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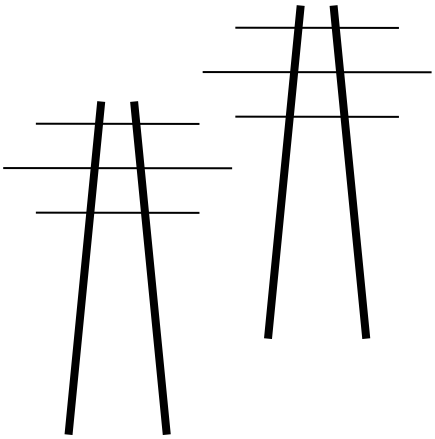

September 25, 2015

Chuck Thompson, Manager
Siting & Regulatory Affairs
Dairyland Power Cooperative
3200 East Avenue South
La Crosse, WI 54602-0617

via email at cat@dairynet.com

Dennis Rankin
Engineering and Environmental Analyst
USDA RUS
1400 Independence SW, Mailstop 1571
Washington D.C., 20250-1571

via email at dennis.rankin@wdc.usda.gov

In Re: **THIRD NO CAPX 2020 COMMENT AND REQUEST FOR EIS**
Dairyland Power Cooperative Upgrade of Q-1D South, USDA RUS #1060

Dear Mr. Thompson and Mr. Rankin:

ON BEHALF OF NO CAPX 2020, I AGAIN REQUEST THAT A FULL EIS BE COMPLETED ON THIS PROJECT, AS WAS DONE FOR THE MARSHLAND-BRIGGS RD. PROJECT, AS THE REBUILD OF THE Q-1 LINE HAS BEEN SEGMENTED, AND THIS, THE SMALLEST OF THE SEGMENTS, HAS EXTREME IMPACTS, WHICH MAY EVADE ENVIRONMENTAL REVIEW IF SEGMENTED.

For the record, I have requested information regarding this project several times in order to have enough to go on to prepare a comment, and have yet to receive additional information describing this project and its impacts.

This Comment incorporates all prior comments and correspondence regarding this project as if fully related here.

Regarding the Q-1D South project, on behalf of No CapX 2020, I offer the following comments:

The USDA RUS should require an Enviuronmental Impact Statement for this project.

No CapX 2020 hereby requests a full Environmental Impact Statement for this project and for all the associated, segmented parts of the Dairyland Q-1 line and their cumulative impacts.

Specifications and capacity of project

At this time, I rely on the MISO presentations, provided in my second comment, for specifications of the line. Info regarding amps and MVA comes from the attached charts. It's my understanding that this project will significantly increase capacity of the lines and electric and magnetic fields will significantly increase as well. The specifics of this project have yet to be revealed, so let's see the info. This should be evaluated by the RUS.

Rights of way and easements

It is not clear that Dairyland has all the easements and rights of way necessary to build and operate this project. The "access roads" seem to traverse property that goes far beyond the boundaries of easements. This needs to be verified by RUS.

Justifications, need for the project, and rejections and approval by Wisconsin PSC

This full Q-1 line was considered as a justification for the Badger Coulee transmission line, with the claim that there were reliability issues that would be resolved if the Badger Coulee line were built. That problem solving transmission line has been permitted, so there is no reason to believe the Q-1 line needs to be rebuilt.

A rebuilt of the Q-1 line was also considered as an alternative to the Badger Coulee transmission line, and it was rejected and Badger Coulee built instead. Therefore, there is no reason to believe that the Q-1 line should be rebuilt as that was rejected.

Topics raised in "Public Notice" for project

The "notice" was supplemented via a recent email from Dairyland, which provided more information, but still only sketchy details.

AS NOTED PREVIOUSLY, ENVIRONMENTAL REVIEW MUST ADDRESS:

No Build Alternative and Analysis

The environmental review must consider the "No-Build Alternative" for compliance with NEPA.

Alternatives – System Alternatives and Route Alternatives

This bears repeating: The environmental review must consider alternatives. As to routing alternatives, I am not sufficiently familiar with the area to propose routing alternatives. Local residents should be offered opportunity to suggest alternatives for analysis by RUS.

The environmental review must consider alternatives. As to system alternatives, some possibilities include:

- Evaluate removal of the link between Briggs Road as duplicative and unnecessary. For example, because CapX 2020 comes down to Briggs Road, and Badger Coulee runs north from Briggs Road, it may be possible to eliminate the Q-1 161 kV connection completely.

- Evaluate connection of the Genoa northward section of Q-1 to the large new substation south of I-90 and east of La Crosse.

- Evaluate impacts of shut down of Alma coal, Genoa coal, and Cassville coal on need for the connection between these plants and La Crosse.

- Evaluate impact continued operation of the La Crosse 3 generator on need for Q-1. This was a deciding factor in approval of CapX 2020, which claimed the La Crosse generator was not operational, and it was correctly noted that an operational Unit 3 would bring available generation to an acceptable level. See PSC Final Order p. 22, Wisconsin PSC Docket 05-CE-136 (5/30/2012); Xcel Energy Integrated Resource Plan, MPUC Docket 12-1240. The Q-1line, and specifically Q-1D South, may not be needed.

- Environmental Review should evaluate whether this line is needed in light of purpose of Q-1 as transmission for generation to La Crosse, and of available generation in La Crosse and shuttered generation on both the north and southern ends of the line.

Segmentation prohibited under NEPA and CEQ regulations

The multiple Q-1 projects must not be segmented, and environmental review must address this segment, the other segments, and cumulative impacts.

The RUS must consider "connected actions" defined as actions that:

(i) Automatically trigger other actions which may require environmental impact statements;
(ii) Cannot or will not proceed unless other actions are taken previously or simultaneously;
(iii) Are independent parts of a larger action and depend on the larger action for their justification.[1]

[1] See 40 C.F.R. §1508.25(a)(1)(1997).

No "independent utility" justification has been proffered to permit this segmentation.

Further, there has been no finding that this project will have no significant impact. It is my understanding that the RUS will make a determination as to the type and breadth of environmental review required for this project. RUS must take a "hard look" at the consequences of this project and RUS financing of this project that would make this project happen. This "hard look" requires a record, which at this time does not appear to exist. An Environmental Impact Statement is needed due to the substantial impacts, and environmental review must consider:

- Cumulative environmental impacts of all of the Q-1 upgrades, not just this one small segment.

- The cumulative environmental impacts for all Q-1 upgrades, whether financed by USDA RUS or otherwise, should be considered.

- Under NEPA, segmentation of projects is not appropriate, for example, in this case, Dairyland has separated out the project with the most extreme environmental impacts to close residents and directly affected landowners into a nine mile segment that may not receive the same environmental review that it would had it been included as part of the USDA RUS financed Marshland-Briggs Road segment.

- "Connected actions" include not just the other segments of the Q-1 transmission line, but also the RUS funding of various of those segments, including CapX 2020 and Badger Coulee, and the the Marshfield-Briggs Road segment of Dairyland's Q-1.

RUS authority, mission, and criteria for grant of loans

Environmental review, must begin with disclosure of project details, phased and connected actions, and potential for impacts. There must also be a cogent explanation of, and citations for the RUS authority to loan funds for rebuild of facilities such as the Dairyland Q-1 line, a demonstration that this project loan falls within the mission of the RUS, and specific itemization of criteria for the RUS determination of whether to provide funds for this project. Each of these areas should be accompanied by citations to authority.

Request for Information

Again, please forward information about this project at your earliest convenience, and post it online for the public to access. I will also post this information, if and when received, on my No CapX 2020 website.

On behalf of No CapX 2020, I have filed a FOIA request, but that is not likely to result in any information anytime soon.

Request for Full Environmental Impact Statement on this project, all segments of Q-1, and cumulative impacts

ON BEHALF OF NO CAPX 2020, I AGAIN REQUEST THAT A FULL EIS BE COMPLETED ON THIS PROJECT, AS WAS DONE FOR THE MARSHLAND-BRIGGS RD. PROJECT, AS THE REBUILD OF THE Q-1 LINE HAS BEEN SEGMENTED, AND THIS, THE SMALLEST OF THE SEGMENTS, HAS EXTREME IMPACTS, WHICH MAY EVADE ENVIRONMENTAL REVIEW IF SEGMENTED.

Thank you for the opportunity to Comment on this project and for your attention to these matters.

Very truly yours,

Carol A. Overland
Attorney at Law

Enclosures: ACSR and ACSS Tables

Table 1

Computation of Bare ACSR Overhead Conductor Ampacities (Steady State)

Per ANSI/IEEE Standard 738-1986

				Temperature C	Temperature F		
	m/hr	ft/s					
Wind speed	1.36	2.00	Ambient air temp	40	104	Latitude	45 degrees N
Coefficient of emissivity		0.5	Conductor surface temp	100	212	Azimuth of line	90 degrees
Coefficient of solar absorption		0.5				Elev above msl	1000 ft

Air viscosity @ T ave	0.04943	lb/h ft
Air density	0.05192	lb/ft^3
Air thermal conductivity	0.00990	W/ft C
Altitude of sun	66.1	degrees
Azimuth of sun	180	degrees
Heat rec'd by a surface	94.64	W/ft^2
Elevation correction factor	1.0340	

			Resistance, Ohm/mi			Ohm/kft	Conductor heat transfer, W/ft					Ampacity	kV:	MVA rating @ nominal voltage						
	Conductor		50	100	100	100	Forced convection heat loss			Radiated	Solar			69	115	138	161	230	345	500
kcm	strand	diam,in	deg C	deg C	deg C	deg C	qc1	qc2	max	heat loss	heat gain	amps/kv	conductor	1	1	1	1	1	2	3
4/0	6/1	0.563	0.5920	0.6979	0.6979	0.13218	17.48	15.27	17.48	3.79	2.30	378		45	75	90	108				4/0
266	6/7	0.633	0.5520	0.6507	0.6507	0.12324	18.48	16.39	18.48	4.26	2.59	406		48	81	97	113				266
336	18/1	0.684	0.5059	0.5966	0.5966	0.09630	19.23	17.19	19.23	4.61	2.79	555		66	111	133	155				336
336	26/7	0.721	0.5072	0.5823	0.5823	0.09662	19.75	17.71	19.75	4.85	2.94	562		67	112	134	157				336
477	26/7	0.858	0.2169	0.2557	0.2557	0.04845	21.57	19.65	21.57	5.78	3.50	702		84	140	168	196				477
477	24/7	0.846	0.2168	0.2556	0.2555	0.04841	21.42	19.50	21.42	5.70	3.45	699		84	139	167	195				477
556	26/7	0.927	0.1860	0.2192	0.2192	0.04152	22.43	20.60	22.43	6.24	3.78	774		93	154	185	216				556
636	24/7	0.977	0.1631	0.1922	0.1922	0.03640	23.04	21.26	23.04	6.58	3.98	839		100	167	201	234	334			636
795	26/7	1.109	0.1305	0.1538	0.1538	0.02913	24.56	22.92	24.56	7.46	4.52	972		116	194	232	271	387	1161	2525	795
795	45/7	1.115	0.1313	0.1544	0.1544	0.02924	24.64	23.01	24.64	7.51	4.55	972		116	194	232	271	387	1161	2524	795
795	30/19	1.140	0.1307	0.1540	0.1540	0.02917	24.92	23.32	24.92	7.69	4.65	979		117	195	234	273	390	1170	2543	795
954	45/7	1.165	0.1089	0.1291	0.1291	0.02445	25.19	23.62	25.19	7.84	4.75	1076		129	214	257	300	429	1288	2795	954
954	54/7	1.196	0.1094	0.1297	0.1297	0.02456	25.53	24.00	25.53	8.05	4.88	1085		130	216	259	303	432	1297	2820	954
1192	54/19	1.336	0.0893	0.1013	0.1013	0.01919	27.03	25.67	27.03	9.01	5.49	1263		151	252	302	352	503	1509	3281	1192
1272	54/19	1.382	0.0851	0.0966	0.0966	0.01866	27.48	26.17	27.48	9.31	5.69	1295		154	259	307	358	512	1536	3339	1272
1590	54/19	1.545	0.0657	0.0767	0.0767	0.01483	29.09	27.88	29.09	10.40	6.39	1612		161	301	361	422	602	1807	3928	1590
2312	76/19	1.802	0.0505	0.0584	0.0584	0.01106	31.47	30.60	31.47	12.13	7.35	1811		216	361	433	505	721	2164	4704	2312

Notes:
Sun computations based on noon local sun time.
Solar absorption based on "Clear atmosphere"
Azimuth of line: N-S = 0, E-W = 90

Xcel Energy
Delivery System Planning & Engineering

Table 2

Computation of SAC Overhead Conductor Ampacities (Steady State)

Per ANSI/IEEE Standard 738-1986

	mi/hr	ft/s
Wind speed	1.36	2.00
Coefficient of emissivity		0.5
Coefficient of solar absorption		0.5

	Temperature C	Temperature F
Ambient air temp	40	104
Conductor surface temp	200	392

Latitude	45 degrees N
Azimuth of line	90 degrees
Elev above msl	1000 ft

Air viscosity @ T ave	0.05463	lb/h ft
Air density	0.05403	lb/ft^3
Air thermal conductivity	0.0101	W/ft C
Altitude of sun	68.1	degrees
Azimuth of sun	180	degrees
Heat rec'd by a surface	94.64	W/ft^2
Elevation correction factor	1.0340	

Conductor			Resistance, Ohm/mi			Ohm/kft	Conductor heat transfer, W/ft					Ampacity	MVA rating @ nominal voltage							
			50	100	200	200	Forced convection heat loss			Radiated	Solar		kV:	69	115	138	161	230	345	500	
kcm	strand	diam,in	deg C	deg C	deg C	deg C	qc1	qc2	max	heat loss	heat gain		cond/ph:	1	1	1	1	1	2	3	kcm
4/0	6/1	0.563	0.5920	0.6979	0.9097	0.17229	46.46	39.77	46.46	15.72	2.30	590		70	117	141	164				4/0
266	6/7	0.633	0.5520	0.6507	0.8481	0.16063	49.28	42.67	49.28	17.67	2.58	633		76	126	151	177				266
336	18/1	0.684	0.3059	0.3606	0.4700	0.08902	51.24	44.70	51.24	19.09	2.79	871		104	174	208	243				336
336	26/7	0.721	0.3072	0.3623	0.4725	0.08949	52.62	46.14	52.62	20.13	2.94	883		106	176	211	246				336
477	26/7	0.858	0.2169	0.2557	0.3333	0.06313	57.44	51.21	57.44	23.95	3.50	1111		133	221	266	310				477
477	24/7	0.846	0.2168	0.2556	0.3332	0.06311	57.04	50.78	57.04	23.62	3.45	1106		132	220	264	308				477
556	26/7	0.927	0.1860	0.2192	0.2856	0.05409	59.73	53.65	59.73	25.88	3.78	1230		147	245	294	343				556
636	24/7	0.977	0.1631	0.1922	0.2504	0.04742	61.34	55.37	61.34	27.27	3.98	1336		160	266	319	373	532			636
795	26/7	1.108	0.1306	0.1538	0.2002	0.03792	65.38	59.71	65.38	30.93	4.52	1556		186	310	372	434	620	1860	4042	795
795	45/7	1.115	0.1313	0.1544	0.2006	0.03799	65.59	59.93	65.59	31.13	4.55	1558		186	310	372	434	620	1861	4047	795
795	30/19	1.140	0.1307	0.1540	0.2006	0.03799	66.33	60.74	66.33	31.82	4.65	1569		187	312	375	437	625	1875	4076	795
954	45/7	1.165	0.1099	0.1291	0.1675	0.03172	67.06	61.53	67.06	32.52	4.75	1729		207	344	413	482	689	2068	4492	954
954	54/7	1.196	0.1094	0.1287	0.1673	0.03169	67.96	62.51	67.96	33.39	4.88	1745		209	348	417	487	695	2085	4533	954
1192	54/19	1.338	0.0863	0.1013	0.1313	0.02487	71.95	66.86	71.95	37.35	5.46	2044		244	407	488	570	814	2442	5309	1192
1272	54/19	1.382	0.0851	0.0998	0.1286	0.02436	73.14	68.17	73.14	38.58	5.63	2087		249	416	499	582	831	2494	5422	1272
1590	54/19	1.545	0.0657	0.0767	0.0987	0.01869	77.41	72.89	77.41	43.13	6.30	1472		295	492	591	689	985	2954	6423	1590
2312	76/19	1.802	0.0505	0.0584	0.0742	0.01405	83.72	79.94	83.72	50.30	7.35	3002		359	598	718	837	1196	3588	7800	2312

Notes:
Sun computations based on noon local sun time
Solar absorption based on "Clear atmosphere"
Azimuth of line: N-S = 0, E-W = 90

Xcel Energy
Delivery System Planning & Engineering

Ex 35, Application, Appendix 7

ADJUSTABLE TABLE

TABLE 5.2-6. Calculated Magnetic Fields (milligauss) for proposed double circuit 345 kV Transmission Line Designs
(3.28 feet above ground)

STRUCTURE TYPE	SYSTEM CONDITION	CURRENT (AMPS)	DISTANCE TO PROPOSED CENTERLINES												
			-300'	-200'	-100'	-75'	-50'	-25'	0'	25'	50'	75'	100'	200'	300'
1 CIRCUIT	PEAK	1568.95	4.69	9.92	33.40	51.70	85.34	139.36	189.52	176.86	106.50	60.56	37.20	9.81	4.28
DELTA CFG	AVERAGE	301.58	0.90	1.91	6.41	9.94	16.42	26.78	36.42	33.99	20.48	11.64	7.16	1.89	0.82
1 CIRCUIT	PEAK	1568.95	5.11	11.71	42.31	65.97	107.98	163.14	151.84	95.33	58.60	38.09	26.27	8.80	4.22
VERT CFG	AVERAGE	301.58	0.99	2.25	8.13	12.69	20.75	31.36	29.18	18.32	11.26	7.33	5.04	1.68	0.80
2 CIRCUIT W/	PEAK	1568.95	4.22	8.80	26.33	38.21	58.78	95.62	152.26	163.43	108.04	65.97	42.25	11.71	5.11
1 CKT ACTIVE	AVERAGE	301.58	0.82	1.70	5.06	7.35	11.30	18.38	29.26	31.42	20.77	12.67	8.11	2.25	0.99
2 CIRCUIT W/	PEAK	1568.95	1.13	3.45	19.73	36.13	71.08	136.09	178.47	137.05	71.91	36.67	20.15	3.51	1.13
2 CKTS ACTIVE	AVERAGE	301.58	0.21	0.67	3.80	6.95	13.67	26.17	34.30	26.34	13.82	7.06	3.87	0.67	0.23

ENTER MVA BELOW TO
ADJUST CURRENT IN THE TABLE:

437.00 MVA PEAK
161.00 kV
1.73 3 Phase
1568.95 Amps PEAK CALC'D

84.00 MVA AVERAGE
161.00 kV
1.73 3 Phase
301.58 Amps AVERAGE CALC'D