY

Individuals emerge from overwintering and begin basking in late March or early April on warm, sunny days. The increase in body temperature which occurs during basking is necessary for egg development within the female turtle. Nesting in Minnesota typically occurs during June, and females are most active in late afternoon and at dusk. Nesting can occur as much as a mile from wetlands. The nest is dug by the female in an open sandy area and 6-15 eggs are laid. The female turtle returns to the marsh within 24 hours of laying eggs. After a development period of approximately two months, hatchlings leave the nest from mid-August through early-October. Nesting females and hatchlings are often at risk of being killed while crossing roads between wetlands and nesting areas. In addition to movements associated with nesting, all ages and both sexes move between wetlands from April through November. These movements peak in June and July and again in September and October as turtles move to and from overwintering sites. In late autumn (typically November), Blanding′s turtles bury themselves in the substrate (the mud at the bottom) of deeper wetlands to overwinter.

IMPACTS / THREATS / CAUSES OF DECLINE

- loss of wetland habitat through drainage or flooding (converting wetlands into ponds or lakes)
- loss of upland habitat through development or conversion to agriculture
- human disturbance, including collection for the pet trade* and road kills during seasonal movements
- increase in predator populations (skunks, raccoons, etc.) which prey on nests and young

*It is illegal to possess this threatened species.

RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS

These recommendations apply to typical construction projects and general land use within Blanding's turtle habitat, and are provided to help local governments, developers, contractors, and homeowners minimize or avoid detrimental impacts to Blanding's turtle populations. **List 1** describes minimum measures which we recommend to prevent harm to Blanding's turtles during construction or other work within Blanding's turtle habitat. **List 2** contains recommendations which offer even greater protection for Blanding's turtles populations; this list should be used *in addition to the first list* in areas which are known to be of state-wide importance to Blanding's turtles (contact the DNR's Natural Heritage and Nongame Research Program if you wish to determine if your project or home is in one of these areas), or in any other area where greater protection for Blanding's turtles is desired.

List 1. Recommendations for all areas inhabited by Blanding's turtles.	**List 2. *Additional* recommendations for areas known to be of state-wide importance to Blanding's turtles.**
GENERAL	
A flyer with an illustration of a Blanding's turtle should be given to all contractors working in the area. Homeowners should also be informed of the presence of Blanding's turtles in the area.	Turtle crossing signs can be installed adjacent to road-crossing areas used by Blanding's turtles to increase public awareness and reduce road kills.
Turtles which are in imminent danger should be moved, by hand, out of harms way. Turtles which are not in imminent danger should be left undisturbed.	Workers in the area should be aware that Blanding's turtles nest in June, generally after 4pm, and should be advised to minimize disturbance if turtles are seen.
If a Blanding's turtle nests in your yard, do not disturb the nest.	If you would like to provide more protection for a Blanding's turtle nest on your property, see "Protecting Blanding's Turtle Nests" on page 3 of this fact sheet.
Silt fencing should be set up to keep turtles out of construction areas. It is critical that silt fencing be removed after the area has been revegetated.	Construction in potential nesting areas should be limited to the period between September 15 and June 1 (this is the time when activity of adults and hatchlings in upland areas is at a minimum).
WETLANDS	
Small, vegetated temporary wetlands (Types 2 & 3) should not be dredged, deepened, filled, or converted to storm water retention basins (these wetlands provide important habitat during spring and summer).	Shallow portions of wetlands should not be disturbed during prime basking time (mid morning to mid- afternoon in May and June). A wide buffer should be left along the shore to minimize human activity near wetlands (basking Blanding's turtles are more easily disturbed than other turtle species).
Wetlands should be protected from pollution; use of fertilizers and pesticides should be avoided, and run-off from lawns and streets should be controlled. Erosion should be prevented to keep sediment from reaching wetlands and lakes.	Wetlands should be protected from road, lawn, and other chemical run-off by a vegetated buffer strip at least 50' wide. This area should be left unmowed and in a natural condition.
ROADS	
Roads should be kept to minimum standards on widths and lanes (this reduces road kills by slowing traffic and reducing the distance turtles need to cross).	Tunnels should be considered in areas with concentrations of turtle crossings (more than 10 turtles per year per 100 meters of road), and in areas of lower density if the level of road use would make a safe crossing impossible for turtles. Contact your DNR Regional Nongame Specialist for further information on wildlife tunnels.
Roads should be ditched, not curbed or below grade. If curbs must be used, 4 inch high curbs at a 3:1 slope are preferred (Blanding's turtles have great difficulty climbing traditional curbs; curbs and below grade roads trap turtles on the road and can cause road kills).	Roads should be ditched, not curbed or below grade.

ROADS cont.	
Culverts between wetland areas, or between wetland areas and nesting areas, should be 36 inches or greater in diameter, and elliptical or flat-bottomed.	Road placement should avoid separating wetlands from adjacent upland nesting sites, or these roads should be fenced to prevent turtles from attempting to cross them (contact your DNR Nongame Specialist for details).
Wetland crossings should be bridged, or include raised roadways with culverts which are 36 in or greater in diameter and flat-bottomed or elliptical (raised roadways discourage turtles from leaving the wetland to bask on roads).	Road placement should avoid bisecting wetlands, or these roads should be fenced to prevent turtles from attempting to cross them (contact your DNR Nongame Specialist for details). This is especially important for roads with more than 2 lanes.
Culverts under roads crossing streams should be oversized (at least twice as wide as the normal width of open water) and flat-bottomed or elliptical.	Roads crossing streams should be bridged.
UTILITIES	
Utility access and maintenance roads should be kept to a minimum (this reduces road-kill potential).	
Because trenches can trap turtles, trenches should be checked for turtles prior to being backfilled and the sites should be returned to original grade.	
LANDSCAPING AND VEGETATION MANAGEMENT	
Terrain should be left with as much natural contour as possible.	As much natural landscape as possible should be preserved (installation of sod or wood chips, paving, and planting of trees within nesting habitat can make that habitat unusable to nesting Blanding's turtles).
Graded areas should be revegetated with native grasses and forbs (some non-natives form dense patches through which it is difficult for turtles to travel).	Open space should include some areas at higher elevations for nesting. These areas should be retained in native vegetation, and should be connected to wetlands by a wide corridor of native vegetation.
Vegetation management in infrequently mowed areas -- such as in ditches, along utility access roads, and under power lines -- should be done mechanically (chemicals should not be used). Work should occur fall through spring (after October 1st and before June 1st).	Ditches and utility access roads should not be mowed or managed through use of chemicals. If vegetation management is required, it should be done mechanically, as infrequently as possible, and fall through spring (mowing can kill turtles present during mowing, and makes it easier for predators to locate turtles crossing roads).

Protecting Blanding's Turtle Nests: Most predation on turtle nests occurs within 48 hours after the eggs are laid. After this time, the scent is gone from the nest and it is more difficult for predators to locate the nest. Nests more than a week old probably do not need additional protection, unless they are in a particularly vulnerable spot, such as a yard where pets may disturb the nest. Turtle nests can be protected from predators and other disturbance by covering them with a piece of wire fencing (such as chicken wire), secured to the ground with stakes or rocks. The piece of fencing should measure at least 2 ft. x 2 ft., and should be of medium sized mesh (openings should be about 2 in. x 2 in.). It is ***very important*** that the fencing be **removed <u>before August 1st</u>** so the young turtles can escape from the nest when they hatch!

REFERENCES

[1]Association for Biodiversity Information. "Heritage Status: Global, National, and Subnational Conservation Status Ranks." NatureServe. Version 1.3 (9 April 2001). http://www.natureserve.org/ranking.htm (15 April 2001).

Coffin, B., and L. Pfannmuller. 1988. Minnesota's Endangered Flora and Fauna. University of Minnesota Press, Minneapolis, 473 pp.

REFERENCES (cont.)

Moriarty, J. J., and M. Linck. 1994. Suggested guidelines for projects occurring in Blanding's turtle habitat. Unpublished report to the Minnesota DNR. 8 pp.

Oldfield, B., and J. J. Moriarty. 1994. Amphibians and Reptiles Native to Minnesota. University of Minnesota Press, Minneapolis, 237 pp.

Sajwaj, T. D., and J. W. Lang. 2000. Thermal ecology of Blanding′s turtle in central Minnesota. Chelonian Conservation and Biology 3(4):626-636.

CAUTION

BLANDING'S TURTLES

MAY BE ENCOUNTERED IN THIS AREA

The unique and rare Blanding's turtle has been found in this area. Blanding's turtles are state-listed as Threatened and are protected under Minnesota Statute 84.095, Protection of Threatened and Endangered Species. Please be careful of turtles on roads and in construction sites. For additional information on turtles, or to report a Blanding's turtle sighting, contact the DNR Nongame Specialist nearest you: Bemidji (218-308-2641); Grand Rapids (218-327-4518); New Ulm (507-359-6033); Rochester (507-280-5070); or St. Paul (651-259-5764).

DESCRIPTION: The Blanding's turtle is a medium to large turtle (5 to 10 inches) with a black or dark blue, dome-shaped shell with muted yellow spots and bars. The bottom of the shell is hinged across the front third, enabling the turtle to pull the front edge of the lower shell firmly against the top shell to provide additional protection when threatened. The head, legs, and tail are dark brown or blue-gray with small dots of light brown or yellow. A distinctive field mark is the bright yellow chin and neck.

BLANDING'S TURTLES DO NOT MAKE GOOD PETS
IT IS ILLEGAL TO KEEP THIS THREATENED SPECIES IN CAPTIVITY

SUMMARY OF RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS TO BLANDING'S TURTLE POPULATIONS

(see Blanding's Turtle Fact Sheet for full recommendations)

- This flyer should be given to all contractors working in the area. Homeowners should also be informed of the presence of Blanding's turtles in the area.
- Turtles that are in imminent danger should be moved, by hand, out of harms way. Turtles that are not in imminent danger should be left undisturbed to continue their travel among wetlands and/or nest sites.
- If a Blanding's turtle nests in your yard, do not disturb the nest and do not allow pets near the nest.
- Silt fencing should be set up to keep turtles out of construction areas. It is critical that silt fencing be removed after the area has been revegetated.
- Small, vegetated temporary wetlands should not be dredged, deepened, or filled.
- All wetlands should be protected from pollution; use of fertilizers and pesticides should be avoided, and run-off from lawns and streets should be controlled. Erosion should be prevented to keep sediment from reaching wetlands and lakes.
- Roads should be kept to minimum standards on widths and lanes.
- Roads should be ditched, not curbed or below grade. If curbs must be used, 4" high curbs at a 3:1 slope are preferred.
- Culverts under roads crossing wetland areas, between wetland areas, or between wetland and nesting areas should be at least 36 in. diameter and flat-bottomed or elliptical.
- Culverts under roads crossing streams should be oversized (at least twice as wide as the normal width of open water) and flat-bottomed or elliptical.
- Utility access and maintenance roads should be kept to a minimum.
- Because trenches can trap turtles, trenches should be checked for turtles prior to being backfilled and the sites should be returned to original grade.
- Terrain should be left with as much natural contour as possible.
- Graded areas should be revegetated with native grasses and forbs.
- Vegetation management in infrequently mowed areas -- such as in ditches, along utility access roads, and under power lines -- should be done mechanically (chemicals should not be used). Work should occur fall through spring (after October 1st and before June 1st).

Minnesota Pollution Control Agency
520 Lafayette Road North | St. Paul, MN 55155-4194 | 651-296-6300 | 800-657-3864 | 651-282-5332 TTY | www.pca.state.mn.us

May 27, 2010

RECEIVED
MAY 28 2010
MAILROOM

Mr. Scott Ek
Minnesota Department of Commerce
Office of Energy Security
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

RE: Potato Lake 115 kilovolt (kV) Transmission Line and Substation in Park Rapids, Minnesota
Application for a Route Permit, in Preparation for Draft Environmental Impact Statement
PUC Docket No. ET2/TL-10-86

Dear Mr. Ek:

Thank you for the opportunity to review and comment on the route permit application by Great River Energy for the Potato Lake 115 kilovolt (kV) Transmission Line Project. Regarding matters for which the Minnesota Pollution Control Agency (MPCA) has regulatory responsibility and other interests, the MPCA has the following comments to provide at this time.

- As stated in the Route Permit Application, a National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater Permit is required from the MPCA prior to construction. Information regarding the MPCA's Construction Stormwater Program can be found on the MPCA's Web site at: http://www.pca.state.mn.us/water/stormwater/stormwater-c.html.

- Waters are listed on the "Hydrologic Features in the Potato Lake Area" in Figure 6-3. These maps outline Impaired Waters, Wetlands and Floodplains. A valuable Web site to reference the current listing of impaired waters is at http://www.pca.state.mn.us/water/tmdl/tmdl-303dlist.html. The stream designation and/or impairment will dictate additional increased stormwater treatment both during construction and require additional increased permanent treatment post-construction. These requirements will be included in the NPDES/SDS Construction Stormwater Permit. In addition, any project that will result in over 50 acres of disturbed area and has a discharge point within one mile of an impaired water, is required to submit their Stormwater Pollution Prevention Plan to the MPCA for a review at least 30 days prior to the commencement of land disturbing activities. The MPCA encourages the project proposer to meet with staff at preliminary points to avoid any unnecessary delays. Questions regarding construction stormwater permit requirements should be directed to Larry Zdon at 651-757-2839.

- As stated in Section 6.5 and 10 of the Route Permit Application, it has been determined that a Section 404 Permit is required by the United States Army Corp of Engineers. Depending on the project's proximity to impaired waters, a Clean Water Act Section 401 Water Quality Certification or waiver from the MPCA to verify compliance with state water quality standards may also be required. For further information about the 401 Water Quality Certification process, please contact Kevin Molloy at 651-757-2577 or Bill Wilde at 651-757-2825.

Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this project, please contact Elise Doucette of my staff by e-mail at elise.doucette@state.mn.us or by telephone at 651-757-2316.

Sincerely,

Craig Affeldt
Supervisor
Environmental Review and Feedlot Section
Regional Division

CA/EMD:bt

cc: Kevin Molloy – MPCA, St. Paul
Bill Wilde – MPCA, St. Paul

Minnesota Department of Transportation
395 John Ireland Boulevard
Saint Paul, MN 55155
Office of Technical Support
Mailstop 678

Phone: (651) 366-4635
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stacy.kotch@state.mn.us

June 1, 2010

Scott Ek, Project Manager
Office of Energy Security
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

Re: In the Matter of Great River Energy's Potato Lake 115kV Transmission Project
MPUC Docket No. E280/TL-10-86

Dear Mr. Ek:

On April 19, 2010, the Minnesota Office of Energy Security (OES) issued a Notice of a Public Information Meeting and request for public comments to be considered in the scope of the environmental assessment relating to the route permit application by Great River Energy (GRE) for a new high voltage transmission line (HVTL) known as the Potato Lake Transmission 115kV Transmission Project. The Minnesota Department of Transportation (Mn/DOT) has reviewed the route permit application for the proposed transmission line project and submits the following comments in response to the Notice.

Based on our review of the application, it appears that the proposed route runs parallel to US 71 for about 1.5 miles and may occupy a portion of the highway right of way. The HVTL will also cross over US 71. Mn/DOT has adopted a formal policy and procedures for accommodation of utilities on the highway rights-of-way ("Utility Accommodation Policy"). A copy of Mn/DOT's policy can be found at http://www.dot.state.mn.us/utility/files/pdf/appendix-b.pdf. GRE will need to obtain permits from Mn/DOT pursuant to the utility Accommodation Policy for any location where the HVTL will occupy a portion of the highway right-of-way.

Highway crossings by utilities generally do not pose insurmountable difficulties in issuing a permit, and Mn/DOT routinely grants such permits to a variety of types of utilities. These permits usually have conditions associated with them, such as placement of the poles so that they do not become a physical obstruction that might be struck by an errant vehicles or block the visibility of traffic. Mn/DOT also does not permit utilities to run diagonally across intersections and prefers that crossings occur as close to right angles as possible. Mn/DOT has a long history of working with utilities such as Great River Energy to establish appropriate conditions in locations where the utility seeks to cross a trunk highway.

The proposed substation and the 1.5 miles of the route that are proposed to run parallel to US 71 are located along the route of the Lake Country Scenic Byway, a Minnesota Scenic Byway. This byway links the cities of Detroit Lakes, Park Rapids and Walker along State Highway 34 and includes a spur route from Park Rapids to Itasca State Park on US 71.

Scenic byways are designated because they possess one or more of six intrinsic qualities, including: scenic, cultural, recreational, natural, historic and archaeological qualities. An analysis of the physical and visual impact on each of these six intrinsic qualities should be conducted to determine the route with the least adverse impact on the byway route and corridor. The proposal should address mitigation measures for any unavoidable impacts on intrinsic qualities within the scenic byway corridor.

A similar transmission line was recently installed along 1.6 miles of State Highway 34 east of Park Rapids, also on the Lake Country Scenic Byway. That installation has several negative features such as intrusive pole heights that extend far above the existing tree line and extensive deforestation without mitigating vegetation. The environmental assessment should address the cumulative impact that the proposed Potato Lake project on the overall experience of the byway. The environmental assessment should also address appropriate methods to mitigate the adverse impacts, such as limiting pole height so as to not exceed adjacent tree height and limiting the amount of vegetation removed in the vicinity of the byway.

Each scenic byway has a leaders group and/or stakeholder group. The Lake Country Scenic Byway Association should be contacted as part of the review process.

While the proposed transmission line is not in the current corridor of the Heartland Trail, an off-road bicycle trail, the Heartland Trail Association is working to establish an off-road spur route from Park Rapids to Itasca State Park as an alternative to the on-road bike lanes along US Highway 71. The proposal should address the potential route and how the transmission line corridor might hinder or enhance that initiative.

Any HVTL construction work, including delivery or storage of structures, materials or equipment that may affect Mn/DOT right of way is of concern such that Mn/DOT should be involved in planning and coordinating such activities. If work is required within Mn/DOT right of way for temporary or permanent access, please coordinate with Stephen Frisco, District 2A Permits, at 218-755-6553 or Stephen.Frisco@state.mn.us.

Mn/DOT has a continuing interest in working with the OES to ensure that possible impacts to highways, airports, waterways, rail lines and the environmentally significant areas of highway right of way are adequately addressed. We appreciate the opportunity to provide these comments.

Stacy Kotch

Utility Transmission Route Coordinator

Minnesota Department of Transportation

An Equal Opportunity Employer

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Twin Cities Field Office
4101 American Blvd E.
Bloomington, Minnesota 55425-1665

June 1, 2010

Office of Energy Security
Energy Facility Permitting
85 7th Place East, Suite 500
St. Paul, Minnesota 55101-2198

Dear Mr. Ek,

Thank you for involving the Fish and Wildlife Service (the Service) in the planning phases of Great River Energy's (GRE) Potato Lake 115 kv substation and transmission line in Hubbard county. This letter is in response to your inquiry regarding potential effects of this project on bald eagles (*Haliaeetus leucocephalus*) and other migratory birds during the construction of the line and its subsequent long-term use. Although the bald eagle was delisted pursuant to the Endangered Species Act on August 8, 2007, it remains protected from harassment and disturbance under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act (Eagle Act). The Eagle Act (1940) defines "disturb" as, "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior." The Service has generated The National Bald Eagle Management Guidelines (http://www.fws.gov/midwest/eagle/guidelines/guidelines.html), which are intended to help landowners and project proponents minimize disturbance to bald eagles, thereby benefiting bald eagles and protecting landowners. The Service strongly encourages adherence to these guidelines.

As GRE begins its Environmental Assessment (EA) of this project, we ask that special attention be paid to Important Eagle Use Areas. This is defined under 50 CFR §22.3 as

> "an eagle nest, foraging area, or communal roost site that eagles rely on for breeding, sheltering, or feeding, and the landscape features surrounding such a nest, foraging area, or roost site that are essential for the continued viability of the site for breeding, feeding, or sheltering eagles."

Disturbance or landscape alteration around Important Eagle Use Areas (including indirect effects) could result in take or disturbance of eagles. The EA needs to examine effects on eagles of the construction phase, as well as the long-term impact of the transmission line.
The Service recommends siting potentially lethal infrastructure (such as transmission lines) away from nests, foraging areas, and communal roost sites. A typical bald eagle home range is two miles. We recommend the following actions be undertaken for the EA:

- Complete an eagle nest survey within two miles of any potential line placement or upgrade. Historic nest sites should be visited to determine if the nest is still present. Because data in the Minnesota Department of Natural Resources (MN DNR) database might not be current for Hubbard County, surveys should be done for any new nests. Nest surveys are most easily done when foliage is absent (fall, winter, or early spring). Nests of other migratory birds should also be noted, such as other raptors and colonial nesting birds (herons, egrets, cormorants, etc).

Known bald eagle nests
(information current as of 2007)
North side of Island Lake (1 nest)
North side of Potato Lake (3 nests)
Vicinity of Fishhook Lake (3 nests)
South side of Big Sand Lake (1 nest)
South side of Lower Bottle Lake (1 nest)

- Nests are only one component of Important Eagle Use Areas. We recommend surveys be completed for foraging, roosting, or wintering areas within two miles of all potential line placements. Because use of these locations can change throughout the year, we recommend a fall (pre-water freeze) and a winter (post-freeze) survey to determine use and location. Activity of other migratory birds should also be noted at this time, including waterfowl and water bird concentration areas (especially during spring and fall migration).

- GRE can request the help of the Service, MN DNR, local birding groups, and private citizens to supply information on likely nests and other Important Eagle Use Areas. These can be compiled into likely locations to streamline surveys.

- We recommend GRE examine the feasibility of constructing transmission lines at the same height as surrounding vegetation to reduce avian collisions.

- Transmission poles should be designed to discourage raptor nesting.

- In areas where eagles and migratory birds are present, line markers and diverters should be used. We recommend GRE examine the type and efficacy of different markers and diverters, as well as documented responses of surveyed bird species to these markers.

- The Advisory Task Force (ATF) has proposed an alternate northern route located west of Emmaville that runs a straight line directly from County Highway 4 to Highway 71. When looking at alternate line locations, we recommend GRE compare the environmental costs of placing a line though a roadless area versus an existing right-of-way.

- The ATF has expressed concern regarding preservative-treated transmission poles and possible effects on wetland and limnic ecosystems. We recommend this concern be researched and possible alternatives explored.

- Construction timetables should be designed to do much of the work outside the eagle and migratory bird nesting season. One consideration to this recommendation is if a winter use area is found near the preferred route.

Once potential routes have been chosen and bird use of these areas is verified, the Service will work with GRE to determine if an eagle disturbance permit (for construction or long-term line use) is necessary. The Service will also be able to advise GRE on any appropriate minimization or mitigation measures at that time.

Again, thank you for including the US Fish and Wildlife Service in the planning phase of Great River Energy's project. If you have any questions regarding our recommendations, please contact Margaret Rheude at (612)-725-3548, extension 2-202.

Sincerely,

Tony Sullins
Field Supervisor

cc: (email) Katie Haws, MN DNR
Elizabeth Shaw, Potato Lake Advisory Task Force