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MPUC E-002 / CN-12-113

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MPUC E-002 / TL-11-152

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Application for a Certificate of
Need for the Hollydale 115 kV Transmission Line
Project in the Cities of Plymouth and Medina

and

In the Matter of the Route Permit Application for the
Hollydale 115 kV Transmission Line Project in the
Cities of Plymouth and Medina, Hennepin County

**SUMMARY OF PUBLIC
COMMENT AND
PUBLIC TESTIMONY**

These matters came before Administrative Law Judge Eric L. Lipman following a
May 12, 2014 Order of the Minnesota Public Utilities Commission.

Valerie T. Herring and Lisa Agrimonti, Briggs & Morgan, LLP, appeared on behalf
of the Joint Applicants, Xcel Energy and Great River Energy.

Paula Maccabee, Just Change Law Offices, appeared on behalf of the Western
Plymouth Neighborhood Alliance, Incorporated.

Daniel N. Rosen, Parker Rosen, LLC, appeared on behalf of Park Nicollet Health
Services.

James M. Strommen, Kennedy & Graven, Chartered, appeared on behalf of the
city of Medina.

Carol A. Overland, Legalectric - Overland Law Office, appeared on behalf of Amy
and Chris Barry (the Barry Family).

Julia Anderson, Assistant Attorney General, appeared on behalf of the Energy
Regulation and Planning Unit of the Minnesota Department of Commerce (DER).

Linda S. Jensen, Assistant Attorney General, appeared on behalf of the Energy
Environmental Review and Analysis Unit of the Minnesota Department of Commerce
(EERA).

I. Plymouth, Medina and the Proposed Project

On June 30, 2011, Xcel and Great River Energy (the Joint Applicants) filed an application for a route permit to build a 115-kilovolt (kV) high-voltage transmission line in the cities of Plymouth and Medina (the Hollydale project).¹

The Joint Applicants maintain that due to population and commercial growth, particularly in the areas along Minnesota Highway 55, Interstate 494, and Interstate 394, the demand for power in the Plymouth and Medina area has increased beyond the capability of the current distribution system.²

The project area contains a mix of land uses – with rural residential and agricultural land use in the western portion of the project area, generally in Medina, and much denser residential and commercial at the eastern edge of the project area, in Plymouth.³

The project area is served at the transmission level primarily by a 69 kV transmission line, two 115 kilovolt (kV) transmission lines, and one 345 kV transmission line. At the distribution level the area is served by a network of 13.8 and 34.5 kV distribution lines.⁴

When the existing distribution system in the area (bounded generally by County Road 116 to the west, County Road 47 to the north, Interstate 494 to the east, and Interstate 394 - Highway 12 to the south) is operating under contingency conditions, the historic peak load exceeds the system capacity by 37 MW. The historical peak load on these feeder lines is 128 MW.⁵

The Joint Applicants contend that additional infrastructure is needed to address distribution concerns, provide additional distribution capacity, and avoid overload conditions in the area. The Applicants further maintain that if they could provide approximately 50 MW of additional load serving capability to the area, the 37 MW deficit identified in Xcel Energy distribution studies could be eliminated and future demand growth in the area could be supported through 2030.⁶

Specifically, the Joint Applicants proposed to upgrade approximately eight miles of existing 69-kV transmission line to 115-kV capacity; construct approximately 0.8 miles

¹ INITIAL FILING, MPUC Docket No. 11-152 (June 7, 2011) (eDocket No. 20116-64334-04).

² *Id.* at Section 1.1.

³ ENVIRONMENTAL REPORT, HOLLYDALE 115 kV TRANSMISSION PROJECT, at 62 (eDocket No. 20132-83588-01) (“Environmental Report”).

⁴ Environmental Report, at 2.

⁵ *Id.*

⁶ *Id.*

of new 115-kV transmission line; construct a new 115-kV substation; and modify associated transmission facilities.⁷

On August 25, 2011, the Minnesota Public Utilities Commission (Commission) accepted the route-permit application as substantially complete and authorized the Department to process the application under the alternative permitting process of Minn. R. 7850.2800 *et seq.* (2013).⁸

The Department received some 450 written comments and held a scoping meeting that was attended by approximately 300 members of the public.⁹

On December 7, 2011, the Department issued a scoping decision that included 26 route alternatives to be evaluated in the environmental assessment. Several of these route alternatives were longer than ten miles.¹⁰

The Administrative Law Judge held public hearings on June 7 and 8, 2012, to update the Department's scoping decision. Approximately 360 members of the public attended this hearing. Following the hearing, the Administrative Law Judge received 251 written comments.¹¹

A new high-voltage transmission line that is longer than ten miles generally requires a Certificate of Need. Because some of the route alternatives identified in the Department's scoping decision were longer than ten miles, the Joint Applicants decided to apply for a Certificate of Need for the Hollydale project.¹²

The Joint Applicants filed their Certificate of Need application on July 2, 2012. The Applicants also requested that the Commission consolidate the Certificate of Need and Route Permit proceedings.¹³

The Commission received comments from neighborhood groups and individual residents, including a petition from 428 residents of Plymouth and Medina requesting additional development of the record regarding alternatives to the Hollydale project.¹⁴

⁷ *Id.*, Appendix A, at 2.

⁸ ORDER, MPUC Docket No. 11-152 (August 25, 2011) (eDocket No. 20118-65712-01).

⁹ ENVIRONMENTAL ASSESSMENT SCOPING DECISION DOCUMENT, MPUC Docket No. TL-11-152 at 3 (eDocket No. 20118-65712-01).

¹⁰ *Id.* at 9-12.

¹¹ See ORDER PERMITTING WITHDRAWAL WITH CONDITIONS, MPUC Docket Nos. TL-11-152 and CN-12-113 at 2 (eDocket No. 20145-99402-02).

¹² See INITIAL FILING, MPUC Docket No. CN-12-113, at 10-11 (July 2, 2012) (eDocket No. 20127-76388-02).

¹³ INITIAL FILING, MPUC Docket No. CN-12-113, at 10-11 (July 2, 2012) (eDocket No. 20127-76388-02).

¹⁴ See ORDER PERMITTING WITHDRAWAL WITH CONDITIONS, *supra*, at 2.

On September 21, 2012, the Commission found the Certificate of Need application substantially complete and referred it to the Office of Administrative Hearings (OAH) for contested case proceedings. The Commission declined the Joint Applicants' request to consolidate the Certificate of Need and Route Permit proceedings. It suggested that the Administrative Law Judge conduct hearings on the need for the project before holding hearings on the routing of any transmission facility.¹⁵

On March 6 and 7, 2013, the Administrative Law Judge held public hearings on the Certificate of Need application. Approximately 200 people attended the hearings.¹⁶

II. Chapter 57 – The Hollydale Law

In May 2013, the Legislature enacted Chapter 57 of the 2013 Laws of Minnesota – colloquially known as “the Hollydale law.” The law suspends the Hollydale route-permit proceedings until the Commission determines that the project is needed. Additionally, the law further provides that the Commission may only grant a Certificate of Need for the project if it finds “by clear and convincing evidence that there is no feasible and available distribution level alternative to the transmission line.”¹⁷

The Administrative Law Judge continued the evidentiary hearings on the Certificate of Need application to September of 2013. These hearings same would later be continued a second time, until January of 2014, as the parties worked to meet, and respond to, the newly-realigned evidentiary standards of Chapter 57.¹⁸

On November 7, 2013, the Administrative Law Judge held additional public hearings on the Certificate of Need application. Approximately 300 people attended these hearings.¹⁹

On December 10, 2013, Applicants filed a petition to withdraw Certificate of Need and Route Permit applications. The Joint Applicants stated that withdrawal would permit them additional time to confer with local stakeholders and build consensus around an alternative transmission line route.²⁰

The Administrative Law Judge received comments from two intervenors — the Western Plymouth Neighborhood Alliance (WPNA) and the Barry family — and approximately 170 from individuals who reside within the project area. The majority of

¹⁵ NOTICE AND ORDER FOR HEARING, MPUC Docket Nos. TL-11-152 and CN-12-113 at 4 (eDocket No. 20129-78860-01).

¹⁶ See ORDER PERMITTING WITHDRAWAL WITH CONDITIONS, *supra*, at 2.

¹⁷ 2013 Minn. Laws ch. 57, § 2.

¹⁸ See FIRST PREHEARING ORDER, MPUC Docket No. CN-12-113 (eDocket No. 20129-78924-01); SECOND PREHEARING ORDER, MPUC Docket No. CN-12-113 (eDocket No. 201211-80628-01).

¹⁹ See ORDER PERMITTING WITHDRAWAL WITH CONDITIONS, *supra*, at 3.

²⁰ *Id.*

these commentators supported withdrawal of the applications but expressed concern over how, and when, a follow-on set of applications would occur. The commentators asked the Commission to condition the withdrawal of the current applications on the Joint Applicants' acceptance of limitations as to how a successor application for similar facilities would be processed.²¹

On January 7, 2014, the Administrative Law Judge issued an Order certifying Applicants' withdrawal request to the Commission. The Administrative Law Judge concluded that the Joint Applicants were entitled to withdraw their applications, as a matter of right, and recommended that the Commission allow Applicants to withdraw their applications without condition. The Administrative Law Judge also recommended that the Commission consider requesting either its staff, or the OAH, to develop a summary of the comments and testimony that had been developed through the public hearing process. Through such a summary, those area residents who had submitted comments and testimony through the public hearing process would have some assurance that their feedback would be readily accessible to the Commission during any follow-on proceedings.²²

The Commission concluded that forcing the Joint Applicants to advance a proposal that they no longer supported served no useful purpose. Yet, it also expressed concern that the assessment of any future proposals would be undermined if the analyses offered by the public and the parties were not readily accessible. The Commission held:

Residents have invested substantial time and resources in these proceedings, submitting comments, attending hearings, and retaining attorneys and an expert witness to provide testimony. The Commission will request that the ALJ prepare a summary of the public comments and testimony in this case to aid public participation and agency decision-making in any future proceedings.²³

Below, is a summary of the comments and testimony received during the Certificate of Need proceeding. The comments are grouped according to the assessments that the Commission will need to complete during a review of any subsequent Certificate of Need application.

III. Comments on the Forecasted Need for New Infrastructure

A number of the public commentators questioned the analysis of energy needs within the project area and whether the proposed higher-voltage line was necessary to address local demands for electricity.²⁴

²¹ *Id.* at 3-4.

²² See ORDER GRANTING MOTION FOR CERTIFICATION, MPUC Docket Nos. TL-11-152 and CN-12-113 (eDocket No. 20141-95184-01).

²³ See, ORDER PERMITTING WITHDRAWAL WITH CONDITIONS, *supra*, at 6-7.

²⁴ Compare generally, Minn. R. 7849.0120 A(1) (2013).

Paul Ablack, a resident of Plymouth, Minnesota, noted that he was aware of GRE's 69 kV line, and the path of the transmission line, when he and his wife moved to Plymouth, Minnesota, fifteen years ago. Yet, he determined that the existing transmission line was of relatively low voltage and was rarely energized. Because of the significant impacts associated with a larger transmission line, he urged careful consideration of lower-voltage, distribution-level alternatives – specifically the “A2 Alternative.”²⁵

As described by the Joint Applicants in their application, the “A2 Alternative” proposes construction of a new 115/13.8 kV substation in the area near Pomerleau Lake. This substation would be supplied by GRE's existing 115 kV Parkers Lake – Plymouth transmission line. The substation would initially be developed with both 115 kV and 13.8 kV distribution yards and would include two 115 kV transmission line terminations (Parkers Lake and Cedar Island) and two new 115/13.8 kV transformers. The key objective of the A2 alternative is to meet existing and forecasted distribution needs in the study area, over the near term, but without constructing a 115 kV transmission line.²⁶

State Representative Sarah Anderson, a resident of Plymouth, Minnesota, maintained that Xcel Energy had not demonstrated that their proposal was the only “feasible and available alternative” as required by Chapter 57. She asserted that there were several distribution-level alternatives available and that the legislature directed that these alternatives be pursued first.²⁷

Daniel Callahan, a resident of Plymouth, Minnesota, expressed his view that through deployment of more efficient, commercially-available electrical conduction methods, and local sources of electrical generation, a 115 kV transmission line would never be needed.²⁸

Dominic Fong, a resident of Plymouth, Minnesota, expressed skepticism as to the likelihood that voltages in the areas around Gleason Lake will become unacceptably low and violate federal energy reliability standards. To the extent that the Commission determines that low voltages in the project area are a real possibility, Mr. Fong urged the parties and the Commission to focus on solutions that permit transfers of needed power between area substations.²⁹

Jeff Ehm, a resident of Plymouth, Minnesota, expressed the view that as the price of solar panels continues to drop, the amount of local generation of electricity in and around Plymouth, Minnesota, will increase. Mr. Ehm posited that the application seeks

²⁵ Medina I Tr. at 85-89; see *also*, Hr'g Ex. 14, Medina III Tr. at 132-137, and Hr'g Exs. 46 and 47.

²⁶ Application, at 60-61; Environmental Report, at 30; Direct Testimony of Emmanuel Day, at 3 (February 15, 2013) (eDocket No. 20132-83871-01).

²⁷ Medina III Tr. at 29-40 (S. Anderson); see *also*, Medina I Tr. at 117-120 (Wright); Hr'g Ex. 20.

²⁸ Medina III Tr. at 142-143 (Callahan); Hr'g Ex. 49.

²⁹ Medina III Tr. at 230-244 (Fong).

to meet projections of future load growth that will not occur because of sharp rises in local generation. He argued that claimed need is illusory.³⁰

James and Janice Kjelberg, residents of Plymouth, Minnesota, questioned the increase in demand predicted by the Joint Applicants and urged the Commission to closely examine this claim.³¹

Madeline and Richard Linck, residents of Medina, Minnesota, maintained that the Joint Applicants' forecasted need was based upon outdated data, from 2006. They urged the Applicants to invest in green energy alternatives to meet the local need.³²

Patricia O'Donnell, Director of Buildings and Grounds for Providence Academy, argued that the Joint Applicants' proposal does not meet the criteria outlined in Minn. R. 7849.0120. Ms. O'Donnell argues that the population has decreased in 10 of the 13 cities included in the need study. Similarly, the number of building permits issued in these communities has also decreased. In Ms. O'Donnell's view, the projections included by the Applicants are "outdated and underperforming." The number of building permits has also decreased in recent years, which also indicates a stagnant or decreasing population.³³

Carol A. Overland, counsel for Chris and Amy Barry of Medina, Minnesota, urged the Department, parties, and the Commission to consider whether a still broader "higher voltage solution" for the western metropolitan area might be the best method of resolving this dispute. Pointing to the other, concurrent proceedings in the Westgate docket (CN-11-332) and the Carver-Scott Counties Project docket (CN-11-826), Ms. Overland noted that similar capacity and reliability concerns were present in adjacent communities.³⁴

Jim Zook, a resident of Plymouth, Minnesota, expressed skepticism that load serving capabilities were sought in the western portions of the project area. He maintained that the hearing record did not reflect the claimed demand for electricity.³⁵

IV. The Efficacy of Conservation Programs on Reducing Need for the Proposed Infrastructure (Minn. R. 7849.0120 A(2) (2013))

Jeff Ehm, a resident of Plymouth, Minnesota, urged the Commission to closely evaluate the effect of rising electricity rates on the demand for electric power. Mr. Ehm maintained that as rates rise, he and others will switch more energy efficient products so

³⁰ Medina III Tr. at 123-126 (Ehm); Hr'g Ex. 43.

³¹ Comments of James and Janice Kjelberg (March 22, 2013).

³² Comments of Madeline and Richard Linck (March 20, 2013); see *also*, Comments of Colleen and Jim Simons (March 19, 2013).

³³ Comments of Patricia O'Donnell (March 20, 2013).

³⁴ Comments of Carol Overland (May 30, 2012).

³⁵ Medina III Tr. at 213-219 (Zook).

as to reduce their use of electricity. These reductions, continued Mr. Ehm, impact the overall amounts of power needed in the project area.³⁶

Carolyn Smith, a resident of Medina, Minnesota, urged the parties to develop greater incentives for conservation measures and for the parties within the project area to reduce consumption so as to avoid the aesthetic and cost impacts associated with the proposed infrastructure.³⁷

V. Can Other Existing Facilities Meet the Service Needs of the Area? (Minn. R. 7849.0120 A(4) (2013))

Jody Bonsen, a resident of Plymouth, Minnesota, noted that because the existing 69 kV line in the area was not always energized, she was skeptical of the need for 115 kV transmission line. She urged the Commission to extend the use of lower-voltage transmission alternatives, specifically the A2 alternative, to meet energy needs in the area.³⁸

Retired Judge Bruce Kruger, President of the Orchards of Plymouth Homeowners Association, argued that because the Joint Applicants had not established that distribution-level transmission alternatives were not “feasible and available,” as those terms are used in Chapter 57, the proposal for a 155kv transmission line could not properly be considered. He asserted that the A2 Alternative was a feasible and available option to meet local needs for electricity.³⁹

Tom Kubinski, a resident of Plymouth, Minnesota, maintained that according to the Joint Applicant’s own assessments the five zip codes within the project area represent only 3 percent of total system load. Under such circumstances, Mr. Kubinski maintained that additional distribution level, and not transmission-level, options were required to address the stated need.⁴⁰

Paula Maccabee, attorney representing the Western Plymouth Neighborhood Alliance, asserted that there has been an insufficient inquiry into whether distribution-level alternatives could meet area needs for electric power, and satisfy federal reliability standards, during times of significant system outages. She noted that WPNA’s expert, Emmanuel Day, opined that there are a variety of cost-effective distribution-level methods that are capable of meeting local demand during such events – what the North American Electric Reliability Corporation (NERC) refers to as “category C conditions.”⁴¹

³⁶ Medina III Tr. at 123-126 (Ehm); Hr’g Ex. 43.

³⁷ Medina III Tr. at 88-91 (Smith).

³⁸ Medina II Tr. at 40-41 (Bonsen); Hr’g Ex. 26.

³⁹ Medina III Tr. at 137-39 (Kruger); Hr’g Ex. 48; see also, Medina I Tr. at 40-42 (Kruger); Comments of Mary Shimshock (March 14, 2013).

⁴⁰ Medina III Tr. at 171-83 (Kubinski); Hr’g Exs. 7 and 50 and Medina I Tr. at 47-57 (Kubinski).

⁴¹ Medina III Tr. at 206-09 (Maccabee); see also, Medina I Tr. at 80-84 (McBride).

VI. Is the Proposed Infrastructure an Efficient Use of Resources? (Minn. R. 7849.0120 A(5) (2013))

Maksim and Tatyana Belov, residents of Plymouth, Minnesota, asserted that homeowners along the proposed line were aware of the existing line when they purchased their homes. They argued that this purchase decision should be understood as an acceptance of later upgrades to the line.⁴²

Rich Demeules, a resident of Medina, Minnesota, said he assumed there was a need for the proposed upgrade, and the upgrade should follow the existing line next to his property instead of personally-motivated alternatives. In his view, upgrading the existing line was the most logical choice.⁴³

Brad Hill, a resident of Plymouth, Minnesota, supported upgrading the existing transmission line because this line was in place there when homeowners bought their homes. In his view, the values of the homes adjacent to the transmission line already included a market discount reflecting the line. Mr. Hill argued that adjustment of the line in a new direction would result in a windfall increase in the value of the homes near the line. He likewise opposed burying the transmission line, on the grounds that this practice would increase costs and decrease safety.⁴⁴

Thomas E. Murphy, a resident of Plymouth, Minnesota, argued that the proposed project was not fairly characterized as an “upgrade” to an existing line. He maintained that the nature of the proposed line was very different than the one it replaces and would be difficult and expensive to maintain.⁴⁵

Carolyn Smith, a resident of Medina, Minnesota, submitted a petition in support of use of the existing GRE transmission line corridor. As the signatories argued, because a relatively small number of homes directly abutted the corridor, use of the existing right-of-way was an efficient use of land resources.⁴⁶

⁴² Comments of Maksim and Tatyana Belov (June 22, 2012).

⁴³ Comments of Rich Demeules (March 11, 2013).

⁴⁴ Comments of Brad Hill (June 21, 2012); accord Comments of Edana Nelson (June 21, 2012); Comments of Jamie Nickel (June 21, 2012); Comments of Mark Scheidhauer (June 22, 2012).

⁴⁵ Comments of Thomas E. Murphy (June 9, 2012).

⁴⁶ Comments of Carolyn Smith (June 21, 2012).

VII. Is the Proposed Infrastructure Appropriate in Terms of Size, Type and Timing? (Minn. R. 7849.0120 B(1) (2013))

A. Size of the Proposed Facility

Emmanuel Day, of Sebesta Blomberg & Associates, Inc., submitted testimony on behalf of the Western Plymouth Neighborhood Alliance. Mr. Day is an electrical engineer with considerable experience in the design and commissioning of electrical power plants, voltage distribution systems, and utility substations. He resides near Xcel's proposed Hollydale line and volunteered his time to testify on behalf of WPNA. Mr. Day testified that improvements to the electrical system in the area were necessary, but the forecasted needs for electric power could be met, through 2030, by Alternative A2. While acknowledging some features of the joint applicants' critique of the A2 alternative – namely that this alternative would require longer feeder circuits, and, as a result, would be subject to more line failures – Mr. Day maintained that the A2 alternative would still meet local demand for electricity, at a lower cost.

Mr. Day likewise argued there were “troubling discrepancies” in the treatment of costs for the Joint Applicants' preferred proposal and the A2 Alternative. For example, he asserted that “although both Alternative A2 and Xcel's preferred Hollydale 115 kV proposal in the Distribution Study required construction of new feeder circuits, in the [Certificate of Need] Application Applicants included no feeder costs for the Hollydale 115 kV proposal.” Because of such discrepancies, he concluded that the Hollydale 115 kV proposal was not the least cost alternative.⁴⁷

Scott Johnson, a resident of Medina, Minnesota, and city administrator for the city of Medina, expressed the view that power outages are occurring with some frequency in Medina, but that a distribution level alternative is the best method of balancing the need for additional electric power against the impacts that follow from new utility infrastructure.⁴⁸

Bob Onken, a resident of Plymouth, Minnesota, argued that the utility easement in favor of the existing Great River Energy transmission line only provides for maintenance of existing facilities and not the new and larger infrastructure proposed by the Joint Applicants.⁴⁹

Ilan Zeroni, a resident of Plymouth, Minnesota, noted that Minn. R. 4410.2000, subp. 4 (2013), requires that “connected actions or phased actions” of a single energy project must be “considered in total when determining the need” for an Environmental Impact Statement. Mr. Zeroni maintained that because the proposed project was part of

⁴⁷ Test. of E. Day, *supra*, at 3 - 16 (Day Direct).

⁴⁸ Medina III Tr. at 127-128 (S. Johnson); Hr'g Ex. 44.

⁴⁹ Medina I Tr. at 43-46 (Onken); Hr'g Ex. 6.

a larger series of reliability plans, detail relating to all of the related projects needed to be available for evaluation.⁵⁰

Jim Zook, a resident of Plymouth, Minnesota, expressed the view that from the perspective of those closest to the proposed transmission line, more frequent power outages would be a preferable result to a nearby 115 kV transmission line.⁵¹

B. Type of the Proposed Facility – Many Commentators Call for Underground Burial of the Transmission Line

John P. Blank and Karen Blank, residents of Long Lake, Minnesota, signaled their support for Alternative Route H or, in the alternative, that any new transmission line should be buried.⁵²

Barbara Bremer, a resident of Plymouth, Minnesota, argued that because of the impacts the proposed line would have on residential properties, the line should be buried.⁵³

Ron and Victoria Boyd, of Plymouth, Minnesota, opposed Route Alternative A and urged closer consideration of other options. They requested the Joint Applicants either bury lines that cross residential areas or select a different route altogether.⁵⁴

Cort J. Cieminski, of Plymouth, Minnesota, asked that any line be buried so as to reduce the health impacts of the line to children.⁵⁵

Sejal and Hitten Doshi, residents of Plymouth, Minnesota, recommended placing the transmission line underground because of the aesthetic, financial, and health impacts of routing the line along Medina Road.⁵⁶

Mark Flaten, a resident of Wayzata, Minnesota, argued that because of the potential health impacts of a 115 kV transmission line, any new line should be buried underground.⁵⁷

⁵⁰ Comments of Ilan Zeroni (March 25, 2013).

⁵¹ Medina III Tr. at 218 (Zook).

⁵² Comments of John P. Blank and Karen Blank (June 21, 2012).

⁵³ Comments of Barbara Bremer (June 17, 2012); *accord* Comments of George and Lauri Klaus (June 22, 2012).

⁵⁴ Comments of Ron and Victoria Boyd (June 18, 2012).

⁵⁵ Comments of Cort J. Cieminski (June 20, 2012).

⁵⁶ Comments of Sejal and Hitten Doshi (June 21, 2012).

⁵⁷ Comments of Mark Flaten (June 22, 2012); *see also*, Comments of Thomas J. McClellan and Pamela J. Barton (June 12, 2012).

Eric and Deidra Gustavson, residents of Plymouth, Minnesota, expressed concern over the proximity of proposed Routes A and G1 to their homes. The couple urged Xcel to bury the line in existing neighborhoods until it reached Highway 55.⁵⁸

Jeff Johnson, a resident of Plymouth, Minnesota, hopes the utility companies and PUC use the Hollydale line as an opportunity “to be proactive and put all power lines underground the way other states, and as I find out now, other countries do currently.”⁵⁹

Scott Johnson, Medina City Administrator, submitted a letter from the Medina City Council urging the installation of single pylon poles, use of EMF-reducing insulation and burying any transmission line that is routed near residences or sites of future development.⁶⁰

George and Lauri Klaus, pointing to the particular impacts to their property and their development plans, urged the installation of underground lines in residential areas.⁶¹

Jeff Minea expressed the view that the large metal poles and lines for the 115 kV high voltage line are better suited for industrial and commercial areas. He urged placing transmission lines underground in any residential area.⁶²

Mark Nelson, a resident of Plymouth, Minnesota, opposed the Medina alternative route. He urged burying the transmission line along the proposed route.⁶³

Jerry Rannallo urged that the proposed transmission lines be buried so as to maintain property values of residential homes in the area.⁶⁴

Teresa Reding, a resident of Plymouth, Minnesota, opposed Alternative Route F1 and the Medina Road Alternative Route. She urged routing the lines along Highway 55 or underground.⁶⁵

⁵⁸ Comments of Eric and Deidra Gustavson (June 19, 2012).

⁵⁹ Medina III Tr. at 51 (J. Johnson); Hr’g Ex. 41; *see also*, Comments of Carole and Ward Hamlin (June 21, 2012).

⁶⁰ Comments of Scott Johnson (June 20, 2012).

⁶¹ Comments of George and Lauri Klaus (June 21, 2012); *see also*, Comments of Mike and Kathy Larson (June 19, 2012).

⁶² Medina II Tr. at 37-40 (Minea); Hr’g Ex. 25; Comments of Richard Graft (June 11, 2012); Comments of Steven Wold (June 16, 2012).

⁶³ Comments of Mark Nelson (June 21, 2012); *accord* Comments of Erik Cochran (June 15, 2012); Comments of Kim Nicolay (June 22, 2012); Comments of Anthony Pence (June 14, 2012); Comments of Joe and Kathy Reis (June 21, 2012).

⁶⁴ Comments of Jerry Rannallo (June 20, 2012).

⁶⁵ Comments of Teresa Reding (June 22, 2012).

Deb Stage suggested that power lines be installed underground so as to avoid impacts to human health. She maintained that the additional cost of doing so was not a significant barrier to implementation of such a plan.⁶⁶

C. Timing of the Proposed Facility

Joe and Kathy Reis, residents of Medina, Minnesota, expressed concern that the Certificate of Need process would occur alongside the Route Permitting process, and maintained that each should follow an independent study to investigate effects on health and real estate values.⁶⁷

Tammy L. Pust, representing Park Nicollet Health Services, asked for commercially viable access and egress points for the property, as well as maximum flexibility for the internal site layout. She agreed with the proposal of upgrading the existing line because it would be least disruptive. Most disruptive to Park Nicollet are Alternative Routes F1, F2, F3, G, and potentially B. Routes F1-3 would impair the view of the medical clinic from the roadway, reducing the number of visitors. Route G would disrupt access, making the site unusable.⁶⁸

Lynn and Jim Zook, residents of Plymouth, Minnesota, argued that residents living north of Highway 55 and south of Highway 55 have different concerns; and that the process for reviewing the proposed line should account for these different impacts. The Zooks were critical of the review process in this case.⁶⁹

VIII. Is the Proposed Infrastructure Appropriate in Terms of Cost? (Minn. R. 7849.0120 B(2) (2013))

Laurie Azine, M.D., maintained that any benefits of improved reliability of the electrical system were outweighed by the health impacts of the proposed transmission lines. She expressed doubt that the cost savings achieved by the line would be available to the residents who were negatively impacted by its operation.⁷⁰

Katie Benusa, a resident of Plymouth, Minnesota, asserted that the residents of the Quail Ridge neighborhood are willing to pay for the added expenses of building the voltage lines elsewhere, including underground, or along Route 494.⁷¹

Kay Kaminski, a resident of Plymouth, Minnesota, said the additional cost of pursuing an alternative route should not be a factor in the decision-making. She

⁶⁶ Wayzata Tr. at 30-37 (Stage).

⁶⁷ Comments of Joe and Kathy Reis (June 21, 2012).

⁶⁸ Comments of Tammy L. Pust and Attachment (June 22, 2012).

⁶⁹ Comments of Lynn and Jim Zook (June 22, 2012).

⁷⁰ Wayzata Tr. at 88-94 (Azine).

⁷¹ Comments of Katie Benusa (June 22, 2012).

maintained that the route with the least financial, physical, and health impacts should be selected by the Commission.⁷²

Judy Johnson, a member of the Plymouth City Council, expressed concern over costs that negatively impact ratepayers. She urged the various stakeholders to work collaboratively to both improve the reliability of electric service and reduce the impacts of any new infrastructure.⁷³

Kenneth H. Johnson, a resident of Plymouth, Minnesota, expressed concern over Xcel's communication practices and maintained that Xcel spends the most money (\$790,000) to influence the Public Utilities Commission.⁷⁴

Yan Kravchenko said that cost should be the "last factor" considered when siting a transmission line. He maintained that avoiding the human and environmental impacts of electricity infrastructure was of paramount importance.⁷⁵

The Kochevars, residents of Plymouth, Minnesota, supported upgrading the existing line because alternatives will be more costly.⁷⁶

Tom Kubinski, a resident of Plymouth, Minnesota, maintained that the applicant is pursuing their proposal for cost reasons, and did not have an appropriate regard for minimizing the impacts of EMF.⁷⁷

Julie Rothstein, a resident of Plymouth, Minnesota, expressed skepticism as to why the A2 alternative, which is less expensive than the Hollydale project, was not embraced by the Joint Applicants. She maintained that over the course of the project timeline "[w]e should expect innovation ... energy conservation and new technologies."⁷⁸

Charles Schrader, a resident of Plymouth, Minnesota, urged Xcel Energy to determine with more precision the cost of burying the transmission line. He asserted that there was a willingness within the community to help defray the added costs associated with undergrounding the transmission line.⁷⁹

Suzie Raskob Sween, representing several farm properties, supported burying the existing line and building a public trail on top of the buried line. Ms. Sween maintained

⁷² Comments of Kay Kaminski (June 22, 2012).

⁷³ Wayzata Tr. at 52-56 (J. Johnson).

⁷⁴ Comments of Kenneth H. Johnson (March 21, 2013)

⁷⁵ Wayzata Tr. at 85-88 (Kravchenko).

⁷⁶ Comments of the Kochevar Family (June 21, 2012).

⁷⁷ Comments of Tom Kubinski and Attachments (June 8, 2012).

⁷⁸ Medina III Tr. at 65-67 (Rothstein); see also, Hr'g Ex. 38.

⁷⁹ Medina II Tr. at 61-64 (Schrader); see also, Comments of Mark Nispel (June 22, 2012).

that Xcel should not be allowed to minimize their costs in ways that shift the impacts of the transmission line onto others.⁸⁰

Jim Zook, a resident of Plymouth, Minnesota, expressed his view that the A2 Alternative was preferable because the facilities would provide reliable service, at a lower cost, and would not cause loss of property values. He also maintained that construction of a 115kV line was inconsistent with the scope of the easement granted to Great River Energy.⁸¹

IX. What are the Impacts of the Proposed Infrastructure upon the Natural Environment in Comparison to Alternative Approaches? (Minn. R. 7849.0120 B(3) (2013))

Paula Maccabee, counsel for the Western Plymouth Neighborhood Alliance, maintained the proposed project has potential for “significant environmental effects” as those terms are used under the Minnesota Environmental Policy Act (MEPA). She argued that there is “a need to determine whether [the] A2 is actually a reasonable and prudent alternative that would avoid the harm” associated with the proposed project.⁸²

A. Impact on Health in Comparison to Alternatives

Diane Bridge expressed concern over the health impacts associated with routing a transmission in residential areas. She urged a series of independent inquiries into the impacts of EMF on rates for leukemia, breast cancer, and prostate cancer.⁸³

Kim Carlstrom, a resident of Plymouth, Minnesota, shared her concerns about the potential health risks of the proposed line. She stated that her family will likely relocate their home if the proposed power line is installed.⁸⁴

LeRoy and Doris Hart, of Plymouth, Minnesota, recommended the A2 alternative. In their view, this system alternative mitigates the health and aesthetic impacts associated with adding additional power capacity to the area.⁸⁵

⁸⁰ Comments of Suzie Raskob Sween (June 20, 2012); *accord*, Wayzata Tr. at 122-123 (Andzelevich).

⁸¹ Medina III Tr. at 149-153 (Zook).

⁸² Medina II Tr. at 77-79 (Maccabee).

⁸³ Wayzata Tr. at 115-117 (Bridge); *see also*, Comments of Barry Altman (May 29, 2012 and June 20, 2012).

⁸⁴ Medina II Tr. at 44-46 (Carlstrom); Hr’g Ex. 28.

⁸⁵ Comments of LeRoy and Doris Hart (March 20, 2013).

Douglas Haugen, a resident of Plymouth, Minnesota, pointed to the potential EMF levels and childhood leukemia associated with transmission lines. He urged selection of the A2 alternative.⁸⁶

Stephen and Roxanne Lerum, residents of Plymouth, Minnesota, noted that they feel safe with the current transmission poles, but feared that the upgrade would produce dangerously-high levels of EMF. The Lerums urged routing the transmission line through less densely populated areas.⁸⁷

Adam and Susan Marshall, residents of Medina, Minnesota, detailed their concern about health impacts that follow from EMF, particularly for local families that include cancer survivors.⁸⁸

Craig Mattson, a resident of Plymouth, Minnesota, objected to the proposed line because the conditions that permitted the original line no longer exist and because of the negative health issues associated with the line.⁸⁹

Ryan Niemi, a resident of Plymouth, Minnesota, noted that the current easement “runs the entire length of [his] front yard.” He expressed concern over the impact of a high-voltage line on human health, the safety of children, and wildlife.⁹⁰

Enhui Tan and Ping Peng, residents of Plymouth, Minnesota, recommended alternative Routes F1-3, G, or G1 because of health risks. They also submitted information regarding EMF levels and an academic paper describing the connection between childhood leukemia and EMF.⁹¹

Sandra and Gary Plummer, residents of Plymouth, Minnesota, urged relocation of the proposed transmission line along Highways 494 and 55 and burying lines in residential neighborhoods. The Plummers noted a relationship between electrical appliances and migraine headaches; matters that the Plummers are concerned will become far worse if the proposed transmission line is installed.⁹²

Anil Singh, a resident of Plymouth, Minnesota, expressed concerns about Extremely Low Frequency EMF emitted from high voltage transmission lines. He urged the joint applicants to offer incentives to their customers for reducing energy consumption.

⁸⁶ Medina III Tr. at 62-65 (Haugen); Hr’g Ex. 37; *see also*, Comments of Renee J. Gibson (March 23, 2013); Comments of Becky Hsu (March 21, 2013).

⁸⁷ Comments of Stephen and Roxanne Lerum (June 22, 2012).

⁸⁸ Hr’g Ex. 40.

⁸⁹ Comments of Craig Mattson (June 22, 2013).

⁹⁰ Medina I Tr. at 39-40 (Niemi); Hr’g Ex. 5.

⁹¹ Comments of Enhui Tan and Ping Peng (June 22, 2013).

⁹² Comments of Sandra Plummer (June 22, 2013).

He also urged selection of an alternative route from the Medina sub-station along Highway 55.⁹³

Kalyam Subash, a resident of Plymouth, Minnesota, opposed the proposed route because of health concerns; specifically the long-term impact of having high-voltage transmission lines at close distances to residential homes and schools.⁹⁴

Eric Sunde, a resident of Plymouth, Minnesota, expressed concern over the dangers of EMF and the prospect of having large power lines routed very close to area homes. He supported deployment of solar or wind power alternatives.⁹⁵

Steve Sutton urged the Commission to select “more logical route options” because of the likely health impacts to local residents.⁹⁶

Don and Lorrie Wright, residents of Plymouth, Minnesota, opposed the Hollydale line due to its impact on property values and EMF levels. The Wrights suggested their own alternative route which spans 7.5 miles.⁹⁷

Ilan Zeroni, a resident of Bridlewood Farms, maintained that any transmission line that is installed should have minimal impacts to nearby residents. Moreover, he urged the Commission to compare possible routes and alternatives on the basis of these impacts. Mr. Zeroni argues that, according to the analysis he completed comparing these factors, Alternative G reduces the number of homes impacted by 75 percent when compared with the Joint Applicants’ proposal. As part of his testimony, Mr. Zeroni presented a graph showing magnetic fields in milligauss. He asserted that if the joint applicants’ proposal was approved, his children will be exposed to between 43 and 108 times the magnetic field exposure a person would usually be exposed to while sleeping in their bedroom.⁹⁸

Shelly and Matt Zitzlsperger, residents of Plymouth, Minnesota, expressed concern that that the proposed line did not do enough to protect existing residential developments and that at a minimum these impacts should be Xcel’s top priority.⁹⁹

⁹³ Comments of Anil Singh and Attachments (June 21, 2013).

⁹⁴ Comments of Kalyam Subash (June 12, 2013).

⁹⁵ Comments of Eric Sunde (June 21, 2013).

⁹⁶ Comments of Steve Sutton (June 22, 2013).

⁹⁷ Comments of Don and Lorrie Wright and Attachments (June 22, 2012).

⁹⁸ Wayzata Tr. at 96-108 (Zeroni); Hr’g Ex. C; Comments of Ilan Zeroni (March 25, 2013).

⁹⁹ Comments of Shelly and Matt Zitzlsperger (June 20, 2012).

B. Impact on Risks to Children and Others

Thaddeus L. Jankowski opposed the proposed route because of health risks and the safety of children, and recommended that alternatives be chosen instead.¹⁰⁰

Jim and Lisa Keller, of Plymouth, Minnesota, opposed the Applicants' proposed route on the grounds that it presented significant risks to the safety of residents – particularly children. They suggested that a route follow industrial areas or that the A2 alternative be selected.¹⁰¹

Patti O'Donnell, Director of Buildings and Grounds for Providence Academy, expressed concern that upgrading the existing line would affect her school's play areas and plans for expansion, and suggested alternative routes. Ms. O'Donnell also submitted images of the current poles on the school's campus.¹⁰²

Jim Weinand, a resident of Plymouth, Minnesota, opposed the Medina alternative route and supported moving the current line that passes Greenwood Elementary school to another location.¹⁰³

C. Impact upon Flora and Fauna

Barry Altman, a resident of Plymouth, Minnesota, expressed concern that the Hollydale power line will traverse wetlands and asked the alternative A2 line be implemented instead. Mr. Altman provided a power point detailing the effects of the proposed line and its alternatives on his neighborhood, Walnut Grove Pond. He decried the impact of placement of "over 190-foot tall metal poles spoiling the natural beauty and character of Plymouth."¹⁰⁴

Carolyn Anderson, a resident of Wayzata, Minnesota, noted that while area homeowners expect to pay more for the "neighborhood feel," the proposed route should not sacrifice this feature of homeowner choice.¹⁰⁵

Alexsandr Andzelevich, a resident of Plymouth, Minnesota, suggested burying the line and building a public trail on top of the buried line.¹⁰⁶

¹⁰⁰ Public Comment form; see also, Comments of Thaddeus L. Jankowski (June 21, 2012).

¹⁰¹ Comments of Jim and Lisa Keller (June 22, 2012 and March 25, 2013); see also, Comments of Barbara Morris (March 25, 2013); Comments of Sharon Nelsen (March 14, 2013).

¹⁰² Wayzata Tr. at 20-23 (O'Donnell); Hr'g Ex. A.

¹⁰³ Comments of Jim Weinand (June 16, 2012); see also, Medina II Tr. at 42-44 (Rothstein).

¹⁰⁴ Medina II Tr. at 24-34; (Altman); Hr'g Exs. 22 and 23.

¹⁰⁵ Wayzata Tr. at 118-121 (C. Anderson).

¹⁰⁶ Wayzata Tr. at 122 (Andzelevich); Hr'g Ex. G; Comments of Alexsandr Andzelevich (June 12, 2012).

Summary of the Direct Testimony of Benjamin P. Carlson, on behalf of Western Plymouth Neighborhood Alliance: Benjamin Carlson is the owner of Arrowhead Environmental Consulting and provides consulting services relating to vegetation, wetland permitting, delineation, and maintenance. Following a review of materials filed in this docket, and the proposed transmission line route, Mr. Carlson concluded that approval of the project would have significant environmental impacts. Principally, the impacts would follow from the removal or downsizing of trees along the transmission line route and degradation of area water resources through wetland crossings. Mr. Carlson further opined that nearly all of the “impacts on agricultural crop lands, wetlands and water resources” would be avoided if the Alternative A2 was approved.¹⁰⁷

Mark and Anne Donahue, residents of Medina, Minnesota, expressed concern over the impacts of the proposed line, noting that a large tree line along their property would be destroyed to make way for the transmission line.¹⁰⁸

Jeff Ehm, a resident of Plymouth, Minnesota, noted that members of the Bridlewood Farms community have worked hard to establish buffer areas between homes and other adjacent uses. He maintains that the proposed transmission line undermines this work. He believes that the A2 alternative would be better for aesthetic and environmental reasons.¹⁰⁹

Ron and Sheri Frick, residents of Plymouth, Minnesota, expressed concern about impacts to human health and the environment from a 115 kV transmission line. They urged the Commission to route the transmission line along Interstate 494 so as to minimize these impacts.¹¹⁰

Mathew and Jennifer Knutson, residents of Plymouth, Minnesota, said the A2 alternative was an option that meets power needs, is safer, produces less noise, and has a minimal impact on property values and the environment.¹¹¹

Mike and Kathy Larson, residents of Plymouth, Minnesota, supported the A2 alternative because this option would address reliability issues, at a lower cost, and protect area wetlands.¹¹²

¹⁰⁷ Testimony of Benjamin P. Carlson on Behalf of Intervener Western Plymouth Neighborhood Alliance (February 15, 2013) (eDocket No. 20132-83871-03).

¹⁰⁸ Comments of Mark and Anne Donahue (March 4, 2013).

¹⁰⁹ Medina I Tr. at 36-38; Hr’g Ex. 4; *see also*, Comments of Jennie Nyren and Rodrigo Fuentes (June 20, 2012 and March 25, 2013); Comments of Judy and Chris Mallett (March 10, 2013).

¹¹⁰ Comments of Ron and Sheri Frick (June 12, 2012).

¹¹¹ Comments of Mathew and Jennifer Knutson (March 23, 2013); *see also*, Comments of Amy Johnson (March 18, 2013).

¹¹² Comments of Mike and Kathy Larson (October 28, 2013); *see also*, Comments of Kala Keefe (March 15, 2013).

Julie Rothstein, a resident of Plymouth, Minnesota, remarked that the walking path used by her family will be in jeopardy if power lines are implemented. She expressed support for the A2 low voltage alternative because such a line would have a smaller impact on the environment.¹¹³

John Wood, a resident of Plymouth, Minnesota, argued that the A2 alternative was preferable to the Joint Applicants' proposal because the A2 alternative had fewer impacts upon area trees and shrubs.¹¹⁴

X. What are the Impacts of the Proposed Infrastructure upon the Socioeconomic Environment in Comparison to Alternative Approaches? (Minn. R. 7849.0120 B(3))

A. Impacts upon Property Values

State Representative Sarah Anderson for District 43A, expressed concern for residents of the Plymouth community and the values of their homes. In her June 2013 letter, she urged the Commission to only approve a highway route that avoided these impacts to local residents.¹¹⁵

Tami Carpenter, a resident of Plymouth, Minnesota, expressed concern over the placement of larger utility pole structures, and with that, a commensurate increase in the "engineering design fall fields" associated those structures. As Ms. Carpenter noted, the engineering design teams that place transmission line structures also tabulate the "fall fields" – an area that would be impacted if the structure was knocked down. Ms. Carpenter explains that Federal Home Administration (FHA) financing is not available for homes that are within the "fall fields" of a utility structure. In Ms. Carpenter's views, if FHA financing were no longer available to area homes this would be a significant, negative impact on the re-sale value of those properties.¹¹⁶

Jennifer Corke, a resident of Plymouth, Minnesota, expressed concern about the health impact of the proposed line and the affect it would have on the value of her home. As she summarized at the March 7, 2013 hearing:

[T]he impact on the value of our home would just take a huge hit. We've spoken with a couple realtors already. We've worked really hard for everything that we have. As I know has been stated by, you know, just about everybody that's gotten up, the impacts would be huge and we really

¹¹³ Medina II Tr. at 42-44 (Rothstein); Hr'g Ex. 27; Comments of Julie Rothstein (March 24, 2013).

¹¹⁴ Comments of John Wood (March 24, 2013); *see also*, Comments of Lisa Greenberg (March 12, 2013).

¹¹⁵ Comments of State Representative Sarah Anderson (June 15, 2012); *see also*, Hr'g Exs. B, 8 and 19.

¹¹⁶ Wayzata Tr. at 58-64 (Carpenter); *see also*, Comments of John Wood (March 24, 2013).

don't even have the ability to sell it, take a loss, and move. We would be trapped.¹¹⁷

Jeff and Cindy Ehm, residents of Plymouth, Minnesota, said they invested in their home because they believed that it would retain its value over time. They argued that the cumulative negative impacts on real estate values to those along the route far outweigh the costs avoided by not placing the transmission lines underground. They urged selection of a different route alternative than that proposed by the Joint Applicants.¹¹⁸

Scott and Kristine Erickson, residents of Plymouth, Minnesota, opposed the proposed location of Substation A and the Cheshire-Schmidt Lake Road route alternative. The Ericksons expressed concern over the impacts of this infrastructure from EMF and the value of nearby homes. They urged selection of one of the other available alternatives.¹¹⁹

Doug Haugen, a resident of Plymouth, Minnesota, is a real estate agent. Mr. Haugen maintained the transmission lines would lower the value of adjacent properties between 10 and 40 percent. To avoid these impacts, he urged routing any transmission line in corridors with significant “buffer zones” separating them from residences.¹²⁰

Tom Kubinski, a resident of Plymouth, Minnesota, noted that real estate agents had confirmed to him that his home value would be reduced by 10 to 40 percent if the proposed project was approved. He maintained that Alternative E was the best solution to local reliability concerns because this option did not impact many homes.¹²¹

Lynn Zook, a resident of Plymouth, Minnesota, maintained that siting a project that would result in dramatic impacts to local property values is immoral. She urged approval of low-power voltage distribution option or the burying of transmission lines.¹²²

¹¹⁷ Medina II Tr. at 64-65 (Corke); see also, Medina I Tr. at 44-45 (Onken); Medina I Tr. at 121-122 (Azine); Medina III Tr. at 169-170 (Parks); Comments of Mike, Ginny and Katie Benusa (March 25, 2013); Comments of Joel and Kathleen Critzer (June 21, 2012); Comments of Tracy Crocker (June 18, 2012); Comments of Timothy and Laurene DeMuth (June 22, 2012); Comments of Joe Feder (June 21, 2012); Comments of Joanne Isdahl (March 12, 2013); Comments of Rahul Jhavar (March 10, 2013); Comments of Kenneth and Elaine Johnson (June 20, 2012 and March 18, 2013); Comments of Jacqueline Kalk (March 11, 2013); Comments of James and Janice Kjellberg (June 18, 2012); Comments of Carmen Mattson (June 22, 2012); Comments of Joan Ree (March 18, 2013); Comments of Darren Waldrep (June 17, 2012); Comments of Michelle Weimert (March 18, 2013).

¹¹⁸ Comments of Jeff and Cindy Ehm (June 19, 2012).

¹¹⁹ Comments of Scott and Kristine Erickson (June 9, 2012); see also, Comments of Alek and Bella Buzhaker (June 10, 2012).

¹²⁰ Medina I Tr. at 93-97 and 138 (Haugen); Comments of Doug Haugen (June 22, 2012).

¹²¹ Wayzata Tr. at 45-52 (Kubinski).

¹²² Medina II Tr. at 47-54; Hr'g Ex. 29; see also, Comments of Kathy Huston (June 22, 2012); see also, Comments of Charles and Carole Eidem (June 10, 2012).

B. Impacts upon Quiet Use and Enjoyment

Karin Cotter, a resident of Plymouth, Minnesota, opposed the Joint Applicants' proposal because the proposed transmission line not only bisected her backyard, but also traversed a nearby park, meaning that "all of the places where we like to go to get fresh air and to enjoy the outdoors are impacted by this proposal."¹²³

Patrice Cramer, a resident of Plymouth, Minnesota, and president of the Savannah Homeowners Association, urged that the siting of any substation include heavy fencing so as to obscure the facility from view and for transmission lines to be built near area railroad tracks because such a route would affect fewer neighborhoods.¹²⁴

Kenneth and Elaine Johnson, of the Orchards of Plymouth Homeowners Association, wrote to emphasize regarding the proximity of Route Alternative A to their homes. They urged selection of an alternate route. In the alternative, they argued for undergrounding transmission lines so as to reduce EMF. The Johnsons maintain that even with the current voltage along the existing line, some AM radio stations are inaccessible.¹²⁵

Sharon Taragos, a resident of Plymouth, Minnesota, noted that installation of the proposed line would render her backyard and yard deck unusable and "breaks the good part of living in Bridlewood Farm."¹²⁶

Matt Zitzlsperger, a resident of Plymouth, Minnesota, expressed concern over the noise impacts of the proposed project during construction and later operation. He also expressed the view that the proposed line would have a detrimental impact on the aesthetics of local neighborhood. He urged the Commission to select the A2 alternative.¹²⁷

XI. Does the Proposed Infrastructure Contribute to Reliability in Comparison to Alternative Approaches? (Minn. R. 7849.0120 B(4) (2013))

Rudolf Gutmann, a resident of Plymouth, Minnesota, expressed the concern that an "old unreliable technology line," the existing 69 kV transmission line, would be the basis for approving a successor project – which he likewise characterized as an "old unreliable technology line." In Mr. Gutmann's view, because the capacity that the Joint Applicants hoped to secure by the proposed line is not needed until 2026, the choices on

¹²³ Medina II Tr. at 21-23; see also, Medina III Tr. at 154-155 (Walstein); Comments of Brett Huston (June 21, 2012); Comments of Caron Klein (March 13, 2013).

¹²⁴ Comments of Patrice Cramer (March 12, 2013).

¹²⁵ Comments of Kenneth and Elaine Johnson (June 20, 2012).

¹²⁶ Medina III Tr. at 81-83 (Taragos); Comments of Sharon Taragos (June 20, 2012).

¹²⁷ Medina I Tr. at 90-93 (Zitzlsperger); Hr'g Ex. 15.

how to meet these needs should be postponed until closer to this date. As Mr. Gutmann reasons, this would permit the Joint Applicants and ratepayers to access better technical solutions than are available today.¹²⁸

Deb Stage, a resident of Plymouth, Minnesota, was critical of the claimed reliability of overhead lines, which she maintained were susceptible to frequent weather-related outages. She maintained that underground transmission lines were more reliable, safer, and had fewer impacts upon property value and the environment. In Ms. Stage's view, the long term costs of underground lines were lower than the alternative.¹²⁹

XII. Particular Alternatives Urged by Commentators as Superior (Minn. R. 7849.0120 C (2013))

A. Substation A – Possible Site for Pomerleau Lake Substation

The Joint Applicants proposed two sites in Plymouth for the new Pomerleau Lake Substation, which it referred to "Substation Site A" and "Substation Site B." Substation Site A is located just southwest of the intersection of Schmidt Lake Road and Interstate Highway 494 (I-494) and Substation Site B is located approximately one quarter mile west of the intersection of Fernbrook Lane and the Canadian Pacific Railway tracks. The Joint Applicants prefer Substation Site A "because of its proximity to existing utility and road right-of-way, the existing GRE 115 kV transmission line, future Xcel Energy transmission lines that would connect to the new substation, and I-494."¹³⁰

Jacqueline Eagon, a resident of Plymouth, Minnesota, expressed concern over health and home-devaluation impacts that would follow from siting Substation A. She urged using Substation B and Alternative Route E.¹³¹

Kristine Erickson, a resident of Plymouth, Minnesota, expressed concern over the health impacts that would follow from siting a substation in the area of Schmidt Lake Road and Cheshire Parkway. She urged the Joint Applicants and the Commission to vigorously explore alternatives that would obviate placement of substation facilities in a residential area; including, lower voltage options and alternative locations such as Substation B. Ms. Erickson maintained that substation facilities should be as far away from homeowners as possible.¹³²

¹²⁸ Medina III Tr. at 45-49 (Gutmann); Hr'g Ex. 35.

¹²⁹ Comments of Deb Stage (June 7, 2012).

¹³⁰ Attachment C at 2, NOTICE PLAN PETITION (eDocket No. 20122-71122-01).

¹³¹ Comments of Jacqueline Eagon (June 11, 2012); *see also*, Medina III Tr. at 146-148 (Eric and Joan Brown).

¹³² Wayzata Tr. at 109-111 (Erickson); Medina I Tr. at 112-116 (Erickson); Comments of Kristine Erickson (March 13, 2013).

Sandra Hodgkin, a resident of Plymouth, Minnesota, opposed the location of Substation A and the route following Cheshire Lane to Schmidt Lake Road. Because of the health impacts of the proposed line, Ms. Hodgkin questioned whether this alternative was a low-cost solution.¹³³

Vassilios Morellas and Venetia Laganis, residents of Plymouth, Minnesota, opposed the location of Substation A. Concerned over the effects this infrastructure would have upon human health and property values, they opposed the proposed route from Cheshire Lane to Schmidt Lake Road.¹³⁴

Brad and Becky Weber, residents of Plymouth, Minnesota, shared their opposition to the location of Substation A and the proposed route following Cheshire Lane to Schmidt Lake Road. They maintained that alternative routes, affecting fewer individuals, were available and preferable.¹³⁵

B. A2 Alternative

Tracy Crocker, a resident of Plymouth, Minnesota, urged selection of the A2 alternative. He maintained that if the Joint Applicants' proposal was approved, a decrease in property values along the line will occur; a drop in value that will be harmful to both the impacted homeowners and also the local units of government that rely upon home valuations in their tax bases.¹³⁶

Greg and Becky Jaeger urged the Commission to approve the A2 alternative instead of the Joint Applicants' proposal. They expressed concern over health and valuation impacts associated with the proposed line.¹³⁷

Retired Judge Bruce Kruger expressed his concern over the impacts that a reduction of home values would have upon area seniors and urged adoption of the A2 alternative as a method of avoiding these impacts.¹³⁸

¹³³ Comments of Sandra Hodgkin (June 16, 2012); see also, Comments of Robert and Katherine Walz (June 20, 2013).

¹³⁴ Comments of Vassilios Morellas and Venetia Laganis (June 22, 2012); see also, Comments of Don Brandeau (June 15, 2012); Comments of Matt and Amy Noble (June 19, 2012); Comments of Shelley Wiharm (June 14, 2012).

¹³⁵ Comments of Brad and Becky Weber (June 21, 2012).

¹³⁶ Medina II Tr. at 65-66 (Crocker); Comments of Tracy Crocker (March 20, 2013).

¹³⁷ Comments of Greg and Becky Jaeger (March 11, 2013); see also, Medina II Tr. at 36-37 (Brenner); Ex. 24; Comments of Nazmul Jaffer (March 7, 2013).

¹³⁸ Medina I Tr. at 40-41 (Kruger); Hr'g Exs. 1, 12 and 13.

C. Alternative Route C

Kevin and Rebecca Fruechte, residents of Plymouth, Minnesota, urged the Commission to select Alternative Routes C and E on the grounds that these alternatives impact fewer residents.¹³⁹

Deb Stage, a resident of Plymouth, Minnesota, urged the Commission to select Alternative Route C, on the grounds that it would have fewer impacts upon residential developments.¹⁴⁰

D. Alternative Route E

Grace Azine, a resident of Plymouth, Minnesota, shared her concern over the impacts that the Joint Applicants' proposal would have upon property values, health risks, and aesthetics along the proposed route. She urged the Commission to select a route that ran along Highway 494 to Highway 55 instead.¹⁴¹

Mike and Ginny Benusa urged the Commission to direct that the transmission lines be buried or, in the alternative, to select Alternative Route E.¹⁴²

Gerald and Gail Cullinan, residents of Plymouth, Minnesota, asked for the route to be built along Highway 55 and 494. They opposed Alternative Routes B and B1 because of the impacts to safety, aesthetics, and home resale value in the area.¹⁴³

Joyce Crocker, a resident of Plymouth, Minnesota, expressed the view that the health, property, and aesthetic impacts of the Joint Applicants' proposal were too great. She maintained that the best route would be Alternative Route E along Highway 55 and Route 494.¹⁴⁴

Sean Davis, a resident of Plymouth, Minnesota, shared his support for Alternative Route E. In his view, this alternative was best at reducing financial aesthetic impacts to landowners.¹⁴⁵

¹³⁹ Comments of Kevin and Rebecca Fruechte (June 21, 2012).

¹⁴⁰ Comments of Deb Stage (June 7, 2012).

¹⁴¹ Comments of Grace Azine (June 20, 2012).

¹⁴² Comments of Mike and Ginny Benusa (June 21, 2012); *see also*, Wayzata Tr. at 69-70 (Kader).

¹⁴³ Comments of Gerald and Gail Cullinan (June 21, 2012).

¹⁴⁴ Comments of Joyce Crocker (June 18, 2012); *see also*, Comments of Kevin and Rebecca Fruechte (June 21, 2012); Comments of Irene Green (June 21, 2012); Comments of Lisa Hedin (June 22, 2012); Comments of Elise Lindberg (June 21, 2012).

¹⁴⁵ Comments of Sean Davis (June 19, 2012); Comments of Marshall Frank (June 22, 2012).

David and Jane Folsom, residents of Plymouth, Minnesota, opposed the Hollydale line and asked for a route along Highway 55 because of home value and health concerns.¹⁴⁶

Jared Mandoza, a representative of Regency Pointe Apartment Homes in Plymouth, Minnesota, urged selection of a route other than Alternative Route E. Mr. Mandoza expressed the concern that Route E would directly pass through the property of his apartment complex.¹⁴⁷

William F. Mohrman and Joanne Matzen Mohrman, residents of Plymouth, Minnesota, opposed Alternative Route B1. They urged that the Commission make productive use of the existing easements along Highway 55 and Route 494 for any transmission line routing.¹⁴⁸

Wade and Barbara Niemi, residents of Plymouth, Minnesota, opposed the Joint Applicants' proposed route and instead urged selection of a routing along Highway 55. The Niemis maintain that such a routing would be less intrusive to homeowners.¹⁴⁹

Pam Perrine, a resident of Plymouth, Minnesota, supported alternative Route E on the grounds that it posed fewer risks of storm-related damages to homes. Ms. Perrine expressed concerns over damage to homes that would occur in severe storms, if the proposed transmission line and utility poles were sited in residential areas.¹⁵⁰

Ron Roberts, a representative of the Courtyard Plymouth Oaks homeowners association, expressed concern over potential health impacts and impacts to home values from the proposed transmission line. So as to minimize these impacts, he urged selection of Alternative Route E.¹⁵¹

E. Alternative Route F

Tim and Diane Beversdorf, residents of Plymouth, Minnesota, opposed the proposed route, but expressed support for Route Alternatives F, F1, F2, G, and G1. They urged the Commission to improve upon the Joint Applicants' proposal through alternative routing.¹⁵²

¹⁴⁶ Comments of David and Jane Folsom (June 19, 2012).

¹⁴⁷ Comments of Jared Mandoza (June 22, 2012).

¹⁴⁸ Comments of William F. Mohrman and Joanne Matzen Mohrman (June 22, 2012).

¹⁴⁹ Comments of Wade and Barbara Niemi (June 19, 2012); *see also*, Comments of Linda and Keith Johansen (June 22, 2012).

¹⁵⁰ Comments of Pam Perrine (June 21, 2012).

¹⁵¹ Wayzata Tr. at 64-69 (Roberts); *see also*, Hr'g Ex. B; Wayzata Tr. at 95-96 (Minea); Wayzata Tr. at 135-139 (Thompson); Comments of Elise Lindberg (June 21, 2012); Comments of Steve Podraza (June 22, 2012); Comments of Robert Tucker (June 21, 2012); Comments of Tom Vertes (June 14, 2012).

¹⁵² Comments of Tim and Diane Beversdorf (June 22, 2012).

Jeff and Kathy Huston, residents of Medina, Minnesota, maintained that utility infrastructure was only appropriately placed on public roadways. The Hustons urged that existing lines, and future lines, be routed away from rural locations.¹⁵³

Carl and Patricia Niemi, residents of Plymouth, Minnesota, asked for the route to run along highways. They urged selection of Route Alternatives E2, F1, F3, G, or G1.¹⁵⁴

Deborah Price, a resident of Plymouth, Minnesota, expressed her support for the A2 Alternative. In the alternative, she favored selection of Alternative Routes E2, F1, F2, F3, G, or G1.¹⁵⁵

Scott Pribula, a resident of Plymouth, Minnesota, urged the selection of Route Alternative F2. In his view, this Alternative reduced the impacts to homes in the area.¹⁵⁶

Enhui Tan and Ping Peng, residents of Plymouth, Minnesota, expressed concern over the health risk associated with transmission lines. To reduce these risks, they recommended selection of Alternative Routes F1, F2, F3, G, or G1.¹⁵⁷

Judith Wold, a resident of Medina, Minnesota, opposed alternatives F1, F2, and F3. Ms. Wold argued that Medina Road was never intended to be a major thoroughfare and residents in this area paid a premium when purchasing their homes, to obtain non-urban, rural features.¹⁵⁸

F. Alternative Route G

Barry Altman, a resident of Plymouth, Minnesota, expressed concern that he would lose his home if the Joint Applicants' proposal was approved. He noted that the new utility easement associated with an upgraded line would overlap his home. As an alternative, he urged selection of Route Alternative G.¹⁵⁹

Verne Palmberg, President of the Walnut Grove Homeowners Association, expressed concern over potential health impacts and impacts to home values from the proposed transmission line. So as to minimize these impacts, he urged selection of Route Alternatives G or G1.¹⁶⁰

¹⁵³ Comments of Jeff and Kathy Huston (June 21, 2012).

¹⁵⁴ Comments of Carl and Patricia Niemi (June 22, 2012).

¹⁵⁵ Medina III Tr. at 49 (Price); Hr'g Ex. 36; Comments of Philip and Deborah Price (June 21, 2012).

¹⁵⁶ Comments of Scott Pribula (June 11, 2012).

¹⁵⁷ Comments of Enhui Tan and Ping Peng (June 22, 2012).

¹⁵⁸ Hr'g Ex. E.

¹⁵⁹ Hr'g Ex. F.

¹⁶⁰ Comments of Verne Palmberg (June 13, 2012).

G. Alternative Route H

John P. Blank and Karen Blank, residents of Long Lake, Minnesota, expressed their support for Alternative Route H.¹⁶¹

Michael Ross and Mary Ivory, residents of Plymouth, Minnesota, supported the route urged by the Joint Applicants, or alternatively, a northern route. They opposed Alternative Route H routing along CSAH 24.¹⁶²

¹⁶¹ Comments of John P. Blank and Karen Blank (June 21, 2012).

¹⁶² Comments of Michael Ross and Mary Ivory (June 17, 2012); *see also*, Comments of Sandra L. Anderson (June 17, 2012); Comments of Laura Baenen (June 17, 2012); Comments of Sandra M. Bandalino (June 17, 2012); Comments of Joseph Bebchuck (June 14, 2012); Comments of Debbie and Robert Beidel (June 18, 2012); Comments of Douglas and Anna Bethune (June 17, 2012); Comments of Monica Brands (June 17, 2012); Comments of Jessica Bremseth (June 17, 2012); Comments of Barbara Boobeyer (June 19, 2012); Comments of Deborah Caris (June 17, 2012); Comments of Sean Carroll (June 17, 2012); Comments of Kwei Tsang Chen (June 17, 2012); Comments of Adam and Michelle Cordes (June 17, 2012); Comments of Delia Dalager (June 17, 2012); Comments of Betty Ann Engelman (June 17, 2012); Comments of Charles Feeney (June 17, 2012); Comments of Amy Fraasch-Vold (June 17, 2012); Comments of Kelly Fryer ((June 17, 2012)); Comments of Andrew Gantman (June 17, 2012); Comments of William J. Garlick (June 17, 2012); Comments of Roy L. Goslin (June 17, 2012); Comments of Angela Gower (June 20, 2012); Comments of Paul Halgren (June 17, 2012); Comments of Michael Hagerty (June 17, 2012); Comments of David J. Haselhorst (June 17, 2012); Comments of Adam Hegedus (June 17, 2012); Comments of Richard Hines (June 17, 2012); Comments of Darrin and Greta Homme (June 14, 2012); Comments of Lani Huner (June 17, 2012); Comments of Nancy Hunsickor (June 17, 2012); Comments of Kelly and Robert Hurda (June 17, 2012); Comments of Thomas R. Hurwitz (June 14, 2012); Comments of Patricia and Roger Janikowski (June 17, 2012); Comments of Bill Jarvey (June 22, 2012); Comments of Heidi Johnson (June 17, 2012); Comments of Laurie T. Jones (June 17, 2012); Comments of J. Alexander Kallebo (June 14, 2012); Comments of Gregory R. Katchmaric (June 17, 2012); Comments of Julia and Sal Khan (June 14, 2012); Comments of Paul and Carol Kieffer (June 17, 2012); Comments of Mark and Sarah Kittridge (June 16, 2012); Comments of John Kochevar (June 21, 2012); Comments of Linda and Greg Kohl (June 17, 2012); Comments of Kelly Lehr (June 17, 2012); Comments of Susan Lehr (June 17, 2012); Comments of Douglas Levine (June 17, 2012); Comments of Janet and Josias Lima (June 17, 2012); Comments of Jing Huang and Yong Luo (June 17, 2012); Comments of Kevin and Mary Mahon (June 17, 2012); Comments of Sheila J. Maures (June 17, 2012); Comments of Dee J. McCarthy (June 17, 2012); Comments of Connie K. McClurg (June 17, 2012); Comments of Molly McKenzie (June 17, 2012); Comments of Sandy McKown (June 17, 2012); Comments of Rathe and Sarah McLean (June 17, 2012); Comments of Penny Meier (June 17, 2012); Comments of Lina and Slave Melnikova (June 17, 2012); Comments of Janine Miller (June 17, 2012); Comments of Richard Moher (June 17, 2012); Comments of Dave and Kathy Morrissey (June 17, 2012); Comments of Bill and Sharon Murphy (June 17, 2012); Comments of Paul Offermann (June 17, 2012); Comments of Todd and Wendy Olson (June 17, 2012); Comments of Terry Ottinger (June 15, 2012); Comments of Jung Kwon Pak and Amy K. Pak (June 13, 2012); Comments of Tim Palmatier (June 17, 2012); Comments of Annie Paulson (June 17, 2012); Comments of Susan Pyrz (June 17, 2012); Comments of Apaena Rao (June 17, 2012); Comments of Douglas M. Ramb (June 17, 2012); Comments of David A. Rederson (June 17, 2012); Comments of Rebecca Remley (June 17, 2012); Comments of Diane Richards (June 17, 2012); Comments of Mara Robinson (June 17, 2012); Comments of Ralph Ruis (June 17, 2012); Comments of Erik and Christine Sass (June 20, 2012); Comments of Raymond Schaper (June 17, 2012); Comments of James and Allison Sherman (June 17, 2012); Comments of Ann and Paul Schulte (June 17, 2012); Comments of Jane Schultz (June 17, 2012); Comments of Julia Sheffield (June 17, 2012); Comments of Yugang Sheng (June 17, 2012); Comments of Sylvia Shinder (June 17, 2012); Comments of Jasjeet Singh (June 17, 2012); Comments of Dave and Donna Skoglund (June 17, 2012); Comments of Mark Stenoien (June 17, 2012); Comments of Pamela Thielimahn (June 17, 2012); Comments of Dan Thompson (June 17, 2012); Comments of Donald S. Trevarthen (June 17, 2012); Comments of Les Walter and Yelena Tropsha

XIII. The Relationship between the Proposed Infrastructure and the State's Overall Energy Needs? (Minn. R. 7849.0120 C(1))

Kristine Erickson, a resident of Plymouth, Minnesota, expressed her skepticism as to the methods used to forecast future energy needs and the proposal to cross densely-settled areas with a transmission line so as to serve communities west of Plymouth.¹⁶³

Alan Napier, a resident of Plymouth, Minnesota, argued that the need of the project has not been demonstrated. He urged the Commission to insist upon additional detail as to Xcel Energy's service plans for the northwestern suburbs of Minneapolis.¹⁶⁴

Carl and Pat Niemi, residents of Plymouth, Minnesota, opposed upgrading the transmission line. They maintained that the proposed line would not, in fact, serve Plymouth, but western Hennepin County.¹⁶⁵

Paul Waaraniemi, a resident of Plymouth, Minnesota, was critical of the Joint Applicants' proposal because, in Mr. Waaraniemi's view, it routed larger transmission lines through Plymouth while the energy demand was in communities to the west of Plymouth, Minnesota. He maintained that these areas were better served by other stations, and perhaps, other electricity providers.¹⁶⁶

XIV. Would Not Building the Proposed Infrastructure Be Better for the Natural Environment? (Minn. R. 7849.0120 C(2))

A. Impacts upon Human Health

Paul Ablack, a resident of Plymouth, Minnesota, expressed concerns over potential interrelationships between EMF and cancer, and urged re-routing of the line so as to avoid the potential impacts.¹⁶⁷

(June 13, 2012); Comments of Dan Trizulny (June 17, 2012); Comments of David Truax (June 22, 2012); Comments of Ram Vallabhu (June 17, 2012); Comments of Robert Rath and Jeanine Viani (June 13, 2012); Comments of Andrew and Linda Waszczenko (June 17, 2012); Comments of Robert and Mary Weinzierl (June 14, 2012); Comments of Christoph and Mary Welsh (June 17, 2012); Comments of Joan M. Welters (June 17, 2012); Comments of Dan Wichman (June 17, 2012); Comments of Roberta Wu (June 17, 2012); Comments of Matthew and Jennifer Wuollet (June 21, 2012); Comments of Xiping Zhang and Shaolin Zhong.

¹⁶³ Medina III Tr. at 52-62 (Erickson).

¹⁶⁴ Comments of Alan Napier (June 19, 2012).

¹⁶⁵ Comments of Carl and Pat Niemi (June 22, 2012).

¹⁶⁶ Medina I Tr. at 116-117 (Waaraniemi); Medina I Tr. at 139 and Medina III Tr. at 209-212 (Waaraniemi); see also, Wayzata Tr. at 24-29 (Turner).

¹⁶⁷ Wayzata Tr. at 56-58 (Ablack).

Richard Berning, a resident of Plymouth, Minnesota, expressed concerns over the impact that transmission line operation would have upon pacemakers; and the limitations such effects would place upon those relying upon these devices.¹⁶⁸

Beth and Perry Bloom, residents of Plymouth, Minnesota, maintain that while reliable power supplies are needed in western Hennepin County, transmission lines should be routed away from residential developments. The Blooms also expressed concern over the effects of higher EMF levels upon individuals with severe systemic autoimmune disease.¹⁶⁹

Tami M. Carpenter, president of the Holly Creek Homeowners Association, expressed concern regarding health and EMF exposure risks. In her view, the routing proposals do not reflect the recommended maximum EMF levels for implanted devices. To reduce these risks, she urged burying the transmission line or routing the line along Route Alternative E.¹⁷⁰

Stuart M. Lasky, a resident of Plymouth, Minnesota, is a cancer survivor. He expressed concern over the impacts that higher levels of EMF may have upon him and his health.¹⁷¹

Christine Gibney, a resident of Plymouth, Minnesota, raised concerns about the reliability of the studies that discount the relationship between EMF and later impacts to human health. For this reason, she thanked the Commission for the public hearing process and its attendant opportunities to “hear the public, hear the evidence, and really make sure the evidence is sturdy....”¹⁷²

Philip Price, M.D., a resident of Plymouth, Minnesota, physician, and member of the Western Plymouth Neighborhood Alliance, opposed the proposed line. He lives along the Applicant’s proposed and preferred route. He maintains that there is significant epidemiological evidence that magnetic fields are associated with greater risks of leukemia.¹⁷³

Among the items submitted by Dr. Price were studies undertaken by Dr. David O. Carpenter. Dr. Carpenter is a public health physician and Director of the Institute for Health and the Environment at the State University of New York at Albany. His research

¹⁶⁸ Medina III Tr. at 92-94 (Berning) and Hr’g Ex. 33; see also, Hr’g Ex. 30; Comments of Lowell Turner (May 30, 2012); Comments of Tu Quan (March 13, 2013) Comments of Sew-Wah Tay (March 13, 2012).

¹⁶⁹ Comments of Beth and Perry Bloom (March 11, 2013).

¹⁷⁰ Comments of Tami M. Carpenter (June 22, 2012).

¹⁷¹ Comments of Stuart M. Lasky (May 30, 2012, June 8, 2012 and March 18, 2013); see also, Comments of Dave and Linda Deal (June 22, 2012); Comments of Art and Betty Meyer (March 15, 2013); Comments of Patricia Jenson and Edwin Pelot (June 11, 2012); Comments of Debbie Tucker (May 30, 2012).

¹⁷² Medina III Tr. at 156-160 (Gibney); see also, Medina III Tr. at 244-248 (Gibson).

¹⁷³ Medina I Tr. at 98-100 (Price); Hr’g Exs. 16, 17, and 18.

includes investigating the health effects of electromagnetic fields (EMFs) from transmission lines. Dr. Carpenter maintains that his study confirmed an increase in rates of childhood leukemia among children living in homes exposed to EMFs levels greater than 4 milligauss (4 mG). He likewise testified that occupational and residential exposure to EMFs is associated with adult cancers (especially brain cancer), Alzheimer's disease, and Amyotrophic lateral sclerosis (ALS). According to Dr. Carpenter, any exposure for prolonged periods of time to magnetic fields about 2 to 4 mG is associated with increased risk for these diseases.¹⁷⁴

Christine Stoner, a resident of Plymouth, Minnesota, maintains that there is a link between Extremely Low Frequency magnetic fields (ELF) and the onset of serious health impacts such as childhood leukemia, Alzheimer's, Lou Gehrig's disease, and breast cancer. She maintains that the proposed transmission line would significantly reduce the quality of her life and those of her family members.¹⁷⁵

Dennis Winslow, a resident of Plymouth, Minnesota, expressed concern over the prevalence of breast cancer in his neighborhood, which he believes could have been caused by close proximity to the existing power line.¹⁷⁶

Ilan Zeroni, a resident of Plymouth, Minnesota, expressed support for the solution that impacts residents the least. Mr. Zeroni pointed to several studies that detail the health impacts of low frequency magnetic fields. Because of these effects, which he maintains follow from transmission lines, Mr. Zeroni urged exploration of methods of adding capacity to a substation through local generation as opposed to transmission. Similarly, he urged exploration of methods to improve the capabilities of local distribution lines to resist overloading instead of upgrading to a 115 kV transmission line.¹⁷⁷

B. Impacts upon Safety

Dafne Berlanga, a resident of Plymouth, Minnesota, expressed concern about routing proposals that would bring a transmission line close to Greenwood Elementary School. She is concerned about the impacts of EMF on young children at the school, including her own.¹⁷⁸

¹⁷⁴ Hr'g Exs. 16, 17, and 18.

¹⁷⁵ Comments of Christine Stoner (June 22, 2012); *see also*, Comments of Lisa Lewis (June 22, 2012); Comments of Laura Warner (June 22, 2012).

¹⁷⁶ Comments of Dennis Winslow (June 20, 2012).

¹⁷⁷ Medina I Tr. at 122-137 (Zeroni) and Medina III Tr. at 183-199 (Zeroni); *see also*, Medina III Tr. at 219-230 (Jhavar); Comments of *Jayaraj Ponnuswamy* (June 22, 2012); Comments Kalyam and Visweswaran Subash (June 22, 2012).

¹⁷⁸ Comments of Dafne Berlanga (June 11, 2012).

Alan R. Ellingson, a resident of Plymouth, Minnesota, and a member of the Rockford Glen Homeowner's Association, expressed concern over the impact of the line on senior citizens and nearby schools.¹⁷⁹

Maraline Slovut, a resident of Plymouth, Minnesota, noted that two elementary schools – Plymouth Creek Elementary and Kimberly Lane Elementary – are within a one-half mile of the proposed route. Ms. Slovut expressed concern over the impacts of sustained exposure to EMF to the children in these schools.¹⁸⁰

C. Aesthetic Impacts of the Proposed Line

Peter Keers, a resident of Plymouth, Minnesota, expressed concern over the impact that transmission line towers would have upon the aesthetics of the neighborhood in which these structures are placed. To avoid these impacts, Mr. Keers recommended approval of the A2 low-voltage alternative.¹⁸¹

Deborah Price, a resident of Plymouth, Minnesota, and member of the Western Plymouth Neighborhood Alliance, feared the Hollydale proposal would change the residential feel of the neighborhood.¹⁸²

Vicki Swisher, a resident of Plymouth, Minnesota, pointed to what she termed the sad experience of older neighborhoods in Minneapolis's first ring suburbs. Ms. Swisher argued that these neighborhoods are "dwarfed by the power lines ... the vegetation has been extensively cleared to the point of barrenness, and the neighborhood aesthetics overall are diminished as a result. Sadly, the neighborhood ambience is defined by the high voltage lines."¹⁸³

XV. Would Not Building the Proposed Infrastructure Be Better for the Economic Environment? (Minn. R. 7849.0120 C(2))

Dan and Tish Callahan, of Plymouth, Minnesota, supported the A2 distribution alternative because of its role in avoiding reductions in local property values. The Callahans also expressed the concern that the existing community might dissolve as homeowners fled from areas near the proposed transmission line to other locales.¹⁸⁴

¹⁷⁹ Comments of Alan R. Ellingson (March 22, 2013).

¹⁸⁰ Medina II Tr. at 34-35 (Slovut); see also, Comments of Charles and Carole Eidem (June 12, 2012).

¹⁸¹ Medina Hr'g Ex. 10; see also, Medina I Tr. at 76-78 (Koster) and Hr'g Ex. 11; Comments of James D. Christiansen (June 15, 2012).

¹⁸² Medina II Tr. at 23-24 (Price); Hr'g Ex. 21; see also, Medina III Tr. at 86-87 (Gerber); Hr'g Ex. 42.

¹⁸³ Medina I Tr. at 29-34; Hr'g Ex. 2, 2A-2G; Comments of Vicki Swisher (March 6, 2013); see also, Comments of Nate Lukehart (March 25, 2013); Comments of Douglas and Karen Nauth (June 7, 2012); Comments of Robert C. Peterson and Ruth M. Peterson (March 14, 2013).

¹⁸⁴ Comments of Dan and Tish Callahan, (November 6, 2013); see also, Comments of Paul J. Warosh (March 24, 2013).

Patrice Cramer and Lev Buslovich, residents of Plymouth, Minnesota, officials of the Savannah Homeowners Association (SHA), were critical of the proposal for a substation near Route 494 and Schmidt Lake Road, and transmission lines running from this substation to parcels further west. Ms. Cramer and Mr. Buslovich noted that the proposal would have detrimental impacts on the health and investments of local homeowners.¹⁸⁵

Dayna Murray, a real estate agent with Keller Williams, discussed her real estate experiences with homes near high voltage power lines and said home values would likely decrease between 30 to 40 percent if transmission lines passed through the Bridlewood neighborhood. In her experience, the installation of high voltage power lines has a significant impact upon the resale value of nearby homes. Ms. Murray maintains that the savings to the local economy is greater than the added costs of installing underground power lines.¹⁸⁶

Alan and Nancy Napier, residents of Plymouth, Minnesota, argued that Joint Applicants' Environmental Report was neither complete nor accurate; particularly as to the projected impact of the project upon home valuations. Using Hennepin County valuation data, Mr. Napier performed his own calculations. He estimates that the lost value of homes would be between 11 and 14 million dollars. The Napiers urged both that this amount should be added to the cost assessments of the Joint Applicants' proposal and that the Commission reject the view that construction of the 115 kV will add value to area homes.¹⁸⁷

XVI. The Socially Beneficial Uses of the Electricity Brought by an Upgraded Line? (Minn. R. 7849.0120 C(4))

Jim Gustafson, a resident of Clearbrook, Minnesota, said that as a contractor, he relies heavily on projects like the Hollydale line to stay in business. Gustafson recommended proceeding with the project because it would positively impact local businesses.¹⁸⁸

XVII. Will the Proposed Infrastructure Fail to Meet the Requirements of Federal, State or Local Law? (Minn. R. 7849.0120 D (2013))

Several commentators made arguments as to the likelihood of Xcel's future compliance with the law based upon what they viewed as the Company's self-serving interpretation of legal requirements during the approval process.

¹⁸⁵ Comments of Patrice Cramer (March 12, 2012).

¹⁸⁶ Wayzata Tr. at 70-72 (Murray); Medina I Tr. at 104-111 (Murray); Hr'g Ex. 19; see *also*, Medina I Tr. at 100-104 (Zook); Comments of Jim Zook (March 25, 2013).

¹⁸⁷ Medina I Tr. at 58-73 (Napier); Medina III Tr. at 160-168 (Napier); Hr'g Ex. 8.

¹⁸⁸ Comments of Jim Gustafson (March 20, 2013).

A. Notice Practice

Jacqueline Kalk, a resident of Plymouth, Minnesota, expressed concern over the lack of proper notice regarding the March 2013 public hearings. She maintained that the notice provided to residents should be at least equivalent to that given under Minnesota's Open Meeting Law – at least three days in advance of “public meetings.”¹⁸⁹

B. Construction of the Hollydale Law

On August 19, 2013, the Joint Applicants supplemented their earlier Certificate of Need filing with additional material on the meaning and effect of the Hollydale Law. In this filing, the Joint Applicants argued that because no distribution level alternative addressed both “distribution system load serving capability” and “support for the transmission system under contingency conditions,” no such alternative was “feasible and available.” In their view, there were no “feasible and available” alternatives to the proposed project.¹⁹⁰

State Representative Sarah Anderson expressed her view that the Joint Applicants' construction of the terms “feasible and available” was wrong. She testified: “We were shocked by the filings made by [the Joint Applicants]. It was our belief that the transmission lines were pretty much taken off the table by the law and that the filings ... would be comparing various distribution alternatives.”¹⁹¹

Janet B. Clarke, a resident of Plymouth, Minnesota, questioned the claims made by the Joint Applicants' in their June 21, 2012 filing. Because Xcel suggested an alternative that is only slightly different from their proposed route, Ms. Clarke maintained that Xcel did not correctly interpret the requirement of “at least two proposed routes.”¹⁹²

Kate McBride, a resident of Plymouth, Minnesota, expressed her belief that the Joint Applicants incorrectly interpreted the Hollydale Law and that their supplemental filings did not reflect a genuine effort to assess distribution level alternatives. She

¹⁸⁹ Comments of Jacqueline Kalk (March 11, 2013) (citing Minn. Stat. § 13D.04, subd. (2) (2012)); *See also*, Comments of Laurie S. Azine (March 8, 2013); Comments of Ann Ciardelli (March 8, 2013); Comments of Cort and Karen Cieminski (March 8, 2013); Comments of David Craig (March 8, 2013); Comments of Pam Darnell (March 11, 2013); Comments of Jeff Feneis (June 8, 2013); Comments of Claudia Freund (March 14, 2013); Comments of Elizabeth A. Goodman (March 9, 2013); Comments of Pam Koehler (March 12, 2013); Comments of Michael Kroul (March 8 and 11, 2013); Comments of Colleen and Scott Larson on (March 25, 2013); Comments of Joanie Meehan (June 22, 2012); Comments of Angela Nelson (March 12, 2013); Comments of Dennis J. and Janet E. Orke (March 10, 2013); Comments of Jeff Peterson (March 25, 2013); Comments of Patrick Stewart (March 9, 2013); Comments of Brandon Stendal (March 8, 2013); Comments of Gangi Reddy Thimmasani (March 8, 2013); Comments of Deborah Tucker (March 20 and 21, 2013); Comments of Jim and Lynn Zook (March 25, 2013).

¹⁹⁰ *See*, Supplemental to Certificate of Need Application, Appendix H, at 4 – 14 (August 19, 2013) (eDocket No. 20138-90409-03).

¹⁹¹ *Medina III Tr.* at 34-35 (Anderson); *see also*, *Medina III Tr.* at 38-40 and 115-123 (Bonoff); Ex. 33.

¹⁹² Comments of Janet B. Clarke (June 21, 2012).

asserted: “Nowhere in Appendix H is there an evaluation of distribution alternatives that the statute demands.”¹⁹³

CONCLUSION

So as to aid public participation and agency decision-making in any future proceedings,¹⁹⁴ this summary of the public comments and testimony is respectfully submitted to the Commission.

Dated: July 13, 2015

s/Eric L. Lipman

ERIC L. LIPMAN
Administrative Law Judge

¹⁹³ Medina III Tr. at 129-132 (McBride); Hr’g Ex. 45; see *also*, Medina III Tr. at 140-142 (Kravchenko).

¹⁹⁴ See, ORDER PERMITTING WITHDRAWAL WITH CONDITIONS, *supra*, at 6-7.