

7849.0270 PEAK DEMAND AND ANNUAL CONSUMPTION FORECAST.

Subpart 1. **Scope.** Each application shall contain pertinent data concerning peak demand and annual electrical consumption within the applicant's service area and system, as provided in part 7849.0220, including but not limited to the data requested in subpart 2, item B. When recorded data is not available, or when the applicant does not use the required data in preparing its own forecast, the applicant shall use an estimate and indicate in the forecast justification section in subparts 3 to 6 the procedures used in deriving the estimate. The application shall clearly indicate which data are historical and which are projected. It is expected that data provided by the applicant should be reasonable and internally consistent.

Subp. 2. **Content of forecast.** For each forecast year, the following data must be provided:

A. when the applicant's service area includes areas other than Minnesota, annual electrical consumption by ultimate consumers within the applicant's Minnesota service area;

B. for each of the following categories, estimates of the number of ultimate consumers within the applicant's system and annual electrical consumption by those consumers:

(1) farm, excluding irrigation and drainage pumping (for reporting purposes, any tract of land used primarily for agricultural purposes shall be considered farm land);

(2) irrigation and drainage pumping;

(3) nonfarm residential (when electricity is supplied through a single meter for both residential and commercial uses, it shall be reported according to its principal use, and apartment buildings shall be reported as residential even if not separately metered);

(4) commercial (this category shall include wholesale and retail trade; communication 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; recreational, social, religious, and amusement facilities; governmental units, excluding military bases; warehouses other than manufacturer owned; electric, gas, water and water pumping, excluding water pumping for irrigation, and other utilities);

(5) mining;

(6) industrial (this category shall include all manufacturing industries, construction operations and petroleum refineries);

(7) street and highway lighting;

(8) electrified transportation (this category shall include energy supplied for the propulsion of vehicles, but shall not include energy supplied for office buildings, depots, signal lights or other associated facilities that shall be reported as commercial or industrial);

(9) other (this category shall include municipal water pumping facilities, oil and gas pipeline pumping facilities, military camps and bases, and all other consumers not reported in subitems (1) to (8)); and

(10) the sum of subitems (1) to (9);

C. an estimate of the demand for power in the applicant's system at the time of annual system peak demand, including an estimated breakdown of the demand into the consumer categories listed in item B;

D. the applicant's system peak demand by month;

E. the estimated annual revenue requirement per kilowatt hour for the system in current dollars; and

F. the applicant's estimated average system weekday load factor by month; in other words, for each month, the estimated average of the individual load factors for each weekday in the month.

Subp. 3. **Forecast methodology.** An applicant may use a forecast methodology of its own choosing, with due consideration given to cost, staffing requirements, and data availability. However, forecast data provided by the applicant is subject to tests of accuracy, reasonableness, and consistency. The applicant shall detail the forecast methodology employed to obtain the forecasts provided under subpart 2, including:

A. the overall methodological framework that is used;

B. the specific analytical techniques which 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:

(1) the purpose of the technique;

(2) typical computations (e.g., computer printouts, formulas used), specifying variables and data; and

(3) the results of appropriate statistical tests;

E. forecast confidence levels or ranges of accuracy for annual peak demand and annual electrical consumption, as well as a description of their derivation;

F. a brief analysis of the methodology used, including:

- (1) its strengths and weaknesses;
- (2) its suitability to the system;
- (3) cost considerations;
- (4) data requirements;
- (5) past accuracy; and
- (6) other factors considered significant by the applicant; and

G. an explanation of discrepancies that appear between the forecasts presented in the application and the forecasts submitted under chapter 7610 or in the applicant's previous certificate of need proceedings.

Subp. 4. **Data base for forecasts.** The applicant shall discuss the data base used in arriving at the forecast presented in its application, 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's office);

B. a clear identification of any adjustments made to raw data in order to adapt them for use in forecasts, including:

- (1) the nature of the adjustment;
- (2) the reason for the adjustment; and
- (3) the magnitude of the adjustment.

The applicant shall provide to the commission or the administrative law judge on demand copies of the data sets used in making the forecasts, including both raw and adjusted data, input and output data.

Subp. 5. **Assumptions and special information.** The applicant shall discuss each essential assumption made in preparing the forecast, including the need for the assumption, the nature of the assumption, and the sensitivity of forecast results to variations in the essential assumptions.

The applicant shall discuss the assumptions made regarding:

- A. the availability of alternate sources of energy;
- B. the expected conversion from other fuels to electricity or vice versa;
- C. future prices of electricity for customers in the applicant's system and the effect that such price changes will likely have on the applicant's system demand;

D. the data requested in subpart 2 that is not available historically or not generated by the applicant in preparing its own internal forecast;

E. the effect of energy conservation programs on long-term electrical demand; and

F. any other factor considered by the applicant in preparing the forecast.

Subp. 6. **Coordination of forecasts with other systems.** The applicant shall provide:

A. a description of the extent to which the applicant coordinates its load forecasts with those of other systems, such as neighboring systems and associate systems in a power pool or coordinating organization; and

B. a description of the manner in which such forecasts are coordinated, and any problems experienced in efforts to coordinate load forecasts.

Statutory Authority: *MS s 216A.05; 216B.08; 216B.2421; 216B.243; 216C.10*

History: *L 1983 c 289 s 115; L 1987 c 312 art 1 s 10; 12 SR 2624; 17 SR 1279*

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