CHAPTER 7849
PUBLIC UTILITIES COMMISSION
POWER PLANTS AND TRANSMISSION LINES

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7849.0010 DEFINITIONS.

Subpart 1. **Scope.** For purposes of this chapter, the following definitions shall apply.

Subp. 2. **Adjusted net capability.** "Adjusted net capability" means net generating capacity, minus participation sales, plus participation purchases.

Subp. 3. **Adjusted net demand.** "Adjusted net demand" means system demand, minus firm purchases, plus firm sales.

Subp. 4. **Annual adjusted net demand.** "Annual adjusted net demand" means annual system demand, minus firm purchases, plus firm sales.

Subp. 5. **Annual electrical consumption.** "Annual electrical consumption" means sales of kilowatt hours of electricity to ultimate consumers over a 12-month period beginning January 1 and ending December 31 of the forecast year.

Subp. 6. **Annual system demand.** "Annual system demand" means the highest system demand of a utility occurring during the 12-month period ending with a given month.

Subp. 7. **Capacity factor.** "Capacity factor" means the ratio of the actual amount of electrical energy generated during a designated period by a particular generating facility to the maximum amount of electrical energy that could have been generated during the period by the facility had it been operated continuously at its rated capacity.

Subp. 8. **Commission.** "Commission" means the Minnesota Public Utilities Commission.

Subp. 9. **Construction.** "Construction" means significant physical alteration of a site to install or enlarge a large energy facility, but not including an activity incident to preliminary engineering or environmental studies.

Subp. 10. **Firm purchases; firm sales.** "Firm purchases" and "firm sales" mean the amount of power to be purchased or sold which is intended to have assured availability.

Subp. 11. **Forecast years.** "Forecast years" means the 26 calendar years consisting of the calendar year the application is filed with the commission, the ten previous calendar years, and the 15 subsequent calendar years.

Subp. 12. **Heat rate.** "Heat rate" means a measure of average thermal efficiency of an electric generating facility expressed as the ratio of input energy per net kilowatt hour produced, computed by dividing the total energy content of fuel burned for electricity generation by the resulting net kilowatt hour generation.

Subp. 13. **LEGF; large electric generating facility.** "Large electric generating facility" or "LEGF" means an electric power generating unit or combination of units as defined by Minnesota Statutes, section 216B.2421, subdivision 2, paragraph (a).

Subp. 14. **LHVTL; large high voltage transmission line.** "Large high voltage transmission line" or "LHVTL" means a conductor of electrical energy as defined by Minnesota Statutes, section 216B.2421, subdivision 2, paragraph (b), and associated facilities necessary for normal operation of the conductor, such as insulators, towers, substations, and terminals.

Subp. 15. **Load center.** "Load center" means that portion or those portions of a utility's system where electrical energy demand is concentrated.

Subp. 16. **Load factor.** "Load factor" means the ratio of the average load in kilowatts supplied during a designated period to the maximum load in kilowatts that was supplied during that designated period.

Subp. 17. **Minnesota service area.** "Minnesota service area" means that portion of a utility's system lying within Minnesota.

Subp. 18. **Net generating capacity.** "Net generating capacity" means the total number of kilowatts, less station use, that all the generating facilities of a system could supply at the time of its maximum system demand. The capability of the generating units that are temporarily out of service for maintenance or repair shall be included in the net generating capacity.

Subp. 19. **Net reserve capacity obligation.** "Net reserve capacity obligation" means the annual adjusted net demand multiplied by the percent reserve capacity requirement.

Subp. 20. **Nominal generating capability.** "Nominal generating capability" means the average output power level, net of in-plant use, that a proposed LEGF is expected to be capable of maintaining over a period of four continuous hours of operation.

Subp. 21. **Participation power.** "Participation power" means power and energy that are sold from a specific generating unit or units for a period of six or more months on a continuously available basis (except when such unit or units are temporarily out of service for maintenance, during which time the delivery of energy from other generating units is at the seller's option).

Subp. 22. **Participation purchases; participation sales.** "Participation purchases" and "participation sales" mean purchases and sales under a participation power agreement or a seasonal participation power agreement.

Subp. 23. **Peak demand.** "Peak demand" means the highest system demand occurring within any designated period of time.

Subp. 24. **Promotional practices.** "Promotional practices" means any action or policies by an applicant, except those actions or policies that are permitted or mandated by statute or rule, which directly or indirectly give rise to the demand for the facility, including but not limited to advertising, billing practices, promotion of increased use of electrical energy, and other marketing activities.

Subp. 25. **Seasonal adjusted net demand.** "Seasonal adjusted net demand" means seasonal system demand, minus firm purchases, plus firm sales.

Subp. 26. **Seasonal participation power.** "Seasonal participation power" means participation power sold and bought on a seasonal (summer or winter) basis.

Subp. 27. **Seasonal system demand.** "Seasonal system demand" means the maximum system demand on the applicant's system that occurs or is expected to occur in any summer season or winter season.

Subp. 28. **Summer season.** "Summer season" means the period from May 1 through October 31.

Subp. 29. **System.** "System" means the service area where the utility's ulti-

mate consumers are located and that combination of generating, transmission, and distribution facilities that makes up the operating physical plant of the utility, whether owned or nonowned, for the delivery of electrical energy to ultimate consumers.

Subp. 30. **System demand.** "System demand" means the number of kilowatts that is equal to the kilowatt hours required in any clock hour, attributable to energy required by the system during such hour for supply of firm energy to ultimate consumers, including system losses, and also including any transmission losses occurring on other systems and supplied by the system for transmission of firm energy, but excluding generating station uses and excluding transmission losses charged to another system.

Subp. 31. **Ultimate consumers.** "Ultimate consumers" means consumers purchasing electricity for their own use and not for resale.

Subp. 32. **Utility.** "Utility" means any entity engaged in the generation, transmission, or distribution of electrical energy, including but not limited to a private investor-owned utility or a public or municipally owned utility.

Subp. 33. **Winter season.** "Winter season" means the period from November 1 through April 30.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

7849.0020 PURPOSE OF RULES.

The purpose of this chapter is to specify the content of applications for certificates of need and to specify criteria for the assessment of need for large electric generating facilities and large high voltage transmission lines.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

7849.0030 SCOPE.

Subpart 1. **Facilities covered.** A person applying for a certificate of need for an LEGF or an LHVTL shall provide the information required by this chapter. A certificate of need is required for a new LEGF, a new LHVTL, and for expansion of either facility when the expansion is itself of sufficient size to come within the definition of "large electric generating facility" or "large high voltage transmission line" in part 7849.0010. The nominal generating capability of an LEGF is considered its size. If the nominal generating capability of an LEGF varies by season, the higher of the two seasonal figures is considered its size.

Subp. 2. **Exemption.** Notwithstanding subpart 1, a certificate of need is not required for a facility exempted by Minnesota Statutes, section 216B.243, subdivision 8.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

CRITERIA FOR ASSESSMENT OF NEED

7849.0100 PURPOSE OF CRITERIA.

The criteria for assessment of need must be used by the commission to determine the need for a proposed large energy facility under Minnesota Statutes, sections 216B.2421, subdivision 2, and 216B.243. The factors listed under each of the criteria set forth in part 7849.0120 must be evaluated to the extent that the commission considers them applicable and pertinent to a facility proposed under this chapter. The commission shall make a specific written finding with respect to each of the criteria.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

7849.0110 CONSIDERATION OF ALTERNATIVES.

The commission shall consider only those alternatives proposed before the close of the public hearing and for which there exists substantial evidence on the record with respect to each of the criteria listed in part 7849.0120.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

7849.0120 CRITERIA.

A certificate of need must be granted to the applicant on determining that:

A. the probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states, considering:

(1) the accuracy of the applicant's forecast of demand for the type of energy that would be supplied by the proposed facility;

(2) the effects of the applicant's existing or expected conservation programs and state and federal conservation programs;

(3) the effects of promotional practices of the applicant that may have given rise to the increase in the energy demand, particularly promotional practices which have occurred since 1974;

(4) the ability of current facilities and planned facilities not requiring certificates of need to meet the future demand; and

(5) the effect of the proposed facility, or a suitable modification thereof, in making efficient use of resources;

B. a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record, considering:

(1) the appropriateness of the size, the type, and the timing of the proposed facility compared to those of reasonable alternatives;

(2) the cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives;

(3) the effects of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives; and

(4) the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives;

C. by a preponderance of the evidence on the record, the proposed facility, or a suitable modification of the facility, will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health, considering:

(1) the relationship of the proposed facility, or a suitable modification thereof, to overall state energy needs;

(2) the effects of the proposed facility, or a suitable modification thereof, upon the natural and socioeconomic environments compared to the effects of not building the facility;

(3) the effects of the proposed facility, or a suitable modification thereof, in inducing future development; and

(4) the socially beneficial uses of the output of the proposed facility, or a suitable modification thereof, including its uses to protect or enhance environmental quality; and

D. the record does not demonstrate that the design, construction, or operation of the proposed facility, or a suitable modification of the facility, will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

APPLICATIONS FOR CERTIFICATES OF NEED

7849.0200 APPLICATION PROCEDURES AND TIMING.

Subpart 1. **Form and manner.** An applicant for a certificate of need shall apply in a form and manner prescribed by this chapter.

Subp. 2. **Copies, title, table of contents.** The original and 13 copies of the application must be filed with the commission. The applicant shall provide copies of the application to other state agencies with regulatory responsibilities in connection with the proposed facility and to other interested persons who request copies. The applicant shall maintain a distribution list of the copies. Documents, forms, and schedules filed with the application must be typed on 8-1/2 inch by 11 inch paper except for drawings, maps, and similar materials. An application must contain a title page and a complete table of contents that includes the applicable rule by the titles and numbers given in this chapter. The date of preparation and the applicant's name must appear on the title page, as well as on each document filed with the application.

Subp. 3. **Changes to application.** After an application is filed, changes or corrections to the application must comply with subpart 2 as to the number of copies and size of documents. In addition, each page of a change or correction to a previously filed page must be marked with the word "REVISED" and with the date the revision was made. The original copy of the changes or corrections must be filed with the administrative law judge, and the remaining copies must be submitted to the commission. The applicant shall send to persons receiving copies of the application a like number of copies of changed or corrected pages.

Subp. 4. **Cover letter.** An application for a certificate of need must be accompanied by a cover letter signed by an authorized officer or agent of the applicant. The cover letter must specify the type of facility for which a certificate of need is requested.

Subp. 5. **Complete applications.** The commission must notify the applicant within 30 days of the receipt of an application if the application is not substantially complete. On notification, the applicant may correct any deficiency and may resubmit the application. If the revised application is substantially complete, the date of its submission is considered the application date.

Subp. 6. **Exemptions.** Before submitting an application, a person is exempted from any data requirement of this chapter if the person (1) requests an exemption from specified rules, in writing to the commission, and (2) shows that the data requirement is unnecessary to determine the need for the proposed facility or may be satisfied by submitting another document. A request for exemption must be filed at least 45 days before submitting an application. The commission shall respond in writing to a request for exemption within 30 days of receipt and include the reasons for the decision. The commission shall file a statement of exemptions granted and reasons for granting them before beginning the hearing.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

7849.0210 FILING FEES AND PAYMENT SCHEDULE.

Subpart 1. **Fees.** The fee for processing an application shall be: $10,000 plus $50 for each megawatt of plant capacity for LEGF's; or $10,000 plus $40 per kilovolt of design voltage for LHVTL's; plus such additional fees as are reasonably necessary for completion of the evaluation of need for the proposed facility.

Subp. 2. **Payment schedule.** Twenty-five percent of the fee set according to subpart 1 must accompany the application, and the balance must be paid in three equal installments within 45, 90, and 135 days after submission of the applica-

tion. The applicant must be notified of and billed for costs not covered by the fee described in subpart 1. The additional fees must be paid within 30 days of notification. The billing of additional fees must be accompanied by an itemized document showing the necessity for the additional assessment.

Subp. 3. **Payment required.** The commission shall not issue its decision on the application until the outstanding set fee payments and additional billings under subparts 1 and 2 are paid by the applicant.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

7849.0220 CONTENTS OF APPLICATION.

Subpart 1. **Large electric generating facilities (LEGF).** Each application for a certificate of need for an LEGF shall include all of the information required by parts 7849.0240, 7849.0250, and 7849.0270 to 7849.0340.

Subp. 2. **Large high voltage transmission lines (LHVTL).** Each application for a certificate of need for an LHVTL shall include all of the information required by parts 7849.0240 and 7849.0260 to 7849.0340. If, however, a proposed LHVTL is designed to deliver electric power to a particular load center within the applicant's system, the application shall contain the information required by part 7849.0270 for that load center rather than for the system as a whole.

Subp. 3. **Joint ownership and multiparty use.** If the proposed LEGF or LHVTL is to be owned jointly by two or more utilities or by a pool, the information required by this chapter must be provided by each joint owner for its system. If the facility is designed to meet the long term needs, in excess of 80 megawatts, of a particular utility that is not to be an owner, that utility must also provide the information required by this chapter. Joint applicants may use a common submission to satisfy the requirements of any part for which the appropriate response does not vary by utility.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

7849.0230 ENVIRONMENTAL REPORT.

Subpart 1. **Draft report.** If the application is for an LHVTL, the information submitted under parts 7849.0240, 7849.0260, and 7849.0290 to 7849.0340 must be designated by the applicant as its "draft environmental report" and distributed in accordance with part 4410.7100, subpart 5.

Subp. 2. **Written responses.** The applicant shall submit written responses to the substantive comments entered into the record of the proceeding before the close of the public hearing on the application. The written responses must be entered into the record and be available to the administrative law judge in preparing the recommendation on the application.

Subp. 3. **Final report.** The draft environmental report, written comments, and the applicant's written responses to comments comprise the "final environmental report," which must be distributed in accordance with part 4410.7100, subpart 5.

Subp. 4. **Notice of final report.** On completing the final environmental report, the commission shall have published in the EQB Monitor, published by the Minnesota Environmental Quality Board, a notice indicating completion.

Subp. 5. **Supplements.** The applicant must prepare a supplement to the final environmental report if the tests described in part 4410.3000, subparts 1 and 2, are met and a certificate of need proceeding on the proposed facility is pending.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

7849.0240 NEED SUMMARY AND ADDITIONAL CONSIDERATIONS.

Subpart 1. **Need summary.** An application must contain a summary of the major factors that justify the need for the proposed facility. This summary must not exceed, without the approval of the commission, 15 pages in length, including text, tables, graphs, and figures.

Subp. 2. **Additional considerations.** Each application shall contain an explanation of the relationship of the proposed facility to each of the following socioeconomic considerations:

A. socially beneficial uses of the output of the facility, including its uses to protect or enhance environmental quality;

B. promotional activities that may have given rise to the demand for the facility; and

C. the effects of the facility in inducing future development.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

7849.0250 DESCRIPTION OF PROPOSED LEGF AND ALTERNATIVES.

An application for a proposed LEGF must include:

A. a description of the facility, including:

(1) the nominal generating capability of the facility, as well as a discussion of the effect of the economies of scale on the facility size and timing;

(2) a description of the anticipated operating cycle, including the expected annual capacity factor;

(3) the type of fuel used, including the reason for the choice of fuel, projection of the availability of this fuel type over the projected life of the facility, and alternate fuels, if any;

(4) the anticipated heat rate of the facility; and

(5) to the fullest extent known to the applicant, the anticipated areas where the proposed facility could be located;

B. a discussion of the availability of alternatives to the facility, including but not limited to:

(1) purchased power;

(2) increased efficiency of existing facilities, including transmission lines;

(3) new transmission lines;

(4) new generating facilities of a different size or using a different energy source (fuel oil, natural gas, coal, nuclear fission, and the emergent technologies); and

(5) any reasonable combinations of the alternatives listed in subitems (1) to (4);

C. for the proposed facility and for each of the alternatives provided in response to item B that could provide electric power at the asserted level of need, a discussion of:

(1) its capacity cost in current dollars per kilowatt;

(2) its service life;

(3) its estimated average annual availability;

(4) its fuel costs in current dollars per kilowatt hour;

(5) its variable operating and maintenance costs in current dollars per kilowatt hour;

(6) the total cost in current dollars of a kilowatt hour provided by it;

(7) an estimate of its effect on rates system-wide and in Minnesota, assuming a test year beginning with the proposed in-service date;

(8) its efficiency, expressed for a generating facility as the estimated heat rate, or 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; and

(9) the major assumptions made in providing the information in subitems (1) to (8), including projected escalation rates for fuel costs and operating and maintenance costs, as well as projected capacity factors;

D. a map (of appropriate scale) showing the applicant's system; and

E. such other information about the proposed facility and each alternative as may be relevant to determination of need.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

7849.0260 DESCRIPTION OF PROPOSED LHVTL AND ALTERNATIVES.

Each application for a proposed LHVTL must include:

A. a description of the type and general location of the proposed line, including:

(1) the design voltage;

(2) the number, the sizes, and the types of conductors;

(3) the expected losses under projected maximum loading and under projected average loading in the length of the transmission line and at the terminals or substations;

(4) the approximate length of the proposed transmission line and the portion of that length in Minnesota;

(5) the approximate location of DC terminals or AC substations, which information shall be on a map of appropriate scale; and

(6) a list of all counties reasonably likely to be affected by construction and operation of the proposed line;

B. a discussion of the availability of alternatives to the facility, including but not limited to:

(1) new generation of various technologies, sizes, and fuel types;

(2) upgrading of existing transmission lines or existing generating facilities;

(3) transmission lines with different design voltages or with different numbers, sizes, and types of conductors;

(4) transmission lines with different terminals or substations;

(5) double circuiting of existing transmission lines;

(6) if the proposed facility is for DC (AC) transmission, an AC (DC) transmission line;

(7) if the proposed facility is for overhead (underground) transmission, an underground (overhead) transmission line; and

(8) any reasonable combinations of the alternatives listed in subitems (1) to (7);

C. for the proposed facility and for each of the alternatives provided in response to item B that could provide electric power at the asserted level of need, a discussion of:

(1) its total cost in current dollars;

(2) its service life;

(3) its estimated average annual availability;

(4) its estimated annual operating and maintenance costs in current dollars;

(5) an estimate of its effect on rates system-wide and in Minnesota, assuming a test year beginning with the proposed in-service date;

(6) its 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, or expressed for a generating facility as the estimated heat rate; and

(7) the major assumptions made in providing the information in subitems (1) to (6);

D. a map (of appropriate scale) showing the applicant's system or load center to be served by the proposed LHVTL; and

E. such other information about the proposed facility and each alternative as may be relevant to determination of need.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

7849.0270 PEAK DEMAND AND ANNUAL ELECTRICAL 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 sup-

plied 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, manpower 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; 12 SR 2624*

7849.0280 SYSTEM CAPACITY.

The applicant shall describe the ability of its existing system to meet the demand for electrical energy forecast in response to part 7849.0270 and the extent to which the proposed facility will increase this capability. In preparing this description, the applicant shall present the following information:

A. a brief discussion of power planning programs, including criteria, applied to the applicant's system and to the power pool or area within which the applicant's planning studies are based;

B. the applicant's seasonal firm purchases and seasonal firm sales for each utility involved in each transaction for each of the forecast years;

C. the applicant's seasonal participation purchases and seasonal participation sales for each utility involved in each transaction for each of the forecast years;

D. for the summer season and for the winter season corresponding to each forecast year, the load and generation capacity data requested in subitems (1) to (13), including the anticipated purchases, sales, capacity retirements, and capacity additions, except those that depend on certificates of need not yet issued by the commission:

(1) seasonal system demand;

(2) annual system demand;

(3) total seasonal firm purchases;

(4) total seasonal firm sales;

(5) seasonal adjusted net demand (subitem (1) minus subitem (3) plus subitem (4));

(6) annual adjusted net demand (subitem (2) minus subitem (3) plus subitem (4));

(7) net generating capacity;

(8) total participation purchases;

(9) total participation sales;

(10) adjusted net capability (subitem (7) plus subitem (8) minus subitem (9));

(11) net reserve capacity obligation;

(12) total firm capacity obligation (subitem (5) plus subitem (11)); and

(13) surplus or deficit (-) capacity (subitem (10) minus subitem (12));

E. for the summer season and for the winter season corresponding to each forecast year subsequent to the year of application, the load and generation capacity data requested in item D, subitems (1) to (13), including purchases, sales, and generating capability contingent on the proposed facility;

F. for the summer season and for the winter season corresponding to each forecast year subsequent to the year of application, the load and generation capacity data requested in item D, subitems (1) to (13), including all projected purchases, sales, and generating capability;

G. for each of the forecast years subsequent to the year of application, a list of proposed additions and retirements in net generating capability, including the probable date of application for any addition that is expected to require a certificate of need;

H. for the previous calendar year, the current year, the first full calendar year before the proposed facility is expected to be in operation and the first full calendar year of operation of the proposed facility, a graph of monthly adjusted net demand and monthly adjusted net capability, as well as a plot on the same graph of the difference between the adjusted net capability and actual, planned, or estimated maintenance outages of generation and transmission facilities; and

I. a discussion of the appropriateness of and the method of determining system reserve margins, considering the probability of forced outages of generating units, deviation from load forecasts, scheduled maintenance outages of generation and transmission facilities, power exchange arrangements as they affect reserve requirements, and transfer capabilities.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

7849.0290 CONSERVATION PROGRAMS.

An application must include:

A. the name of the committee, department, or individual responsible for the applicant's energy conservation and efficiency programs, including load management;

B. a list of the applicant's energy conservation and efficiency goals and objectives;

C. a description of the specific energy conservation and efficiency programs the applicant has considered, a list of those that have been implemented, and the reasons why the other programs have not been implemented;

D. a description of the major accomplishments that have been made by the applicant with respect to energy conservation and efficiency;

E. a description of the applicant's future plans through the forecast years with respect to energy conservation and efficiency; and

F. a quantification of the manner by which these programs affect or help determine the forecast provided in response to part 7849.0270, subpart 2, a list of their total costs by program, and a discussion of their expected effects in reducing the need for new generation and transmission facilities.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

7849.0300 CONSEQUENCES OF DELAY.

The applicant shall present a discussion of anticipated consequences to its system, neighboring systems, and the power pool should the proposed facility be delayed one, two, and three years, or postponed indefinitely. This information must be provided for the following three levels of demand: the expected demand provided in response to part 7849.0270, subpart 2, and the upper and lower confidence levels provided in response to part 7849.0270, subpart 3, item E.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

7849.0310 ENVIRONMENTAL INFORMATION REQUIRED.

Each applicant shall provide environmental data for the proposed facility and for each alternative considered in detail in response to part 7849.0250, item C or 7849.0260, item C. Information relating to construction and operation of each of these alternatives shall be provided as indicated in parts 7849.0320 to 7849.0340, to the extent that such information is reasonably available to the applicant and applicable to the particular alternative. Where appropriate, the applicant shall submit data for a range of possible facility designs. Major assumptions should be stated, and references should be cited where appropriate.

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

History: *L 1983 c 289 s 115*

7849.0320 GENERATING FACILITIES.

The applicant shall provide the following information for each alternative that would involve construction of an LEGF:

A. the estimated range of land requirements for the facility with a discussion of assumptions on land requirements for water storage, cooling systems, and solid waste storage;

B. the estimated amount of vehicular, rail, and barge traffic generated by construction and operation of the facility;

C. for fossil-fueled facilities:

(1) the expected regional sources of fuel for the facility;

(2) the typical fuel requirement (in tons per hour, gallons per hour, or thousands of cubic feet per hour) during operation at rated capacity and the expected annual fuel requirement at the expected capacity factor;

(3) the expected rate of heat input for the facility in Btu per hour during operation at rated capacity;

(4) the typical range of the heat value of the fuel (in Btu per pound, Btu per gallon, or Btu per 1,000 cubic feet) and the typical average heat value of the fuel; and

(5) the typical ranges of sulfur, ash, and moisture content of the fuel;

D. for fossil fueled facilities:

(1) the estimated range of trace element emissions and the maximum emissions of sulfur dioxide, nitrogen oxides, and particulates in pounds per hour during operation at rated capacity; and

(2) the estimated range of maximum contributions to 24-hour average ground level concentrations at specified distances from the stack of sulfur dioxide, nitrogen oxides, and particulates in micrograms per cubic meter during operation at rated capacity and assuming generalized worst-case meteorological conditions;

E. water use by the facility for alternate cooling systems, including:

(1) the estimated maximum use, including the groundwater pumping rate in gallons per minute and surface water appropriation in cubic feet per second;

(2) the estimated groundwater appropriation in million gallons per year; and

(3) the annual consumption in acre-feet;

F. the potential sources and types of discharges to water attributable to operation of the facility;

G. radioactive releases, including:

(1) for nuclear facilities, the typical types and amounts of radionuclides released by the facility in curies per year for alternate facility designs and levels of waste treatment; and

(2) for fossil-fueled facilities, the estimated range of radioactivity released by the facility in curies per year;

H. the potential types and quantities of solid wastes produced by the facility in tons per year at the expected capacity factor;

I. the potential sources and types of audible noise attributable to operation of the facility;

J. the estimated work force required for construction and operation of the facility; and

K. the minimum number and size of transmission facilities required to provide a reliable outlet for the generating facility.

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

History: *L 1983 c 289 s 115*

7849.0330 TRANSMISSION FACILITIES.

The applicant shall provide data for each alternative that would involve construction of an LHVTL. The following information must be included:

A. for overhead transmission facilities:

(1) schematic diagrams that show the dimensions of the support structures and conductor configurations for each type of support structure that may be used;

(2) a discussion of the strength and distribution of the electric field attributable to the transmission facility, including the contribution of air ions if appropriate;

(3) a discussion of ozone and nitrogen oxide emissions attributable to the transmission facility;

(4) a discussion of radio and television interference attributable to the transmission facility; and

(5) a discussion of the characteristics and estimated maximum and typical levels of audible noise attributable to the transmission facilities;

B. for underground transmission facilities:

(1) the types and dimensions of the cable systems and associated facilities that would be used;

(2) the types and quantities of materials required for the cable system, including materials required for insulation and cooling of the cable; and

(3) the amount of heat released by the cable system in kilowatts per foot of cable length;

C. the estimated width of the right-of-way required for the transmission facility;

D. a description of construction practices for the transmission facility;

E. a description of operation and maintenance practices for the transmission facility;

F. the estimated work force required for construction and for operation and maintenance of the transmission facility; and

G. a narrative description of the major features of the region between the endpoints of the transmission facility. The region shall encompass the likely area for routes between the endpoints. The description should emphasize the area within three miles of the endpoints. The following information shall be described where applicable:

(1) hydrologic features including lakes, rivers, streams, and wetlands;

(2) natural vegetation and associated wildlife;

(3) physiographic regions; and

(4) land-use types, including human settlement, recreation, agricultural production, forestry production, and mineral extraction.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

7849.0340 THE ALTERNATIVE OF NO FACILITY.

For each of the three levels of demand specified in part 7849.0300, the applicant shall provide the following information for the alternative of no facility:

A. a description of the expected operation of existing and committed generating and transmission facilities;

B. a description of the changes in resource requirements and wastes produced by facilities discussed in response to item A, including:

(1) the amount of land required;

(2) induced traffic;

(3) fuel requirements;

(4) airborne emissions;

(5) water appropriation and consumption;

(6) discharges to water;

(7) reject heat;

(8) radioactive releases;

(9) solid waste production;

(10) audible noise; and

(11) labor requirements; and

C. a description of equipment and measures that may be used to reduce the environmental impact of the alternative of no facility.

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

History: *L 1983 c 289 s 115; 12 SR 2624*

MODIFICATIONS

7849.0400 CERTIFICATE OF NEED CONDITIONS AND CHANGES.

Subpart 1. **Authority of commission.** Issuance of a certificate of need may be made contingent upon modifications required by the commission. When an application is denied, the commission shall state the reasons for the denial.

Subp. 2. **Proposed changes in size, type, and timing.** Changes proposed by an applicant to the certified size, type, or timing of a proposed facility before the facility is placed in service must conform to the following provisions:

A. A delay of one year or less in the in-service date of a large generation or transmission facility previously certified by the commission is not subject to review by the commission.

B. A power plant capacity addition or subtraction smaller than the lesser of 80 megawatts or 20 percent of the capacity approved in a certificate of need issued by the commission does not require recertification.

C. A change in power plant ownership smaller than the lesser of 80 megawatts or 20 percent of the capacity approved in a certificate of need issued by the commission does not require recertification.

D. The applicant shall notify the commission as soon as it determines that a change described in item A, B, or C is imminent, detailing the reasons for the change.

E. A large transmission line length addition or subtraction made as a result of the route length approved by the Minnesota Environmental Quality Board for projects previously certified does not require recertification.

F. A design change required by another state agency in its permitting process for certified facilities is not subject to review by the commission, unless the change contradicts the basic type determination specified by the certificate of need.

G. If a utility applies to the Minnesota Environmental Quality Board for a transmission line route that is not expected to meet the definition of LHVTL in part 7849.0010, but at some time in the routing process it becomes apparent that the board may approve a route that meets the definition, the utility may apply for a certificate of need as soon as possible after that time. The length of a route is determined by measuring the length of its center line.

H. If an applicant determines that a change in size, type, timing, or ownership other than specified in this subpart is necessary for a large generation or transmission facility previously certified by the commission, the applicant must inform the commission of the desired change and detail the reasons for the change. A copy of the applicant's submission to the commission must be sent to each intervenor in the certificate of need hearing proceeding on the facility. Intervenors may comment on the proposed change within 15 days of being notified of the change. The commission shall evaluate the reasons for and against the proposed change and, within 45 days of receipt of the request, notify the applicant whether the change is acceptable without recertification. The commission shall order further hearings if and only if it determines that the change, if known at the time of the need decision on the facility, could reasonably have resulted in a different decision under the criteria specified in part 7849.0120.

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

History: *L 1983 c 289 s 115; 12 SR 2624*