



BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

COMMENTS AND RECOMMENDATIONS OF MINNESOTA DEPARTMENT OF COMMERCE ENERGY FACILITY PERMITTING STAFF

DOCKET NO. ET2/TL-11-867

EFP Staff: Ray Kirsch.....651-296-7588
Date: July 19, 2012

In the Matter of the Route Permit Application by Great River Energy for the Parkers Prairie 115 kV Transmission Line Project in Otter Tail County, Minnesota

Issues Addressed: These reply comments address the initial comments received on Energy Facility Permitting staff's proposed findings of fact and proposed permit for the Parkers Prairie 115 kV transmission line project.

Documents Attached:

- (1) Illustration of Alignment with Crossing at Jahnke Residence
- (2) Illustration of Alignment with Crossing at 555th Avenue

Additional documents and information can be found on eDockets:

<https://www.edockets.state.mn.us/EFiling/search.jsp> (11-867) and on the Department's energy facilities permitting website: <http://mn.gov/commerce/energyfacilities/Docket.html?Id=32307>.

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Introduction and Background

On October 24, 2011, Great River Energy (GRE) submitted a route permit application to the Commission for the proposed Parkers Prairie 115 kilovolt (kV) transmission line project. Upon completion of the environmental review and hearing process prescribed by Minnesota Rule 7850, Department of Commerce, Energy Facility Permitting (EFP) staff filed with the Commission comments and recommendations, including proposed findings of fact and a proposed permit.¹

¹ Comments and Recommendations of Department of Commerce, Energy Facility Permitting Staff, Docket No. ET2/TL-11-867, June 18, 2012, eDockets Number [20126-75737-01](https://www.edockets.state.mn.us/EFiling/search.jsp) [hereafter EFP Comments, Proposed Findings, and Proposed Permit, June 18, 2012].

On June 27, 2012, the Commission issued a notice soliciting comments on EFP staff's comments and recommendations, proposed findings of fact, and proposed permit.² On July 9, GRE submitted comments to the Commission.³ On July 11, Mr. Terry Carlson, a landowner along the proposed route, submitted comments.⁴

DOC EFP Staff Analysis and Comments

These reply comments address four topics raised by the comments of GRE and Mr. Carlson: (1) the inclusion of an anticipated alignment in Commission route permits, (2) the balancing of potential impacts due to the project, (3) GRE revisions to EFP staff's proposed findings of fact and proposed permit, and (4) possible alignments and route permit conditions for the project.

Anticipated Alignments in Commission Route Permits

GRE's comments can be construed as questioning the need for the Commission to include an anticipated alignment in its route permit for the project. EFP staff believes it is entirely appropriate to include an anticipated alignment. First, it has been Commission practice, for roughly the past five years, to include in all route permits a permitted route and an anticipated alignment.⁵ The Parkers Prairie project has no distinguishing features that would cause the Commission to proceed otherwise.

Second, the inclusion of an anticipated alignment is necessary to demonstrate how potential impacts of the project will be mitigated. Route widths permitted by the Commission can be hundreds of feet in width, up to a statutory limit of 1.25 miles.⁶ Not all alignments of a transmission line within such routes have equal impacts relative to the Commission's routing criteria. For example, an alignment on one side of a road may impact five homes, three wetlands, and two shelterbelts, while proceeding on the other side of the road impacts just two homes. All of these features may be within the same route; it is the anticipated alignment that illustrates how impacts to these features will be mitigated. The key questions of the public – the key impacts and mitigations – are almost always at the level of detail that a route cannot provide, but which an anticipated alignment does.

Thus, an anticipated alignment is the sum of all conditions on the placement of a transmission line within a route. It flows directly from the specific impacts and mitigation strategies identified in the environmental review and hearing process. An anticipated alignment is represented in Commission permits graphically on route permit maps and in text. For larger projects, a graphic

² Notice Soliciting Comments, June 27, 2012, eDockets Number [20126-76133-01](#).

³ Comments of Great River Energy on EFP Staff Recommendation, July 9, 2012, eDockets Numbers [20127-76593-01](#), [20127-76593-02](#), [20127-76593-03](#), [20127-76593-04](#), [20127-76593-05](#), [20127-76593-06](#) [hereafter GRE Comments].

⁴ Comments of Mr. Terry Carlson on EFP Staff Recommendation, July 11, 2012, eDockets Number [20127-76714-01](#).

⁵ See, e.g., Order Issuing Route Permit as Amended, Hampton-Rochester-La Crosse High Voltage Transmission Line, TL-09-1448, eDockets Number, [20125-75128-01](#); Route Permit for the St. Cloud 115 kV Transmission Line Project, TL-10-1026, eDockets Number [201112-69086-01](#); Route Permit for the Little Falls 115 kV Transmission Line Project, TL-11-318, eDockets Number [20123-72942-01](#); Route Permit for 115 kV Interconnection of the Prairie Rose Wind Farm, TL-10-134, eDockets Number [20121-70271-01](#).

⁶ Minnesota Statute 216E.01.

representation of the anticipated alignment is an efficient means of demonstrating how impacts will be mitigated. For the Parkers Prairie project, an anticipated alignment is shown on the proposed route permit maps; it is also included in the text:

The new 115 kV transmission line would exit the modified and expanded Parkers Prairie substation and cross directly to the south side of CSAH 6. The line would then proceed along the south side of CSAH 6 approximately 6,500 feet before crossing to the north side of CSAH 6. The line would then proceed on the north side of CSAH 6 approximately 4,200 feet, across Minnesota State Highway 29 and across a Canadian Pacific rail line, to a connection with the Permittee's existing LR-IA line.⁷

Third, an anticipated alignment properly places the responsibility of weighing and balancing potential impacts of a project with the Commission. Without an anticipated alignment, it is the permittee that would decide how best to weigh and mitigate impacts. This is not the permittee's responsibility; it is the Commission's responsibility.⁸ GRE's comments could be read as suggesting that the Commission need only permit a route for the Parkers Prairie project and that the details of balancing potential impacts to irrigation systems, shelterbelts, trees farms, residences, and potential road reconstruction be left to GRE. EFP believes this would be contrary to the Commission's authority and responsibility under Minnesota Statute 216E.

Fourth, anticipated alignments are just that – anticipated. They provide predictability but also flexibility. Permittees can modify alignments upon showing that unforeseen circumstances were encountered or upon landowner request, and that modifications to the alignment will have “comparable overall impacts relative to the factors in Minnesota Rule 7850.4100” as does the anticipated alignment.⁹ This requirement to show “comparable overall impacts” keeps the evaluation and balancing of impacts with the Commission.

For all of the above reasons, EFP staff believes it is appropriate for the Commission to include in its route permit for the Parkers Prairie project a permitted route and an anticipated alignment.

Balancing of Potential Impacts

GRE's comments request that the Commission evaluate and balance potential impacts of the Parkers Prairie project differently than has been recommended by EFP staff. Based on the environmental review and hearing record EFP staff determined that the potential impacts of an alignment that utilizes both sides of County Road 6 (CSAH 6) (alignment 3) – uncertain impacts with respect to an irrigation well and the the costs and difficulties of underbuilding or undergrounding a distribution line – were less than those impacts of an alignment that proceeded solely on the south side of CSAH 6 – impacts to the Jahnke's shelterbelt and the Dittberner tree farm. GRE finds the balancing to be the reverse (alignment 1).

GRE also introduces new information into the record, supportive of its balancing, that was unavailable to EFP staff for inclusion in its proposed findings of fact. This information

⁷ Proposed Route Permit, Section 3, EFP Comments, Proposed Findings, and Proposed Permit, June 18, 2012.

⁸ Minnesota Statute 216E.02, Subd. 2.

⁹ Proposed Route Permit, Section 3.1, EFP Comments, Proposed Findings, and Proposed Permit, June 18, 2012.

addresses potential impacts to an irrigation well, the costs and challenges of underbuilding or undergrounding the distribution line on the north side of CSAH 6, and potential impacts to a grain bin.

Mr. Carlson's comments express concern about potential impacts to the Jahnke shelterbelt (and residence) and the Dittberner tree farm. In this sense, his comments are consistent with EFP staff's prior comments and recommendations. Mr. Carlson also notes that the impacts to his irrigation well on the north side of CSAH 6 are not uncertain – impacts will occur and he will likely be forced to relocate his well. This information was not in the environmental review or hearing record and thus was not available to EFP staff for inclusion in its proposed findings of fact. Mr. Carlson's preference is an alignment that utilizes the south side of CSAH 6, excepting that portion of the route near Mr. Jahnke's shelterbelt.

GRE's comments note that potentially impacted landowners – Mr. Jahnke and the Dittberners – did not specifically request that the new 115 kV line be located on the north side of CSAH 6 near their property. It appears that GRE interprets this lack of a request as indicating that these landowners are agreeable to placing the line on the south side of CSAH 6, i.e., on their property. Mr. Carlson also notes that “if the southern landowners [those landowners on the south side of CSAH 6] have come to terms with the utility” then alignment 1 is the way to proceed.¹⁰ However Mr. Jahnke's and the Dittberner's actions are interpreted, these interpretations are not relevant to the anticipated alignment for the project.

The anticipated alignment suggested by EFP staff in its proposed permit (alignment 3) flows from the potential impacts and mitigation strategies identified in the environmental review and hearing process. Loss of trees was identified in the scoping process for the environmental assessment (EA) as a potential impact of the project.¹¹ EFP staff characterized these impacts in the EA and the ways in which these impacts might be mitigated. The primary means of mitigating impacts to the trees in Mr. Jahnke's shelterbelt and the Dittberner tree farm is to avoid these areas. This is true independent of any interpretation of the Jahnke's and Dittberner's comments or actions.

GRE Revisions to EFP Staff's Proposed Findings of Fact and Proposed Permit

GRE's comments include proposed revisions to EFP staff's proposed findings of fact and proposed route permit.¹² These proposed revisions are discussed here.

Findings 21, 21a, and 21b

GRE suggests that Finding 21 be edited and expanded to include additional information concerning the Lake Region Electric Cooperative (LREC) distribution line on the north side of CSAH 6.

EFP Staff Analysis: The additional information suggested by GRE was not in the environmental review and hearing record, and thus was unavailable to EFP staff for inclusion in

¹⁰ Comments of Mr. Terry Carlson on EFP Staff Recommendation, July 11, 2012, eDockets Number [20127-76714-01](#).

¹¹ See, e.g., Scoping Comments of Mr. Steve Douma, January 5, 2012, [20121-69970-02](#).

¹² GRE Comments, Attachments A and B.

its proposed findings of fact. EFP staff has no objection to this additional information. However, EFP staff believes that the text in Finding 21 which GRE has suggested for deletion should not be deleted, as it is not contrary to GRE's suggested additional information.

Finding 25 and 169

GRE suggests adding detail to these two findings regarding the operations and maintenance costs for the project – splitting out costs related to the transmission line from costs related to right-of-way maintenance.

EFP Staff Analysis: EFP staff has no objection to this additional detail.

Finding 44

GRE suggests additional detail regarding citizen comment letters received during the scoping period for the environmental assessment (EA). This detail is as follows:¹³

Finding 44. Two citizen comment letters expressed concern the potential loss of trees due to the proposed project. *One of these letters expressed concern related to the additional trees that would be lost if the request of Otter Tail County for an additional 10 feet of separation between the road ROW and structure locations than what was proposed by Great River Energy were accommodated. The second letter requested economic compensation for trees that would be removed for the Project and potential income losses due to removal of land from production.*

EFP Staff Analysis: The first comment letter cited is from Mr. Bruce Jahnke. Mr. Jahnke expressed concern for the loss of trees at his residence due to the Parkers Prairie project itself and an exacerbation of this loss if the CSAH 6 right-of-way were expanded as suggested by Otter Tail County. EFP staff has no objection to this additional detail. However, EFP staff suggests that if additional information is included concerning Mr. Jahnke's letter that it appropriately include his concerns for the project itself.

One of these letter expressed concern related to the additional trees to the loss of trees due to the project, particularly those trees that would be lost if the request of Otter Tail County for an additional 10 feet of separation between the road ROW and structure location than what was proposed by Great River Energy were accommodated.

The second letter noted by GRE is incorrectly cited. The second letter received during scoping which mentioned the potential loss of trees was from Mr. Steve Douma, not the Plants Beautiful Nursery (Dittberner tree farm).¹⁴ The comment letter from the Plants Beautiful Nursery was received during the comment period following the public hearing. If the Commission adopts GRE's revised finding, EFP staff recommends that reference to this second letter be removed from the Finding.

¹³ Text suggested by GRE indicated in italics; footnotes omitted.

¹⁴ Scoping Comments of Mr. Steve Douma, January 5, 2012, [20121-69970-02](#).

Finding 62

GRE suggests edits and additions to the Finding to provide more detail regarding Mr. Jahnke's testimony at the public hearing. These edits and additions are as follows:¹⁵

Finding 62. Bruce Jahnke, a landowner along the proposed route, expressed concern that he would lose *all his trees in front of his residence and windbreak* if the line were located south of CSAH 6 near his residence, ~~particularly~~ if the line were located at a distance of 65 ft. from the centerline of CSAH 6 as suggested by the Otter Tail County highway department. Mr. Jahnke also noted that an alignment at 65 ft. from the CSAH 6 centerline would impact his irrigation systems and would reduce his irrigated crop acreage. *Specifically, Mr. Jahnke noted that any use of the south side of CSAH 6 would remove trees from his property. He stated that he had been in discussions with Great River Energy and was accepting of its proposal.*

EFP Staff Analysis: EFP staff has no objections to these edits and additions except with respect to the final sentence. Mr. Jahnke's testimony indicates that he was comfortable with an alignment on the south side of CSAH 6 at 55 ft. from the road centerline, and that he had discussed this alignment with GRE. Mr. Rick Heuring of GRE indicated that he had discussed new plantings of low growing species with Mr. Jahnke. However, neither Mr. Jahnke's nor Mr. Heuring's testimony notes that a proposal had been made to Mr. Jahnke and what this proposal might include. It may include replanting with low growing species, or it may include more, e.g., monetary compensation. Thus EFP staff recommends modifying GRE's proposed final sentence as follows:

He stated he had been in discussions with Great River Energy and was willing to work with Great River Energy and was accepting of their proposal on an alignment at 55 ft. south of the CSAH 6 centerline.

Finding 133

GRE suggests adding detail regarding the hearing comments of the Plants Beautiful Nursery.

EFP Staff Analysis: EFP staff has no objection to this additional detail.

Findings 148, 149, and 176

GRE suggests adding detail concerning the maintenance of trees and shelterbelts along the proposed route to these three findings.

EFP Staff Analysis: EFP staff has no objection to this additional detail.

Finding 153

GRE suggests adding detail concerning impacts to treed areas along the proposed route.

EFP Staff Analysis: EFP staff has no objection to this additional detail.

¹⁵ Text suggested by GRE indicated in italics; footnotes omitted.

Finding 178

GRE suggests edits and additions to the summary of impacts for alignment 3 in EA. These edits and additions are as follows:¹⁶

Finding 178. Alignment 3 would require that a portion (approximately 0.45 miles) of the existing distribution line on the north side of CSAH 6 be underbuilt on the new 115 kV line or placed underground. The alignment mitigates impacts to residences (across the road from three residences; on the same side as one residence, *similar to alignment 1*). *A grain bin located on the east end of CSAH 6, near Minnesota State Highway 29, would be within the Alignment 3 right-of-way.* The alignment mitigates impacts to irrigation systems *located north of CSAH 6* by proceeding primarily on the south side of CSAH 6. *This alignment does potentially impact an irrigation system where it crosses CSAH 6 to the north side. The proximity of the alignment to the irrigation well may pose problems in the future in the existing well requires maintenance or an additional well needs to be drilled.* ~~Potential impacts to irrigation systems with the alignment crosses CSAH 6 can be mitigated by placing the alignment in the range of 50-55 ft. from the CSAH 6 centerline and by using non-guyed structures.~~ *Additionally, alignment 3 would present challenges as it would require construction near the LREC three phase distribution line. LREC's three phase distribution line must remain in service as LREC cannot back feed the Parkers Prairie Substation in this area. The LREC three phase distribution line would need to be installed underground prior to any construction of the 115 kV transmission line at an added cost.* Alignment 3 impacts trees/shelterbelts on the south side of CSAH 6, but also mitigates impacts to ~~a residential trees, a portion of a shelterbelt and a tree farm.~~ Alignment 3 is relatively more expensive than Alignment 1.

EFP Staff Analysis:

- a. EFP recommends modifying GRE's proposed sentence regarding a grain bin to read:

A grain bin located on the east end of CSAH 6, near Minnesota State Highway 29, ~~would~~may be within the Alignment 3 right-of-way.

The grain bin in question is very near the potential transmission line right-of-way on the north side of CSAH 6; however, there is no information in the record as to whether the grain bin would be in or out of the right-of-way. It may depend on the placement of the poles for the project. GRE's citation to Map B-5 of the EA is incorrect. The maps in the EA show potential alignments for the project but indicate that alignments are shown as offset from each other for ease of viewing. Thus, the maps cannot be used to accurately determine distances from alignments to land-based features.

- b. EFP staff notes that GRE's proposed sentence regarding future maintenance of an irrigation well on the north side of CSAH 6 is information that is not in the environmental review and

¹⁶ Text suggested by GRE indicated in italics; footnotes omitted.

hearing record, and thus was unavailable to EFP staff for inclusion in its proposed findings of fact.

- c. EFP staff recommends editing and including the sentence discussing potential mitigation strategies for impacts to the irrigation well.

Potential impacts to irrigation systems ~~with~~ where the alignment crosses CSAH 6 ~~can~~ may be mitigated by placing the alignment in the range of 50-55 ft. from the CSAH 6 centerline and by using non-guyed structures.

EFP staff believes that both EFP staff's original sentence and GRE's striking of the sentence are incorrect. There is uncertainty as to whether impacts to the irrigation well on the north side of CSAH 6 can be mitigated by the measures discussed in the EA. Thus, EFP recommends retention of the sentence with the word "may" used to capture this uncertainty.

The additional information provided by GRE concerning the LREC distribution line was not in the environmental review and hearing record, and thus was unavailable to EFP staff for inclusion in its proposed findings of fact (see discussion of Finding 21, above).

Conclusion 7

GRE suggests adding text to indicate that the route proposed by GRE best satisfies applicable routing criteria.

EFP Staff Analysis: EFP staff believes the additional text is unnecessary and confusing. There is only one proposed route for the project; there are no alternative routes. Thus, one cannot conclude that the only route under consideration best satisfies applicable routing criteria.

Conclusion 9

GRE suggests editing conclusion 9 to identify alignment 1 as having the fewest impacts, and designating alignment 1 as the anticipated alignment for the project.

EFP Staff Analysis: EFP staff disagrees with the edits proposed by GRE. For the reasons outlined in EFP staff's prior comments and recommendations, staff believes that alignment 3 is the superior alignment for the project. EFP staff recommends that the conclusion remain as originally proposed by EFP staff. If the Commission designates alignment 1 as the anticipated alignment for the project, the Commission should adopt a revised version of GRE's proposed conclusion 9:

Conclusion 9. Of the alignments evaluated in the EA and public hearing, alignment 1 ~~would result in the fewest impacts~~ best satisfies the routing criteria of Minnesota Statute 216E.03, subdivisions 7(a) and (b) and Minnesota Rule 7850.4100. ~~Alignment 1 shall, therefore, be designated as the intended alignment for the project.~~

Order Point 3

GRE suggests editing this order point as follows:¹⁷

3. It is anticipated that the right of way for the project will be centered approximately ~~The anticipated alignment for those portions of the line south of County Road 6 is 52-55 ft. south of the CSAH 6 centerline. The anticipated alignment for those portions of the line north of County Road 6 is 50-52-55 ft. from north of the CSAH 6 centerline.~~

EFP Staff Analysis: EFP staff is unclear as to the intent of the edits proposed by GRE. If the intent is to indicate that the new 115 kV line will be placed along County Road 6, then EFP has no objection to the edits. If the intent is to suggest that a route be permitted for the line without an anticipated alignment, then EFP staff disagrees with the proposed edits. For the reasons noted above, staff believes that an anticipated alignment is appropriate for the Parkers Prairie route permit. If the Commission determines that an anticipated alignment is not appropriate, the Commission should adopt GRE's editing of order point 3.

Section 2.3 of the Proposed Route Permit

GRE suggests editing this permit section to clarify that underbuilding or undergrounding of the LREC distribution line will occur only if the new 115 kV line is on the same side of CSAH 6 as the distribution line (the north side of CSAH 6).

EFP Staff Analysis: EFP staff has no objection to this edit. This edit can be adopted regardless of the anticipated alignment for the project.

Section 3.0 and 3.1 of the Proposed Route Permit

GRE suggests editing these permit sections to indicate alignment 1 as the anticipated alignment for the project.

EFP Staff Analysis: EFP staff disagrees with the edits proposed by GRE. For the reasons outlined in EFP staff's prior comments and recommendations, staff believes that alignment 3 is the superior alignment for the project. EFP staff recommends that the permit sections remain as originally proposed by EFP staff. If the Commission designates alignment 1 as the anticipated alignment for the project, the Commission should adopt GRE's proposed sections 3.0 and 3.1 of the route permit, but revise these sections to use the word "anticipated" rather than "intended" when referring to the alignment for the project.

Possible Alignments and Route Permit Conditions

EFP staff believes that there are at least four alignment options for the Parkers Prairie project for the Commission to consider:

- (1) EFP Staff Prior Recommendation – Alignment 3. The Commission could permit an anticipated alignment that utilizes both sides of CSAH 6 and crosses from the south to the north side of CSAH 6 such that the residential shelterbelt at the Jahnke residence and the Dittberner tree farm are not impacted (Alignment 3 in the environmental assessment (EA)).

¹⁷ Text suggested by GRE indicated in italics; footnotes omitted.

Attachment 3 of GRE's comments notes that Lake Region Electric Cooperative would likely underground the existing distribution line on the north side of CSAH 6 if alignment 3 were permitted.

EFP staff's prior comments and recommendations noted that should there be a demonstrated safety concern with placing the line near Mr. Carlson's irrigation well, then GRE could request a change in the alignment of the project through the plan and profile review process.¹⁸ GRE's comments indicate that further analysis will be needed to determine possible safety concerns with the irrigation well, and that GRE will design the project with proper grounding. GRE notes that the greater concern may be with well drilling equipment and well maintenance activities. Mr. Carlson indicates that he could not use his well if the line were placed on the north side of CSAH 6. He cites Minnesota Department of Health (MDH) setbacks and utility setbacks. The utility setbacks would be those applied by GRE consistent with the National Electric Safety Code and the proposed permit. MDH setbacks are primarily directed at avoiding contamination of water supplies and mitigating environmental impacts.¹⁹ To EFP's understanding, the MDH required setback from a transmission line for irrigation well is 10 feet.²⁰ The distance from the transmission line to the well for alignment 3 is 17-22 feet.²¹

- (2) GRE Recommendation – Alignment 1. The Commission could permit an anticipated alignment that proceeds solely on the south side of CSAH 6 (Alignment 1 in the EA). This alignment would avoid potential impacts to an irrigation well and uncertain impacts to a grain bin, and would eliminate the need to underbuild or underground the distribution line on the north side of CSAH 6. However, this alignment would impact the Jahnke's shelterbelt and residence and the Dittberner tree farm.
- (3) Crossing CSAH 6 at the Jahnke Residence. Mr. Carlson suggests that one alignment solution would be to place a pole on the north side of CSAH 6 at the Jahnke residence, to minimize impacts to the residence and associated shelterbelt. It appears from Mr. Carlson's comment that he is proposing what might be called a quick over-and-back at the Jahnke residence – utilizing Alignment 1, but modifying it with two crossings near the Jahnke residence. Such an alignment would still impact the Dittberner tree farm.

Mr. Carlson's comment can also be read as suggesting that it may be possible, through the use of self-supporting structures (e.g., steel poles), to mitigate impacts to Mr. Carlson's irrigation well and the Jahnke residence by crossing CSAH 6 in a manner that avoids both (see Attachment 1). In this sense, his suggestion is a variation on alignment 3, with the crossing of CSAH 6 at the Jahnke residence instead of crossing further west near the

¹⁸ Section 3.1 of the proposed permit provides that “[a]ny alignment modifications ... shall be located so as to have comparable overall impacts relative to the factors in Minnesota Rule 7850.4100 as does the alignment identified in this permit, and shall be specifically identified, documented, and approved as part of the plan and profile submitted pursuant to Section 4.1 of this permit. EFP Comments, Proposed Findings, and Proposed Permit, June 18, 2012.

¹⁹ Minnesota Rule 4725, Wells and Borings, <https://www.revisor.mn.gov/rules/?id=4725>.

²⁰ Isolation Distances from a Water-Supply Well, Minnesota Department of Health Fact Sheet, 2008, <http://www.health.state.mn.us/divs/eh/wells/construction/isolate.pdf>.

²¹ EFP Comments, Proposed Findings, and Proposed Permit, June 18, 2012. This distance could be increased by placing the transmission line poles less than 50 feet from the CSAH 6 centerline.

Liljegren residence. This alignment would avoid the Dittberner tree farm, but would require the underbuilding or undergrounding of the distribution line on the north side of CSAH 6. This alignment would honor the Dittberner's request to place the new 115 kV line, where it is east of Minnesota Highway 29, as far north on their property as possible.²²

- (4) Crossing CSAH 6 at 555th Avenue. The Commission could permit an anticipated alignment that utilizes both sides of CSAH 6 and crosses from the south to the north side of CSAH 6 at 555th Avenue, such that the residential shelterbelt at the Jahnke residence is impacted, but the Dittberner tree farm is not impacted (see Attachment 2). This alignment would avoid Mr. Carlson's irrigation well on the north side of CSAH 6 and would avoid impacts to the existing distribution line on the north side of CSAH 6. Additionally, it would honor the Dittberner's request to place the new 115 kV line, where it is east of Minnesota Highway 29, as far north on their property as possible.

In light of the comments of GRE and Mr. Carlson, EFP staff believes that an alignment that utilizes both sides of CSAH 6 to mitigate potential impacts to the Jahnke residence and shelterbelt and the Dittberner tree farm remains the appropriate alignment for the Parkers Prairie project. Thus, Option 1, which is EFP's prior recommendation and alignment 3 in the EA, is an appropriate alignment for the project.

Given Mr. Carlson's comments concerning impacts to his irrigation well, EFP staff believes that variations on alignment 3 are also appropriate. Options 3 and 4 above – crossing at the Jahnke residence and crossing at 555th Avenue – are both variations on alignment 3 that appropriately mitigate impacts for the project. Both of these options avoid impacts to the Dittberner tree farm. EFP staff supports both of these variations on alignment 3 as reasonable options for permitting by the Commission.

In issuing a route permit for the Parkers Prairie project, the Commission may – but need not – choose between those alignment options supported by EFP staff for the project (Options 1, 3, and 4). This is so because Option 1 includes Options 3 and 4. If the Commission selects Option 1, GRE will proceed with final design and engineering work, including the evaluation of potential impacts to Mr. Carlson's irrigation well. This work may lead GRE to request, through the plan and profile review process, a different alignment; perhaps alignment Option 3 or 4, or perhaps a new alignment option which the engineering analysis indicates is superior. As noted above, the anticipated alignment for the project is just that – anticipated. It is designed to demonstrate how impacts of the project will be mitigated but is flexible enough to accommodate variations on this mitigation.

²² Hearing Comments of Plants Beautiful Nursery (Dittberner Tree Farm), May 31, 2012, [20125-75226-01](#).

Attachment 1. Illustration of Alignment with Crossing at Jahnke Residence



Attachment 2. Illustration of Alignment with Crossing at 555th Avenue



Attachment 2. Illustration of Alignment with Crossing at 555th Avenue

