

800 MW Firm Dispatchable Generation Acquisition - Certificate of Need Like Application Requirements

Authority	Required Information	Alternative Proposals
Minn. R. 7849.0200, Subp. 4	Cover Letter	
Minn. R. 7829.2500, Subp. 2	Brief summary of filing on separate page sufficient to apprise potentially interested parties of its nature and general content	
Minn. R. 7849.0200, Subp. 2	Title Page and Table of Contents	
Minn. R. 7849.0240 Subp. 1	Need Summary and Additional Considerations Summary of the major factors that justify the need for the proposed facility	
Subp. 2	Relationship of the proposed facility to the following socioeconomic considerations:	
A.	Socially beneficial uses of the output of the facility;	Exempt
B.	Promotional activities that may have given rise to the demand for the facility; and	Exempt
C.	Effects of the facility in inducing future development.	
Minn. R. 7849.0250	Proposed LEGF and Alternatives	
A.	A description of the facility, including:	
(1)	Nominal generating capability of the facility, and discussion of economies of scale on facility size and timing;	
(2)	Description of anticipated operating cycle, including expected annual capacity factor;	
(3)	Type of fuel used, including the reason for the choice, its projected availability over the facility's life, and alternate fuels, if any;	
(4)	Anticipated heat rate of the facility; and	
(5)	To fullest extent known to applicant, the anticipated area(s) the facility could be located;	
B.	Discussion of available alternatives, including:	Exempt
(1)	Purchased power;	
(2)	Increased efficiency of existing facilities, including transmission lines;	
(3)	New transmission lines;	
(4)	New generating facilities of different size or using different energy sources; and	
(5)	Any reasonable combination of the above;	
C.	For proposed facility and alternatives discussed in item (B) that could provide electric power to meet the identified need:	Exempt
(1)	Capacity cost/kW in current dollars;	
(2)	Service life;	
(3)	Estimated average annual availability;	
(4)	Fuel costs/kWh in current dollars;	
(5)	Variable O&M costs/kWh in current dollars;	
(6)	Total cost of a kWh generated in current dollars;	
(7)	Estimate of effect on rates systemwide and Minnesota, assuming a test year beginning with in-service date;	
(8)	Estimated heat rate; and	
(9)	Major assumptions for subitems (1)–(8), including projected escalation rates for fuel and O&M, and project capacity factors;	
D.	A map showing applicant's system; and	
E.	Other information about the facility and alternatives relevant to determination of need.	
Minn. R. 7849.0270	Peak Demand and Annual Consumption Forecasts	Exempt
Subp. 1	Peak demand and annual consumption data for applicant's service area and system, indicating when data is not available, historical, or projected;	
Subp. 2	The following data for each forecast year:	
A.	Annual consumption by ultimate consumers within applicant's Minnesota service area;	
B.	Estimates of total ultimate consumers and their annual consumption for each of the following consumer categories:	
(1)	Farm;	
(2)	Irrigation and drainage pumping;	
(3)	Nonfarm residential;	
(4)	Commercial;	
(5)	Mining;	
(6)	Industrial;	
(7)	Street and highway lighting;	
(8)	Transportation;	
(9)	Other (including municipal water pumping, oil/gas pipeline pumping, military, all other consumers not reported in subitems (1)-(8)); and	
(10)	Sum of subitems (1)-(9);	
C.	Estimate of demand on applicant's system at time of annual system peak demand, including breakdown of demand into consumer categories in item B;	
D.	Applicant's system peak demand by month;	
E.	Estimated annual revenue requirement/kWh for system in current dollars; and	
F.	Applicant's estimated average system weekday load factor by month;	

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Subp. 3	Detail of forecast methodology employed, including	
A.	Overall methodological framework that is used;	
B.	Specific analytical techniques used, their purpose, and components to which they were applied;	
C.	Manner in which specific techniques relate to forecast;	
D.	Where statistical techniques have been used:	
(1)	Purpose of technique;	
(2)	Typical computations, specifying variables and data; and	
(3)	Results of appropriate statistical tests;	
E.	Forecast confidence levels/ranges of accuracy for annual peak demand and consumption, and description of their derivation;	
F.	Brief analysis of methodology used, including:	
(1)	Strengths and weaknesses;	
(2)	Suitability to the system;	
(3)	Cost considerations;	
(4)	Data requirements;	
(5)	Past accuracy; and	
(6)	Other significant factors;	
G.	Explanation of discrepancies between application's forecast and applicant forecasts in other proceedings;	
Subp. 4	Data base used in forecast, including:	
A.	Complete list of all data used in forecast, including a brief description of each and how it was obtained;	
B.	Clear identification of any adjustments to raw data to adapt them for use in forecasting, including:	
(1)	Nature of adjustment;	
(2)	Reason for adjustment; and	
(3)	Magnitude of adjustment	
Subp 5	Essential forecast assumptions made regarding:	
A.	Availability of alternate sources of energy;	
B.	Expected conversion from other fuels to electricity or vice versa;	
C.	Future electricity prices in applicant's system and their effect on system demand;	
D.	Subpart 2 data that is not available historically nor created by applicant for forecast;	
E.	Effect of conservation programs on long-term demand; and	
F.	Any factor considered in preparing forecast;	
Subp. 6	Coordination of forecasts	
A.	Description of extent applicant coordinates load forecasts with other systems; and	
B.	Description of forecast coordination, including problems experienced.	
Minn. R. 7849.0280	System Capacity Description	Exempt
A.	Brief discussion of power planning programs applied to applicant's system;	
B.	Applicant's seasonal firm purchases/firm sales for each utility involved in each transaction for each forecast year;	
C.	Applicant's seasonal firm participation purchases/sales for each utility involved in each transaction for each forecast year;	
D.	Load and generation capacity data for sub-items below for summer and winter seasons for each forecast year, including anticipated purchases, sales, and capacity retirements/additions:	
(1)	Seasonal system demand;	
(2)	Annual system demand;	
(3)	Total seasonal firm purchases;	
(4)	Total seasonal firm sales;	
(5)	Seasonal adjusted net demand;	
(6)	Annual adjusted net demand;	
(7)	Net generating capacity;	
(8)	Total participation purchases;	
(9)	Total participation sales;	
(10)	Adjusted net capability;	
(11)	Net reserve capacity obligation;	
(12)	Total firm capacity obligation; and	
(13)	Surplus or deficit capacity;	
E.	Load and generation capacity data requested in item D/sub-items (1)-(13) for summer and winter seasons for each forecast year subsequent to the year of application, including purchases, sales, and generating capability contingent on the proposed facility;	
F.	Load and generation capacity data requested in item D/sub-items (1)-(13) for summer and winter seasons for each forecast year subsequent to the year of application, including all projected purchases, sales, and generating capability;	
G.	List of proposed additions/retirements in net generating capability for each forecast year subsequent to the year of application;	
H.	Graph showing monthly adjusted net demand, monthly adjusted net capability, and difference between adjusted net capability and actual, planned, or estimated maintenance outages of generation/ transmission for specified time periods; and	
I.	Discussion of method and appropriateness of determining system reserve margins.	

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Minn. R. 7849.0290	Conservation Programs	Exempt
A.	Name of committee, department, individual responsible for applicant's energy conservation/efficiency programs, including load management;	
B.	List of applicant's conservation/efficiency goals and objectives;	
C.	Description of specific energy conservation/efficiency programs considered, a list of those implemented, and reasons why other programs have not been implemented;	
D.	Description of major energy conservation/efficiency accomplishments by applicant;	
E.	Description of applicant's energy conservation/efficiency plans through the forecast years; and	
F.	Quantification of how energy conservation/efficiency programs affect the 7849.0270, subp. 2 forecast, a list of total program costs, and discussion of expected program effects in reducing need for new generation and transmission.	
Minn. R. 7849.0300	Consequence of Delay	Exempt
Minn. R. 7849.0310	Required Environmental Information	
Minn. R. 7849.0320	Information for Generating Facilities and Alternatives	New Resources Only
A.	Estimated land requirements for facility, water storage, cooling system, and solid waste storages;	
B.	Estimated amount of vehicular, rail, and barge traffic due to construction and operation;	
C.	For fossil-fueled facilities:	
(1)	Expected regional sources of fuel;	
(2)	Typical hourly and annual fuel requirement ;	
(3)	Expected rate of heat input in Btu/hour ;	
(4)	Typical range of fuel's heat value and typical average of fuel's heat value; and	
(5)	Typical ranges of sulfur, ash, and moisture content of fuel;	
D.	For fossil-fueled facilities:	
(1)	Estimated range of emissions of sulfur dioxide, nitrogen oxides, and particulates in pounds/hour; and	
(2)	Estimated range of maximum contributions to 24-hr ground level concentrations of sulfur dioxide, nitrogen oxides, and particulates in micrograms per cubic meter;	
E.	Water use by the facility for alternate cooling system, including:	
(1)	Estimated maximum use, including groundwater pumping rate in gallons/minute and surface water appropriation in cubic feet/second;	
(2)	Estimated groundwater appropriation in million gallons/year; and	
(3)	Annual consumption in acre-feet;	
F.	Potential sources/types of discharges to water;	
G.	Radioactive releases, including:	
(1)	For nuclear facilities, typical types/amounts of radionuclides released in curies/year; and	
(2)	For fossil-fueled facilities, estimated range of radioactivity released in curies per year;	
H.	Potential types/quantities of solid wastes produced in tons/year;	
I.	Potential sources/types of audible noise;	
J.	Estimated work force required for construction and operation; and	
K.	Minimum number/size of transmission facilities required for reliable outlet.	
Minn. R. 7849.0340	No-Facility Alternative	Exempt
IRP Order	Supplementary Data Required for Alternative Providers	Required Supplementary
A.	Developer experience and qualifications.	
B.	Pricing of the proposal, including but not limited to the following:	
1	The term;	
2	In-service date;	
3	Contract capacity;	
4	Capacity payment;	
5	Fixed operations and maintenance payment;	
6	Variable operations and maintenance payment;	
7	Fuel payment; and	
8	Tax-related payments and other costs.	
C.	Scheduling provisions, including but not limited to:	
1	Planned maintenance;	
2	Expected minimum load;	
3	Ramp rates; and	
4	Limitations on operations.	
D.	Discussion of the guaranteed performance factors, such as construction costs, unit completion, availability, and efficiency.	
E.	Any other key contract terms the provider requires.	
800 FD Order*	Supplementary Data Required for All Providers	Required Supplementary
Metric 32	Provide a climate change analysis of the proposal consistent with the Minnesota Environmental Quality Board's environmental assessment worksheet guidance for developing a carbon footprint and incorporating climate adaptation and resilience.	
Metric 32	Identifying whether the proposal is located in an environmental justice area using census criteria in Minnesota Statute 216B.1691, subd. 1(e).	

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Metric 61	Information necessary for consideration of Energy Justice factors: The socioeconomic factors of a project's location; The involvement of local government, community organizations and, where relevant, Tribal Nations; The estimated local tax revenue it will produce; The temporary and permanent jobs it will create; The commitment to the use of diverse suppliers, as demonstrated by a history of use on recent projects; and The payment of prevailing wages, and workforce training opportunities.	
Metric 32	Minn. R. 7849.1500 Subp. 2: Impacts of Power Plants:	New Resources Only
A.	The anticipated emissions of the following pollutants expressed as an annual amount at the maximum rated capacity of the project and as an amount produced per kilowatt hour and the calculations performed to determine the emissions: sulfur dioxide, nitrogen oxides, carbon dioxide, mercury, and particulate matter, including particulate matter under 2.5 microns in diameter;	
B.	The anticipated emissions of any hazardous air pollutants and volatile organic compounds;	
C.	The anticipated contribution of the project to impairment of visibility within a 50-mile radius of the plant;	
D.	The anticipated contribution of the project to the formation of ozone expressed as reactive organic gases. Reactive organic gases are chemicals that are precursors necessary to the formation of ground-level ozone;	
E.	The availability of the source of fuel for the project, the amount required annually, and the method of transportation to get the fuel to the plant;	
F.	Associated facilities required to transmit the electricity to customers;	
G.	The anticipated amount of water that will be appropriated to operate the plant and the source of the water if known;	
H.	The potential wastewater streams and the types of discharges associated with such a project including potential impacts of a thermal discharge;	
I.	The types and amounts of solid and hazardous wastes generated by such a project, including an analysis of what contaminants may be found in the ash and where the ash might be sent for disposal or reuse; and	
J.	The anticipated noise impacts of a project, including the distance to the closest receptor where state noise standards can still be met.	
Minn. Stat. §§ 216B.2422, subd. 4; 216B.243, subd. 3a	Whether the applicant for a project generating nonrenewable energy has demonstrated that the project is less expensive than one generating renewable energy or is otherwise in the public interest.	
Minn. Stat. § 216B.243, subd. 3(10)	Whether the applicant is in compliance with Minnesota's renewable energy objectives, including purchasing energy from C-BED projects.	
Minn. Stat. § 216B.2426	Whether the applicant has considered the opportunities for installation of distributed generation.	
Minn. Stat. § 216B.243, subd. 3(12)	Whether an applicant proposing a nonrenewable energy generating plant has assessed the risk of environmental costs and regulation over the expected useful life of the plant.	
Minn. Stat. § 216B.1694, subd. (2)(5)	Whether the applicant has considered an innovative energy project as a supply option before expanding a fossil-fuel-fired generation facility or entering into a 5+-year purchased power agreement.	
* Docket No. E002/CN-23-212, Order Approving Petition and Requiring Compliance Filing (Nov. 3, 2023)		