



MINNESOTA DEPARTMENT OF COMMERCE
State Energy Office, Division of Energy Resources
85 7th Place East, Suite 280
St. Paul MN 55101
Direct: 651-539-1851
Email: rule7610.reports@state.mn.us (preferred)

**ELECTRIC UTILITY INFORMATION REPORTING
FORECAST SECTION**

*** RESPONSE DUE ON OR BEFORE JULY 1, 2024 ***

Instructions follow for the completion of the forecast section (Excel workbook) for the annual reporting requirements by specific electric utilities in Minnesota. Rules are cited where appropriate to help clarify what information should be included. Please complete the forecast section workbook, include required attachments, and return them to the Minnesota Department of Commerce.

7610.0300 WHO MUST FILE [Registration Tab]

The following utilities must file a forecast: Northern States Power Company, Minnesota Power, Otter Tail Power Company, Interstate Power Company, Minnkota Power Cooperative, Cooperative Power Association, United Power Association and Dairyland Power Cooperative, and the Southern Minnesota Municipal Power Agency. Data that is compiled within the same calendar year for either an extended forecast or a certificate of need application may be substituted interchangeably to satisfy those portions of both sets of rules that have identical data requirements. For these cases, references to the material substituted and a copy of the appropriate reference material must be submitted to meet the reporting requirements.

Please update this registration statement annually.

Report Year: 2023

Utility Name		Entity ID#	
		RILS ID#	
Street Address		City, State, Zip Code	
Telephone (include area code)	Utility Type: <input type="checkbox"/> Private <input type="checkbox"/> Public <input type="checkbox"/> Co-op		
Contact Name	Contact Title	Telephone ()	
Contact Street Address	City, State, Zip Code		
Contact Email Address			
Name of Person Preparing Forms	Preparer's Title	Date	
Preparer's Email Address			

COMMENTS

7610.0310 CONTENT OF HISTORICAL DATA AND FORECAST

The following data must be provided:

- A. **[SysConsumers and MNConsumers Tabs]** the annual electrical consumption by ultimate consumers and number of customers at year's end within the utility's system and for its Minnesota service area only for the past calendar year, the present calendar year, and the subsequent 14 years, for each of the following categories:
- (1) farm, which for reporting purposes means any tract of land used primarily for agricultural purposes, including irrigation and drainage pumping;
 - (2) nonfarm-residential, including electricity supplied through a single meter for both residential and commercial uses reported according to its principal use and apartment buildings reported as residential even if not separately metered;
 - (3) commercial, including wholesale and retail trade; communications industries; public and private office buildings, banks, and dormitories; insurance, real estate and rental agencies; hotels and motels; personal business and auto repair services; medical and educational facilities, governmental units, excluding military bases; warehouses other than manufacturer-owned; and electric, gas, water, water pumping other than pumping for agricultural irrigation, and other utilities;
 - (4) industrial and mining, including all manufacturing industries, construction operations, and petroleum refineries, except that mining must be reported as a separate category if annual sales are greater than 1,000 gigawatt hours;
 - (5) street and highway lighting;
 - (6) other ultimate consumers, including municipal water pumping facilities, oil and gas pipeline pumping facilities, military camps and bases, and other consumers not reported in subitems (1) to (5); and
 - (7) the sum of subitems (1) to (6).
- B. **[Consumption Tab]** the annual system consumption and generation data for the last year, the present year, and the 14 subsequent years for each of the following categories:
- (1) annual total electrical consumption in megawatt-hours by ultimate consumers within the utility's Minnesota service area;
 - (2) annual total electrical consumption in megawatt-hours by ultimate consumers outside its Minnesota service area;
 - (3) the number of megawatt-hours the utility has received or expects to receive from other systems for sale to its ultimate consumers or to other utilities;
 - (4) the number of megawatt-hours the utility has delivered or expects to deliver to other systems for resale;
 - (5) total annual net generation of electrical energy by the utility in megawatt-hours;
 - (6) electrical energy loss in megawatt-hours due to transmission line and substation losses; and
 - (7) total semiannual electrical consumption by the utility's ultimate consumers during May through October and November through April;
- C. **[PeakDemand Tab]** an estimate of the demand for power by ultimate consumers in the utility's system for each of the categories listed in item A at the time of the last annual system peak demand;
- D. **[PeakDemand Tab]** the utility's system peak demand by month for the last calendar year;
- E. **[FirmPurch and FirmSales Tabs]** the utility's seasonal firm purchases and seasonal firm sales for each utility involved in each transaction for the last year, the present year, and the 14 subsequent years;
- F. **[ParticipPurch and ParticipSales Tabs]** the utility's seasonal participation purchases and participation sales for each utility involved in each transaction for the last year, the present year, and the 14 subsequent years;
- G. **[Load&GenCap Tab]** for the summer season and for the winter season of the last year, the present year, and the 14 subsequent years, the load and generation capacity data requested in subitems (1) to (15), including all anticipated purchases, sales, capacity retirements, and capacity additions, including those that may depend upon certificates of need not yet issued:
- (1) seasonal maximum demand;
 - (2) schedule L purchase at the time of seasonal system demand;
 - (3) seasonal system demand;
 - (4) annual system demand;
 - (5) firm purchases - total;

- (6) firm sales - total;
 - (7) seasonal adjusted net demand which is subitem (3) minus subitem (5) plus subitem (6);
 - (8) annual adjusted net demand which is subitems (4) minus subitem (5) plus subitem (6);
 - (9) net generating capability;
 - (10) participation purchases - total;
 - (11) participation sales - total;
 - (12) adjusted net capability which is subitem (9) plus subitem (10) minus subitem (11);
 - (13) net reserve capacity obligation;
 - (14) total firm capacity obligation which is subitem (7) plus subitem (13); and
 - (15) surplus or deficit (-) capacity which is subitem (12) minus subitem (14);
- H. **[Add&Retire Tab]** for the present calendar year and the subsequent 14 years, a list in megawatts of proposed additions and retirements in generating capability; and
- I. the utility's method of determining its system reserve margin and the appropriateness of the margin.

7610.0315 FORECASTS USING ALTERNATIVE SECTOR DEFINITIONS

Utilities required to provide forecasts by category of consumption under part 7610.0310, Item A, may request in writing that the Department accept alternative definitions for one or more of the categories defined in part 7610.0310, Item A. A utility must provide the alternative definition or definitions in writing. This must be filed with each subsequent forecast following approval by the Department. If the Department concludes that a previously accepted definition is no longer acceptable, the Department must inform the utility in writing at least six months before the reporting date for the next annual forecast.

7610.0320 FORECAST DOCUMENTATION

Subpart 1. **Forecast methodology.** Each applicant may use the forecast methodology that yields the most useful results for its system. However, the applicant shall detail in written form the forecast methodology employed to obtain the forecasts provided under parts 7610.0300 to 7610.0315, including:

- A. the overall methodological framework that is used;
- B. the specific analytical techniques that are used, their purpose, and the components of the forecast to which they have been applied;
- C. the manner in which these specific techniques are related in producing the forecast;
- D. where statistical techniques have been used, the purpose of the technique, typical computations (e.g., computer printouts, formulas used) specifying variables and data, and the results of appropriate statistical tests;
- E. forecast confidence levels or ranges of accuracy for annual peak demand and annual electrical consumption;
- F. a brief analysis of the methodology used, including its strengths and weaknesses, its suitability to the system, cost considerations, data requirements, past accuracy, and any other factors considered significant by the utility.

Subpart 2. **Database forecasts.** The utility shall discuss in written form the data base used in arriving at the forecast presented in part 7610.0310 including:

- A. a complete list of all data sets used in making the forecast, including a brief description of each data set and an explanation of how each was obtained, (e.g., monthly observations, billing data, consumer survey, etc.) or a citation to the source (e.g., population projection from the state demographer); and
- B. a clear identification of any adjustments made to raw data to adapt them for use in forecasts, including the nature of the adjustment, the reason for the adjustment, and the magnitude of the adjustment.

Subpart 3. **Discussion.** The utility shall discuss in writing each essential assumption made in preparing the forecasts, including the need for the assumption, the nature of the assumption, and the sensitivity of forecast results to variations in the essential assumptions.

Subpart 4. **Subject of assumption.** The utility shall discuss the assumptions made regarding the availability of alternative sources of energy, the expected conversion from other fuels to electricity or vice versa, future prices of electricity for customers in the utility's system and the effect that such price changes will likely have on the

utility’s system demand, the assumptions made in arriving at any data requested in part 7610.0310 that is not available historically or not generated by the utility in preparing its own internal forecast, the effect of existing energy conservation programs under federal or state legislation on long-term electrical demand, the projected effect of new conservation programs that the utility deems likely to occur through future state and federal legislation on long-term electrical demand, and any other factor considered by the utility in preparing the forecast. In addition the utility shall state what assumptions were made, if any, regarding current and anticipated saturation levels of major electrical appliances and electric space heating within the utility’s service area. If a utility makes no assumptions in preparing its forecast with regard to current and anticipated saturation levels of major electrical appliances and electric space heating, it shall simply state this in its discussion of assumptions.

Subpart 5. **Coordination of forecasts with other systems.** The utility shall provide in writing:

- A. a description of the extent to which the utility coordinates its load forecasts with those of other systems, such as neighboring systems, associate systems in a power pool, or coordinating organizations; and
- B. a description of the manner in which such forecasts are coordinated, and any problems experienced in efforts to coordinate load forecasts.

LIST OF FORMS AND DATA REQUESTS CONTAINED IN THIS REPORT

7610.0310, Item A. System Forecast of Annual Electric Consumption by Ultimate Consumers	5-6
7610.0310, Item A: Minnesota Only Forecast of Annual Electric Consumption by Ultimate Consumers	7-8
7610.0310, Item B: Forecast of Annual System Consumption and Generation Data	9-10
7610.0310, Item C: Peak Demand by Ultimate Consumers at Time of Annual Peak (in MWs)	11
7610.0310, Item D: Peak Demand by Month for the Last Calendar Year.....	11
7610.0310, Item E, Part 1: Firm Purchases.....	12
7610.0310, Item E, Part 2: Firm Sales	13
7610.0310, Item F, Part 1: Participation Purchases.....	14
7610.0310, Item F, Part 2: Participation Sales	15
7610.0310, Item G: Load and Generation Capacity.....	16-17-18
7610.0310, Item H: Additions and Retirements	19
7610.0400: Present Facilities (use Page 22 within these instructions)	20
7610.0410: Future Facility Additions	23
7610.0420: Future Facility Retirements	23
7610.0430: Fuel Requirements and Generation by Fuel Type	23-24
7610.0500: Transmission Lines.....	25
7610.0600, Item A: 24-Hour Peak Day Demand.....	26

7610.0310, Item A. SYSTEM FORECAST OF ANNUAL ELECTRIC CONSUMPTION BY ULTIMATE CONSUMERS

[SysConsumers Tab]

Provide actual data for your entire system for the past year, your estimate for the present year and all future forecast years. Please remember that the number of customers *should reflect the number of customers at year's end, not the number of meters.*

			FARM	NON-FARM RESIDENTIAL	COMMERCIAL	MINING *
Past Year	2023	No. of Customers				
		MWH				
Present Year	2024	No. of Customers				
		MWH				
1 st Forecast Year	2025	No. of Customers				
		MWH				
2 nd Forecast Year	2026	No. of Customers				
		MWH				
3 rd Forecast Year	2027	No. of Customers				
		MWH				
4 th Forecast Year	2028	No. of Customers				
		MWH				
5 th Forecast Year	2029	No. of Customers				
		MWH				
6 th Forecast Year	2030	No. of Customers				
		MWH				
7 th Forecast Year	2031	No. of Customers				
		MWH				
8 th Forecast Year	2032	No. of Customers				
		MWH				
9 th Forecast Year	2033	No. of Customers				
		MWH				
10 th Forecast Year	2034	No. of Customers				
		MWH				
11 th Forecast Year	2035	No. of Customers				
		MWH				
12 th Forecast Year	2036	No. of Customers				
		MWH				
13 th Forecast Year	2037	No. of Customers				
		MWH				
14 th Forecast Year	2038	No. of Customers				
		MWH				

COMMENTS

* MINING needs to be reported as a separate category only if annual sales are greater than 1,000 GWH. Otherwise, include MINING in the INDUSTRIAL category.

7610.0310, Item A. SYSTEM FORECAST OF ANNUAL ELECTRIC CONSUMPTION BY ULTIMATE CONSUMERS
[SysConsumers Tab] (Continued)

			INDUSTRIAL	STREET & HIGHWAY LIGHTING	OTHER	SYSTEM TOTALS (MWH's should equal Column 1 + Column 2 on Page 9)
Past Year	2023	No. of Customers				
		MWH				
Present Year	2024	No. of Customers				
		MWH				
1 st Forecast Year	2025	No. of Customers				
		MWH				
2 nd Forecast Year	2026	No. of Customers				
		MWH				
3 rd Forecast Year	2027	No. of Customers				
		MWH				
4 th Forecast Year	2028	No. of Customers				
		MWH				
5 th Forecast Year	2029	No. of Customers				
		MWH				
6 th Forecast Year	2030	No. of Customers				
		MWH				
7 th Forecast Year	2031	No. of Customers				
		MWH				
8 th Forecast Year	2032	No. of Customers				
		MWH				
9 th Forecast Year	2033	No. of Customers				
		MWH				
10 th Forecast Year	2034	No. of Customers				
		MWH				
11 th Forecast Year	2035	No. of Customers				
		MWH				
12 th Forecast Year	2036	No. of Customers				
		MWH				
13 th Forecast Year	2037	No. of Customers				
		MWH				
14 th Forecast Year	2038	No. of Customers				
		MWH				

COMMENTS

7610.0310, Item A. MINNESOTA-ONLY FORECAST OF ANNUAL ELECTRIC CONSUMPTION BY ULTIMATE CONSUMERS [MNConsumers Tab]

Provide actual data for your Minnesota service area only, for the past year, your best estimate for the present year and all future forecast years. The definitions shall be the same as those used in 7610.0310, Item A on the second page of this report. Please remember that the number of customers should reflect the **actual number of customers** the utility has in that category at year’s end, **not the number of meters**.

			FARM	NON-FARM RESIDENTIAL	COMMERCIAL	MINING *
Past Year	2023	No. of Customers				
		MWH				
Present Year	2024	No. of Customers				
		MWH				
1 st Forecast Year	2025	No. of Customers				
		MWH				
2 nd Forecast Year	2026	No. of Customers				
		MWH				
3 rd Forecast Year	2027	No. of Customers				
		MWH				
4 th Forecast Year	2028	No. of Customers				
		MWH				
5 th Forecast Year	2029	No. of Customers				
		MWH				
6 th Forecast Year	2030	No. of Customers				
		MWH				
7 th Forecast Year	2031	No. of Customers				
		MWH				
8 th Forecast Year	2032	No. of Customers				
		MWH				
9 th Forecast Year	2033	No. of Customers				
		MWH				
10 th Forecast Year	2034	No. of Customers				
		MWH				
11 th Forecast Year	2035	No. of Customers				
		MWH				
12 th Forecast Year	2036	No. of Customers				
		MWH				
13 th Forecast Year	2037	No. of Customers				
		MWH				
14 th Forecast Year	2038	No. of Customers				
		MWH				

COMMENTS

* MINING needs to be reported as a separate category only if annual sales are greater than 1,000 GWH. Otherwise, include MINING in the INDUSTRIAL category.

7610.0310, Item A. MINNESOTA-ONLY FORECAST OF ANNUAL ELECTRIC CONSUMPTION BY ULTIMATE CONSUMERS [MNConsumers Tab] (Continued)

			INDUSTRIAL	STREET & HIGHWAY LIGHTING	OTHER	MN-ONLY TOTALS (MWH's should equal Column 1 on Page 9)
Past Year	2023	No. of Customers				
		MWH				
Present Year	2024	No. of Customers				
		MWH				
1 st Forecast Year	2025	No. of Customers				
		MWH				
2 nd Forecast Year	2026	No. of Customers				
		MWH				
3 rd Forecast Year	2027	No. of Customers				
		MWH				
4 th Forecast Year	2028	No. of Customers				
		MWH				
5 th Forecast Year	2029	No. of Customers				
		MWH				
6 th Forecast Year	2030	No. of Customers				
		MWH				
7 th Forecast Year	2031	No. of Customers				
		MWH				
8 th Forecast Year	2032	No. of Customers				
		MWH				
9 th Forecast Year	2033	No. of Customers				
		MWH				
10 th Forecast Year	2034	No. of Customers				
		MWH				
11 th Forecast Year	2035	No. of Customers				
		MWH				
12 th Forecast Year	2036	No. of Customers				
		MWH				
13 th Forecast Year	2037	No. of Customers				
		MWH				
14 th Forecast Year	2038	No. of Customers				
		MWH				

COMMENTS

7610.0310, Item B. FORECAST OF ANNUAL SYSTEM CONSUMPTION AND GENERATION DATA [Consumption Tab]
 (Express as Indicated in **Megawatt Hours** or **Megawatts**)

It is recognized that there may be circumstances in which the data entered by the utility is more appropriate or accurate than the value in the corresponding automatically-calculated cell. If the value in the automatically-calculated cell does not match the value that your utility entered, please provide an explanation in the Comments area at the bottom of the worksheet tab.

		Column 1	Column 2	Column 3	Column 4
		CONSUMPTION BY ULTIMATE CONSUMERS IN MINNESOTA MWH [7610.0310 B(1)]	CONSUMPTION BY ULTIMATE CONSUMERS OUTSIDE OF MINNESOTA MWH [7610.0310 B(2)]	RECEIVED FROM OTHER UTILITIES MWH [7610.0310 B(3)]	DELIVERED FOR RESALE MWH [7610.0310 B(4)]
Past Year	2023				
Present Year	2024				
1 st Forecast Year	2025				
2 nd Forecast Year	2026				
3 rd Forecast Year	2027				
4 th Forecast Year	2028				
5 th Forecast Year	2029				
6 th Forecast Year	2030				
7 th Forecast Year	2031				
8 th Forecast Year	2032				
9 th Forecast Year	2033				
10 th Forecast Year	2034				
11 th Forecast Year	2035				
12 th Forecast Year	2036				
13 th Forecast Year	2037				
14 th Forecast Year	2038				

COMMENTS

NOTE: (Column 1 plus Column 2) equals (Column 3 plus Column 5) minus (Column 4 plus Column 6).

7610.0310, Item B. FORECAST OF ANNUAL SYSTEM CONSUMPTION AND GENERATION DATA [Consumption Tab]

(Continued)

(Express as Indicated in **Megawatt Hours** or **Megawatts**)

		Column 5	Column 6	Column 7	Column 8
		TOTAL ANNUAL NET GENERATION MWH [7610.0310 B(5)]	TRANSMISSION LINE SUBSTATION AND DISTRIBUTION LOSSES MWH [7610.0310 B(6)]	TOTAL WINTER CONSUMPTION MWH [7610.0310 B(7)]	TOTAL SUMMER CONSUMPTION MWH [7610.0310 B(7)]
Past Year	2023				
Present Year	2024				
1 st Forecast Year	2025				
2 nd Forecast Year	2026				
3 rd Forecast Year	2027				
4 th Forecast Year	2028				
5 th Forecast Year	2029				
6 th Forecast Year	2030				
7 th Forecast Year	2031				
8 th Forecast Year	2032				
9 th Forecast Year	2033				
10 th Forecast Year	2034				
11 th Forecast Year	2035				
12 th Forecast Year	2036				
13 th Forecast Year	2037				
14 th Forecast Year	2038				

COMMENTS

7610.0310, Item C. PEAK DEMAND BY ULTIMATE CONSUMERS AT THE TIME OF ANNUAL SYSTEM PEAK (IN MW'S). [PeakDemand Tab]

	FARM	NON-FARM RESIDENTIAL	COMMERCIAL	MINING *
Last Year Peak Day (2023)				

	INDUSTRIAL	STREET & HIGHWAY LIGHTING	OTHER	SYSTEM TOTALS (MWH's should equal Column 1 + Column 2 on Page 9)
Last Year Peak Day (2023)				

COMMENTS

7610.0310, Item D. PEAK DEMAND BY MONTH FOR THE LAST CALENDAR YEAR [PeakDemand Tab]


Last Year (2023)	PEAK (in MW)	Last Year (2023)	PEAK (in MW)	Last Year (2023)	PEAK (in MW)
JANUARY		MAY		SEPTEMBER	
FEBRUARY		JUNE		OCTOBER	
MARCH		JULY		NOVEMBER	
APRIL		AUGUST		DECEMBER	

COMMENTS

[remainder of page intentionally left blank]

7610.0310, Item E. PART 1: FIRM PURCHASES (see next form for Firm Sales) [FirmPurch Tab]


Express in **MegaWatts**

NAME OF OTHER UTILITY								
Past Year	2023	Summer						
		Winter						
Present Year	2024	Summer						
		Winter						
1 st Forecast Year	2025	Summer						
		Winter						
2 nd Forecast Year	2026	Summer						
		Winter						
3 rd Forecast Year	2027	Summer						
		Winter						
4 th Forecast Year	2028	Summer						
		Winter						
5 th Forecast Year	2029	Summer						
		Winter						
6 th Forecast Year	2030	Summer						
		Winter						
7 th Forecast Year	2031	Summer						
		Winter						
8 th Forecast Year	2032	Summer						
		Winter						
9 th Forecast Year	2033	Summer						
		Winter						
10 th Forecast Year	2034	Summer						
		Winter						
11 th Forecast Year	2035	Summer						
		Winter						
12 th Forecast Year	2036	Summer						
		Winter						
13 th Forecast Year	2037	Summer						
		Winter						
14 th Forecast Year	2038	Summer						
		Winter						

COMMENTS

7610.0310, Item E. PART 2: FIRM SALES (see previous form for Firm Purchases) [FirmSales Tab]

Express in **MegaWatts**


NAME OF OTHER UTILITY								
Past Year	2023	Summer						
		Winter						
Present Year	2024	Summer						
		Winter						
1 st Forecast Year	2025	Summer						
		Winter						
2 nd Forecast Year	2026	Summer						
		Winter						
3 rd Forecast Year	2027	Summer						
		Winter						
4 th Forecast Year	2028	Summer						
		Winter						
5 th Forecast Year	2029	Summer						
		Winter						
6 th Forecast Year	2030	Summer						
		Winter						
7 th Forecast Year	2031	Summer						
		Winter						
8 th Forecast Year	2032	Summer						
		Winter						
9 th Forecast Year	2033	Summer						
		Winter						
10 th Forecast Year	2034	Summer						
		Winter						
11 th Forecast Year	2035	Summer						
		Winter						
12 th Forecast Year	2036	Summer						
		Winter						
13 th Forecast Year	2037	Summer						
		Winter						
14 th Forecast Year	2038	Summer						
		Winter						

COMMENTS

7610.0310, Item F. PART 1: PARTICIPATION PURCHASES (see next form for Participation Sales)

[ParticipPurch Tab]

Express in **MegaWatts**


NAME OF OTHER UTILITY								
Past Year	2023	Summer						
		Winter						
Present Year	2024	Summer						
		Winter						
1 st Forecast Year	2025	Summer						
		Winter						
2 nd Forecast Year	2026	Summer						
		Winter						
3 rd Forecast Year	2027	Summer						
		Winter						
4 th Forecast Year	2028	Summer						
		Winter						
5 th Forecast Year	2029	Summer						
		Winter						
6 th Forecast Year	2030	Summer						
		Winter						
7 th Forecast Year	2031	Summer						
		Winter						
8 th Forecast Year	2032	Summer						
		Winter						
9 th Forecast Year	2033	Summer						
		Winter						
10 th Forecast Year	2034	Summer						
		Winter						
11 th Forecast Year	2035	Summer						
		Winter						
12 th Forecast Year	2036	Summer						
		Winter						
13 th Forecast Year	2037	Summer						
		Winter						
14 th Forecast Year	2038	Summer						
		Winter						

COMMENTS

7610.0310, Item F. PART 2: PARTICIPATION SALES (see previous form for Participation Purchases)

[ParticipSales Tab]

Express in **MegaWatts**

NAME OF OTHER UTILITY								
Past Year	2023	Summer						
		Winter						
Present Year	2024	Summer						
		Winter						
1 st Forecast Year	2025	Summer						
		Winter						
2 nd Forecast Year	2026	Summer						
		Winter						
3 rd Forecast Year	2027	Summer						
		Winter						
4 th Forecast Year	2028	Summer						
		Winter						
5 th Forecast Year	2029	Summer						
		Winter						
6 th Forecast Year	2030	Summer						
		Winter						
7 th Forecast Year	2031	Summer						
		Winter						
8 th Forecast Year	2032	Summer						
		Winter						
9 th Forecast Year	2033	Summer						
		Winter						
10 th Forecast Year	2034	Summer						
		Winter						
11 th Forecast Year	2035	Summer						
		Winter						
12 th Forecast Year	2036	Summer						
		Winter						
13 th Forecast Year	2037	Summer						
		Winter						
14 th Forecast Year	2038	Summer						
		Winter						

COMMENTS

7610.0310, Item G. LOAD AND GENERATION CAPACITY [Load&GenCap Tab]

Express in **MegaWatts**

			Column 1	Column 2	Column 3	Column 4	Column 5
			SEASONAL MAXIMUM DEMAND	SCHEDULE L. PURCHASE AT THE TIME OF SEASONAL SYSTEM DEMAND	SEASONAL SYSTEM DEMAND	ANNUAL SYSTEM DEMAND	SEASONAL FIRM PURCHASES (TOTAL)
Past Year	2023	Summer					
		Winter					
Present Year	2024	Summer					
		Winter					
1 st Forecast Year	2025	Summer					
		Winter					
2 nd Forecast Year	2026	Summer					
		Winter					
3 rd Forecast Year	2027	Summer					
		Winter					
4 th Forecast Year	2028	Summer					
		Winter					
5 th Forecast Year	2029	Summer					
		Winter					
6 th Forecast Year	2030	Summer					
		Winter					
7 th Forecast Year	2031	Summer					
		Winter					
8 th Forecast Year	2032	Summer					
		Winter					
9 th Forecast Year	2033	Summer					
		Winter					
10 th Forecast Year	2034	Summer					
		Winter					
11 th Forecast Year	2035	Summer					
		Winter					
12 th Forecast Year	2036	Summer					
		Winter					
13 th Forecast Year	2037	Summer					
		Winter					
14 th Forecast Year	2038	Summer					
		Winter					

COMMENTS

7610.0310, Item G. LOAD AND GENERATION CAPACITY [Load&GenCap Tab] (Continued)

Express in **MegaWatts**

			Column 6	Column 7	Column 8	Column 9	Column 10
			SEASONAL FIRM SALES (TOTAL)	SEASONAL ADJUSTED NET DEMAND (Col 3 - 5 + 6)	ANNUAL ADJUSTED NET DEMAND (Col 4 - 5 + 6)	NET GENERATING CAPABILITY	PARTICIPATION PURCHASES (TOTAL)
Past Year	2023	Summer					
		Winter					
Present Year	2024	Summer					
		Winter					
1 st Forecast Year	2025	Summer					
		Winter					
2 nd Forecast Year	2026	Summer					
		Winter					
3 rd Forecast Year	2027	Summer					
		Winter					
4 th Forecast Year	2028	Summer					
		Winter					
5 th Forecast Year	2029	Summer					
		Winter					
6 th Forecast Year	2030	Summer					
		Winter					
7 th Forecast Year	2031	Summer					
		Winter					
8 th Forecast Year	2032	Summer					
		Winter					
9 th Forecast Year	2033	Summer					
		Winter					
10 th Forecast Year	2034	Summer					
		Winter					
11 th Forecast Year	2035	Summer					
		Winter					
12 th Forecast Year	2036	Summer					
		Winter					
13 th Forecast Year	2037	Summer					
		Winter					
14 th Forecast Year	2038	Summer					
		Winter					

COMMENTS

7610.0310, Item G. LOAD AND GENERATION CAPACITY [Load&GenCap Tab] (Continued)

Express in **MegaWatts**

			Column 11	Column 12	Column 13	Column 14	Column 15
			PARTICIPATION SALES (TOTAL)	ADJUSTED NET CAPABILITY (Col 9+10-11)	NET RESERVE CAPACITY OBLIGATION	TOTAL FIRM CAPACITY OBLIGATION (Col 7+13)	SURPLUS (+) OR DEFICIT (-) CAPACITY (Col 12-14)
Past Year	2023	Summer					
		Winter					
Present Year	2024	Summer					
		Winter					
1 st Forecast Year	2025	Summer					
		Winter					
2 nd Forecast Year	2026	Summer					
		Winter					
3 rd Forecast Year	2027	Summer					
		Winter					
4 th Forecast Year	2028	Summer					
		Winter					
5 th Forecast Year	2029	Summer					
		Winter					
6 th Forecast Year	2030	Summer					
		Winter					
7 th Forecast Year	2031	Summer					
		Winter					
8 th Forecast Year	2032	Summer					
		Winter					
9 th Forecast Year	2033	Summer					
		Winter					
10 th Forecast Year	2034	Summer					
		Winter					
11 th Forecast Year	2035	Summer					
		Winter					
12 th Forecast Year	2036	Summer					
		Winter					
13 th Forecast Year	2037	Summer					
		Winter					
14 th Forecast Year	2038	Summer					
		Winter					

COMMENTS

7610.0310, Item H. ADDITIONS AND RETIREMENTS [Add&Retire Tab]

Express in **MegaWatts**

		ADDITIONS	RETIREMENTS
Past Year	2023		
Present Year	2024		
1 st Forecast Year	2025		
2 nd Forecast Year	2026		
3 rd Forecast Year	2027		
4 th Forecast Year	2028		
5 th Forecast Year	2029		
6 th Forecast Year	2030		
7 th Forecast Year	2031		
8 th Forecast Year	2032		
9 th Forecast Year	2033		
10 th Forecast Year	2034		
11 th Forecast Year	2035		
12 th Forecast Year	2036		
13 th Forecast Year	2037		
14 th Forecast Year	2038		

COMMENTS

[remainder of page intentionally left blank]

7610.0400 PRESENT FACILITIES [USE PAGE 22 WITHIN THESE INSTRUCTIONS]

A utility required to report under part 7610.0300 shall provide the following information on each power plant serving or capable of serving its Minnesota service area as of January 1 of the current year:

- A. the name and type of the plant;
- B. the statutory or home rule charter city or town and the county in which the plant is located;
- C. actual summer and winter plant capacity as measured by the maximum load that could be supplied by present equipment on a peaking basis;
- D. the total number of net megawatt-hours generated by the plant for nonplant use during the last calendar year;
- E. if coal is a fuel source, the average Btu content of the coal;
- F. the quantities of primary and secondary fuels consumed during the last calendar year;
- G. the year in which the plant or each unit of a multiunit plant began operation;
- H. the type of unit for each unit of generating equipment in the plant; and
- I. if available, for base load plants provide the capacity factor, operating availability, and forced outage rate.

USE THE “**POWER PLANT AND GENERATING UNIT DATA REPORT**”
ON PAGE 22 TO COMPLETE THIS SECTION

NOTE: Please refer to the definitions and table of codes given below when filling in the information for UNIT STATUS, UNIT TYPE and FUEL TYPE that are requested in the “POWER PLANT AND GENERATING UNIT DATA REPORT” on Page 22.

DEFINITIONS

Forced Outage Rate (percentage): A measure of how often the unit failed to produce, other than periods of scheduled maintenance. The formula is:

$$(1) \frac{\text{Hours Unit Failed to be Available}}{\text{Hours Unit Called Upon to Produce}} \times 100$$

Note: Failure of a unit to be available does not include downtime for scheduled maintenance.

Operating Availability (percentage): A measure of how often the unit is available outside of scheduled maintenance and forced outage periods. The formula is:

$$(2) 100 - \text{Maintenance percentage} - \text{Forced Outage percentage}$$

Note: Maintenance percentage is the number of hours of scheduled maintenance divided by 8,760.

Capacity Factor (percentage): A measure of how much the unit was used compared to its total usefulness, assuming no need for maintenance or forced outages. The formula is:

$$(3) \frac{\text{Total Annual MWH of Production}}{\text{Accredited Capacity Rating (MW) of the unit} \times 8,760} \times 100$$

ALLOWABLE CODES

CELL HEADING	CODE CODE DEFINITION
1. Unit Status*	USEIn-use STB.....Stand-by RET.....Retired FUTFuture OTHEROther - provide description
2. Unit Type**	CS.....Combined Cycle ICInternal Combustion (Diesel) GTCombustion (Gas) Turbine HCHydro ST.....Steam Turbine (Boiler) NC.....Nuclear WIWind OTHEROther - provide description
3. Energy Source & Fuel Type***	BITBituminous Coal COAL.....Coal (General) DIESEL.....Diesel FO2Fuel Oil #2 (Mid Distillate) FO6Fuel Oil #6 (Residual Fuel Oil) LIG.Lignite LPGLiquefied Propane Gas NG.....Natural Gas NUCNuclear REF.....Refuse, Bagasse, Peat, Non-wood waste STMSteam SUBSub-Bituminous Coal HYD.....Hydro (Water) WIND.....Wind WOODWood SOLARSolar OTHEROther - provide description
4. Unit of Measure****	GALGallons MCFThousand cubic feet MMCF.....Million cubic feet TONS.....Tons BBL.....Barrels THERMS.....Therms

**ELECTRIC UTILITY INFORMATION REPORTING
FORECAST SECTION
POWER PLANT AND GENERATING UNIT DATA REPORT: 2023**

(Complete one form for each plant)

A PLANT DATA	PLANT NAME		UTILITY NAME		DATE	
	PLANT ADDRESS		CITY	STATE	ZIP CODE	COUNTY
	PLANT ID # (leave blank)	NUMBER OF UNITS		CONTACT PERSON		TELEPHONE

B INDIVIDUAL GENERATING UNIT DATA	UNIT ID #	UNIT 1/ STATUS	UNIT 2/ TYPE	YEAR INSTALLED	ENERGY SOURCE	NET GENERATION (MWH)
	Plant* Total					

*Net Generation Only

C INDIVIDUAL UNIT CAPABILITY DATA	UNIT ID#	CAPACITY (MEGAWATTS)		CAPACITY FACTOR (%)	OPERATING FACTOR (%)	FORCED OUTAGE RATE (%)
		Summer	Winter			
	PLANT TOTAL					

D FUEL USED	UNIT ID#	PRIMARY FUEL USE				SECONDARY FUEL USE			
		Fuel 3/ Type	Quantity	Unit of Measure	BTU** Content	Fuel 3/ Type	Quantity	Unit of Measure	BTU** Content

** For coal only

7610.0410 FUTURE FACILITY ADDITIONS

A utility required to report under part 7610.0300, shall estimate the additional power plants or additions to existing plants necessary to provide for the energy growth predicted by the forecasts in parts 7610.0300 to 7610.0320. A utility shall supply the following information about each additional plant or addition:

- A. the proposed general location of each plant currently in the planning stage, or the actual location of each plant currently under construction;
- B. the year the plant is to begin operation;
- C. the estimated cost of the new facility at the time of construction;
- D. the estimated summer and winter plant capacity of anticipated generating equipment;
- E. the estimated total annual net megawatt-hours generated for nonplant use by the plant operating at normal conditions under normal maintenance and circumstances, during its first full calendar year of operation;
- F. the estimated type and amount of fuel to be used to operate the plant on an annual basis under conditions set forth in item E; and
- G. the type of unit or units proposed for the plant.

7610.0420 FUTURE FACILITY RETIREMENTS

A utility required to report under part 7610.0300, shall list planned facility retirements that will take place within the next 15 years. The utility shall provide the following information about a facility retirement: the location and type of the plant; the forecasted retirement date; and the plant's actual summer and winter capacity.

7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE [FuelRequirements Tab]

Subpart 1. **Quantity used.** Based on the data reported under part 7610.0400 each utility shall report the quantity of coal, natural gas, middle distillates, heavy oils, nuclear energy, and other fuels used by its **Minnesota power plants** during the last calendar year, and the net megawatt-hours of electrical energy generated by each type of fuel. Net generation from Minnesota hydropower plants shall also be provided. If data is reported for other fuels, the type of fuel shall be specified.

Subpart 2. **Estimated quantity necessary.** Each utility shall estimate the quantities of the fuel which will be necessary for use by its **Minnesota power plants** to provide for the electrical energy growth predicted by the forecast projected in parts 7610.0300 - 7610.0320. Each utility shall also estimate by fuel type the net megawatt-hours electricity which will be produced by its **Minnesota power plants** under the forecast. A forecast of net generation from Minnesota hydropower plants shall also be provided. In preparing such estimates, each utility shall consider increases in fuels used by existing facilities and possible conversions between fuel types.

Please use the appropriate code for the fuel type as shown in the list at the bottom of this worksheet tab.

[FuelRequirements Tab]

		FUEL TYPE 1		FUEL TYPE 2		FUEL TYPE 3	
		Name of Fuel		Name of Fuel		Name of Fuel	
		Unit of Measure		Unit of Measure		Unit of Measure	
		QUANTITY OF FUEL USED	NET MWH GENERATED	QUANTITY OF FUEL USED	NET MWH GENERATED	QUANTITY OF FUEL USED	NET MWH GENERATED
Past Year	2023						
Present Year	2024						
1 st Forecast Year	2025						
2 nd Forecast Year	2026						
3 rd Forecast Year	2027						
4 th Forecast Year	2028						
5 th Forecast Year	2029						
6 th Forecast Year	2030						
7 th Forecast Year	2031						
8 th Forecast Year	2032						
9 th Forecast Year	2033						
10 th Forecast Year	2034						
11 th Forecast Year	2035						
12 th Forecast Year	2036						
13 th Forecast Year	2037						
14 th Forecast Year	2038						

COMMENTS

PLEASE MAKE COPIES OF THE ABOVE FORM IF MORE THAN 3 FUEL TYPES ARE USED

LIST OF FUEL TYPES

BIT - Bituminous Coal
 COAL - Coal (General)
 DIESEL - Diesel
 FO2 - Fuel Oil #2 (Mid-Distillate)
 FO6 - Fuel Oil #6 (Residual Fuel Oil)
 LIG - Lignite

LPG - Liquefied Propane Gas
 NG - Natural Gas
 NUC - Nuclear
 REF - Refuse, Bagasse, Peat, Non-wood waste
 STM - Steam
 SUB - Sub-bituminous coal

HYD - Hydro (Water)
 WIND - Wind
 WOOD - Wood
 SOLAR - Solar

7160.0500 TRANSMISSION LINES [Transmission Tab]

Subpart 1. **Existing transmission lines.** Each utility shall report the following information in regard to each transmission line of 200 kilovolts now in existence:

- A. a map showing the location of each line;
- B. the design voltage of each line;
- C. the size and type of conductor;
- D. the approximate location of d.c. terminals or a.c. substations; and
- E. the approximate length of each line in Minnesota.

Subpart 2. **Transmission line additions.** Each generating and transmission utility, as defined in part 7610.0100, shall report the information required in subpart 1 for all future transmission lines over 200 kilovolts that the utility plans to build within the next 15 years.

Subpart 3. **Transmission line retirements.** Each generation and transmission utility, as defined in part 7610.0100, shall identify all present transmission lines over 200 kilovolts that the utility plans to retire within the next 15 years.

In Use <small>(enter X for selection)</small>	To Be Built <small>(enter X for selection)</small>	To Be Retired <small>(enter X for selection)</small>	DESIGN VOLTAGE	SIZE OF CONDUCTOR	TYPE OF CONDUCTOR	D.C. OR A.C. <small>(specify)</small>	LOCATION OF D.C. TERMINALS OR A.C. SUBSTATIONS	INDICATE YEAR IF "TO BE BUILT" OR "RETIRED"	LENGTH IN MN <small>(miles)</small>

COMMENTS

7610.0600, Item A. 24 - HOUR PEAK DAY DEMAND [PeakDay Tab]

		DATE OF PEAK DAY DEMAND:	DATE OF PEAK DAY DEMAND:
ENTER DATES		=== >>	
TIME OF DAY		MW USED ON SUMMER PEAK DAY	MW USED ON WINTER PEAK DAY
0100	●	●	
0200	●	●	
0300	●	●	
0400	●	●	
0500	●	●	
0600	●	●	
0700	●	●	
0800	●	●	
0900	●	●	
1000	●	●	
1100	●	●	
1200	●	●	
1300	●	●	
1400	●	●	
1500	●	●	
1600	●	●	
1700	●	●	
1800	●	●	
1900	●	●	
2000	●	●	
2100	●	●	
2200	●	●	
2300	●	●	
2400	●	●	
		COMMENTS	

Each utility shall provide the following information for the last calendar year:

A table of the demand in megawatts by the hour over a 24 - hour period for:

1. the 24 - hour period during the summer season when the megawatt demand on the system was the greatest; and
2. the 24 - hour period during the winter season when the megawatt demand on the system was the greatest.

(Use the table to the right)

REMINDER OF ATTACHMENTS

[Attachments Tab]

- **Minnesota Electric Utility Annual Report – Forecast Section** (ELEC_XXX_2023_Forecast.xlsx, See 7610.0300)
- **Report on Electric Generating Facilities** (ELEC_XXX_2023_TL Map, See Page 22 and 7610.0400)

Please use the file naming format referenced in the Attachments tab of the forecast workbook.

If for any reason the forecast workbook needs to be updated/corrected, resubmit the workbook with **** CORRECTED **** highlighted (change font color from *White* to *Automatic*) in Cell G1 of the Registration tab and place a note in the Comments area (Cells ABC19-24) indicating what was updated.

Please review the instructions in the attached “cover letter” detailing the two options (Option 1: eDockets **OR** Option 2: email, **not both**) for submitting the forecast workbook and the attachment to Commerce. Before submitting your forecast report to Commerce, please check to be sure that all sections in the forecast workbook have been completed and the attachment is included.

If you have any questions about the forecast section, please contact Anne Sell.



IMPORTANT! Deadline for submission: Friday, July 1, 2024