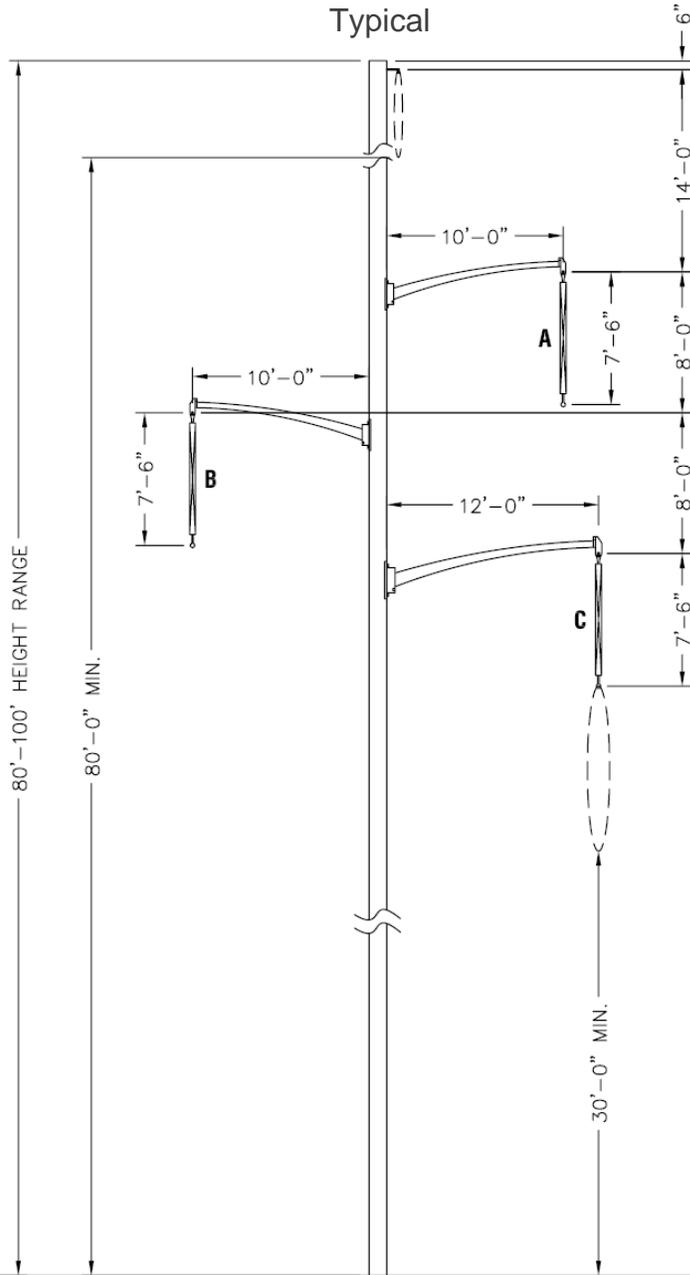


Appendix B
Structure Graphics

Potential Structure Types and Configurations for the Bemidji-Grand Rapids Line

The following pages are illustrations of the structure types and configurations currently being considered for the Bemidji-Grand Rapids Line.

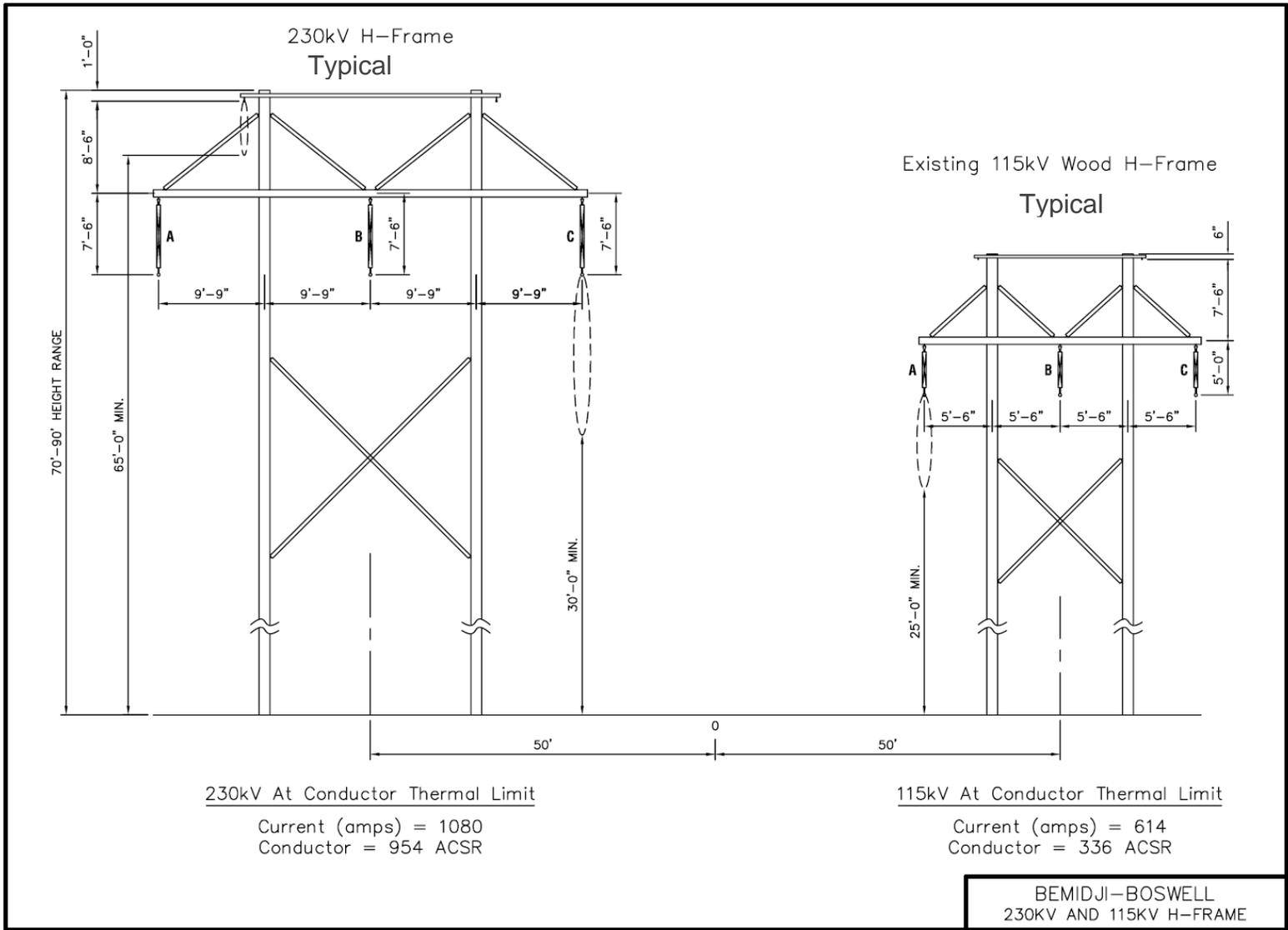
230kV Single Pole
Typical

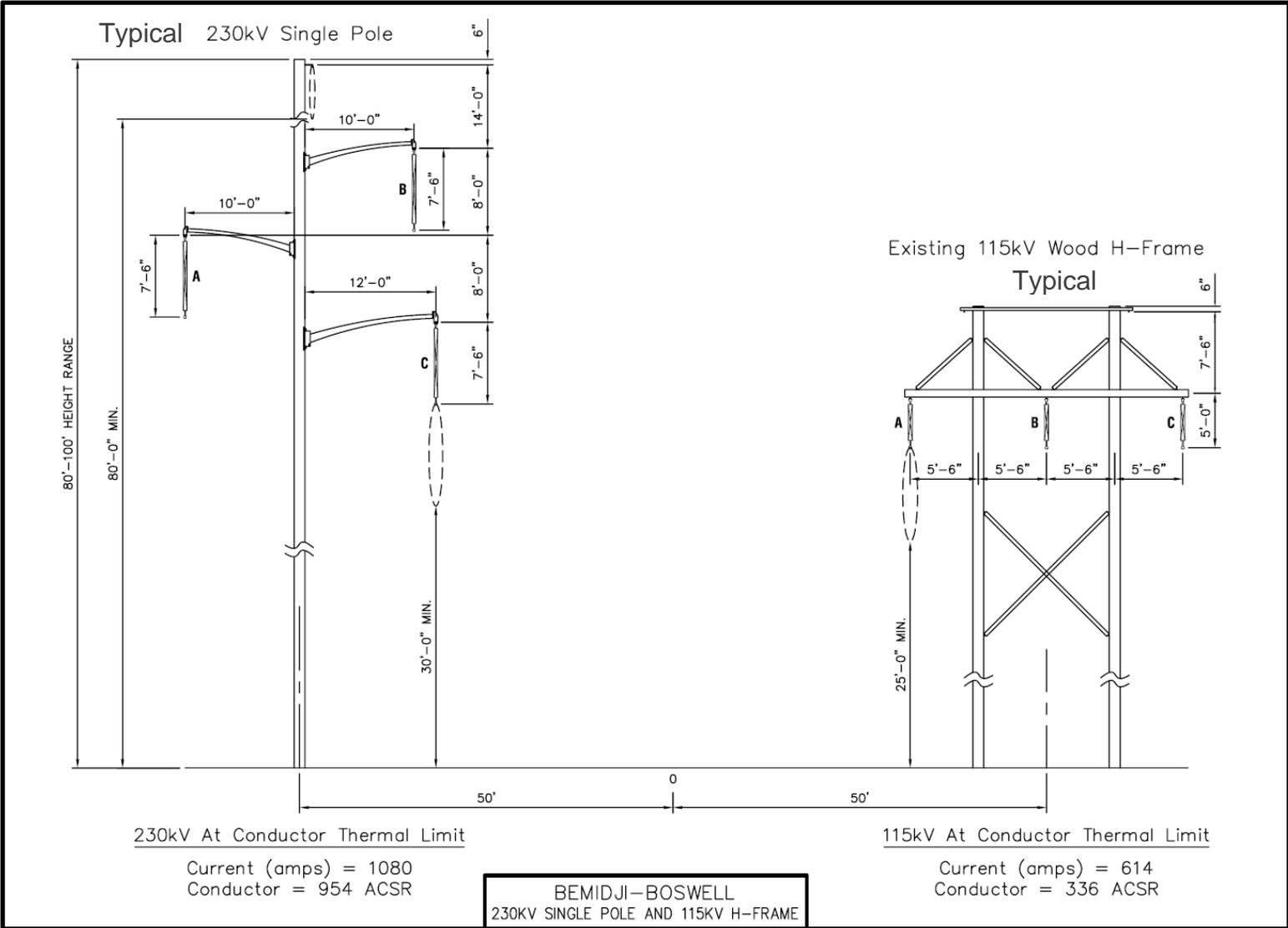


At Conductor Thermal Limit

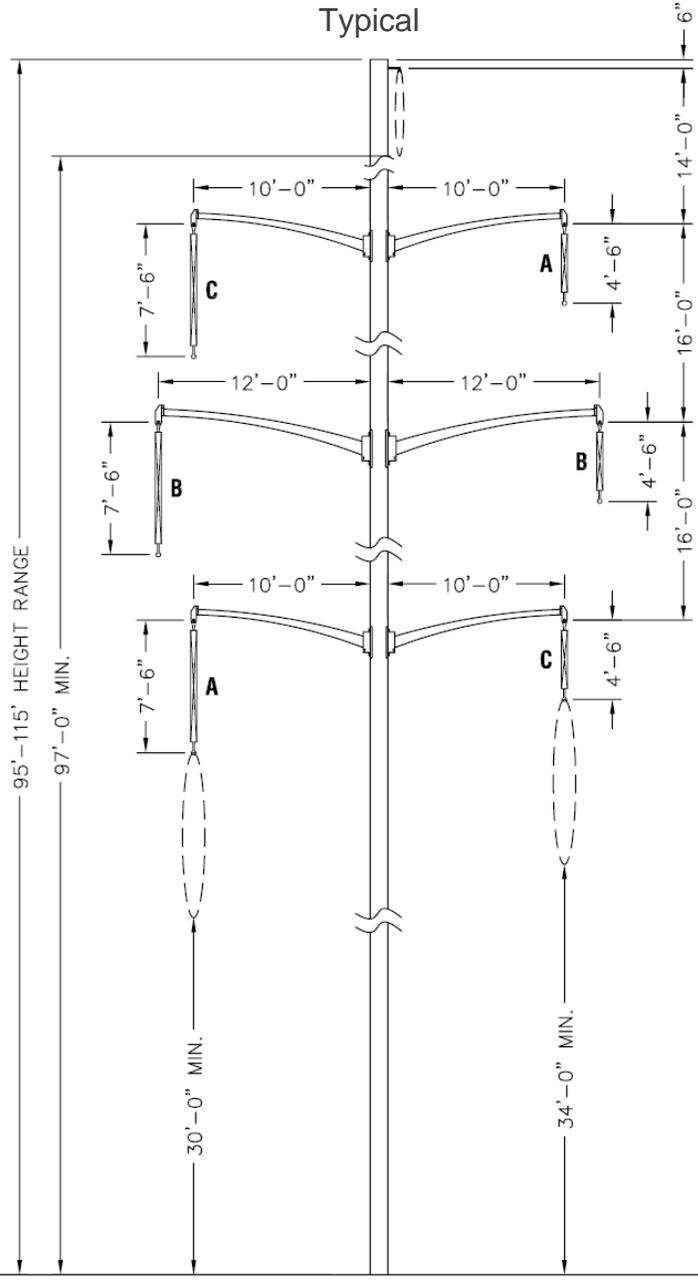
Current (amps) = 1080
Conductor = 954 ACSR

BEMIDJI-BOSWELL
230KV SINGLE POLE





230/115kV Single Pole Double Circuit
Typical



230kV At Conductor Thermal Limit

Current (amps) = 1080
Conductor = 954 ACSR

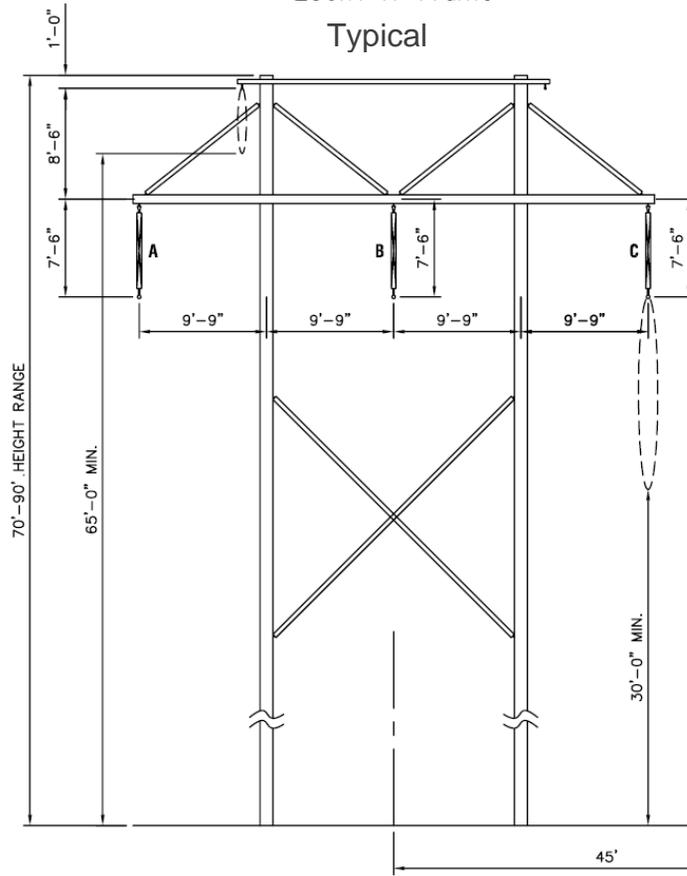
115kV At Conductor Thermal Limit

Current (amps) = 915
Conductor = 636 ACSR

BEMIDJI-BOSWELL
230/115KV SINGLE POLE DOUBLE CIRCUIT

230kV H-Frame

Typical

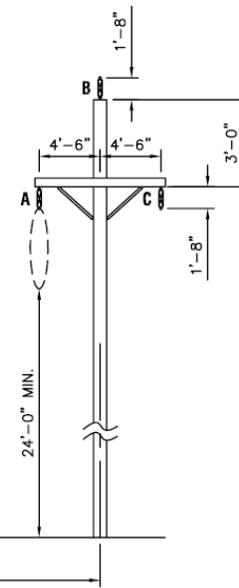


230kV At Conductor Thermal Limit

Current (amps) = 1080
 Conductor = 954 ACSR

Existing 69kV Wood Single Pole

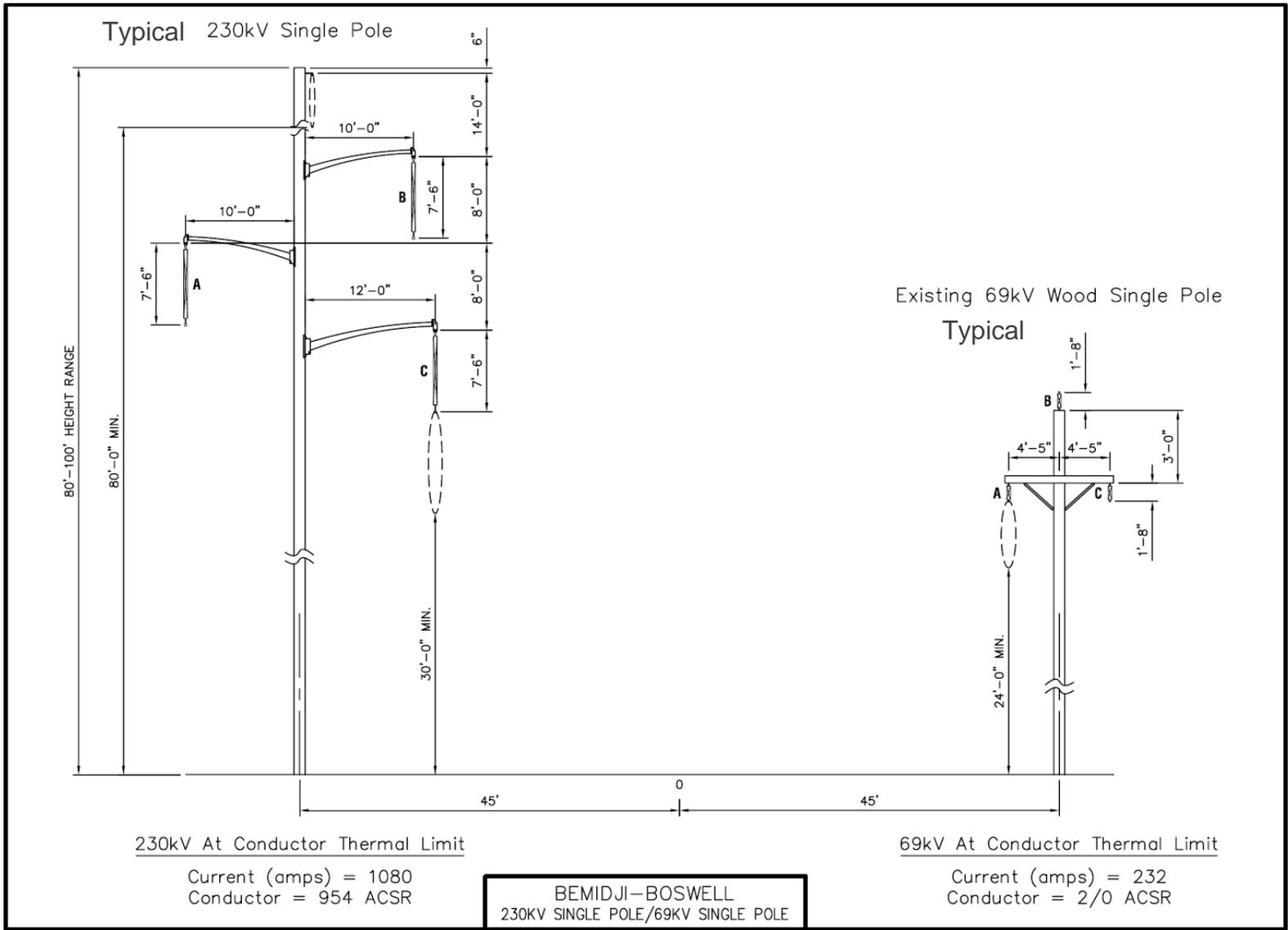
Typical



69kV At Conductor Thermal Limit

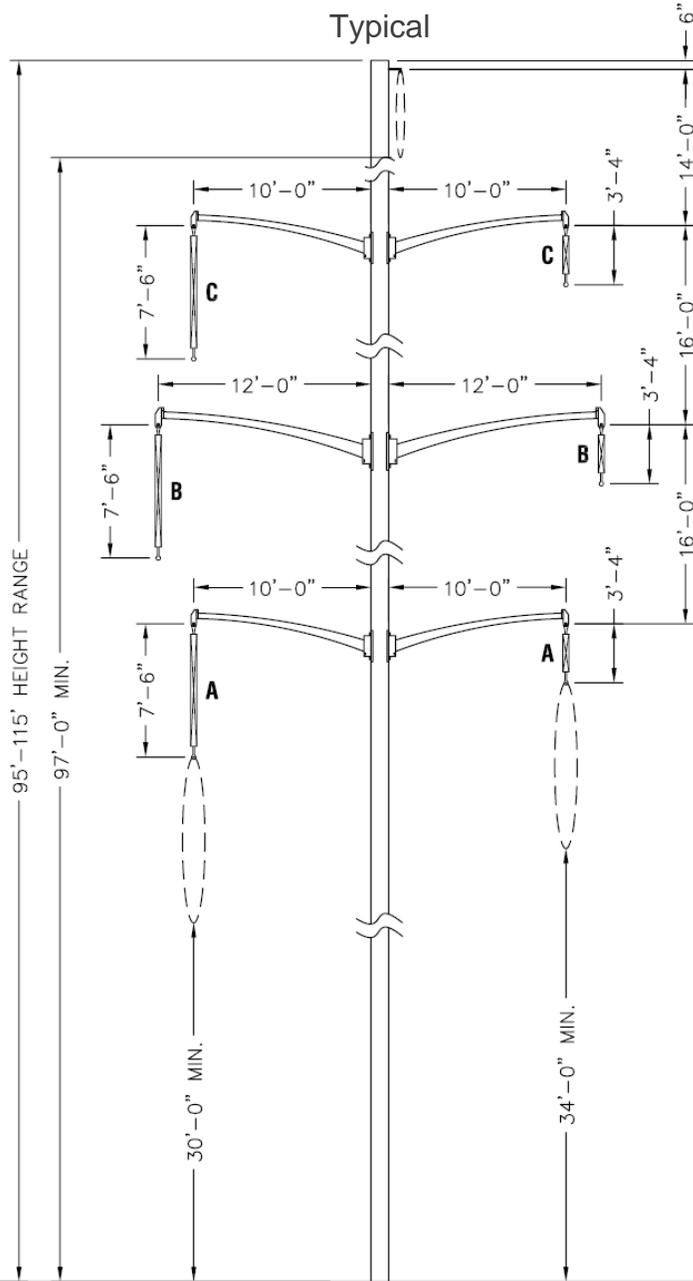
Current (amps) = 232
 Conductor = 2/0 ACSR

BEMIDJI-BOSWELL
 230KV H-FRAME/69KV SINGLE POLE



230/69kV Single Pole Double Circuit

Typical



230kV At Conductor Thermal Limit

Current (amps) = 1080
Conductor = 954 ACSR

69kV At Conductor Thermal Limit

Current (amps) = 614
Conductor = 336 ACSR

BEMIDJI-BOSWELL
230/69KV SINGLE POLE DOUBLE CIRCUIT

**Appendix C
Project Development Agreement
and Certificate of Need Outlines**

**Please see Certificate of Need at www.capx2020.com
for complete document.**

**BEMIDJI – GRAND RAPIDS
TRANSMISSION PROJECT**

PROJECT DEVELOPMENT AGREEMENT

Dated as of March 7, 2007

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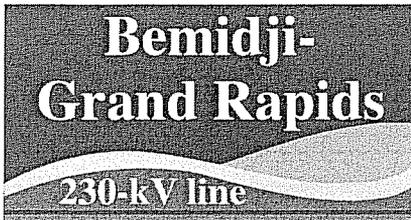
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Bemidji-Grand Rapids 230-kV transmission line
PO Box 1735
Bemidji, MN 56619-1735
888-373-4113



Delivering electricity you can rely on

March 17, 2008

Burl W. Haar
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 250
St. Paul, MN 55101

RE: APPLICATION FOR A CERTIFICATE OF NEED FOR A 230-KV TRANSMISSION LINE AND ASSOCIATED SYSTEM CONNECTIONS FROM BEMIDJI TO GRAND RAPIDS, MINNESOTA DOCKET NO. E017, E015, ET-6/CN-07-1222

Otter Tail Power Company, Minnesota Power, and Minnkota Power Cooperative, Inc. (the Applicants), on behalf of themselves and Northern States Power Company, a Minnesota corporation (Xcel Energy) and Great River Energy, are submitting today via E-filing a public and not public application for a certificate of need to construct a 230-kV transmission line between Bemidji and Grand Rapids, Minnesota (Bemidji-Grand Rapids Line).

The Bemidji-Grand Rapids Line is one of four Group I Projects of the Capacity Expansion 2020 ("CapX2020") initiative. This initiative is focused on prioritizing the transmission infrastructure investments needed in Minnesota to meet the growing demand for electricity in Minnesota and the surrounding region, and to ensure timely and efficient regulatory review and approval of those investments.

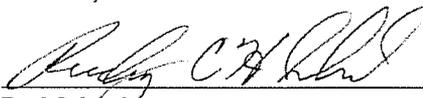
The Bemidji-Grand Rapids Line is needed to effectively meet projected future customer demand in the Bemidji area in north central Minnesota. It is also required to improve the regional transmission reliability of the larger northwestern Minnesota and eastern North Dakota region. The added transmission capacity from the Bemidji-Grand Rapids Line would assist in the potential development of wind-energy resources in portions of the Red River Valley and eastern North Dakota.

Copies of this application are being served on the parties on the attached distribution list as provided in Minnesota Rules 7849.0200, subp. 2. A short summary of our Application is being distributed as required by Minnesota Rules 78.29.2500 subp.3.

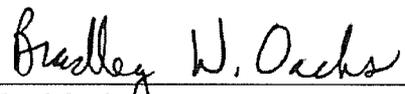
The Applicants look forward to working with all parties interested in this proceeding. Our goal is to cooperatively develop the transmission facilities needed to reliably serve Minnesotans and the upper Midwest region.

Please call Al Koeckeritz at 218-739-8416 if you have any questions regarding this filing. His email address is akoeckeritz@otpc.com. You can send him mail at this address: Otter Tail Power Company, PO Box 496, Fergus Falls, MN 56538-0496.

Sincerely,



Rod Schaeel
Vice President, Asset Management
Otter Tail Power Company



Brad Oachs
Vice President, Power Delivery and Transmission
Minnesota Power



Al Tschepen
Vice President, Planning and System Operations
Minnkota Power Cooperative, Inc.

Enclosures
cc: See attached distribution list

2153563v1

AFFIDAVIT OF SERVICE BY MAIL

STATE OF MINNESOTA)
) ss.
COUNTY OF HENNEPIN)

Cindy Kuismi of the City of Fergus Falls, County of Otter Tail, in the State of Minnesota, being duly sworn on oath says: that on the 17th day of March, she served copies of the following:

Application for a Certificate of Need for Bemidji- Grand Rapids 230-kV Transmission Line – Docket No. E017, E015, ET-6/CN-07-1222.

on the persons listed below by delivering to them, shipping prepaid, via UPS service at Fergus Falls, MN, directed to said person(s) at the address(s) shown below:

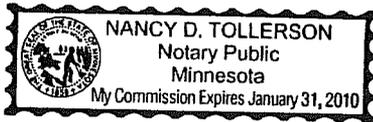
SEE ATTACHED PAGES

Cindy Kuismi

Subscribed and sworn to before me
on March 17th, 2008.

Nancy D. TollerSON

Notary Public



Bemidji-Grand Rapids 230-kv transmission line

CON distribution list

Agency	Contact	Address 1	Address 2	City	State	Zip
Minnesota Public Utilities Commission	Burl W. Haar	121 7th Place East, Suite 350		St. Paul	MN	55101
Minnesota Department of Commerce	Susan Steinhauer and Dr. Steve Rakow	85 7th Place East, Suite 500		St. Paul	MN	55101-2198
Residential Utilities Division, Attorney General's Office	John Lindell	1400 Bremer Tower	445 Minnesota St	St. Paul	MN	55101
Rural Utilities Service	Mark Plank	1400 Independence Ave.	Mail Stop 1571	Washington	DC	20250
Rural Utilities Service	Barbara Britton	1400 Independence Ave.	Mail Stop 1571	Washington	DC	20250
Bureau of Indian Affairs	Scott Doig	Whipple Federal Building	Room 550	Fort Snelling	MN	55111
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Leech Lake Band of Ojibwe	George Goggleye, Chairman	115 6th Street NW	Suite E	Cass Lake	MN	56633
Leech Lake Band of Ojibwe	Rich Robinson	115 6th Street NW	Suite E	Cass Lake	MN	56633
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U.S. Forest Service, Chippewa National Forest	Rob Harper, Supervisor	200 Ash Ave NW		Cass Lake	MN	56633
U.S. Forest Service, Chippewa National Forest	Cathy Thompson	200 Ash Ave NW		Cass Lake	MN	56633
U.S. Forest Service, Chippewa National Forest	Andrea LaVasseur	200 Ash Ave NW		Cass Lake	MN	56633
Minnesota Board of Soil and Water Resources	Jerome Deal	1501 Second Ave S		Wheaton	MN	56296
Minnesota Department of Agriculture	Robert Patton	625 North Robert St		St. Paul	MN	55155-2538
Minnesota Historical Society		345 W Kellogg Blvd		St. Paul	MN	55102-1906
Minnesota Department of Transportation	Rex Bordson	423 DOT Building	395 John Ireland Bo	St. Paul	MN	55155
Minnesota Department of Transportation	Stephen Frisco	423 DOT Building	395 John Ireland Bo	St. Paul	MN	55155
Minnesota Office of Aeronautics	Tracy Schmidt	395 John Ireland Boulevard		St. Paul	MN	55107
US Fish and Wildlife Service	Laurie Fairchild	Twin Cities Ecological Field O	4101 E 80th St	Bloomington	MNq	55425-1655
Minnesota Pollution Control Agency	Richard Newquist	520 Lafayette RD		St. Paul	MN	55155
Minnesota Department of Natural Resources	Matt Langan	520 Lafayette RD		St. Paul	MN	55155
Beltrami County Administrator	Jim Hellzer	P.O. Box 2052		Bemidji	MN	56619
Cass County Administrator	Jim Demgen	303 Minnesota Ave W	PO Box 3000	Walker	MN	56484
Hubbard County Administrator	Cal Johannsen	38179 US71		Lake George	MN	56458
Itasca County Administrator	Rusty Eichorn	31708 LaPlant Road		Grand Rapids	MN	55744
Bemidji Public Library		509 America Ave NW		Bemidji	MN	56601

Bemidji-Grand Rapids 230-kv transmission line

CON distribution list

Agency	Contact	Address 1	Address 2	City	State	Zip
Park Rapids Area Library		210 W 1st Street		Park Rapids	MN	56470
Cass Lake Community Library		223 Cedar	PO Box 836	Cass Lake	MN	56633
Grand Rapids Area Library		140 NE 2nd Street		Grand Rapids	MN	55744
Walker Public Library		207 4th Street	PO Box 550	Walker	MN	56484
Minneapolis Public Library	Minnesota Environmental Conservation Library	250 Marquette		Minneapolis	MN	53401-19902
Minnesota Legislative Reference Library		643 State Office Building				
CapX 2020	Terry Grove	17845 E Highway 10	PO Box 800	St. Paul	MN	55155-1050
CapX 2020	Laura McCarten	414 Nicollet Mall, MP8C		Elk River	MN	55330-0800
CapX 2020	Tim Carlsgaard	414 Nicollet Mall		Minneapolis	MN	55401
				Minneapolis	MN	55401-1927
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Otter Tail Power Company	Kimberly Johnson	215 Cascade St. S	PO Box 496	Fergus Falls	MN	56538
Otter Tail Power Company	Rod Scheel	215 Cascade St. S	PO Box 496	Fergus Falls	MN	56538
Otter Tail Power Company	Cindy Kuismi	215 Cascade St. S	PO Box 496	Fergus Falls	MN	56538
Otter Tail Power Company	Jim Metcalf	215 Cascade St. S	PO Box 496	Fergus Falls	MN	56538
Otter Tail Power Company	Harvey McMahon	215 Cascade St. S	PO Box 496	Fergus Falls	MN	56538
Otter Tail Power Company	Tim Rogelstad	215 Cascade St. S	PO Box 496	Fergus Falls	MN	56538
Minnkota Power Cooperative	John Graves	1822 Mill Road	PO Box 13200	Fergus Falls	MN	56538
Minnkota Power Cooperative	Al Tchapan	1822 Mill Road	PO Box 13200	Grand Forks	ND	58208-3200
Minnkota Power Cooperative	Tim Bartels	1822 Mill Road	PO Box 13200	Grand Forks	ND	58208-3200
Minnesota Power	Bob Lindholm	30 Superior St. W		Grand Forks	ND	58208-3200
Minnesota Power	Dave Van House	30 Superior St. W		Duluth	MN	55802
Minnesota Power	Jim Atkinson	30 Superior St. W		Duluth	MN	55802
Minnesota Power		30 Superior St. W		Duluth	MN	55802
Minnesota Power		30 Superior St. W		Duluth	MN	55802
Great River Energy	Laureen Ross McCallib	17845 Highway 10		Duluth	MN	55802
Great River Energy	Fayette Cote	17845 Highway 10		Elk River	MN	55330-1500
Great River Energy	Craig Poorker	17845 Highway 10		Elk River	MN	55330-1500
Great River Energy		17845 Highway 10		Elk River	MN	55330-1500
Great River Energy		17845 Highway 10		Elk River	MN	55330-1500
Xcel Energy	Jim Alders	414 Nicollet Mall		Elk River	MN	55330-1500
Xcel Energy	Darrin Lahr	8701 Monticello Ln N		Minneapolis	MN	55401-1927
Xcel Energy	Grant Stevenson	414 Nicollet Mall		Osseo	MN	55369-4550
Xcel Energy				Minneapolis	MN	55401-1927
Xcel Energy						
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HDR Inc.	Dan Schmidt	701 Xenia Ave So. Suite 600		Minneapolis	MN	55416

Bemidji-Grand Rapids 230-kv transmission line

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Agency	Contact	Address 1	Address 2	City	State	Zip
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HDR Inc.	Kristen Steckman	701 Xenia Ave So. Suite 600		Minneapolis	MN	55416
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Briggs & Morgan LLC	Mike Krikava	2200 IDS Center	80 South 8th Street	Minneapolis	MN	55403
Briggs & Morgan LLC	Shelle Herstein	2200 IDS Center	80 South 8th Street	Minneapolis	MN	55404
Briggs & Morgan LLC		2200 IDS Center	80 South 8th Street	Minneapolis	MN	55405
Briggs & Morgan LLC		2204 IDS Center	80 South 8th Street	Minneapolis	MN	55406
National Consultants	Roger Moe	17444 Park Ave SE		Erskine	MN	56535

Public Document- Trade Secret Data Excised

**APPLICATION FOR A CERTIFICATE OF NEED
FOR 230 KV TRANSMISSION LINE
AND ASSOCIATED SYSTEM CONNECTIONS
FROM BEMIDJI TO GRAND RAPIDS, MINNESOTA**

DOCKET NO. E017, E015, ET-6/CN-07-1222

SUBMITTED BY

**OTTER TAIL POWER COMPANY, MINNESOTA POWER, AND
MINNKOTA POWER COOPERATIVE INC.**

MARCH 17, 2008

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- APPENDIX B:** MPUC Data Exemption Order (Dec. 24, 2007); MPUC Notice Plan Order (Nov. 29, 2007); Approved Notices; and Summary of Certificate of Need Filing
- APPENDIX C:** Potential Transmission Structure Types and Configurations; Electric Field Graphs; Magnetic Field Graphs; and Audible Noise Level Graphs
- APPENDIX D:** Map of Load Centers in North Zone; Winter Peak Demand and Consumption Forecasting Methodology; Winter Peak Demand Forecast for North Zone and Bemidji Load Center; and Consumption Forecast for Minnesota Portion of North Zone
- APPENDIX E:** Renewable Generation Forecasts
- APPENDIX F:** Demand Side Management and Conservation
- APPENDIX G:** Draft Macro Corridor Study (March 2008)

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