

**CHAPTER 4270**  
**DEPARTMENT OF ENERGY AND ECONOMIC**  
**DEVELOPMENT**  
**LARGE ENERGY FACILITIES**

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**FUEL CONVERSION, COAL LIQUIDS PIPELINES, NUCLEAR FUEL,**  
**AND WASTES**

**4270.0100 DEFINITIONS.**

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

Subp. 2. **Agency.** "Agency" means the Department of Energy and Economic Development.

Subp. 3. **Applicant.** "Applicant" means the person or persons submitting a certificate of need application.

Subp. 4. **Application.** "Application" means a document, the contents of which are described in these rules, submitted to the director for the purpose of obtaining a certificate of need.

Subp. 5. **Barrel.** "Barrel" means the quantity of liquid equaling 42 gallons (159.0 liters).

Subp. 6. **Base capacity.** "Base capacity" means:

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A. the capacity or throughput of a large energy facility as of the effective date of this chapter;

B. the capacity or throughput of a certified new large energy facility; or

C. if a large energy facility has been expanded since the effective date of these rules, the capacity or throughput of the facility following the most recent certified expansion.

Subp. 7. **Btu.** "Btu" means British thermal unit, a common unit of energy measurement that is used in this chapter for comparative purposes.

Subp. 8. **Coal liquids pipeline.** "Coal liquids pipeline" means any pipeline greater than 15.2 centimeters (six inches) in diameter and having more than 80.4 kilometers (50 miles) of its length in Minnesota used for the transportation of liquids derived from coal.

Subp. 9. **Coal slurry pipeline.** "Coal slurry pipeline" means any pipeline greater than 15.2 centimeters (six inches) in diameter and have more than 80.4 kilometers (50 miles) of its length in Minnesota used for the transportation of coal or any solid derivative thereof.

Subp. 10. **Demand.** "Demand" means that quantity of products or services from the applicant's facilities for which there are willing and able purchasers.

Subp. 11. **Director.** "Director" means the director of the agency.

Subp. 12. **Energy product.** "Energy product" means any fuel or other natural resource that may be used to provide energy.

Subp. 13. **Expansion.** "Expansion" means an increase in the capacity of an existing large energy facility, accomplished by one or more methods, including but not limited to increasing the size of the facility, using new or different technology, or adding pumping stations.

Subp. 14. **Firm contract customers.** "Firm contract customers" means customers served under schedules or contracts that neither anticipate nor permit interruption unless a state of emergency exists.

Subp. 15. **Forecast.** "Forecast" means a projection of future demand for some specified time period.

Subp. 16. **Forecast years.** "Forecast years" means the 16-year period consisting of the year of application plus the next 15 years.

Subp. 17. **Fuel conversion facility.** "Fuel conversion facility" means any facility intended to convert coal, peat, wood, or any other material, excepting fissile, fertile, or fissionable nuclear material, into another combustible fuel and having the capacity to process 22.7 metric tons (25 tons) of the material per hour at its peak capacity. A fuel conversion facility shall include any storage facility needed for operation of the facility at the design capacity. A coal-cleaning or coal-agglomerating facility shall not be considered a fuel conversion facility, unless its operation causes a change in the molecular structure of the input coal.

Subp. 18. **Interruptible contract customers.** "Interruptible contract customers" means customers served under schedules or contracts that anticipate or permit interruption of service during the term of the contract.

Subp. 19. **Joint application.** "Joint application" means an application submitted to the director by two or more persons.

Subp. 20. **Mbpd-mile.** "Mbpd-mile" means a descriptive unit used as a measure of the size of a coal liquids pipeline, the quantity of which is determined by multiplying:

A. either the length in miles of the new (section of) pipeline in Minnesota, or 50 if the capacity expansion is achieved by adding power; and

B. the new or additional design capacity in thousand barrels per day (Mbpd).

If the pipeline capacity would be expanded by a combination of looping and

adding power, the mbpd-miles corresponding to each method of expansion shall be calculated and the sum of the two shall be the size of the pipeline.

Subp. 21. **Mcf.** "Mcf" means 1,000 cubic feet, a common unit of volume measurement for natural gas.

Subp. 22. **Minnesota service area.** "Minnesota service area" means that part of an applicant's service area that is in Minnesota.

Subp. 23. **Mton-mile.** "Mton-mile" means a descriptive unit used as a measure of the size of a coal slurry pipeline, the quantity of which is determined by multiplying:

A. either the length in miles of new (section of) pipeline in Minnesota, or 50 if the capacity expansion is achieved by adding power; and

B. the new or additional design capacity in thousands of tons per day (Mton).

If the pipeline capacity would be expanded by a combination of looping and adding power, the Mton-miles corresponding to each expansion shall be calculated and the sum of the two shall be the size of the pipeline.

Subp. 24. **Nuclear fuel processing facility.** "Nuclear fuel processing facility" means any facility designed for or capable of processing or reprocessing any material for use as a fuel in a nuclear reactor. A nuclear fuel processing facility shall include any radioactive or nonradioactive waste storage or disposal facility on the site needed for operation of the facility at the design capacity.

Subp. 25. **Nuclear waste storage or disposal facility.** "Nuclear waste storage or disposal facility" means any facility designed for or capable of serving as a temporary or permanent depository for radioactive or associated nonradioactive wastes produced by a nuclear reactor or a nuclear fuel processing facility, including any burial ground for low-level radioactive wastes.

Subp. 26. **Peak day.** "Peak day" means that day during a calendar year when demand is the greatest.

Subp. 27. **Peak demand.** "Peak demand" means the highest demand placed upon a facility within a designated period of time.

Subp. 28. **Person.** "Person" means an individual, partnership, corporation, joint stock company, unincorporated association or society, municipal corporation, or a government or governmental subdivision, unit, or agency other than a court of law.

Subp. 29. **Promotional practices.** "Promotional practices" means any actions or policies by an applicant, an applicant's customers, or other persons that directly or indirectly give rise to the demand for the facility, including but not limited to advertising, billing practices, and other marketing activities.

Subp. 30. **Service area.** "Service area" means that geographical area in which the applicant has customers.

Subp. 31. **Substantially complete application.** "Substantially complete application" means an application that is deemed by the director to be in substantial compliance with the information requirements of these rules.

Subp. 32. **Ton.** "Ton" means 907.2 kilograms (2,000 pounds).

**Statutory Authority:** *MS s 116J.10*

**History:** *L 1983 c 289 s 115 subd 1*

#### 4270.0200 PURPOSE.

The purpose of this chapter is to specify the contents of applications for certificates of need and to specify criteria for assessment of need, pursuant to Minnesota Statutes, section 216B.243, for fuel conversion facilities, coal slurry or coal liquids pipelines, nuclear fuel processing facilities, and nuclear waste storage or disposal facilities.

**Statutory Authority:** *MS s 116J.10*

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### 4270.0300 SCOPE OF RULES.

Subpart 1. **Facilities subject to rules.** Each person applying for a certificate of need to construct one of the following types of large energy facilities pursuant to this chapter shall provide all information required by this chapter:

- A. a new fuel conversion facility;
- B. expansion of an existing fuel conversion facility by at least 25 tons per hour of input material over the base capacity of the facility;
- C. a new coal slurry or coal liquids pipeline;
- D. expansion of an existing coal slurry pipeline by at least 1,000 tons of coal or coal derivatives per day over the base capacity of the facility;
- E. expansion of an existing coal liquids pipeline by at least 15,000 barrels per day over the base capacity of the facility;
- F. a new nuclear fuel processing facility;
- G. expansion of an existing nuclear fuel processing facility by at least 20 percent of the base capacity of the facility;
- H. a new nuclear waste storage or disposal facility; and
- I. expansion of an existing nuclear waste storage or disposal facility by at least 20 percent of the base capacity of the facility.

Subp. 2. **Exceptions.** The following types of facilities shall not be subject to this chapter:

- A. any large energy facility on which construction has begun or has been completed by the effective date of this chapter;
- B. any nuclear waste storage or disposal facility to be constructed in conjunction with a large generating facility that itself requires a certificate of need, unless the total capacity of that storage facility is not covered by the certificate of need issued for the large electric generating facility and associated facilities; and
- C. any facility covered by Minnesota Statutes 1977 Supplement, sections 116C.71 to 116C.74, unless expressly authorized by the legislature.

**Statutory Authority:** *MS s 116J.10*

### CRITERIA FOR ASSESSMENT OF NEED

#### 4270.1100 PURPOSE OF THE CRITERIA.

The criteria for assessment of need shall be used by the director in the determination of need for each proposed large energy facility that is subject to these rules. The factors listed under each of the criteria set forth at part 4270.1300 shall be evaluated to the extent that the director deems them applicable and pertinent to each facility proposed pursuant to this chapter. The director shall make a specific written finding with respect to each of the criteria. In the case of an application for a certificate of need for an expansion of a nuclear waste storage or disposal facility serving an existing large electric generating facility, the director shall not make a decision that could reasonably be expected to result in a forced shutdown of the generating facility.

**Statutory Authority:** *MS s 116J.10*

#### 4270.1200 CONSIDERATION OF ALTERNATIVES.

The director 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 4270.1300.

**Statutory Authority:** *MS s 116J.10*

#### 4270.1300 CRITERIA.

A certificate of need shall be granted to the applicant if it is determined that:

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A. the probable direct or indirect result of denial would be an adverse effect upon the future adequacy, reliability, safety, 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 energy or service that would be supplied by the proposed facility;

(2) the effects of existing or expected conservation programs of the applicant, the state government, or the federal government;

(3) the effects of promotional practices in creating a need for the proposed facility, particularly promotional practices that 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 by parties or persons other than the applicant, 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. it has been demonstrated by a preponderance of the evidence on the record that the consequences of granting the certificate of need for the proposed facility, or a suitable modification thereof, are more favorable to society than the consequences of denying the certificate, 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. that it has not been demonstrated on the record that the design, construction, operation, or retirement of the proposed facility will fail to comply with those relevant policies, rules, and regulations of other state and federal agencies and local governments.

**Statutory Authority:** *MS s 116J.10*

### APPLICATIONS FOR CERTIFICATE OF NEED

#### 4270.2100 APPLICATION PROCEDURES AND TIMING.

Subpart 1. **Submission.** Each application for a certificate of need pursuant to this chapter shall be submitted in the form and manner prescribed by this chapter.

Subp. 2. **Filing copies.** A minimum of seven bound copies and one unbound

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copy of the application shall be filed with the director for use by the director and the agency staff. The director shall require additional copies, not to exceed 100 copies total, to supply other governmental authorities, potential intervenors, and libraries designated as distribution points for public use. The director shall provide for the record at the hearing a list indicating the distribution of the additional copies. All documents, forms, and schedules filed with the application shall be typed on 8-1/2 inch by 11 inch paper except for drawings, maps, and similar materials. Each application shall contain a title page and a complete table of contents, which includes the applicable rule by the titles and numbers given in this chapter. The date of preparation and the applicant's name shall appear on the title page, as well as on each document filed with the application.

**Subp. 3. Subsequent filings.** Subsequent to the filing of an application, any changes or corrections to the application shall 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 shall be marked with the word "REVISED" and with the date the revision was made. The original copy of the changes or corrections shall be filed with the hearing examiner, and the remaining copies shall be submitted to the director.

**Subp. 4. Cover letter.** Each application for a certificate of need shall be accompanied by a cover letter signed by an authorized officer or agent of the applicant. The cover letter shall specify the type of facility for which a certificate of need is requested and the number of copies of the application filed.

**Subp. 5. Hearing.** A hearing examiner shall be assigned, and a public hearing shall be scheduled to commence, no later than 80 days after the receipt of the application, in accordance with rules governing certificate of need program, chapter 4210, and the Office of Administrative Hearings rules for contested case procedures, parts 1400.5100 to 1400.8500.

**Subp. 6. Decision.** A decision on an application for a certificate of need shall be made by the director no later than six months from the receipt of the application, provided that the application as received is substantially complete.

**Subp. 7. Notice of incomplete application.** The director shall notify the applicant within 15 days of the receipt of an application if the application is not substantially complete. Upon such notification, the applicant may correct any deficiency and may resubmit the application. A decision shall be made upon the revised application within six months of the date of resubmission, assuming it is then substantially complete.

**Subp. 8. Exemption.** Prior to the submission of an applicant, a person shall be exempted from any data requirement of this chapter upon a written request to the director for exemption from specified rules and a showing by that person in the request that the data requirement is unnecessary to determine the need for the proposed facility or may be satisfied by submission of another document. A request for exemption shall be filed at least 20 days prior to submission of an application. The director shall respond in writing to each such request within 15 days of receipt, including reasons for the decision. The director shall file a statement of exemptions granted and reasons therefor prior to commencement of the hearings.

**Subp. 9. Reasons for denial.** When an application for a certificate of need is denied, the director shall state the reasons for the denial.

**Statutory Authority:** *MS s 116J.10*

### 4270.2200 FILING FEES AND PAYMENT SCHEDULE.

**Subpart 1. Fees.** The fee for processing an application shall be:

A. \$5,000 plus \$50 per ton of hourly design input for a new or expanded fuel conversion facility;

B. \$5,000 plus \$10 per mton-mile for a new or expanded coal slurry pipeline;

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C. \$5,000 plus \$1 per mbpd-mile for a new or expanded coal liquids pipeline;

D. \$20,000 plus \$50 per ton of yearly design input for a nuclear fuel processing facility; or

E. \$20,000 for a nuclear waste storage or disposal facility; plus such additional fees as are reasonably necessary for completion of the evaluation of need for the proposed facility.

**Subp. 2. Schedule.** Fifty percent of the fee set according to subpart 1, items A to D shall accompany the application and the balance shall be paid 90 days after submission of the application. The applicant shall be notified prior to the time the application is acted upon by the director of any additional fees, which fees shall be paid within 30 days of notification. The billing of such additional fees shall be accompanied by an itemized document showing the necessity for the additional assessment.

**Subp. 3. Payment required.** No certificate shall be issued until all fees are paid in full.

**Statutory Authority:** *MS s 116J.10*

**4270.2300 CONTENTS OF APPLICATION.**

**Subpart 1. Information required.** An application for a certificate of need shall provide all information required by parts 4270.2400 to 4270.2800 and, optionally, part 4270.2900. An application shall also provide information for specific types of facilities as indicated:

A. An applicant for a fuel conversion facility shall refer to parts 4270.3100 to 4270.3800 for the additional information required.

B. An applicant for a coal slurry or coal liquids pipeline shall refer to parts 4270.4100 to 4270.4800 for the additional information required.

C. An applicant for a nuclear fuel processing facility shall refer to parts 4270.5100 to 4270.5800 for the additional information required.

D. An applicant for a nuclear waste storage or disposal facility shall refer to parts 4270.6100 to 4270.6800 for additional information required.

**Subp. 2. Joint application.** If an application for a certificate of need is jointly submitted by two or more persons, then each such person shall submit separate information in response to the general information section, part 4270.2400, the conservation programs section, part 4270.2800, and the appropriate historical data and forecast section, parts 4270.3300, 4270.4300, 4270.5300, or 4270.6300.

**Subp. 3. Multiparty ownership and use.** An application for a certificate of need for a facility that would be owned and used by two or more persons shall be considered as a joint application for purposes of this chapter.

**Statutory Authority:** *MS s 116J.10*

**4270.2400 GENERAL INFORMATION SECTION.**

Each application shall include the following general information:

A. the applicant's complete name and address, telephone number, and standard industrial classification codes;

B. the complete name, title, address, and telephone number of the official or agent to be contacted concerning the applicant's filing;

C. a brief description of the nature of the applicant's business and of the products that are manufactured, produced, or processed, or of the services rendered;

D. a brief description of the proposed facility and its planned use;

E. the total fee for the application as prescribed by part 4270.2200 and the amount of the fee submitted with the application; and

F. the signatures and titles of the applicant's officers or executives

authorized to sign the application, and the signature of the preparer of the application if prepared by an outside agent.

**Statutory Authority:** *MS s 116J.10*

**4270.2500 SCHEDULE OF OTHER FILINGS.**

Each application shall contain a schedule listing all known federal, state, and local agencies or authorities with which the applicant must file for the proposed facility. The following information shall be included on the schedule:

A. the names of all known federal, state, or local authorities with which the applicant must file;

B. the title of each required permit or certificate issued by the authorities named in response to item A and needed by the applicant;

C. for each permit or certificate listed in response to item B, the date an application was filed or the projected date of future application;

D. for each permit or certificate listed in response to item B, the actual date a decision was made on the application, or the anticipated decision date; and

E. for each permit or certificate listed in response to item B for which an application was filed, the disposition or status of the permit or certificate.

**Statutory Authority:** *MS s 116J.10*

**4270.2600 NEED SUMMARY.**

Each application shall contain a summary of the major factors that justify the need for the proposed facility. Except upon prior approval of the director, this summary shall not exceed 15 pages, including text, tables, graphs, and figures.

**Statutory Authority:** *MS s 116J.10*

**4270.2700 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 116J.10*

**4270.2800 CONSERVATION PROGRAMS.**

Each application shall include the following information:

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

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 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 applicant's forecast of demand, a list of the total costs by program, and a discussion of the expected effects in reducing the need for new large energy facilities.

**Statutory Authority:** *MS s 116J.10*



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**4270.2900 OTHER DATA FILED WITH APPLICATION.**

In addition to the information required by these rules, an applicant may file additional data if it believes that such data is relevant to the director's decision.

*Statutory Authority: MS s 116J.10*

**ADDITIONAL INFORMATION FOR FUEL CONVERSION FACILITIES**

**4270.3100 DESCRIPTION OF PROPOSED FUEL CONVERSION FACILITY.**

Each application for a fuel conversion facility shall contain the following information:

A. a physical description of the facility, including:

- (1) its location, to the fullest extent known;
- (2) an estimate of the required land area and the height of the tallest structures;

- (3) its design capacity in tons per hour of input material;

- (4) a schematic drawing showing major components of the facility; and

- (5) a map showing the planned location of the facility and its interconnections with energy transportation systems;

B. data regarding design and construction of the facility, including:

- (1) if known, the complete name and business address of the engineer and firm that would be responsible for the design of the facility;

- (2) if known, the complete name and business address of the company that would construct the facility;

- (3) the proposed date for commencing construction and the proposed in-service date;

- (4) the estimated installed cost of the facility in current dollars; and

- (5) the estimated economic life of the facility; and

C. data regarding operation of the facility, including:

- (1) a narrative description of the steps of the process;

- (2) the types and sources of input materials that would be processed by the facility and the estimated energy content of each in Btu per appropriate unit of measure;

- (3) the types of output products, the amount of each, and the estimated energy content of each in Btu per appropriate unit of measure;

- (4) the projected annual operating and maintenance costs in current dollars for each of the first five calendar years of operation;

- (5) a description of the methods that would be used to transport input and output materials to and from the facility;

- (6) the estimated amounts and types of energy products that would be consumed during operation at the design capacity;

- (7) the expected average percentage of use of the full design capacity for each of the first five calendar years of operation; and

- (8) a discussion of the maintenance requirements of the facility, including the estimated impact on production.

*Statutory Authority: MS s 116J.10*

**4270.3200 ALTERNATIVES.**

Each application for a fuel conversion facility shall contain a description of alternatives available to the applicant that differ significantly from the proposed facility with respect to location, size, timing, or design. The description of each alternative shall include the following information, if applicable:

- A. the location of the facility, to the fullest extent known;
- B. the design capacity of the facility;
- C. a schematic drawing showing major components of the facility;
- D. a map showing the planned location of the facility and its interconnections with energy transportation systems;
- E. the probable date for commencing construction and the probable in-service date;
- F. the estimated installed cost of the alternative in current dollars;
- G. the estimated economic life of the facility;
- H. the input materials that would be processed by the facility and the products that would be produced;
- I. the projected annual operating and maintenance costs in current dollars for each of the first five calendar years of operation;
- J. a description of the methods that would be used to transport input and output materials to and from the facility;
- K. the estimated amounts and types of energy products that would be consumed during operation of the facility at the design capacity;
- L. the expected average percentage of use of the full design capacity for each of the first five calendar years of operation;
- M. a discussion of the maintenance requirements of the facility, including the estimated impact on production; and
- N. the reasons why the alternative was rejected.

**Statutory Authority:** *MS s 116J.10*

#### **4270.3300 HISTORICAL AND FORECAST DATA.**

**Subpart 1. Information required.** Each applicant for a fuel conversion facility shall provide five years of historical energy data, as well as a forecast of demand through the forecast years. If the fuel conversion facility is designed primarily to provide energy for the applicant's own use, data shall be submitted in response to subpart 2. If the facility is designed to produce pipeline quality gas for sale by either a utility or a pipeline company, data shall be submitted in response to subpart 3. In all other cases, data shall be submitted in response to subpart 4.

**Subp. 2. Own-use facility.** The applicant shall submit the following information about its historical and projected use of energy products:

- A. for each of the energy products that would be produced by the proposed facility, the amount of that product consumed by the applicant during each of the five preceding calendar years;
- B. the amounts of any other energy products consumed by the applicant during each of the five preceding calendar years;
- C. the amounts of those energy products listed in response to items A and B that were consumed at the applicant's Minnesota locations;
- D. for the first six forecast years, the 11th forecast year (the tenth year after the year of application), and the 16th forecast year, the projected demand by the applicant for each of the energy products named in response to items A and B and the projected demand for each at the applicant's Minnesota locations;
- E. a discussion of the methodology, statistical techniques, and data bases used in providing the forecast data required by item D;
- F. any major assumptions made in providing the forecast data required by item D, and a discussion of the sensitivity of the projections to changes in the assumptions; and
- G. any other known large energy facilities that may be constructed during the forecast years for use by the applicant.

**Subp. 3. Gas utility or pipeline.** A gas utility or pipeline company shall submit the following information:

A. for each of the ten preceding calendar years, the first six forecast years, the 11th forecast year (the tenth year after the year of application), and the 16th forecast year, annual gas consumption by ultimate consumers and the number of such customers within the applicant's system in each of the following categories:

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

(2) commercial firm who use less than 200 Mcf on peak day;

(3) commercial firm with a peak day requirement equal to or greater than 200 Mcf;

(4) industrial firm who use less than 200 mfc on peak day;

(5) industrial firm with a peak day requirement equal to or greater than 200 Mcf;

(6) commercial and industrial interruptible;

(7) other (this category shall include storage gas and other sales or deliveries not covered in subitems (1) to (7));

(8) unaccounted for; and

(9) the sum of subitems (1) to (8);

B. if the applicant's service area includes consumers outside of Minnesota, annual gas consumption by ultimate consumers within the applicant's Minnesota service area for each of the years given in item A;

C. for each of the years given in item A and for each of the categories listed in item A, subitems (1) to (9), an estimate of the daily demand for gas by ultimate consumers in the applicant's system at the time of system peak demand;

D. for each of the years given in item A, the applicant's system peak demand by month;

E. a discussion of methodology, statistical techniques, and data bases used in providing the forecast data required by items A to D;

F. a discussion of the assumptions made by the applicant with respect to the availability of alternate sources of energy, the expected conversion from other fuels to gas or vice versa, the future prices of gas for customers in the applicant's system, and the effect that such prices will likely have on the applicant's system demand, the effect of existing energy conservation programs under federal or state legislation on long-term gas demand, and any other factor considered important by the applicant;

G. a discussion of the sensitivity of the forecast to changes in the assumptions;

H. for a gas utility only, for the last calendar year, the current calendar 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, an annual supply curve consisting of a single graph for each year and showing the contributions from:

(1) pipeline contract demand;

(2) gas from storage;

(3) synthetic gas other than propane;

(4) liquefied natural gas;

(5) propane peak-shaving gas; and

(6) the proposed facility;

I. for a gas pipeline company only, for the last calendar year, the current calendar 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

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facility, an annual supply curve consisting of a single graph for each year and showing the contributions from:

- (1) own production;
- (2) committed purchases from other gas producers;
- (3) gas from storage;
- (4) emergency purchases (historical year only);
- (5) other sources; and
- (6) the proposed facility; and

J. any other known large energy facilities that may be constructed during the forecast years for use by the applicant.

**Subp. 4. Other cases.** The applicant shall submit the following information about its consumption and sales of energy products:

A. for each of the energy products that would be produced by the proposed facility, the amount sold or transported by the applicant during each of the five preceding calendar years;

B. the amounts of those energy products listed in response to item A that were sold or transported by the applicant in its Minnesota service area;

C. for each of the energy products consumed by the applicant and for each of the five preceding calendar years, the total amount consumed and the amount consumed at the applicant's Minnesota locations;

D. for the first six forecast years, the 11th forecast year (the tenth year after the year of application), and the 16th forecast year, the projected total demand for products produced by the proposed facility within the applicant's service area and the projected demand within its Minnesota service area;

E. a discussion of the methodology, statistical techniques, and data bases used in providing the forecast data required by item D;

F. any assumptions made in supplying the projections made in response to item D, and a discussion of the sensitivity of the projections to changes in the assumptions; and

G. any other known large energy facilities that may be constructed during the forecast years for use by the applicant.

**Statutory Authority:** *MS s 116J.10*

## 4270.3400 ENVIRONMENTAL DATA FOR FUEL CONVERSION FACILITIES.

Each applicant shall provide environmental data for the proposed facility and for each alternative facility described in response to part 4270.3200. The information in parts 4270.3500 to 4270.3800 relating to construction and operation of each of these facilities shall be provided, to the extent that such information is reasonably available to the applicant and applicable to the particular alternative.

**Statutory Authority:** *MS s 116J.10*

## 4270.3500 DESCRIPTION OF ALTERNATIVE SITES.

The applicant shall supply a description of each alternative site, including:

- A. the nature of the terrain at the site;
- B. the general soil and bedrock types at the site;
- C. the depth to groundwater at the site;
- D. the types of vegetation (forest, brush, marsh, pasture, and cropland) on the site, and the approximate percentage of each;

E. the predominant types of land use (such as residential, forest, agricultural, commercial, and industrial) within five miles of the site, and the approximate percentage of each;

F. lakes, streams, wetlands, or drainage ditches within five miles of the site, and any other lakes, streams, wetlands, drainage ditches, wells, or storm drains into which liquid contaminants could flow;

G. trunk highways and airports within five miles of the site;

H. national natural landmarks, national wilderness areas, national wildlife refuges, national wild and scenic rivers, national parks, national forests, national trails, and national waterfowl production areas within five miles of the site, as mapped on the inventory of significant resources by the State Planning Agency;

I. state critical areas, state wildlife management areas, state scientific and natural areas, state wild, scenic and recreational rivers, state parks, state scenic wayside parks, state recreational areas, state forests, state trails, state canoe and boating rivers, state zoo, designated trout streams, and designated trout lakes within five miles of the site, as mapped on the inventory of significant resources by the State Planning Agency;

J. national historic sites and landmarks, national monuments, national register historic districts, registered state historic or archaeological sites, state historical districts, sites listed on the National Register of Historical Places, and any other cultural resources within five miles of the site, as indicated by the Minnesota Historical Society; and

K. areas within five miles of the site designated by regional or local authorities as having recreational, cultural, historical, or scientific significance, as indicated by local units of government.

**Statutory Authority:** *MS s 116J.10*

**History:** *L 1983 c 289 s 115 subd 1*

#### **4270.3600 WASTES AND EMISSIONS.**

The applicant shall supply data on wastes and emissions associated with construction or operation of the facility, including:

A. the types and estimated amounts of solid and liquid wastes, including aromatic compounds, that would be produced by the facility;

B. the types and estimated amounts of gaseous and particulate emissions into the air that would occur during full operation from each emission source, and the location and nature of the release point;

C. locations that may be sources of fugitive dust and the nature of each source;

D. the locations, routes, and final receiving waters for any discharge points, and for each discharge point the source, the amount, and the nature of the discharge;

E. any area from which runoff may occur, potential sources of contamination in the area, and receiving waters for any runoff;

F. the sources and estimated amounts of heat rejected from the facility; and

G. the maximum noise levels (in decibels, A scale) expected at the property boundary and the expected maximum increase over ambient noise levels.

**Statutory Authority:** *MS s 116J.10*

#### **4270.3700 POLLUTION CONTROL AND SAFEGUARDS EQUIPMENT.**

The applicant shall supply data regarding pollution control and safeguards equipment, including:

A. the methods that would be used to recycle or dispose of solid or liquid wastes;

B. the types of emission control devices and dust control measures that would be used;

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C. the types of water pollution control equipment and runoff control measures that would be used;

D. the measures that would be taken to prevent spills of pollutants or to minimize the environmental effect of a spill on surface waters and groundwaters;

E. the methods that would be used to reduce the effects of heat rejected by the facility;

F. any other equipment or measures, including noise control or erosion control, that would be used to reduce the impact of the facility; and

G. the types of environmental monitoring that are planned for the facility, if any, and a description of any relevant environmental monitoring data already collected.

**Statutory Authority:** *MS s 116J.10*

### 4270.3800 ESTIMATES OF INDUCED DEVELOPMENTS.

The applicant shall supply estimates of induced developments, including:

A. the types and amounts of vehicular traffic that would be generated by the facility due to construction activity and, later, to operational needs;

B. the work forces required for construction and for operation of the facility;

C. the extent to which the facility would create or add to the need for expanded utility or public services, including high voltage transmission lines, access roads, and the like;

D. the amount of water that would be appropriated and the amount that would be consumed by the facility, the expected source of the water, and the uses for the water;

E. the amount of agricultural land, including pasture land, that would be removed from agricultural use if the facility were constructed, and known circumstances associated with the facility that could lead to reduced productivity of surrounding agricultural land; and

F. the number of people that would have to relocate if the facility were constructed.

**Statutory Authority:** *MS s 116J.10*

### ADDITIONAL INFORMATION FOR COAL SLURRY OR COAL LIQUIDS PIPELINES

### 4270.4100 DESCRIPTION OF PROPOSED COAL SLURRY OR COAL LIQUIDS PIPELINE.

Each application for a coal slurry or coal liquids pipeline shall contain the following information:

A. a physical description of the facility, including:

(1) a pipeline system map showing the planned route, mileages, and locations of pumping stations, mainline valves, dump basins or storage facilities, and interconnections with other energy transportation systems;

(2) the diameter and the expected length within Minnesota;

(3) the design throughput in tons per day of coal (coal slurry pipeline) or in barrels per day (coal liquids pipeline);

(4) to the extent known, specifications for the pipe (diameter, length, wall thickness, and grade) and the valves (diameter and American National Standards Institute rating) with the maximum allowable operating pressure for each;

(5) to the extent known, specifications for the pumps (diameter, maximum allowable operating pressures, and maximum capabilities); and

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(6) to the extent known, specifications for the prime movers (type, maximum power capacity in horsepower, efficiency, allowable maximum and minimum operating temperatures, and energy requirement in Btu per ton of coal or barrel of coal liquids pumped);

B. data regarding design and construction of the facility, including:

(1) if known, the complete name and business address of the engineer and firm that would be responsible for the design;

(2) if known, the complete name and business address of the company which would construct the facility;

(3) the proposed date for commencing construction and the proposed in-service date;

(4) the estimated installed cost of the facility in current dollars; and

(5) the estimated economic life of the facility; and

C. data regarding operation of the facility, including:

(1) a list of expected sources of supply for transportation during the first five calendar years of operation, designated as in-state or as out-of-state, the expected dates and durations of the contracts with the suppliers, and the quantities expected to be involved;

(2) a list of expected recipients of the transported slurry or coal liquids during the first five calendar years of operation, designated either as in-state or as out-of-state, the expected dates and durations of the contracts with the 25 largest recipients, and the quantities expected to be involved;

(3) the expected maximum operating pressure and capacity of the facility at the time of peak demand;

(4) the expected power requirement from the prime movers at each station at the time of peak demand (in kilowatts, thousands of cubic feet per hour, or gallons per hour);

(5) the expected average percentage of use of the full design capacity for each of the first five calendar years of operation;

(6) the estimated tariffs or transportation costs for the pipeline for each of the first five calendar years of operation; and

(7) for a coal slurry pipeline, a description of what would be done with the slurry water or other carrier after it had been used to transport coal.

**Statutory Authority:** *MS s 116J.10*

## 4270.4200 ALTERNATIVES.

Each application for a coal slurry or coal liquids pipeline shall contain a description of alternatives available to the applicant that differ significantly from the proposed facility with respect to location, size, timing, or design.

A. If the alternative is another pipeline, all of the information required by part 4270.4100, items A to C shall be submitted for the alternative. The applicant shall also indicate the reasons for rejecting the alternative.

B. If the alternative is not a pipeline, the description of the alternative shall include the following information, if applicable:

(1) the location of the alternative, to the fullest extent known;

(2) the dimensions and design capacity of the alternative;

(3) a schematic drawing showing major components of the alternative;

(4) a map showing the planned location of the facility and its interconnections with energy transportation systems;

(5) the probable date for commencing construction and the probable in-service date;

(6) the estimated installed cost of the alternative in current dollars;

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- (7) the estimated maintenance requirements of the alternative;
- (8) the estimated economic life of the alternative; and
- (9) the reasons why the alternative was rejected.

**Statutory Authority:** *MS s 116J.10*

### **4270.4300 HISTORICAL AND FORECAST DATA.**

Subpart 1. **Information required.** Each applicant for a coal slurry or coal liquids pipeline shall provide five years of historical energy data, as well as a forecast of demand through the forecast years. If the proposed pipeline is designed primarily to provide energy for the applicant's own use, data shall be submitted in response to subpart 2. If the proposed pipeline is designed primarily to transport or distribute energy to be used by others, data shall be submitted in response to subpart 3.

Subp. 2. **Own-use pipeline.** The applicant shall submit the following information about its historical and projected use of energy products:

A. for each of the energy products that would be transported by the proposed facility, the amount of that product consumed by the applicant during each of the five preceding calendar years;

B. the amounts of any other energy products consumed by the applicant during each of the five preceding calendar years;

C. the amounts of those energy products named in response to items A and B that were consumed at the applicant's Minnesota locations;

D. for the first six forecast years, the 11th forecast year (the tenth year after the year of application), and the 16th forecast year, the projected demand by the applicant for each of the energy products named in response to items A and B and the projected demand for each at the applicant's Minnesota locations;

E. a discussion of the methodology, statistical techniques, and data bases used in providing the forecast data required by item D;

F. any major assumptions made in providing the forecast data required by item D, and a discussion of the sensitivity of the projections to changes in the assumptions; and

G. any other known large energy facilities that may be constructed during the forecast years for use by the applicant.

Subp. 3. **Energy to be used by others.** The applicant shall submit the following information about its transportation and distribution of energy products:

A. a list of the energy products transported or distributed in its service area during each of the five preceding calendar years;

B. for each energy product listed in response to item A, the annual and peak-day quantities transported or distributed for each of the five preceding calendar years in the appropriate units of measure;

C. a list of sources of supply of energy products for transportation or distribution during the five preceding calendar years, designated as either in-state or out-of-state, the dates and durations of the contracts with the suppliers or shippers, and the quantities of each energy product involved;

D. for each of the five preceding calendar years and for each energy product, the percentage of in-state delivery of the annual amounts given in response to items A to C;

E. a list of each storage facility, pipeline, or other major facility owned or operated by the applicant and associated with the transportation and distribution of the energy products given in response to item A, and the average percentage of use of each such facility during the summer season and during the winter season;

F. a list of the energy products the applicant expects to transport or distribute in its service area during the first six forecast years, the 11th forecast



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year (the tenth year after the year of application), and the 16th forecast year, and the annual and peak-day quantities expected in the appropriate units of measure;

G. a discussion of the methodology, statistical techniques, and data bases used in providing the forecast data required by item F;

H. a discussion of the methods, assumptions, and factors employed for purposes of estimation in response to item F;

I. a discussion of the sensitivity of the forecast to changes in the assumptions; and

J. any other known large energy facilities that may be constructed during the forecast years for use by the applicant.

**Statutory Authority:** *MS s 116J.10*

**4270.4400 ENVIRONMENTAL INFORMATION REQUIRED.**

Each applicant shall provide environmental data for the proposed facility and for each alternative facility described in response to part 4270.4200. Environmental data for each pipeline considered shall conform to the format given in parts 4270.4500 to 4270.4800. Environmental data for any other alternative shall include a list of the natural and cultural resources, as given in part 4270.4500, items G to L, that would be directly affected, and a discussion of those applicable areas of environmental concern that are detailed in parts 4270.4600 to 4270.4800.

**Statutory Authority:** *MS s 116J.10*

**4270.4500 DESCRIPTION OF ALTERNATIVE ROUTES.**

The applicant shall supply a description of each alternative route, including:

A. the names of cities or population centers through which the route passes;

B. the number of miles of the route that pass through, respectively, federal lands, state lands, county or tax-forfeit lands, incorporated areas, and private land outside corporate areas;

C. the general soil types along the route and the approximate percentage of each;

D. the general bedrock types along the route and the approximate percentage of each;

E. the general terrain along the route;

F. the types of vegetation along the route (forest, brush, marsh, pasture, and cropland) and the approximate percentage of each;

G. the predominant types of land use along the route (such as residential, forest, agricultural, commercial, and industrial) and the approximate percentage of each;

H. the names of major lakes or streams and the number of wetlands of five acres or more through which the route passes, as well as any others into which liquid contaminant from the pipeline could flow;

I. trunk highways, airports, or railroad lines under which the route passes;

J. national natural landmarks, national wilderness areas, national wildlife refuges, national wild and scenic rivers, national parks, national forests, national trails, and national waterfowl production areas through which the route passes, as mapped on the inventory of significant resources by the State Planning Agency;

K. state critical areas, state wildlife management areas, state scientific and natural areas, state wild, scenic and recreational rivers, state parks, state scenic wayside parks, state recreational areas, state forests, state trails, state canoe and boating rivers, state zoo, designated trout streams, and designated trout lakes through which the route passes, as mapped on the inventory of significant resources by the State Planning Agency; and

L. national historic sites and landmarks, national monuments, national register historic districts, registered state historic or archaeological sites, state historical districts, sites listed on the National Register of Historic Places, and any other cultural resources through which the route passes, as indicated by the Minnesota Historical Society.

**Statutory Authority:** *MS s 116J.10*

**History:** *L 1983 c 289 s 115 subd 1*

#### **4270.4600 WASTES AND EMISSIONS.**

The applicant shall provide data on wastes and emissions associated with construction or operation of the facility, including:

A. the types and estimated amounts of solid and liquid wastes that would be produced;

B. the types and estimated amounts of gaseous and particulate emissions into the air that would occur during full operation of the pipeline from each emission source, and the location and nature of the release point;

C. locations that may be sources of fugitive dust and the nature of each source;

D. the locations, routes, and final receiving waters for any discharge points, and for each discharge point the source, the amount, and the nature of the discharge;

E. any area from which runoff may occur, potential sources of contamination in the area, and receiving waters for any runoff; and

F. the maximum noise levels (in decibels, A scale) expected along the route and the expected maximum increase over ambient noise levels.

**Statutory Authority:** *MS s 116J.10*

#### **4270.4700 POLLUTION CONTROL AND SAFEGUARDS EQUIPMENT.**

The applicant shall provide data regarding pollution control and safeguards equipment, including:

A. the types of emission control devices and dust control measures that would be used, including provisions for controlling coal dust left in evaporated dump basins;

B. the types of water pollution control equipment and runoff control measures that would be used, including methods to treat any residual slurry water that may enter freshwater bodies;

C. the measures that would be taken to prevent slurry or coal liquids spills or to minimize the environmental effect of a spill on surface waters and groundwaters;

D. for a coal slurry pipeline, a description of the procedure in case of electrical outage at one or more pump stations or cessation of slurry movement for any reason;

E. any other equipment or measures, including noise control, that would be used to reduce the impact of the facility; and

F. the types of environmental monitoring that are planned for the facility, if any, and a description of any relevant environmental monitoring data already collected.

**Statutory Authority:** *MS s 116J.10*

#### **4270.4800 ESTIMATES OF INDUCED DEVELOPMENTS.**

The applicant shall provide estimates of induced developments, including:

A. the extent to which the facility would create or add to the need for expanded utility or public services;

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

C. the amount of water which would be appropriated and the amount that would be consumed by the facility, the expected source of the water, and the uses for the water;

D. a discussion of the effects on agricultural operations, including the number of farms and the number of acres of cropland and pasture land that would be affected by construction of the pipeline, the number of drainage ditches that would be affected, and the efforts that would be used to mitigate effects on production (e.g., segregating topsoil, avoiding soil compaction, providing adequate depth of cover); and

E. the number of people who would have to relocate if the facility were constructed.

**Statutory Authority:** *MS s 116J.10*

**ADDITIONAL INFORMATION FOR NUCLEAR FUEL PROCESSING FACILITIES**

**4270.5100 DESCRIPTION OF PROPOSED NUCLEAR FUEL PROCESSING FACILITY.**

Each application for a nuclear fuel processing facility shall contain the following information:

A. a physical description of the facility, including:

- (1) its location, to the fullest extent known;
- (2) the required land area, the height of the tallest structures, and, if applicable, the depth and size of any underground caverns;
- (3) its design capacity in tons per year of input material; and
- (4) a schematic drawing showing major components of the facility;

B. data regarding design and construction of the facility, including:

- (1) if known, the complete name and business address of the engineer and firm that would be responsible for the design of the facility;
- (2) if known, the complete name and business address of the company which would construct the facility;
- (3) the proposed date for commencing construction and the proposed in-service date;
- (4) the estimated installed cost of the facility in current dollars; and
- (5) the estimated economic life of the facility;

C. data regarding operation of the facility, including:

- (1) a narrative description of the steps of the process;
- (2) the sources and amounts of input materials that would be processed by the facility during operation at the design capacity, including uranium, plutonium, and structural metals in tons per year and fission product nuclides in curies per year;
- (3) the types and amounts of output materials from the processing facility during operation at the design capacity;
- (4) the projected annual operating and maintenance costs in current dollars for each of the first five calendar years of operation;
- (5) the methods that would be used to transport materials to and from the facility;
- (6) the projected types and amounts of energy products that would be consumed during operation at the design capacity;
- (7) the expected average percentage of use of the full design capacity for each of the first five calendar years of operation; and
- (8) a discussion of the maintenance requirements of the facility, including the estimated impact on production.

**Statutory Authority:** *MS s 116J.10*

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### 4270.5200 ALTERNATIVES.

Each application for a nuclear fuel processing facility shall contain a description of alternatives available to the applicant that differ significantly from the proposed facility with respect to location, size, timing, or design. The description of each alternative shall include the following information, if applicable:

- A. the location of the facility, to the fullest extent known;
- B. the required land area, the height of the tallest structures, and if applicable, the depth and size of any underground caverns;
- C. its design capacity in the appropriate units of measure;
- D. a schematic drawing showing major components of the facility;
- E. the probable date for commencing construction and the probable in-service date;
- F. the estimated installed cost of the alternative in current dollars;
- G. the estimated economic life of the facility;
- H. the sources and amounts of input materials that would be processed by the facility, including uranium, plutonium, structural metals, and fission products, and the products that would be produced;
- I. the projected annual operating and maintenance costs in current dollars for each of the first five calendar years of operation;
- J. the methods that would be used to transport materials to and from the facility;
- K. the projected types and amounts of energy products that would be consumed during operation at the design capacity;
- L. the estimated average percentage of use of the full design capacity for each of the first five years of operation;
- M. a discussion of the maintenance requirements of the facility, including the estimated impact on production; and
- N. the reasons why the alternative was rejected.

**Statutory Authority:** *MS s 116J.10*

### 4270.5300 HISTORICAL AND FORECAST DATA.

Each applicant for a nuclear fuel processing facility shall provide five years of historical data, as well as a forecast of demand through the forecast years. The following information shall be included:

- A. the amount of each input material, in tons per year, produced nationally and the amount produced within Minnesota during each of the last five calendar years preceding the year of application;
- B. for each of the last five calendar years preceding the year of application, the year-end capacity within Minnesota and within the United States, in tons of input material per year, to process the materials listed in item A;
- C. an estimate of the amount of each input material expected to be produced nationally (including, if applicable, spent fuel from foreign reactors that use uranium supplied by the United States) and within Minnesota during the first six forecast years, the 11th forecast year (the tenth year after the year of application), and the 16th forecast year;
- D. a discussion of the methodology, statistical techniques, and data bases used in providing the forecast data required by item C;
- E. a list of known facilities to be added in the United States during the forecast years, including locations, in-service dates, and design capacities, for processing the same types of materials that would be processed by the proposed facility; and
- F. any major assumptions made in supplying the information required by items A to D, and a discussion of the sensitivity of the information to changes in the assumptions.

**Statutory Authority:** *MS s 116J.10*

**4270.5400 ENVIRONMENTAL INFORMATION REQUIRED.**

Each applicant shall provide environmental data for the proposed facility and for each alternative facility described in response to part 4270.5200. The information in parts 4270.5500 to 4270.5800 relating to construction and operation of each of these facilities shall be provided, to the extent that such information is reasonably available to the applicant and applicable to the particular alternative.

**Statutory Authority:** *MS s 116J.10*

**4270.5500 DESCRIPTION OF ALTERNATIVE SITES.**

The applicant shall provide a description of each alternative site, including:

- A. the nature of the terrain at the site;
- B. the general soil types at the site;
- C. the types and depths of bedrock underlying the site;
- D. the depth to groundwater at the site;
- E. the types of vegetation (forest, brush, marsh, pasture, and cropland) on the site, and the approximate percentage of each;
- F. the predominant types of land use (such as residential, forest, agriculture, commercial, and industrial) within five miles of the site, and the approximate percentage of each;
- G. lakes, streams, wetlands, or drainage ditches within five miles of the site, and any other lakes, streams, wetlands, drainage ditches, wells, or storm drains into which liquid contaminants from the site could flow;
- H. trunk highways, airports, and air traffic corridors within five miles of the site;
- I. national natural landmarks, national wilderness areas, national wildlife refuges, national wild and scenic rivers, national parks, national forests, national trails, and national waterfowl production areas within five miles of the site, as mapped on the inventory of significant resources by the State Planning Agency;
- J. state critical areas, state wildlife management areas, state scientific and natural areas, state wild, scenic and recreational rivers, state parks, state scenic wayside parks, state recreational areas, state forests, state trails, state canoe and boating rivers, state zoo, designated trout streams, and designated trout lakes within five miles of the site, as mapped on the inventory of significant resources by the State Planning Agency;
- K. national historic sites and landmarks, national monuments, national register historic districts, registered state historic or archaeological sites, state historical districts, sites listed on the National Register of Historic Places, and any other cultural resources within five miles of the site, as indicated by the Minnesota Historical Society;
- L. areas within five miles of the site designated by regional or local authorities as having recreational, cultural, historical, or scientific significance, as indicated by local units of government; and
- M. the estimated total population within 50 miles of the site, and a map showing the distribution of the population within 50 miles of the site.

**Statutory Authority:** *MS s 116J.10*

**History:** *L 1983 c 289 s 115 subd 1*

**4270.5600 WASTES AND EMISSIONS.**

The applicant shall provide data on wastes and emissions associated with construction or operation of the facility, including:

- A. the types and estimated amounts of solid, liquid, and gaseous radio-

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active wastes that would be produced by the facility, and the level of radioactivity of each in curies per year;

B. an analysis of human exposure to ionizing radiation attributable to operation of the facility, taking account of the pathways of radioactive releases to man;

C. the types and estimated amounts of nonradioactive solid and liquid wastes that would be produced;

D. the types and estimated amounts of nonradioactive gaseous and particulate emissions into the air that would occur during full operation from each emission source, and the location and nature of the release point;

E. locations that may be sources of fugitive dust and the nature of each source;

F. the nature and estimated amount of nonradioactive discharges to water, and the locations, routes, and final receiving waters for any discharge points;

G. any area from which runoff may occur, potential sources of contamination in the area, and receiving waters for any runoff;

H. the sources and estimated amounts of heat rejected by the facility; and

I. the maximum noise levels (in decibels, A scale) expected at the property boundary and the expected maximum increase over ambient noise levels.

**Statutory Authority:** *MS s 116J.10*

### **4270.5700 POLLUTION CONTROL AND SAFEGUARDS EQUIPMENT.**

The applicant shall provide data regarding pollution control and safeguards equipment, including:

A. the provisions that would be made for management of radioactive materials;

B. a description of contingency plans to reduce the effects of an accidental release to radioactive materials;

C. the methods that would be used to recycle or dispose of solid or liquid wastes;

D. the types of emission control devices and dust control measures that would be used;

E. the types of water pollution control equipment and runoff control measures that would be used;

F. the measures that would be taken to prevent spills or leaks of pollutants, or to minimize the effects of spills or leaks on the environment;

G. the methods that would be used to reduce the effects of heat rejected by the facility;

H. any other equipment or measures, including noise control or erosion control, that would be used to reduce the effects of the facility on the environment; and

I. the types of environmental monitoring, if any, that are planned for the facility and a description of any relevant environmental monitoring data already collected.

**Statutory Authority:** *MS s 116J.10*

### **4270.5800 ESTIMATES OF INDUCED DEVELOPMENTS.**

The applicant shall provide estimates of induced developments, including:

A. the types and amounts of vehicular traffic that would be generated by the facility due to construction activity and, later, to operational needs;

B. the work forces required for construction and for operation of the facility;

C. the extent to which the facility would create or add to the need for expanded utility or public services, including high voltage transmission lines, access roads, and the like;

D. the amount of water which would be appropriated and the amount that would be consumed by the facility, the expected source of the water, and the uses for the water;

E. the amount of agricultural land, including pasture land, that would be removed from agricultural use if the facility were constructed, and known circumstances associated with the facility that could lead to reduced productivity of surrounding agricultural land; and

F. the number of people that would have to relocate if the facility were constructed.

**Statutory Authority:** *MS s 116J.10*

**ADDITIONAL INFORMATION FOR NUCLEAR WASTE STORAGE OR DISPOSAL FACILITIES**

**4270.6100 DESCRIPTION OF PROPOSED NUCLEAR WASTE OR DISPOSAL FACILITY.**

Each application for a nuclear waste storage or disposal facility shall contain the following information:

A. a physical description of the facility, including:

(1) its location, to the fullest extent known;

(2) the required land area, the height of the tallest structures, and if applicable, the depth and size of any underground caverns;

(3) its design capacity in cubic meters; and

(4) a schematic drawing showing major components of the facility;

B. data regarding design and construction of the facility, including:

(1) if known, the complete name and business address of the engineer and firm that would be responsible for the design of the facility;

(2) if known, the complete name and business address of the company which would construct the facility;

(3) the proposed date for commencing construction and the proposed in-service date;

(4) a description of the construction techniques;

(5) the estimated installed cost of the facility in current dollars; and

(6) the estimated economic life of the facility; and

C. data regarding operation and retirement of the facility, including:

(1) a narrative description of the steps of the storage or disposal process, starting at the point the nuclear wastes are produced;

(2) the sources, types, and amounts of nuclear waste products that would be stored, the methods of transporting these materials to the facility, and the level of radioactivity of each in curies per year;

(3) if the facility is only for temporary storage, the length of time material would be stored there and the method of transporting the material to its disposal site; and

(4) the expected maintenance requirements of the facility, if any.

**Statutory Authority:** *MS s 116J.10*

**4270.6200 ALTERNATIVES.**

Each application for a nuclear waste storage or disposal facility shall contain

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a description of alternatives available to the applicant that differ significantly from the proposed facility with respect to location, size, timing, or design. The description of each alternative shall include the following information, if applicable:

- A. the location of the facility, to the fullest extent known;
  - B. the required land area, the height of the tallest structures, and if applicable, the depth and size of any underground caverns;
  - C. its design capacity in the appropriate units of measure;
  - D. a schematic drawing showing major components of the facility;
  - E. the probable date for commencing construction and the probable in-service date;
  - F. the estimated installed cost of the alternative in current dollars;
  - G. the sources, types, and amounts of nuclear waste products that would be involved in the alternative, the methods of transporting these materials, and the level of radioactivity of each in curies per year;
  - H. the estimated maintenance requirements of the alternative;
  - I. the estimated economic life of the facilities involved in the alternative;
- and
- J. the reasons why the alternative was rejected.

**Statutory Authority:** *MS s 116J.10*

### 4270.6300 HISTORICAL AND FORECAST DATA.

Each applicant for a nuclear waste storage or disposal facility shall provide five years of historical data, as well as a forecast of demand through the forecast years. The following information shall be included:

- A. for each material that would be stored in the proposed facility, the amount (in cubic meters) produced nationally and within Minnesota during each of the last five calendar years preceding the year of application;
- B. for each of the last five calendar years preceding the year of application, the year-end capacity (in cubic meters) within Minnesota and within the United States to store the materials listed in response to item A;
- C. an estimate of the amount (in cubic meters) of each material listed in response to item A expected to be produced nationally and within Minnesota during the first six forecast years, the 11th forecast year (the tenth year after the year of application), and the 16th forecast year;
- D. a list of known facilities to be added in the United States during the forecast years, including locations, design capacities (in cubic meters), and in-service dates, for storing the same types of materials that would be stored in the proposed facility;
- E. the expected years during which the material stored in the proposed facility would reach ten percent, 25 percent, 50 percent, and 100 percent of the capacity of the facility;
- F. a discussion of the methodology, statistical techniques, and data bases used in providing the forecast data required by items C and E; and
- G. any major assumptions made in supplying the information required by items A to E, and a discussion of the sensitivity of the information to changes in the assumptions.

**Statutory Authority:** *MS s 116J.10*

### 4270.6400 ENVIRONMENTAL INFORMATION REQUIRED.

Each applicant shall provide environmental data for the proposed facility and for each alternative facility described in response to part 4270.6200. The information in parts 4270.6500 to 4270.6800 relating to construction and opera-



tion of each of these facilities shall be provided to the extent that such information is reasonably available to the applicant and applicable to the particular alternative.

**Statutory Authority:** *MS s 116J.10*

#### 4270.6500 DESCRIPTION OF ALTERNATIVE SITES.

The applicant shall provide a description of each alternative site, including:

- A. the nature of the terrain at the site;
- B. the general soil types at the site;
- C. the types and depths of bedrock underlying the site;
- D. the depth to groundwater at the site;
- E. the types of vegetation (forest, brush, marsh, pasture, and cropland) on the site, and the approximate percentage of each;
- F. the predominant types of land use (such as residential, forest, agricultural, commercial, and industrial) within five miles of the site, and the approximate percentage of each;
- G. lakes, streams, wetlands, or drainage ditches within five miles of the site, and any other lakes, streams, wetlands, drainage ditches, wells, or storm drains into which liquid contaminants from the site could flow;
- H. trunk highways, airports, and air traffic corridors within five miles of the site;
- I. national natural landmarks, national wilderness areas, national wildlife refuges, national wild and scenic rivers, national parks, national forests, national trails, and national waterfowl production areas within five miles of the site, as mapped on the inventory of significant resources by the State Planning Agency;
- J. state critical areas, state wildlife management areas, state scientific and natural areas, state wild, scenic, and recreational rivers, state parks, state scenic wayside parks, state recreational areas, state forests, state trails, state canoe and boating rivers, state zoo, designated trout streams, and designated trout lakes within five miles of the site, as mapped on the inventory of significant resources by the State Planning Agency;
- K. national historic sites and landmarks, national monuments, national register historic districts, registered state historic or archaeological sites, state historical districts, sites listed on the National Register of Historic Places, and any other cultural resources within five miles of the site, as indicated by the Minnesota Historical Society;
- L. areas within five miles of the site designated by regional or local authorities as having recreational, cultural, historical, or scientific significance, as indicated by local units of government; and
- M. the estimated total population within 50 miles of the site, and a map showing the distribution of the population within 50 miles of the site.

**Statutory Authority:** *MS s 116J.10*

**History:** *L 1983 c 289 s 115 subd 1*

#### 4270.6600 WASTES AND EMISSIONS.

The applicant shall provide data on wastes and emissions associated with construction or operation of the facility, including:

- A. the types and estimated amounts of solid, liquid, and gaseous radioactive wastes that would be produced by the facility, and the level of radioactivity of each in curies per year;
- B. an analysis of human exposure to ionizing radiation attributable to operation of the facility, taking account of the pathways of radioactive releases to man;

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C. the types and estimated amounts of nonradioactive solid and liquid wastes that would be produced;

D. the types and estimated amounts of nonradioactive gaseous and particulate emissions into the air that would occur during full operation from each emission source, and the location and nature of the release point;

E. locations that may be sources of fugitive dust and the nature of each source;

F. the nature and estimated amount of nonradioactive discharges to water, and the locations, routes, and final receiving waters for any discharge points;

G. any area from which runoff may occur, potential sources of contamination in the area, and receiving waters for any runoff;

H. the sources and estimated amounts of heat rejected by the facility; and

I. the maximum noise levels (in decibels, A scale) expected at the property boundary and the expected maximum increase over ambient noise levels.

**Statutory Authority:** *MS s 116J.10*

### 4270.6700 POLLUTION CONTROL AND SAFEGUARDS EQUIPMENT.

The applicant shall provide data regarding pollution control and safeguards equipment, including:

A. the provisions that would be made for management of radioactive materials;

B. a description of contingency plans to reduce the effects of an accidental release of radioactive materials;

C. the methods that would be used to recycle or dispose of solid or liquid wastes;

D. the types of emission control devices and dust control measures that would be used;

E. the types of water pollution control equipment and runoff control measures that would be used;

F. the measures that would be taken to prevent spills or leaks of pollutants, or to minimize the effects of spills or leaks on the environment;

G. the methods that would be used to reduce the effects of heat rejected by the facility;

H. any other equipment or measures, including noise control or erosion control, that would be used to reduce the effects of the facility on the environment; and

I. the types of environmental monitoring, if any, that are planned for the facility and a description of any relevant environmental monitoring data already collected.

**Statutory Authority:** *MS s 116J.10*

### 4270.6800 ESTIMATES OF INDUCED DEVELOPMENT.

The applicant shall provide estimates of induced developments, including:

A. the types and amounts of vehicular traffic that would be generated by the facility due to construction activity and, later, to operational needs;

B. the work forces required for construction and for operation of the facility;

C. the extent to which the facility would create or add to the need for expanded utility or public services, including high voltage transmission lines, access roads, and the like;

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D. the amount of water that would be appropriated and the amount that would be consumed by the facility, the expected source of the water, and the uses for the water;

E. the amount of agricultural land, including pasture land, that would be removed from agricultural use if the facility were constructed, and known circumstances associated with the facility that could lead to reduced productivity of surrounding agricultural land; and

F. the number of people that would have to relocate if the facility were constructed.

**Statutory Authority:** *MS s 116J.10*