

Cannon Falls 115 kV Transmission Line Project

Assessment of Potential Routes Considering the Proposed CR 85 Interchange Options

Background

At the public hearing held on June 5, 2006 for this project, a landowner provided information regarding plans the Minnesota Department of Transportation (MN DOT) had been providing to local landowners. The landowner expressed a preference for Xcel Energy to follow an alignment that would match up with the proposal and avoid placing the proposed transmission line in front of the home she owned.

Xcel Energy has reviewed the various options that the Minnesota Department of Transportation has provided regarding this project to add an interchange on Highway 52 to connect to CR 85. The following information has been included in our assumptions:

1. Communications between Department of Commerce Staff and the Department of Transportation have indicated that the DOT Metro Division sees the need for an interchange at TH 52 and CR 86. However, that need is not immediate. There have been some interchange concepts developed, and one design concept is "preferred." (See Attachment #1 for email and PDF file).
2. No formal approvals, reviews or budgeting have occurred for the DOT project. Therefore it is difficult for Xcel Energy to design a route that would assure there would be no conflicts with the potential future interchange.
3. Xcel Energy has made some general assumptions to attempt to address the landowners concerns and to avoid any major conflicts with this proposal in the future.
4. A major issue that creates limitations to Xcel Energy's options is the requirement that the total length of double circuit 115 kV construction needs to be 1 mile or less. This has limited our options for consideration since our proposed route had almost 1 mile of double circuit construction.
5. The landowner has expressed a desire to keep the line further away from the home located on her property. The two alternatives assessed move the line further north of the home, but do need to go across agricultural property.

Assessment of Options

Provided as Attachments #2, #3, and #4 are maps and a spreadsheet providing a summary of two additional options Xcel Energy has assessed. None of the proposed route options have additional double circuit construction due to the restriction on the amount of double circuit construction that can be used for this project based on planning requirements.

Alternative 1

Xcel Energy would tap the existing CFT Transmission line (130 feet) north of our original proposal and follow a route that would place the new single circuit 115 kV line just north of the grove of trees. Where the line meets CR 85, it would follow along the west side of the road. The North tap line would follow along the east side of CR 85 for its entire length.

- Cost increase from proposed route: \$121,000
- Change in impacts: The impacts to agricultural lands are increased, but less clearing will be required and the line will be further away from residences on CR 86.

Alternative 2

Xcel Energy would tap the existing CFT Transmission line (590 feet) north of our original proposal and follow the property line to CR 85. Where the line meets CR 85, it would follow along the west side of the road. The North tap line would follow along the east side of CR 85 for its entire length.

- Cost increase from proposed route: \$137,000
- Change in impacts: The impacts to agricultural lands are increased, but less clearing will be required and the line will be further away from residences on CR 86.

Conclusion

Given this analysis, Xcel Energy believes there are several options available to consider for placement of the southern 115 kV tap line that would work. We recommend that the information be provided in the EA as submitted. Over the next few weeks prior to the public hearing, Xcel Energy will discuss the proposals with the DOT and landowners. If an alignment acceptable to all can be identified prior to hearing, Xcel Energy will recommend that option at that time. However, if additional discussions and coordination are required given the preliminary nature of the DOT proposal, Xcel Energy may request that the PUC allow for routing flexibility in this area. The final alignment would be based on discussions with DOT and the landowner and would be submitted to PUC staff for review prior to easement acquisition.

Attachment 1

-----Original Message-----

From: Gerry Larson [mailto:Gerry.Larson@dot.state.mn.us]
Sent: Friday, June 30, 2006 1:13 PM
To: Bill.Storm@state.mn.us
Cc: Nancy Daubenberger
Subject: Cannon Falls Project

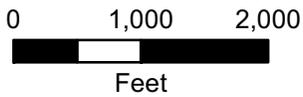
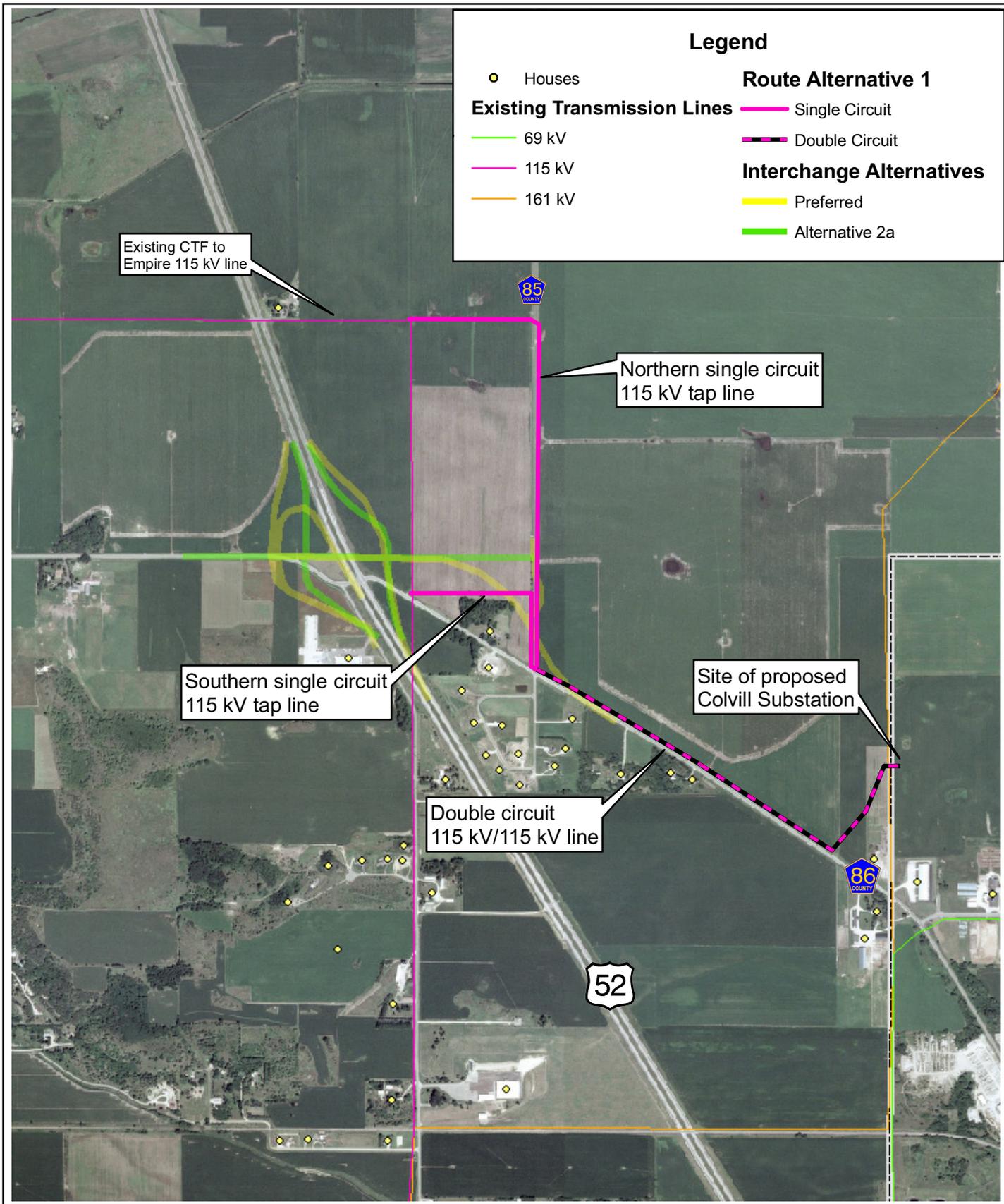
Hello Bill. I was out of the office when you sent your note. Please excuse the delay in getting back to you.

The short answer is yes, Metro Division sees the need for an interchange at TH 52 and CR 86. However, that need is not immediate. Some interchange concepts were developed, and one design concept is "preferred." (See attached PDF file) A good deal of work was done to develop an EA for the project, but no EA was approved or circulated. We were doing the EA primarily to establish the location for the interchange, and a "footprint" for it. That would allow for the area to be "officially mapped," to preserve the land for the future interchange.

No funding has been identified within Metro for the project. However, that can change. If you have further questions on this I suggest you call Nancy Daubenberger at our Metro District office. She can be reached at 651-582-1379.
Gerry

Attachment 2

Map Document: (\\mspe-gis\gisproj\gisproj\excelcannon_falls\map_docs\Landownermap_032806_aerial.mxd)
3/28/2006 -- 5:30:44 PM

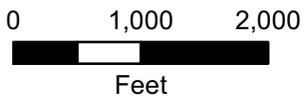
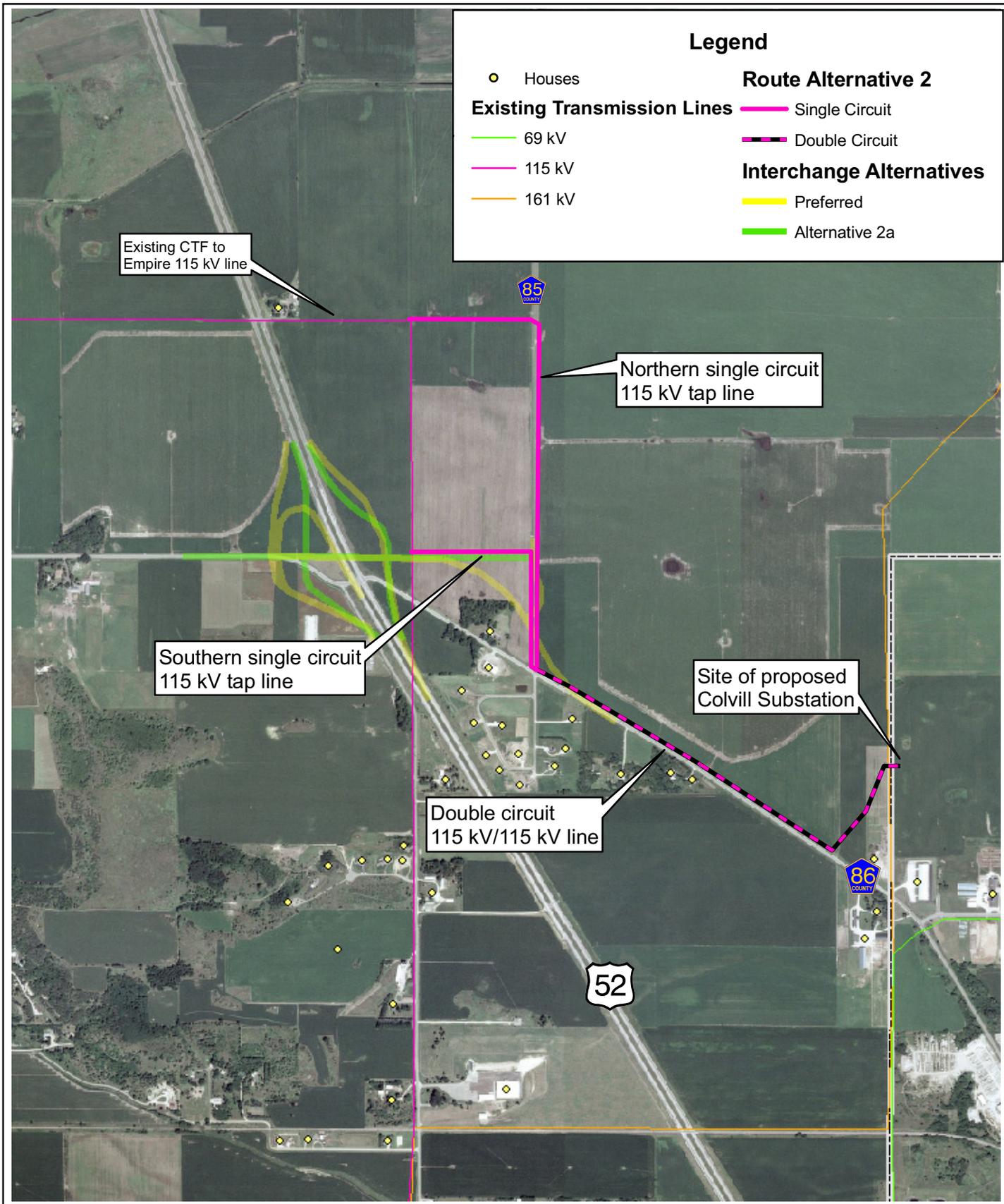


Route Alternative 1
Cannon Falls 115 kV Tap Project
Cannon Falls, Minnesota



Attachment 3

Map Document: (N:\gis\proj\excel\cannon_falls\map_docs\route_Alternative2_071206_aerial.mxd)
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Route Alternative 2
Cannon Falls 115 kV Tap Project
Cannon Falls, Minnesota



Attachment 4

Line #0822 Empire - Cannon Falls 115 kV

Phase 2 - Tap to Colvill Sub

Hwy 52 / CR 86 Interchange

Alternative	Length of Southern Tap (ft)*	Removal Length (ft)	Distance to Home (ft)	Double Circuit Length (ft)	Double Circuit Length (mi)	Tree Removal (acres)	Permanent Agricultural Impacts (sq. ft)**	Temporary Agricultural Impacts (acres)**
Original	1,731	3,169	173	5,143	0.97	0.46	1,500	7.0
Alternative 1	2,210	3,018	378	5,143	0.97	0.00	1,600	7.3
Alternative 2	2,675	2,580	878	5,143	0.97	0.00	1,650	7.5

Estimated Cost								
Alternative	Cost	Distance (Mi.)	Alternative	Cost	Distance (Mi.)	Alternative	Cost	Distance (Mi.)
Initial Proposal			Alternate 1			Alternate 2		
Single Circuit	\$466,000	1.31	Single Circuit	\$587,000	1.41	Single Circuit	\$604,000	1.50
Double Circuit	\$810,000	0.98	Double Circuit	\$810,000	0.98	Double Circuit	\$810,000	0.98
Removal (9 Strs.)	\$5,000	1.07	Removal (9 Strs.)	\$5,000	1.07	Removal (8 Strs.)	\$4,000	0.95
Total:	\$1,281,000		Total :	\$1,402,000		Total :	\$1,418,000	
			Cost Above Original Estimate:	\$121,000			Cost Above Original Estimate:	\$137,000

* Represents length between the existing 115 kV line and the proposed line following CR85 for the southern tap.

** Represents impacts for the entire route proposal