

City of East Bethel
City Council Agenda
Special Meeting – 6:30 PM
Date: June 22, 2011



	Item	
6:30 PM	1.0	Call to Order
6:31 PM	2.0	Adopt Agenda
6:33 PM	3.0	Great River Energy (GRE) Conditional Use Permit for Placement of Transmission Line in portions of the City of East Bethel
7:30 PM	4.0	Top Notch Fence Invoice
7:45 PM	5.0	Adjourn



City of East Bethel City Council Agenda Information

Date:

June 22, 2011

Agenda Item Number:

Item 3.0

Agenda Item:

Conditional Use Permit (CUP) Request by Great River Energy (GRE) for a Proposed 69kV Transmission Line to be Located in East Bethel

Requested Action:

Make a Motion for a Conditional Use Permit (CUP) Request by Great River Energy (GRE) for a Proposed 69kV Transmission Line to be Located in East Bethel

Background Information:

On April 6, 2011, City Council tabled the request from Great River Energy (GRE) for a Conditional Use Permit (CUP) for a proposed 69 kV transmission line to be located in East Bethel. City Council directed staff to hire a technical expert to analyze the proposal, the need for the additional services, and make a recommendation for route location.

Mr. Larry Schedin of LLS Resources was contracted to complete the analysis. Mr. Schedin has met with the GRE Work Group, Planning Commission, and City Council to brief individuals on updates of his project analysis.

Mr. Schedin has completed his final analysis and will be presenting his findings and recommendation at the public hearing. Attachment #1 is the final report by Mr. Schedin. Mr. Schedin’s report answers many questions asked by Planning Commission and City Council, including an analysis regarding the electric power supply to the City of East Bethel, how the existing and future distribution electrical supply works, the need for the project, the potential of the proposed line operating at 115 kV, and route recommendation.

Mr. Schedin has completed an analysis for the need of a 69 kV line. After much research and analysis, Mr. Schedin agrees there is a need for this particular project, therefore, is of the opinion that a “no-build” is not an option. City staff concurs with Mr. Schedin’s report in which a no-build alternate is not reasonable given the existing needs as expressed by the Applicant and the growth for electrical service presently and anticipated to occur within the area.

As part of Mr. Schedin’s recommendation, he discusses “Route I” which could be significantly shortened by utilizing Durant Street. Attachment #2 shows “Route I”; the proposed shortened alternative route. GRE has provided additional data information for this route, which will be known as Route II. Attachment #3 analyses the data for Mr. Schedin’s recommended routes II and A, and all other routes Mr. Schedin analyzed. As part of the presentation, Mr. Schedin will further discuss the route analysis and his recommendation for preferred routes II and A.

On June 20, 2011, a public hearing was held in which all persons had the opportunity to speak. For your review, staff has attached a draft of the meeting minutes (Attachment #4). Planning Commission made the recommendation to deny the CUP request based on the following reasons:

1. Amount of wetlands affected by proposed Route A is significantly higher than other proposed routes, and
2. The population density in East Bethel affected by proposed "Route A" is greater than the population density in communities to the north.

Staff understands City Council may still consider the two (2) routes, as proposed by Mr. Schedin, for the location of the proposed 69 kV line. Staff is preparing resolutions that will be available for the June 22, 2011 meeting.

Attachments:

1. Final Route Selection Report by Mr. Larry Schedin
2. Route I¹ Map
3. Matrices of Route Analysis
4. DRAFT June 20, 2011 Planning Commission Meeting Minutes
5. GRE Transmission Line Project Information, June 20, 2011

Fiscal Impact:

To be determined

Recommendations:

Staff requests City Council to take into consideration Mr. Schedin's analysis and recommendation when making a motion for the CUP request by Great River Energy for a proposed 69kV transmission line with East Bethel.

Planning Commission recommended denial to City Council for the CUP request by GRE for the route known as "Route A", for the following reasons:

1. Amount of wetlands affected by proposed Route A is significantly higher than other proposed routes, and
2. The population density in East Bethel affected by proposed "Route A" is greater than the population density in communities to the north.

However, in the event City Council proceeds to approve the CUP request, regardless of route selection, Planning Commission recommends the approval be contingent with the following staff conditions with the addition of condition #6:

1. GRE will submit a construction plan prior to the commencing the construction of the 69 kV line, establishing both a construction time table and a progression of construction that shall be reviewed and meet the approval of the City Engineer and staff.
2. GRE shall minimize the need for any unsightly guide wires at corners, angles and dead ends, and utilize steel poles at dead ends, corners, angles and in certain high density neighborhoods designated by the City Engineer as part of this project.
3. That Great River Energy and/or its subsidiaries or other utility users that utilize its services shall install underground service drops at crossings of County Road 26 and other municipal roads within the city of East Bethel without added cost to the residents and utility users and assure that the relocation of distribution facilities to the north side of County Road 26 results in a minimum replacement of service drops, and wherever possible all service drops must be undergrounded.

4. GRE must submit easement descriptions and final route determination prior to the execution of the CUP Agreement.
5. A CUP Agreement must be executed no later than December 22, 2011. Failure to comply will null and void approved CUP. The agreement must be executed prior to the start of construction of the project.
6. GRE must coordinate with affected property owners as to the option of total easement width granted to GRE so as long easement width meets federal regulations.

City Council Action

Motion by: _____

Second by: _____

Vote Yes: _____

Vote No: _____

No Action Required: _____

**CITY OF EAST BETHEL
ATHENS TO MARTIN LAKE 69 KV LINE
ROUTE SELECTION REPORT**

**Prepared by LLS Resources , LLC
For presentation June 15, 2011
Revised June 17, 2011**

I. Introduction

The following report presents the technical and engineering recommendations of LLS Resources, LLC, a Minneapolis based consulting firm, regarding the need for and routing of a 69 KV line connecting an eastern portion to a western portion of Great River Energy's (GRE's) area 69 KV transmission system. This project has been called the Athens to Martin Lake 69 KV Project. Results are based on a detailed examination of background materials provided by the City, several meetings and telecons with GRE technical representatives (including updates), several meetings with the City's GRE Work Group, and on-site field inspections of the routes and substations involved by LLS Resources principals. The work at LLS Resources, LLC was conducted by Larry L Schedin and Rob Hoerauf, both registered professional electrical engineers (PE's) in Minnesota. Separate routes both within and outside the City are evaluated along with recommended routes in both areas.

II. Electric Power Supply to City of East Bethel

A. Bulk Transmission and Subtransmission

Great River Energy (GRE), a generation and transmission cooperative headquartered in Maple Grove, owns the transmission lines supplying electricity to East Bethel. GRE's facilities supply wholesale electricity to Connexus which in turn distributes the electricity at retail to East Bethel homes and businesses.

Electric supply occurs at three successive levels in the following order: 1) bulk transmission, 230,000 volts (230 KV), 2) subtransmission, 69,000 volts (69 KV) , and 3) distribution, 12,500 volts (12.5 KV). The 230 KV bulk transmission system supplies GRE's 69 KV system in the north metro area. It originates at Rush City, MN and heads south roughly parallel to highway I35W to a point near Hugo where it turns west through Blaine toward Bunker Lake where it again turns north to Andover. At Andover, it again turns west toward Elk River and Monticello. Over this north metro path, the 230 KV system supplies the 69 KV system via 230 KV-69 KV substations located at Linwood, Blaine, Bunker Lake, and Elk River. However, as the north metro area grows, it is positioned to further supply GRE's 69 KV system via new 230 KV-69KV substations at locations such as Johnsville and Andover.

B. Distribution System

1. Existing Distribution Supply

The 69 KV subtransmission system presently supplies five distribution substations at 12.5 KV, portions of which directly serve East Bethel homes and businesses via distribution lines called feeders. These distribution substations are:

- a. Cooper's Corner (at 237th Ave and Hastings about 1 mile east of Hwy 65)
- b. East Bethel (at Viking Blvd about 1 mile west of Hwy 65)
- c. Martin Lake (at Typo Creek Drive near Island Lake in Linwood Township)
- d. Soderville (at Hwy 65 and Crosstown Blvd in Soderville)
- e. Forest Lake (at Forest Lake just off Hwy I35W)

According to GRE, peak demands on each distribution substation and the percentage of these peak demands supplying homes and businesses in East Bethel are as follows:

<u>Substation</u>	<u>Peak Demand (MW)</u>	<u>% E. Bethel</u>
Coopers Corner	7.8 MW	63%
East Bethel	10.8 MW	76%
Martin Lake	9.0 MW	14%
Forest Lake	16.6 MW	2%
Soderville	14.0 MW	6%

It is important to note that except for Martin Lake, each of the foregoing distribution substations is supplied by two or more 69 KV lines. Therefore, if one 69 KV source is out of service, it is backed up by one or more remaining 69 KV sources. However, Martin Lake has no such backup supply. It is supplied by only one 69 KV line from Linwood Substation near Hwy I35W. This line is called a radial feed, and its loss can be replaced only via a complicated switching procedure on the 12.5 KV distribution system typically causing lengthy outages. The foregoing tabulation and subsequent discussion shows that improving reliability to Martin Lake Substation provides direct benefits to residential and business users in East Bethel as well as improving 69 KV grid area reliability.

2. Future Distribution Supply

Any new area 69 KV line should recognize the possible need to supply new distribution substations located on or near alternate routes. We presented this possibility to GRE, and it asked Connexus for plans for new distribution substations within East Bethel. Connexus stated

that the existing substations are adequate for the near term future, so no new distribution substations are planned at this time.

III. Project Need (No Build)

GRE's maps and diagrams show that 69 KV supply to the East Bethel area is via three 69 KV lines. Power flow studies simulate operation of these 69 KV lines and show resulting problems if any are taken out of service because of weather and other potential problems. Typical 69 KV system design requires that loss of a single 69 KV line in a local power grid should not disrupt or degrade electric service within the grid. We have reviewed some of the output of these power flow studies with GRE personnel. The studies show that outages of any one of these lines at the supply end of each causes severe low voltages in the East Bethel area along with high thermal loadings at the supply ends of the two lines remaining in service.

The supply lines and critical line sections are as follows:

<u>Supply Source</u>	<u>Critical 69 KV Line Segment</u>
Cambridge	Cambridge-Cambridge Industrial Park
Elk River	Elk River-St Francis
Soderville	Soderville-East Bethel

Information provided by GRE engineers shows that repair and/or replacement of these critical line segments supplemented by a capacitor bank could cost in the range of 4 to 5 times the \$4-\$5 million cost of an Athens-Martin Lake 69 KV line. Additionally, such upgrades would not provide 2-way service to Martin Lake Substation, an important goal of the project. Two-way service to Martin Lake would otherwise be provided by a second 69 KV line from Hwy I35W corridor or the installation of expensive diesel generators, both further adding substantially to the cost of alternatives.

In summary, addition of an Athens-Martin Lake 69 KV line avoids the expensive upgrade of three other critical 69 KV line segments in the local power grid and provides two-way 69 KV supply to Martin Lake Substation. The upgrade avoidance may also be considered a deferral depending on future growth in the State Hwy 65 corridor which may eventually require conversion to 115 KV. However, based on our limited review of studies conducted by GRE and our own observations, we feel that addition of the Athens-Martin Lake 69 KV line is a cost effective solution eliminating the two-way service problem to Martin Lake and deferring three other 69 KV upgrades. As part of this review, we determined that no 69 KV lines owned by other utilities (such as Xcel Energy) were available to supply the study area. Open access requirements allow joint use if such lines were available.

We therefore agree that Athens and Martin Lake are reasonable termination points for a new 69 KV line, but with many routing options between these two points. This eliminates a "no-build" alternative.

IV. Potential Operation at 115 KV

GRE representatives have explained that GRE wishes to secure a total right-of-way (R/W) width of 70 ft for a single circuit 69 KV line with 38 ft of R/W taken via private easements along a roadway and the remaining 32 ft taken within the roadway. During our discussions with East Bethel groups, concern was raised regarding future upgrade to 115 KV. Our meeting with GRE's transmission line designer indicates that the line will not be designed so that it can simply be reconnected to operate at 115 KV. Such flexibility would not only require a design change but would also require a state siting permit as required for new 115 KV lines exceeding 1500 ft in length.

V. Environmental and Archeological Considerations

A base map showing environmentally sensitive areas was prepared by GRE, and the City provided this map (included in the handouts) as the official guide for route selection. Additionally, Cedar Creek Reserve spokesperson, Mr Jeff Corney attended task force meetings and provided special guidance regarding the Cedar Creek Reserve. Additionally, GRE retained a consultant to locate potentially sensitive archeological and historical areas, some of which are shown on the map of environmentally sensitive areas.

VI. Routing Options

In addition to the “no-build” option, we were given 15 route options to consider with option titles shown as follows and grouped with the routes listed in order from north to south and sublisted by critical corridor. Within the far north and medium north groups, the critical corridors considered utilize Sunset Road and Typo Creek Drive. In addition to evaluating previously prepared route information, the routes and related termination substations were all visually inspected by two representatives of LLS Resources. Maps of the routing options are included in the handouts.

A. Far North and Medium North Groups

1. Sunset Road sub-group

Route E: Far North, Road 9E to Xylite S, to Road 56E along north edge of Cedar Creek Reserve turning S on Durant St to Fawn Drive (76E) then Sunset Rd S to Road 26E to Typo Creek Dr S

Route F: Far North, Road 9E to Durant St (45S) to Fawn Drive (76E) to S on Sunset Rd to Road 26E, then to Typo Creek Dr S

Route F1: Far North, Road 9E to Road 12S&W to Durant St (45S) to Fawn Drive (76E) to S on Sunset Rd to Road 26E, then to Typo Creek Dr S

Route E1, Far North: Road 56E to Xylite (56S) (both on north edge of Cedar Creek Reserve) to Fawn Drive (76E), to Sunset Rd S to 26E to Typo Creek Dr S.

2. Typo Creek Drive sub-group

Route G: Far North, Road 9E to 12S to 20E to Typo Creek Dr S.

Route H : Med North, Road 56E to Xylite (56S) (both on north edge of Cedar Creek Reserve) to 12E to Durant St (45S) to Fawn Drive (76E), then to Typo Creek Dr S

Route H1: Far North, Road 9E to 18S to 20W (north of Typo Lake) then to Typo Creek Dr S

Route I: Far North, Road 9E to Road 12S&W to Durant St (45S) to Fawn Drive (76E) then to Typo Creek Dr S

Route I1: Far North, Road 9E to Durant St (45S) to edge of Fish Lake to Fawn Drive (76E) then to Typo Creek Dr S

3. Typo Creek Drive and Sunset sub-group

Route G1: Far North, Road 9E to 12S to 20E to Typo Creek Dr S to 29W to Sunset Rd S to 26E to Typo Creek Dr S.

B. Central Cut Group

Route B: Central Cut, Road 24E from Coopers Corner to Fawn Drive (76E) to Sunset Rd S to 26E to Typo Creek Dr S.

Route B1: Central Cut, S from Athens Sub to Route 25 cutting directly across Cedar Creek Reserve to Fawn Dr (76E) to Sunset Rd S to 26E to Typo Creek Dr S.

C. Medium South, South and Far South Group

Route A: Med South, 237th Ave E (Rd 24) to Road 26E to Typo Creek Drive S

Route C1: Med South, 237th Ave E (Rd 24) to Road 26E to 15S to Road 22N

Route C: South, Hwy 65 S to Road 74E to Rd 22N

Route D: Far South, Hwy 65 to Viking Blvd (Rd 68E to 22N)

VII. Route Attributes

A. Environmental and Archeological Considerations

A base map showing environmentally sensitive areas was prepared by GRE, and the City provided this map (included in the handouts) as the official environmental guide for route selection. Additionally, Cedar Creek Reserve spokesperson, Mr Jeff Corney attended task force meetings and provided special guidance regarding the Cedar Creek Reserve. Additionally, GRE retained a consultant to locate potentially sensitive archeological and historical areas, some of which are shown on the map of environmentally sensitive areas.

B. Electrical Performance

Important electrical performance factors include:

1. Resistance which impacts electrical losses meaning lost energy simply heating the air
2. Impedance which negatively impacts voltage drop and causes low voltage problems
3. Maintenance access and costs such as vegetation control
4. Exposure to weather
5. Exposure to other hazards such as road accidents
6. Structure design and static wire which mitigates exposure to lighting and other failures.

Foregoing items No. 1-6 are directly related to line length. Shorter line distances therefore enhance these factors as well as cost, so distance is considered an important attribute. Also, double circuit construction is considered to be less reliable than single circuit construction because with double circuit construction, a single event can cause an outage of both circuits.

The horizontal insulator, single 69 KV wood pole structure design proposed by GRE, is reasonable, but requires unsightly guy wires at corners, angles and deadends (some which must cross roadways). The City may therefore wish to require steel poles at deadends, corners, and angles and possibly for tangent structures, especially in certain higher density neighborhoods. Laminated wood structures also reduce the need for guy wires, but laminated wood is not as effective as steel in reducing unsightly guy wires.

C. Other Route Attributes

Many other attributes can be attached to each route option. However, following are ones which we have selected as most important with respect to making a recommendation. The attributes for each route option included the attached Route Matrix are:

1. New construction miles
2. Construction cost (\$ millions)
3. Tree clearing, acres
4. New easements, acres
5. Public land easements, miles
6. Private land easements, miles
7. Special transmission structures (reinforced or guyed deadends, corner and angle structures)
8. Distance to homes from centerline:

- a) 0-100 ft
 - b) 0-200 ft
 - c) 0-300 ft
9. Forested wetlands, miles
 10. Non-forested wetlands, miles
 11. Wetlands, acres
 12. Six types of Public Water Inventory (PWI) categories:
 - a) Perennial streams and rivers crossed
 - b) Intermittent streams and rivers crossed
 - c) PWI streams crossed
 - d) No. of wetlands within route
 - e) No. of PWI lakes within ROW
 - f) No. of PWI wetlands within ROW.

The route titles and attributes are all included in the attached matrix, parts 1 and 2

VIII. Route Recommendation Within East Bethel

The consulting Agreement between the City and LLS Resources, LLC specifically states that LLS Resources is to provide “... a technical expert opinion regarding the routing of a GRE 69 KV line through the City of East Bethel (City).” (emphasis added).

A. Route Options Within the City

With the former specific task in mind, we note the following routes fall largely within the City:

Routes: A, B, B1, C, C1, D

Routes B & B1 were eliminated by the Work Group at the outset because these travel through the center or near center of the Cedar Creek Reserve and were clearly rejected by Cedar Creek Reserve representative, Mr Jeff Corney. Route D was eliminated by the Work Group because of its extreme length and circuitous path thereby leaving Routes A, C and C1 as the remaining “in City” candidate routes. We agree with these eliminations.

B. Route Recommendation

A review of the route attributes shows that Route A (mostly following Road 26) is the most direct route with significantly less new ROW (7.4 miles total) and less new construction (10.4 miles total) and less cost than all the other candidate routes within the City. The other attributes of Route A compared to all the other route options (inside or outside the City) are all favorable. We therefore recommend Route A as the best route option within the City while keeping in mind certain concerns and possible disadvantages.

C. Route A Concerns and Disadvantages

Route A would also accommodate rebuild and relocation of a 3-phase main feeder line as underbuild running almost the entire length of the new line. GRE proposes to build the new 69 KV line mostly along the north side of Hwy 26, whereas the 3-phase feeder is mostly on the south side of Road 26. Unless Connexus agrees to install underground service drop crossings of Road 26 without added cost, the relocation of distribution facilities to the north side of Road 26 would result in a number of unsightly service drops which now do not exist. Also, GRE should confirm that to avoid power lines on both sides of Road 26, the distribution line transfer will occur at the same time as the new 69 KV construction.

In addition to construction along the north border of the Allison Savannah, Route A also requires construction along the entire south border of Cedar Creek Reserve, a major ecosystem science reserve. However, the Reserve Work Group representative has stated that construction along the south border is preferable to construction along the north border. Additionally, GRE has been working to avoid a school forest on the west side of Typo Creek Drive just south of the intersection with Road 26.

IX. Route Recommendation Outside East Bethel

A. Route Options Outside the City

The far north and medium north route sub groupings listed in the previous route options section are mostly outside of the City and were specifically aimed at problem areas going south from the far north and medium north routes in order to reach Martin Lake Substation. The two potential problem areas are Typo Creek Drive (north of Road 26) and Sunset Drive. After observing the number of properties close to the roadway and pinch points along Sunset Drive, we concur with the Work Group's concerns that Sunset Drive should be eliminated from further consideration and that Typo Creek Drive would be the preferred alternate for getting from the north and far north route options to Martin Lake Substation. This leaves Routes G, H, H1 and I as the remaining outside-of-City options using Typo Creek Drive and not using Sunset Drive.

Typo Creek Drive includes several pinch points regarding homes, a park, a fire station, a town hall, and a cemetery. In addition, a report commissioned by GRE identifies potential significant archeological sites and historic preservation uncertainties. We therefore recommend that its use should be minimized. Minimum use of Typo Creek Drive is certainly not a characteristic of either Route G or H1. Also, Route H follows the north edge of the Cedar Creek Reserve, a less desirable path than others according to Mr Corney.

B. Route Recommendation

Elimination of the foregoing leaves Route I as the remaining route which avoids the foregoing disadvantages. Route I utilizes about 2 miles of 69 KV deenergized line running north and east of Athens substation apparently built by GRE for future specific use.

However, Route I could be significantly shortened by utilizing Durant Street (as with Route F) rather than Route 12 when heading south off Route 9. We estimate that using this modification the distance could be shortened appreciably from 13.7 miles making the new construction distance close to that required for Route A. According to GRE, Hwy 9 is scheduled for rebuild and widening in 4-5 years, so this modification of Plan I minimizes the length of line on Hwy 9 (about two miles) exposed to rebuild or relocation. We therefore recommend this modification of Route I as the best route outside the City. We subsequently refer to this modification of Route I as Route II

Route II data provided by GRE on 06/17/2011 is now included as a line item in the attached comparison matrix. It shows a total line length of 11.3 miles at a cost of \$3.905 million which is close to the \$3.678 million cost of Route A but with significantly more (11.3 miles vs 7.4 miles) of new ROW acquisition.

Prepared by Larry L Schedin PE and Rob Hoerauf PE
Revised 06-17-11

6/17/2011 EAST BETHEL PROJECT ROUTE MATRIX 1

Route ID	Route Location	Route Description	Construction Notes	Cost (MM)	Tree Clearing (acres)	New Easements (acres)	Public Land Easements (miles)	Private Land Easements (miles)	Special Structures Req'r.	Homes Route CL (0-100 ft)	Homes Route CL (0-200 ft)	Homes Route CL (0-300 ft)
E	Far North	Road 9E to Xylite S to Road 56E to north edge of Cedar Creek. Uses Sunset Road (76).	10.5 mi new construction.	\$ 3.953	18	49	0.8	9.7	24	4	58	96
F	Far North	Road 9E to 45.S. Uses Sunset Road (76) to Road 26E.	10.9 mi new construction.	\$ 3.977	19	50	0	10.9	21	6	60	94
F1	Far North	Road 9E to 12S. Uses Sunset Road (76) to Road 26.	13.4 mi new construction.	\$ 4.785	17	62	0	13.4	22	4	62	102
G	Far North	Road 9E to 12S to Road 20. Uses Typo (85S).	11.2 mi new construction.	\$ 4.040	17	52	0.6	10.6	21	3	49	76
G1	Far North	Road 9E to 12S to Road 20. Uses Sunset Road (76) to Road 26.	15.0 mi new construction.	\$ 5.245	17	69	0.6	14.4	21	4	72	116
H2	Far North	Road 56 to Xylite S. Uses Sunset Road (76).	11.0 mi new construction.	\$ 4.449	15.4	93.45	Note A	Note A	20	3	44	80
H	Far North	Road 9E to 18S to 36 to 76. Uses Typo (85S).	16.85 mi new construction.	\$ 5.437	44.1	143.59	0.6	16.2	26	7	96	150
H1	Far North	Road 9E to 18S Road 20. Uses Typo (85S).	17.34 mi new construction.	\$ 5.606	32	147.72	0.6	16.7	24	3	65	95
I	Far North	Road 9E to 12S. Uses Typo (85S). Road 9E to 12S to Road 76.	13.7 mi new construction.	\$ 5.119	14.57	117.5	0	13.7	28	4	55	95
I1	Far North	Road 9E to 45. South on 45 to the edge of Fish Lake, then east on 76 to Typo Dr.	11.3 mi new construction.	\$ 3.905	20.45	Note A	Note A	Note A	20	6	52	86
E1	Med North	Road 56E to Xylite S.. Uses Sunset Road (76) to Road 26.	10.5 mi new construction.	\$ 3.927	18	49	0.8	9.8	20	4	53	89
B	Central Cut	Road 24E to 76E to Road 26. Uses Sunset Road S.	3.0 mi new dbi ckt. Plus 9.0 mi new const. = 12.0 mi.	\$ 4.298	17	42	Note A	Note A	13	4	39	68

6/17/2011 EAST BETHEL PROJECT ROUTE MATRIX 1

Route ID	Route Location	Route Description	Construction Notes	Cost (MM)	Tree Clearing (acres)	New Easements (acres)	Public Land Easements (miles)	Private Land Easements (miles)	Special Structures Req'r.	Homes Route CL (0-100 ft)	Homes Route CL (0-200 ft)	Homes Route CL (0-300 ft)
B1	Central Cut	Routes along the north of Fish Lake. Uses Sunset Road S to Road 26.	2.0 mi new dbl ckt. Plus 8.3 mi new const. = 10.3 mi.	\$ 3.696	31	54	Note A	Note A	13	4	38	62
A	Med South	Road 26E to Road 26. Avoids Sunset Rd and Typo.	3.0 mi new dbl ckt. Plus 7.4 mi new const. = 10.4 mi.	\$ 3.678	14	35	3.3	4.1	10	0	43	84
C1	Med South	Road 24 to 26 to 15S to Road 22. Avoids Sunset Rd and Typo.	3.0 mi new dbl ckt. Plus 9.4 mi new const. = 12.4 mi.	\$ 4.323	19	44	3.3	6.1	13	2	54	99
C	South	Hwy 65 to Road 74. Avoids Sunset Rd and Typo.	5.4 mi new dbl ckt. Plus 8.9 mi new const. = 14.3 mi.	\$ 5.140	20	42	0	8.9	15	7	82	121
D	Far South	Hwy 65 route south to Road 68 and Road 22.	9.5 mi new dbl ckt. Plus 9.5 mi new const. = 19.0 mi.	\$ 7.173	15	45	Note A	Note A	23	14	182	271

Note A - GRE did not provide.

6/17/2011 EAST BETHEL PROJECT ROUTE MATRIX 2

Route ID	Route Location	Route Description	Forested Wetlands		Non-Forested Wetlands		PWI Waters (Note 1)		PWI Waters (Note 2)		PWI Waters (Note 3)		PWI Waters (Note 4)		PWI Waters (Note 5)		PWI Waters (Note 6)	
			(miles)	(miles)	(miles)	(acres)	Waters	Waters										
E	Far North	Road 9E to Xylite S to Road 56E to north edge of Cedar Creek. Uses Sunset Road (76).	0.4	1.0	1.8	2	2	1	2	2	1	1	1	1	1	1	2	2
F	Far North	Road 9E to 45.S. Uses Sunset Road (76) to Road 26E.	0.6	1.1	1.9	4	2	1	2	2	1	1	1	1	1	1	2	2
F1	Far North	Road 9E to 12S. Uses Sunset Road (76) to Road 26.	0.5	1.3	2.2	5	4	1	2	4	1	1	1	1	1	1	2	2
G	Far North	Road 9E to 12S to Road 20. Uses Typo (85S).	0.4	0.9	2.1	6	3	3	6	3	3	1	1	1	0	0	1	1
G1	Far North	Road 9E to 12S to Road 20. Uses Sunset Road (76) to Road 26.	0.5	1.5	2.4	6	3	3	6	3	1	1	1	1	0	0	2	2
H2	Far North	Road 56 to Xylite S. Uses Sunset Road (76).	0.02	0.32	2.73	2	2	2	2	2	2	2	1	1	0	0	2	2
H	Far North	Road 9E to 18S to 36 to 76. Uses Typo (85S).	0.06	0.21	3.8	3	6	3	3	6	3	3	3	3	3	3	3	3
H1	Far North	Road 9E to 18S Road 20. Uses Typo (85S).	0.08	0.22	4.48	5	8	5	5	8	3	3	3	3	2	2	3	3
I	Far North	Road 9E to 12S. Uses Typo (85S). Road 9E to 12S to Road 76.	0.07	0.25	3.11	4	5	4	4	5	4	4	2	2	1	1	2	2
I1	Far North	Road 9E to 45. South on 45 to the edge of Fish Lake, then east on 76 to Typo Dr.	Note A	Note A	2.84	Note A	Note A	Note A	Note A	Note A	Note A	Note A	Note A	Note A	2	2	3	3
E1	Med North	Road 56E to Xylite S.. Uses Sunset Road (76) to Road 26.	0.4	1.1	2.0	3	2	3	2	2	2	2	1	1	1	1	2	2

6/17/2011

EAST BETHEL PROJECT ROUTE MATRIX 2

Route ID	Route Location	Route Description	Forested Wetlands		Non-Forested Wetlands		PWI Waters (Note 1)	PWI Waters (Note 2)	PWI Waters (Note 3)	PWI Waters (Note 4)	PWI Waters (Note 5)	PWI Waters (Note 6)
			(miles)	(miles)	(miles)	(acres)						
B	Central Cut	Road 24E to 76E to Road 26. Uses Sunset Road S.	0.1	1.3	6.8	2	3	1	1	1	1	2
B1	Central Cut	Routes along the north of Fish Lake. Uses Sunset Road S to Road 26.	0.8	1.3	7.3	2	2	1	1	1	1	2
A	Med South	Road 26E to Road 26. Avoids Sunset Rd and Typo.	0.1	0.8	5.8	2	1	1	1	1	0	1
C1	Med South	Road 24 to 26 to 15S to Road 22. Avoids Sunset Rd and Typo.	0.3	0.8	6.3	2	1	1	2	2	0	2
C	South	Hwy 65 to Road 74. Avoids Sunset Rd and Typo.	0.4	1.2	9.1	3	3	1	3	1	1	4
D	Far South	Hwy 65 route south to Road 68 and Road 22.	0.7	1.1	9.9	6	3	1	2	2	1	3

Notes to Public Water Inventory (PWI) Categories

- Note 1 Number of Perennial Streams and Rivers crossed by Intended Centerline.
 Note 2 Number of Intermittent Streams and Rivers crossed by Intended Centerline.
 Note 3 Number of PWI Streams Crossed by Intended CL.
 Note 4 Number of Wetlands within Route.
 Note 5 Number of PWI Lakes within ROW.
 Note 6 Number of PWI Wetlands within ROW.

Note A GRE did not provide.

EAST BETHEL PLANNING COMMISSION MEETING

June 20, 2011

The East Bethel Planning Commission met on June 20, 2011 at 7:00 P.M for their regular meeting at City Hall.

MEMBERS PRESENT: Eldon Holmes Lorraine Bonin Brian Mundle, Jr. Glenn Terry

MEMBERS ABSENT: Dale Voltin Julie Moline

ALSO PRESENT: Stephanie Hanson, City Planner

Adopt Agenda

Chairperson Terry called the June 20, 2011 meeting to order at 7:00 P.M.

Terry motioned to adopt the June 20, 2011 agenda. Holmes seconded; all in favor, motion carries.

Public Hearing: Conditional Use

Permit. A request by applicant, Great River Energy, to obtain a Conditional Use Permit for the placement of a transmission line in portions of the City of East Bethel.

Public Hearing

Conditional Use Permit (CUP) Request by Great River Energy (GRE) for a Proposed 69kV Transmission Line to be Located in East Bethel

Requested Action:

Make Recommendation to City Council for a Conditional Use Permit (CUP) Request by Great River Energy (GRE) for a Proposed 69kV Transmission Line to be Located in East Bethel

Background Information:

Hanson provided the background information. On April 6, 2011, City Council tabled the request from Great River Energy (GRE) for a Conditional Use Permit (CUP) for a proposed 69 kV transmission line to be located within East Bethel. City Council directed staff to hire a technical expert to analyze the proposal, the need for the additional services, and make a recommendation for route location.

Mr. Larry Schedin of LLS Resources was contracted to complete the analysis. Mr. Schedin has met with the GRE Work Group, Planning Commission, and City Council to brief individuals on updates of his project analysis.

Mr. Schedin has completed his final analysis and will be presenting his findings and recommendation at the public hearing. Attachment #1 is the final report by Mr. Schedin. Mr. Schedin's report answers many questions asked by Planning Commission, the GRE Work Group, and City Council, including an analysis regarding the electric power supply to the City of East Bethel, how the existing and future distribution electrical supply works, the need for the project, the potential of the proposed line operating at 115 kV, and route recommendation.

Mr. Schedin has completed an analysis for the need of a 69 kV line. After much research and analysis, Mr. Schedin agrees there is a need for this particular project, therefore, is of the opinion that a "no-build" is not an option. City staff concurs with Mr. Schedin's report in which a no-build alternate is not reasonable

given the existing needs as expressed by the Applicant and the growth for electrical service presently and anticipated to occur within the area.

As part of Mr. Schedin's recommendation, he discusses "Route I" which could be significantly shortened by utilizing Durant Street. Attachment #2 shows "Route I"; the proposed alternative route is highlighted in yellow to show the shortened length. GRE has provided additional data information for this route, which will be known as Route I¹. Attachment #3 analyzes the data for Route I¹ and all other routes Mr. Schedin analyzed. As part of the presentation, Mr. Schedin will further discuss the route analysis and his recommendation of a preferred route.

Recommendations:

Staff requests Planning Commission take into consideration Mr. Schedin's analysis and recommendation when making a recommendation to City Council for the CUP request by Great River Energy for a proposed 69kV transmission line known as Route A.

If Planning Commission recommends approval to City Council for the CUP request by GRE for the route known as "Route A", then Planning Commission must give factual reasons for approval. In addition to approval, staff recommends the following conditions:

1. GRE will submit a construction plan prior to the commencing the construction of the 69 kV line, establishing both a construction timetable and a progression of construction that shall be reviewed and meet the approval of the City Engineer and staff.
2. GRE shall minimize the need for any unsightly guide wires at corners, angles and dead ends, and utilize steel poles at dead ends, corners, angles and in certain high density neighborhoods designated by the City Engineer as part of this project.
3. That Great River Energy and/or its subsidiaries or other utility users that utilize its services shall install underground service drops at crossings of County Road 26 and other municipal roads within the city of East Bethel without added cost to the residents and utility users and assure that the relocation of distribution facilities to the north side of County Road 26 results in a minimum replacement of service drops, and wherever possible all service drops must be underground.
4. GRE must submit easement descriptions and final route determination prior to the execution of the CUP Agreement.
5. A CUP Agreement must be executed no later than December 22, 2011. Failure to comply will null and void approved CUP. The agreement must be executed prior to the start of construction of the project.

If Planning Commission recommends denial of the CUP request for "Route A", then Planning Commission must give factual reasons for denial.

Hanson stated this evening we have GRE staff here; we also have Mr. Schedin here who will present his route analysis and recommendation.

Larry Schedin introduced himself and also explained he is an electrical engineer. He has been in this business for many years. He has a homestead in Bonstream, Minnesota. It is about 200 miles north of here; if you take Hwy. 65 to where it

ends, that is where his place is. He does appreciate working with the GRE work group, Planning Commission, and City Council. When he started this project he was given 15 alternatives. He added two options: no-build and another option that he put together himself, called I¹.

Some of you have heard his introductory remarks before. The first part of his remarks address where does the electricity come from to get to East Bethel? One source of supply is from Rush City – there is a major power station that goes down Hwy. 35. Off that big wire, there is a secondary transmission line. It supplies places like Blaine, Linwood, and Bunker Lake. To get the electricity to East Bethel is through distribution substations. The feeder lines go to the homes. The substations are at Soderville (Crosstown/Hwy 65), Viking Blvd (1 mile west of Hwy), Coopers Corner (237th), Martin Lake (Linwood, off of Typo Creek) and Forest Lake.

Schedin asked is this proposed power line really needed? It is a very strong system that GRE owns. GRE is a transmission and generative cooperative and they are headquartered in Maple Grove. GRE sells power to companies like Connexus.

Schedin stated his main concern is this system around East Bethel, and how strong is it, and why do they need to build this line. After analyzing the area, he determined if something were not changed, there would be serious issues. The three lines aren't adequate anymore. Martin Lake is built out of Linwood, off of 35. If anything happens in that area, there would be serious issues. These could be alleviated if the lines are increased on Hwy. 65 up to Cambridge and Elk River. Elk River, Cambridge, and Soderville provide a secondary source for Martin Lake. The Martin Lake substation is poised to house the growth on the east side of East Bethel. He believes this line is a very cost effective solution for the line. Schedin also stated that no-build is not an option – this line is needed and is the most cost effective.

Next Schedin reviewed a map with all of the routes on it. Schedin did not go into the details of each route. He concluded there are a lot of environmentally sensitive areas in East Bethel. Schedin asked for a map, of where not to go. His map showed all of the environmentally sensitive areas. He was also given a matrix on what are the routes, how much do they cost, and how many acres of wetland would they cover. The major thing he was trying to avoid is the ecologically sensitive area.

Schedin stated how did he analyze these routes? He started driving these roads and it turns out there are probably 7-10 options in the north, where the line would come from someplace north and go to the Martin Lake substation. The routes would come down Typo Creek or Sunset Road.

He said if you keep driving north to 261st and turn east off of Hwy 65, you will come to a key substation called Athens. That is a transmission submission hub, and it does not supply East Bethel. If you drive straight north of Athens, about a mile north and a mile east, there is a power line that is already there and it is de-energized. It is built on double circuit structure. It comes into Athens through the north and that is a key point. Schedin said what it does is this line provides a

freebee of mileage. The mileages would be the same if you went on Hwy 65; you already have two miles built, on a line that is unused.

He divided the routes into the north and south routes and first analyzed the north routes. The routes on the north go on the north side of the Cedar Creek Reserve and then to Typo Creek Drive or down Durant and to Sunset. After meeting with the GRE Work Group and Planning Commission, he agreed with them that if something has to come from north, that it should avoid Sunset Road and use Typo Creek Drive. The reason being is Sunset has many homes that are built close to the street. Additionally, if Typo Creek Drive is to be used, the archeological sites on that road require the road be used minimally.

He also noted that two of the routes cross right through the middle of the Cedar Creek Reserve. He stated he spoke with representatives of Cedar Creek Reserve and they said there was no way a transmission line would be run through Cedar Creek Reserve. They also requested if anything is constructed by the Reserve, that it be done on the south side versus the north side.

Schedin then analyzed the south side routes. GRE's preference is the route from Cooper Corner to County Road 26, then to Typo Creek and then south to Martin Lake. He looked at a route on 221st Street. He also looked at another route that would follow the south side of the Reserve, and then go to County Road 22. When analyzing the routes, he looked at distances and structures and he concluded that based on distance that Route A would be the recommended route. If people drive that route, they might notice there is already a distribution line on the south side of County Road 26. GRE wants to build on the north side of County Road 26. Their plan is to take down the line on the south side and have it combined on the north side. Right now if the electricity would have to go across the road for service, he would recommend the feeder lines be put underground. To do this, the line would come down the pole and they would drill under the road and go to the home.

He was asked to look at other concerns about the route. One concern is it borders the south side of the Reserve, and there is an environmentally sensitive spot, the Allison Savannah. This line would be running on the edge of those environmentally sensitive areas. Those are his great concerns about the south route.

Schedin stated that on the north side, the GRE Work Group tried to find a route that skirted the Reserve. They took the line from Athens (that goes nowhere) and created Route I. The issues on this route are the pinch points on Typo Creek Drive. Schedin said to him it made more sense to just go down Durant Street. It would eliminate the area on County Road 9. One of the disadvantages is distance. Once you cut off the part of the route over to County Road 12 and back. It is only 9/10 of a mile longer than Route A. The cost is \$3.7 million. There still remains, however, the issue with Typo Creek Drive having the archeological sites and pinch points. GRE's route engineers say there will be a number of pinch points. On Route A, there is supposedly only one pinch point. He devised Route I¹ and believes it is the best option that he could come identify from the north.

A resident asked what about the houses along Fawn Lake Drive. Schaub stated they tried to look at houses from the centerline and different distances. GRE is planning to buy 70 feet of right-of-way. About one-half would be in the street. Within the 35 feet, the land would be clear-cut. There is the number of miles of trees that will be taken. He explained Federal laws regulate the heights of trees you can have under the transmission lines. Property owners would not be able to have tall pine trees under the transmission lines.

Darrell Page, 4546 Fawn Lake Drive, East Bethel – He stated Mr. Schedin reviewed all the routes. Is there a preferred route? Schedin stated he does not represent Athens Township, but that is the best route that he has seen.

A resident said the people on Fawn Lake Drive don't get their power from there. Another resident said her house is 75 feet from the road. Another resident said we aren't here to discuss I; we are here to discuss A. Schedin said he was requested to look at viable routes.

Public hearing was opened at 7:37 p.m.

Heidi Moegerle - 179 Forest Road, East Bethel – Moegerle explained she received the matrix, and asked for it in Excel since originally she received it as a PDF document. She noticed that the data doesn't add up. She reorganized the data and analyzed it. She stated there is not a single parameter whereby Route A has the least impact and it is never the least impact. She was rather amazed at how GRE touts their concerns for the environment on their website, but doesn't seem concerned about it in East Bethel.

Schedin stated Route I¹ came up to information provided at the last meeting. He did ask GRE to give him as much information as possible about Route I¹, but they didn't get the notice until Friday. Schedin stated as far as Route A, a good part of this Route A comes down Hwy 65 on a line that already exists. A good share of this, at least 3 miles, is in existing right-of-way. The amount of remaining miles, there would be 7 or 7½ miles of new right-of-way. I¹ would require 10½ miles of new right-of-way. There is only 4 miles that is around the environmental areas.

Tanner Balfany - 19172 East Front Blvd, East Bethel – Balfany explained there are routes that have lines that aren't being used. There are lines that go nowhere. Balfany said the GRE Work Group looked for minimal impact and he also explained that Martin Lake is only about 14 percent of our power. Schedin said any of the proposed routes back up the Martin Lake substation.

A resident asked could you report the number of pinch points for the routes. Route A – 1; Route I¹ – 11. Over one-half of the pinch points are on Typo Creek Drive, because of a school, city hall, and forest.

Sue Traczyk - 22930 Packard Street, East Bethel – Where is the pinch point on Route A?

GRE representative said there are two pinch points on Route A: Durant/26 and another one east of there on Erskin Street. It would be just to the east of Durant.

He explained there are 11 on Route I¹. There are some by Xylite, near Fawn Lake, and also some at the intersection on Fawn Lake and also on Typo Creek. Pinch points are where we have to take special note, and we will have to do some special engineering, so we don't put the line right by their house. They require additional material and potentially additional easements. Anytime a line has additional angles, we have to plan for that and do more engineering. They need to make sure the tension and alignment stays as true as possible.

Mr. Schedin said a line to nowhere isn't built to go nowhere. He said the line in Athens Township was built because GRE said there would be a major corridor going along Hwy. 9 and that route would go to 35W. That is an option, but will cost 15 or 20 million dollars more than the suggestions we have here to consider.

Resident at 22500 Typo Creek, Linwood. He said you mention a pinch point on a school on Typo Creek. There isn't a school at that point. Mr. Schaub from GRE stated there is a school forest. That is not a pinch point for the other route. The actual school is south of the substation.

Bill Boyer - 3303 Luan Drive NE, East Bethel – He stated 38 feet along natural heritage area will get clear-cut. This would be a large loss for the City of East Bethel.

Resident stated these big wires are not good for peoples' health. It is known that these transmission lines cause cancer and they reduce the value of peoples' property.

Boyer stated by his rough calculation about 4 miles will get clear-cut.

Terry said this is a 69kv line and was wondering what is the minimum requirement for the amount of right-of-way that would be needed. It was explained that GRE would like 70 feet from the centerline. They are only required to have 60 feet. GRE said their standard request is for 70 feet from the centerline. Thirty-two feet would be taken from the roadway and the other 38 feet of right-of-way would be taken via private easements along a roadway. Terry stated that 10 additional feet of right-of-way over 10 miles, through an ecologically sensitive area, is a good reason to not request the additional footage above what is required.

Heidi Moegerle - 179 Forest Road, East Bethel – You are talking about 8.5 acres of trees that are going to be cleared. Route I has much less clearing.

Bob DeRoche -158 Collen Street, East Bethel – Is this extra variance, this area you are looking for, is this putting your foot in the door for bigger lines that isn't being brought forth now? Mr. Schaub stated additional area is not considered additional, it is standard for GRE. The Federal Government is strictly regulating the areas where transmission lines are, ensuring safety and security. As far as getting our foot in the door with 115kv – if we wanted to go 115kv, we would be dealing with the State versus every governmental entity. In his opinion, it would be easier to go through the state.

DeRoche said if you read the mission statement of GRE, what you are doing does

not follow through with your mission statement.

Dave Landis - 1747 237th Avenue, East Bethel – It was mentioned that the line goes along Hwy. 65; he said the line comes down his property, not on Hwy. 65. Schedin said the line is actually on Hastings and you have to go east before you go to the Athens substation.

Ann Jonas – 4525 Fawn Lake Drive, East Bethel – You have been mentioning the north side construction, would this also be for the Route I? Schedin stated he was referring to the 26 and he isn't sure if the design has been done on Fawn Lake Drive. Jonas stated there is a whole stretch of houses on Fawn Lake Drive and it is really terrible to hear everyone planning this and have no part in it. Schedin said the City has had people working on this – the GRE Work Group.

Sue Traczyk - 22930 Packard Street, East Bethel – What you are saying is the lines would go underground. Schedin said no, if the distribution line is moved to the other side of the road, you need to have the service drops to go to the houses under the street.

Resident asked if there were already a line on the south side of the road, why would you move it to the north side? We would lose all of our trees, and we would go from a wooded lot, to not a wooded lot. If there is a big disturbance, they could possibly have it on one side and then change sides. So again, with some of the issues, it would go back to the line designer at GRE. No one wants to have a big power line pole right at the end of his or her driveway.

It was asked if Schedin could describe the difference between a 69kv line and a distribution line. Schedin stated distribution feeder line poles are a lot shorter than what they are talking about here. The poles that are already there, already take up some right-of-way. The pole heights are about one-half the size of these new poles. They have one wire at the tippy top to attract lightening. Distribution lines are lower and carry less capacity. GRE is proposing to combine the 69kv line and a distribution line. Transmission lines are high voltage and they don't service individual properties, distribution lines go to your property. Terry said that is also why there is more right-of-way that is needed, because 69kv lines can cause fires with trees.

Public hearing was closed at 8:15 p.m.

GRE Presentation – Peter Schaub with GRE stated he provided the Planning Commission with books of information on this plan and you hopefully have seen all of this before. There was one addition, Council Member Moegerle asked for the information to be broken down by jurisdiction. He stated he could move through a lot of this pretty quickly.

The first page is the history. We started this project in 2008 and we had open houses for this project. As most of you know, we ended up with the City adopting the moratorium. We did work with the GRE Work Group and provided a lot of information. They made the recommendation to go with Route I. They presented it to the Planning Commission. Planning Commission said we should submit an application to the City pertaining to Route A.

Another good portion of this project talks about the importance of the project and that no-build isn't an option. We are looking at power for the region and for the power for the region; not building the line isn't an option.

In the books he also included information on other options. The project we are looking at now is \$6.5 million dollars total. He has included information about the routing process that was to follow. He would like to submit the whole document on the record.

Essentially GRE likes to share right-of-way and they also try to reduce impacts to other systems, and try to minimize the length. They do take into consideration public and social considerations, environmental and other impacts. In the book there were also some photos of what the lines would look like. They would be 70-80 feet tall if they have underbuild on them. They have a ground clearance of 23½ for the lines. One of the reasons GRE's engineers want to use the 35 feet on either side of the centerline, the whole idea of behind of easement width is blow out issues. As you narrow up the easement, you need more poles, and less trees cut.

As you will see in here, there is information on the Route A – from Athens using 3 miles of existing corridor, they would double circuit that to Coopers Corners substation, and then cut east to the Cedar Creek property to Durant. From Durant there isn't any design as of yet. The rest of the area isn't designed, so general formulas were used when we give distances from roads, because we don't know what side of the road we are going to use formulas. If we were to physically design the routes, we would have better information. He did include pictures of the proposed route. You can see there already is a distribution line on the route. We included information on the different criteria.

We looked at homes, amount of actual new easements they would have to acquire (7 miles for Route A, 11 miles for Route I¹). In actuality it is a longer route. It is an 11-mile stretch. The number of easements for Route A would be 40, for Route I¹ would be 99 or 120 depending on the side of the road it is constructed on.

Environmental map was included. He would like to point out that the three miles of that line is already existing, it is a not a new impact, and all of this line goes on the edge of those areas. It tries to follow road right-of-way. The way we site our lines is about 3 feet along the side of the roadway. He has also included other information on what they do to avoid environmental impact. They do construction in the winter. They also try to avoid Oak Wilt impacts. A lot of the area north of East Bethel is very similar to East Bethel and has the same problems. They also design the lines so birds of prey don't land on them and get electrocuted.

There are two challenges for Route A, one at Durant and one at Jewel Street. There is also information on Route I¹. There is a map there, and photographs of the route. This is in fact a combination of other routes we did look at. When we did look at this route, we did determine there were some issues with this route. The number of easements, the pinch points, environmental issues. There are

problems with archeological and historical issues. It also does have overhead distribution on the route. They would have to do something with the existing distribution lines, as GRE doesn't want to put lines on both sides of the road. The encroachments/pinch points are located throughout the route. One is immediately east of Xylite. Right now the road is 66 feet wide in that area and the road will be widened within the next few years to 120 feet wide. GRE works off the road right-of-way, so that would bump GRE back even further.

Schaub explained even though they have estimates for the routes, they are just estimates based on a per mile average cost without taking the time to design each route, because it is time consuming and not cost effective.

Schaub also explained there are more streams to cross on I¹. That adds to the cost.

The next portion in his book is Route A versus Route I¹. There are many more pinch points, streams to cross, and the other matrix information. These are estimates as best as we can get without designing. There are two pages that list out the issues with Route I¹. GRE didn't break up the route per jurisdiction and he understands that the City will only be reviewing the impacts of East Bethel.

The plan does meet the City Code. They are allowed to put in transmission lines in the area proposed and they are following the rules for safety, noise and electromagnetic fields. Transmission lines do not cause cancer and there isn't any documentation that they do. The City ordinance does require us to address traffic and there would be little impact on traffic during build out. There wouldn't be any affect to public utilities. There shouldn't be any more of a burden on government services. We have addressed property values and GRE does pay for the easements and the impact they have on the property. That shouldn't be an issue.

We do comply with the comprehensive plan. This plan goes hand and hand with your comprehensive plan. There isn't any impact on air quality. Some of the ordinance is a little redundant; it addresses zoning, natural resources. As we go along Cedar Creek, we have no intention of going on the Allison Savannah. They would not interfere with the business of Cedar Creek and at no time has there ever been any indication that we would interfere with it. They also have a history of our transmission line being on our western border. Also public services would not be impacted. This will only benefit proposed improvements if they require electricity.

FHA and VA mortgage rules have been raised, and it is addressed in the document. FHA and VA rules do have some requirements that say that they can't get appraisals on some of the property. We take great pains to make sure a house isn't in a fall zone. If a shed or anything is in the fall zone, we do address that when we are negotiating the easement and we try to work with property owners. We try to make sure the property owners have as much input as necessary. Overall Route A is the least expensive route and since we are essentially stewards of the ratepayers we want to make sure we use the least expensive route.

The proposed timeline has been put off many times. We wanted to get something started by May of 2011 and finish the plan by May of 2013. We are at the time of where this needs to be done. We aren't doing this for 20 years in the future. It is needed now, as your consultant has already stated.

Adverse impact, Linwood School Forest, Allison Savannah and Cedar Creek, they would impact these areas minimally. They would not go through the Forest, and the Allison Savannah they would be on the other side of the street. Cedar Creek they would be on the south side of the Reserve. There would not be any permanent impact to any rare animals or vegetation.

Mr. Schaub concluded by stating that Route A is the best of the routes.

Public hearing opened at 8:40 p.m.

Linda – a resident on Fawn Lake Drive – What is the minimum distance between the poles and do the residents get input on where they go? Schaub said it depends on the topography and GRE does work with the property owners as to where the poles are installed.

Bob DeRoche -158 Collen Street, East Bethel – DeRoche stated, Schaub mentioned there is only 15.8 milligauss.

What is a milligauss? Schaub said it is essentially the measure of magnetic waves. During the process of the project, that was something that was raised by someone in Linwood Township. We measured the line that is along Coopers Corner; we measure it directly under the centerline at 8 milligauss and then in her house. They had a lazy boy in front of their television. There was approximately 279 milligauss coming from the television. From the microwave oven there was something like 478 milligauss. The radio had something like 135 milligauss. That might put it in perspective. Everything you come in contact with has much more milligauss than a transmission line.

DeRoche stated that was at one point on the line. You speak a lot in generalities, and they are going to have questions, and you say we don't really have a design. If you don't have a design, this may happen this way, it may not. But yet you are asking for a CUP, to go and do whatever you want. Schaub said we do speak in generalities, but there are not such vast differences in the 69kv line at Coopers Corner and one in Eagan. They are specifically designed based on the parameters. We are always happy to give you more specifics, but the ordinance dictates that we come in, but not with a specific design. It would cost a fortune to design all of the potential plans.

DeRoche said you were talking about fall zones. A 35-foot easement and an 80-foot pole, if the house was within in that, they are in the danger zone.

DeRoche said about 50 percent of East Bethel is wetlands. Because of the environment, there is a great concern. There are always going to be questions, and you're going to need to answer them. Is there an environmental impact statement needed? You have made statements that they have said certain things, but we haven't seen anything to substantiate it. Schaub said generally we have

made contact with some agencies, but not all yet. For instance we haven't contacted the Army Corp of Engineers. The statements are based on general statements based on design. If there are concerns, the agencies will make GRE do the research. There can be quite a bit of burdensome work and investigation to get their ok. With respect to the poles – if a house is within 40 feet of a pole, possibly it could hit it. We try to design around those issues. We are aware of the intrusion of the poles. If there is an issue, we try to work with the property owner as much as we can.

Dave Landes - 1747 237th Ave. NE, East Bethel – This is a never ending argument. You implied that our Planning Commission should be concerned about future growth. Growth is pretty questionable at this time. How does the line going to Linwood provide for growth for East Bethel? Schaub said there are two parts to that question. The issue of the poles themselves, the best thing to do is to reiterate, the issue how does this affect the City of East Bethel residents, the southern part or any part. Schaub stated it does help those residents that are served off the Martin Lake and it does help with low voltage. The best he can say is, it is designed to bolster the entire area. Landes said if there is growth on the south side of East Bethel, it is hard to believe that you don't have other routes to serve that area. Schaub said this is not something for 20 years down the line. This was needed in 2006 and now the economy has been in respite, but it is also has been increasing the past couple of years. Maybe he needs to explain that this is not something that will cause the lights to go out now. It is to address the worse possible contingency. We don't want that to happen, we need to plan for them. These are all instances that could come about now, just depends on the amount of demand.

DeRoche said about contingency plans, what happens if you come upon some issues, is there a contingency plan. Schaub said with any route, we address the issues that come up. If it is archeological, we work with the State Archeological Society in the area. That is why we want to avoid the Typo Creek area. We also want to avoid the laboratory at Cedar Creek Reserve. They have cataloged the area and we feel we might not run into anything there. DeRoche said my question was really narrow, is there a contingency.

Jack Davis - 2241 221st Avenue, East Bethel – Can you give us a projected time schedule on the Athens route on County Road 9 from Athens to the Hwy 35 corridor. Tim can address that, per Mr. Schaub. DeRoche said the road would be widened within the next couple of years. Schaub said yes the road would be widened. Tim Mickelson, GRE, at this time, we have identified no plan to connect that line to the 35 corridor. We have our 230 kv network and are going to connect that corridor to the Hwy. 65 network using that section of line. This project would fulfill our needs for the foreseeable future.

Heidi Moegerle - 179 Forrest Road, East Bethel – On GRE's website, they state they are environmental stewards. But what their website states is we don't protect what is there, we build new prairies, etc. Moegerle stated she is a numbers person, so she wanted to make sure that Route A is the most environmentally conservative route. She analyzed the 15 routes. Route A comes in fifth from the top. If you are an East Bethel resident, and look at the East Bethel information, not the region. She took a look at the East Bethel impact;

Route A doesn't come in the top 75 percent. Then she looked at the data, we have what is printed out, and there are four factors that are missing. She looked at the formulas, the numbers don't total up, and she has a very grave concern that Route A is not minimal impact, unless we are talking about money. Because the environmental stuff really doesn't matter to GRE. Route A is the cheapest monetarily, but it isn't environmentally. It comes down to that. She said you probably think that I am angry and upset, I am not, but I want you to provide us a reason why Route A is the best other than besides the money.

Schaub said he doesn't know what you mean that numbers don't add up. It isn't a process whereby we just look at environmental. We are a cooperative and we look at the bottom line, and have to justify it when they don't. It is the impact on the people being able to public corridors. There are already easements for the lines. Moegerle said that is just money. Schaub said more easements are needed almost double the amount. Some of it is public versus private easements. We generally also look at the mileage as a factor. We thought the 0-100 or 0-200 factors were important also. We looked at the combination of all these things and as well as the requirements for higher voltage lines.

Moegerle said the matrix doesn't really count, but what we are really hearing is "trust us." What I would really like to see is what you based your decision on. Route A is shorter, but that isn't even on here. I want to know the winning argument of what makes Route A the best route. There are conclusionary statements, but no facts. There has to be something more, that you're not giving us, that is a fact that we have missed it all along. At the many meetings that I have been to, it isn't there. The issues with the number of easements wasn't initially mentioned. Schaub said we didn't have much time to look at Route I¹; we have looked at it for about a week. We did look at it, and noticed it is 11 miles. GRE tries to use existing corridors. Plus the other three miles doesn't go away and those poles have been up since the 50s. With the respect to the other issues, Route A is a better route. But overall it does allow us, to convert the lines. Can we use transportation corridors, can we avoid cutting across country, can we make sure that we do use the resources we do have and limit the cost of the use. Moegerle said you could say that about the majority of the other ones. The things you have said are not unique to Route A. Schaub said Route A is the better route. It is in the information they have been providing all along. The criteria are as much a part of it. It does in fact come out as a better route. It is the cheapest route. It will be 35 feet on either side of the centerline. It is usually about 3 feet off the road right-of-way, so 38 feet.

Dave Landes - 1747 237th Avenue NE, East Bethel – Are we able to address the Planning Commission?

Terry said on the matrix that we have been given, on Route A and Route I¹. It does show advantages in Route A – 14 to Route I¹ – 20. Route A has important considerations. It also has an advantage of centerlines to houses. That is one point in its favor. Schaub said the first route that we came in with. It wasn't rejected by any governmental entity. We had some understanding that we couldn't go along Route A and we would have to go further to the north, due to more service needed to the north. The reason we changed that was not because of what any governmental entity did. We held two open houses, and we invited

everyone for comments. The comments we kept getting were “why don’t you look at this route.” Another route that was explored was the East Bethel Road that cuts through Cedar Creek; the University said no, that runs south to north through their property. We determined the East Central and Connexus aren’t going to put something up in that area and there was no reason to grow in that direction. We determined that Route A was a good route and probably the best route. Because of those factors, and things like that. We didn’t move away from it because of any governmental entity, it was because what citizens asked us to. Terry said that is contrary to what others have said.

Resident asked since this doesn’t directly affect East Bethel now, or in the future, why doesn’t it make sense to let Linwood deal with it? Terry said they have come to us with that proposal so we have to respond in kind. Resident asked what would convince you that this should be done? Holmes said that is what we are here for, to determine what needs to be done. In Terry’s mind nothing has been said that will make him determine one or the other route. Resident said he would like to commend you and found that you are much more open to citizen input. And he is happy to hear your comments on that line and he thinks you are genuine in what they have to say.

Lou Cornicelli – 4620 229th Ave. NE, East Bethel – He has been involved with project for over two years. The bulk of East Bethel residents found out about the transmission line after GRE came to the City. To his knowledge there weren’t East Bethel residents involved in the meetings. It has been good to work on this, and he hopes the GRE Workgroup recommendation will move forward.

Schaub said we have a few open houses that were open to the public at large. It was published and we sent letters to the towns and cities to let them know. Everyone was invited. It is the way we begin our process. We did talk about it and show a map to the cities. There has never been any intention to include or exclude anyone.

Bob DeRoche -158 Collen Street, East Bethel – He has been a resident of the City for 29 years. To his knowledge, no one in Coon Lake Beach was aware of this project. Who was GRE talking to, or what newspapers was it in or what attempts were really made. East Bethel does have town hall meetings. Schaub said it was in 2008, and it was at a public City Council meeting. His understanding is that Doug Sell had the information. We did publish in the Anoka newspaper. And he can get the information on it. DeRoche said he would like to get the information. Schaub said we used the building next door and reserved the building. We also sent out the information.

Holmes said he does have 45 years of electrical background and does believe this line is needed. There is no question about that. It isn’t the City of East Bethel’s position for us to design a route for GRE. Route A is mainly in East Bethel. If this CUP is granted you will continue with Route A regardless? Schaub, yes, if it is granted, then yes we would go with Route A. If we grant it, and then you can’t say that we want to go with Route I.

Terry said he has a few question. What is the current right-of-way on Hwy. 65? Schaub said it is 50 feet on other side of centerline. Terry said you had

mentioned some issues on Typo Creek Drive. There is already a distribution line on the west side. Most of the distribution lines are in the road right-of-way. They put the line in, and there aren't the same safety issues with a distribution line. There are distribution lines that have brush along them. There isn't a lot of growth on the area I am talking about. On the other side there are buildings.

The communication tower is an issue if there is a blow out. Schaub said we need a 35-foot easement. It brings us dangerously close there. On the other side it brings us very close to the Linwood Town Hall. Getting to that area is a problem. There are also homes on the other side of the street. There are the group of homes, and also the fire department. Terry said all the difficulties are on the other side. There is not enough room for a safe easement. He is not an expert, and he thinks he has solved it. He doesn't know how valid these concerns are.

You have raised these issues for Route I¹, but you don't spell them out for Route A. There are only the two, because you haven't determined the whole route. Schaub said because the homes on Durant and Sunset are not as close to the road. There are only two that require special engineering. Cornacelli said once you get further on the Route A plan, there would be a lot of pinch points in those areas. Also at Packard Street on both sides the houses are closer than 100 feet. He feels that the information is weighted and believes the difficulties with Route A have been hidden for effect.

Schaub said in looking at those lots and homes, those are ones that we can work with easier. We won't have to make special considerations. It is all based on that kind of information. Some of the information that you have looked at is speculations for archeological sites that you can't share. It is information that is acquired and disseminated by the State Historical Society. We don't make up the requirements and we follow their rules and regulations. We don't know the full extent. That would cause delays and additional costs. Terry asked if any Linwood resident knows of the archeological site. A resident stated he has heard of Indian burial grounds somewhere near Martin Lake. Schaub said that others have done investigations that the state historical society has deemed an area that is not looked at, not disturbed or needs to be looked at. The issue for GRE is do we have to comply with what the State requires us to look at.

Marsha Parlow, GRE. She stated she works with the State Historical Society and they have records that show where it is. We can go and have an archeologist go and review the information. They don't want the public to know the information due to potential vandalism. Once something is entered into the record here, it is public; they have asked us to not reveal the information. That is the reason you don't have it now, open meeting laws and data practices act.

Bob DeRoche -158 Collen Street, East Bethel – Isn't that something that could be done in a closed session. City Attorney stated he doesn't know because we don't know what it is.

Schaub said we aren't telling you because of what is there or isn't there, but because of the requirements are required for us. We don't want to have to go that route. Moegerle would those requirements would be there if you find something or not. Schaub said if we present them with our route, and we would have to do

the additional investigation, whether we find something or not.

Holmes said he has had to deal with that in the past, and if you are going to do something with a remotely close area, you are under their guise. They are very picky about that stuff.

Terry stated if we were to approve Route A, his personal concern is for residents, and to have to approve a 35-foot right-of-way. He doesn't want to see persons have their trees cut down and would recommend shorter pole distances. Would that present a great impact? Schaub said our design engineer could address that. There is an issue of reasonableness. If it is possible to minimize an easement, but it isn't something that we typically do. We need to maintain safety standards and would work with people to minimize what the impact is.

GRE, Jim McGuire, if you have trees that are taller than the line, we would take that tree down to minimize the impact on the line.

Resident asked how much of the clear cut is by peoples' homes, versus clear cutting along non-developed road. Schaub said if there are trees that are partially within an easement, we work with people to trim them. The Federal Government is getting very strict to get us to remove all the trees. This is for tall growing species. There are things that can grow within the safety distances. That is not completely removing all trees. Resident said if everything is tall species and it is all clear cut, are you going to work on that. Schaub said yes, we do work with the residents on that, and we also have a forester who works on this. Resident said do you use a basic calculation for easement, is it based on road mileage, or is it valuation. Schaub said we have to come up with a standard for the property. We have standard amounts that we try to pay, based on market in the area. There are some trees that have storm damage in areas and the trees might not be so great. If some people are 400 feet from the line versus 40 feet from the line, we look at all of that. If you have a bunch of cottonwoods and oaks, we look at that.

Public Hearing was Closed at 9:50 p.m.

Holmes motions to recommend denial to the City Council for the CUP request by GRE for the route known as "Route A based on the following:

- **Density of East Bethel compared to the other areas north of East Bethel.**
- **East Bethel has a massive amount of environmental and wetland impacts.**

Mundle seconded; all in favor, motion carries 3-1 (Terry abstained).

City Council will hear this on June 22, 2011 in a special meeting.

Terry motioned if the City Council does decide to approve Route A, that they incorporate these concerns:

1. **GRE shall minimize the need for any unsightly guide wires at corners, angles and dead ends, and utilize steel poles at dead ends,**

corners, and angles and in certain high-density neighborhoods designated by the City Engineer as part of this project.

- 2. That Great River Energy and/or its subsidiaries or other utility users that utilize its services shall install underground service drops at crossings of County Road 26 and other municipal roads within the city of East Bethel without added cost to the residents and utility users and assure that the relocation of distribution facilities to the north side of County Road 26 results in a minimum replacement of service drops, and wherever possible all service drops must be underground.**
- 3. Consider limiting the easement to the minimum standard, and if 70 feet is needed it is reviewed on a case-by-case basis after consulting with the property owner.**

Holmes seconded; all in favor, motion carries unanimously.

**Approve May 24,
2011 Planning
Commission Meeting
Minutes**

Holmes motioned to approve the May 24, 2011 Planning Commission minutes. Terry seconded; all in favor, motion carries.

Adjourn

Terry made a motion to adjourn the meeting at 9:55 PM. Holmes seconded; all in favor, motion carries.

Submitted by:

Jill Teetzel
Recording Secretary



City of East Bethel City Council Agenda Information

Date:

June 21, 2011

Agenda Item Number:

3.0A

Agenda Item:

Resolutions for Great River Energy CUP Request

Requested Action:

Consider of Adoption of Resolution Supporting City Council Decision

Background Information:

Staff understands City Council is considering three (3) options for the Conditional Use Permit (CUP) request by Great River Energy of a proposed 69 kV transmission line. Staff has prepared resolutions for each of the options. The proposed resolutions are identified as A, B, and C. An official number will be assigned to the final, approved resolution.

Should City Council choose to deny the request, staff recommends the adoption of Resolution 2011-A, A Resolution Making Findings of Fact and Denying a Conditional Use Permit for Great River Energy Route A. The resolution states reasons of denial.

Should City Council choose to grant the request for Route A, staff recommends the adoption of Resolution 2011-B, A Resolution Making Findings of Fact and Granting a Conditional Use Permit for Great River Energy Route A. The resolution states reasons for approval and required conditions as part of the approval.

Should City Council choose to grant a CUP for the portion of transmission line within the City of East Bethel known as Route II, staff recommends the adoption of Resolution 2011-C, A Resolution Making Findings of Fact and Granting a Conditional Use Permit for Great River Energy Route II. The resolution states reasons for approval and required conditions as part of the approval.

Attachments:

1. Resolution 2011-A, A Resolution Making Findings of Fact and Denying a Conditional Use Permit for Great River Energy Route A
2. Resolution 2011-B, A Resolution Making Findings of Fact and Granting a Conditional Use Permit for Great River Energy Route A
3. Resolution 2011-C, A Resolution Making Findings of Fact and Granting a Conditional Use Permit for Great River Energy Route II

Fiscal Impact:

Undetermined

Recommendation:

Staff recommends the adoption of a resolution to support the decision of City Council. An official resolution number will be assigned to the approved resolution.

City Council Action

Motion by:_____

Second by:_____

Vote Yes:_____

Vote No:_____

No Action Required:_____

RESOLUTION NO. 2011-A

**CITY OF EAST BETHEL
ANOKA COUNTY, MINNESOTA**

**A RESOLUTION MAKING FINDINGS OF FACT AND DENYING A CONDITIONAL
USE PERMIT FOR GREAT RIVER ENERGY FOR ROUTE A
(ROUTE A DENIAL)**

THE CITY OF EAST BETHEL HEREBY MAKES THE FOLLOWING FINDINGS:

WHEREAS, the City of East Bethel received a CUP application submitted by Great River Energy on March 4, 2011, requesting that the City provide Conditional Use Permit approval for a 69KV Transmission Line to be constructed through the city of East Bethel; and,

WHEREAS, the City of East Bethel, prior to the filing of the Conditional Use Permit, established by Ordinance, a Conditional Use Permit process for transmission lines to be constructed or located within the city of East Bethel; and,

WHEREAS, the City of East Bethel formed a workgroup who participated with the Applicant in reviewing the application and proposed project alternatives at several locations, with the Applicant supplying analysis to the workgroup in a manner that was specified within the Ordinance; and,

WHEREAS, the City of East Bethel did retain an independent technical expert, being LLS Resources, LLC, with technical representatives Larry L. Schedin and Robert Hoerauf, both registered professional electrical engineers in the State of Minnesota, to examine the several routes both within and outside of the city, being evaluated for the proposed routes to serve the transmission line to be located; and,

WHEREAS, Great River Energy is a generation transmission cooperative headquartered in Maple Grove, owning transmission lines supplying energy to East Bethel and surrounding territories. GRE facilities supply wholesale electricity to Connexus, which in turn distributes electricity at retail to East Bethel homes, businesses and neighboring communities; and,

WHEREAS, GRE proposes the located of a 69 Kilovolt line, denominated the Athens to Martin Lake 69KV Project; and,

WHEREAS, current electric supply occurs at 3 successive levels in the following order:

- 1.) bulk transmission: 230 volts (230kv);

- 2.) sub transmission: 69,000 volts (69kv); and
- 3.) distribution: 12,500 volts (12.5kv).

The 230kv bulk transmission system supplies GRE's 69kv system in the north metro area originating at Rush City heading south, roughly parallel to Highway I-35W to a point near Hugo where it turns west through Blaine through Bunker Lake, where again it turns north through Andover. At Andover, it again turns west towards Elk River and Monticello. Over this north metro path, the 230kv system supplies the 69kv system via 230kv-69kv substations located at Linwood, Blaine, Bunker Lake, and Elk River; however, as the north metro area grows, it is positioned to further supply GRE's 69kv system via a new 230kv-69kv substation at locations such as Johnsville and Andover. The existing KV subtransmission system presently supplies five (5) distribution substations at 12.5kv, portions of which directly serve East Bethel homes and businesses via distribution lines called "feeders". Distribution substations are currently located at Cooper's Corner, East Bethel, Martin Lake, Soderville, and Forest Lake; and,

WHEREAS, with the exception of the Martin Lake substation, each of the foregoing distribution substations are supplied by two or more 69kv lines. Therefore, if one 69kv source is out of service, it is backed up by one or more remaining KV sources, however, in the Martin Lake substation has no such back up supply; it is supplied only by one (1) 69kv line from Linwood substation near Highway I-35. This line is called a "radical feed" and its loss can be replaced only via complicated switching procedures on the 12.5kv distribution system, typically causing lengthy outages; and,

WHEREAS, the addition of an Athens Martin Lake 69KV line would avoid expensive upgrades of three other critical 69kv line segments in the local power grid and provides a two-way 69kv supply to the Martin Lake substation; and,

WHEREAS, information provided by the Applicant's engineer shows that the repair and replacement of these critical line segments supplemented by a capacitor bank could cost in the range of 4 to 5 times the \$4-5 Million cost of an Athens to Martin Lake 69KV line, and additionally, such upgrades would not provide two-way service to the Martin Lake substation, and important goal of the project; and,

WHEREAS, the City of East Bethel does find that the Athens and Martin Lake substations are reasonable termination points for a new 69kv line, but there are many routing options between these two points both within and outside of the City of East Bethel; and,

WHEREAS, GRE representatives and Applicant have represented that the 69kv line would not be designed so that it could be simply reconnected to operate and upgrade to 115kv line, which would be a regulated service permit under the Public Utilities Commission; however, it is reasonable to project that future upgrades to electric service lines would favor following existing paths established under the current protocols; and,

WHEREAS, the City, its workgroups, Planning Commission, in addition to the Applicant, have examined 16 route options to consider for the routing of the proposed 69kv line to connect the Athens and Martin Lake substations; and,

WHEREAS, the lines examined are set forth as follows:

A. Far North and Medium North Groups

1. Sunset Road sub-group

Route E: Far North, Road 9E to Xylite S, to Road 56E along north edge of Cedar Creek Reserve turning S on Durant St to Fawn Drive (76E) then Sunset Rd S to Road 26E to Typo Creek Dr S

Route F: Far North, Road 9E to Durant St (45S) to Fawn Drive (76E) to S on Sunset Rd to Road 26E, then to Typo Creek Dr S

Route F1: Far North, Road 9E to Road 12S&W to Durant St (45S) to Fawn Drive (76E) to S on Sunset Rd to Road 26E, then to Typo Creek Dr S

Route E1, Far North: Road 56E to Xylite (56S) (both on north edge of Cedar Creek Reserve) to Fawn Drive (76E), to Sunset Rd S to 26E to Typo Creek Dr S.

Route E1, Med North: Road 56E to Xylite (56S) (both on north edge of Cedar Creek Reserve) to Fawn Drive (76E), to Sunset Rd S to 26E to Typo Creek Dr S.

2. Typo Creek Drive sub-group

Route G: Far North, Road 9E to 12S to 20E to Typo Creek Dr S.

Route H : Med North, Road 56E to Xylite (56S) (both on north edge of Cedar Creek Reserve) to 12E to Durant St (45S) to Fawn Drive (76E), then to Typo Creek Dr S

Route H1: Far North, Road 9E to 18S to 20W (north of Typo Lake) then to Typo Creek Dr S

Route I: Far North, Road 9E to Road 12S&W to Durant St (45S) to Fawn Drive (76E) then to Typo Creek Dr S

3. Typo Creek Drive and Sunset sub-group

Route G1: Far North, Road 9E to 12S to 20E to Typo Creek Dr S to 29W

to Sunset Rd S to 26E to Typo Creek Dr S.

B. Central Cut Group

Route B: Central Cut, Road 24E from Coopers Corner to Fawn Drive (76E) to Sunset Rd S to 26E to Typo Creek Dr S.

Route B1: Central Cut, S from Athens Sub to Route 25 cutting directly across Cedar Creek Reserve to Fawn Dr (76E) to Sunset Rd S to 26E to Typo Creek Dr S.

C. Medium South, South and Far South Group

Route A: Med South, 237th Ave E (Rd 24) to Road 26E to Typo Creek Drive S

Route C1: Med South, 237th Ave E (Rd 24) to Road 26E to 15S to Road 22N

Route C: South, Hwy 65 S to Road 74E to Rd 22N

Route D: Far South, Hwy 65 to Viking Blvd (Rd 68E to 22N)

WHEREAS, as part of the evaluation of the various routes, the Applicant and the City have considered environmental issues specific to Cedar Creek Reserve and potentially sensitive archeological and historic areas, only some of which have been shown on the mapping of environmentally sensitive areas depicted on maps provided by the Applicant; and,

WHEREAS, the Cedar Creek Ecosystem and Scientific Reserve is listed as a National Natural Landmark by the National Park Service and is a significant environmental asset within the community of East Bethel; and

WHEREAS, the Cedar Creek Ecosystem and Scientific Reserve is proposed to be in the pathway of proposed “Route A” advocated by the applicant; and,

WHEREAS, The University of Minnesota manages the Cedar Creek Ecosystem and Scientific Reserve and has stated in response to their position on proposed “Route A”:

“Cedar Creek Ecosystem Science Reserve owned and operated by the University of Minnesota, will support the decision of the City of East Bethel’s City Council in regards to Great River Energy’s request for a Conditional Use Permit to construct transmission lines through the City. However, the University will not support any option that would require routing the transmission line through any part of the University property other than along the perimeter of the Reserve.

Specifically, if the council decides to deny a permit for “Route A” then Cedar Creek will

stand by that decision by officially rejecting GRE's request to build a transmission line on University property along that or any other route specifically precluded by the council"

WHEREAS, in the evaluation of the various routes, the City has considered attributes for each route option, included within a route matrix prepared, which attributes are as follows:

1. New construction miles
2. Construction cost (\$ millions)
3. Tree clearing, acres
4. New easements, acres
5. Public land easements, miles
6. Private land easements, miles
7. Special transmission structures (reinforced or guyed dead ends, corner and angle structures)
8. Distance to homes from centerline:
 - a) 0-100 ft
 - b) 0-200 ft
 - c) 0-300 ft
9. Forested wetlands, miles
10. Non-forested wetlands, miles
11. Wetlands, acres
12. Six types of Public Water Inventory (PWI) categories:
 - a) Perennial streams and rivers crossed
 - b) Intermittent streams and rivers crossed
 - c) PWI streams crossed
 - d) No. of wetlands within route
 - e) No. of PWI lakes within ROW
 - f) No. of PWI wetlands within ROW.

WHEREAS, the City's consultants have reviewed the various routes option proposed to be located within the city, and have determined that from the various route attributes, only Route A (mostly following County Road 26) is the most direct route with significantly less new right-of-way (7.4 miles total to be acquired) and less new construction (10.4 miles total), and less cost than all of the other candidate routes within the city. The other attributes of Route A compared to all the other route options (inside and outside the city) are all favorable in the opinion of the consultants, and Route A has been recommended to the City as the best route option within the city, yet recognizing that there are concerns and mitigation points and disadvantages that needed to be accommodated; and,

WHEREAS, Route A would also accommodate a rebuild and relocation of a 3-phase main feeder line as under build running most of the entire length of the new line with the 3-phase feeder line being mostly on the south side of County Road 26. The City's consultants have opined that unless Connexus agrees to install underground service drops, crossings, for County Road 26 without added costs, the relocation of distribution facilities to the north side of County Road 26 will result in a number of unsightly service drops which now do not exist. Additionally,

the City's consultants have opined that GRE should confirm that to avoid power lines on both sides of County Road 26, the distribution line transfer, should Route A be selected, will occur at the same time as the new 69kv construction; and,

WHEREAS, in addition to the construction along the north border of the Allison Savannah, Route A will also require construction along the entire south border of Cedar Creek Reserve, a major ecosystem/science reserve; and,

WHEREAS, the representatives of Cedar Creek Reserve do not concur with the construction in proximity to Cedar Creek Reserve; and,

WHEREAS, it is reasonable for the City to consider the imposition of obtaining the necessary commitments from Great River Energy with regard to the timing of the construction of the various facilities comprising the 69kv line, should Route A be granted so that the community is not burdened by piece meal construction of that facility over an unreasonable length of time; and,

WHEREAS, the construction of any route should utilize steel poles at dead ends, corners and angles, and within certain high-density neighborhoods so as to reduce the need for guide wires and wood structures, as wood is not as effective as steel in reducing unsightly guide wires and for stability; and,

WHEREAS, Route A territory, is currently guided by the City's comprehensive plan for the following land uses and environmental and natural resources goals:

- a) low density residential land use which consists of detached single family homes on a variety of lot sizes with a minimum gross density of one (1) unit per ten (10) acres; as the lots are difficult to serve with municipal services and will be in the foreseeable future,
- b) significant natural area known as Cedar Creek Ecosystem and Scientific Reserve, owned and operated by the University of Minnesota,
- c) to maintain and enhance the natural amenities of the city for future generations to enjoy, and
- d) to protect the surface waters and wetland areas of the city to promote aesthetic qualities, natural habitat areas, and groundwater recharge.

WHEREAS, Route 11, as examined, could be significantly shorted by using Durant Street, rather than Route 12 when heading south off of Route 9. The City's consultants estimated that in using this modification the distance could be shortened from 13.10 miles to 10.9 miles, making the new construction distance comparable to that required by Route A. Further, Route 9 is also scheduled for a rebuild and widening in 4 to 5 years by Anoka County, so that modification of Plan I would minimize the length of line on Highway 9 to be exposed to a rebuild or relocation. It is also established that there exists 2 miles of 69kv line currently located on Highway 9 which could be utilized for this modification of Route 9; and,

WHEREAS, this modification to former Route I, designated Route II, shows a total length of 11.3 miles at a projected cost of \$3.905 million, which is close to the projected \$3.678 million of Route A, but with more new right-of-way acquisition (11.3 miles vs. 7.4 miles). Notwithstanding same, Route II would have the following significant benefits:

- A. From a planning standpoint, given the possibility that the route selected presently for the upgrade to the 69kv line might someday in the future be proposed to be served by an upgrade to a 115kv line (Route ROW widths are the same for a 69 KV line vs. a 115 KV line as designed by GRE), the route designated as II impacts fewer residents and involves right-of-way over more open and vacant land.
- B. The route would already utilize 2 miles of existing 69kv line now in place and controlled by GRE.
- C. The Route II would impact a lesser densely populated area than Route A
- D. Route II would have no impact upon the Cedar Creek Ecosystem Science Reserve

WHEREAS, The applicant has prepared matrices and reports based on the various routes and differences with aspects and elements of impacts (i.e. projected pinch points, easements to be acquired and right of way to be secured) but has acknowledged at the public hearing conducted before the planning commission on June 20, 2011 that its matrices are projected upon estimates and not gathered from any surface study or design data and thus are inherently generalized as based on projection appearing to skew the results between the various options and Route A; and,

WHEREAS, the applicants matrix misses important data such as the number of easements and right of way acquisitions needed for each route; and

WHEREAS, the applicants statement that Route II in the vicinity of Typo Drive would encounter possible historic or archeological features that could impact the route designation is speculative and uncertain given that no specific historic or archeological site has been evidenced within any report nor any existing historic or archeological feature has been demonstrated to exist in the pathway of Route II; and,

WHEREAS, Route A would result in significant tree and canopy loss (8.5 ac vs. 1.79 ac within East Bethel for Route II) along CSAH 26 impacting many residents on the north side of that proposed line; and

WHEREAS, there is no evidence that location of the 69 KV line along Route II will not impair or preclude widening and upgrades to CSAH 9 in the future should Anoka County desire to do so.

WHEREAS, all routes have a negative impact relative to economic/environmental social and/or health and safety impacts, but Route A appears to be the route that has one of the most impacts to Cedar Creek Ecosystem Science Reserve as opposed to other several other routes within the City of East Bethel; and,

WHEREAS, Both Route A and I1 have minimal interference with public use and public property; and,

WHEREAS, Route A and I1 would serve the Applicant's need to adequately and reliably service customers within the relevant service area now and in the foreseeable future; and,

WHEREAS, the traffic impacts are less pronounced with Route A and I1 as opposed to other options as proposed within the city; and,

WHEREAS, the significant impact and risk to Cedar Creek Ecosystem Science Reserve outweighs any possible economic benefit to the use of Route A.

NOW, THEREFORE, BE IT RESOLVED, by the City Council for the City of East Bethel that the Application for Conditional Use Permit requested by Great River Energy to locate 69kv line between the Athens and Martin Lake substations going through the city of East Bethel along Route A is hereby denied

Passed by the City Council for the City of East Bethel this _____ day of June, 2011.

Richard Lawrence, Mayor

ATTEST:

Jack Davis
City Administrator

RESOLUTION NO. 2011-B

**CITY OF EAST BETHEL
ANOKA COUNTY, MINNESOTA**

**A RESOLUTION MAKING FINDINGS OF FACT AND GRANTING A CONDITIONAL
USE PERMIT FOR GREAT RIVER ENERGY
(ROUTE A-APPROVAL)**

THE CITY OF EAST BETHEL HEREBY MAKES THE FOLLOWING FINDINGS:

WHEREAS, the City of East Bethel received a CUP application submitted by Great River Energy on March 4, 2011, requesting that the City provide Conditional Use Permit approval for a 69KV Transmission Line to be constructed through the city of East Bethel; and,

WHEREAS, the City of East Bethel, prior to the filing of the Conditional Use Permit, established by Ordinance, a Conditional Use Permit process for transmission lines to be constructed or located within the city of East Bethel; and,

WHEREAS, the City of East Bethel formed a workgroup who participated with the Applicant in reviewing the application and proposed project alternatives at several locations, with the Applicant supplying analysis to the workgroup in a manner that was specified within the Ordinance; and,

WHEREAS, the City of East Bethel did retain an independent technical expert, being LLS Resources, LLC, with technical representatives Larry L. Schedin and Robert Hoerauf, both registered professional electrical engineers in the State of Minnesota, to examine the several routes both within and outside of the city, being evaluated for the proposed routes to serve the transmission line to be located; and,

WHEREAS, Great River Energy is a generation transmission cooperative headquartered in Maple Grove, owning transmission lines supplying energy to East Bethel and surrounding territories. GRE facilities supply wholesale electricity to Connexus, which in turn distributes electricity at retail to East Bethel homes, businesses and neighboring communities; and,

WHEREAS, GRE proposed the located of a 69 Kilovolt line, denominated the Athens to Martin Lake 69KV Project; and,

WHEREAS, current electric supply occurs at 3 successive levels in the following order:

- 1.) bulk transmission: 230 volts (230kv);

- 2.) subtransmission: 69,000 volts (69kv); and
- 3.) distribution: 12,500 volts (12.5kv).

The 230kv bulk transmission system supplies GRE's 69kv system in the north metro area originating at Rush City heading south, roughly parallel to Highway I-35W to a point near Hugo where it turns west through Blaine through Bunker Lake, where again it turns north through Andover. At Andover, it again turns west towards Elk River and Monticello. Over this north metro path, the 230kv system supplies the 69kv system via 230kv-69kv substations located at Linwood, Blaine, Bunker Lake, and Elk River; however, as the north metro area grows, it is positioned to further supply GRE's 69kv system via a new 230kv-69kv substation at locations such as Johnsville and Andover. The existing KV subtransmission system presently supplies five (5) distribution substations at 12.5kv, portions of which directly serve East Bethel homes and businesses via distribution lines called "feeders". Distribution substations are currently located at Cooper's Corner, East Bethel, Martin Lake, Soderville, and Forest Lake; and,

WHEREAS, with the exception of the Martin Lake substation, each of the foregoing distribution substations are supplied by two or more 69kv lines. Therefore, if one 69kv source is out of service, it is backed up by one or more remaining KV sources, however, in the Martin Lake substation has no such back up supply; it is supplied only by one (1) 69kv line from Linwood substation near Highway I-35. This line is called a "radical feed" and its loss can be replaced only via complicated switching procedures on the 12.5kv distribution system, typically causing lengthy outages; and,

WHEREAS, the addition of an Athens Martin Lake 69KV line would avoid expensive upgrades of three other critical 69kv line segments in the local power grid and provides a two-way 69kv supply to the Martin Lake substation; and,

WHEREAS, information provided by the Applicant's engineer shows that the repair and replacement of these critical line segments supplemented by a capacitor bank could cost in the range of 4 to 5 times the \$4-5 Million cost of an Athens to Martin Lake 69KV line, and additionally, such upgrades would not provide two-way service to the Martin Lake substation, and important goal of the project; and,

WHEREAS, the City of East Bethel does find that the Athens and Martin Lake substations are reasonable termination points for a new 69kv line, but there are many routing options between these two points; and,

WHEREAS, GRE representatives and Applicant have represented that the 69kv line would not be designed so that it could be simply reconnected to operate and upgrade to 115kv line, which would be a regulated service under the Public Utilities Commission; however, it is reasonable to project that future upgrades to electric service lines would follow existing paths established under the current protocols; and,

WHEREAS, the City, its workgroups, Planning Commission, in addition to the Applicant, have examined 16 route options to consider for the routing of the proposed 69kv line to connect the Athens and Martin Lake substations; and,

WHEREAS, the lines examined are set forth as follows:

A. Far North and Medium North Groups

1. Sunset Road sub-group

Route E: Far North, Road 9E to Xylite S, to Road 56E along north edge of Cedar Creek Reserve turning S on Durant St to Fawn Drive (76E) then Sunset Rd S to Road 26E to Typo Creek Dr S

Route F: Far North, Road 9E to Durant St (45S) to Fawn Drive (76E) to S on Sunset Rd to Road 26E, then to Typo Creek Dr S

Route F1: Far North, Road 9E to Road 12S&W to Durant St (45S) to Fawn Drive (76E) to S on Sunset Rd to Road 26E, then to Typo Creek Dr S

Route E1, Far North: Road 56E to Xylite (56S) (both on north edge of Cedar Creek Reserve) to Fawn Drive (76E), to Sunset Rd S to 26E to Typo Creek Dr S.

Route E1, Med North: Road 56E to Xylite (56S) (both on north edge of Cedar Creek Reserve) to Fawn Drive (76E), to Sunset Rd S to 26E to Typo Creek Dr S.

2. Typo Creek Drive sub-group

Route G: Far North, Road 9E to 12S to 20E to Typo Creek Dr S.

Route H : Med North, Road 56E to Xylite (56S) (both on north edge of Cedar Creek Reserve) to 12E to Durant St (45S) to Fawn Drive (76E), then to Typo Creek Dr S

Route H1: Far North, Road 9E to 18S to 20W (north of Typo Lake) then to Typo Creek Dr S

Route I: Far North, Road 9E to Road 12S&W to Durant St (45S) to Fawn Drive (76E) then to Typo Creek Dr S

3. Typo Creek Drive and Sunset sub-group

Route G1: Far North, Road 9E to 12S to 20E to Typo Creek Dr S to 29W

to Sunset Rd S to 26E to Typo Creek Dr S.

B. Central Cut Group

Route B: Central Cut, Road 24E from Coopers Corner to Fawn Drive (76E) to Sunset Rd S to 26E to Typo Creek Dr S.

Route B1: Central Cut, S from Athens Sub to Route 25 cutting directly across Cedar Creek Reserve to Fawn Dr (76E) to Sunset Rd S to 26E to Typo Creek Dr S.

C. Medium South, South and Far South Group

Route A: Med South, 237th Ave E (Rd 24) to Road 26E to Typo Creek Drive S

Route C1: Med South, 237th Ave E (Rd 24) to Road 26E to 15S to Road 22N

Route C: South, Hwy 65 S to Road 74E to Rd 22N

Route D: Far South, Hwy 65 to Viking Blvd (Rd 68E to 22N)

WHEREAS, as part of the evaluation of the various routes, the Applicant and the City have considered environmental issues specific to Cedar Creek Reserve and potentially sensitive archeological and historic areas, only some of which have been shown on the mapping of environmentally sensitive areas depicted on maps provided by the Applicant; and,

WHEREAS, in the evaluation of the various routes, the City has considered attributes for each route option, included within a route matrix prepared, which attributes are as follows:

1. New construction miles
2. Construction cost (\$ millions)
3. Tree clearing, acres
4. New easements, acres
5. Public land easements, miles
6. Private land easements, miles
7. Special transmission structures (reinforced or guyed dead ends, corner and angle structures)
8. Distance to homes from centerline:
 - a) 0-100 ft
 - b) 0-200 ft
 - c) 0-300 ft
9. Forested wetlands, miles

10. Non-forested wetlands, miles
11. Wetlands, acres
12. Six types of Public Water Inventory (PWI) categories:
 - a) Perennial streams and rivers crossed
 - b) Intermittent streams and rivers crossed
 - c) PWI streams crossed
 - d) No. of wetlands within route
 - e) No. of PWI lakes within ROW
 - f) No. of PWI wetlands within ROW.

WHEREAS, the City's consultants have reviewed the various routes option proposed to be located within the city, and have determined that from the various route attributes, only Route A (mostly following County Road 26) is the most direct route with significantly less new right-of-way (7.4 miles total to be acquired) and less new construction (10.4 miles total), and less cost than all of the other candidate routes within the city. The other attributes of Route A compared to all the other route options (inside and outside the city) are all favorable in the opinion of the consultants, and Route A has been recommended to the City as the best route option within the city, yet recognizing that there are concerns and mitigation points and disadvantages that needed to be accommodated; and,

WHEREAS, Route A would also accommodate a rebuild and relocation of a 3-phase main feeder line as under build running most of the entire length of the new line with the 3-phase feeder line being mostly on the south side of County Road 26. The City's consultants have opined that unless Connexus agrees to install underground service drops, crossings, for County Road 26 without added costs, the relocation of distribution facilities to the north side of County Road 26 will result in a number of unsightly service drops which now do not exist. Additionally, the City's consultants have opined that GRE should confirm that to avoid power lines on both sides of County Road 26, the distribution line transfer, should Route A be selected, will occur at the same time as the new 69kv construction; and,

WHEREAS, in addition to the construction along the north border of the Allison Savannah, Route A will also require construction along the entire south border of Cedar Creek Reserve, a major ecosystem/science reserve; and,

WHEREAS, the representatives of Cedar Creek Reserve do not concur with the construction in proximity to Cedar Creek Reserve, but have stated that construction along the south border is preferable to construction along their far more ecologically sensitive north border; and,

WHEREAS, it is reasonable for the City to consider the imposition of obtaining the necessary commitments from Great River Energy with regard to the timing of the construction of the various facilities comprising the 69kv line, should Route A be granted so that the community is not burdened by piece meal construction of that facility over an unreasonable length of time; and,

WHEREAS, the construction of any route should utilize steel poles at dead ends, corners and angles, and within certain high-density neighborhoods so as to reduce the need for guide wires and wood structures, as wood is not as effective as steel in reducing unsightly guide

wires and for stability; and,

WHEREAS, Route A, as currently guided by the City's comprehensive plan for the following land uses and environmental and natural resources goals:

low density residential land use which consists of detached single family homes on a variety of lot sizes with a minimum gross density of one (1) unit per ten (10) acres; as the lots are difficult to serve with municipal services and will be in the foreseeable future,

significant natural area known as Cedar Creek Ecosystem and Scientific Reserve, owned and operated by the University of Minnesota,

to maintain and enhance the natural amenities of the city for future generations to enjoy, and

to protect the surface waters and wetland areas of the city to promote aesthetic qualities, natural habitat areas, and groundwater recharge.

WHEREAS, the City of East Bethel finds that a no-build alternate is not reasonable given the existing needs as expressed by the Applicant and the growth for electrical service presently and anticipated to occur within the area; and,

WHEREAS, all routes have a negative impact relative to economic/environmental social and/or health and safety impacts, but Route A appears to be the route that has the least impact in those areas as to other routes within the city of East Bethel; and,

WHEREAS, Route A has minimal interference with public use and public property; and,

WHEREAS, Route A does serve the Applicant's need to adequately and reliably service customers within the relevant service area now and in the foreseeable future; and,

WHEREAS, the traffic impacts are less pronounced with Route A as opposed to other options as proposed within the city; and,

NOW, THEREFORE, BE IT RESOLVED, by the City Council for the City of East Bethel that the Conditional Use Permit requested by Great River Energy to locate 69kv line between the Athens and Martin Lake substations going through the city of East Bethel is hereby approved, with Route A being selected, subject to the imposition of the following mitigation measures and conditions:

1. That Great River Energy will submit a construction plan prior to commencing the construction of the 69kv line, establishing both a construction time table and a progression of construction that shall be reviewed and meet the approval of the City's consulting engineers and staff.

2. That Great River Energy shall minimize the need for any unsightly guide wires at corners, angles and dead ends, and utilize steel poles at dead ends, corners, angles and in certain high density neighborhoods designated by the City's consulting engineers as part of this project.
3. That Great River Energy and/or its subsidiaries or other utility users that utilize its services shall install underground service drops at crossings of County Road 26 and other municipal roads within the city of East Bethel without added cost to the residents and utility users and assure that the relocation of distribution facilities to the north side of County Road 26 results in a minimum replacement of service drops, and wherever possible all service drops must be undergrounded.
4. That Great River Energy execute Conditional use Permits and Agreements as prepared by City Staff.

Passed by the City Council for the City of East Bethel this _____ day of June, 2011.

Richard Lawrence, Mayor

ATTEST:

Jack Davis
City Administrator

RESOLUTION NO. 2011-C

**CITY OF EAST BETHEL
ANOKA COUNTY, MINNESOTA**

**A RESOLUTION MAKING FINDINGS OF FACT AND GRANTING A CONDITIONAL
USE PERMIT FOR GREAT RIVER ENERGY
(ROUTE I1-APPROVAL)**

THE CITY OF EAST BETHEL HEREBY MAKES THE FOLLOWING FINDINGS:

WHEREAS, the City of East Bethel received a CUP application submitted by Great River Energy on March 4, 2011, requesting that the City provide Conditional Use Permit approval for a 69KV Transmission Line to be constructed through the city of East Bethel; and,

WHEREAS, the City of East Bethel, prior to the filing of the Conditional Use Permit, established by Ordinance, a Conditional Use Permit process for transmission lines to be constructed or located within the city of East Bethel; and,

WHEREAS, the City of East Bethel formed a workgroup who participated with the Applicant in reviewing the application and proposed project alternatives at several locations, with the Applicant supplying analysis to the workgroup in a manner that was specified within the Ordinance; and,

WHEREAS, the City of East Bethel did retain an independent technical expert, being LLS Resources, LLC, with technical representatives Larry L. Schedin and Robert Hoerauf, both registered professional electrical engineers in the State of Minnesota, to examine the several routes both within and outside of the city, being evaluated for the proposed routes to serve the transmission line to be located; and,

WHEREAS, Great River Energy is a generation transmission cooperative headquartered in Maple Grove, owning transmission lines supplying energy to East Bethel and surrounding territories. GRE facilities supply wholesale electricity to Connexus, which in turn distributes electricity at retail to East Bethel homes, businesses and neighboring communities; and,

WHEREAS, GRE proposed the located of a 69 Kilovolt line, denominated the Athens to Martin Lake 69KV Project; and,

WHEREAS, current electric supply occurs at 3 successive levels in the following order:

- 1.) bulk transmission: 230 volts (230kv);

- 2.) subtransmission: 69,000 volts (69kv); and
- 3.) distribution: 12,500 volts (12.5kv).

The 230kv bulk transmission system supplies GRE's 69kv system in the north metro area originating at Rush City heading south, roughly parallel to Highway I-35W to a point near Hugo where it turns west through Blaine through Bunker Lake, where again it turns north through Andover. At Andover, it again turns west towards Elk River and Monticello. Over this north metro path, the 230kv system supplies the 69kv system via 230kv-69kv substations located at Linwood, Blaine, Bunker Lake, and Elk River; however, as the north metro area grows, it is positioned to further supply GRE's 69kv system via a new 230kv-69kv substation at locations such as Johnsville and Andover. The existing KV subtransmission system presently supplies five (5) distribution substations at 12.5kv, portions of which directly serve East Bethel homes and businesses via distribution lines called "feeders". Distribution substations are currently located at Cooper's Corner, East Bethel, Martin Lake, Soderville, and Forest Lake; and,

WHEREAS, with the exception of the Martin Lake substation, each of the foregoing distribution substations are supplied by two or more 69kv lines. Therefore, if one 69kv source is out of service, it is backed up by one or more remaining KV sources, however, in the Martin Lake substation has no such back up supply; it is supplied only by one (1) 69kv line from Linwood substation near Highway I-35. This line is called a "radical feed" and its loss can be replaced only via complicated switching procedures on the 12.5kv distribution system, typically causing lengthy outages; and,

WHEREAS, the addition of an Athens Martin Lake 69KV line would avoid expensive upgrades of three other critical 69kv line segments in the local power grid and provides a two-way 69kv supply to the Martin Lake substation; and,

WHEREAS, information provided by the Applicant's engineer shows that the repair and replacement of these critical line segments supplemented by a capacitor bank could cost in the range of 4 to 5 times the \$4-5 Million cost of an Athens to Martin Lake 69KV line, and additionally, such upgrades would not provide two-way service to the Martin Lake substation, and important goal of the project; and,

WHEREAS, the City of East Bethel does find that the Athens and Martin Lake substations are reasonable termination points for a new 69kv line, but there are many routing options between these two points; and,

WHEREAS, GRE representatives and Applicant have represented that the 69kv line would not be designed so that it could be simply reconnected to operate and upgrade to 115kv line, which would be a regulated service under the Public Utilities Commission; however, it is reasonable to project that future upgrades to electric service lines would follow existing paths established under the current protocols; and,

WHEREAS, the City, its workgroups, Planning Commission, in addition to the Applicant, have examined 16 route options to consider for the routing of the proposed 69kv line to connect the Athens and Martin Lake substations; and,

WHEREAS, the lines examined are set forth as follows:

A. Far North and Medium North Groups

1. Sunset Road sub-group

Route E: Far North, Road 9E to Xylite S, to Road 56E along north edge of Cedar Creek Reserve turning S on Durant St to Fawn Drive (76E) then Sunset Rd S to Road 26E to Typo Creek Dr S

Route F: Far North, Road 9E to Durant St (45S) to Fawn Drive (76E) to S on Sunset Rd to Road 26E, then to Typo Creek Dr S

Route F1: Far North, Road 9E to Road 12S&W to Durant St (45S) to Fawn Drive (76E) to S on Sunset Rd to Road 26E, then to Typo Creek Dr S

Route E1, Far North: Road 56E to Xylite (56S) (both on north edge of Cedar Creek Reserve) to Fawn Drive (76E), to Sunset Rd S to 26E to Typo Creek Dr S.

Route E1, Med North: Road 56E to Xylite (56S) (both on north edge of Cedar Creek Reserve) to Fawn Drive (76E), to Sunset Rd S to 26E to Typo Creek Dr S.

2. Typo Creek Drive sub-group

Route G: Far North, Road 9E to 12S to 20E to Typo Creek Dr S.

Route H : Med North, Road 56E to Xylite (56S) (both on north edge of Cedar Creek Reserve) to 12E to Durant St (45S) to Fawn Drive (76E), then to Typo Creek Dr S

Route H1: Far North, Road 9E to 18S to 20W (north of Typo Lake) then to Typo Creek Dr S

Route I: Far North, Road 9E to Road 12S&W to Durant St (45S) to Fawn Drive (76E) then to Typo Creek Dr S (See Consultant report for modified Route I1)

3. Typo Creek Drive and Sunset sub-group

Route G1: Far North, Road 9E to 12S to 20E to Typo Creek Dr S to 29W to Sunset Rd S to 26E to Typo Creek Dr S.

B. Central Cut Group

Route B: Central Cut, Road 24E from Coopers Corner to Fawn Drive (76E) to Sunset Rd S to 26E to Typo Creek Dr S.

Route B1: Central Cut, S from Athens Sub to Route 25 cutting directly across Cedar Creek Reserve to Fawn Dr (76E) to Sunset Rd S to 26E to Typo Creek Dr S.

C. Medium South, South and Far South Group

Route A: Med South, 237th Ave E (Rd 24) to Road 26E to Typo Creek Drive S

Route C1: Med South, 237th Ave E (Rd 24) to Road 26E to 15S to Road 22N

Route C: South, Hwy 65 S to Road 74E to Rd 22N

Route D: Far South, Hwy 65 to Viking Blvd (Rd 68E to 22N)

WHEREAS, as part of the evaluation of the various routes, the Applicant and the City have considered environmental issues specific to Cedar Creek Reserve and potentially sensitive archeological and historic areas, only some of which have been shown on the mapping of environmentally sensitive areas depicted on maps provided by the Applicant; and,

WHEREAS, in the evaluation of the various routes, the City has considered attributes for each route option, included within a route matrix prepared, which attributes are as follows:

1. New construction miles
2. Construction cost (\$ millions)
3. Tree clearing, acres
4. New easements, acres
5. Public land easements, miles
6. Private land easements, miles
7. Special transmission structures (reinforced or guyed dead ends, corner and angle structures)
8. Distance to homes from centerline:
 - a) 0-100 ft
 - b) 0-200 ft

- c) 0-300 ft
- 9. Forested wetlands, miles
- 10. Non-forested wetlands, miles
- 11. Wetlands, acres
- 12. Six types of Public Water Inventory (PWI) categories:
 - a) Perennial streams and rivers crossed
 - b) Intermittent streams and rivers crossed
 - c) PWI streams crossed
 - d) No. of wetlands within route
 - e) No. of PWI lakes within ROW
 - f) No. of PWI wetlands within ROW.

WHEREAS, the City's consultants have reviewed the various routes option proposed to be located within the city, and have determined that from the various route attributes, only Route II is an effective and efficient route with new right-of-way comparable to Route A, and have the opportunity to use existing 2 plus miles of 69 KV line along County Highway 9, and reasonable cost and right of way acquisition when compared to other routes. Route II also better plans for future upgrades to 115KV systems and transmission lines and impacts less densely populated areas of the affected communities. The other attributes of Route II compared to all the other route options (inside and outside the city) are all favorable in the opinion of the consultants, and Route II has been recommended to the City as a preferred route option for the city, yet recognizing that there are concerns and mitigation points and disadvantages that needed to be accommodated; and,

WHEREAS, the representatives of Cedar Creek Reserve do not concur with the construction in proximity to Cedar Creek Reserve, but have stated that construction along the south border is preferable to construction along their far more ecologically sensitive north border; and,

WHEREAS, it is reasonable for the City to consider the imposition of obtaining the necessary commitments from Great River Energy with regard to the timing of the construction of the various facilities comprising the 69kv line, should Route II be granted so that the community is not burdened by piece meal construction of that facility over an unreasonable length of time; and,

WHEREAS, the construction of any route should utilize steel poles at dead ends, corners and angles, and within certain high-density neighborhoods so as to reduce the need for guide wires and wood structures, as wood is not as effective as steel in reducing unsightly guide wires and for stability; and,

WHEREAS, Route II, as currently guided by the City's comprehensive plan for the following land uses and environmental and natural resources goals:

low density residential land use which consists of detached single family homes on a variety of lot sizes with a minimum gross density of one (1) unit per ten (10) acres; as the lots are difficult to serve with municipal services and will be in the foreseeable future,

significant natural area known as Cedar Creek Ecosystem and Scientific Reserve, owned and operated by the University of Minnesota,

to maintain and enhance the natural amenities of the city for future generations to enjoy, and

to protect the surface waters and wetland areas of the city to promote aesthetic qualities, natural habitat areas, and groundwater recharge.

WHEREAS, the City of East Bethel finds that a no-build alternate is not reasonable given the existing needs as expressed by the Applicant and the growth for electrical service presently and anticipated to occur within the area; and,

WHEREAS, all routes have a negative impact relative to economic/environmental social and/or health and safety impacts, but Route II appears to be the route that has the least impact in those areas as to other routes within the city of East Bethel; and,

WHEREAS, Route II has minimal interference with public use and public property; and,

WHEREAS, Route II can serve the Applicant's need to adequately and reliably service customers within the relevant service area now and in the foreseeable future; and,

WHEREAS, the traffic impacts are less pronounced with Route II as opposed to other options as proposed within the city; and,

WHEREAS, the City's consultants have reviewed possibly routes being located predominately outside the city of East Bethel to also serve the Athens Martin Lake substations, and provide the same economic/electrical services benefits that would be secured through the use of other routes; and,

WHEREAS, the far north and medium north sub-grouping routes which were previously reviewed, are mostly outside of the city in which are specifically aimed at the problem areas going south from the far north and medium north routes in order to reach the Martin Lake substation. The two potential problem areas were the Typo Creek Drive (north of County Road 26) and Sunset Drive. The City's consulting engineers opined and concurred with the workgroup's concerns that the Sunset Drive options should be eliminated from further consideration, and that Typo Creek Drive would be a preferred alternative for getting from the north and far north options to the Martin Lake substation; and,

WHEREAS, Typo Creek Drive includes several pinch points regarding residential properties and homes, a park, fire station, the Town Hall, and a cemetery. In addition, the report commissioned by the Applicant identifies possible archeological sites and historical preservation uncertainties which were not defined or fully substantiated; and,

WHEREAS, Route I, as examined, could be significantly shorted by using Durant

Street, rather than Route 12 when heading south off of Route 9. The City's consultants estimated that in using this modification the distance could be shortened from 13.10 miles to 10.9 miles, making the new construction distance comparable to that required by Route A. Further, Route 9 is also scheduled for a rebuild and widening in 4 to 5 years by Anoka County, so that modification of Plan I would minimize the length of line on Highway 9 to be exposed to a rebuild or relocation. It is also established that there exists 2 miles of 69kv line currently located on Highway 9 which could be utilized for this modification of Route 9; and,

WHEREAS, this modification to Route I, now designated Route II, shows a total length of 11.3 miles at a projected cost of \$3.905 million, which is close to the projected \$3.678 million of Route A, but with more new right-of-way acquisition (11.3 miles vs. 7.4 miles). Notwithstanding same, Route II would have the following significant benefits:

- A. From a planning standpoint, given the possibility that the route selected presently for the upgrade to the 69kv line might someday in the future be proposed to be served by an upgrade to a 115kv line (Route ROW widths are the same for a 69 KV line vs. a 115 KV line as designed by GRE), the route designated as II impacts fewer residents and involves right-of-way over more open and vacant land.
- B. The route would already utilize 2 miles of existing 69kv line now in place and controlled by GRE.
- C. The Route II would impact a lesser densely populated area than Route A

WHEREAS, The applicant has prepared matrices and reports based on the various routes and differences with aspects and elements of impacts (i.e. pinch points, easements to be acquired and right of way to be secured) but has acknowledged at the public hearing conducted before the planning commission on June 20, 2011 that its matrices are projected upon estimates and not gathered from any surface study or design data and thus are inherently generalized as based on projection; and,

WHEREAS, the applicants statement that Route II in the vicinity of Typo Drive would encounter possible historic or archeological features that could impact the route designation is speculative and uncertain given that no specific historic or archeological site has been evidenced within any report nor any existing historic or archeological feature has been demonstrated to exist in the area of the Route II; and,

WHEREAS, Route A would result in significant Tree loss (8.5 ac vs. 1.79 ac within East Bethel for Route II) along CSAH 26 impacting residents on the north side of that proposed line; and

WHEREAS, there is no evidence that location of the 69 KV line along Route II will not impair or preclude widening and upgrades to CSAH 9 in the future should Anoka County desire to do so.

NOW, THEREFORE, BE IT RESOLVED, by the City Council for the City of East Bethel that the Conditional Use Permit requested by Great River Energy to locate 69kv line

between the Athens and Martin Lake substations going through the city of East Bethel is hereby approved, with Route II being selected, subject to the imposition of the following mitigation measures and conditions:

1. That Great River Energy (GRE) will submit a construction plan prior to commencing the construction of the 69kv line, establishing both a construction time table and a progression of construction that shall be reviewed and have to meet the approval of the City's consulting engineers.
2. That Great River Energy shall minimize the need for any unsightly guide wires at corners, angles and dead ends, and utilize steel poles at dead ends, corners, angles and in certain high density neighborhoods designated by the City's consulting engineers as part of this project.
3. That Great River Energy and/or its subsidiaries or other utility users that utilize its services shall install underground service drops at crossings of County Road 26 and other municipal roads within the city of East Bethel without added cost to the residents and utility users and assure that the relocation of distribution facilities to the north side of County Road 26 results in a minimum replacement of service drops, and wherever possible all service drops must be undergrounded.
4. That Great River Energy execute Conditional use Permits and Agreements as prepared by City Staff.
5. That pursuant to ordinance Sec 74-214(h):
"The applicant may notify the City and request the selection of a different alternative after the City Council's action if the applicant believes that it cannot use the selected alternative because of a reason that was beyond its own control and not apparent during the selection process. The City Council may approve a different alternative that has been subject to phase one requirements if it finds that the applicant is prevented from using the selected location."

The City expects that GRE make a substantive and good faith effort to secure route approval for Route II from any and all permitting authorities but in the event it cannot the City reserves the right to reconsider Route A for permitting.

Passed by the City Council for the City of East Bethel this _____ day of June, 2011.

Richard Lawrence, Mayor

ATTEST:

Jack Davis
City Administrator



City of East Bethel City Council Agenda Information

Date:

June 22, 2011

Agenda Item Number

Item 4.0

Agenda Item:

Fence Bill

Requested Action:

Consider approving Top Notch Fence Bill for the Booster East Connector Trail

Background Information:

City Council approved the construction of the fence on the Booster East Connector Trail at their June 6, 2011 meeting. The contract was awarded to Top Notch Fence Company for the \$10,900. The fence will be completed on Friday, June, 24, 2011. Top Notch Fence needs payment for the materials for this job prior to final installation. It is proposed with Council's approval to pay \$7,900.00 for the materials for this work upon delivery on Thursday, June 23, 2011. It is also proposed to issue a check for \$3,000.00 for the labor on this job but withhold the check until the project is completed, inspected and accepted.

This request is proposed so the fence can be completed in a timely manner and lessen the inconvenience to the property owner, Mr. Tim Oney. Even though this is an unconventional method of payment, no services are being paid in advance and the savings on this project between the bid from Top Notch Fence and the second low bidder was \$5,570.

Attachment(s):

Project Invoices
Location Map

Fiscal Impact:

As noted above

Recommendation(s):

Staff recommends payment for materials upon delivery and holding the labor check until the project is completed.

City Council Action

Motion by: _____

Second by: _____

Vote Yes: _____

Vote No: _____

No Action Required: _____

Top Notch Fence

811 221st ave ne
East Bethel, MN 55011

Invoice

Date	Invoice #
6/20/2011	144

Bill To
City of East Bethel 2241 221st ave ne East Bethel , MN. 55011 PO# 010370

P.O. No.	Terms	Project

Quantity	Description	Rate	Amount
320	6' Galvanized chain link 3 1/2" post and top rail 1 5/8" bottom rail material cost	24.6875	7,900.00
320	LABOR	9.375	3,000.00

Thank you for your business.

Total

\$10,900.00



City of East Bethel City Council Agenda Information

Date:

June 22, 2011

Agenda Item Number:

Ag062211

Agenda Item:

Fence Bill

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Project Invoices

Location Map

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City Council Action

Motion by: _____

Second by: _____

Vote Yes:_____

Vote No:_____

No Action Required:_____

**CITY OF EAST BETHEL
ANOKA COUNTY, MINNESOTA**

RESOLUTION NO. 2011-20

**A RESOLUTION MAKING FINDINGS OF FACT AND DENYING A CONDITIONAL
USE PERMIT FOR GREAT RIVER ENERGY FOR ROUTE A**

THE CITY OF EAST BETHEL HEREBY MAKES THE FOLLOWING FINDINGS:

WHEREAS, the City of East Bethel received a CUP application submitted by Great River Energy on March 4, 2011, requesting that the City provide Conditional Use Permit approval for a 69KV Transmission Line to be constructed through the city of East Bethel; and,

WHEREAS, the City of East Bethel, prior to the filing of the Conditional Use Permit, established by Ordinance, a Conditional Use Permit process for transmission lines to be constructed or located within the city of East Bethel; and,

WHEREAS, the City of East Bethel formed a workgroup who participated with the Applicant in reviewing the application and proposed project alternatives at several locations, with the Applicant supplying analysis to the workgroup in a manner that was specified within the Ordinance; and,

WHEREAS, the City of East Bethel did retain an independent technical expert, being LLS Resources, LLC, with technical representatives Larry L. Schedin and Robert Hoerauf, both registered professional electrical engineers in the State of Minnesota, to examine the several routes both within and outside of the city, being evaluated for the proposed routes to serve the transmission line to be located; and,

WHEREAS, Great River Energy is a generation transmission cooperative headquartered in Maple Grove, owning transmission lines supplying energy to East Bethel and surrounding territories. GRE facilities supply wholesale electricity to Connexus, which in turn distributes electricity at retail to East Bethel homes, businesses and neighboring communities; and,

WHEREAS, GRE proposes the located of a 69 Kilovolt line, denominated the Athens to Martin Lake 69KV Project; and,

WHEREAS, current electric supply occurs at 3 successive levels in the following order:

- 1.) bulk transmission: 230,000 volts (230kv);
- 2.) sub transmission: 69,000 volts (69kv); and
- 3.) distribution: 12,500 volts (12.5kv).

The 230kv bulk transmission system supplies GRE's 69kv system in the north metro area originating at Rush City heading south, roughly parallel to Highway I-35W to a point near Hugo where it turns west through Blaine through Bunker Lake, where again it turns north through Andover. At Andover, it again turns west towards Elk River and Monticello. Over this north metro path, the 230kv system supplies the 69kv system via 230kv-69kv substations located at Linwood,

Blaine, Bunker Lake, and Elk River; however, as the north metro area grows, it is positioned to further supply GRE's 69kv system via a new 230kv-69kv substation at locations such as Johnsville and Andover. The existing KV subtransmission system presently supplies five (5) distribution substations at 12.5kv, portions of which directly serve East Bethel homes and businesses via distribution lines called "feeders". Distribution substations are currently located at Cooper's Corner, East Bethel, Martin Lake, Soderville, and Forest Lake; and,

WHEREAS, with the exception of the Martin Lake substation, each of the foregoing distribution substations are supplied by two or more 69kv lines. Therefore, if one 69kv source is out of service, it is backed up by one or more remaining KV sources, however, in the Martin Lake substation has no such back up supply; it is supplied only by one (1) 69kv line from Linwood substation near Highway I-35. This line is called a "radial feed" and its loss can be replaced only via complicated switching procedures on the 12.5kv distribution system, typically causing lengthy outages; and,

WHEREAS, the addition of an Athens Martin Lake 69KV line would avoid expensive upgrades of three other critical 69kv line segments in the local power grid and provides a two-way 69kv supply to the Martin Lake substation; and,

WHEREAS, information provided by the Applicant's engineer shows that the repair and replacement of these critical line segments supplemented by a capacitor bank could cost in the range of 4 to 5 times the \$4-5 Million cost of an Athens to Martin Lake 69KV line, and additionally, such upgrades would not provide two-way service to the Martin Lake substation, and important goal of the project; and,

WHEREAS, the City of East Bethel does find that the Athens and Martin Lake substations are reasonable termination points for a new 69kv line, but there are many routing options between these two points both within and outside of the City of East Bethel; and,

WHEREAS, GRE representatives and Applicant have represented that the 69kv line would not be designed so that it could be simply reconnected to operate and upgrade to 115kv line, which would be a regulated service permit under the Public Utilities Commission; however, it is reasonable to project that future upgrades to electric service lines would favor following existing paths established under the current protocols; and,

WHEREAS, the City, its workgroups, Planning Commission, in addition to the Applicant, have examined 16 route options to consider for the routing of the proposed 69kv line to connect the Athens and Martin Lake substations; and,

WHEREAS, the lines examined are set forth as follows:

A. Far North and Medium North Groups

1. Sunset Road sub-group

Route E: Far North, Road 9E to Xylite S, to Road 56E along north edge of Cedar Creek Reserve turning S on Durant St to Fawn Drive (76E) then Sunset Rd S to Road 26E to Typo Creek Dr S

Route F: Far North, Road 9E to Durant St (45S) to Fawn Drive (76E) to S

on Sunset Rd to Road 26E, then to Typo Creek Dr S

Route F1: Far North, Road 9E to Road 12S&W to Durant St (45S) to Fawn Drive (76E) to S on Sunset Rd to Road 26E, then to Typo Creek Dr S

Route E1, Far North: Road 56E to Xylite (56S) (both on north edge of Cedar Creek Reserve) to Fawn Drive (76E), to Sunset Rd S to 26E to Typo Creek Dr S.

Route E1, Med North: Road 56E to Xylite (56S) (both on north edge of Cedar Creek Reserve) to Fawn Drive (76E), to Sunset Rd S to 26E to Typo Creek Dr S.

2. Typo Creek Drive sub-group

Route G: Far North, Road 9E to 12S to 20E to Typo Creek Dr S.

Route H : Med North, Road 56E to Xylite (56S) (both on north edge of Cedar Creek Reserve) to 12E to Durant St (45S) to Fawn Drive (76E), then to Typo Creek Dr S

Route H1: Far North, Road 9E to 18S to 20W (north of Typo Lake) then to Typo Creek Dr S

Route I: Far North, Road 9E to Road 12S&W to Durant St (45S) to Fawn Drive (76E) then to Typo Creek Dr S

3. Typo Creek Drive and Sunset sub-group

Route G1: Far North, Road 9E to 12S to 20E to Typo Creek Dr S to 29W to Sunset Rd S to 26E to Typo Creek Dr S.

B. Central Cut Group

Route B: Central Cut, Road 24E from Coopers Corner to Fawn Drive (76E) to Sunset Rd S to 26E to Typo Creek Dr S.

Route B1: Central Cut, S from Athens Sub to Route 25 cutting directly across Cedar Creek Reserve to Fawn Dr (76E) to Sunset Rd S to 26E to Typo Creek Dr S.

C. Medium South, South and Far South Group

Route A: Med South, 237th Ave E (Rd 24) to Road 26E to Typo Creek Drive S

Route C1: Med South, 237th Ave E (Rd 24) to Road 26E to 15S to Road 22N

Route C: South, Hwy 65 S to Road 74E to Rd 22N

Route D: Far South, Hwy 65 to Viking Blvd (Rd 68E to 22N)

WHEREAS, as part of the evaluation of the various routes, the Applicant and the City have considered environmental issues specific to Cedar Creek Reserve and potentially sensitive archeological and historic areas, only some of which have been shown on the mapping of environmentally sensitive areas depicted on maps provided by the Applicant; and,

WHEREAS, the Cedar Creek Ecosystem and Scientific Reserve is listed as a National Natural Landmark by the National Park Service and is a significant environmental asset within the community of East Bethel; and

WHEREAS, the Cedar Creek Ecosystem and Scientific Reserve is proposed to be in the pathway of proposed “Route A” advocated by the applicant; and,

WHEREAS, The University of Minnesota manages the Cedar Creek Ecosystem and Scientific Reserve and has stated in response to their position on proposed “Route A”:

“Cedar Creek Ecosystem Science Reserve owned and operated by the University of Minnesota, will support the decision of the City of East Bethel’s City Council in regards to Great River Energy’s request for a Conditional Use Permit to construct transmission lines through the City. However, the University will not support any option that would require routing the transmission line through any part of the University property other than along the perimeter of the Reserve.

Specifically, if the council decides to deny a permit for “Route A” then Cedar Creek will stand by that decision by officially rejecting GRE’s request to build a transmission line on University property along that or any other route specifically precluded by the council”

WHEREAS, in the evaluation of the various routes, the City has considered attributes for each route option, included within a route matrices prepared by Applicant, which attributes are as follows:

1. New construction miles
2. Construction cost (\$ millions)
3. Tree clearing, acres
4. New easements, acres
5. Public land easements, miles
6. Private land easements, miles
7. Special transmission structures (reinforced or guyed dead ends, corner and angle structures)
8. Distance to homes from centerline:
 - a) 0-100 ft
 - b) 0-200 ft
 - c) 0-300 ft
9. Forested wetlands, miles
10. Non-forested wetlands, miles
11. Wetlands, acres
12. Six types of Public Water Inventory (PWI) categories:
 - a) Perennial streams and rivers crossed

- b) Intermittent streams and rivers crossed
- c) PWI streams crossed
- d) No. of wetlands within route
- e) No. of PWI lakes within ROW
- f) No. of PWI wetlands within ROW.

WHEREAS, the City's consultants have reviewed the various routes option proposed to be located within the city, and have determined that from the various route attributes, only Route A (mostly following County Road 26) is the most direct route with significantly less new right-of-way (7.4 miles total to be acquired) and less new construction (10.4 miles total), and less cost than all of the other candidate routes within the city; and,

WHEREAS, Route A would also accommodate a rebuild and relocation of a 3-phase main feeder line as under build running most of the entire length of the new line with the 3-phase feeder line being mostly on the south side of County Road 26. The City's consultants have opined that unless Connexus agrees to install underground service drops, crossings, for County Road 26 without added costs, the relocation of distribution facilities to the north side of County Road 26 will result in a number of unsightly service drops which now do not exist. Additionally, the City's consultants have opined that GRE should confirm that to avoid power lines on both sides of County Road 26, the distribution line transfer, should Route A be selected, will occur at the same time as the new 69kv construction; and,

WHEREAS, in addition to the construction along the north border of the Allison Savannah, Route A will also require construction along the entire south border of Cedar Creek Reserve, a major ecosystem/science reserve; and,

WHEREAS, the representatives of Cedar Creek Reserve do not concur with the construction in proximity to Cedar Creek Reserve; and,

WHEREAS, it is reasonable for the City to consider the imposition of obtaining the necessary commitments from Great River Energy with regard to the timing of the construction of the various facilities comprising the 69kv line, should Route A be granted so that the community is not burdened by piece meal construction of that facility over an unreasonable length of time; and,

WHEREAS, the construction of any route should utilize steel poles at dead ends, corners and angles, and within certain high-density neighborhoods so as to reduce the need for guide wires and wood structures, as wood is not as effective as steel in reducing unsightly guide wires and for stability; and,

WHEREAS, Route A territory, is currently guided by the City's comprehensive plan for the following land uses and environmental and natural resources goals:

- a) low density residential land use which consists of detached single family homes on a variety of lot sizes with a minimum gross density of one (1) unit per ten (10) acres; as the lots are difficult to serve with municipal services and will be in the foreseeable future,
- b) significant natural area known as Cedar Creek Ecosystem and Scientific Reserve, owned and operated by the University of Minnesota,
- c) to maintain and enhance the natural amenities of the city for future generations to enjoy, and

- d) to protect the surface waters and wetland areas of the city to promote aesthetic qualities, natural habitat areas, and groundwater recharge.

WHEREAS, Route I1, as examined, could be significantly shortened by using Durant Street, rather than Route 12 when heading south off of Route 9. The City's consultants estimated that in using this modification the distance could be shortened from 13.10 miles to 10.9 miles, making the new construction distance comparable to that required by Route A; and,

WHEREAS, this modification to former Route I, designated Route I1, shows a total length of 11.3 miles at a projected cost of \$3.905 million, which is close to the projected \$3.678 million of Route A, but with more new right-of-way acquisition (11.3 miles vs. 7.4 miles). Notwithstanding same, Route I1 would have the following significant benefits:

- A. From a planning standpoint, given the possibility that the route selected presently for the upgrade to the 69kv line might someday in the future be proposed to be served by an upgrade to a 115kv line (Route ROW widths are the same for a 69 KV line vs. a 115 KV line as designed by GRE), the route designated as I1 impacts fewer residents and involves right-of-way over more open and vacant land.
- B. The route would already utilize 2 miles of existing 69kv line now in place and controlled by GRE.
- C. The Route I1 would impact a lesser densely populated area than Route A
- D. Route I1 would have no impact upon the Cedar Creek Ecosystem Science Reserve

WHEREAS, The Applicant has prepared matrices and reports based on the various routes and differences with aspects and elements of impacts (i.e. projected pinch points, easements to be acquired and right of way to be secured) but has acknowledged at the public hearing conducted before the planning commission on June 20, 2011 that its matrices are projected upon estimates and not gathered from any surface study or design data and thus are inherently generalized as based on projection appearing to skew the results between the various options and Route A; and,

WHEREAS, the Applicant's matrices missed important data such as the number of easements and right of way acquisitions needed for each route; and

WHEREAS, the Applicant's statement that Route I1 in the vicinity of Typo Drive would encounter possible historic or archeological features that could impact the route designation is speculative and uncertain given that no specific historic or archeological site has been evidenced within any report nor any existing historic or archeological feature has been demonstrated to exist in the pathway of Route I1; and,

WHEREAS, Route A would result in significant tree and canopy loss (8.5 ac vs. 1.79 ac within East Bethel for Route I1) along CSAH 26 impacting many residents on the north side of that proposed line; and

WHEREAS, there is no evidence that location of the 69 KV line along Route I1 will not impair or preclude widening and upgrades to CSAH 9 in the future should Isanti County desire to do so.

WHEREAS, all routes have a negative impact relative to economic/environmental social and/or health and safety impacts, Route A appears to be the route that has one of the most impacts to Cedar Creek Ecosystem Science Reserve, the environment and number of residents as a whole as opposed to other several other routes within the City of East Bethel; and,

WHEREAS, Routes other than Route A have significantly less interference with public use and public property; and,

WHEREAS, Routes other than Route A would serve the Applicant's need to adequately and reliably service customers within the relevant service area now and in the foreseeable future; and,

WHEREAS, the significant impact and risk to Cedar Creek Ecosystem Science Reserve outweighs any possible economic benefit to the use of Route A.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF EAST BETHEL, MINNESOTA THAT: the Application for Conditional Use Permit requested by Great River Energy to locate 69kv line between the Athens and Martin Lake substations going through the City of East Bethel along Route A is hereby denied

Adopted this 22nd day of June, 2011 by the City Council of the City of East Bethel.

Richard Lawrence, Mayor

ATTEST:

Jack Davis
City Administrator