COMMENTS ON THE DEIS ARE DUE APRIL 29, 2011

The Comments that are due at the end of the month are specifically about the DEIS, what's missing, what isn't taken into account, a very narrow range, so make sure you're on point! For example, NoCapX 2020 and U-CAN think the Office of Energy Security (MOES) must:

Point out homes that are not shown on the maps.

Disclose the full range of potential magnetic fields in all the configurations proposed for this project. See the back of this page.

Address impact of the width of the Right of Way (see DEIS Table 8.4.1-1):

- RoW must be wide enough assure magnetic fields are below 2mG at the RoW edge to protect the health and safety of the public;
- Disclose chart showing width of RoW necessary to assure mG level at 2mG or lower;
- Identify basis for RoW width.

Comply with the Minnesota Environmental Policy Act:

- Must have more than one completely separate route; and
- Must have more than one river crossing location a Alma (as is being done in the UDEA's Rural Utility Service EIS that is in the works).

Incorporate the Rural Utility Service EIS into the MOES EIS.

Minnesota policy of non-proliferation means that transmission must use shared railroad and highway rights of way. Minn. Stat. 216E.03, Subd. 7(b)(8); (e). MOES conflates Minn. Stat. 216E.03, Subd. 7(b)(8) and 7(b)(9).

- DEIS must identify shared railroad and highway rights of way and tally independently
- DEIS must identify separately from parcel and field boundaries.
- Include maps showing only shared railroad and highway rights of way.
- DEIS must not include or characterize ag land survey lines or other natural division lines as "shared corridor."

Minnesota policy supporting agriculture requires that transmission corridors, if sited on ag land, utilize survey lines or other natural division.

- DEIS must identify separately survey lines or other natural division lines utilized to avoid disruption of agricultural operations.
- DEIS must identify and set out survey lines or other natural division lines separately from railroad and highway rights of way.
- DEIS must not include or characterize ag land survey lines or other natural division lines as "shared corridor."

Send comments by April 29, 2011.

Identify as "DEIS Comments, Docket 09-1448" and send to: Matthew Langan email by 4:30 p.m. to **matthew.langan@state.mn.us**

MOES Project Manager 85 – 7th Place East St. Paul, MN 55101

MAGNETIC FIELDS ARE MUCH HIGHER THAN CAPX UTILITIES ADMIT

This chart is from the CapX Hampton-LaCrosse application, Chapter 3, Table3.6-2:

Table 3.6-2:

Calculated Magnetic Fields (mG) for Proposed 345 kV Transmission Line Designs (3.28 Feet Aboveground)

Structure Type	Geographical Segment	System Condition	Current (amps)	-300	-200	-100	-75	-50	0	50	75	100	200	300
Single-Pole Davit Arm 345/345 kV Double- Circuit with one Circuit In Service	Preferred Route: Hampton to Cannon Falls; Non-US-52 segments Zumbrota area to North Rochester	2015 Peak	140 A	0.38	0.79	2.35	3.41	5.24	13.58	9.64	5.88	3.77	1.04	0.46
		2015 Average	112 A	0.30	0.63	1.88	2.73	4.19	10.87	7.71	4.71	3.01	0.83	0.37
	Alternate Route: Hampton to North Rochester	2025 Peak	132 A	0.36	0.74	2.22	3.22	4.94	12.81	9.09	5.55	3.55	0.98	0.43
		2025 Average	106 A	0.29	0.60	1.78	2.58	3.97	10.29	7.30	4.45	2.85	0.79	0.35
	Preferred Route: 2015 Peak 140/325 US-52 segments 2015 112/260 Zumbrota area 2025 Peak 132/328 2025 Average 106/262	0.74	1.65	6.20	10.42	20.73	70.89	8.50	3.77	2.51	1.01	0.52		
Single-Pole Davit Arm 345/345 kV with 69 kV Underbuild with 1 Active 345 kV Circuit			112/260	0.59	1.32	4.96	8.33	16.58	56.71	6.80	3.02	2.01	0.81	0.41
		2025 Peak	132/328	0.73	1.62	6.14	10.36	20.71	71.85	8.89	3.92	2.54	0.99	0.50
			106/262	0.58	1.30	4.91	8.28	16.55	57.37	7.09	3.12	2.03	0.79	0.40
Single-Pole Davit Arm 345/345 kV Double- Circuit with one Circuit in Service	N. Rochester to	2015 Peak	403 A	1.12	2.33	6.97	10.11	15.54	40.27	28.58	17.44	11.17	3.09	1.35
	Alma	2015 Average	322 A	0.87	1.81	5.41	7.85	12.06	31.24	22.17	13.53	8.67	2.40	1.05
		2025 Peak	415 A	1.12	2.33	6.97	10.11	15.54	40.27	28.58	17.44	11.17	3.09	1.35
		2025 Average	332 A	0.90	1.87	5.57	8.09	12.43	32.21	22.86	13.95	8.94	2.47	1.08

For the CapX Fargo line, with the same configurations, look at the levls:

CALCULATED MAGNETIC FLUX DENSITY (MILLIGAUSS) FOR PROPOSED 345 KV TRANSMISSION LINE DESIGNS (3.28 FEET ABOVE GROUND) (ASSUMED 600 & 1,000 MVA LOADING)

Structure Type	System Condition	Current (Amps)	Distance to Proposed Centerline													
			-300'	-200'	-100"	-75'	-50'	-25'	0'	25'	50'	75'	100'	200'	300'	
Single Pole Davit Arm 345kV Single Circuit Delta Config	System Max	1000	2.98	6.33	21.28	32.97	54.40	88.83	120.79	112.71	67.90	38.59	23.71	6.27	2.73	
	With Added Generation	2500	7.44	15.84	53.20	82.42	136.01	222.07	301.96	281.77	169.74	96.49	59.28	15.67	6.83	
Single Pole Davit Arm 345kV Single Circuit Vertical Config	System Max	1000	3.26	7.46	26.96	42.06	68.82	103.97	96.76	60.77	37.34	24.29	16.73	5.60	2.67	
	With Added Generation	2500	8.15	18.65	67.39	105.14	172.05	259.93	241.91	151.92	93.34	60.72	41,82	13.99	6.68	
Single Pole Davit Arm 345kV/345kV Double Circuit with One Circuit In Service	System Max	1000	2.70	5.62	16.79	24.37	37.45	60.95	97.03	104.17	68.86	42.03	26.92	7.45	3.26	
	With Added Generation	2500	6.74	14.06	41.96	60.92	93.64	152.38	242.57	260.42	172.14	105.07	67.29	18.62	8.15	
Single Pole Davit Arm 345kV/345kV Double Circuit with Both Circuits In Service	System Max	1000	.73	2.19	12.58	23.01	45.30	86.76	113.75	87.37	45.85	23.39	12.8	2.25	.74	
	With Added Generation	2500	1.81	5.47	31.44	57.53	113.26	216.89	284.37	218.42	114.62	58.47	32.08	5.61	1.84	