



**MINNESOTA DEPARTMENT OF COMMERCE**  
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**St. Paul, Minnesota 55101-2145**  
**(651) 539-1500**

**ELECTRIC UTILITY INFORMATION REPORTING**  
**FORECAST SECTION**

**\* RESPONSE DUE ON OR BEFORE JULY 1, 2015 \***

**7610.0300 WHO MUST FILE.**

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, 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.

**7610.0310 CONTENT OF HISTORICAL DATA AND FORECAST.**

The following data must be provided:

- A. 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. 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. 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. the utility's system peak demand by month for the last calendar year;
- E. 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. 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. 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 subitem (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. 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
7610.0310, item C: Peak Demand by Ultimate Consumers at Time of Annual Peak (in MWs).....	5
7610.0310, item D: Peak Demand by Month for the Last Calendar Year .....	6
7610.0310, item A: Minnesota Only Forecast of Annual Electric Consumption by Ultimate Consumers.....	7
7610.0310, item B: Forecast of Annual System Consumption and Generation Data .....	9
7610.0310, item E, Part 1: Firm Purchases.....	11
7610.0310, item E, Part 2: Firm Sales .....	12
7610.0310, item F, Part 1: Participation Purchases .....	13
7610.0310, item F, Part 2: Participation Sales .....	14
7610.0310, item G: Load and Generation Capacity.....	15
7610.0310, item H: Additions and Retirements.....	17
7610.0400: Present Facilities .....	18
7610.0410: Future Facility Additions .....	21
7610.0420: Future Facility Retirements.....	21
7610.0430: Fuel Requirements and Generation by Fuel Type .....	22
7610.0500: Transmission Lines .....	23
7610.0600: item A: 24-Hour Peak Day Demand.....	24

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

In the space below, 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.

			<b>FARM</b>	<b>NON-FARM RESIDENTIAL</b>	<b>COMMERCIAL</b>	<b>MINING*</b>
PAST YEAR	2014	NO. OF CUST'S				
		MWH'S				
PRESENT YEAR	2015	NO. OF CUST'S				
		MWH'S				
1 <sup>st</sup> FORECAST YR	2016	NO. OF CUST'S				
		MWH'S				
2 <sup>nd</sup> FORECAST YR	2017	NO. OF CUST'S				
		MWH'S				
3 <sup>rd</sup> FORECAST YR	2018	NO. OF CUST'S				
		MWH'S				
4 <sup>th</sup> FORECAST YR	2019	NO. OF CUST'S				
		MWH'S				
5 <sup>th</sup> FORECAST YR	2020	NO. OF CUST'S				
		MWH'S				
6 <sup>th</sup> FORECAST YR	2021	NO. OF CUST'S				
		MWH'S				
7 <sup>th</sup> FORECAST YR	2022	NO. OF CUST'S				
		MWH'S				
8 <sup>th</sup> FORECAST YR	2023	NO. OF CUST'S				
		MWH'S				
9 <sup>th</sup> FORECAST YR	2024	NO. OF CUST'S				
		MWH'S				
10 <sup>th</sup> FORECAST YR	2025	NO. OF CUST'S				
		MWH'S				
11 <sup>th</sup> FORECAST YR	2026	NO. OF CUST'S				
		MWH'S				
12 <sup>th</sup> FORECAST YR	2027	NO. OF CUST'S				
		MWH'S				
13 <sup>th</sup> FORECAST YR	2028	NO. OF CUST'S				
		MWH'S				
14 <sup>th</sup> FORECAST YR	2029	NO. OF CUST'S				
		MWH'S				

**7610.0310, item C. PEAK DEMAND BY ULTIMATE CONSUMERS AT THE TIME OF ANNUAL SYSTEM PEAK (IN MW'S).**

<b>LAST YR PEAK DAY</b>				
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\* 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. (Continued)**

			<b>INDUSTRIAL</b>	<b>ST. AND HWY. LIGHTING</b>	<b>OTHER</b>	<b>SYSTEM TOTALS</b> (MWH's Should equal col. 1 + col. 2 on p. 9)
PAST YEAR	2014	NO. OF CUST'S				
		MWH'S				
PRESENT YEAR	2015	NO. OF CUST'S				
		MWH'S				
1 <sup>st</sup> FORECAST YR	2016	NO. OF CUST'S				
		MWH'S				
2 <sup>nd</sup> FORECAST YR	2017	NO. OF CUST'S				
		MWH'S				
3 <sup>rd</sup> FORECAST YR	2018	NO. OF CUST'S				
		MWH'S				
4 <sup>th</sup> FORECAST YR	2019	NO. OF CUST'S				
		MWH'S				
5 <sup>th</sup> FORECAST YR	2020	NO. OF CUST'S				
		MWH'S				
6 <sup>th</sup> FORECAST YR	2021	NO. OF CUST'S				
		MWH'S				
7 <sup>th</sup> FORECAST YR	2022	NO. OF CUST'S				
		MWH'S				
8 <sup>th</sup> FORECAST YR	2023	NO. OF CUST'S				
		MWH'S				
9 <sup>th</sup> FORECAST YR	2024	NO. OF CUST'S				
		MWH'S				
10 <sup>th</sup> FORECAST YR	2025	NO. OF CUST'S				
		MWH'S				
11 <sup>th</sup> FORECAST YR	2026	NO. OF CUST'S				
		MWH'S				
12 <sup>th</sup> FORECAST YR	2027	NO. OF CUST'S				
		MWH'S				
13 <sup>th</sup> FORECAST YR	2028	NO. OF CUST'S				
		MWH'S				
14 <sup>th</sup> FORECAST YR	2029	NO. OF CUST'S				
		MWH'S				

**7610.0310, item C. PEAK DEMAND BY ULTIMATE CONSUMERS AT THE TIME OF ANNUAL SYSTEM PEAK. (IN MW'S)**

<b>LAST YR PEAK DAY</b>				
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**7610.0310, item D. PEAK DEMAND BY MONTH FOR THE LAST CALENDAR YEAR**

PEAK (IN MW's)		PEAK (IN MW's)		PEAK (IN MW's)	
JANUARY		MAY		SEPTEMBER	
FEBRUARY		JUNE		OCTOBER	
MARCH		JULY		NOVEMBER	
APRIL		AUGUST		DECEMBER	

**7610.0310, item A. MINNESOTA ONLY FORECAST OF ANNUAL ELECTRIC CONSUMPTION BY ULTIMATE CONSUMERS.**

In the space below, 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 first 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.

			<b>FARM</b>	<b>NON-FARM RESIDENTIAL</b>	<b>COMMERCIAL</b>	<b>MINING*</b>
PAST YEAR	2014	NO. OF CUST'S				
		MWH'S				
PRESENT YEAR	2015	NO. OF CUST'S				
		MWH'S				
1 <sup>st</sup> FORECAST YR	2016	NO. OF CUST'S				
		MWH'S				
2 <sup>nd</sup> FORECAST YR	2017	NO. OF CUST'S				
		MWH'S				
3 <sup>rd</sup> FORECAST YR	2018	NO. OF CUST'S				
		MWH'S				
4 <sup>th</sup> FORECAST YR	2019	NO. OF CUST'S				
		MWH'S				
5 <sup>th</sup> FORECAST YR	2020	NO. OF CUST'S				
		MWH'S				
6 <sup>th</sup> FORECAST YR	2021	NO. OF CUST'S				
		MWH'S				
7 <sup>th</sup> FORECAST YR	2022	NO. OF CUST'S				
		MWH'S				
8 <sup>th</sup> FORECAST YR	2023	NO. OF CUST'S				
		MWH'S				
9 <sup>th</sup> FORECAST YR	2024	NO. OF CUST'S				
		MWH'S				
10 <sup>th</sup> FORECAST YR	2025	NO. OF CUST'S				
		MWH'S				
11 <sup>th</sup> FORECAST YR	2026	NO. OF CUST'S				
		MWH'S				
12 <sup>th</sup> FORECAST YR	2027	NO. OF CUST'S				
		MWH'S				
13 <sup>th</sup> FORECAST YR	2028	NO. OF CUST'S				
		MWH'S				
14 <sup>th</sup> FORECAST YR	2029	NO. OF CUST'S				
		MWH'S				

\* 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. (Continued)**

			<b>INDUSTRIAL</b>	<b>ST. AND HWY. LIGHTING</b>	<b>OTHER</b>	<b>TOTAL – MN ONLY</b> <small>(MWH's should equal col. 1 on p. 9)</small>
PAST YEAR	2014	NO. OF CUST'S				
		MWH'S				
PRESENT YEAR	2015	NO. OF CUST'S				
		MWH'S				
1 <sup>st</sup> FORECAST YR	2016	NO. OF CUST'S				
		MWH'S				
2 <sup>nd</sup> FORECAST YR	2017	NO. OF CUST'S				
		MWH'S				
3 <sup>rd</sup> FORECAST YR	2018	NO. OF CUST'S				
		MWH'S				
4 <sup>th</sup> FORECAST YR	2019	NO. OF CUST'S				
		MWH'S				
5 <sup>th</sup> FORECAST YR	2020	NO. OF CUST'S				
		MWH'S				
6 <sup>th</sup> FORECAST YR	2021	NO. OF CUST'S				
		MWH'S				
7 <sup>th</sup> FORECAST YR	2022	NO. OF CUST'S				
		MWH'S				
8 <sup>th</sup> FORECAST YR	2023	NO. OF CUST'S				
		MWH'S				
9 <sup>th</sup> FORECAST YR	2024	NO. OF CUST'S				
		MWH'S				
10 <sup>th</sup> FORECAST YR	2025	NO. OF CUST'S				
		MWH'S				
11 <sup>th</sup> FORECAST YR	2026	NO. OF CUST'S				
		MWH'S				
12 <sup>th</sup> FORECAST YR	2027	NO. OF CUST'S				
		MWH'S				
13 <sup>th</sup> FORECAST YR	2028	NO. OF CUST'S				
		MWH'S				
14 <sup>th</sup> FORECAST YR	2029	NO. OF CUST'S				
		MWH'S				

**7610.0310, item B. FORECAST OF ANNUAL SYSTEM CONSUMPTION AND GENERATION DATA.**  
 (Express as Indicated in Megawatt Hours or Megawatts)

		Column 1	Column 2	Column 3	Column 4
		<b>CONSUMPTION BY ULTIMATE CONSUMERS IN MINNESOTA MWH 7610.0310 B(1)</b>	<b>CONSUMPTION BY ULTIMATE CONSUMERS OUTSIDE OF MINNESOTA MWH 7610.0310 B(2)</b>	<b>RECEIVED FROM OTHER UTILITIES MWH 7610.0310 B(3)</b>	<b>DELIVERED FOR RESALE MWH 7610.0310 B(4)</b>
PAST YEAR	2014				
PRESENT YEAR	2015				
1 <sup>st</sup> FORECAST YR	2016				
2 <sup>nd</sup> FORECAST YR	2017				
3 <sup>rd</sup> FORECAST YR	2018				
4 <sup>th</sup> FORECAST YR	2019				
5 <sup>th</sup> FORECAST YR	2020				
6 <sup>th</sup> FORECAST YR	2021				
7 <sup>th</sup> FORECAST YR	2022				
8 <sup>th</sup> FORECAST YR	2023				
9 <sup>th</sup> FORECAST YR	2024				
10 <sup>th</sup> FORECAST YR	2025				
11 <sup>th</sup> FORECAST YR	2026				
12 <sup>th</sup> FORECAST YR	2027				
13 <sup>th</sup> FORECAST YR	2028				
14 <sup>th</sup> FORECAST YR	2029				

**NOTE:** Column 1 plus Column 2 should equal Column 3 plus Column 5 minus Column 4 minus Column 6.

**7610.0310, item B. FORECAST OF ANNUAL SYSTEM CONSUMPTION AND GENERATION DATA.**  
*(Continued)*

		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	2014				
PRESENT YEAR	2015				
1 <sup>st</sup> FORECAST YR	2016				
2 <sup>nd</sup> FORECAST YR	2017				
3 <sup>rd</sup> FORECAST YR	2018				
4 <sup>th</sup> FORECAST YR	2019				
5 <sup>th</sup> FORECAST YR	2020				
6 <sup>th</sup> FORECAST YR	2021				
7 <sup>th</sup> FORECAST YR	2022				
8 <sup>th</sup> FORECAST YR	2023				
9 <sup>th</sup> FORECAST YR	2024				
10 <sup>th</sup> FORECAST YR	2025				
11 <sup>th</sup> FORECAST YR	2026				
12 <sup>th</sup> FORECAST YR	2027				
13 <sup>th</sup> FORECAST YR	2028				
14 <sup>th</sup> FORECAST YR	2029				

**7610.0310, item E. PART 1: FIRM PURCHASES (see next form for Firm Sales).**  
**EXPRESS IN MEGAWATTS**

NAME OF OTHER UTILITY		▶											
PAST YEAR	2014	SUMMER											
		WINTER											
PRESENT YEAR	2015	SUMMER											
		WINTER											
1 <sup>st</sup> FORECAST YR	2016	SUMMER											
		WINTER											
2 <sup>nd</sup> FORECAST YR	2017	SUMMER											
		WINTER											
3 <sup>rd</sup> FORECAST YR	2018	SUMMER											
		WINTER											
4 <sup>th</sup> FORECAST YR	2019	SUMMER											
		WINTER											
5 <sup>th</sup> FORECAST YR	2020	SUMMER											
		WINTER											
6 <sup>th</sup> FORECAST YR	2021	SUMMER											
		WINTER											
7 <sup>th</sup> FORECAST YR	2022	SUMMER											
		WINTER											
8 <sup>th</sup> FORECAST YR	2023	SUMMER											
		WINTER											
9 <sup>th</sup> FORECAST YR	2024	SUMMER											
		WINTER											
10 <sup>th</sup> FORECAST YR	2025	SUMMER											
		WINTER											
11 <sup>th</sup> FORECAST YR	2026	SUMMER											
		WINTER											
12 <sup>th</sup> FORECAST YR	2027	SUMMER											
		WINTER											
13 <sup>th</sup> FORECAST YR	2028	SUMMER											
		WINTER											
14 <sup>th</sup> FORECAST YR	2029	SUMMER											
		WINTER											

**7610.0310, item E. PART 2: FIRM SALES.**  
**EXPRESS IN MEGAWATTS**

NAME OF OTHER UTILITY		▶											
PAST YEAR	2014	SUMMER											
		WINTER											
PRESENT YEAR	2015	SUMMER											
		WINTER											
1 <sup>st</sup> FORECAST YR	2016	SUMMER											
		WINTER											
2 <sup>nd</sup> FORECAST YR	2017	SUMMER											
		WINTER											
3 <sup>rd</sup> FORECAST YR	2018	SUMMER											
		WINTER											
4 <sup>th</sup> FORECAST YR	2019	SUMMER											
		WINTER											
5 <sup>th</sup> FORECAST YR	2020	SUMMER											
		WINTER											
6 <sup>th</sup> FORECAST YR	2021	SUMMER											
		WINTER											
7 <sup>th</sup> FORECAST YR	2022	SUMMER											
		WINTER											
8 <sup>th</sup> FORECAST YR	2023	SUMMER											
		WINTER											
9 <sup>th</sup> FORECAST YR	2024	SUMMER											
		WINTER											
10 <sup>th</sup> FORECAST YR	2025	SUMMER											
		WINTER											
11 <sup>th</sup> FORECAST YR	2026	SUMMER											
		WINTER											
12 <sup>th</sup> FORECAST YR	2027	SUMMER											
		WINTER											
13 <sup>th</sup> FORECAST YR	2028	SUMMER											
		WINTER											
14 <sup>th</sup> FORECAST YR	2029	SUMMER											
		WINTER											

**7610.0310, item F. PART 1: PARTICIPATION PURCHASES**  
**(see next form for Participation Sales)**  
**EXPRESS IN MEGAWATTS**

<b>NAME OF OTHER UTILITY</b>		▶											
PAST YEAR	2014	SUMMER											
		WINTER											
PRESENT YEAR	2015	SUMMER											
		WINTER											
1 <sup>st</sup> FORECAST YR	2016	SUMMER											
		WINTER											
2 <sup>nd</sup> FORECAST YR	2017	SUMMER											
		WINTER											
3 <sup>rd</sup> FORECAST YR	2018	SUMMER											
		WINTER											
4 <sup>th</sup> FORECAST YR	2019	SUMMER											
		WINTER											
5 <sup>th</sup> FORECAST YR	2020	SUMMER											
		WINTER											
6 <sup>th</sup> FORECAST YR	2021	SUMMER											
		WINTER											
7 <sup>th</sup> FORECAST YR	2022	SUMMER											
		WINTER											
8 <sup>th</sup> FORECAST YR	2023	SUMMER											
		WINTER											
9 <sup>th</sup> FORECAST YR	2024	SUMMER											
		WINTER											
10 <sup>th</sup> FORECAST YR	2025	SUMMER											
		WINTER											
11 <sup>th</sup> FORECAST YR	2026	SUMMER											
		WINTER											
12 <sup>th</sup> FORECAST YR	2027	SUMMER											
		WINTER											
13 <sup>th</sup> FORECAST YR	2028	SUMMER											
		WINTER											
14 <sup>th</sup> FORECAST YR	2029	SUMMER											
		WINTER											

**7610.0310, item F. PART 2: PARTICIPATION SALES.**  
**EXPRESS IN MEGAWATTS**

<b>NAME OF OTHER UTILITY</b>		▶										
PAST YEAR	2014	SUMMER										
		WINTER										
PRESENT YEAR	2015	SUMMER										
		WINTER										
1 <sup>st</sup> FORECAST YR	2016	SUMMER										
		WINTER										
2 <sup>nd</sup> FORECAST YR	2017	SUMMER										
		WINTER										
3 <sup>rd</sup> FORECAST YR	2018	SUMMER										
		WINTER										
4 <sup>th</sup> FORECAST YR	2019	SUMMER										
		WINTER										
5 <sup>th</sup> FORECAST YR	2020	SUMMER										
		WINTER										
6 <sup>th</sup> FORECAST YR	2021	SUMMER										
		WINTER										
7 <sup>th</sup> FORECAST YR	2022	SUMMER										
		WINTER										
8 <sup>th</sup> FORECAST YR	2023	SUMMER										
		WINTER										
9 <sup>th</sup> FORECAST YR	2024	SUMMER										
		WINTER										
10 <sup>th</sup> FORECAST YR	2025	SUMMER										
		WINTER										
11 <sup>th</sup> FORECAST YR	2026	SUMMER										
		WINTER										
12 <sup>th</sup> FORECAST YR	2027	SUMMER										
		WINTER										
13 <sup>th</sup> FORECAST YR	2028	SUMMER										
		WINTER										
14 <sup>th</sup> FORECAST YR	2029	SUMMER										
		WINTER										

**7610.0310, item G. LOAD AND GENERATION CAPACITY**  
**EXPRESS IN MEGAWATTS**

	PAST YEAR 2014		PRESENT YR. 2015		1 <sup>st</sup> FORECAST YR. 2016		2 <sup>nd</sup> FORECAST YR. 2017		3 <sup>rd</sup> FORECAST YR. 2018		4 <sup>th</sup> FORECAST YR. 2019		5 <sup>th</sup> FORECAST YR. 2020		6 <sup>th</sup> FORECAST YR. 2021	
	summer	winter	summer	winter	summer	winter	summer	winter	summer	winter	summer	winter	summer	winter	summer	winter
(1) seasonal maximum demand																
(2) schedule L. purchase at the time of seasonal system demand																
(3) seasonal system demand																
(4) annual system demand																
(5) seasonal firm purchases – total																
(6) seasonal firm sales – total																
(7) seasonal adjusted net demand (3-5+6)																
(8) annual adjusted net demand (4-5+6)																
(9) net generating capability																
(10) participation purchases – total																
(11) participation sales – total																
(12) adjusted net capability (9+10-11)																
(13) net reserve capacity obligation																
(14) total firm capacity obligation (7+13)																
(15) surplus (+) or deficit (-) capacity (12-14)																

**7610.0310, item G. LOAD AND GENERATION CAPACITY (Continued)**  
**EXPRESS IN MEGAWATTS**

	7 <sup>th</sup>		8 <sup>th</sup>		9 <sup>th</sup>		10 <sup>th</sup>		11 <sup>th</sup>		12 <sup>th</sup>		13 <sup>th</sup>		14 <sup>th</sup>	
	FORECAST YR 2022		FORECAST YR 2023		FORECAST YR 2024		FORECAST YR. 2025		FORECAST YR. 2026		FORECAST YR. 2027		FORECAST YR. 2028		FORECAST YR. 2029	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
(1) seasonal maximum demand																
(2) schedule L. purchase at the time of seasonal system demand																
(3) seasonal system demand																
(4) annual system demand																
(5) seasonal firm purchases – total																
(6) seasonal firm sales – total																
(7) seasonal adjusted net demand (3-5+6)																
(8) annual adjusted net demand (4-5+6)																
(9) net generating capability																
(10) participation purchases – total																
(11) participation sales – total																
(12) adjusted net capability (9+10-11)																
(13) net reserve capacity obligation																
(14) total firm capacity obligation (7+13)																
(15) surplus (+) or deficit (-) capacity (12-14)																

**7610.0310, item H. ADDITIONS AND RETIREMENTS.  
EXPRESS IN MEGAWATTS**

		ADDITIONS	RETIREMENTS
PAST YEAR	2014		
PRESENT YEAR	2015		
1 <sup>st</sup> FORECAST YR	2016		
2 <sup>nd</sup> FORECAST YR	2017		
3 <sup>rd</sup> FORECAST YR	2018		
4 <sup>th</sup> FORECAST YR	2019		
5 <sup>th</sup> FORECAST YR	2020		
6 <sup>th</sup> FORECAST YR	2021		
7 <sup>th</sup> FORECAST YR	2022		
8 <sup>th</sup> FORECAST YR	2023		
9 <sup>th</sup> FORECAST YR	2024		
10 <sup>th</sup> FORECAST YR	2025		
11 <sup>th</sup> FORECAST YR	2026		
12 <sup>th</sup> FORECAST YR	2027		
13 <sup>th</sup> FORECAST YR	2028		
14 <sup>th</sup> FORECAST YR	2029		

**7610.0400 PRESENT FACILITIES.**

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 20 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 20.

**Forced Outage Rate:** 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:** 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:** 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:

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

## REFERENCE FOR CODE USED

	<b>CODE</b>	<b>DEFINITION</b>
1. Unit Status	USE.....	In-use
	STB .....	Stand-by
	RET .....	Retired
	FUT .....	Future
2. Unit Type	CS .....	Combined Cycle
	IC.....	Internal Combustion (Diesel)
	GT .....	Combustion (Gas) Turbine
	HC .....	Hydro
	ST.....	Steam Turbine (Boiler)
	NC .....	Nuclear
3. Fuel Type	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.....	Subbituminous Coal
	HYD.....	Hydro (Water)
	WIND.....	Wind
WOOD.....	Wood	
SOLAR .....	Solar	

## POWER PLANT AND GENERATING UNIT DATA REPORT: 2014

(Complete one form for each plant)

<b>A</b> 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>B</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

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

<b>D</b> 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**

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.

		<b>FUEL TYPE 1</b>		<b>FUEL TYPE 2</b>		<b>FUEL TYPE 3</b>	
		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	2014						
PRESENT YEAR	2015						
1 <sup>st</sup> FORECAST YR	2016						
2 <sup>nd</sup> FORECAST YR	2017						
3 <sup>rd</sup> FORECAST YR	2018						
4 <sup>th</sup> FORECAST YR	2019						
5 <sup>th</sup> FORECAST YR	2020						
6 <sup>th</sup> FORECAST YR	2021						
7 <sup>th</sup> FORECAST YR	2022						
8 <sup>th</sup> FORECAST YR	2023						
9 <sup>th</sup> FORECAST YR	2024						
10 <sup>th</sup> FORECAST YR	2025						
11 <sup>th</sup> FORECAST YR	2026						
12 <sup>th</sup> FORECAST YR	2027						
13 <sup>th</sup> FORECAST YR	2028						
14 <sup>th</sup> FORECAST YR	2029						

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

**7160.0500 TRANSMISSION LINES.**

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	To be built	Retired	DESIGN VOLTAGE	SIZE OF CONDUCTOR	TYPE OF CONDUCTOR	D.C. OR A.C. (specify)	LOCATION OF D.C. TERMINALS OR A.C. SUBSTATIONS	INDICATE YEAR IF "TO BE BUILT" OR "RETIRED"	LENGTH IN MN (miles)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							

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**7610.0600, item A. 24 – HOUR PEAK DAY DEMAND.**

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)

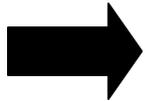
TIME OF DAY	DATE:	DATE:
	MW USED ON SUMMER PEAK DAY	MW USED ON WINTER PEAK DAY
0100	•	•
0200	•	•
0300	•	•
0400	•	•
0500	•	•
0600	•	•
0700	•	•
0800	•	•
0900	•	•
1000	•	•
1100	•	•
1200	•	•
1300	•	•
1400	•	•
1500	•	•
1600	•	•
1700	•	•
1800	•	•
1900	•	•
2000	•	•
2100	•	•
2200	•	•
2300	•	•
2400	•	•

**REMINDER OF ENCLOSURE**

- Report on Electric Generating Facilities (see page 20)

**Please return forms to: MINNESOTA DEPARTMENT OF COMMERCE  
85 – 7<sup>th</sup> Place East  
Suite 500  
St. Paul, Minnesota 55101-2145  
Attention: Steve Loomis**

**If you have any questions please call (651) 539-1690 or email [steve.loomis@state.mn.us](mailto:steve.loomis@state.mn.us).**



**IMPORTANT! Deadline for submission: July 1, 2015**