



Energy Facility Permitting

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June 10, 2011

TO: William Grant, Deputy Commissioner
Division of Energy Resources

THROUGH: Deborah Pile, Manager

FROM: William Cole Storm, Staff
EFP (Tel: 651-296-9535)

RE: Scoping Decision
Great River Energy/Minnesota Power Savanna HVTL Project
PUC Docket Number: ET2, E015/CN-10-973
PUC Docket Number: ET2, E015/TL-10-1307

ACTION REQUIRED: Signature of the Deputy Commissioner on the attached Order, "Environmental Assessment Scoping Decision." Once signed, the Department of Commerce (DOC) Energy Facility Permitting (EFP) staff will mail the notice of the order to interested parties.

BACKGROUND: On February 10, 2011, Great River Energy and Minnesota Power (Applicants) submitted a Certificate of Need (CON) application and a high voltage transmission line (HVTL) Route Permit application to the Minnesota Public Utilities Commission (Commission) for the proposed Savanna Transmission Line Rebuild project. The docket number for the CON proceedings is ET2, E015/CN-10-973; the docket number for the HVTL route permit is ET2, E015/TL-10-1307.

Two separate approvals from the Commission are required for the construction/operation of the Savanna 115 kV transmission line project (Project) – a certificate of need and a route permit. The HVTL route permit application was accepted as complete by the Commission on April 4, 2011. The CON application was accepted as complete by the Commission on April 13, 2011.

Minnesota Statute 216B.243, subdivision 2, states that no Large Energy Facility shall be sited or constructed in Minnesota without issuance of a *Certificate of Need* by the Commission. The 115 kV rebuild of the existing 69 kV system proposed for the Savanna Transmission Project is a "large energy facility" because it has a capacity in excess of 100 kV and is more than 10 miles long.

Minnesota Statutes Section 216E.03, subd. 2, provides that no person may construct a high voltage transmission line (HVTL) without a *HVTL Route Permit* granted from the Commission. An HVTL is defined as a transmission line of 100 kV or more and greater than 1,500 feet in length (Minnesota Statutes Section 216E.01, subd. 4). The proposed transmission line rebuild meets the definition of a HVTL and therefore a route permit is required prior to construction.

EFP staff is responsible for conducting the environmental review for CON applications submitted to the Commission (Minn. Rules 7849.1200). The environmental report (ER) is completed prior to the public hearing. An ER examines the potential human and environmental impacts of a proposed project, relative to size, type, timing and system configuration, and alternatives to the project, as well as potential mitigative measures.

EFP staff is also responsible for conducting the environmental review for route permit applications to the Commission (Minn. Rules 7850.3700). Environmental review for a project of this size requires the preparation of an environmental assessment (EA). An EA examines the potential human and environmental impacts of a proposed project, alternative routes for the project, and potential mitigative measures.

As two concurrent environmental reviews are required – one for the CON application and one for the route permit application – OES EFP staff has elected to combine the environmental review for the two applications (Minn. Rules 7849.1900). Thus, an environmental assessment (EA) will be prepared to meet the requirements of both review processes.

After completion of the EA, a public hearing will be held. The hearing will be presided over by an administrative law judge (ALJ) from the Office of Administrative Hearings. Members of the public will have an opportunity to speak at the hearing, present evidence, ask questions, and submit comments. Notice of the public hearing will be published in local newspapers and mailed to persons who register their names on the project mailing list.

Upon completion of the environmental review and hearing process, the records compiled for each proceeding (CON, route permit) will be presented to the Commission for final decisions.

PROJECT DESCRIPTION. The Applicants propose that the new lines follow the same alignment (route request is 300 feet wide, 150 feet either side of the existing transmission line centerline) that the existing Great River Energy 69 kV lines presently follow. The proposed plan includes:

- Construct the new Savanna 115 kV Switching Station in Section 32 of Van Buren Township.
- Rebuild approximately seven miles of existing Great River Energy 69 kV transmission line to single circuit 115 kV between Lake Country Power's existing Cedar Valley Substation in Cedar Valley Township and the new Savanna Switching Station. This

section of the proposed route is where GRE has stated that an “off-set” from the existing 69 kV ROW would be needed due to concerns surrounding the de-energizing of the existing line.

- Rebuild approximately nine miles of existing Great River Energy 69 kV transmission line to single circuit 115 kV between the new Savanna Switching Station and Lake Country Power’s existing Gowan Substation in Floodwood Township.
- Rebuild approximately 21 miles of existing Great River Energy 69 kV transmission line to double circuit 115/69 kV between the Lake Country Power Gowan Substation and Great River Energy’s existing Cromwell Substation in Kalevala Township.
- Modify the Lake Country Power Cedar Valley Substation and Great River Energy Cromwell Substation to accommodate the 115 kV transmission lines.

The transmission lines lie entirely in Minnesota in St. Louis and Carlton counties. Single-pole wood structures with horizontal post insulators will be used for most of the rebuild. Laminated wood poles or steel poles may be required in some locations (angle poles or areas where soil conditions are poor and guying is not practical), and two pole H-Frame structures may be used in some areas. Typical pole heights will range from 60-85 feet above ground and the average span would be 350 to 400 feet for single pole structures and 600 to 800 feet for H-Frame structures.

Small sections of the existing line near the two St. Louis River crossings have distribution under-build, which would be attached to the new 115 kV transmission line structures. The average span for these structures would be approximately 250 to 350 feet.

The Applicants propose that the majority of the new lines would follow the alignment of the existing 69 kV lines, but note that a 15-foot offset from the existing pole locations may be required in some areas. The necessary easement width is 50 feet on each side of the transmission centerline; however, in areas where the line follows an existing distribution line or roadway, the easement may overlap with existing easements and/or the road right-of-way. Great River Energy has existing easements for the majority of the 69 kV line and anticipates that only minimal additional property will be required when the line is upgraded to 115 kV. Great River Energy intends to enter into new easements or amendments of the existing easements with landowners to update the language to reflect typical provisions included in today’s easements.

The Project will cost approximately \$29 million dollars.

SCOPING PROCESS

On April 21, 2011, the EFP sent notice of the place, date and times of the Initial Public Information and Scoping meeting to those persons on the General List maintained by the PUC,

the agency technical representatives list and the project contact list. Additionally, on February 4, 2011, the Applicants mailed the notice to those persons on their property owners list and local unit of government list.

Notice of the public meeting was also published in the local newspapers.

On Wednesday, May 18, 2011, the Energy Facility Permitting staff (EFP) held two public information/scoping meetings at the Fine Lakes Township Hall in Wright, Minnesota. The meetings included two sessions, one starting at 2:00 pm and another starting at 6:00 pm. The purpose of the meeting was to provide information to the public about the proposed project, to answer questions, and to allow the public an opportunity to suggest alternatives and impacts that should be considered during preparation of the environmental review document. Written comments were due no later than Wednesday, June 1, 2011.

Approximately 12 people attended the public information and scoping meetings; five individuals took the opportunity to speak on the record. A court reporter was present to document oral statements. Nine written comments were received.

A variety of questions were asked and answered during the oral discussion; topics included: specifics on which lines and poles will be removed, and design/construction of any new poles; specifics on the proposed alignment and easement requirements; construction methods that allow for "hot" work to avoid the off-set of the right-of-way (ROW); the concepts of route width and ROW width; sources of power generation for this project; and timeline and milestones of the application review process.

The major areas of concern for scoping expressed during the public comment period included: health and safety issues, property values, compensation for easements, avian impacts, impacts of herbicides in wetlands/public waters, and flexibility in siting the final alignment.

These items and issues, along with the typical HVTL routing impacts, have been incorporated into the proposed Order on the Environmental Assessment Scoping Decision.

Alternative routes, alternative route segments and modifications to the Applicants' proposed alignment were discussed during the scoping meeting and in comments received during the scoping comment period.

Goodell alternative route segment

A resident located along the south side of Hingeley Road (County State Aid Highway 86 - CSAH) in Section 15, Township 50 north, Range 20 west, requested that an *alternative route segment* be considered in a portion of the proposed Savanna HVTL route (Applicant's Key Map Book, Map 22 and 23). The alternative route segment lies within the portion of the proposed route that includes a rebuild of approximately nine miles of existing GRE 69 kV line to double-circuit 115/69 kV line, south of Lake Country Power's Gowan Substation.

The Goodell Alternative Route Segment would modify an approximately one mile segment of the proposed route along CSAH 86 (Hingeley Road) where the road runs west from the intersection of Norlund Road (Township Road 5004) in Fine Lakes Township. The current proposal consists of utilizing the existing 69 kV ROW that runs along the south side of CSAH 86; the Goodell Alternative Route Segment would relocate this ROW so that it follows the north side of CSAH 86.

This alternative would impact five new parcels; four corporate owned (Potlatch Corporation) and one private undeveloped parcel (Hokala). The relocation of the ROW would move the line off of four private parcels, two of which are developed.

The Applicants' proposal is to rebuild the existing 69 kV line to a 115 kV transmission line.

The stated purpose of this alternative route segment is to reduce the impact to resident, developed parcels along this segment of the proposed HVTL rebuild.

An additional option included in the request is consideration of moving the Lake Country Power distribution line (which is also located along the south side of CSAH 86) to the north side of CSAH 86 as a possible distribution under build with the proposed 115 kV transmission line.

The EFP staff recommends that this alternative route segment, along with the distribution under build, be carried forward into the scope of the EA.

Lund alternative route segment

Several members of the Lund family, who own four forty-acre parcels along the west side of Stremel Road (County Road 192-CR) requested that an *alternative route segment* be considered in a portion of the proposed Savanna HVTL route (Applicant's Key Map Book, Map 38 and 39).

The Lund Alternative Route Segment lies within the portion of the proposed rebuild route that GRE has stated will need an "off-set" of the centerline due to the need to keep the existing 69 kV line energized; the consequence of this off-set is the creation of an addition HVTL ROW to the west of the existing ROW.

The Lund Alternative Route Segment would modify an approximately two mile segment of the proposed route along Stremel Road (CR 192), between the proposed Savanna Switching Station north to Parantala Road (County Road 732) in Van Buren Township. The current 69 kV line runs along the west side of Stremel Road (CR 192) from the proposed switching station to Parantala Road (County Road 732); the Lund Alternative Route Segment would relocate this ROW so that it follows the east side of Stremel Road.

An additional option included in the request is consideration of so called "hot work" methods of construction (i.e., hot stick, leaning the existing poles, etc.) that would allow the new 115 kV to remain in the existing ROW.

The Lund family has established a memorial site in a stand of tamaracks to honor a deceased sibling. The memorial and tamarack stand are to the west of the existing 69 kV ROW; this area lies within, or very near to, the proposed new 115 kV ROW. The stated purpose of this alternative route segment or alternative construction methodology is to eliminate the impact to the tamarack stand and memorial therein.

The EFP staff recommends that this alternative route segment, along with the "hot work" construction methods, be carried forward and evaluated in EA.

Cedar Valley Substation to Savanna Switching Station Alternative Route Segment

GRE has stated that the section of the proposed route between the existing Cedar Valley Substation and the proposed Savanna Switching Station will be "off-set" from the existing 69 kV line ROW due to the need to keep the 69 kV line energized during construction of the new 115 kV HVTL, in essence creating a new ROW for this section of the proposed project.

The creation of new ROW or expansion of existing ROW, as proposed, makes the evaluation of similar alternatives practicable. This route alternative segment would follow the MP 115 kV 9 line east-northeast out of the proposed Savanna Switching Station for approximately one mile to the point where the MP 9 line crosses the MP 230 kV 98 line. At this point, the route alternative segment would turn northwest and follow the MP 98 line for approximately six miles to a point just (1/4 mile) east of the Cedar Valley Substation. The route then makes a short (1/4 mile) cross-country run to the west to tie into the Cedar Valley Substation.

A route width of 700 feet centered on the MP 9 and MP 98 line will provide adequate room to evaluate placing the new ROW on either side of the existing ROWs.

The purpose of this alternative route segment is to allow the existing 69 kV to remain energized during construction of the new 115 kV HVTL, maintain the concept of paralleling/overlapping of existing ROWs, and utilizes, to a greater degree, public lands over privately owned lands.

There was no Advisory Task Force established for this routing docket.

Per Minn. Rule 7850.3700, subpart 2, item B, (The commissioner shall provide the applicant with an opportunity to respond to each request that an alternative be included in the environmental assessment) GRE/MP were provided an opportunity to comment on the alternatives to be evaluated..

Relevant documents and other information on this docket can be viewed at the PUC Energy Facilities website: <http://energyfacilities.puc.state.mn.us/Docket.html?Id=31883>

STATE OF MINNESOTA
DEPARTMENT OF COMMERCE

**In the Matter of GRE/MP's Application for a
CON and a HVTL Route Permit for the
proposed Savanna HVTL Rebuild Project.**

**EA SCOPING DECISION
PUC Docket No. ET2, E015/CN-10-973
PUC Docket No. ET2, E015/TL-10-1307**

The above-entitled matter came before the Deputy Commission, Department of Commerce (Department) for a decision on the scope of the Environmental Assessment (EA) to be prepared on the proposed Savanna HVTL Rebuild Project.

Having reviewed the matter, consulted with Energy Facility Permitting staff, and in accordance with Minnesota Rule 7850.3700, I hereby make the following Scoping Decision.

I. SUMMARY

On February 10, 2011, Great River Energy and Minnesota Power (Applicants) submitted a Certificate of Need (CON) application and a high voltage transmission line (HVTL) Route Permit application to the Minnesota Public Utilities Commission (Commission) for the proposed Savanna Transmission Line Rebuild project. The docket number for the CON proceedings is ET2, E015/CN-10-973; the docket number for the HVTL route permit is ET2, E015/TL-10-1307. The HVTL route permit application was accepted as complete by the Commission on April 4, 2011. The CON application was accepted as complete by the Commission on April 13, 2011.

The project is located in St. Louis and Carlton counties, near the cities of Cromwell and Floodwood. A Route Permit is being requested to construct approximately 37 miles new 115 kilovolt (kV) transmission line. The proposed plan includes:

- Construct the new Savanna 115 kV Switching Station in Section 32 of Van Buren Township.
- Rebuild approximately seven miles of existing Great River Energy 69 kV transmission line to single circuit 115 kV between Lake Country Power's existing Cedar Valley Substation in Cedar Valley Township and the new Savanna Switching Station.
- Rebuild approximately nine miles of existing Great River Energy 69 kV transmission line to single circuit 115 kV between the new Savanna Switching Station and Lake Country Power's existing Gowan Substation in Floodwood Township.
- Rebuild approximately 21 miles of existing Great River Energy 69 kV transmission line to double circuit 115/69 kV between the Lake Country Power Gowan Substation and Great River Energy's existing Cromwell Substation in Kalevala Township.
- Modify the Lake Country Power Cedar Valley Substation and Great River Energy Cromwell Substation to accommodate the 115 kV transmission lines.

II. MATTERS TO BE ADDRESSED IN THE EA

EFP staff is responsible for conducting the environmental review for CON applications submitted to the Commission (Minn. Rules 7849.1200) and the environmental review for route permit applications to the Commission (Minn. Rules 7850.3700).

As two concurrent environmental reviews are required – one for the CON application and one for the route permit application – the Department has elected to combine the environmental review for the two applications (Minn. Rules 7849.1900). Thus, an environmental assessment (EA) will be prepared to meet the requirements of both review processes.

The EA on the proposed Savanna HVTL Rebuild project will address and provide information on the following matters:

ABSTRACT

LIST OF PREPARERS

SUMMARY

1.0 PROJECT DESCRIPTION

Purpose of the Transmission Line

Project Location

Route Description

Substation Description

Savanna Switching Station

Cedar Valley Substation

Cromwell Substation

Route Width

Rights-of-Way Requirements

Project Cost

Sources of Information

2.0 REGULATORY FRAMEWORK

CON Process and Procedures

HVTL Route Permit Process

Environmental Review Process

3.0 ENGINEERING AND OPERATION DESIGN

Transmission Line Conductors

Transmission Line Structures

Substations

4.0 CONSTRUCTION

Transmission Line and Structures

Substations

Property/Right-of-Way Acquisition

Cleanup and Restoration

Damage Compensation

Maintenance

Herbicide Application and Wetlands/Public Waters

5.0 AFFECTED ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATIVE MEASURES

The EA will include a discussion of the following human and environmental resources potentially impacted by the project and its alternatives. Potential impacts, both positive and negative, of the proposed project and each alternative considered will be described. Based on the impacts identified, the EA will describe mitigative measures that could reasonably be implemented to reduce or eliminate the identified impacts. The EA will describe any unavoidable impacts resulting from implementation of the proposed project.

Environmental Setting

Socioeconomic Setting

Human Settlement

Displacement

Noise

HVTL & Substation

Construction Activities

Aesthetics

Visual and View-shed

Lighting Requirements

Proximity to Structures

Residences

Businesses

Schools/Daycares

Hospitals

Cemeteries

Displacement

Existing Utilities

Public Health and Safety

Electric and Magnetic Fields

Implantable Medical Devices

Stray Voltage

Tower Collapse

Security of Facilities, placarding, emergency provisions

Recreation

Parks (city, county, state, and federal)

Trails (walking, bike)

Transportation and Public Services

Emergency Services

Airports

Highways, Roads and Bike Paths

Traffic (during construction)

Interference

Radio and Television (digital and satellite)

Internet (Wi-Fi)

Cellular Phone

Current and Future Infrastructure

Emergency vehicle pre-emption devices

Archaeological and Historic Resources

Zoning and Compatibility/Federal, State and Local Government Planning

Land-Based Economies

Agriculture

Forestry

Property Values

Residential

Industrial

Agriculture

Air Quality (As it pertains specifically to this transmission line only.)

~~Henshaw Effect~~

Construction (heavy equipment, dust)

Natural Resources

Surface Water

Lakes

Surface/stormwater Flows

Groundwater

Dewatering Requirements

Wetlands

Floodplains

State Wildlife Management Areas/Scientific Natural Areas

National Wildlife Refuge/Waterfowl Production Areas

Flora

Fauna

Avian Impacts (diverter methods)

Rare and Unique Natural Resources/Critical Habitat

Environmental Justice

6.0 ALTERNATIVES TO THE PROPOSED HVTL

No-build Alternative

Demand Side Management

Purchase Power

Long term Purchase Power

Short term Purchase Power

Alternative Facilities (Size/Type)

Up-grading Existing Facilities

New Generation

7.0 ALTERNATIVE ROUTES, ROUTES SEGMENTS and SUBSTATION LOCATIONS

The EA will identify and evaluate the following alternative routes and route segments to the proposed project identified through the scoping process:

Goodell Alternative Route Segment (north side of CSAH 86 west of Norlund Road) with possible distribution under build.

Lund Alternative Route Segment (east side of CR 192 between the Savanna Switching Station and Parantala Road).

Cedar Valley Substation to Savanna Switching Station Alternative Route Segment (paralleling MP 9 line and MP 98 line).

8.0 REJECTED ALTERNATIVE ROUTES

The EA will include a discussion of route alternatives that were evaluated by the applicants and through the scoping process and rejected.

9.0 ALIGNMENT ALTERNATIVES

Alignment alternatives are alternatives or options for placement of the ROW that fall within the applicants' requested route widths and generally entail site specific concerns such as building on one side of the road or the other, avoiding tree groves, and avoiding recreational areas or environmentally sensitive areas. ~~The following specific alignment alternative will be evaluated:~~

Lund Alignment (existing 69 kV ROW on the west side of CR 192 between the Savanna Switching Station and Parantala Road). This alternative will include an evaluation of the applicable "hot work" construction options to mitigate the need for the "off-set" from the existing 69 kV ROW.

9.0 REQUIRED PERMITS AND APPROVALS

The EA will include a list of permits that will be required for the project.

III ISSUES OUTSIDE THE SCOPE OF THE EA

The following issues will not be considered or evaluated in the EA:

- Any route or substation alternatives not specifically identified in this scoping decision.
- The impacts of specific energy sources, such as carbon outputs from coal-generated facilities.
- The manner in which landowners are paid for transmission rights-of-way easements.

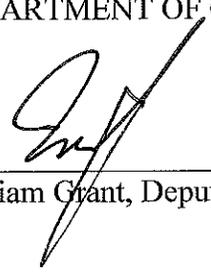
IV SCHEDULE

Following is the anticipated schedule: August, 2011 – EA Available

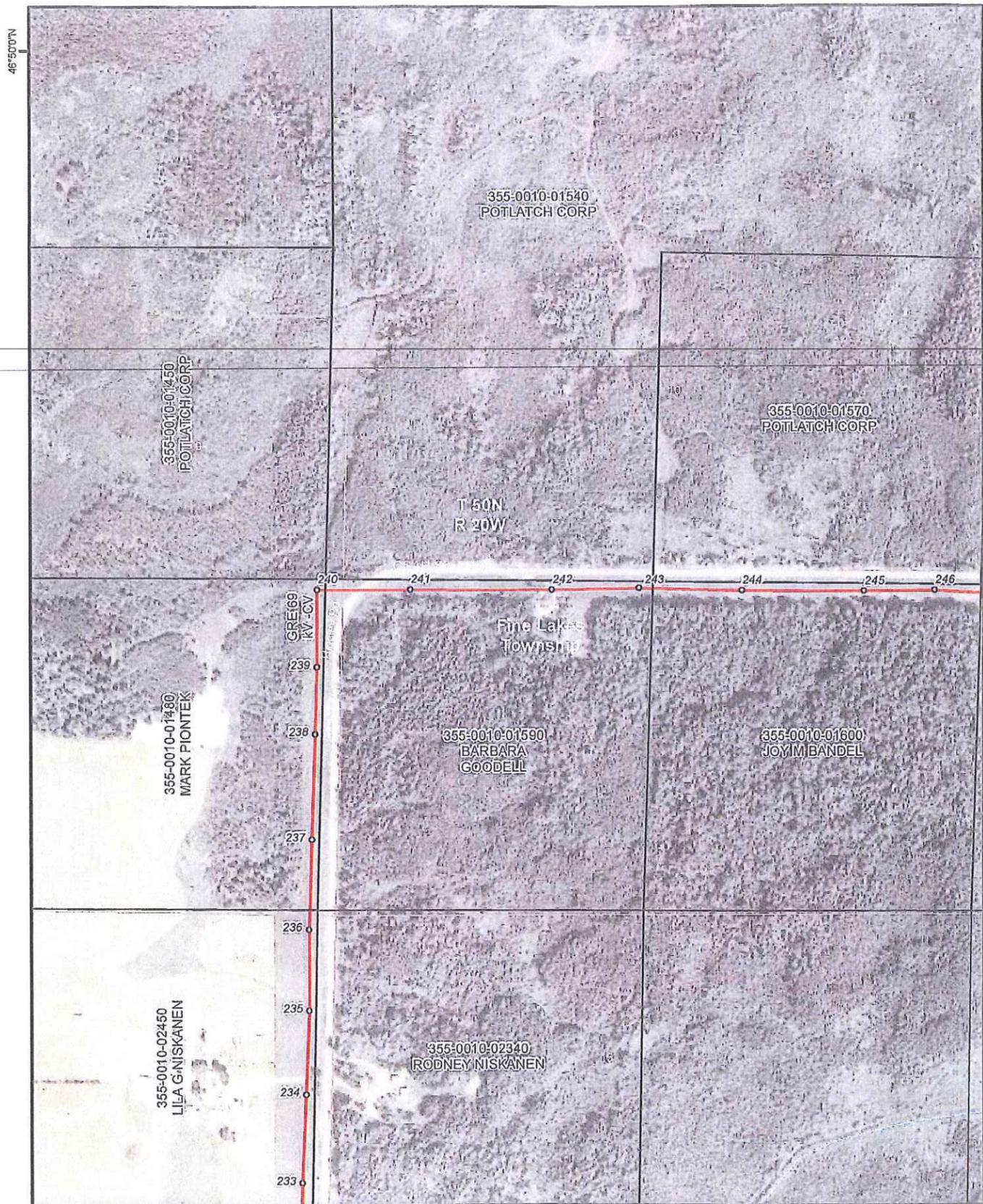
The above outline is not intended to serve as a "Table of Contents" for the EA document, and as such, the organization (i.e., structure of the document) of the information and the data may not be similar to that appearing in the EA.

Signed this 10th day of June, 2011

STATE OF MINNESOTA
DEPARTMENT OF COMMERCE



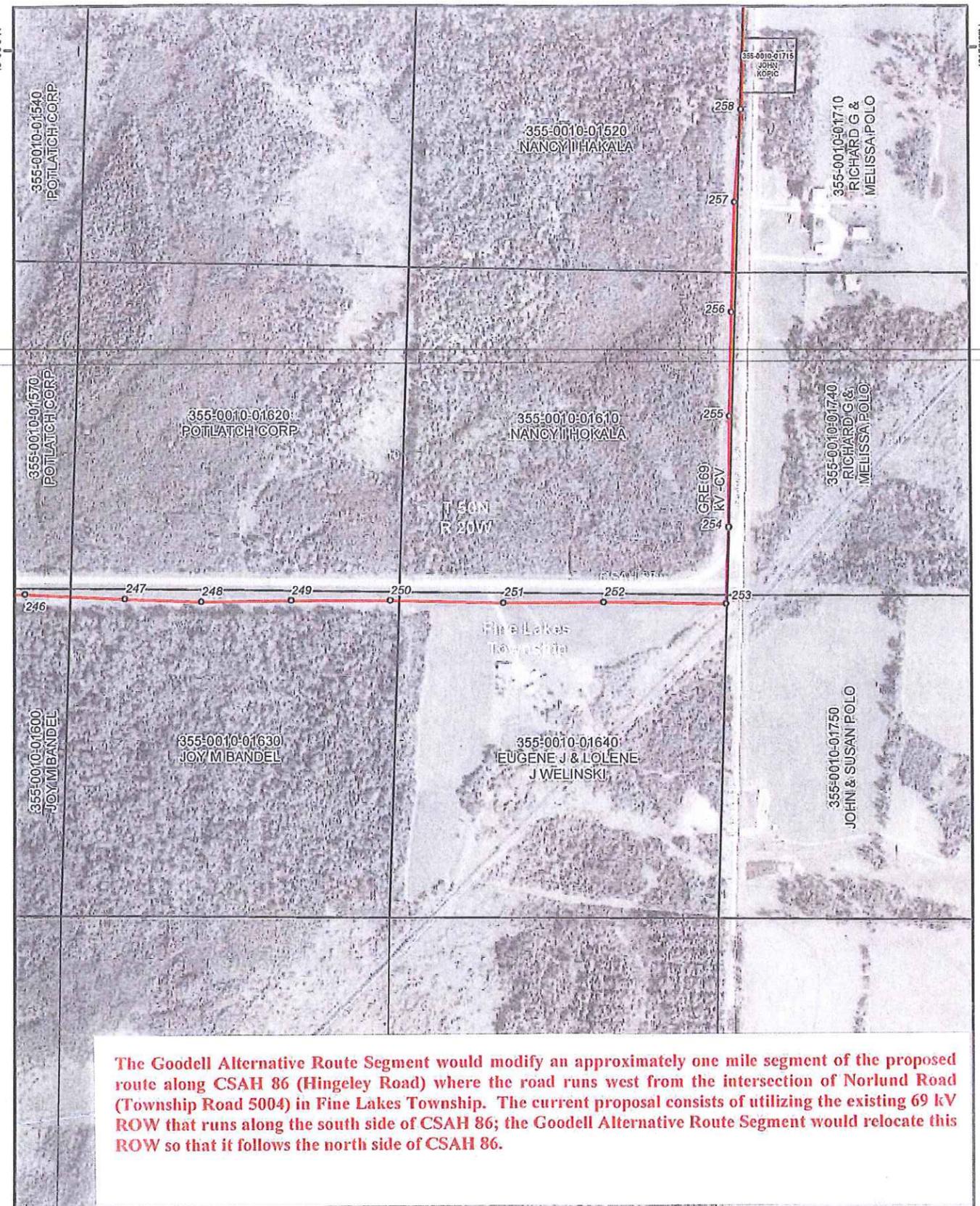
William Grant, Deputy Commissioner



Cedar Valley-Savanna-Cromwell Map 22

Parcels
 GIS data sources vary from MNDNR, MNDOT, MNGEO, and Great River Energy
 2009 Aerial Photography from USDA Farm Service Agency (FSA) through the MNGEO WMS Data Server

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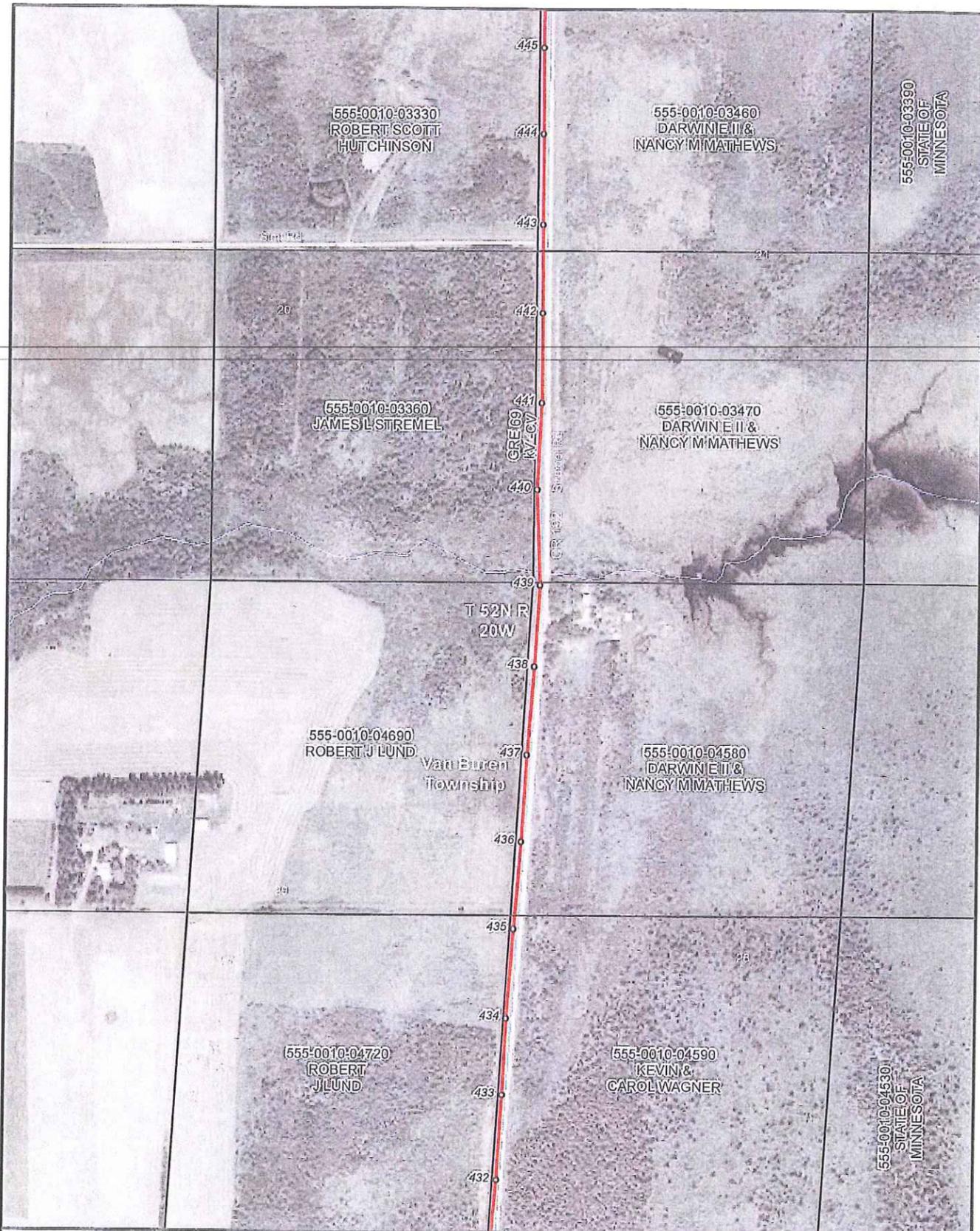
The Goodell Alternative Route Segment would modify an approximately one mile segment of the proposed route along CSAH 86 (Hingeley Road) where the road runs west from the intersection of Norlund Road (Township Road 5004) in Fine Lakes Township. The current proposal consists of utilizing the existing 69 kV ROW that runs along the south side of CSAH 86; the Goodell Alternative Route Segment would relocate this ROW so that it follows the north side of CSAH 86.

Cedar Valley-Savanna-Cromwell Map 23

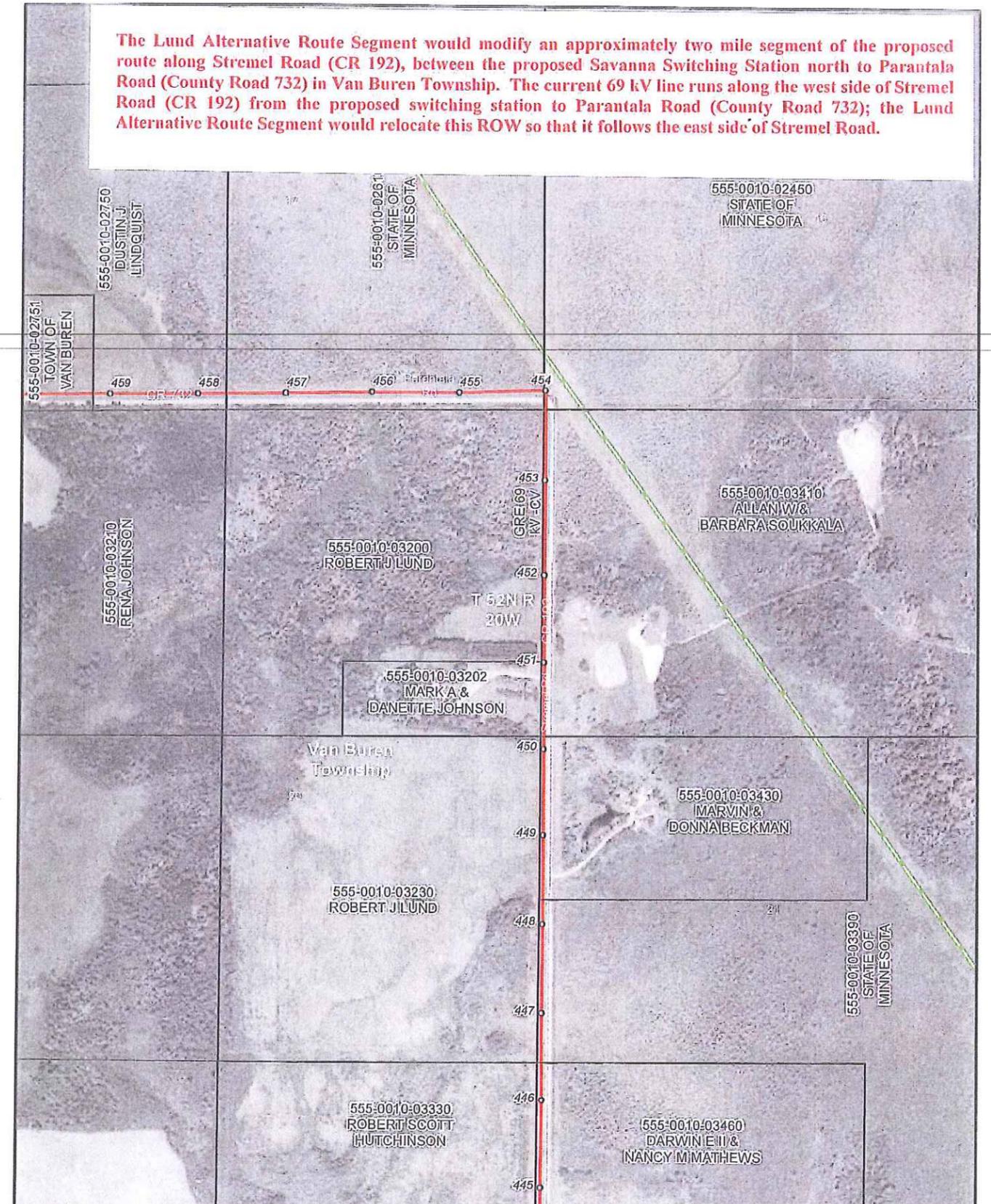
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Cedar Valley-Savanna-Cromwell Map 38



Cedar Valley-Savanna-Cromwell Map 39



The Lund Alternative Route Segment (continued)

Cedar Valley-Savanna-Cromwell Map 37



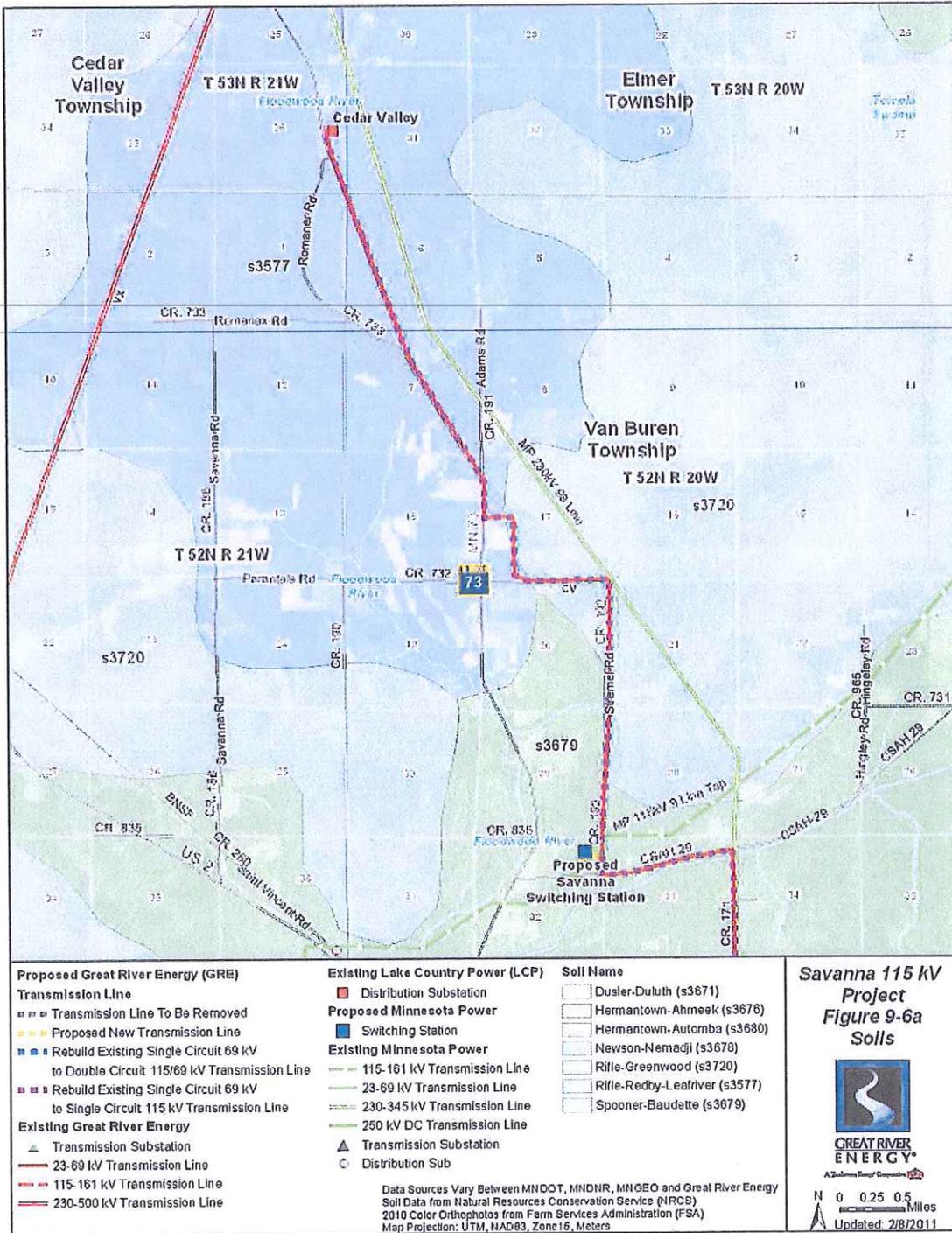
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GREAT RIVER ENERGY

A Exelon Energy Company





The Cedar Valley to Savanna route alternative segment would follow the MP 115 kV 9 line east-northeast out of the proposed Savanna Switching Station for approximately one mile to the point where the MP 9 line crosses the MP 230 kV 98 line. At this point, the route alternative segment would turn northwest and follow the MP 98 line for approximately six miles to a point just (1/4 mile) east of the Cedar Valley Substation. The route then makes a short (1/4 mile) cross-country run to the west to tie into the Cedar Valley Substation.