APPENDIX H

Substation Plot Plans (Preliminary)

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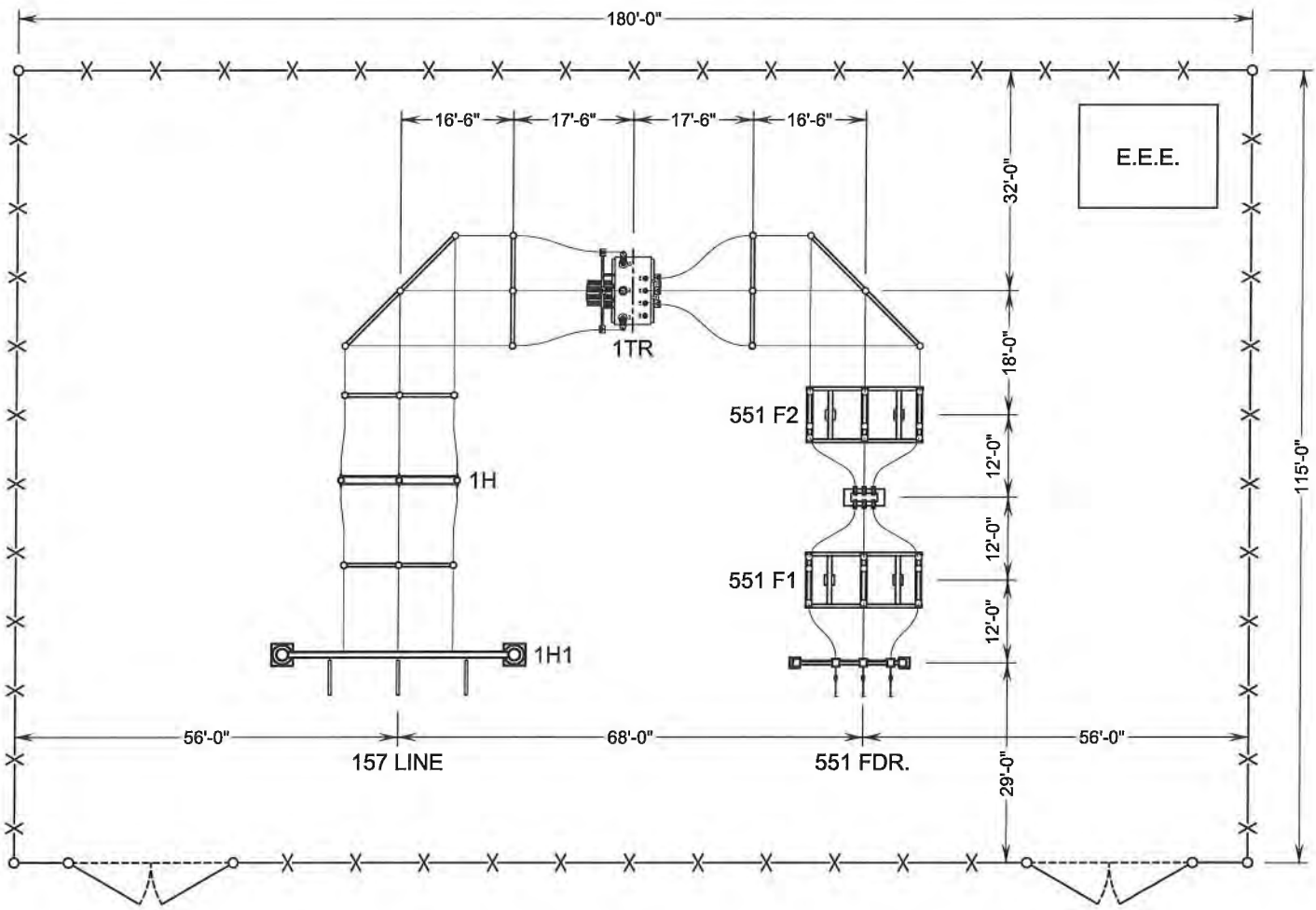


STRAIGHT RIVER 115/34kV SUBSTATION PLAN

PRELIMINARY

DWN: SJM	APP. .
DATE: 01.05.2015	SCALE: 1" = 300'

minnesota power

STRAIGHT RIVER 115/34.5kV SUBSTATION
ELECTRICAL PLAN & ELEVATIONS
ELECTRICAL EQUIPMENT PLAN

REV. A	DATE: 01.05.2015
.	

FILE: .

.	.	.

N

430'-0"

215'-0"

Menahga
Substation

TWEC
GRE

115KV LINE
TO HUBBARD

115KV
MOD
SWITCH

Blueberry Substation

34.5KV LINE
TO SPIRIT LAKE

30'-0"
DRIVE GATE

CONTROL
BIULDING

115KV
MOD
SWITCH

115KV LINE
TO RED EYE

REV NO	DATE	REVISION	REV BY	APPD BY
6				
5				
4				
3				
2				
1				

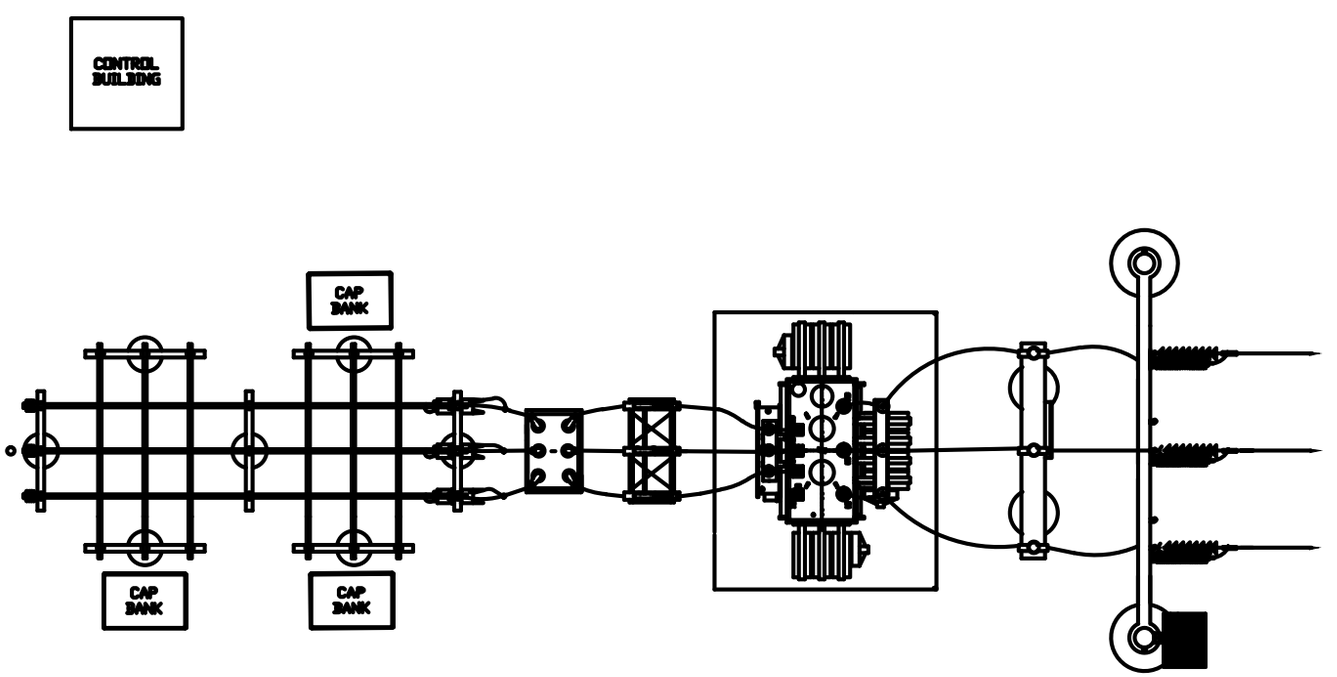
GREAT RIVER ENERGY*

BLUEBERRY / MENAHGA SUBSTATION
S329

DATE: 9-30-14
SCALE:
DWN BY:
CKD BY:
CKD BY:
APPD BY:

PROJECT NO 203472
REVISION
DRAWING NUMBER
SHEET

PRELIMINARY



PRELIMINARY
RED EYE
SUBSTATION

125′

125′

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APPENDIX I

Great River Energy Demand Side Management Programs

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GREAT RIVER ENERGY DEMAND SIDE MANAGEMENT PROGRAMS

A. The name of the committee, department, or individual responsible for the applicants energy conservation and efficiency programs, including load management;

Great River Energy's Membership and Energy Markets Division is responsible for energy conservation and load management programs.

B. A list of the applicant's energy conservation and efficiency goals and objectives;

- Per Minnesota Statute 216B.241, Subd. 1c. Great River Energy's 2014 energy conservation goal for its member cooperatives is equal to 165,055,348 kWh at the generator. This figure represents 1.5% of Great River Energy's members average weather normalized sales for 2011-2012, less sales to customers that have received formal CIP exemptions from the Minnesota Department of Commerce. The Minnesota Department of Commerce, Division of Energy Resources has approved Great River Energy's 2015 program plan, which includes a broad array of programs that cover the residential, commercial, industrial and agricultural sectors.
- Per Great River Energy's load management programs, the goal is to maximize the value of current load management programs by identifying new revenue streams available in a FERC approved ISO market. Opportunities include load management as market energy, regulation and/or reserves.

A description of the specific energy conservation and efficiency programs that the applicant has considered, a list of those that have been implemented and the reasons why the other programs have not been implemented;

Great River Energy periodically conducts feasibility studies on potential programs. Programs with verifiable energy reductions and no market barriers that are found to be cost effective are implemented. Programs that are difficult to quantify with significant market barriers, or are not cost effective are not added to the program portfolio.

A brief description of each program, by program type, that allows Great River Energy to achieve its strategic conservation and load management goals is provided below.

INDIRECT CONSERVATION PROGRAMS

<u>Energy Education</u>
Member cooperatives assist residential and commercial/industrial customers to help make them aware of the available energy conservation and energy efficiency programs through brochures, bill inserts, radio advertisements, newsletters, workshops, fairs, trade shows, and one-on-one consultation.

<u>Residential Electrical Evaluation and Consultation</u>
The residential electrical evaluation and consultation program is targeted at customers who contact their member cooperative and express concern over their electrical usage. When a customer contacts their cooperative representative, the representative reviews general appliance

usage and costs with the customer. The review provides an overview of the customer's energy usage and provides suggestions on various means by which the customer can conserve energy.

DIRECT CONSERVATION PROGRAMS - RESIDENTIAL

Energy Assessments/Audits

Members offer free or reduced cost energy audits for residential and commercial customers. Cooperatives have staff specifically trained to conduct basic audits. In addition to the basic audits, participating members work with local Community Action Programs (CAP) agencies to target low-income households that could benefit from energy conservation education.

Commercial consumers are provided with either a walk-through energy audit performed by cooperative staff or a more comprehensive audit performed by a professional consultant. Costs for the comprehensive audit are typically shared 50 percent by Great River Energy, through the distribution cooperative, and 50 percent by the customer.

Residential Cooling

Residential air conditioning is a critical load to Great River Energy and its member distribution cooperatives. High-efficiency air conditioners improve system load factor, reduce peak capacity requirements, improve system efficiencies, and lower customer's cooling costs. Great River Energy, through its member cooperatives, provides a rebate for central air conditioners that have a Seasonal Energy Efficiency Ratio (SEER) of 14 or greater. This increased efficiency results in energy and demand savings during Great River Energy's critical summer period.

Residential Air Source Heat Pump (ASHP)

ASHPs provide summer cooling and spring/fall heating in residential or commercial installations. ASHPs are sized for cooling. In the cooling mode, the ASHP functions as a central air conditioner and is load managed during the summer per Great River Energy's cycled air conditioning control strategy. In the heating mode, the ASHP provides very efficient space heating to a temperature of approximately 20 degrees F. At this temperature the ASHP automatically shuts off and the secondary heating system (typically a natural gas or liquid propane furnace) heats the home. If conditions should require load control, Great River Energy also has the ability to control ASHPs during the heating season. ASHPs help Great River Energy improve load factor, reduce peak capacity requirements, and improve system efficiencies.

Quality Installation Program for Central Air Conditioners and Air Source Heat Pumps

In addition to offering equipment rebates, Great River Energy and its member cooperatives provide additional incentives for quality installation of high-efficient central air conditioners and air-source heat pumps. In order to generate maximum electric energy savings, it is essential that the equipment is installed correctly and according to manufacturer's specifications. The quality installation program seeks to validate four components of the installation:

1) Air flow
2) Duct sealing
3) Proper sizing
4) Refrigerant charge

New central air conditioners and air source heat pumps with an overall efficiency of 13 SEER or higher are eligible. The system must be matched, which means the outdoor condenser unit and the indoor evaporator coil are designed by the manufacturer to work together to provide top performance and maximum efficiency.

Residential HVAC Tune-Up

Rebates are available to members who hire a registered and/or professional Heating Ventilation and Air Conditioning (HVAC) contractor to perform a tune-up of an existing, working Cycled Air Conditioner (CAC) or ASHP. This program is designed to improve the efficiency and maintain the operation of CACs and ASHPs.

Residential Cycled Air Conditioning and ASHP

The cycled air conditioning program provides customers with an incentive to allow Great River Energy to cycle (15 minutes on, 15 minutes off) their central air conditioner during periods of high peak demand. The cycling provides approximately one kilowatt (kW) of demand reduction per air conditioner. Air conditioning is a critical load to the member distribution cooperatives and to Great River Energy. The program helps improve system load factor, reduce peak capacity requirements, and improve system efficiencies.

Residential Geothermal

Ground Source Heat Pumps (GSHPs) have proven to be one of the most efficient space conditioning options with the added potential of significant energy savings. Acceptance of this technology continues to grow nationwide. GSHPs use the latent heat in the earth as a heat sink and a heat source. By utilizing a series of buried heavy-duty plastic pipes filled with a food-grade antifreeze solution as the heat transfer medium, GSHPs are highly efficient in both heating and cooling modes. This high efficiency results in reduced kWh usage in the cooling season and can also significantly reduce the total energy used to heat a home when compared to alternative heating systems. Along with the kilowatt hour (kWh) savings, there is capacity savings when the GSHP is part of the load management program.

Income Eligible: AC Tune-UP

Participating member distribution cooperatives offer air conditioning tune-ups to low-income customers in conjunction with local CAP agencies. The role of a CAP agency is to help identify customers that would benefit from this service and to provide instruction to local HVAC service vendors authorized under this program to provide tune-ups. The tune-up service includes:

- Cleaning condenser coil
- Checking Freon level and pressures
- Checking indoor filter
- Testing all controls
- Blowing out drain line
- Visually inspecting the entire system
- Educating homeowner on operation

The low-income air conditioner tune-up program improves air conditioner efficiency, which in turn lowers the customer's energy bill.

Income Eligible

Participating member distribution cooperatives provide renters or rental property owners with help to improve the energy efficiency of the property. Programs include high efficiency space heating and cooling, lighting retrofit, appliance replacement, energy saving water kits, Habitat for Humanity, and air conditioner tune-ups.

Residential Lighting

Lighting makes up ten percent of a typical home's electricity consumption. The home lighting program is an energy conservation program in the form of a rebate that encourages the conversion from incandescent lighting to more energy efficient lighting – particularly compact fluorescent lighting (CFLs) and light emitting diodes (LEDs). Promotions are also offered throughout the year at major retailers for instant in-store savings (Wal-Mart and Target).

Bulb Recycling

This program is designed to support Minn. Stat. §115A.932 to encourage residential members to properly recycle CFLs. Great River Energy offers $0.50 per lamp rebate through local retailers. Free recyling was available in 2008-2009 through participating Menards stores.

High Efficiency Water Heat

Customers replacing old inefficient electric water heaters with new high efficiency electric water heaters receive a cash rebate from a participating distribution cooperative. The minimum acceptable water heater has insulation of R16 or greater, and an energy efficiency factor of 0.92. The average water heater replaced has an efficiency factor of 0.82 or less.

Residential Dual Fuel and Pool Heat

Dual fuel space heating is a heating option for the conditioned living space in residential customers' homes that use only electric heat as the primary heat source. Cooperative members must have a backup heat source (propane or fuel oil) to provide heat to the entire living area or pool. Member incentives may include all or a portion of the costs to install load controls on equipment.

Hot Water Savings

This program offers an opportunity for residential members to purchase and install a variety of energy saving water equipment at a significantly reduced price. The kit includes shower head, kitchen aerator, bathroom aerators, hot water temperature card, and teflon tape to assist with the installation. Kits are provided at no cost to income-eligible members and CAP agencies for installation in income-eligible properties.

Electric Vehicle and ChargeWise^{SM}

Great River Energy provides a specific rate for charging on and off-road electric vehicles such as Plug-in Hybrid Electric Vehicles (PHEV), golf carts, forklifts, etc., which can operate "around-the-clock" from a nightly eight hour charge. Great River Energy will rebate up to $500 of the installation cost for the ChargeWise^{SM} kit. The ChargeWise^{SM} program requires the program participant be a residential customer of an all requirements member.

DIRECT CONSERVATION PROGRAMS – COMMERCIAL, INDUSTRIAL, and AGRICULTURE (CI&A)

Agriculture

Agricultural prescriptive and custom rebates are available to members for the installation of various typs of high efficiency agricultural equipment. Rebates are offered for the following applications:

- Ventilation
- Dairy-Free Heater
- Dairy Plate Cooler
- Hog Farrowing
- Compressor Heat Recovery Systems
- Scroll Compressors for Bulk Tank
- Low Pressure Irrigation Systems
- Livestock Water Heaters

Compressed Air

This program rebates members for installing compressed air systems, equipment updates or system improvements that result in lower energy usage.

Custom

The CI&A energy grant and rebate program provides cash incentives to qualified applicants for energy efficiency improvements to their business, industry, or farm. Interested customers must complete a grant application form, which describes the intended energy efficiency improvement measures and calculates the expected energy and demand savings. The individual member cooperative evaluates the proposal for viability and cost effectiveness, and those that rank the highest are awarded grants to help offset the cost of their project. Grant funds are typically used for the installation of high efficiency lighting, motors, adjustable speed drives, refrigeration compressors, high efficiency air conditioning, and other energy-conserving equipment. The program also includes a New Construction Rebate for Lighting and Motors. This rebate is on a per fixture basis or on the horsepower rating of the motor.

Energy Assessments/Audits

Members offer free or reduced cost energy audits for residential and commercial customers. Cooperatives have staff specifically trained to conduct basic audits. In addition to the basic audits, participating members work with local CAP agencies to target low-income households that could benefit from energy conservation education.

Commercial consumers are provided with either a walk-through energy audit performed by cooperative staff or a more comprehensive audit performed by a professional consultant. Costs for the comprehensive audit are typically shared 50 percent by Great River Energy, through the distribution cooperative, and 50 percent by the customer.

COMMERCIAL HEATING VENTILATION AND AIR CONDITIONING (HVAC)

Program rebates are offered to members for qualifying commercial cooling equipment installation. Only new and complete central air conditioning units and remote condensing unit retrofits qualify.

Commercial GSHPs

GSHPs have proven to be one of the most efficient space conditioning options with the added potential of significant energy savings. This high efficiency results in the reduction of kWh usage in the cooling season and can also significantly reduce the total energy used to heat a building when compared to alternative heating systems. A number of building types are able to take advantage of the benefits of heating and cooling with GSHPs and the program targets schools, churches, and other commercial and industrial buildings where appropriate.

Commercial New Construction Lighting

Prescriptive and custom rebates are available for lighting projects in retrofit, new construction and LED traffic signal retrofit applications. Specific dollar amounts, per fixture, vary based on the type of luminaries installed, lamp wattage, length and number of lamps per fixture.

Commercial Retrofit Lighting

Rebates are offered for retrofit lighting projects in existing structures. They are determined individually, based on equipment being removed and replaced with more efficient lighting or controls. For projects not covered by the perscriptive rebate application form, a custom rebate will calculate the energy savings and determine the rebate amount.

Commercial Motors and Drives

This program offers rebates for new or existing retail businesses. Rebates are determined on an individual basis using the perscriptive rebate forms for the motors and drives being installed. Motors that meet the National Electrical Manufacturers Association (NEMA) Premium Efficiency Motor Standards for retrofit applications are eligible.

Commercial Whole Building Energy Efficiency

Member cooperatives provide energy efficient educational materials and speakers for little or no cost to members at community meetings, key account meetings and other public informational gatherings. Member cooperatives also offer design assistance, building commissioning, building recommissioning, and audits that are specific for the commercial, industrial, or agricultural members needs.

Vending Controls

Rebates are available for control devices that are either occupancy or moisture sensor-based installed on beverage vending machines, glass-front beverage machine coolers or glass-front refrigerated display case doors.

DIRECT LOAD CONTROL PROGRAMS

Interruptible CI&A Loads
The Interruptible CI&A Loads Program provides a reduced electric rate to CI&A customers that can reduce their demand by a minimum of 25 kW during periods of high demand.

Interruptible Air Conditioning
The interruptible air conditioning program is available to residential, commercial, and industrial members annually from May through September. During these months members agree to have their air conditioning systems interrupted for up to six (6) hours on event days.

Interruptible Irrigation
Interruptible commercial irrigation systems, generally agricultural, turf growers, or golf courses, can be interrupted once per day for up to four hours.

Dual Fuel Space Heating
Dual fuel space heating systems are a combination of interruptible electric and non-electric space heating. Both the primary and secondary heating systems are sized for the entire heating load of the home. During periods of high electric demand, the interruptible electric heating system is shut off and the secondary (non-electric) heating system heats the home.

Electric Thermal Storage (ETS) Space Heating
The ETS space heating program uses off-peak electric energy to provide 100% of a home's heating requirements. During the nightly eight-hour ETS charge time, heat is stored in a water or ceramic medium. There are three commonly available storage heating configurations: central furnaces, room or dispersed heaters, and slab. Customers receive a special off-peak rate in return for allowing Great River Energy to control their systems each day during the on-peak hours.

Electric Thermal Storage (ETS) Water Heating
The ETS water heating program uses off-peak electric energy coupled with a high efficient water heater with sufficient storage capacity to supply the user's hot water needs. The water heaters are charged between 11:00 p.m. and 7:00 a.m. each evening.

Interruptible Water Heating
Interruptible water heaters can be interrupted during periods of high electric demand for up to eight hours per day. Customers receive a special interruptible rate in return for allowing Great River Energy to control their water heaters during peak periods.

Electric Thermal Storage (ETS) Pool Heating
The ETS pool heating program uses off-peak electric energy to heat water for swimming pools. Swimming pools can be sufficiently heated during the nightly eight-hour off-peak charge time. Member distribution cooperatives provide participants a reduced electric rate for the ability to interrupt this load during the on-peak hours.

Off Peak Electric Vehicles and "ChargeWiseSM"
The Electric Vehicle and "ChargeWise[SM]" program charges electric vehicle batteries using only off-peak energy between 11:00 p.m. and 7:00 a.m. nightly. Examples of qualifying vehicles are electric forklifts, golf carts, and residential PHEVs and EVs.

WELLSPRING RENEWABLE ENERGY PROGRAM

The Wellspring renewable wind energy program is a voluntary "green pricing" program that offers wind-generated electricity to cooperative members. Great River Energy was the first utility in the five-state region to offer such a program. Green pricing is a voluntary service that allows members the opportunity to purchase 100 kWh blocks of renewable energy and pay a premium on their electric bill to cover the incremental cost.

EVALUATED PROGRAMS

Pool Pump
The Pool Pump program is currently available on a pilot basis. The program is available to members that have an in-ground swimming pool. Members replacing an old inefficient pump with a new high efficiency pump can receive a rebate from their participating distribution cooperative.

PC Power Management
Connexus Energy, Dakota Electric, and Minnesota Valley Electric Cooperative are currently evaluating PC Power Management based on the recommendations provided in a report titled, "Electricity Savings Opportunities for Home Electronics and Other Plug-In Devices in Minnesota Homes". The report was completed in 2010 by the Energy Center of Wisconsin. The program allows a member to download an internet application that manages the energy used by a home PC based on an energy use profile that automatically switches the computer to a hibernate mode when it is not used for a predetermined length of time.

Data Centers
Data center rebates are not a specific program, rather they are covered under the custom grant program or by individual measures done at the site (HVAC, Lighting, Controls, etc.)

Battery Energy Storage
The intent of the program was to store off-peak energy in lead acid batteries to be discharged during the on-peak hours. Great River Energy's analysis showed that the cost of the units and the kWh capacity was not able to yield a positive return on investment, via energy arbitrage, over the life of the unit.

Ice Energy Storage
The potential to store off-peak energy in large insulated vessels to be discharged during on-peak hours was investigated. The units are deployed in conjunction with existing commercially packaged HVAC rooftop units. When the HVAC unit calls for cooling, a pump circulates coolant through coils in the ice and transfers the cold fluid to a separate condenser installed in the HVAC unit. The program was not found to be cost effective.

C. A description of the major accomplishments that have been made by the applicant with respect to energy conservation and efficiency;

Conservation and Efficiency

Great River Energy has met the CIP goals outlined since 2010 when the legislation regarding the Minnesota Energy Conservation Goals took effect. Prior to 2010, Great River Energy successfully met the internally established goals for 2008 and 2009. Additional information on the success of the conservation and load management programs is provided in the tables on the following pages.

2008: 78,000,000 kWhs saved (0.7% of member sales)

2009: 94,000,000 kWhs saved (0.85% of member sales)

2010 All Requirements Members*: 117,226,945 kWh saved at the generator equaling 1.34% of member sales.

2011 All Requirements Members: 110,152,388 kWh saved at the generator equaling 1.27% of member sales.

2012 All Requirements Members: 83,744,605 kWh saved at the generator equaling 1.0% of member sales.

2013 All Requirements Members: 99,134,162 kWh saved at the generator equaling 1.17% of member sales.

** Twenty (20) all-requirements members purchase all of the power and energy needed to satisfy their electricity sales from Great River Energy, with limited exceptions for amounts historically supplied by the Western Area Power Administration ("WAPA") or from renewable generation facilities directly interconnected at a distribution level. Great River Energy has the responsibility and obligation to plan for and supply all of the future power and energy needs of the all-requirements member rate class.*

Eight (8) fixed members purchase a finite contractual amount of power and energy from Great River Energy that does not change based on their current actual use or need. As such, the energy conservation savings achieved by the fixed members does not reduce Great River Energy's power supply obligations or impact its need for future generation resources. Some fixed members purchase power and energy historically supplied by WAPA or from renewable generation facilities directly interconnected at the distribution level. The fixed members have made arrangements for other wholesale suppliers to assume responsibility and obligation to plan for and supply all of their future power and energy needs.

Total kWh saved does not include kWh savings generated through supply side investments. In 2010 Great River Energy and its member cooperatives realized an additional 431,900,000 kWh in savings associated with improvements to generation and cooperatives distribution assets.

Generator kWh savings add 11.5% to the energy savings that are realized at the end use member. This amount is an average reflecting the line-losses that occur through the Transmission and Distribution of electricity to end use members.

CIP Savings and Expenditures – All Requirements Members Only Great River Energy 2008-2013						
CIP Year	**Annual kWh**	**Lifetime kWh (based on average measure lifetime)**	**Annual KW**	**Aggregate KW**	**Annual CIP Spending**	**Aggregate CIP Spending**
2008	70,432,275	880,403,438	125,825	125,825	$16,248,830	$16,248,830
2009	79,467,727	998,114,651	77,418	203,243	$18,759,091	$35,007,921
2010	117,226,945	1,441,891,424	41,634	244,877	$20,598,092	$55,606,013
2011	110,152,388	1,371,764,400	35,400	280,277	$18,306,921	$73,912,934
2012	83,744,605	1,042,899,483	20,189	300,466	$16,274,707	$90,187,638
2013	99,134,162	1,524,683,411	38,598	339,064	$15,575,524	$105,763,162
Total	***560,158,102***	***7,259,756,807***	***339,064***	***339,064***	***$105,763,162***	***$105,763,162***

Demand Side Management

Additional Controlled Load Great River Energy 2011-2013			
Additional Controlled Load Installed by Customer Class (kW)			
	2011	**2012**	**2013**
Residential	9,000	8,700	9,000
Commercial	1,000	6,000	1,000
Total*	**10,000**	**14,700**	**12,013**
Total Controlled Load Installed by Load Type (MW)			
	2011	**2012**	**2013**
Dual Fuel	137	140	143
Cycled Air Conditioning	104	106	108
Interruptible Water Heating	38	39	36
Irrigation	31	31	30
Interruptible C&I	165	170	176
Total MW	**475**	**486**	**493**

* The effect of energy conservation and load management programs on load is implicit in Great River Energy's forecasts. The forecast is calculated using raw load data, and does not make any adjustments that attempt to measure the impact of energy efficiency or load management activities. DSM and conservation programs do have a significant effect in reducing the need for new resource additions. In aggregate, Great River Energy's load management programs are capable of reducing summer and winter peak loads by 15%.

D. A description of the applicant's future plans through the forecast years with respect to energy conservation and efficiency.

Great River Energy and its Members have developed a robust portfolio of energy efficiency programs that provide measureable value for member-consumers in Minnesota. These programs are a dynamic and active part of Great River Energy's planning and daily operations and provide member-consumers with options for managing their energy use and associated costs.

The key to maintaining success hinges on the ability to promote current programs while developing new programs that find a sustainable balance between reducing energy and maintaining member-consumer satisfaction. Success can be seen not only in the achievement of conservation goals but also in the creation of new programs. An ongoing goal at Great River Energy is to create new programs that provide more opportunities for member-consumer participation. On average, Great River Energy creates two new energy efficiency programs each year. Recent goals have been achieved by reaching out and partnering with large retailers such as Wal-Mart and Target. Continuing to reach out to local retailers and others across the industry will enable Great River Energy to identify new opportunities that will lead to successful achievement of its strategic conservation goals.

E. A quantification of the manner by which these programs affect or help determine the forecast provided in response to part 7849.0270 subpart 2, a list of their total costs by programs, and a discussion of their expected effects in reducing the need for new generation and transmission facilities.

Energy Conservation and Demand Side Management Budgets 2014-2016			
	2014 Approved Budget	**2015 Proposed**	**2016 Proposed**
Energy Conservation			
Residential	$6,394,148	$5,894,148	$5,894,148
Commercial	$2,605,852	$2,605,852	$2,605,852
Income Eligible	$1,189,076	$1,189,076	$1,189,076
Total	**$10,189,076**	**$9,689,076**	**$9,689,076**
Demand Side Management			
Residential	$6,178,798	$5,569,688	$5,569,688
Commercial	$388,839	$288,839	$288,839
Total	**$6,567,638**	**$5,858,527**	**$5,858,527**
Total Budget*	**$16,756,714**	**$15,547,603**	**$15,547,603**

*2014-2016 Budget projections are based on the statutory mandated spending requirements and will change with changes in subsequent annual revenues. Currently Minnesota Statutes §216B.241, Subd. 1b. requires that cooperative associations spend a minimum of 1.5% of their gross operating revenues from service provided in the state, excluding gross operating revenues from service provided to large electric customer facilities indirectly through a distribution cooperative electric association. Cooperatives are allowed to use 50% of this minimum spending requirement on load management program expenditures.

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APPENDIX J

List of Landowners within Proposed Route

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ALLEN M & JANICE L MARJAMAA

ANDREW MARJAMAA

BRADLEY & MARLENE SNYDER

BRENDA SEXTON & LANITA SEXTON

BRUCE & MARY & JACOB BURKMAN

BRUCE H & MARY E BURKMAN

CARL O BENSON TR

CATHRYN J & RICHARD E KARI

CHARLES & LISA DORMANEN

CHRISTOPHER S & LISA MICKELSON

COOPERATIVE POWER ASSOC

DALE L & CAROL K ANDERSON

DALE R & DEBRA A FISHER

DAVID & DOROTHY HAATAJA TRUST

DAVID C & LINDA J BENSON

DAVID F & DONNA L MARJAMAA

DAVID G & JEANNE HILGENDORF

DAVID G & JEANNE M HILGENDORF

DNR-FORESTRY-OTHER

DONNA J ANDERSEN TRUST

DULSKI FAMILY TR

GARY L DAY ETAL

GARY MARJAMA

GEORGE C HALVORSON JR SEP PROP

GERALD & JOY BENJAMIN

GERALD P & JOY R BENJAMIN CD

GREGORY A & JOANN C PETERSON

GREGORY P & LINDA J GIESE

HENDRI ERNST & SARAH ERNST

JAMES D PETERSON

JAMES W & DIANE K GILMER

JEFFREY A & YALONDA K FIX

JOEL S & JENNIFER A GREWE

JOHN B & REBECCA M TORMANEN

JOHN C & ROBERTA L ROGAHN

JOSEPH A WUOLLETT

KELLY J & LAURIE M ELSNER

KEVIN D & JANE I URVIG

LARRY J MCKEEVER

LEON A MAGER

LEVI R YLINIEMI

LOWELL & MELISSA KOEBERNICK

LOWELL S & M J KOEBERNICK

LUANN M HINTON

MARC A & CYNTHIA R SIMPSON

MARJORIE KNOWLES ETAL

MICHAEL & ANDREA MAKELA

MILO J & JULIE A HUGHES

MINN PIPE LINE CO

MINNESOTA POWER & LIGHT

PETER J MARJAMAA & JEFFREY A MARJAMAA

PHILLIP E & JENORA J PIKE

POTLATCH MN TIMBERLANDS LLC

POTLATCH OPERATING CO

RICHARD & DARLAYNE YLINIEMI

RUSSELL & CAROL SCHWARTZ

RUSSELL D & VICKIE L KNOWLES

RUSSELL D KNOWLES ETAL

SHIRLEY J HUNKINS

STEVEN O & JANET M APPEL

TFL-COUNTY

TROY D KINNUNEN

WESLEY G RENNEBERG REVOCABLE TRUST

WILLIAM & BONITA FERGUSON CD

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APPENDIX K

Agency Correspondence

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GREAT RIVER ENERGY®

12300 Elm Creek Boulevard • Maple Grove, Minnesota 55369-4718 • 763-445-5000 • Fax 763-445-5050 • greatriverenergy.com

September 15, 2014

Ms. Cathy Huebsch
Office of Aeronautics
Minnesota Department of Transportation
222 E. Plato Blvd.
St. Paul, MN 55107-1618

RE: Proposed Menahga Area 115 kV Transmission Project
Hubbard, Wadena and Becker Counties

Dear Ms: Huebsch:

Great River Energy is currently gathering data to be used in preparation of regulatory applications necessary to obtain approvals and permits for the construction of the proposed Menahga Area 115 kilovolt (kV) Transmission Project in Hubbard, Wadena and Becker counties (see enclosed fact sheet and map). Great River Energy and Minnesota Power intend to seek a Certificate of Need and a Route Permit for the Project from the Minnesota Public Utilities Commission (Commission).

The proposed electric transmission improvement project in the Menahga area will serve two primary purposes:

- Strengthen the electric transmission system in the Menahga area, as the existing 34.5 kV system serving the area is becoming outdated and is reaching its maximum capacity.
- Provide electric service to the proposed new Todd-Wadena Electric Cooperative (Todd-Wadena) Red Eye distribution substation that would provide electric power to a new pipeline pumping station proposed by Minnesota Pipe Line Company (MPL).

The Project will include:

- Construction of an east-west transmission line between the existing Great River Energy Hubbard Substation and the existing Minnesota Power Pipeline Substation, of which approximately 4.5 miles will be double-circuit 115 kV line and approximately 2.5 miles will be single-circuit 115 kV line.
- Construction of a generally north-south transmission line between the existing Minnesota Power Pipeline Substation and the proposed new Todd-Wadena Red Eye distribution substation, which will be approximately 15.5 miles of primarily single-circuit 115 kV line.
- Construction of the proposed new Great River Energy Blueberry Substation in the vicinity of the existing Menahga Substation and the new Todd-Wadena Red Eye Substation to serve the new MPL pumping station; and modifications to the existing Todd-Wadena Menahga Substation and the Minnesota Power Pipeline Substation.

If you would like to learn more about the project, an open house public meeting for the project will be held on:

September 30, 2014

4-7 p.m.

at:

Menahga Senior Center
19 Cedar Ave. SE
Menahga, MN 56464

In most cases, round wood transmission structures will be used that will range in height from 60 to 90 feet above ground.

Great River Energy is requesting information on the possible effects of the proposed project on airports or airstrips in the project area. The proposed Project is nearly five miles from the Park Rapids Municipal Airport in Park Rapids, approximately 15 miles from the Wadena Municipal Airport in Wadena, and approximately 16 miles from the New York Mills Municipal Airport in New York Mills, Minnesota.

We would appreciate receiving any written comments from your office by Friday, October 17, 2014. If you have any questions about this proposed project, please contact me at (763) 445-5214. If you wish to respond by e-mail, my address is cschmidt@grenergy.com.

Thank you for your attention to this important project.

Sincerely,

GREAT RIVER ENERGY

Carole L. Schmidt

Carole L. Schmidt
Supervisor, Transmission Permitting and Compliance

Enclosures: Fact Sheet/Project Map

s:\lega\environmental\transmission\projects\Menahga Area Project\Agency Correspondence\MenahgaMnDOTltr.doc

Menahga Area 115 kV Transmission Project

Great River Energy
12300 Elm Creek Blvd
Maple Grove, MN 55369-4718
1-888-521-0130
www.greatriverenergy.com

Todd-Wadena Electric Cooperative
550 Ash Avenue NE
Wadena, MN 56482
1-800-321-8932
www.toddwadena.coop

Project Need

Great River Energy proposes a new overhead 115 kilovolt (kV) transmission line project (Menahga Area Project) in Hubbard, Wadena and Becker Counties to relieve overload issues on the transmission system in the area and to serve a new pumping station to be built by Minnesota Pipe Line Company (MPL). The Menahga Area Project would:

- Strengthen the Menahga area electric transmission system, as the existing 34.5 kV system serving the area is becoming outdated and reaching its maximum capacity.
- Provide electric service to the proposed new Todd-Wadena Electric Cooperative (Todd-Wadena) "Red Eye" distribution substation that would provide electric power to a new pipeline pumping station proposed by MPL.

Project Description

The Menahga Area Project (see map on back) would consist of:

- An east-west section between the existing Great River Energy Hubbard Substation and the existing Minnesota Power Pipeline Substation, of which approximately 4.5 miles will be double-circuit 115 kV line (see top photo) and approximately 2.5 miles will be single-circuit 115 kV line (see middle photo).
- A generally north-south section of primarily single-circuit 115 kV line (approximately 15.5 miles) between the existing Minnesota Power Pipeline Substation and the proposed new Red Eye distribution substation.
- The proposed new Great River Energy Blueberry Substation in the vicinity of the existing Menahga Substation; the proposed new Todd-Wadena Red Eye Substation; conversion of Todd-Wadena's existing Menahga 34.5 kV distribution substation to operate at 115 kV; and modifications to the existing Minnesota Power Pipeline Substation.

The proposed transmission line would generally require a 100-foot-wide right-of-way, 50 feet on each side of the centerline. The majority of the project would use single round wood poles ranging in height from 60 - 90 feet above ground and a distance between poles of 275 - 400 feet. Poles with guy wires/anchors, two-pole H-frame or steel poles may be required in some areas as line angles, soil conditions, or crossing of existing utilities necessitate. Some segments of the line would carry lower-voltage distribution underbuild (see bottom photo).

Typical 115 kV Wood Double Circuit Structure

Typical 115 kV Wood Single Circuit Structure

Typical 115 kV Wood Structure with Distribution Underbuild

Permitting

The Minnesota Public Utilities Commission (Commission) must issue a Certificate of Need (CON) and Route Permit before project construction can proceed. Great River Energy and Minnesota Power will submit a combined CON/Route Permit application containing relevant information that will help the Commission determine if there is sufficient need for the project and evaluate the proposed route and any alternative routes brought forth by the public. At the conclusion of the permitting process, the Commission will determine the final location of the proposed transmission facilities.

The public and regulatory agencies will have numerous opportunities to provide input during the CON and Route Permitting process, which is conducted and facilitated by Commission and Minnesota Department of Commerce (DOC) staff. Public meetings will be held and other opportunities will be provided for collecting comments and responses. The DOC will prepare an Environmental Assessment document for the project.

Easements/Trees

Once project approval is granted by the Commission, Great River Energy will contact landowners to present an easement and offer of compensation. Most poles will be located on private property, although the majority of the right-of-way can continue to be used for agricultural cultivation, underground utilities, fencing and access drives. During acquisition, information is shared on tree removal, access and construction practices. Removal of trees and vegetation in the right-of-way will be necessary for safety and maintenance.

Project Schedule

Project contact and/or notifications	Fall 2014
State permitting	Early 2015 – early 2016
Survey/design	Summer 2015 – Spring 2016
Easement acquisition/right-of-way permits	Spring 2016 – Fall 2016
Transmission line construction	Fall 2016 – Spring 2017
Energization	Spring 2017

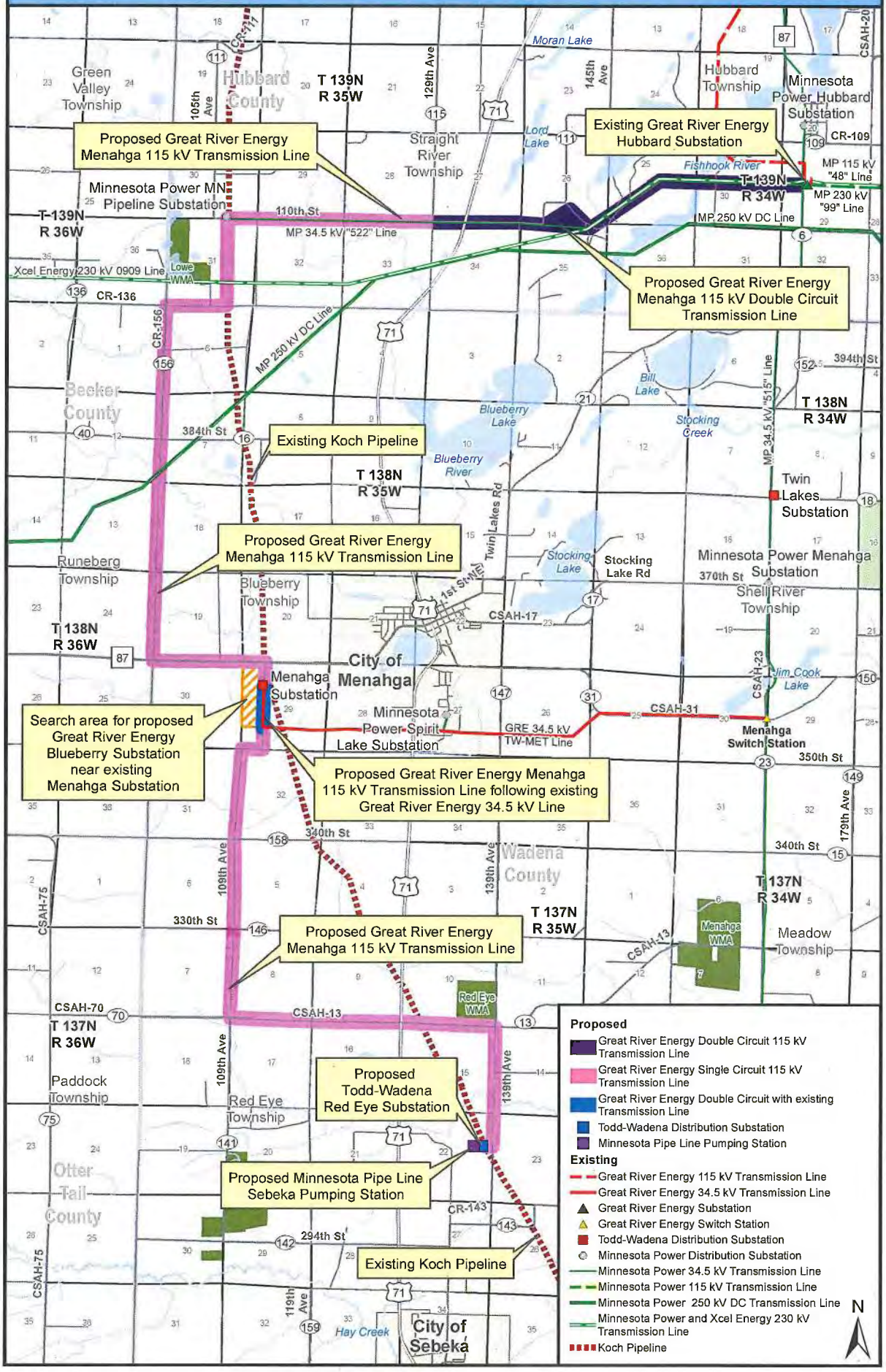
For project updates and information, visit greatriverenergy.com/Menahga or contact:

Michelle Lommel
Sr. Field Representative
Great River Energy - Land Rights Department
(763) 445-5977 or 1-888-521-0130
mlommel@grenergy.com

Carole Schmidt
Supervisor, Transmission Permitting and Compliance
Great River Energy – Environmental Services Department
763-445-5214
cschmidt@grenergy.com

Date last revised: 9/11/2014

Preliminary Project Study Area



Schmidt, Carole GRE-MG

From: Sorenson, Debra (DOT) [deb.sorenson@state.mn.us]
Sent: Tuesday, October 07, 2014 12:34 PM
To: Schmidt, Carole GRE-MG
Cc: Aguirre, Matthew (DOT); Huebsch, Catherine (DOT); Gaug, Ryan (DOT)
Subject: Proposed Menahga Area 115 kV Transmission Project

The project description Proposed Menahga Area 115 kV Transmission Project Early Notification Memo has been received and reviewed by the Office of Aeronautics and has been determined to have no significant effect to the operations at the any of the following airports - Park Rapids Municipal Airport Wadena Municipal Airport, New York Mills Municipal Airport.

Thank you for the opportunity to comment.

Debra Sorenson
Planning Coordinator
MNDOT Office of Aeronautics
651-234-7191
deb.sorenson@state.mn.us

GREAT RIVER ENERGY®

12300 Elm Creek Boulevard • Maple Grove, Minnesota 55369-4718 • 763-445-5000 • Fax 763-445-5050 • greatriverenergy.com

September 19, 2014

Ms. Sarah Beimers, Manager
Government Programs and Compliance
Minnesota State Historic Preservation Office
345 Kellogg Boulevard West
St. Paul, MN 55102-1906

RE: Proposed Menahga Area 115 kV Transmission Project
Hubbard, Wadena and Becker Counties

Dear Ms. Beimers:

Great River Energy is currently gathering data to be used in preparation of regulatory applications necessary to obtain approvals and permits for the construction of the proposed Menahga Area 115 kilovolt (kV) Transmission Project in Hubbard, Wadena and Becker counties (see enclosed fact sheet and map). Great River Energy and Minnesota Power intend to seek a Certificate of Need and a Route Permit for the Project from the Minnesota Public Utilities Commission.

The proposed electric transmission improvement project in the Menahga area will serve two primary purposes:

- Strengthen the electric transmission system in the Menahga area, as the existing 34.5 kV system serving the area is becoming outdated and is reaching its maximum capacity.
- Provide electric service to the proposed new Todd-Wadena Electric Cooperative (Todd-Wadena) Red Eye distribution substation that would provide electric power to a new pipeline pumping station proposed by Minnesota Pipe Line Company (MPL).

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- Construction of a generally north-south transmission line between the existing Minnesota Power Pipeline Substation and the proposed new Todd-Wadena Red Eye distribution substation, which will be approximately 15.5 miles of primarily single-circuit 115 kV line.
- Construction of the proposed new Great River Energy Blueberry Substation in the vicinity of the existing Menahga Substation and the new Todd-Wadena Red Eye Substation to serve the new MPL pumping station; and modifications to the existing Todd-Wadena Menahga Substation and the Minnesota Power Pipeline Substation.

If you would like to learn more about the project, an open house public meeting for the project will be held on:

September 30, 2014

4-7 p.m.

at:

Menahga Senior Center
19 Cedar Ave. SE
Menahga, MN 56464

Merjent conducted a Phase 1A Cultural Resources Assessment of the proposed Project (see enclosed letter). Merjent reported eight previously recorded archaeological sites and five previously recorded historic structures in the study area, although none overlap the proposed Menahga Area Project. Merjent recommended an archaeological inventory of the Project ROW once the route is defined, but recommended that an architectural review is not appropriate for the Project.

The project will likely require a Section 404 permit from the US Army Corps of Engineers (COE). If a permit is required, we understand the COE will initiate the Section 106 requirements and consult with the SHPO under your joint Programmatic Agreement.

A letter and fact sheet were sent to representatives of the White Earth Band of Ojibwe and the Leech Lake Band of Ojibwe.

We would appreciate receiving any written comments from your office by Friday, October 17, 2014. If you have any questions about this proposed project, please contact me at (763) 445-5214. If you wish to respond by e-mail, my address is cschmidt@grenergy.com.

Thank you for your attention to this important project.

Sincerely,

GREAT RIVER ENERGY

Carole L. Schmidt

Carole L. Schmidt
Supervisor, Transmission Permitting and Compliance

Enclosures: Fact Sheet/Project Map, Letter of 9/19/14 from Merjent

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Menahga Area 115 kV Transmission Project

Great River Energy
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- The proposed new Great River Energy Blueberry Substation in the vicinity of the existing Menahga Substation; the proposed new Todd-Wadena Red Eye Substation; conversion of Todd-Wadena's existing Menahga 34.5 kV distribution substation to operate at 115 kV; and modifications to the existing Minnesota Power Pipeline Substation.

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Typical 115 kV Wood Double Circuit Structure

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Typical 115 kV Wood Structure with Distribution Underbuild

Permitting

The Minnesota Public Utilities Commission (Commission) must issue a Certificate of Need (CON) and Route Permit before project construction can proceed. Great River Energy and Minnesota Power will submit a combined CON/Route Permit application containing relevant information that will help the Commission determine if there is sufficient need for the project and evaluate the proposed route and any alternative routes brought forth by the public. At the conclusion of the permitting process, the Commission will determine the final location of the proposed transmission facilities.

The public and regulatory agencies will have numerous opportunities to provide input during the CON and Route Permitting process, which is conducted and facilitated by Commission and Minnesota Department of Commerce (DOC) staff. Public meetings will be held and other opportunities will be provided for collecting comments and responses. The DOC will prepare an Environmental Assessment document for the project.

Easements/Trees

Once project approval is granted by the Commission, Great River Energy will contact landowners to present an easement and offer of compensation. Most poles will be located on private property, although the majority of the right-of-way can continue to be used for agricultural cultivation, underground utilities, fencing and access drives. During acquisition, information is shared on tree removal, access and construction practices. Removal of trees and vegetation in the right-of-way will be necessary for safety and maintenance.

Project Schedule

Project contact and/or notifications ---------- Fall 2014
State permitting ---------- Early 2015 – early 2016
Survey/design ---------- Summer 2015 – Spring 2016
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Energization ---------- Spring 2017

For project updates and information, visit greatriverenergy.com/Menahga or contact:

Michelle Lommel
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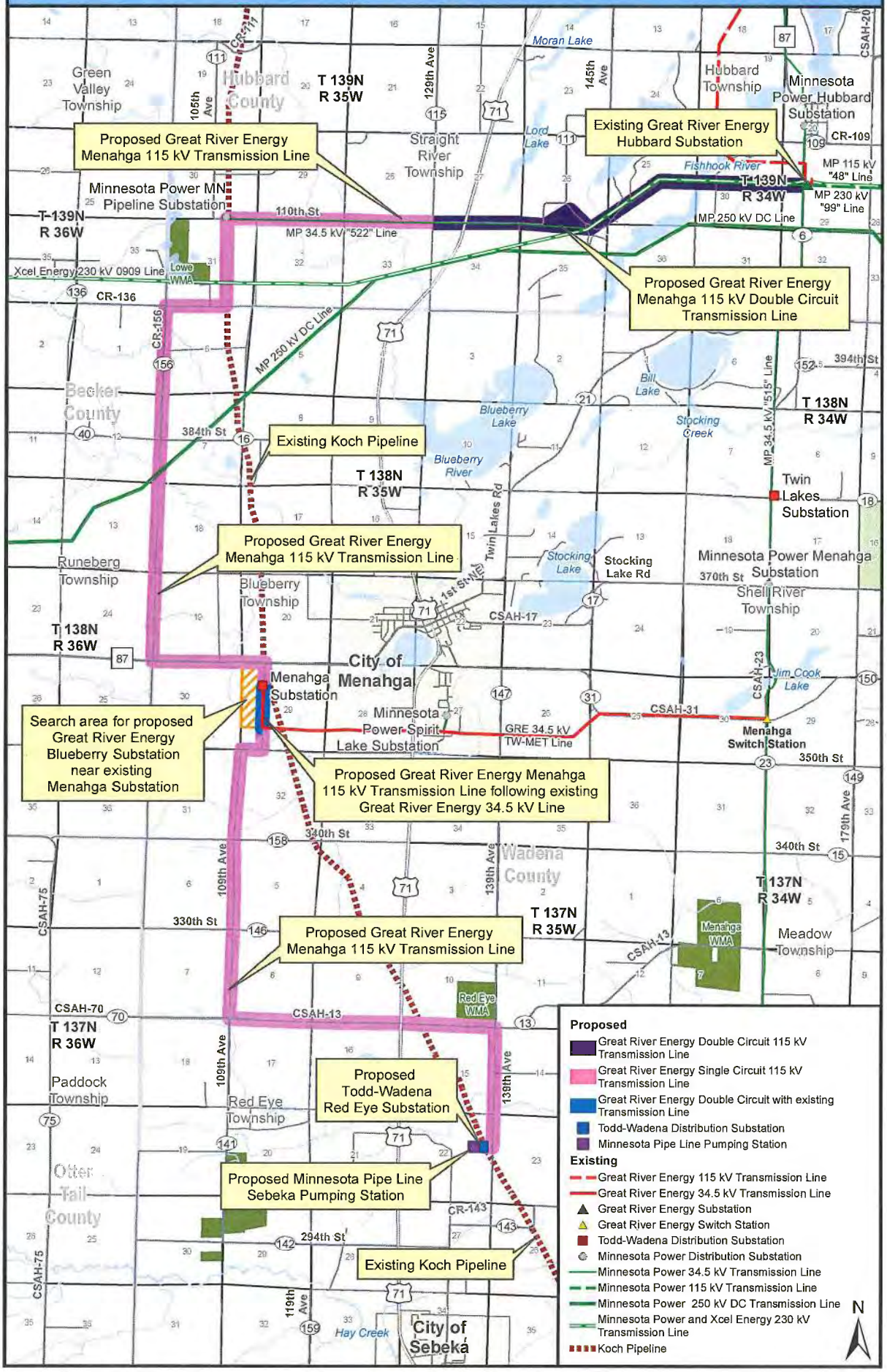
Date last revised: 9/11/2014

Preliminary Project Study Area



merjent

p 612.746.3660 ▪ f 612.746.3679

800 Washington Avenue North ▪ Suite 315 ▪ Minneapolis, Minnesota ▪ 55401

September 19, 2014

Carole Schmidt
Supervisor, Transmission Permitting and Compliance
Great River Energy
12300 Elm Creek Boulevard
Maple Grove, MN 55369-4718

Re: Phase IA Cultural Resources Assessment of the proposed Menahga Area 115 kilovolt (kV) Transmission Line Project, Hubbard, Wadena and Becker Counties, Minnesota.

Dear Carole:

Merjent was contacted in September 2014 by Great River Energy to conduct a Phase IA Cultural Resources Assessment in support of the proposed Menahga Area 115 kilovolt (kV) Transmission Line Project (Menahga Area Project) in Hubbard, Wadena and Becker Counties, Minnesota. Great River Energy proposes construction of the line to strengthen the existing Menahga area electric transmission system and to provide service to a new Todd-Wadena Electric Cooperative (Todd-Wadena) distribution substation that would in turn provide electric power to a new pumping station to be built by Minnesota Pipe Line Company (MPL).

Project Description

The Menahga Area Project would consist of:

- An east-west section between the existing Great River Energy Hubbard Substation and the existing Minnesota Power (MP) Pipeline Substation, of which approximately 4.5 miles will be double-circuit 115 kV line and approximately 2.5 miles will be single-circuit 115 kV line.
- A generally north-south section of primarily single-circuit 115 kV line (approximately 15.5 miles) between the existing MP Pipeline Substation and the proposed new Red Eye Substation.
- New facilities or upgrades of existing facilities including: the proposed new Great River Energy Blueberry Substation in the vicinity of the existing Menahga Substation; the proposed new Todd-Wadena Red Eye Substation; conversion of Todd-Wadena's existing Menahga 34.5 kV distribution substation to operate at 115 kV; and modifications to the existing MP Pipeline Substation.

Proposed Menahga Area Project activities may occur in the following counties and legal locations, which served as the Phase IA study area:

County	Township	Range	Sections
Hubbard	139N	34W	29, 30
Hubbard	139N	35W	25-35
Hubbard	139N	36W	36
Wadena	138N	35W	6-7, 18-20, 29-32
Becker	138N	36W	1, 12-13, 24-25
Wadena	137N	35W	5-10, 14-18, 22-23

Literature Review

The main objective in reviewing the cultural resources literature is to identify the recorded cultural sites and assess the potential for unrecorded sites within the study area. The standard for considering a cultural property as significant is whether it meets the criteria for listing on the National Register of Historic Places (NRHP). The initial criterion for such listing is an age of 50 or more years. Beyond age, a property must retain integrity and be associated with significant historic trends, historic persons, building styles and craftsmanship, or the property must have the potential to provide significant information about the past.

Merjent reviewed and followed the published guidelines for conducting cultural resources literature reviews in Minnesota. The Minnesota State Historic Preservation Office (SHPO), located in the Minnesota History Center in St. Paul, maintains the state's prehistoric and historic archaeological site files, historic standing structure inventory files, and field survey reports.

Merjent examined the current topographic maps and aerial photographs to understand the modern land use of the study area and to provide a baseline for examining the historic maps and documents. Merjent also examined primary sources that have been digitized and made available online, such as the original land survey maps and the original land patent records.

In September 2014 Merjent Cultural Resource Specialist Dan Born examined site files maintained at the Minnesota State Historic Preservation Office (SHPO).

Previously Recorded Archaeological Resources

Merjent identified eight (8) previously recorded archaeological sites in the study area.

Site Number/Site Name/Site Type	County, Location (TRS)	Site Significance	Location to Project
21HB0046/Hubbard Mill/Historic-period industry	Hubbard, 139N/34W/20	Unknown	North of project terminus at existing Great River Energy Hubbard Substation
21HB0047(e)/Hubbard Mounds/Pre-contact earthworks	Hubbard, 139N/34W/20	Protected under MN 307	North of project terminus at existing Great River Energy Hubbard Substation
21HB0085/Pre-contact single artifact	Hubbard, 139N/34W/36	Unknown	South of project; adjacent to existing MP 250 kV DC line
21HB0086/Pre-contact single artifact	Hubbard, 139N/34W/36	Unknown	South of project; adjacent to existing MP 250 kV DC line
21HB0087/Pre-contact lithic scatter	Hubbard, 139N/34W/36	Unknown	South of project; adjacent to existing MP 250 kV DC line
21HB0089/Pre-contact artifact scatter	Hubbard, 139N/34W/36	Unknown	South of project; adjacent to existing MP 250 kV DC line
21WD0025/Heino/Pre-contact artifact scatter	Wadena, 137N/35W/15	Unknown	West of single circuit 115 kV transmission line
21WDj/ Pre-contact earthworks	Wadena (Hubbard), 139N/35W/35 (138N/35W/2)	Unknown	South of project

Six of the eight archaeological sites are in Hubbard County and **none overlap the proposed Menahga Area Project.** The available information suggests that the locales crossed by the proposed Menahga Area Project in southern Hubbard and northern Wadena counties have a moderate to high potential to intersect currently non-recorded pre-contact archaeological sites, including artifact scatters and earthworks. Such resources are generally considered to have a greater potential to be significant; in addition, pre-contact earthworks are almost always protected under the Minnesota Private Cemeteries Act (MN 307.08). Two of the eight sites are in Wadena County (with one overlapping into Hubbard County, namely 21WDj) and suggests moderate potential to cross similar sites along the balance of the Menahga Area Project. Extant sites are more likely in areas not disturbed by historic and modern (non-agricultural) development.

Previously Recorded Standing Historic Structures

Merjent identified five previously recorded standing historic structures in the study area.

Site Number/Site Name/Site Type	County, Location (TRS)	Site Significance	Likely Location to Project
HB-HUB-002/Hubbard School	Hubbard, 139N/34W/20	Unknown	North of project
HB-HUB-003/United Methodist Church	Hubbard, 139N/34W/20	Unknown	North of project
HB-HUB-005/Bridge No. 8219	Hubbard, 139N/34W/30	Unknown	North of project
HB-SRT-002/Straight River Township Hall	Hubbard, 139N/35W/28	Unknown	North of project
WD-BLB-001/Blueberry Township School, Town Hall	Wadena, 139N/34W/36	Unknown	West of project

Five of the six previously recorded historic structures are in Hubbard County and **none appear to overlap the proposed Menahga Area Project**. The sixth previously recorded historic structure appears to be adjacent west of the search area for the proposed Great River Energy Blueberry Substation near the existing Menahga Substation. All six structures were inventoried during a 1986 county survey; it is unlikely that other structures in the vicinity have become notable since that time, at least enough to warrant additional inventory along the project alignment.

Conclusions

Merjent recommends that there will be no adverse impact on known or suspected cultural resources as a result of this project. However, given the relatively high site density along the northern reaches of Menahga Area Project alignment, Merjent recommends that Great River Energy sponsor an archaeological resources inventory effort to identify significant sites heretofore unknown, as well as any protected under MN 307.08, that could represent a delay to the project permitting or construction schedule. This inventory should include enough information to support site-specific significance assessments and inform location-specific routing decisions. Merjent believes that SHPO will share this opinion given the relatively high archaeological site density in the vicinity.

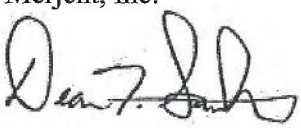
Given public and private development over the almost 30-year period since the 1985 survey, it is unlikely that additional structures would be identified that have not already had the opportunity. In addition, if these five or any other structures were truly significant, it is likely that previous public and private

developers over the past 30 years would have been tasked with evaluating the potential adverse effects of their projects. Merjent recommends that no architectural review is appropriate for this project.

Merjent recommends that if construction plans are altered to affect areas that were not previously surveyed or disturbed, these locations should be examined for cultural resources. Further, if human remains are encountered during construction activities, all ground disturbing activity must cease and local law enforcement must be notified per MN 307.08.

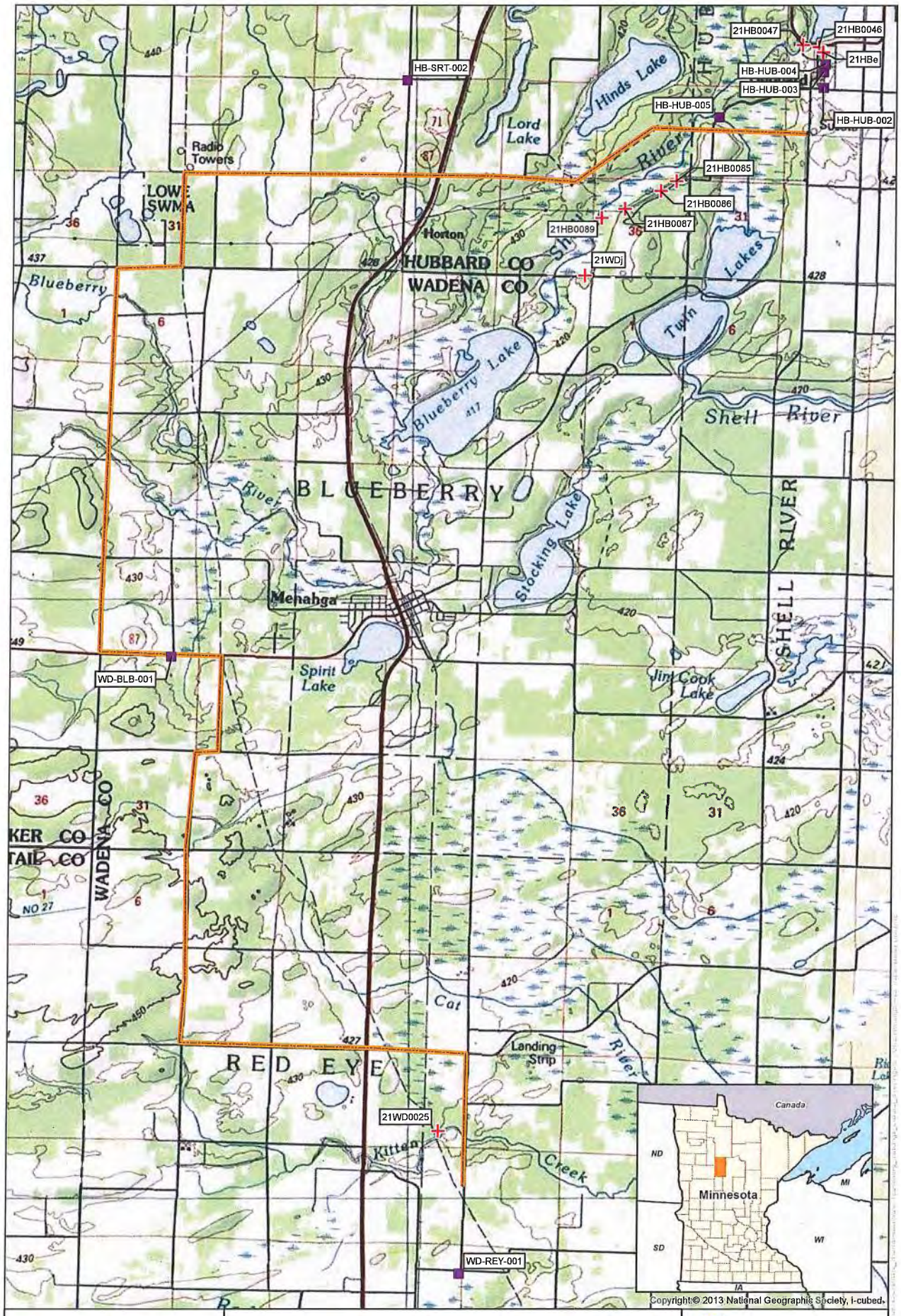
Please contact me at 612.924.3984 or Mike Madson at 612.834.3074 if you have questions.

Sincerely,
Merjent, Inc.



Dean T. Sather, MA, RPA
Sr. Cultural Resource Specialist

Cc: Mike Madson, Merjent



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1 in = 1 miles

N W E S

Emerjent

Figure 1

GRE - Menahga Area 115 kV Transmission Project

Previously Identified Cultural Resources within One Mile

Hubbard, Wadena and Becker Counties, Minnesota

Proposed Transmission Line

Previously Identified Archaeological Site

Previously Identified Architectural/Historic Site

Minnesota
Historical Society
STATE HISTORIC PRESERVATION OFFICE

October 22, 2014

Ms. Carole Schmidt
Great River Energy
12300 Elm Creek Blvd
Maple Grove, MN 55369-4718

RE: Proposed Great River Energy Menahga Area 115 kV Transmission Project
Hubbard, Wadena and Becker Counties
SHPO Number: 2015-0028

Dear Ms. Schmidt:

Thank you for the opportunity to 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.

Due to the nature and location of the proposed project, we concur with your consultant's recommendation that a Phase I archaeological survey be completed. The survey must meet the requirements of the Secretary of the Interior's Standards for Identification and Evaluation, and should include an evaluation of National Register eligibility for any properties that are identified.

We will reconsider the need for survey if the project area can be documented as previously surveyed or disturbed. Any previous survey work must meet contemporary standards. **Note:** plowed areas and right-of-way are not automatically considered disturbed. Archaeological sites can remain intact beneath the plow zone and in undisturbed portions of the right-of-way.

Please note that this comment letter does not address the requirements of Section 106 of the National Historic Preservation Act of 1966 and 36CFR800, procedures of the Advisory Council on Historic Preservation for the protection of historic properties. If this project is considered for federal assistance, or requires a federal license or permit, it should be submitted to our office by the responsible federal agency.

If you have any questions regarding our review of this project, please contact Kelly Gragg-Johnson at (651) 259-3455.

Sincerely,

Sarah J. Beimers

Sarah J. Beimers, Manager
Government Programs and Compliance

cc: Brad Johnson, USACE

GREAT RIVER ENERGY®

12300 Elm Creek Boulevard • Maple Grove, Minnesota 55369-4718 • 763-445-5000 • Fax 763-445-5050 • greatriverenergy.com

September 15, 2014

Mr. Andrew Horton, Habitat Conservation Biologist
United States Department of the Interior
Fish and Wildlife Service
Twin Cities Field Office
4101 American Blvd. East
Bloomington, MN 55425-1665

RE: Proposed Menahga Area 115 kV Transmission Project
Hubbard, Wadena and Becker Counties

Dear Mr. Horton:

Great River Energy is currently gathering data to be used in preparation of regulatory applications necessary to obtain approvals and permits for the construction of the proposed Menahga Area 115 kilovolt (kV) Transmission Project in Hubbard, Wadena and Becker counties (see enclosed fact sheet and map). Great River Energy and Minnesota Power intend to seek a Certificate of Need and a Route Permit for the Project from the Minnesota Public Utilities Commission (Commission).

The proposed electric transmission improvement project in the Menahga area will serve two primary purposes:

- Strengthen the electric transmission system in the Menahga area, as the existing 34.5 kV system serving the area is becoming outdated and is reaching its maximum capacity.
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Menahga, MN 56464

The Fish and Wildlife Service website list for threatened and endangered species includes the Northern long-eared bat (proposed as endangered) in all three counties. Great River Energy does not believe the proposed transmission project will affect this species, but should it be listed, guidance associated with the bat will be considered.

The DNR Rare features database indicates the presence of the cowbane, kittentails and Blanding's turtles in the project area (see attached maps). These species will be evaluated further once a route is permitted, but we do not anticipate impacts to these species from construction of the project.

Great River Energy is requesting concurrence or information on the possible effects of the proposed project on any listed or proposed threatened or endangered species and designated or proposed critical habitat that may be present in the project area.

We would appreciate receiving any written comments from your office by Friday, October 17, 2014. If you have any questions about this proposed project, please contact me at (763) 445-5214. If you wish to respond by e-mail, my address is cschmidt@grenergy.com.

Thank you for your attention to this important project.

Sincerely,

GREAT RIVER ENERGY

Carole L. Schmidt

Carole L. Schmidt
Supervisor, Transmission Permitting and Compliance

Enclosures: Fact Sheet/Project Map, Rare Features Maps

s:\lega\environmental\transmission\projects\Menahga Area Project\Agency Correspondence\MenahgaFWSltr.doc

Menahga Area 115 kV Transmission Project

Great River Energy
12300 Elm Creek Blvd
Maple Grove, MN 55369-4718
1-888-521-0130
www.greatriverenergy.com

Todd-Wadena Electric Cooperative
550 Ash Avenue NE
Wadena, MN 56482
1-800-321-8932
www.toddwadena.coop

Project Need

Great River Energy proposes a new overhead 115 kilovolt (kV) transmission line project (Menahga Area Project) in Hubbard, Wadena and Becker Counties to relieve overload issues on the transmission system in the area and to serve a new pumping station to be built by Minnesota Pipe Line Company (MPL). The Menahga Area Project would:

- Strengthen the Menahga area electric transmission system, as the existing 34.5 kV system serving the area is becoming outdated and reaching its maximum capacity.
- Provide electric service to the proposed new Todd-Wadena Electric Cooperative (Todd-Wadena) "Red Eye" distribution substation that would provide electric power to a new pipeline pumping station proposed by MPL.

Project Description

The Menahga Area Project (see map on back) would consist of:

- An east-west section between the existing Great River Energy Hubbard Substation and the existing Minnesota Power Pipeline Substation, of which approximately 4.5 miles will be double-circuit 115 kV line (see top photo) and approximately 2.5 miles will be single-circuit 115 kV line (see middle photo).
- A generally north-south section of primarily single-circuit 115 kV line (approximately 15.5 miles) between the existing Minnesota Power Pipeline Substation and the proposed new Red Eye distribution substation.
- The proposed new Great River Energy Blueberry Substation in the vicinity of the existing Menahga Substation; the proposed new Todd-Wadena Red Eye Substation; conversion of Todd-Wadena's existing Menahga 34.5 kV distribution substation to operate at 115 kV; and modifications to the existing Minnesota Power Pipeline Substation.

The proposed transmission line would generally require a 100-foot-wide right-of-way, 50 feet on each side of the centerline. The majority of the project would use single round wood poles ranging in height from 60 - 90 feet above ground and a distance between poles of 275 - 400 feet. Poles with guy wires/anchors, two-pole H-frame or steel poles may be required in some areas as line angles, soil conditions, or crossing of existing utilities necessitate. Some segments of the line would carry lower-voltage distribution underbuild (see bottom photo).

Typical 115 kV Wood Double Circuit Structure

Typical 115 kV Wood Single Circuit Structure

Typical 115 kV Wood Structure with Distribution Underbuild

Permitting

The Minnesota Public Utilities Commission (Commission) must issue a Certificate of Need (CON) and Route Permit before project construction can proceed. Great River Energy and Minnesota Power will submit a combined CON/Route Permit application containing relevant information that will help the Commission determine if there is sufficient need for the project and evaluate the proposed route and any alternative routes brought forth by the public. At the conclusion of the permitting process, the Commission will determine the final location of the proposed transmission facilities.

The public and regulatory agencies will have numerous opportunities to provide input during the CON and Route Permitting process, which is conducted and facilitated by Commission and Minnesota Department of Commerce (DOC) staff. Public meetings will be held and other opportunities will be provided for collecting comments and responses. The DOC will prepare an Environmental Assessment document for the project.

Easements/Trees

Once project approval is granted by the Commission, Great River Energy will contact landowners to present an easement and offer of compensation. Most poles will be located on private property, although the majority of the right-of-way can continue to be used for agricultural cultivation, underground utilities, fencing and access drives. During acquisition, information is shared on tree removal, access and construction practices. Removal of trees and vegetation in the right-of-way will be necessary for safety and maintenance.

Project Schedule

Project contact and/or notifications	Fall 2014
State permitting	Early 2015 – early 2016
Survey/design	Summer 2015 – Spring 2016
Easement acquisition/right-of-way permits	Spring 2016 – Fall 2016
Transmission line construction	Fall 2016 – Spring 2017
Energization	Spring 2017

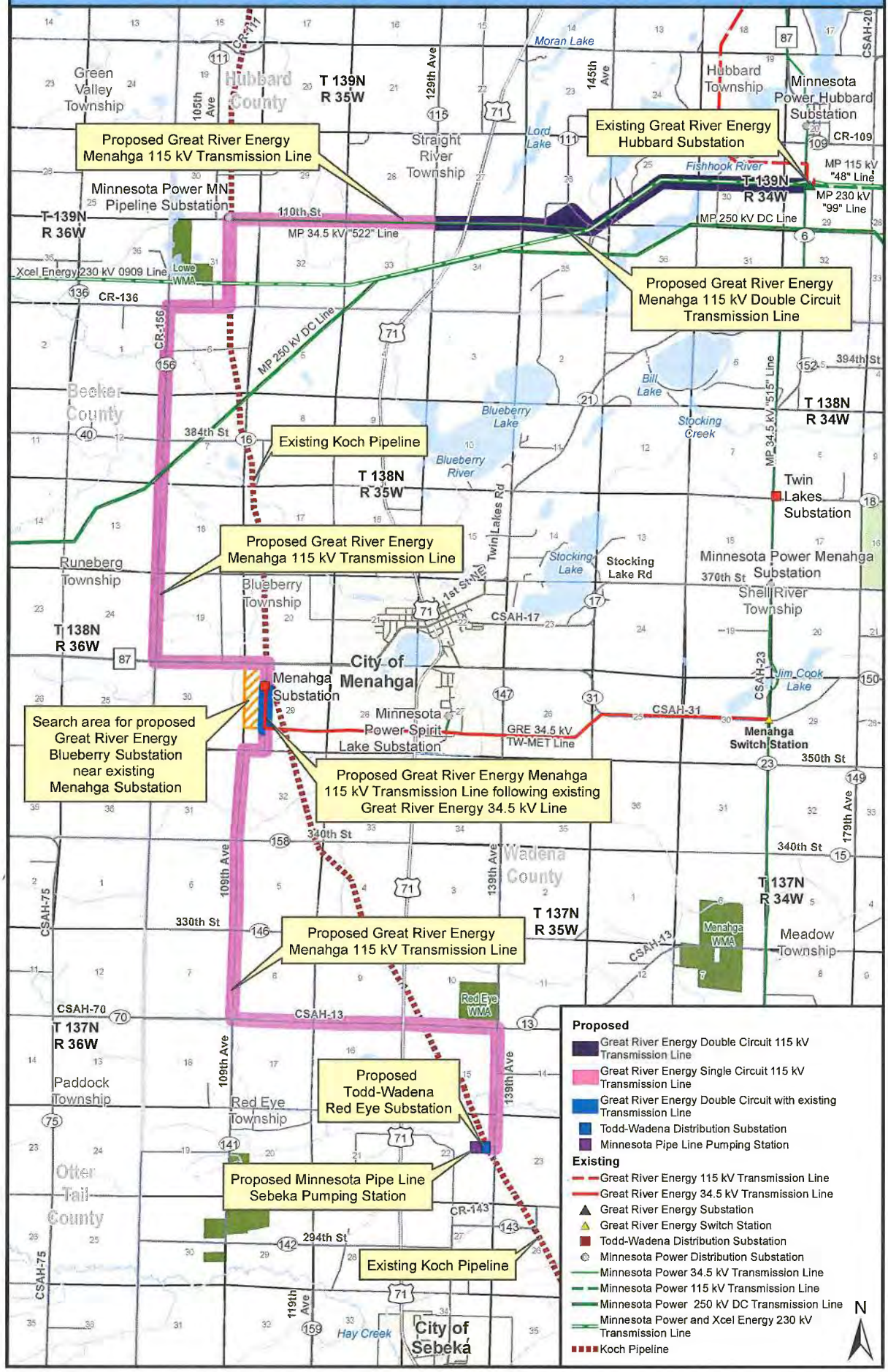
For project updates and information, visit greatriverenergy.com/Menahga or contact:

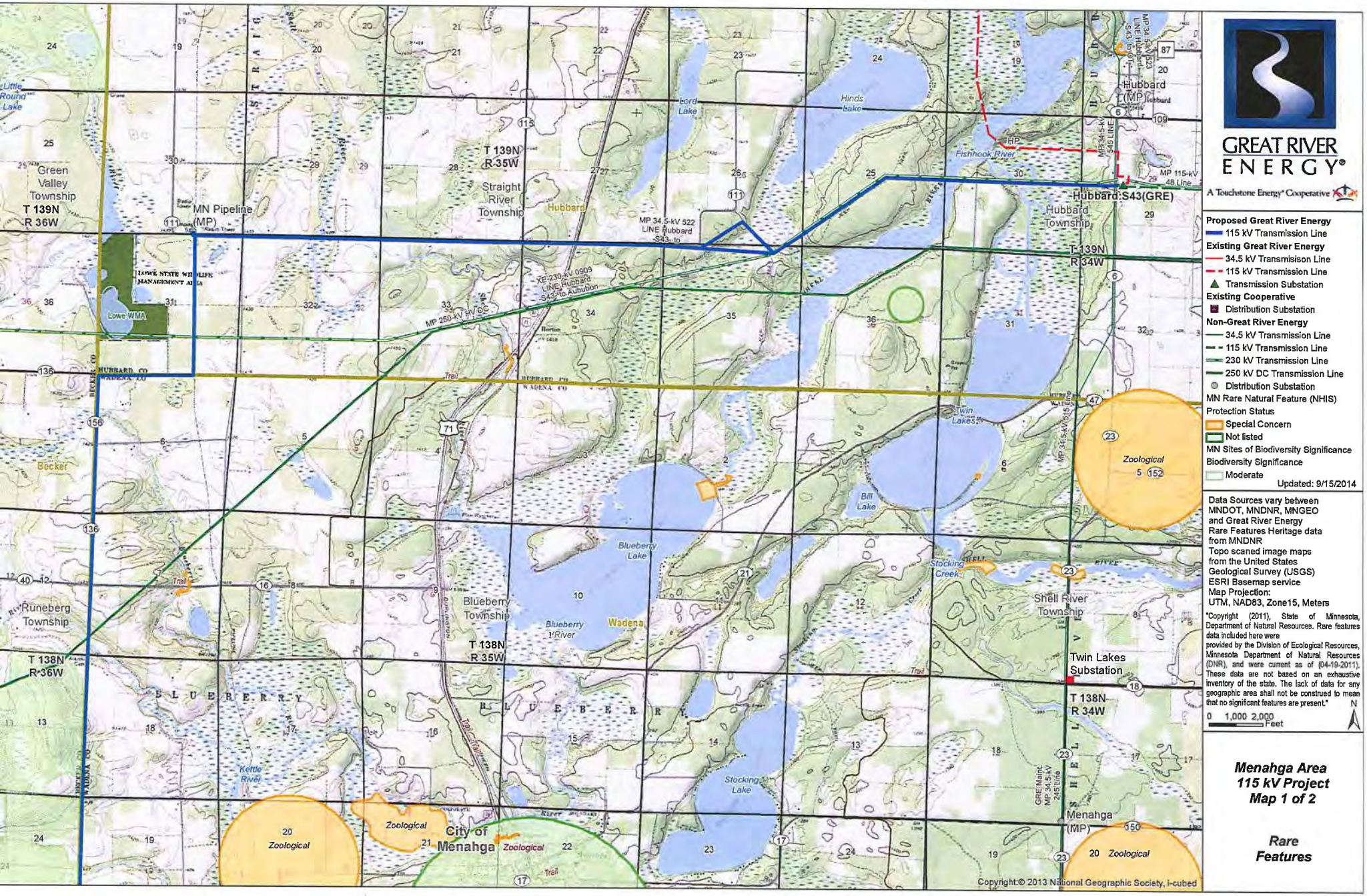
Michelle Lommel
Sr. Field Representative
Great River Energy - Land Rights Department
(763) 445-5977 or 1-888-521-0130
mlommel@grenergy.com

Carole Schmidt
Supervisor, Transmission Permitting and Compliance
Great River Energy – Environmental Services Department
763-445-5214
cschmidt@grenergy.com

Date last revised: 9/11/2014

Preliminary Project Study Area





GREAT RIVER ENERGY®

A Touchstone Energy® Cooperative

Proposed Great River Energy
- 115 kV Transmission Line

Existing Great River Energy
- 34.5 kV Transmisison Line
- 115 kV Transmission Line
- Transmission Substation

Existing Cooperative
- Distribution Substation

Non-Great River Energy
- 34.5 kV Transmission Line
- 115 kV Transmission Line
- 230 kV Transmission Line
- 250 kV DC Transmission Line
- Distribution Substation

MN Rare Natural Feature (NHIS)

Protection Status
- Special Concern
- Not listed

MN Sites of Biodiversity Significance

Biodiversity Significance
- Moderate

Updated: 9/15/2014

Data Sources vary between MNDOT, MNDNR, MNGEO and Great River Energy
Rare Features Heritage data from MNDNR
Topo scaned image maps from the United States Geological Survey (USGS)
ESRI Basemap service
Map Projection:
UTM, NAD83, Zone15, Meters

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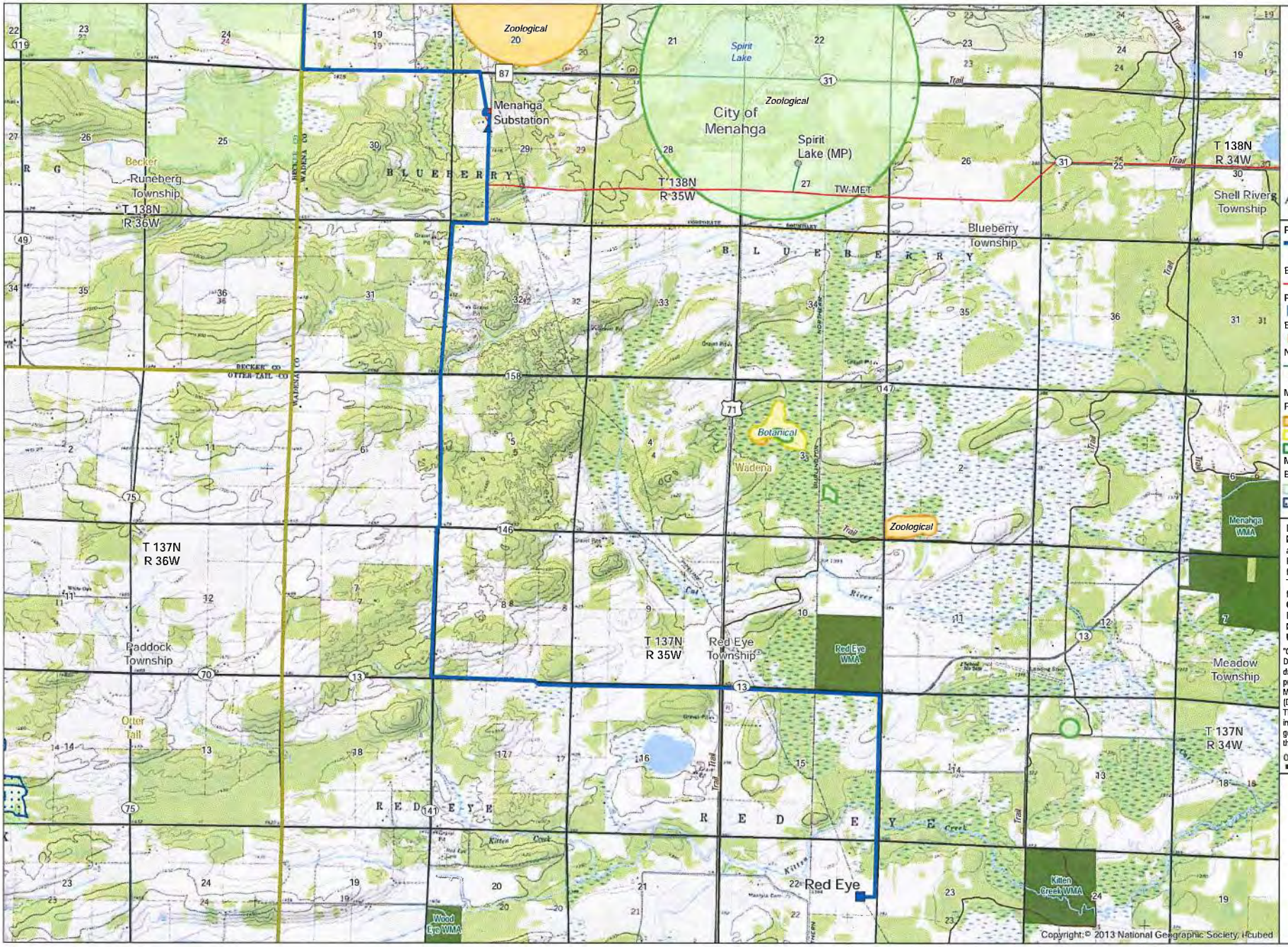
Menahga Area 115 kV Project Map 1 of 2

Rare Features



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MN Rare Natural Feature (NHIS)
Protection Status
Special Concern
Threatened
Not listed
MN Sites of Biodiversity Significance
Biodiversity Significance
Moderate
MN Native Plant Community
Updated: 9/15/2014

Data Sources vary between MNDOT, MNDNR, MNGEO and Great River Energy
Rare Features Heritage data from MNDNR
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Map Projection:
UTM, NAD83, Zone15, Meters

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Menahga Area 115 kV Project Map 2 of 2

Rare Features

GREAT RIVER ENERGY®

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September 29, 2014

Mr. Andrew Horton, Habitat Conservation Biologist
United States Department of the Interior
Fish and Wildlife Service
Twin Cities Field Office
4101 American Blvd. East
Bloomington, MN 55425-1665

RE: Proposed Menahga Area 115 kV Transmission Project
Hubbard, Wadena and Becker Counties

Dear Mr. Horton:

Great River Energy is currently gathering data to be used in preparation of regulatory applications necessary to obtain approvals and permits for the construction of the proposed Menahga Area 115 kilovolt (kV) Transmission Project in Hubbard, Wadena and Becker counties (see enclosed fact sheet and map). Great River Energy and Minnesota Power intend to seek a Certificate of Need and a Route Permit for the Project from the Minnesota Public Utilities Commission (Commission).

In a letter sent to you dated 9-15-14, the rare features in the Project area were erroneously identified as Blanding's turtles, cowbane and kittentails. The correct rare features are Greater Prairie Chicken, Yellow Rail, and Hognose Snake. These species will be evaluated further once a route is permitted, but we do not anticipate impacts to these species from construction of the project. The enclosures submitted with the original letter remain the same.

Sincerely,

GREAT RIVER ENERGY

Carole L. Schmidt

Carole L. Schmidt
Supervisor, Transmission Permitting and Compliance

Enclosures: Fact Sheet/Project Map, Rare Features Maps

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Schmidt, Carole GRE-MG

From: Horton, Andrew [andrew_horton@fws.gov]
Sent: Friday, October 17, 2014 12:48 PM
To: Schmidt, Carole GRE-MG
Subject: Menahga Area 115 kV Transmission Project

Ms. Schmidt,

I have reviewed the proposed transmission line located in Hubbard, Wadena and Becker County, Minnesota. As you have stated, the northern long-eared bat (*Myotis septentrionalis*) is proposed to be listed species in those counties. We have no known occurrence records in close proximity to the proposed action area, however, summer roosting habitat may be present. If removal of suitable habitat is anticipated after final listing and between April 1 and September 30, consultation may be necessary.

Construction of the single-circuit 115 kV line from the existing Minnesota Power Pipeline Substation to the proposed new Todd-Wadena Red Eye distribution substation passes in close proximity to USFWS interest property. The Marrs Farm Services Agency (FSA) easement and Red Eye Wildlife Management Area are located in the SE 1/4 of Section 10, Township 137N, Range 35W. Any new Right of Way (ROW) through these properties should be avoided. We recommend that if the final route is selected that utilizes the existing ROW adjacent to these properties, that bird flight diverters be placed on the transmission line and raptor perch deterrents be place on power poles adjacent to those properties.

If project plans change, additional information on listed or proposed species becomes available, or new species are listed that may be affected by the project, consultation should be reinitiated. This concludes our review of the proposed construction at the above location. If you have any further endangered species questions, please contact me at (612) 725-3548 x2208.

Andrew Horton
Twin Cities Ecological Services Field Office
U.S. Fish and Wildlife Service
4101 American Blvd East
Bloomington, MN 55425-1665
(612) 725-3548 ext. 2208

GREAT RIVER ENERGY®

12300 Elm Creek Boulevard • Maple Grove, Minnesota 55369-4718 • 763-445-5000 • Fax 763-445-5050 • greatriverenergy.com

September 15, 2014

Ms. Lisa Joyal
Minnesota Department of Natural Resources
Natural Heritage and Nongame Research Program
500 Lafayette Road, Box 25
St. Paul, MN 55155

RE: Proposed Menahga Area 115 kV Transmission Project
Hubbard, Wadena and Becker Counties

Dear Ms. Joyal:

Great River Energy is currently gathering data to be used in preparation of regulatory applications necessary to obtain approvals and permits for the construction of the proposed Menahga Area 115 kilovolt (kV) Transmission Project in Hubbard, Wadena and Becker counties (see enclosed fact sheet and map). Great River Energy and Minnesota Power intend to seek a Certificate of Need and a Route Permit for the Project from the Minnesota Public Utilities Commission (Commission).

The proposed electric transmission improvement project in the Menahga area will serve two primary purposes:

- Strengthen the electric transmission system in the Menahga area, as the existing 34.5 kV system serving the area is becoming outdated and is reaching its maximum capacity.
- Provide electric service to the proposed new Todd-Wadena Electric Cooperative (Todd-Wadena) Red Eye distribution substation that would provide electric power to a new pipeline pumping station proposed by Minnesota Pipe Line Company (MPL).

The Project will include:

- Construction of an east-west transmission line between the existing Great River Energy Hubbard Substation and the existing Minnesota Power Pipeline Substation, of which approximately 4.5 miles will be double-circuit 115 kV line and approximately 2.5 miles will be single-circuit 115 kV line.
- Construction of a generally north-south transmission line between the existing Minnesota Power Pipeline Substation and the proposed new Todd-Wadena Red Eye distribution substation, which will be approximately 15.5 miles of primarily single-circuit 115 kV line.
- Construction of the proposed new Great River Energy Blueberry Substation in the vicinity of the existing Menahga Substation and the new Todd-Wadena Red Eye Substation to serve the new MPL pumping station; and modifications to the existing Todd-Wadena Menahga Substation and the Minnesota Power Pipeline Substation.

If you would like to learn more about the project, an open house public meeting for the project will be held on:

September 30, 2014

4-7 p.m.

at:

Menahga Senior Center
19 Cedar Ave. SE
Menahga, MN 56464

The proposed transmission line will span several DNR public waters (see attached maps). Great River Energy will apply to the DNR Division of Lands and Minerals for a license to cross those waters.

There are a few rare features in the project area; primarily Blanding's turtles, cowbane and kittentails (see attached maps). These features will be evaluated in detail once a route is permitted. The proposed line is near the Red Eye WMA, but it is proposed to be on the opposite side of the road from the WMA.

Great River Energy is requesting information on the possible effects of the proposed project on these features and other important natural resources that occur in the project area. Please advise if there is specific guidance relative to the rare features in the area.

We would appreciate receiving any written comments from your office by Friday, October 17, 2014.

If you have any questions about this proposed project, please contact me at (763) 445-5214. If you wish to respond by e-mail, my address is cschmidt@grenergy.com. Thank you for your attention to this important project

Sincerely,

GREAT RIVER ENERGY

Carole L. Schmidt

Carole L. Schmidt
Supervisor, Transmission Permitting and Compliance

Enclosures: Fact Sheet/Project Map, PWI Maps, Rare Features Map

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Menahga Area 115 kV Transmission Project

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Typical 115 kV Wood Double Circuit Structure

Typical 115 kV Wood Single Circuit Structure

Typical 115 kV Wood Structure with Distribution Underbuild

Permitting

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Project Schedule

Project contact and/or notifications	Fall 2014
State permitting	Early 2015 – early 2016
Survey/design	Summer 2015 – Spring 2016
Easement acquisition/right-of-way permits	Spring 2016 – Fall 2016
Transmission line construction	Fall 2016 – Spring 2017
Energization	Spring 2017

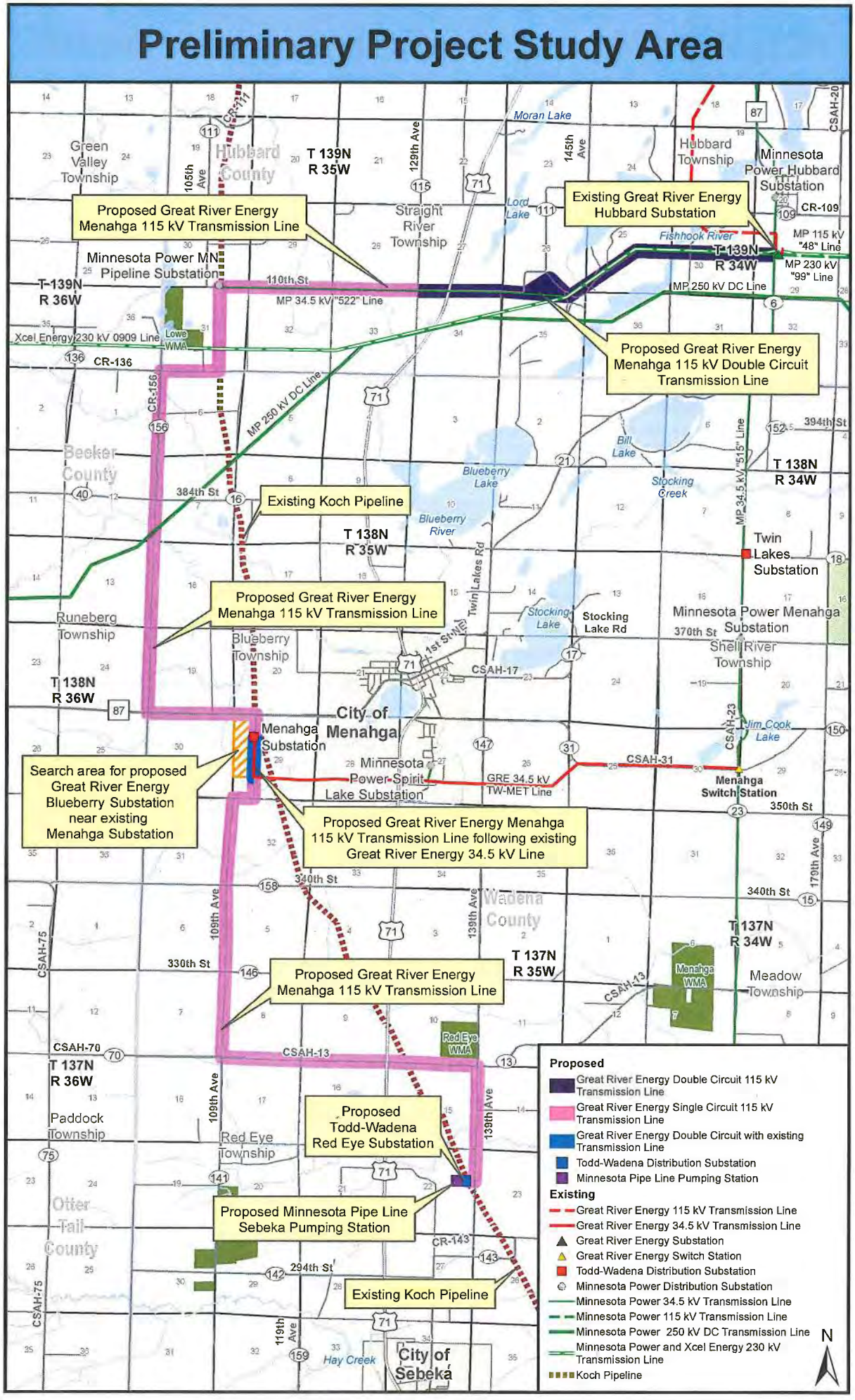
For project updates and information, visit greatriverenergy.com/Menahga or contact:

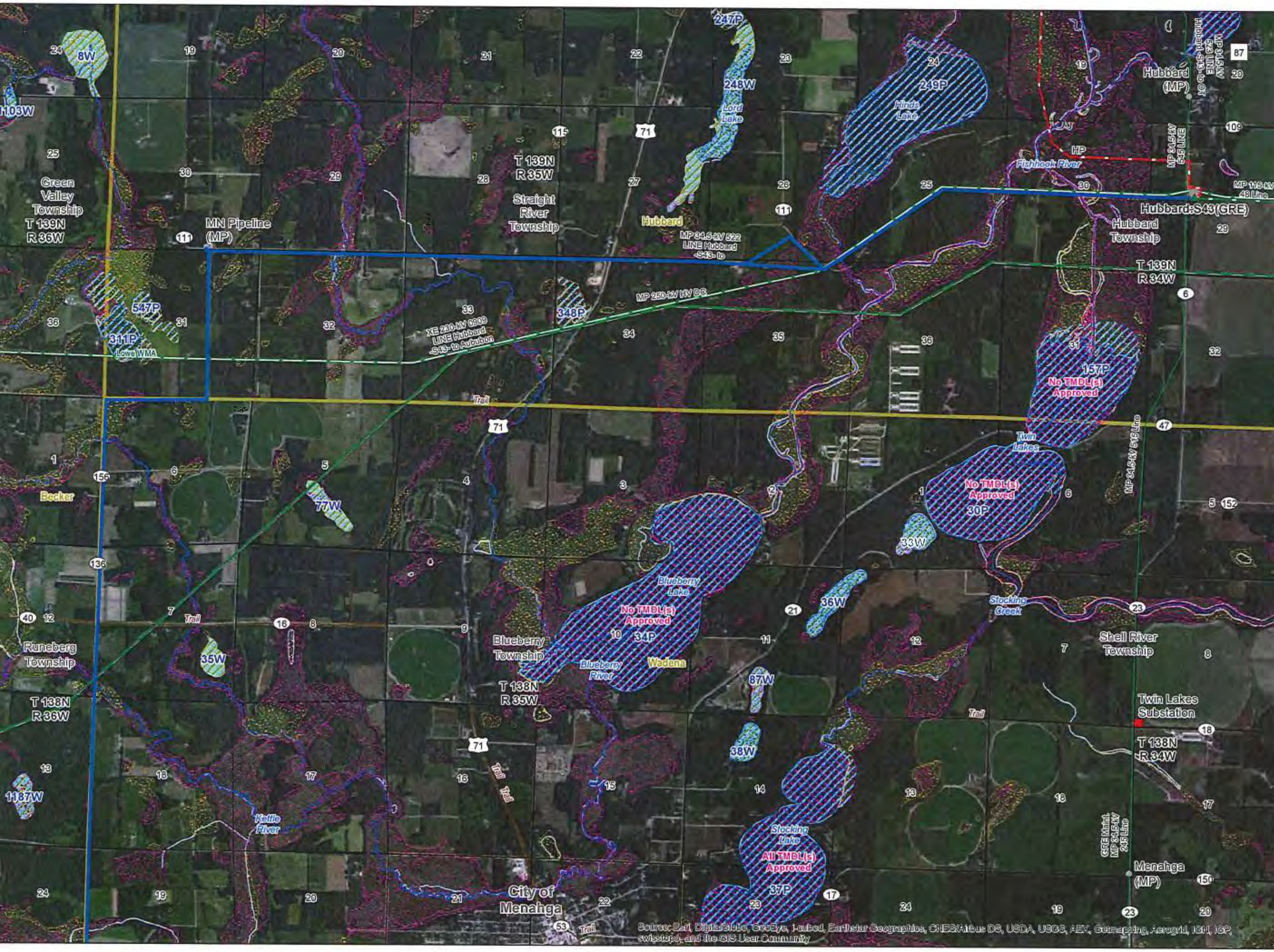
Michelle Lommel
Sr. Field Representative
Great River Energy - Land Rights Department
(763) 445-5977 or 1-888-521-0130
mlommel@grenergy.com

Carole Schmidt
Supervisor, Transmission Permitting and Compliance
Great River Energy – Environmental Services Department
763-445-5214
cschmidt@grenergy.com

Date last revised: 9/11/2014

Preliminary Project Study Area





GREAT RIVER ENERGY®

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Proposed Great River Energy
- 115 kV Transmission Line

Existing Great River Energy
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- Transmission Substation

Existing Cooperative
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Non-Great River Energy
- 34.5 kV Transmission Line
- 115 kV Transmission Line
- 230 kV Transmission Line
- 250 kV DC Transmission Line
- Distribution Substation

NWI Wetlands
- Freshwater Emergent Wetland
- Freshwater Forested/
- Freshwater Pond
- Lake
- Riverine

MN Public Waters Inventory (PWI)
- Public Water Wetland
- Public Water Basin
- MN Public Watercourse
- MN MPCA Impaired Lakes

Updated: 9/15/2014

Data Sources vary between MNDOT, MNDNR, MNGEO and Great River Energy

Aerial Imagery form: ESRI World Imagery Basemap service

Map Projection: UTM, NAD83, Zone15, Meters

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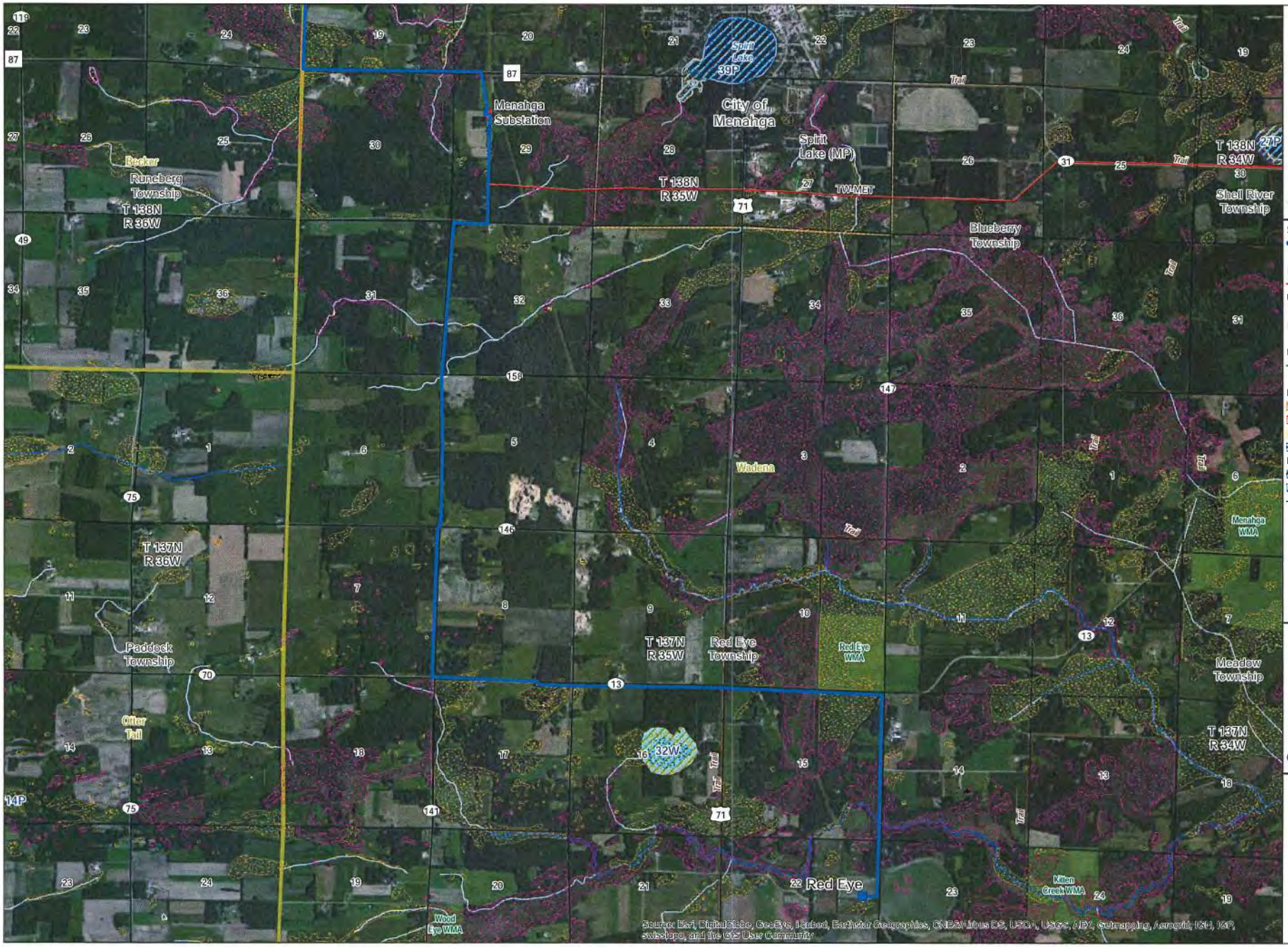
Menahga Area 115 kV Project Map 1 of 2

NWI Wetlands and Hydrologic Features



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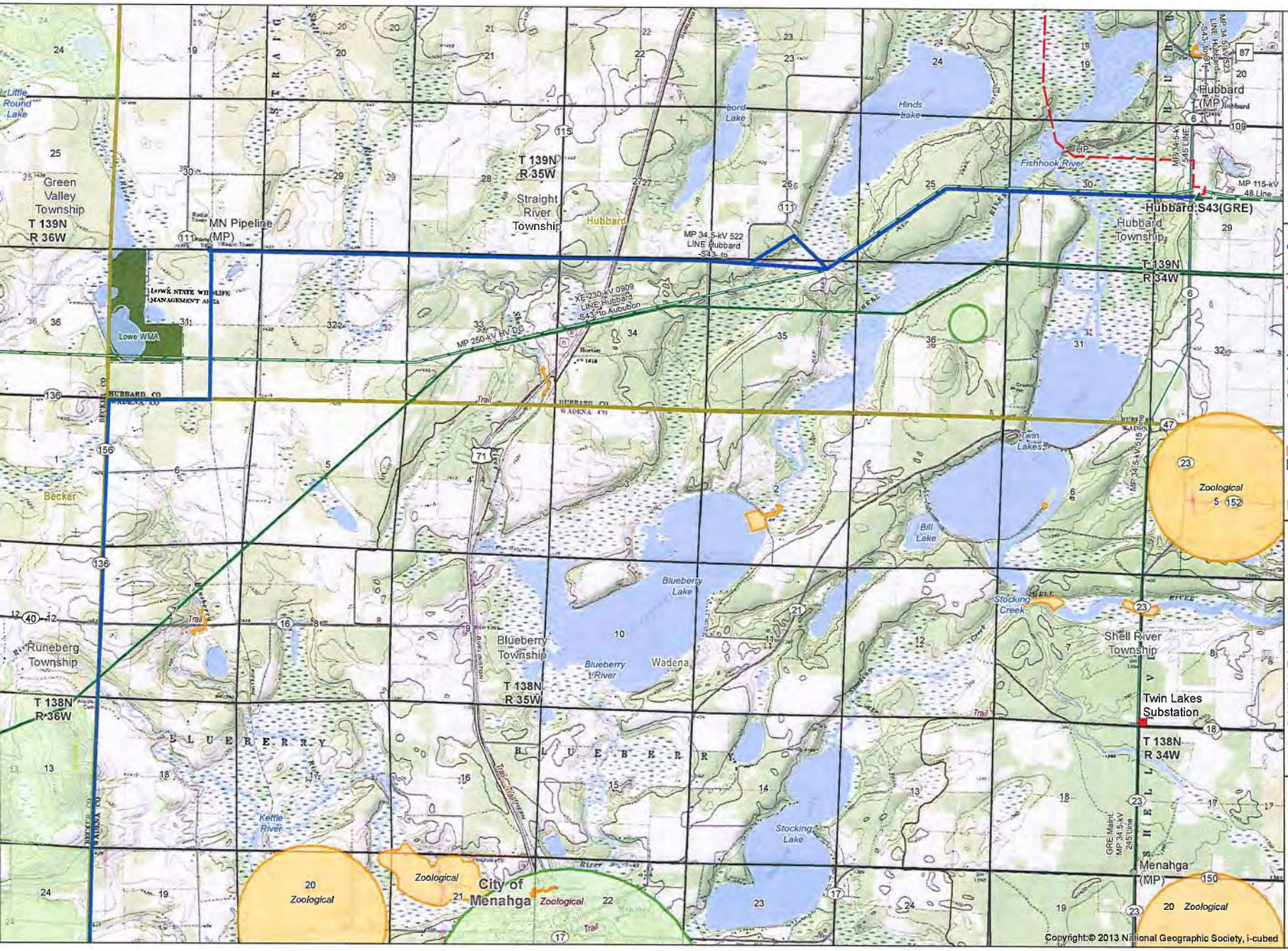
Menahga Area
115 kV Project
Map 2 of 2

NWI Wetlands and Hydrologic Features



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MN Rare Natural Feature (NHIS)

Protection Status
- Special Concern
- Not listed

MN Sites of Biodiversity Significance

Biodiversity Significance
- Moderate

Updated: 9/15/2014

Data Sources vary between MNDOT, MNDNR, MNGEO and Great River Energy
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Menahga Area 115 kV Project Map 1 of 2

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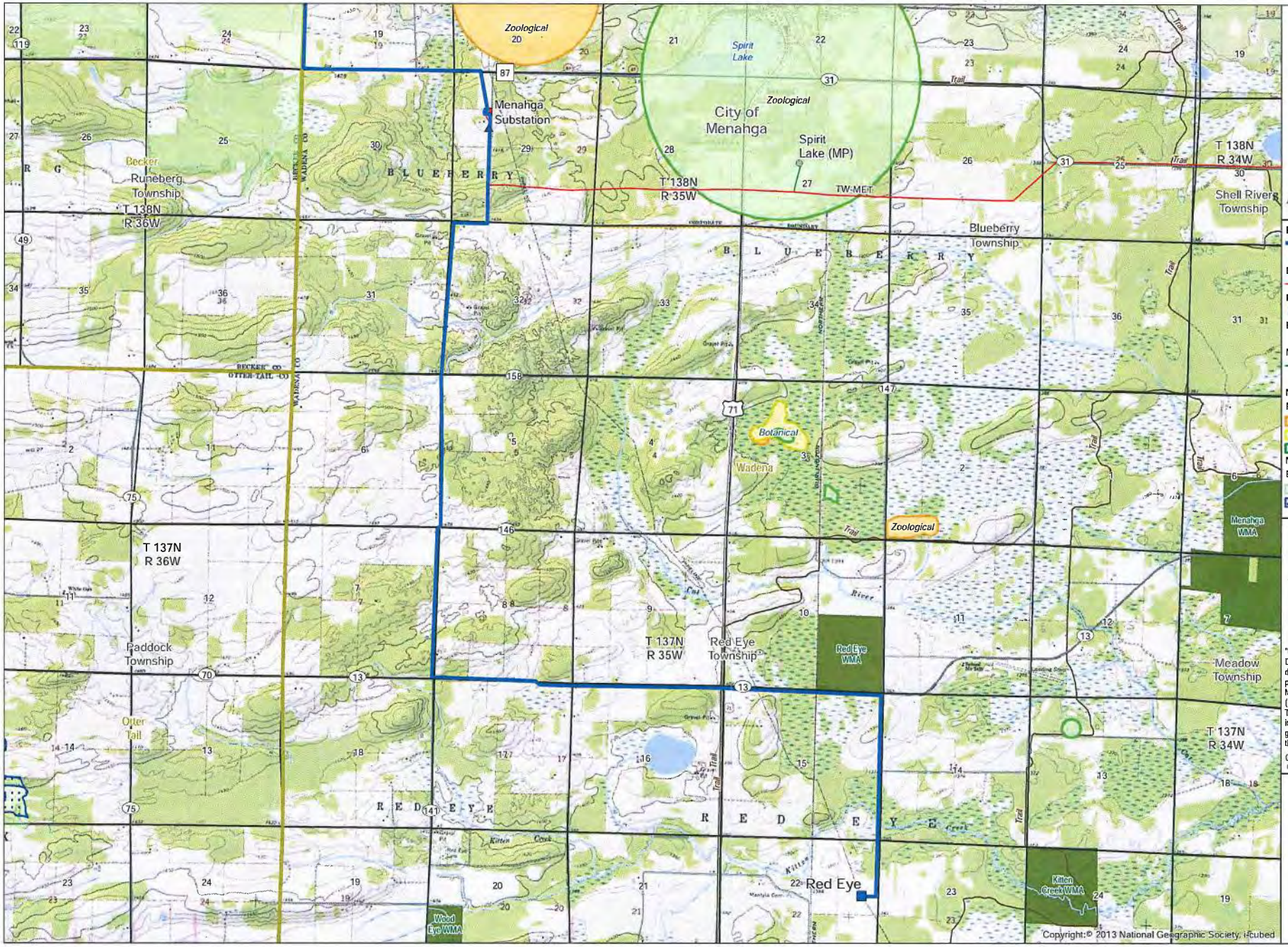

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"Copyright (2011), State of Minnesota, Department of Natural Resources. Rare features data included here were provided by the Division of Ecological Resources, Minnesota Department of Natural Resources (DNR), and were current as of (04-19-2011). These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present."

N

0 1,000 2,000 Feet

Menahga Area
115 kV Project
Map 2 of 2

Rare Features

GREAT RIVER ENERGY®

12300 Elm Creek Boulevard • Maple Grove, Minnesota 55369-4718 • 763-445-5000 • Fax 763-445-5050 • greatriverenergy.com

September 29, 2014

Ms. Lisa Joyal
Minnesota Department of Natural Resources
Natural Heritage and Nongame Research Program
500 Lafayette Road, Box 25
St. Paul, MN 55155

RE: Proposed Menahga Area 115 kV Transmission Project
Hubbard, Wadena and Becker Counties

Dear Ms. Joyal:

Great River Energy is currently gathering data to be used in preparation of regulatory applications necessary to obtain approvals and permits for the construction of the proposed Menahga Area 115 kilovolt (kV) Transmission Project in Hubbard, Wadena and Becker counties (see enclosed fact sheet and map). Great River Energy and Minnesota Power intend to seek a Certificate of Need and a Route Permit for the Project from the Minnesota Public Utilities Commission (Commission).

In a letter sent to you dated 9-15-14, the rare features in the Project area were erroneously identified as Blanding's turtles, cowbane and kittentails. The correct rare features are Greater Prairie Chicken, Yellow Rail, and Hognose Snake. The enclosures submitted with the original letter remain the same.

Great River Energy has assessed potentials impacts to these features and has determined that based on the distance between the proposed Project and these features, no impacts are anticipated. The proposed transmission line is near some areas of moderate biodiversity and the Red Eye WMA, but it is proposed to be on the opposite side of the road from these features and no impacts are anticipated.

Great River Energy is requesting concurrence from the DNR regarding our assessment of impacts to rare features in the Project area. Please advise if there is specific guidance relative to the particular rare features in the area. Once a route permit is issued, Great River Energy will evaluate these features in detail and coordinate with the DNR if necessary.

Sincerely,

GREAT RIVER ENERGY

Carole L. Schmidt

Carole L. Schmidt
Supervisor, Transmission Permitting and Compliance

s:\lega\environmental\transmission\projects\Menahga Area Project\Agency Correspondence\MenahgaDNRltr2.doc

Schmidt, Carole GRE-MG

From: Joyal, Lisa (DNR) [Lisa.Joyal@state.mn.us]
Sent: Wednesday, December 17, 2014 3:34 PM
To: Schmidt, Carole GRE-MG
Subject: Menahga Area 115 kV Transmission Line
Attachments: Menahga DNR letter 2 9-29-14.pdf; MenahgaRareFeaturesMap_20140915.pdf

I have reviewed the attached documents regarding the above project. Please note the following:

- There are old growth remnants north and south of the existing transmission corridor in T139N R34W Section 30. If there will be any disturbance outside the existing corridor, this old growth could be impacted. Old-growth forests are natural forests that have developed over a long period of time, generally at least 120 years, without experiencing severe, stand-replacing disturbances such as fires, windstorms, or logging. Old-growth forests are a unique, nearly vanished piece of Minnesota's history and ecology; less than 5% of Minnesota's old-growth forests remain. For more information on old-growth forests, please visit http://www.dnr.state.mn.us/forests_types/oldgrowth/index.html. Given the ecological significance of these stands, we recommend that measures be implemented to avoid or minimize disturbance.

- In T139N R34W Sections 30 and T139N R35W Section 25, 26, & 35, the proposed line is within an area that the Minnesota Biological Survey has identified as a Site of Moderate Biodiversity Significance. 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. This particular Site was visited in 2006 and contains several occurrences of Jack Pine – (Bush Honeysuckle) Woodland, a rare native plant community, adjacent to the existing transmission corridor.

  Given the ecological significance of this area, disturbance within the MBS Site should be minimized to the extent feasible. Actions to minimize disturbance may include, but are not limited to, the following recommendations:

  - As much as possible, operate within already-disturbed areas;
  - Minimize vehicular disturbance in the area (allow only vehicles/equipment necessary for pipeline removal and installation);
  - Do not park equipment or stockpile supplies in the area;
  - Do not place spoil within MBS Sites or other sensitive areas;
  - Inspect and clean all equipment prior to bringing it to the site to prevent the introduction and spread of invasive species;
  - If possible, conduct the work under frozen ground conditions;
  - Use effective erosion prevention and sediment control measures;
  - Revegetate disturbed soil with native species suitable to the local habitat as soon after construction as possible; and
  - Use only weed-free mulches, topsoils, and seed mixes.

- The proposed line is also adjacent to other Sites of Moderate Biodiversity Significance (GIS shapefiles of MBS Sites of Biodiversity Significance and MBS Native Plant Communities can be downloaded from the DNR Data Deli at http://deli.dnr.state.mn.us). Given that construction activities can negatively affect adjacent native plant communities, especially through the introduction of invasive plant species, disturbance near these ecologically significant areas should be minimized. Actions to minimize disturbance can be found in the above bullet.

- State-listed mussels of special concern have been documented in Kettle Creek and the Blueberry River in the vicinity of the proposed crossings. 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 these waterways.

The reference number for this correspondence is ERDB #20150073-0002.

Thank you for notifying us of this project, and for the opportunity to provide comments.

Please accept my apologies for the slow turnaround on this request.

Sincerely,

Lisa Joyal

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Lisa Joyal
Endangered Species Review Coordinator
NHIS Data Distribution Coordinator
Division of Ecological and Water Resources
Minnesota Department of Natural Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155

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GREAT RIVER ENERGY®

12300 Elm Creek Boulevard • Maple Grove, Minnesota 55369-4718 • 763-445-5000 • Fax 763-445-5050 • greatriverenergy.com

September 15, 2014

Mr. Robert Maroney
US Army Corps of Engineers
St. Paul District
180 5th Street East, Suite 700
St. Paul, MN 55101-1678

RE: Proposed Menahga Area 115 kV Transmission Project
Hubbard, Wadena and Becker Counties

Dear Mr. Maroney:

Great River Energy is currently gathering data to be used in preparation of regulatory applications necessary to obtain approvals and permits for the construction of the proposed Menahga Area 115 kilovolt (kV) Transmission Project in Hubbard, Wadena and Becker counties (see enclosed fact sheet and map). Great River Energy and Minnesota Power intend to seek a Certificate of Need and a Route Permit for the Project from the Minnesota Public Utilities Commission (Commission).

The proposed electric transmission improvement project in the Menahga area will serve two primary purposes:

- Strengthen the electric transmission system in the Menahga area, as the existing 34.5 kV system serving the area is becoming outdated and is reaching its maximum capacity.
- Provide electric service to the proposed new Todd-Wadena Electric Cooperative (Todd-Wadena) Red Eye distribution substation that would provide electric power to a new pipeline pumping station proposed by Minnesota Pipe Line Company (MPL).

The Project will include:

- Construction of an east-west transmission line between the existing Great River Energy Hubbard Substation and the existing Minnesota Power Pipeline Substation, of which approximately 4.5 miles will be double-circuit 115 kV line and approximately 2.5 miles will be single-circuit 115 kV line.
- Construction of a generally north-south transmission line between the existing Minnesota Power Pipeline Substation and the proposed new Todd-Wadena Red Eye distribution substation, which will be approximately 15.5 miles of primarily single-circuit 115 kV line.
- Construction of the proposed new Great River Energy Blueberry Substation in the vicinity of the existing Menahga Substation and the new Todd-Wadena Red Eye Substation to serve the new MPL pumping station; and modifications to the existing Todd-Wadena Menahga Substation and the Minnesota Power Pipeline Substation.

If you would like to learn more about the project, an open house public meeting for the project will be held on:

September 30, 2014

4-7 p.m.

at:

Menahga Senior Center
19 Cedar Ave. SE
Menahga, MN 56464

Great River Energy is requesting information on the possible effects of the proposed project on floodplains, wetlands, and other important natural resources that occur in the project area. The transmission line will span several DNR public waters (see enclosed maps). Great River Energy will apply to the DNR Division of Lands and Minerals for a license to cross those waters.

The project will cross a number of NWI wetlands (see enclosed maps), many of which will be spanned. Great River Energy will work with the Corps and the counties to address impacts once design details are available.

A literature survey of cultural resources in the project area is currently being conducted by Merjent.

We would appreciate receiving any written comments from your office by Friday, October 17, 2014. If you have any questions about this proposed project, please contact me at (763) 445-5214. If you wish to respond by e-mail, my address is cschmidt@grenergy.com.

Thank you for your attention to this important project.

Sincerely,

GREAT RIVER ENERGY

Carole L. Schmidt

Carole L. Schmidt
Supervisor, Transmission Permitting and Compliance
763-445-5214

Enclosures: Fact Sheet/Project Map, PWI/NWI Maps

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Menahga Area 115 kV Transmission Project

Great River Energy
12300 Elm Creek Blvd
Maple Grove, MN 55369-4718
1-888-521-0130
www.greatriverenergy.com

Todd-Wadena Electric Cooperative
550 Ash Avenue NE
Wadena, MN 56482
1-800-321-8932
www.toddwadena.coop

Project Need

Great River Energy proposes a new overhead 115 kilovolt (kV) transmission line project (Menahga Area Project) in Hubbard, Wadena and Becker Counties to relieve overload issues on the transmission system in the area and to serve a new pumping station to be built by Minnesota Pipe Line Company (MPL). The Menahga Area Project would:

- Strengthen the Menahga area electric transmission system, as the existing 34.5 kV system serving the area is becoming outdated and reaching its maximum capacity.
- Provide electric service to the proposed new Todd-Wadena Electric Cooperative (Todd-Wadena) "Red Eye" distribution substation that would provide electric power to a new pipeline pumping station proposed by MPL.

Project Description

The Menahga Area Project (see map on back) would consist of:

- An east-west section between the existing Great River Energy Hubbard Substation and the existing Minnesota Power Pipeline Substation, of which approximately 4.5 miles will be double-circuit 115 kV line (see top photo) and approximately 2.5 miles will be single-circuit 115 kV line (see middle photo).
- A generally north-south section of primarily single-circuit 115 kV line (approximately 15.5 miles) between the existing Minnesota Power Pipeline Substation and the proposed new Red Eye distribution substation.
- The proposed new Great River Energy Blueberry Substation in the vicinity of the existing Menahga Substation; the proposed new Todd-Wadena Red Eye Substation; conversion of Todd-Wadena's existing Menahga 34.5 kV distribution substation to operate at 115 kV; and modifications to the existing Minnesota Power Pipeline Substation.

The proposed transmission line would generally require a 100-foot-wide right-of-way, 50 feet on each side of the centerline. The majority of the project would use single round wood poles ranging in height from 60 - 90 feet above ground and a distance between poles of 275 - 400 feet. Poles with guy wires/anchors, two-pole H-frame or steel poles may be required in some areas as line angles, soil conditions, or crossing of existing utilities necessitate. Some segments of the line would carry lower-voltage distribution underbuild (see bottom photo).

Typical 115 kV Wood Double Circuit Structure

Typical 115 kV Wood Single Circuit Structure

Typical 115 kV Wood Structure with Distribution Underbuild

Permitting

The Minnesota Public Utilities Commission (Commission) must issue a Certificate of Need (CON) and Route Permit before project construction can proceed. Great River Energy and Minnesota Power will submit a combined CON/Route Permit application containing relevant information that will help the Commission determine if there is sufficient need for the project and evaluate the proposed route and any alternative routes brought forth by the public. At the conclusion of the permitting process, the Commission will determine the final location of the proposed transmission facilities.

The public and regulatory agencies will have numerous opportunities to provide input during the CON and Route Permitting process, which is conducted and facilitated by Commission and Minnesota Department of Commerce (DOC) staff. Public meetings will be held and other opportunities will be provided for collecting comments and responses. The DOC will prepare an Environmental Assessment document for the project.

Easements/Trees

Once project approval is granted by the Commission, Great River Energy will contact landowners to present an easement and offer of compensation. Most poles will be located on private property, although the majority of the right-of-way can continue to be used for agricultural cultivation, underground utilities, fencing and access drives. During acquisition, information is shared on tree removal, access and construction practices. Removal of trees and vegetation in the right-of-way will be necessary for safety and maintenance.

Project Schedule

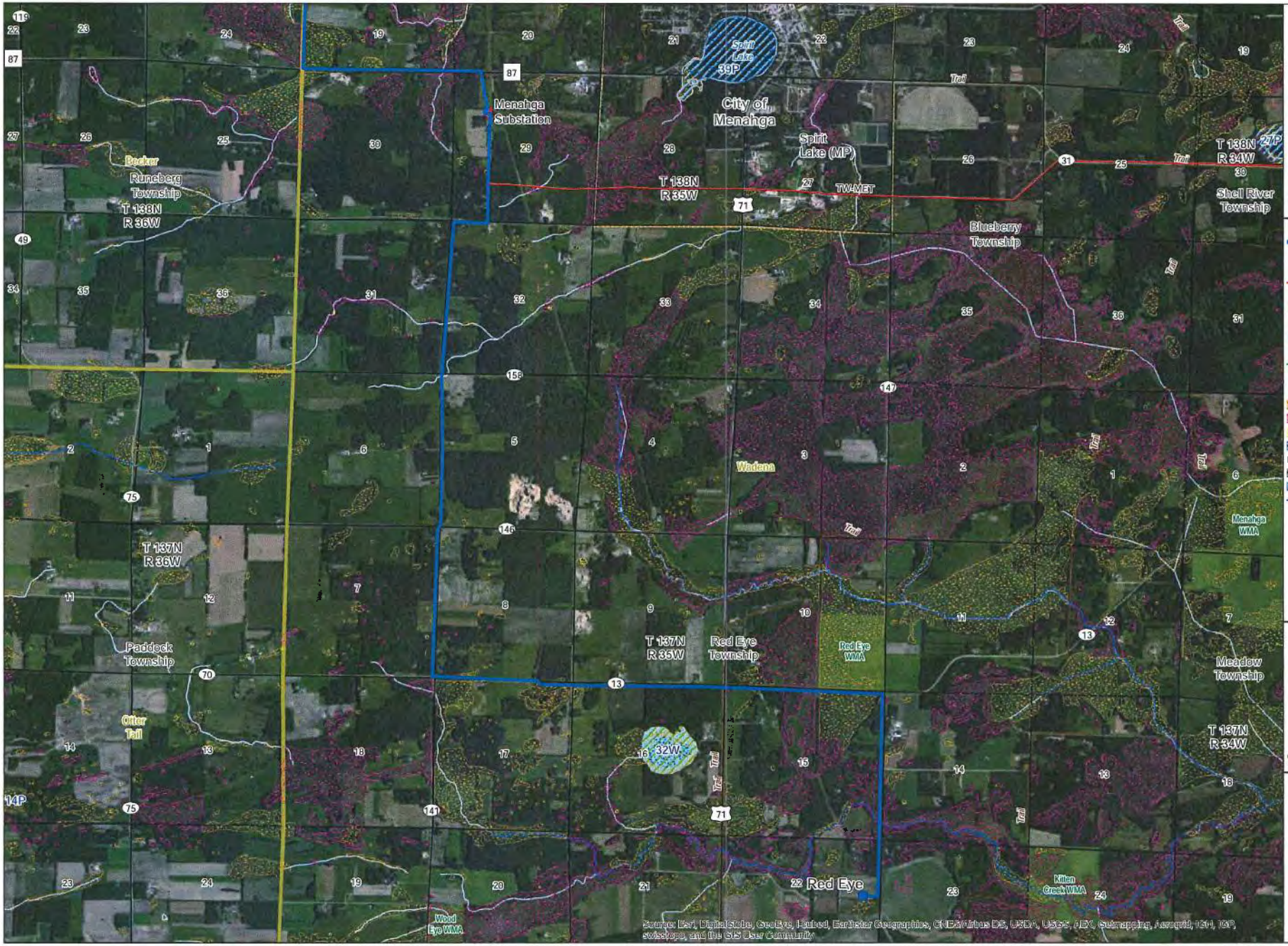
Project contact and/or notifications	Fall 2014
State permitting	Early 2015 – early 2016
Survey/design	Summer 2015 – Spring 2016
Easement acquisition/right-of-way permits	Spring 2016 – Fall 2016
Transmission line construction	Fall 2016 – Spring 2017
Energization	Spring 2017

For project updates and information, visit greatriverenergy.com/Menahga or contact:

Michelle Lommel
Sr. Field Representative
Great River Energy - Land Rights Department
(763) 445-5977 or 1-888-521-0130
mlommel@grenergy.com

Carole Schmidt
Supervisor, Transmission Permitting and Compliance
Great River Energy – Environmental Services Department
763-445-5214
cschmidt@grenergy.com

Date last revised: 9/11/2014



GREAT RIVER ENERGY®

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Proposed Great River Energy
- 115 kV Transmission Line
- Transmission Substation

Existing Great River Energy
- 34.5 kV Transmisison Line

Proposed Cooperative
- Distribution Substation

Existing Cooperative
- Distribution Substation

Non-Great River Energy
- 34.5 kV Transmission Line
- Distribution Substation

NWI Wetlands
- Freshwater Emergent Wetland
- Freshwater Forested/
- Freshwater Pond
- Lake

MN Public Waters Inventory (PWI)
- Public Water Wetland
- Public Water Basin
- MN Public Watercourse

Updated: 9/15/2014

Data Sources vary between MNDOT, MNDNR, MNGEO and Great River Energy

Aerial Imagery form: ESRI World Imagery Basemap service

Map Projection: UTM, NAD83, Zone15, Meters

0 2,000 4,000 Feet

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Menahga Area
115 kV Project
Map 2 of 2

NWI Wetlands and Hydrologic Features