APPENDIX A

CERTIFICATE OF NEED APPLICATION COMPLETENESS CHECKLIST

Duluth Loop Reliability Project Certificate of Need Application Completeness Checklist

Authority	Required Information	Location in Application
Minn. R. 7829.2500, Subp. 2	Brief summary of filing on separate page sufficient to apprise potentially interested parties of its nature and general content	Filing Summary
Minn. R. 7849.0200, Subp. 2	Title Page and Table of Contents	Title Page and Table of Contents
Minn. R. 7849.0200, Subp. 4	Cover Letter	Cover Letter
Minn. R. 7849.0220, Subp. 3	Joint Ownership and Multiparty use	N/A
Minn. R. 7849.0240	Need summary and additional considerations	
Subp. 1	Summary of the major factors that justify the need for the proposed facility	§§ 1.2, 3.1, 3.3
Subp. 2	Relationship of the proposed facility to the following socioeconomic considerations:	_
A.	Socially beneficial uses of the output of the facility	§ 3.9
B.	Promotional activities that may have given rise to the demand for the facility	§ 3.7
C.	Effects of the facility in inducing future development	§ 3.8
Minn. R. 7849.0260	Proposed LHVTL and Alternatives	_
A.	A description of the type and general location of the proposed line, including:	_
(1)	Design voltage	§ 2.1
(2)	Number, sizes and types of conductors	§ 2.1

Authority	Required Information	Location in Application
(3)	Expected losses under projected maximum loading and under projected average loading in the length of the line and at terminals or substations	EXEMPT provided alternative data is supplied
	ALTERNATIVE DATA – Estimated system losses	§ 3.5
(4)	Approximate length of the proposed line	§ 2.1
(5)	Approximate locations of DC terminals or AC substations on a map	§ 2.1, Appendix J
(6)	List of likely affected counties	§ 7.2
B.	Discussion of the available alternatives including:	_
(1)	New generation	§ 4.2
(2)	Upgrading existing transmission lines	§ 4.4
(3)	Transmission lines with different voltages or conductor arrays	§§ 4.3. 4.7
(4)	Transmission lines with different terminals or substations	§ 4.5
(5)	Double circuiting of existing transmission lines	§ 4.6
(6)	If facility for DC (AC) transmission, an AC (DC) transmission line	§ 4.8
(7)	If proposed facility is for overhead (underground) transmission, an underground (overhead) transmission line	§ 4.9
(8)	Any reasonable combination of alternatives (1) – (7)	Chapter 4
C.	For the facility and for each alternative in B, a discussion of:	_
(1)	Total cost in current dollars	§ 2.2.1

Authority	Required Information	Location in Application
(2)	Service life	§ 6.4.1
(3)	Estimated average annual availability	§ 6.4.1
(4)	Estimated annual O&M costs in current dollars	§ 2.2.2
(5)	Estimate of its effect on rates system wide and in Minnesota	§ 2.2.3
(6)	Efficiency expressed for a transmission facility as the estimated losses under projected maximum loading and under projected average loading in the length of the transmission line and at the terminals or substations	EXEMPT provided alternative data is supplied
	ALTERNATIVE DATA – Estimated system losses	§ 3.5
(7)	Major assumptions made in subitems (1) – (6)	
D.	A map (of appropriate scale) showing the applicant's system or load center to be served by the proposed LHVTL	§§ 2.1, 3.2
E.	Such other information about the proposed facility and each alternative as may be relevant to determination of need.	Chapter 4
Minn. R. 7849.0270	Content of Forecast	_
Minn. R. 7849.0270, Subp. 1	Peak demand and annual consumption data within the applicant's service area and system	EXEMPT provided alternative data is supplied
	ALTERNATIVE DATA – Local substation load data and Minnesota Power's most recent Annual Electric Utility Forecast Report	§ 3.4 and Appendix P
Minn. R. 7849.0270, Subp. 2	Minnesota forecast data; forecast demand data by customer class, peak period, and month; estimated system annual revenue per kilowatt hour; estimated average weekday system load factor by month.	EXEMPT except as noted below and provided alternative data is supplied

Authority	Required Information	Location in Application
	ALTERNATIVE DATA – Local substation load data and Minnesota Power's most recent Annual Electric Utility Forecast Report	§ 3.4 and Appendix P
	Subp. 2 (E) – Alternative explanation of how wholesale electricity costs are spread and general financial effect on Minnesota Power customers.	§ 2.2.3
Minn. R. 7849.0270, Subp. 3	Detail of the forecast methodology used in subp. 2.	EXEMPT provided alternative data is supplied
Minn. R. 7849.0270, Subp. 4	Discussion of database used in current forecasting.	EXEMPT provided alternative data is supplied
Minn. R. 7849.0270, Subp. 5	Discussion of each essential assumption made in forecast preparation and sensitivity to variations in assumptions.	EXEMPT provided alternative data is supplied
Minn. R. 7849.0270, Subp. 6	Coordination of forecasts.	EXEMPT provided alternative data is supplied
	ALTERNATIVE DATA FOR SUBPS. 3-6 – Local substation load data and Minnesota Power's most recent Annual Electric Utility Forecast Report	§ 3.4 and Appendix P
Minn. R. 7849.0280	System Capacity	_
	Description of ability of existing system to meet demand forecast including:	_
A.	Power planning programs	Chapter 3
В.	Seasonal firm purchases and sales	EXEMPT
C.	Seasonal participation purchases and sales	EXEMPT
D.	Load and generation capacity data requested in subitems 1-13 for summer and winter seasons for each forecast year, including anticipated purchases, sales, and capacity retirements and additions except those that depend on a not yet issued certificate of need.	EXEMPT

Authority	Required Information	Location in Application
E.	Summer and winter season load generation and capacity in years subsequent to application contingent on proposed facility	EXEMPT
F.	Summer and winter season load generation and capacity including all projected purchases, sales and generation in years subsequent to application	EXEMPT
G.	List of proposed additions and retirements in generating capacity for each forecast year subsequent to application	EXEMPT
Н.	Graph of monthly adjusted net demand and capability with difference between capability and maintenance outages plotted	EXEMPT
I.	Appropriateness and method of determining system reserve margins	EXEMPT
Minn. R. 7849.0290	Conservation Programs	_
A.	Persons responsible for energy conservation and efficiency programs	EXEMPT provided alternative data is supplied
B.	List of energy conservation and efficiency goals and objectives	EXEMPT provided alternative data is supplied
C.	Description of programs considered, implemented and rejected	EXEMPT provided alternative data is supplied
D.	Description of major accomplishments in conservation and efficiency	EXEMPT provided alternative data is supplied
E.	Description of future plans with respect to conservation and efficiency	EXEMPT provided alternative data is supplied
F.	Quantification of the manner by which these programs impact the forecast	EXEMPT provided alternative data is supplied
	ALTERNATIVE DATA FOR A-F — Minnesota Power will provide a summary of its 2021 Integrated Resource Plan and Conservation Improvement Program filings.	Appendix Q
Minn. R. 7849.0300	Consequence of Delay	EXEMPT from three levels of demand
Minn. R. 7849.0310	Required Environmental Information	

Authority	Required Information	Location in Application
Minn. R. 7849.0330	Transmission Facilities	_
	Data for each alternative that would require LHVTL construction including:	_
A.	For overhead transmission lines	_
(1)	Schematics showing dimensions of support structures	§ 2.1
(2)	Discussion of electric fields	§ 6.5
(3)	Discussion of ozone and nitrogen oxide emissions	§ 6.7
(4)	Discussion of radio and television interference	§ 6.8
(5)	Discussion of audible noise	§ 6.9
B.	For underground transmission facilities:	N/A
(1)	Types and dimensions of cable systems	N/A
(2)	Types and qualities of cable system materials	N/A
(3)	Heat released in kW per foot of cable	N/A
C.	Estimated right-of-way required for the facility	§ 6.1
D.	Description of construction practices	§ 6.2
E.	Description of O&M practices	§ 6.4
F.	Estimated workforce required for construction and O&M	§§ 6.2, 6.4

Authority	Required Information	Location in Application
G.	Description of region between endpoints in likely area for routes emphasizing a three mile radius of endpoints including:	_
(1)	Hydrological features	§§ 7.1, 7.5
(2)	Vegetation and wildlife	§§ 7.1, 7.5
(3)	Physiographic regions	§§ 7.1, 7.5, 7.6
(4)	Land use types	§ 7.6
Minn. R. 7849.0340	No-Facility Alternative	EXEMPT from three levels of demand