

Brookings County - Hampton  
345 kV Transmission Line Project  
PUC Docket No. ET2/TL-08-1474

**Appendix B**  
**Figures and Tables**

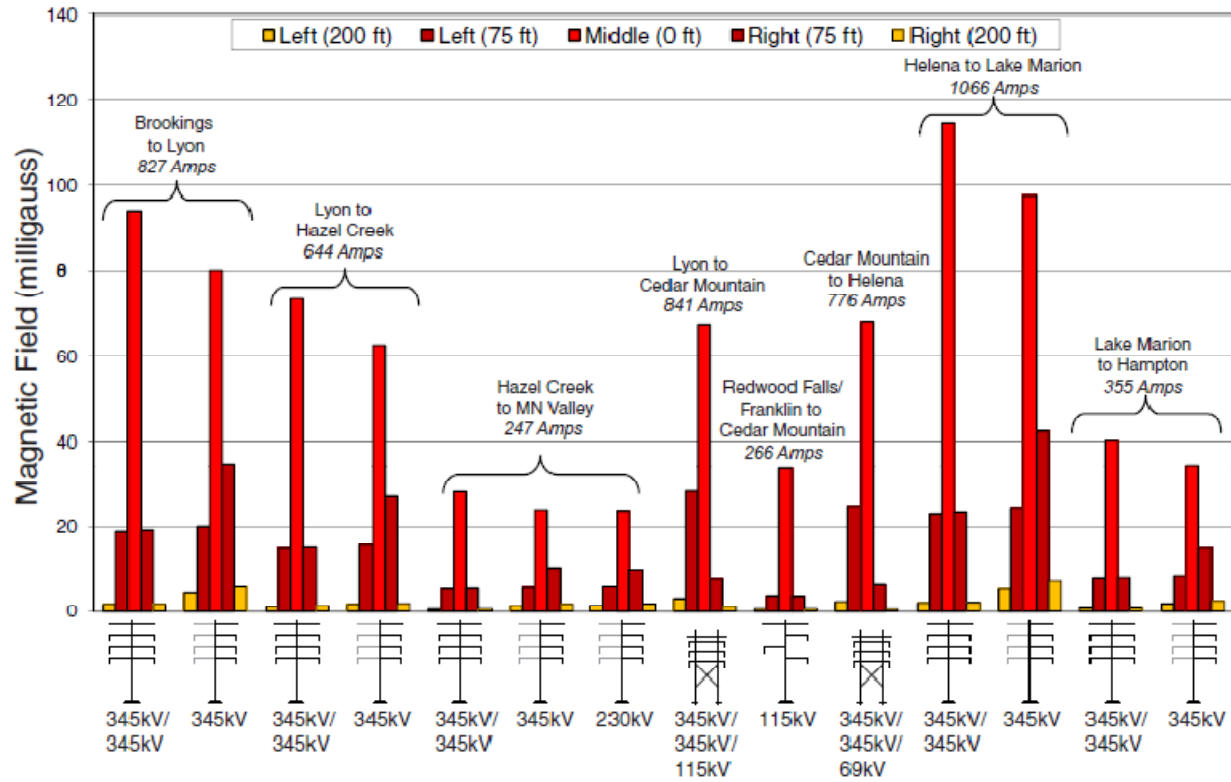
In order to respond to certain comments, tables and figures were prepared by the Minnesota Department of Commerce Office of Energy Security (OES). All tables and figures prepared for the FEIS have been compiled in this appendix. In each instance where the OES response to a comment includes a table or figure, the written response provided by OES in the main body of the Final Environmental Impact Statement (FEIS) directs the reader to the appropriate table or figure in this appendix. An identification number (FEIS ID #) was assigned to each commenter, including those who expressed comments orally at the public meetings. The comments and responses in the main body of this FEIS have generally been arranged by FEIS ID#, and correspondingly, figures and tables in this appendix have been arranged by FEIS ID#. Each figure or table is preceded by a heading identifying the FEIS ID#. Figures and tables have been labeled with a description of the information provided in the table or figure. For additional details regarding the comment and response that the figure or table is associated with, refer to the corresponding FEIS ID# comment/response in the main body of the FEIS.

In order to respond to certain comments, tables and figures were prepared by the Minnesota Department of Commerce Office of Energy Security (OES). All tables and figures prepared for the FEIS have been compiled in this appendix. In each instance where the OES response to a comment includes a table or figure, the written response provided by OES in the main body of the Final Environmental Impact Statement (FEIS) directs the reader to the appropriate table or figure in this appendix. An identification number (FEIS ID #) was assigned to each commenter, including those who expressed comments orally at the public meetings. The comments and responses in the main body of this FEIS have generally been arranged by FEIS ID#, and correspondingly, figures and tables in this appendix have been arranged by FEIS ID#. Each figure or table is preceded by a heading identifying the FEIS ID#. Figures and tables have been labeled with a description of the information provided in the table or figure. For additional details regarding the comment and response that the figure or table is associated with, refer to the corresponding FEIS ID# comment/response in the main body of the FEIS.

FEIS ID#1

COMMENT RESPONSE 1c

Structural variations and calculated magnetic field strength at various distances from transmission centerline



**FEIS ID#46**  
**Comment Response 46**

**Wetland Summary**

		<b>Wetlands</b>			
		<b>Total Acres within 150-ft ROW</b>	<b>Acres of Forested wetland within 150-ft ROW</b>	<b>Total Acres within 1,000-ft Route Width</b>	<b># of Wetlands &gt;1,000 ft in 150-foot ROW</b>
<b>Segment 1</b>					
Start to Lyon County Sub	Preferred Route	3.73	0.48	44.33	
Start to Lyon County Sub	1P-01	3.70	0.46	44.20	
Start to Lyon County Sub	1P-02	12.59	0.40	83.52	1
Start to Lyon County Sub	Alternate Route	6.14	1.54	94.47	
Start to Lyon County Sub	1A-01	6.14	1.54	94.47	
Start to Lyon County Sub	1A-02	4.75	0.64	81.80	
Start to Lyon County Sub	1A-03	6.25	0.59	84.58	
<b>Segment 2</b>					
Lyon County Sub to MN Valley Sub	Preferred Route	7.93	0.35	85.86	
Lyon County Sub to MN Valley Sub	2B-01	21.69	2.25	154.75	2
Lyon County Sub to MN Valley Sub	2B-02	7.92	0.35	87.45	
Lyon County Sub to MN Valley Sub	Alternate Route	20.54	2.25	151.63	2
<b>Segment 3</b>					
Lyon County Sub to Cedar Mountain Sub (North)	Preferred Route	13.27	0.45	133.81	1
Lyon County Sub to Cedar Mountain Sub (North)	3P-01	13.65	0.45	131.92	1
Lyon County Sub to Cedar Mountain Sub (South)	3P-02	11.35	0.45	112.06	1
Lyon County Sub to Cedar Mountain Sub (South)	3P-03	15.42	0.45	131.19	1
Lyon County Sub to Cedar Mountain Sub (South)	3P-04	13.24	0.45	124.00	1
Lyon County Sub to Cedar Mountain Sub (South)	3P-05	15.54	0.45	143.86	1
Lyon County Sub to Cedar Mountain Sub (South)	3P-06	12.85	0.45	79.52	1
Lyon County Sub to Cedar Mountain Sub (South)	Alternate Route	5.86	1.52	79.52	
Lyon County Sub to Cedar Mountain Sub (South)	3A-01	5.86	1.52	133.04	
<b>Segment 4</b>					
Cedar Mountain Sub (North) to Helena Sub (South)	Preferred Route	14.11	0.27	211.81	
Cedar Mountain Sub (North) to Helena Sub (South)	4P-01	14.14	0.27	210.82	
Cedar Mountain Sub (North) to Helena Sub (South)	4P-02	14.51	0.27	213.58	
Cedar Mountain Sub (North) to Helena Sub (South)	4P-03	14.63	0.27	236.86	
Cedar Mountain Sub (South) to Helena Sub (North)	4P-04	15.27	0.80	203.51	
Cedar Mountain Sub (South) to Helena Sub (North)	4P-05	14.30	0.27	213.93	
Cedar Mountain Sub (South) to Helena Sub (North)	4P-06	10.24	0.27	171.24	
Cedar Mountain Sub (South) to Helena Sub (North)	4B-01	60.75	4.05	625.19	3
Cedar Mountain Sub (South) to Helena Sub (North)	4B-02	63.22	4.05	643.93	3

<b>Wetlands</b>					
		<b>Total Acres within 150- ft ROW</b>	<b>Acres of Forested wetland within 150- ft ROW</b>	<b>Total Acres within 1,000-ft Route Width</b>	<b># of Wetlands &gt;1,000 ft in 150-foot ROW</b>
Cedar Mountain Sub (South) to Helena Sub (North)	4B-03	61.26	4.69	602.92	4
Cedar Mountain Sub (South) to Helena Sub (North)	4B-04	37.03	0.27	264.42	1
Cedar Mountain Sub (South) to Helena Sub (North)	4B-05	15.57	0.55	190.33	1
Cedar Mountain Sub (South) to Helena Sub (North)	4B-06	28.47	3.08	290.17	
Cedar Mountain Sub (South) to Helena Sub (North)	4B-07	19.17	0.27	331.55	
Cedar Mountain Sub (South) to Helena Sub (North)	4B-08	19.30	2.42	211.06	
Cedar Mountain Sub (South) to Helena Sub (South) M	4B-09	12.73	0.27	179.78	
Cedar Mountain Sub (South) to Helena Sub (South)	Alternate Route	56.65	4.04	573.53	4
<b>Segment 5</b>					
Helena Sub (North) to Lake Marion Sub	Preferred Route	35.67	0.45	337.71	3
Helena Sub (North) to Lake Marion Sub	5P-01	34.39	0.45	328.07	3
Helena Sub (North) to Lake Marion Sub	5P-02	37.80	0.45	353.15	3
Helena Sub (North) to Lake Marion Sub	5P-03	21.34	0.24	290.80	1
Helena Sub (South) to Lake Marion Sub	5B-01	40.50	0.17	457.05	4
Helena Sub (South) to Lake Marion Sub	5B-02	25.66	0.00	324.81	1
Helena Sub (South) to Lake Marion Sub	5B-03	39.98	0.45	447.57	3
Helena Sub (South) to Lake Marion Sub	Alternate Route	37.72	0.17	456.19	3
Helena Sub (South) M to Lake Marion Sub	5A-01	48.82	0.00	514.88	4
Helena Sub (South) to Lake Marion Sub	5A-02	43.42	0.17	476.82	4
Helena Sub (South) to Lake Marion Sub	5A-03	51.84	0.30	515.56	5
Helena Sub (South) to Lake Marion Sub	5A-04	35.83	0.17	424.04	2
<b>Segment 6</b>					
Lake Marion Sub to Hampton Sub	Preferred Route	33.79	4.34	265.90	3
Lake Marion Sub to Hampton Sub	6P-01	21.37	1.24	210.47	2
Lake Marion Sub to Hampton Sub	6P-02	34.18	4.34	266.38	3
Lake Marion Sub to Hampton Sub	6P-03	32.51	4.64	253.02	3
Lake Marion Sub to Hampton Sub	6P-04	26.84	1.09	256.12	2
Lake Marion Sub to Hampton Sub	6P-05	23.27	1.09	232.67	2
Lake Marion Sub to Hampton Sub	6P-06	32.51	4.64	253.02	3
Lake Marion Sub to Hampton Sub	6P-07	31.71	3.73	269.63	4
Lake Marion Sub to Hampton Sub	6P-08	43.15	1.22	357.12	4
Lake Marion Sub to Hampton Sub	Original Alternate	28.99	1.91	264.42	1
Lake Marion Sub to Hampton Sub	6A-01	28.54	1.91	262.77	1
Lake Marion Sub to Hampton Sub	6A-02	28.68	2.05	264.57	1
Lake Marion Sub to Hampton Sub	6A-03	28.68	2.05	264.31	1
Suggested S. Lake Marion Sub to Hampton Sub	6A-04	8.54	0.79	154.05	

## Water Crossing Summary

Water Crossings in ROW						
		Watercourses	PWI Watercourses	PWI Basins	PWI Wetlands	Trout Streams
<b>Segment 1</b>						
Start to Lyon County Sub	Preferred Route	43	13			
Start to Lyon County Sub	1P-01	44	14			
Start to Lyon County Sub	1P-02	48	15			
Start to Lyon County Sub	Alternate Route	37	10			
Start to Lyon County Sub	1A-01	37	10			
Start to Lyon County Sub	1A-02	39	11			
Start to Lyon County Sub	1A-03	39	11			
<b>Segment 2</b>						
Lyon County Sub to MN Valley Sub	Preferred Route	15	7			
Lyon County Sub to MN Valley Sub	2B-01	21	9		1	
Lyon County Sub to MN Valley Sub	2B-02	16	7			
Lyon County Sub to MN Valley Sub	Alternate Route	20	9	1	1	
<b>Segment 3</b>						
Lyon County Sub to Cedar Mountain Sub (North)	Preferred Route	14	8	1		
Lyon County Sub to Cedar Mountain Sub (North)	3P-01	14	8	1		
Lyon County Sub to Cedar Mountain Sub (South)	3P-02	15	9	1		
Lyon County Sub to Cedar Mountain Sub (South)	3P-03	18	12	1		
Lyon County Sub to Cedar Mountain Sub (South)	3P-04	16	9	1		
Lyon County Sub to Cedar Mountain Sub (South)	3P-05	15	8	1		
Lyon County Sub to Cedar Mountain Sub (South)	3P-06	13	8	1		
Lyon County Sub to Cedar Mountain Sub (South)	Alternate Route	27	11			
Lyon County Sub to Cedar Mountain Sub (South)	3A-01	27	11			
<b>Segment 4</b>						
Cedar Mountain Sub (North) to Helena Sub (South)	Preferred Route	46	18	1		
Cedar Mountain Sub (North) to Helena Sub (South)	4P-01	42	15	1		
Cedar Mountain Sub (North) to Helena Sub (South)	4P-02	47	18	1		
Cedar Mountain Sub (North) to Helena Sub (South)	4P-03	50	20	1		
Cedar Mountain Sub (South) to Helena Sub (North)	4P-04	46	18			
Cedar Mountain Sub (South) to Helena Sub (North)	4P-05	46	18	1		
Cedar Mountain Sub (South) to Helena Sub (North)	4P-06	44	16	1		
Cedar Mountain Sub (South) to Helena Sub (North)	4B-01	64	29		1	
Cedar Mountain Sub (South) to Helena Sub (North)	4B-02	64	29		1	
Cedar Mountain Sub (South) to Helena Sub (North)	4B-03	55	22		1	
Cedar Mountain Sub (South) to Helena Sub (North)	4B-04	47	19	1		
Cedar Mountain Sub (South) to Helena Sub (North)	4B-05	44	17	1		
Cedar Mountain Sub (South) to Helena Sub (North)	4B-06	48	20	1		

Water Crossings in ROW						
		Watercourses	PWI Watercourses	PWI Basins	PWI Wetlands	Trout Streams
Cedar Mountain Sub (South) to Helena Sub (North)	4B-07	49	20	1		
Cedar Mountain Sub (South) to Helena Sub (North)	4B-08	46	18	1		
Cedar Mountain Sub (South) to Helena Sub (South) M	4B-09	44	16	1		
Cedar Mountain Sub (South) to Helena Sub (South)	Alternate Route	56	23		1	
<b>Segment 5</b>						
Helena Sub (North) to Lake Marion Sub	Preferred Route	16	9			
Helena Sub (North) to Lake Marion Sub	5P-01	17	9			
Helena Sub (North) to Lake Marion Sub	5P-02	17	10			
Helena Sub (North) to Lake Marion Sub	5P-03	15	10		2	
Helena Sub (South) to Lake Marion Sub	5B-01	22	10		2	
Helena Sub (South) to Lake Marion Sub	5B-02	18	8		2	
Helena Sub (South) to Lake Marion Sub	5B-03	20	12			
Helena Sub (South) to Lake Marion Sub	Alternate Route	22	10		2	
Helena Sub (South) M to Lake Marion Sub	5A-01	22	10		2	
Helena Sub (South) to Lake Marion Sub	5A-02	22	10	1	2	
Helena Sub (South) to Lake Marion Sub	5A-03	21	8		2	
Helena Sub (South) to Lake Marion Sub	5A-04	23	9		1	
<b>Segment 6</b>						
Lake Marion Sub to Hampton Sub	Preferred Route	20	6		1	3
Lake Marion Sub to Hampton Sub	6P-01	21	11		1	7
Lake Marion Sub to Hampton Sub	6P-02	20	6		1	3
Lake Marion Sub to Hampton Sub	6P-03	19	5		1	2
Lake Marion Sub to Hampton Sub	6P-04	21	11			7
Lake Marion Sub to Hampton Sub	6P-05	17	10		2	5
Lake Marion Sub to Hampton Sub	6P-06	19	5		1	2
Lake Marion Sub to Hampton Sub	6P-07	20	6			3
Lake Marion Sub to Hampton Sub	6P-08	21	8		1	3
Lake Marion Sub to Hampton Sub	Original Alternate	25	3		2	
Lake Marion Sub to Hampton Sub	6A-01	22	3		2	
Lake Marion Sub to Hampton Sub	6A-02	25	3		2	
Lake Marion Sub to Hampton Sub	6A-03	25	3		2	
Suggested S. Lake Marion Sub to Hampton Sub	6A-04	22	4		2	

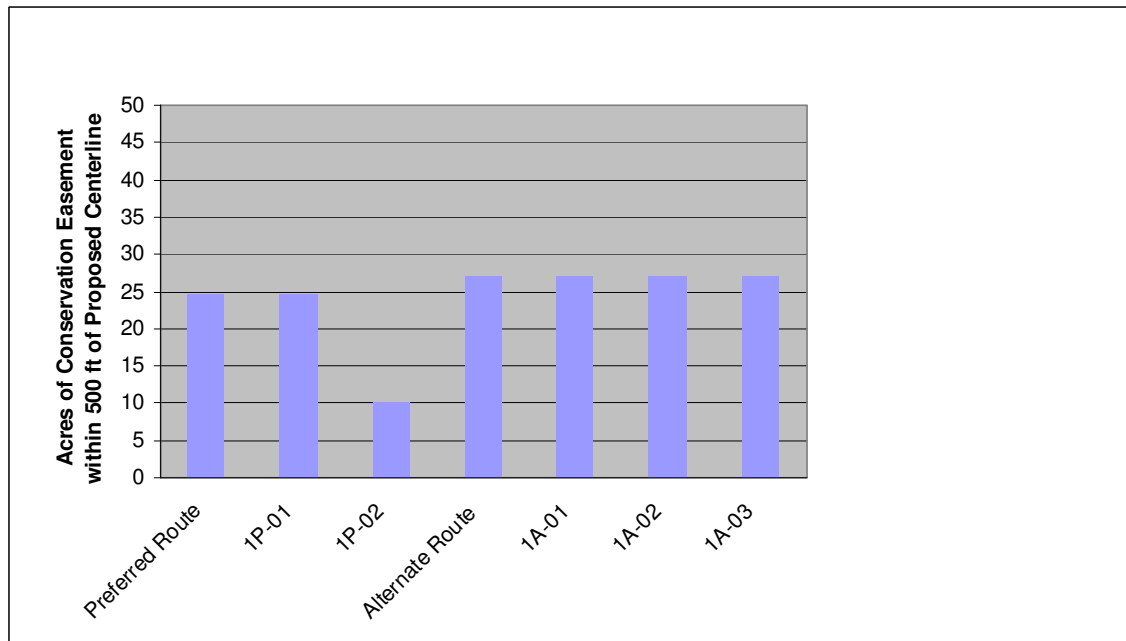


FEIS ID#253

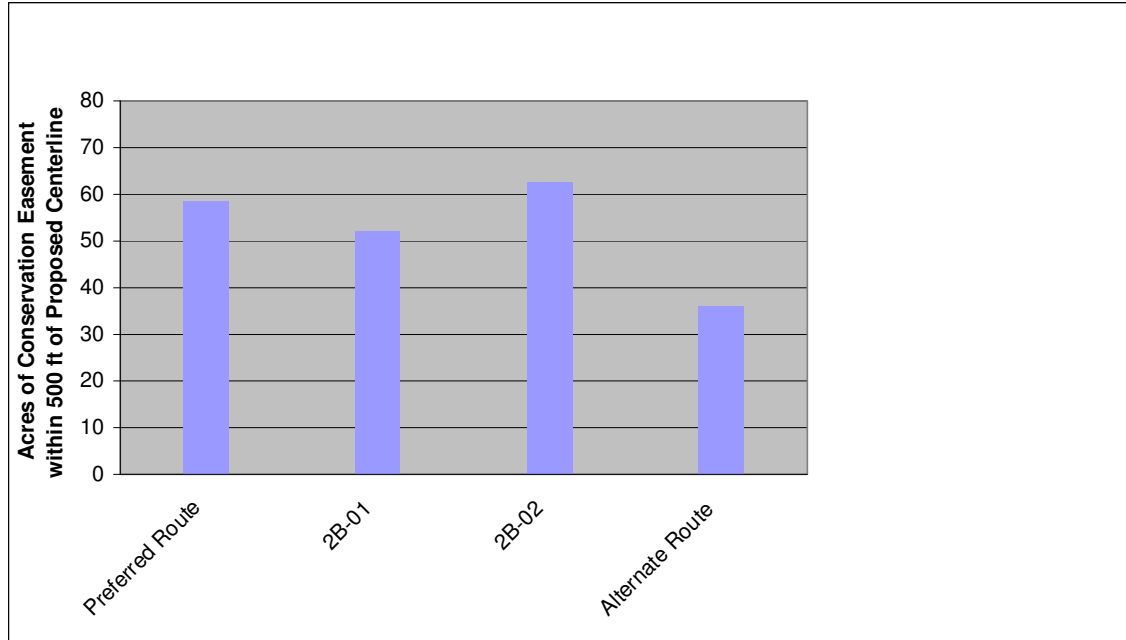
COMMENT RESPONSE 253d

Acres of conservation easement within 500 feet of proposed centerline:

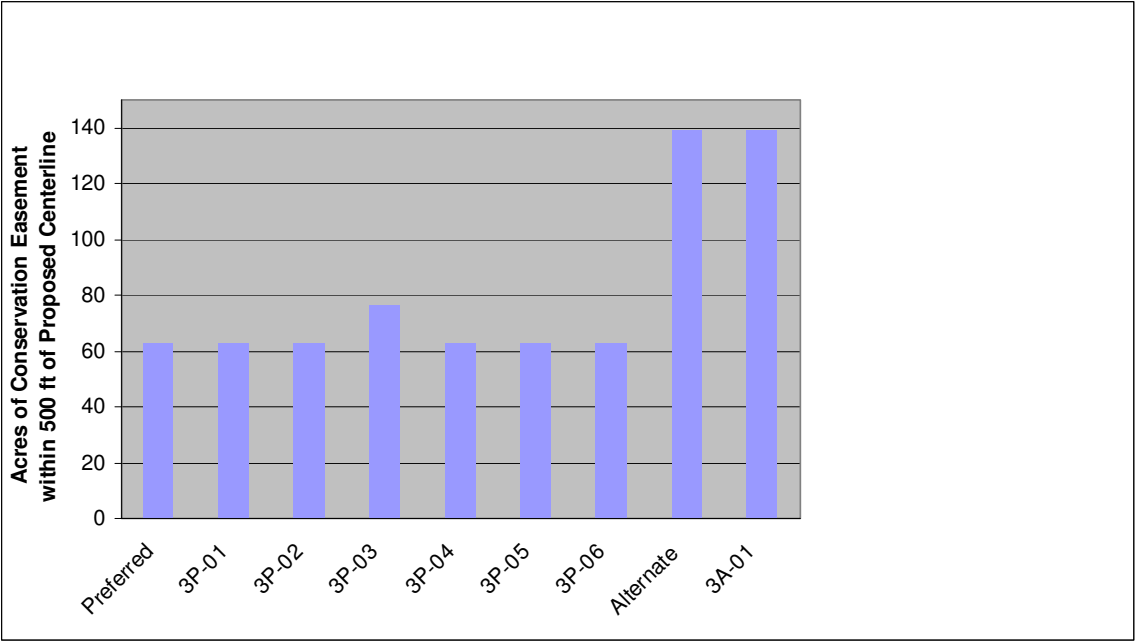
Brookings County to Lyon County Substation



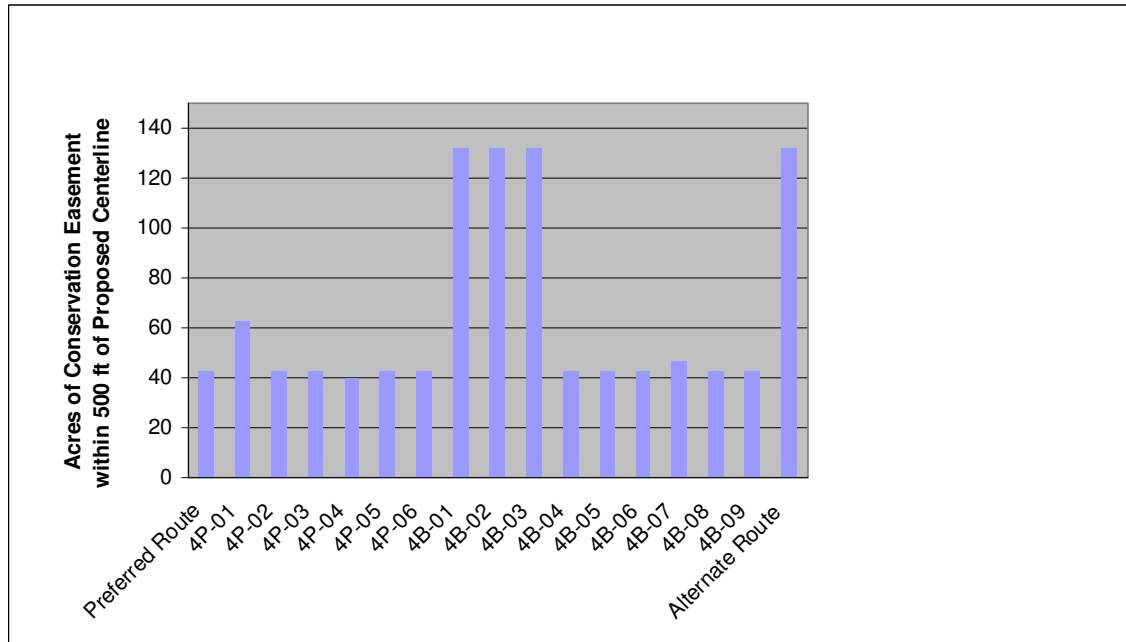
### Lyon County Substation to MN Valley Substation



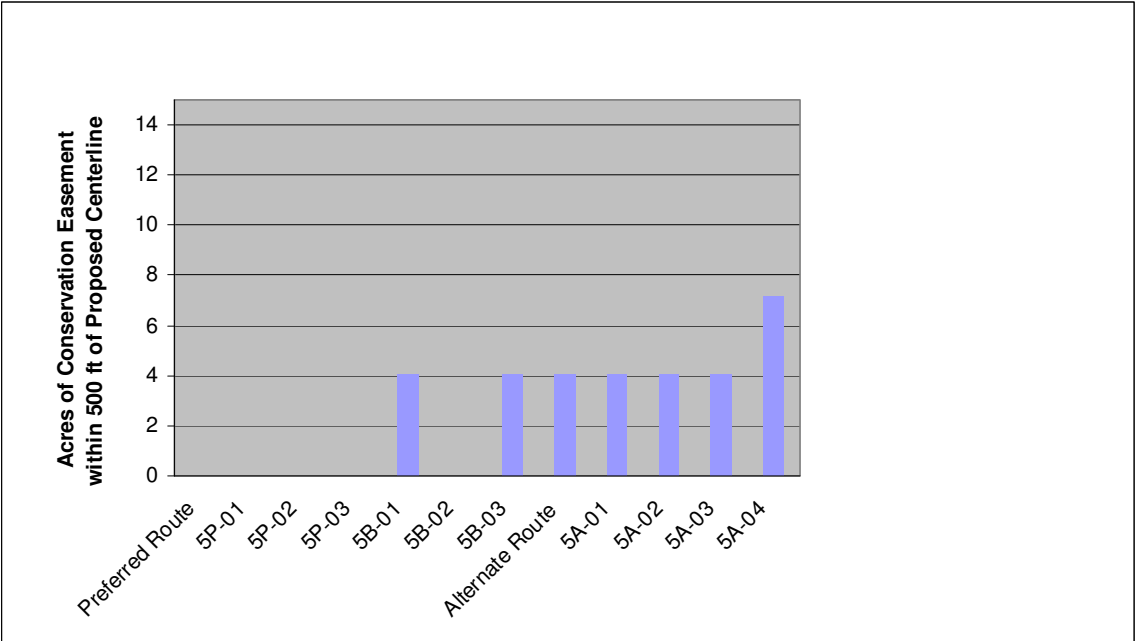
### Lyon County Substation to Cedar Mountain Substation



### Cedar Mountain Substation to Helena Substation



### Helena Substation to Lake Marion Substation

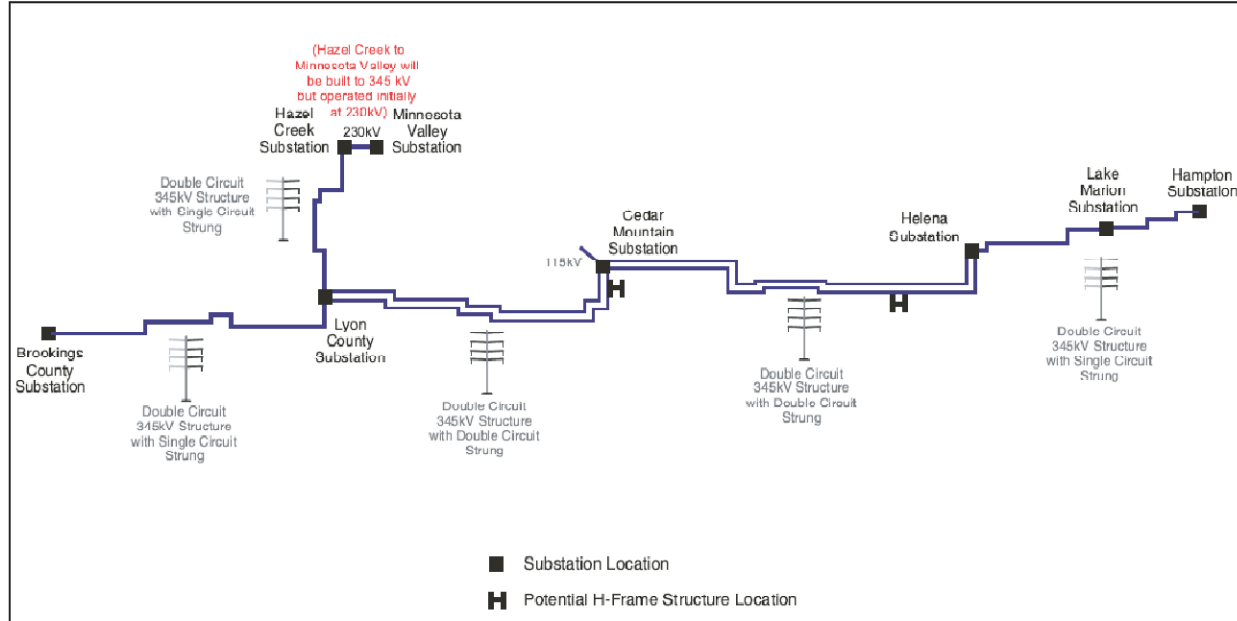




FEIS ID#255

COMMENT RESPONSE 255c

Proposed structure types for the project



COMMENT RESPONSE 255d

Structure designs and foundations being proposed for the 345-kV portions of the project

