



414 Nicollet Mall
Minneapolis, MN 55401

January 6, 2020

—Via Electronic Filing—

Ryan Barlow
Acting Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: PETITION
APPROVAL OF A POWER PURCHASE AGREEMENTS WITH THE UNIVERSITY OF
MINNESOTA FOR ITS SOUTH EAST PLANT IN MINNEAPOLIS
DOCKET NO. E002/M-20-_____

Dear Mr. Barlow:

Northern States Power Company, doing business as Xcel Energy, submits the enclosed Petition requesting approval of a Power Purchase Agreement with the University of Minnesota for its South East Plant in Minneapolis.

We have electronically filed this document with the Minnesota Public Utilities Commission, and copies have been served on the parties on the attached service list. Please contact Amber Hedlund at amber.r.hedlund@xcelenergy.com or (612) 337-2268 or me at bria.e.shea@xcelenergy.com or (612) 330-6064 if you have any questions regarding this filing

Sincerely,

/s/

BRIA E. SHEA
DIRECTOR, REGULATORY & STRATEGIC ANALYSIS

Enclosures
c: Service List

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben
Valerie Means
Matthew Schuerger
John Tuma

Chair
Commissioner
Commissioner
Commissioner

IN THE MATTER OF THE PETITION OF
NORTHERN STATES POWER COMPANY
FOR APPROVAL OF A POWER
PURCHASE AGREEMENT WITH THE
REGENTS OF THE UNIVERSITY OF
MINNESOTA FOR ITS SOUTH EAST
PLANT IN MINNEAPOLIS

DOCKET No. E002/M-20-____

PETITION

INTRODUCTION

Northern States Power Company, doing business as Xcel Energy, submits to the Minnesota Public Utilities Commission this Petition for approval of a Power Purchase Agreement (PPA) with the Regents of the University of Minnesota (University) to purchase Excess Energy of up to 10 Megawatts (MW) from the South East Plant (SEP or Plant). The SEP is a 16.4 MW cogeneration system that supports the electricity and steam needs of the University and is located on its Minneapolis campus.

Specifically, we request that the Commission:

- Approve the attached PPA (Attachment A to this Petition) with an initial five-year term for the Excess Energy, not to exceed 10 MW per hour. Authorize the Company to recover from Minnesota retail customers the Minnesota jurisdictional portion of the costs incurred by the Company under the PPA, pursuant to Minn. Stat. § 216B.16 subd. 7(3).

The Plant satisfies the conditions of a qualifying facility (QF) as a small power production facility of less than 80 MW.¹

¹ 18 Code of Federal Regulations, §292.204. Criteria for qualifying small power production facilities.

The Regents of the University of Minnesota have self-certified the Plant as a QF with the Federal Energy Regulatory Commission (FERC), in a Small Power Producer Docket (QF20-424-000), which is included as Attachment B to this Petition. Under the Public Utility Regulatory Policies Act of 1978 (PURPA) and Minnesota's implementing statute and rules, we are required by statute to purchase all energy and capacity made available by QFs.² However, the Company notes that on August 10, 2011, FERC approved the Company's application to be relieved, on a service territory-wide basis, of the requirement to enter into new contracts or obligations to purchase energy and capacity from QFs that have a net capacity greater than 20 MW.³

As the SEP has a rated capacity of 16.4 MW and the PPA limits excess energy sales to 10 MW, the Company negotiated the attached PPA with the University of Minnesota as a QF pursuant to Minn. Rule 7835.3600.⁴ The Company is, under this Rule, obligated to negotiate a contract with the University for the sale of energy from this plant, if desired. We further note that, to the extent PPAs are negotiated for distributed generation facilities over 10 MW nameplate capacity, such contracts must be approved by the Commission, per our tariffs.⁵ More broadly, however, the Company works as a partner with the University to be responsive to their interests and needs. The University of Minnesota is a state constitutional corporation, an entity which was formed before Minnesota achieved statehood. This gives the project a unique status for public interest consideration. For these reasons, we are moving ahead with this PPA as a QF agreement and believe it is in the public interest.

The University uses most of the steam and energy produced by the Plant for heating and to meet a portion of its campus electricity load. Power purchases by the Company from the SEP would only occur for electricity produced in excess of the University's load, up to 10 MW per hour, primarily in the months of December through February (although the contract does allow for some energy generated in other months). Therefore, it is expected that the amount of energy purchased will not be substantial. Further, the terms of the PPA will not harm the Company's other customers because the negotiated energy price is an avoided cost price as it is based on the wholesale market prices at the Plant's specific node (i.e. the Locational Marginal Price or LMP).

² Minn. Stat. §216B.164, Subd. 4.

³ *Northern States Power Co., a Minnesota corporation, et al.*, 136 FERC ¶ 61,093 (2011), Docket No. QM11-3-000.

⁴ MN Administrative Rule 7835.3600 specifies a qualifying facility with capacity greater than 100 kilowatts must negotiate a contract with the utility setting the applicable rates for payments to the customer of avoided capacity and energy costs.

⁵ See Minnesota Electric Rate Book – MPUC No. 9, Sheet No. 8.2.

The Company has worked with the University in the past on similar projects to ensure campus needs are met in the most cost-effective manner possible. This includes the development of a feeder cable and duct line lease agreement in early 2000 for the Plant (Docket No. E002/M-03-868).⁶ More recently, the Company worked with the University to develop a combined heat and power (CHP) plant at the University's Old Main plant, complete an Interconnection Agreement, and sign PPAs for test energy and longer term net energy offtake (Docket No E002/M-16-445). Given our long-standing relationship with the University, we believe this new PPA is in the best interests of our customer and is consistent with the public interest.

I. GENERAL FILING INFORMATION

A. Name, Address, and Telephone Number of Utility

Xcel Energy
414 Nicollet Mall
Minneapolis, Minnesota 55401
(612) 330-5500

B. Name, Address, and Telephone Number of Utility Attorney

James Denniston
Assistant General Counsel
Xcel Energy Services Inc.
414 Nicollet Mall, (401–8th Floor)
Minneapolis, Minnesota 55401
(612) 215-4656

C. Date of Filing

The Company submits this Petition for approval on January 6, 2020. We note that the most recent PPAs we executed with the University, in Docket No. E002/M-16-445, were approved via the Consent Agenda.

D. Statute Controlling Schedule for Processing the Filing

No specific statute imposes a schedule controlling the processing of this filing. Under

⁶ Note that in conjunction with the PPA for the South East Plant, the University intends to terminate its duct line lease with the Company. The lease agreement allows for the University to terminate this agreement with a 90 day notice.

the Commission's Rules, this Petition falls within the definition of a "miscellaneous" filing under Minn. R. 7829.0100, subp. 11, since no determination of Xcel Energy's revenue requirement is necessary. Under Minn. R. 7829.1400, in the absence of a Commission notice establishing a different comment period, a person wishing to comment on a miscellaneous filing shall do so within 30 days of the miscellaneous filing.

E. Utility Employee Responsible for Filing

Bria Shea
Director, Regulatory and Strategic Analysis
Xcel Energy
414 Nicollet Mall (401–7th Floor)
Minneapolis, MN 55401
(612) 330-6064
bria.e.shea@xcelenergy.com

II. DESCRIPTION AND PURPOSE OF FILING

The Company seeks approval of a PPA with the University of Minnesota for generation from their on-campus South East Plant, which primarily is used to generate steam for the campus, but also produces electricity. The PPA provides for the University to sell excess energy from the SEP to the Company, in amounts not to exceed 10 MW for the months of December through February. The PPA allows for some energy delivered outside those months as well.

Included in this Petition is the following information about the project:

- Background
- Overview of the PPA and summary of terms
- Proposed use of fuel and resource recovery clauses related to the purchases
- Demonstration that the PPA is reasonable and in the public interest

A. Background

The University of Minnesota's Twin Cities campus (Minneapolis and St. Paul) has a total of 248 buildings that encompasses approximately 25 million square feet. In 1999, the University completed the renovation of the SEP to meet growing Minneapolis campus steam and energy needs. The renovation included two natural gas fired package boilers and one natural gas/solid fuel fluidized bed boiler. However, with the 2017 commercial operation of new Main Energy Plant (MEP), the SEP now

primarily provides winter heating season operations and backup service when MEP is offline.

The SEP's rated combined steam production capacity is 650,000 pounds per hour (lbs/hr), as compared to a peak Minneapolis campus demand of approximately 550,000 lbs/hr. To make the steam plant production process efficient, a back-pressure steam turbine generator (STG) provides a means to reduce the high-pressure steam before it gets distributed to campus, while also driving a generator to make electricity. The generator has a nameplate capacity of approximately 16.4 MW (16.425 MW), but because it is a back-pressure turbine and not a condensing turbine, its electrical output load follows campus steam demand. The Plant's STG requires a minimum constant of 120,000 lbs/hr of steam demand to campus for stable operation, which equates to approximately 2 to 3 MW of electricity output. Therefore, during the higher steam demand months of December through February, and partially into March, the STG generally operates continuously, 24 hours per day, seven days a week. The Plant is electrically interconnected with the Xcel Energy-owned Main Street Substation via the express feeder MST 78XY.

B. Contract Overview and Summary of Terms

Minn. Stat. § 216B.164, Subd. 4 requires that:

“The qualifying facility shall be paid the utility's full avoided capacity and energy costs as negotiated by the parties, as set by the commission, or as determined through competitive bidding approved by the commission.”

Here, the parties have negotiated an avoided energy cost in the PPA. Since the Plant will not be providing firm power to the Company, the PPA does not provide for any capacity payments or specify an avoided capacity cost. We summarize the pricing and other terms of the PPA below:

1. Purchase Price

Per the PPA's terms, the Company will purchase the Excess Energy from the Plant. In the PPA, “Excess Energy” is defined as energy the Seller (the University) elects to deliver to the Company “from the SEP up to 10 MW per hour during the months of December through February (and occasionally during other months) at the Point of Delivery less any Auxiliary Energy...” Auxiliary Energy means the Energy used by the University to operate the Plant itself. While the precise amount of energy delivered to the Company under the PPA will vary depending on the University's usage, it is

expected that the average annual energy delivered will be between approximately 2,100 to 3,800 megawatt-hours.

The price in the PPA for Excess Energy delivered is: “75 percent of the integrated hourly real time LMP at MISO Node NSP.UOFMGEN1 – or an otherwise mutually agreed upon MISO Node located near the SEP should NSP.UOFMGEN1 no longer exist – minus any applicable MISO market charges (such as, but not limited to, day-ahead and real-time administrative fees, revenue neutrality uplift charge, and revenue sufficiency guarantee distribution charge, etc.) minus an administrative fee of \$1.00/MWh. In the event the LMP is a negative value, Seller shall pay NSP 125 percent of LMP plus any applicable market charges plus an administrative fee of \$1.00/MWh.”

2. Term

The PPA has an initial term of five years, and subsequently continues indefinitely until either the Company or the University provides 180 days-notice of its intent to terminate the agreement. The PPA becomes effective upon approval via written order from the Commission.

C. Fuel and Resource Recovery Clauses Related to the Purchases

Pursuant to Minn. Stat. §216B.16 subd. 7(3), the costs of “fuel used in generation of electricity” are eligible for automatic adjustment under the Fuel Clause Rider. Under the terms of our currently effective Fuel Clause Rider in our tariff, “[t]he energy cost of purchases from a qualifying facility” are “qualifying costs” that comprise the Cost of Energy. Because the Plant satisfies the conditions of a QF, the Company plans to recover the costs of this PPA through its Fuel Clause Rider.

D. The Purchase Power Agreement is Reasonable and in the Public Interest

We ask the Commission to approve the PPA on the basis that it is a reasonable agreement, in the best interest of our customers, and is in the public interest. The University – which is a state constitutional corporation, formed before Minnesota achieved statehood, and therefore has a unique status for public interest consideration – requires steam and electricity resources that it produces via efficient on-site cogeneration facilities, including the SEP. There are times at which the Plant produces more electricity than the University needs to use on site, and thus it is in their interest to sell Excess Energy from the Plant when possible. The Company notes that federal rules require the Company to negotiate contracts for Excess Energy with qualifying facilities of this size; and especially in light of this requirement, the

negotiated agreement to sell this energy at an LMP-based rate is reasonable and protects the interests of the Company's other customers as well. In total, we expect the costs associated with this PPA to be relatively minimal; but even so, the terms ensure that both the University and the Company's other customers are reasonably protected and thus the PPA is in the public interest.

III. EFFECT OF CHANGE UPON XCEL ENERGY REVENUE

As noted above, the amount of Excess Energy the University will deliver to the Company in any given year is not precisely known, as it depends on the University's needs and usage. Further, because the price is based on a LMP at the time of delivery, total revenue will further depend on the time of day the Excess Energy is delivered and market conditions at that time. That said, the PPA is expected to result in relatively minimal annual average expenditures, as the expected amount of Excess Energy provided to the Company is relatively small (around 2,100-3,800 MWh per year). Based on the estimates of maximum generation noted above and indicative pricing from 2019, we estimate the high end of total energy costs for the PPA's initial five-year term to be under \$450,000, or less than \$100,000 per year. After approval of this PPA, the Company intends to request cost recovery for the Minnesota portion of the PPA's costs through the Fuel Clause Rider.

IV. MISCELLANEOUS INFORMATION

A. Service List

Pursuant to Minnesota Rule 7829.0700, Xcel Energy requests that the following persons be placed on the Commission's official service list for this matter:

James Denniston
Assistant General Counsel
Xcel Energy Service Inc.
414 Nicollet Mall, 401 8th Floor
Minneapolis, Minnesota 55401
James.r.denniston@xcelenergy.com

Lynnette Sweet
Regulatory Administrator
Xcel Energy
414 Nicollet Mall, 401 7th Floor
Minneapolis, Minnesota 55401
Regulatory.Records@xcelenergy.com

Any information requests in this proceeding should be submitted to Ms. Sweet at the Regulatory Records email address above.

B. Service on Other Parties

Pursuant to Minnesota Rule 7829.1300, subp. 2, Xcel Energy has served a copy of this Petition on the Office of Energy Security and the Office of the Attorney General (Residential Utilities Division). A summary of the filing has been served on all parties on Xcel Energy's miscellaneous electric service list.

C. Summary of Filing

A one-paragraph summary of the filing accompanies this Petition pursuant to Minnesota Rule 7829.1300, subp. 1.

CONCLUSION

We respectfully request that the Commission approve the PPA between Xcel Energy and the University of Minnesota for its South East Plant, which is a cogeneration facility primarily used to produce steam during winter heating months for the University's Minneapolis campus. Given that the project is in the public interest, benefits the University, and protects the Company's customers, we request that the Commission authorize Xcel Energy to recover from Minnesota retail customers the Minnesota jurisdictional portion of the amounts incurred by the Company under the PPA.

Dated: January 6, 2020

Northern States Power Company

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben
Valerie Means
Matthew Schuerger
John A. Tuma

Chair
Commissioner
Commissioner
Commissioner

IN THE MATTER OF THE PETITION OF
NORTHERN STATES POWER COMPANY
FOR APPROVAL OF A POWER PURCHASE
AGREEMENT WITH THE UNIVERSITY OF
MINNESOTA FOR ITS SOUTH EAST PLANT
IN MINNEAPOLIS

DOCKET No. E002/M-20-_____

PETITION

SUMMARY OF FILING

Please take notice that on January 6, 2020, Northern States Power Company filed with the Minnesota Public Utilities Commission its Petition for approval of a Power Purchase Agreement (PPA) with the Regents of the University of Minnesota (University) to purchase Excess Energy of up to 10 Megawatts (MW) from the existing South East Plant. The Plant is a 16.4 MW cogeneration system that supports the steam and electricity needs of the University's Minneapolis campus. We also request that the Commission authorize the Company to recover from Minnesota retail customers the Minnesota jurisdictional portion of the costs incurred by the Company under the PPA, pursuant to Minn. Stat. § 216B.16 subd. 7(3).

POWER PURCHASE AGREEMENT

This Power Purchase Agreement ("Agreement") is entered into this 31 day of October, 2019 by and between Northern States Power Company, a Minnesota corporation ("NSP") and Regents of the University of Minnesota, a Minnesota constitutional corporation ("Seller"). NSP and Seller may each be referred to individually as "Party" and collectively as "Parties."

RECITALS

1. NSP is a regulated public utility that sells electricity at retail in the state of Minnesota, and is the retail electric service provider for Seller.
2. Seller operates a facility that produces steam and energy called the South East Plant ("SEP"). The SEP is located at 600 Main Street SE, Minneapolis, MN. The SEP supplies steam to Seller's Minneapolis campus and has a nameplate rating of 16,425 KW. The SEP is expected to generate Excess Energy, as defined in Section 1.2, for sale to NSP of up to 10 MW per hour during the months of December through February (and may include some energy generated and delivered in other months).
3. The Parties wish to enter into this Agreement to establish the terms by which NSP will buy and Seller will sell Excess Energy produced by the SEP and delivered to NSP.

NOW THEREFORE, in consideration of these premises and the mutual promises set forth below, Seller and NSP agree as follows:

AGREEMENT

ARTICLE I - RULES OF CONSTRUCTION AND DEFINITIONS

- 1.1 **Rules of Construction.** The capitalized terms listed in this Article shall have the meanings set forth herein whenever the terms appear in this Agreement, whether in the singular or the plural or in the present or past tense. Other terms used in this Agreement but not listed in this Article shall have meanings as commonly used in the English language and, where applicable, in Prudent Electric Industry Practice. Words not otherwise defined herein that have well known and generally accepted technical or trade meanings are used herein in accordance with such recognized meanings. In addition, the following rules of interpretation shall apply:
 - (a) The masculine shall include the feminine and neuter.
 - (b) References to "Articles," "Sections," or "Appendices" shall be to articles, sections, appendices of this Agreement.
 - (c) The Appendices attached hereto are incorporated in and are intended to be a part of this Agreement; provided, that in the event of a conflict

between the terms of any Appendix and the terms of this Agreement, the terms of this Agreement shall take precedence.

(d) This Agreement was negotiated and prepared by both Parties with the advice and participation of counsel. The Parties have agreed to the wording of this Agreement and none of the provisions hereof shall be construed against one Party on the ground that such Party is the author of this Agreement or any part hereof.

1.2 Definitions. The following terms shall have the meanings set forth herein:

"Auxiliary Energy" means the Energy used by Seller to operate the SEP.

"Emergency" means any condition or situation which in the judgment of NSP or MISO or any successor that may have ownership, jurisdiction, or operational control over the electrical system: (i) endangers or might endanger life or property or public safety; (ii) adversely affects or might adversely affect NSP's or MISO's ability to maintain safe and reliable electric service to NSP's or MISO's customers or others served by the interconnected transmission system; or, (iii) any emergency as defined in the Interconnection Agreement.

"Energy" means the amount of electricity either used or generated over a period of time, expressed in terms of kilowatt-hours (kWh) or megawatt-hours (MWh).

"Environmental Law" means any federal, state, and local laws, including statutes, regulations, rulings, orders, administrative interpretations, and other governmental restrictions and requirements, relating to the discharge of air pollutants, water pollutants or process waste water, or otherwise relating to the environment or hazardous substances as amended from time to time.

"Excess Energy" means the Energy Seller elects to deliver from the SEP to NSP from the SEP up to 10 MW per hour during the months of December through February (and occasionally during other months) at the Point of Delivery less any Auxiliary Energy, as measured by the meter installed at the Point of Delivery pursuant to Section 3.1 of this Agreement.

"FERC" means the Federal Energy Regulatory Commission and any successor organization.

"Force Majeure" shall mean an event or circumstance beyond the control of the Party claiming *Force Majeure*, which, by exercise of due diligence and foresight, could not reasonably have been avoided, including, but not limited to flood, earthquake, storm, fire, lightning, epidemic, war, riot, civil disturbance, sabotage, strike, and act of God or any other cause beyond the control of the Party claiming *Force Majeure*.

"Governmental Authority" means any nation, government, state or other political subdivision thereof, whether foreign or domestic, including, without limitation, any municipality, township and county, and any entity exercising executive, legislative, judicial, regulatory, or administrative functions of or

pertaining to government, including, without limitation, any corporation, or other entity owned or controlled by any of the foregoing.

"Interconnection" means construction, installation, operation, and maintenance of all Interconnection facilities in accordance with any Interconnection Agreement.

"Interconnection Agreement" means the separate agreement between Seller and Interconnection Provider with respect to the interconnection of the SEP to the Interconnection Provider's System; as such agreement may be amended from time to time.

"Interconnection Facilities" means the facilities necessary to interconnect the SEP with the Interconnection Provider's System at the Point of Interconnection, including, but not limited to, breakers, switches, relays and associated equipment.

"Interconnection Provider" means the Person(s) that owns and/or operates the transmission lines, Interconnection Facilities, and other equipment and facilities with which the SEP interconnect at the Point of Delivery, and their successors and assignees.

"Interconnection Provider's System" means the transmission, sub-transmission, distribution facilities and Interconnection Facilities by which the Interconnection Provider provides interconnection and transmission of the Excess Energy at and from the Point of Delivery.

"kW" means kilowatt.

"MISO" means the Midcontinent Independent Transmission System Operator, Inc., a non-profit, non-stock corporation organized and existing under the laws of the State of Delaware and any successor organization.

"MPUC" means the Minnesota Public Utilities Commission and any successor agency.

"MRO" means the Midwest Reliability Organization, a NERC regional electric reliability council, and any successor organization.

"MW" means megawatt.

"NERC" means the North American Electric Reliability Corporation and any successor agency.

"New Joint Transmission Authority" means any independent service organization or other Person that may be created or becomes operational subsequent to the date of this Agreement and that is empowered or authorized to plan, coordinate, operate, regulate or otherwise manage any or all of the Interconnection Provider's System, whether in place of, or in addition to, MRO or MISO.

"NSP.UOFGEN1" means the commercial pricing node registered with MISO by NSP.

"Payment for Excess Energy" means the payment due for Excess Energy. NSP shall pay Seller 75% of the integrated hourly real time Locational Marginal Price ("LMP") at MISO node NSP.UOFGEN1 or an otherwise mutually agreed upon MISO Node located near the SEP should NSP.UOFGEN1 no longer exist minus any applicable MISO market charges (such as but not limited to day ahead and real time administrative fees, revenue neutrality uplift charge, and revenue sufficiency guarantee distribution charge, etc.) minus an administrative fee of \$1.00/MWh. In the event the LMP is a negative value, Seller shall pay NSP 125% of the LMP plus any applicable market charges plus an administrative fee of \$1.00/MWh.

"Permits" means all authorizations, certificates, permits, licenses, and approvals required by any Governmental Authority for the construction, operation, and maintenance of the SEP.

"Person" means an individual, partnership, corporation (including a business trust), limited liability company, joint stock company, trust, unincorporated association, joint venture, Governmental Authority, or other entity.

"Point of Delivery" means the point on the electrical system at which Seller delivers the Excess Energy being provided by Seller pursuant to this Agreement, which is specified in Appendix A.

"Point of Interconnection" means the point on the electrical system where the SEP is physically interconnected with the Interconnection Provider's System. The Point of Interconnection is shown in Appendix A.

"Prudent Electric Industry Practice" means the practices, methods and acts commonly engaged in or approved by a significant portion of the electric power industry, as applicable, including, but not limited to, the requirements of the National Electric Safety Code, National Electrical Code, NERC, IEEE, FERC, MRO, and any Requirement of Law, that, at a particular time, in the exercise of reasonable judgment in light of the facts known or that reasonably should have been known at the time a decision was made, would have been expected to accomplish the desired result in a manner consistent with reliability, safety, economy and expedition.

"Requirements of Law" means collectively, the certificate of incorporation and bylaws or other organizational or governing documents of Seller and NSP, as applicable, and any United States federal, state or local law, Environmental Law, treaty, franchise, rule, regulation, order, writ, judgment, injunction, decree, applicable filed tariff, award or determination of any arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon Seller or NSP or any of their property or to which Seller or NSP or any of their respective properties are subject.

"SCADA" means Supervisory Control and Data Acquisition system for the SEP.

"Site" means the real property on which the SEP is located as set forth in Appendix A.

“Term” means the period of time during which the Agreement is in effect.

ARTICLE 2 - PURCHASE AND SALE

- 2.1 Term.** This Agreement shall be effective from the Effective Date and shall continue, unless otherwise terminated in accordance with its terms, until five (5) years after the Effective Date. Thereafter, this Agreement will continue until terminated by either Party upon one hundred eighty (180) days written notice.
- 2.2 Sale and Purchase.** From the Effective Date NSP agrees to purchase Excess Energy and to accept delivery of any Excess Energy from Seller subject to the terms of this Agreement. For avoidance of doubt, in the event NSP experiences a *Force Majeure*, as more fully described in Article 6 hereof, and cannot accept all or part of the Excess Energy, NSP will be obligated to pay only for that portion of the Excess Energy it accepts. NSP shall not receive, nor shall pay Seller for any attributes of the output of the SEP, except for the Excess Energy addressed herein.
- 2.3 Payment for Excess Energy.** For all Excess Energy Seller delivers to NSP at the Point of Delivery, payment shall be made as defined in this Agreement.
- 2.4 Disputed Payments.** Within two years from the invoice date, either Party may dispute invoiced amounts. When a billing dispute is resolved, the Party owing shall pay the amount owed within five business days of the date of resolution, with late payment charges calculated on the amount owed in accordance with the provisions of Paragraph 3.4.
- 2.5 Offsets.** Each Party may offset against any and all amounts due and owed by it to the other Party any and all undisputed amounts, including damages and other payments that are owed by the other Party under this Agreement.
- 2.6 Operation.** Seller may operate the SEP and produce Excess Energy at its sole discretion pursuant to the terms of this Agreement.
- 2.7 Title and Risk of Loss.** As between the Parties, Seller shall be deemed to be in control of the Excess Energy output from the SEP up to and until its delivery at the Point of Delivery, and NSP shall be deemed to be in control of such Excess Energy from and after delivery and receipt at the Point of Delivery. Title and risk of loss related to the Excess Energy shall transfer from Seller to NSP at the Point of Delivery.

ARTICLE 3 - METERING AND BILLING

- 3.1 Metering Requirements.** The transfer of Excess Energy between Seller and NSP shall be measured by metering equipment installed at the Point of Delivery. NSP shall install, own and maintain the meters. If the metering equipment fails to register, or is found upon testing to be inaccurate by more than one percent (1.0%), an adjustment shall be made correcting all measurements by the inaccurate or defective device using the best-available information (including, but

not limited to turbine SCADA information), provided that such correction shall be limited to no more than the preceding 180 days prior to the discovery of the error. Either Party may install back-up metering at its own cost, provided that such back-up metering meets the same technical standards applicable to the metering equipment.

- 3.2 Billing.** Within twenty (20) days after NSP reads all meter data for the previous month, NSP shall send Seller a settlement breakdown report ("Settlement Report") detailing units, quantity, unit price and totals for the previous month that contains the market settlement data with MISO and any other applicable billing data for the computation of payments owed to Seller or NSP, as the case may be. The Settlement Report shall list the volume and price of energy, each applicable MISO charge, the administrative fee of \$1.00/MWh, any retroactive true-up MISO adjustments and any other adjustments permitted under this Agreement. NSP's settlement statement shall be considered definitive for accuracy and for amounts owed.
- 3.3 Right to Audit.** Each Party shall have the right from time to time, upon written request and at its own expense, to audit the other Party's books and records during normal business hours to verify the information provided by that Party as required under this Agreement. NSP shall also be entitled to review Seller's back-up documentation on operation of the SEP such as operating logs and information related to testing, outages and maintenance.
- 3.4 Payment.** NSP's payment to Seller (or Seller's payment to NSP, as the case may be) for Excess Energy delivered shall be made via wire transfer or mail (or in the case of any payment to NSP from Seller by mail) within five (5) days following the date of the Settlement Report. If such due date falls on a weekend or legal holiday, such due date shall be the next working day. Either Party shall be entitled to conclusively presume, without any liability whatsoever, that the payment information furnished by the other Party (for example, name, financial institution, account numbers, and payee) is accurate. In no event will either Party be required to pay any bill more than once where the payment was first made in accordance with the other Party's instructions. Payments posted after the due date shall be considered late and shall bear interest on the unpaid balance at a rate equal to three (3) percent per annum plus the average daily prime rate as determined from the "Money Rates" section of the Midwest Edition of *The Wall Street Journal* for the days of the late payment period multiplied by the number of days elapsed from and including the day after the due date, to and including the payment date and divided by three hundred and sixty-five (365). In the event this index is discontinued or its basis is substantially modified, the Parties shall agree on a substitute equivalent index.

ARTICLE 4 - SELLER'S OBLIGATIONS

During the Term of the Agreement, Seller hereby agrees to be bound by and to perform the following affirmative obligations:

- 4.1 Operation of the SEP.**

Seller shall at its sole expense:

- (a) In a timely manner, seek, obtain, maintain, comply with and, as necessary, renew and modify, the Permits which are required by any Requirement of Law to engage in the activities envisioned by the Agreement and to meeting Seller's obligation to operate the SEP consistently with the terms of this Agreement.
- (b) Operate, maintain, and repair the SEP in accordance with this Agreement, all Requirements of Law, Permits, requirements of MISO, MRO and any New Joint Transmission Authority, and in accordance with Prudent Electric Industry Practice.

4.2 General Obligations.

- (a) Seller, during the Term of the Agreement, shall pay all present or future federal, state, municipal, or other lawful taxes or fees applicable to Seller or the SEP or by reason of the sale of Excess Energy under this Agreement, except to the extent that any taxes are due to or based on the income of NSP. Seller shall receive the benefit of any new tax credits, allowances, or other credits related to the SEP.
- (b) Seller shall obtain in its own name and at its own expense any and all pollution or environmental credits or offsets necessary to operate the SEP in compliance with Environmental Laws.
- (c) The Parties recognize that this Agreement does not provide for the supply of Auxiliary Energy to the SEP, and Seller must enter into separate arrangements for the supply of retail electric services to the SEP.
- (d) Seller shall keep complete and accurate operating and other records and all other data for the purposes of proper administration of the Agreement, including such records as may be required by any Governmental Authority, Tariff, MISO, MRO, and any New Joint Transmission Authority.
- (e) Seller shall provide to NSP such other information regarding the permitting, engineering, construction, billing and collection of payments, and operations of Seller or the SEP, or other data concerning the Seller or the SEP as NSP may, from time to time, reasonably request to fulfill the requirements of this Agreement.

4.3 Data Sharing.

- (a) The Seller shall comply with all current NSP, NERC, and MISO and governmental or other regulatory generating unit outage reporting requirements, as they may be revised from time to time, and as they apply to the SEP and this Agreement.
- (b) Seller shall inform NSP of any planned or unplanned outage of the SEP as soon as reasonably practicable so that NSP can notify MISO and

effectively manage its obligations and provide such other information regarding the SEP as may be reasonably required. Each year by November 15, Seller shall provide NSP a schedule of expected planned outages for the SEP for the following calendar year and shall provide updates of the schedule as they occur.

- (c) Unless otherwise mutually agreed, Seller shall notify NSP at least 24 hours in advance if Seller plans to deliver Excess Energy to NSP. The Seller shall also provide such additional information regarding its operations that NSP may reasonably request. Seller shall also provide to NSP a monthly schedule of expected plans to deliver Excess Energy to NSP for the coming month.

4.4 Access to SEP. Appropriate representatives of NSP shall at all reasonable times, including weekends and nights, and with reasonable prior notice, have access to the SEP to read meters and to perform all inspections, maintenance, service, capacity testing, and operational reviews as may be appropriate to facilitate the performance of this Agreement. While at the SEP, such representatives shall observe such reasonable safety precautions as may be required by Seller and shall conduct themselves in a manner that will not interfere with the operation of the SEP.

4.5 Interconnection Agreement; Separation of Functions.

- (a) Seller warrants and represents that it has entered into a valid and enforceable Interconnection Agreement with the Interconnection Provider.
- (b) In the event that the Interconnection Provider is NSP or an affiliate (parent or subsidiary, at any level) of NSP, Seller expressly recognizes that, for purposes of this Agreement, the Interconnection Provider shall be deemed to be a separate entity and separate contracting party whether or not the Interconnection Agreement is entered into with NSP or an affiliate of NSP. Notwithstanding any other provision in this Agreement, nothing in the Interconnection Agreement shall alter or modify Seller's or NSP's rights, duties and obligations under this Agreement. Furthermore, this Agreement shall not be construed to create any rights or obligations between Seller and the Interconnection Provider.

ARTICLE 5 - NSP OBLIGATIONS; APPROVALS, TRANSMISSION SERVICE; CURTAILMENT

5.1 Transmission Service.

Seller shall be solely responsible for obtaining and paying for transmission and delivery of any and all Excess Energy produced by the SEP to the Point of Delivery. NSP shall be solely responsible for obtaining and paying for delivery of Excess Energy from the Point of Delivery (including ancillary services) to any other location for retail sales or for any other use as NSP, in its sole discretion, deems fit.

5.2 Curtailment

The Parties acknowledge that there may be circumstances in which NSP, MRO, MISO, the Interconnection Provider, or a New Joint Transmission Authority will direct Seller to curtail deliveries of Excess Energy from the SEP. In the event of such a curtailment, NSP shall provide to Seller any documentation MISO provides to NSP related to the curtailment, and Seller shall not be entitled to any compensation from NSP pursuant to this Agreement for any resulting lost production of Excess Energy.

5.4 MPUC Approval.

This Agreement will be filed with the MPUC for approval. Upon approval by written order of the MPUC this Agreement will become effective ("Effective Date"). If the MPUC orders changes to this Agreement, then within sixty (60) calendar days of the date the MPUC issued its written order:

- (a) The Parties may amend this Agreement to incorporate those ordered changes; or,
- (b) Either Party may terminate this Agreement without any further financial or other obligation to the other Party as a result of such termination.

ARTICLE 6 - FORCE MAJEURE

- 6.1 **Force Majeure.** The performance of each Party under this Agreement may be subject to interruptions or reductions due to an event of *Force Majeure*.
- 6.2 **Remedial Action.** A Party shall not be liable to the other Party in the event it is prevented from performing its obligations hereunder in whole or in part due to an event of *Force Majeure*. The non-performing Party shall be prompt and diligent in attempting to remove the cause of its failure to perform, and nothing herein shall be construed as permitting that Party to continue to fail to perform after said cause has been removed.
- 6.3 **Notice.** In the event of any delay or nonperformance resulting from *Force Majeure*, the Party suffering the event of *Force Majeure* shall, as soon as practicable, but no later than twenty-four (24) hours after the occurrence or the Party's knowledge of the occurrence of the *Force Majeure* event, notify the other Party in writing of the nature, cause, date of commencement thereof, and the anticipated extent of any delay or interruption in performance.
- 6.4 **Effect.** In no event will any delay or failure of performance caused by any conditions or events of *Force Majeure* extend this Agreement beyond its stated Term. In the event that any delay or failure of performance caused by conditions or events of *Force Majeure* continues for an uninterrupted period of three hundred sixty-five (365) Days from its occurrence or inception, as noticed pursuant to Section 6.3, the Party not claiming *Force Majeure* may, at any time following the end of such three hundred sixty-five (365) Day period, terminate this Agreement upon written notice to the affected Party, without further obligation by either Party except as to costs and balances incurred prior to the effective date of such termination. The Party not claiming *Force Majeure* may, but shall not be obligated to, extend such three hundred sixty-five (365) Day period, for such additional time

as it, at its sole discretion, deems appropriate, if the affected Party is exercising due diligence in its efforts to cure the conditions or events of *Force Majeure*.

ARTICLE 7 - TERMINATION/DEFAULT/REMEDIES

7.1 Events of Default by NSP. The following shall each constitute an Event of Default by NSP:

- (a) NSP breaches any curable non-monetary material obligation under this Agreement, and fails to cure such breach within thirty (30) days after written notification by Seller of the breach.
- (b) NSP fails to make any payment due under the Agreement within thirty (30) days after written notification by Seller that such payment is past due.

7.2 Events of Default by Seller. An Event of Default by the Seller shall occur if Seller breaches any curable material obligation under this Agreement which adversely affects NSP and either: 1) fails to initiate action to cure the breach within five (5) days after written notification by NSP of the breach; or, 2) after having initiated the cure in compliance with this Section, Seller subsequently fails to cure the breach within thirty (30) days after the actions to cure the breach were initiated.

7.3 Termination.

- (a) In the event the defaulting Party fails to cure the Event of Default within the period for curative action under Sections 7.1 or 7.2, as applicable, or upon the occurrence of an incurable Event of Default, the non-defaulting Party may terminate the Agreement by notifying the defaulting Party in writing of the decision to terminate and the effective date of the termination.
- (b) Upon termination of the Agreement by NSP due to an Event of Default by Seller pursuant to Section 7.3(a), NSP shall have no future or further obligation to make any further payments whatsoever under this Agreement, except for payments for obligations arising or accruing prior to the effective date of termination.
- (c) Upon termination of the Agreement by Seller due to an Event of Default by NSP pursuant to Section 7.3(a), Seller shall not deliver Excess Energy to NSP, or be required to satisfy any other obligation of this Agreement, except for payments or other obligations arising or accruing prior to the effective date of termination. After the effective date of termination, the Agreement shall not be construed to provide any residual value to either Party or any successor or any other Person, for rights to, use of, or benefits from the SEP or the Interconnection Provider's System.

7.4 Other Damages.

- (a) For all claims, causes of action and damages the Parties shall be entitled to the recovery of actual damages allowed by law unless otherwise limited by the Agreement. Neither the enumeration of Events of Default in Sections

7.1 and 7.2, nor the termination of this Agreement by a non-defaulting Party pursuant to Section 7.3(a), shall limit the right of a non-defaulting Party to rights and remedies available at law, including, but not limited to, claims for breach of contract or failure to perform by the other Party and for direct damages incurred by the non-defaulting Party as a result of the termination of this Agreement.

- (b) Except as otherwise specifically and expressly provided in the Agreement, no Party shall be liable to the other Party under the Agreement for any indirect, special, punitive, exemplary, incidental or consequential damages, including, without limitation, loss of use, loss of revenues, loss of profit, interest charges, cost of capital, or claims of customers to which service is made, whether arising under statute or in tort or contract. Notwithstanding the foregoing, in the event that NSP breaches this Agreement by failing to purchase or accept delivery of Excess Energy (except for curtailments allowed pursuant to Section 5.2 or as otherwise excused pursuant to the terms of this Agreement), Seller shall be entitled to seek damages measured by the difference between the amounts Seller would otherwise have been paid under this Agreement for such Excess Energy if it had been purchased or accepted for delivery by NSP and the costs saved by not being required to produce and deliver such Excess Energy.

- 7.5 **Duty to Mitigate.** Each Party agrees that it has a duty to mitigate damages and covenants that it will use commercially reasonable efforts to minimize any damages it may incur as a result of the other Party's performance or non-performance of the Agreement.
- 7.6 **Responsibility.** Each Party will be responsible for all claims, demands, losses, liabilities, and expenses (including reasonable attorneys' fees) (collectively "Damages") for personal injury or death to Persons and damage to each other's physical property or facilities or the property of any other Person or corporation to the extent caused by the negligent or intentional acts, errors, omissions of, or breach of this Agreement by, the Party. The responsible Party's liability to pay Damages to the other Party shall be reduced in proportion to the percentage by which the other Party's negligent or intentional acts, errors or omissions caused the Damages. These provisions shall not be construed to relieve any insurer of its obligation to pay claims consistent with the provisions of a valid insurance policy. Notwithstanding anything in this Agreement to the contrary, Seller's obligation under this provision shall be subject to the provisions and limitations of the Minnesota Tort Claims Act, Minn. Stat. Section 3.736 and other applicable law.
- 7.7 **Waiver of Trial by Jury.** Seller and NSP each hereby knowingly, voluntarily and intentionally waive any rights they may have to a trial by jury in respect of any litigation based hereon, or arising out of, under, or in connection with, this Agreement or any course of conduct, course of dealing, statements (whether oral or written) or actions of Seller and NSP related hereto and expressly agree to have any disputes arising under or in connection with this Agreement be adjudicated by a judge of the court having jurisdiction without a jury.

ARTICLE 8 - MISCELLANEOUS

- 8.1 No Assignment.** The rights and obligations of this Agreement may not be assigned (i) by either Party without the prior written consent of the other Party, which consent shall not be unreasonably withheld, conditioned or delayed.
- 8.2 Notices.** Any notice, demand, request, or communication required or authorized by the Agreement shall be delivered either by hand, facsimile, overnight courier or mailed by certified mail, return receipt requested, with postage prepaid, as follows:

TO NSP:

Northern States Power Company
1800 Larimer Street, 10th Floor
Denver, Co. 80202
Attn: Mark Baylor, Consultant, Structured Power
Phone: 303.571.7271
Email: mark.d.baylor@xcelenergy.com

With a copy to:

Jeff Klein
Manager Structured Purchases
Xcel Energy Services Inc.
1800 Larimer Street, 10th Floor
Denver, CO 80202
Phone: 303-571-2732
Email: jeffrey.klein@xcelenergy.com

TO SELLER:

University of Minnesota
Facilities Management
Room 400 Donhowe
319-15th Ave SE
Minneapolis, MN 55455
Attn: Office of Director, Energy Management
Phone: 612-625-8038
energy-group@unm.edu
With a copy to:

Office of the General Counsel
University of Minnesota
360 McNamara Alumni Center
200 Oak Street SE
Minneapolis, MN 55455
Phone: 612-624-4100
Fax: 612-626-9624

The designation and titles of the person to be notified or the address of such person may be changed at any time by written notice.

- 8.3 Captions.** All titles, subject headings, section titles and similar items are provided for the purpose of reference and convenience and are not intended to be inclusive, definitive or to affect the meaning of the contents or scope of the Agreement.
- 8.4 No Third-Party Beneficiary.** No provision of this Agreement is intended to nor shall it in any way inure to the benefit of any customer, property owner or any other third party, so as to constitute any such Person a third-party beneficiary under the Agreement, or of any one or more of the terms hereof, or otherwise give rise to any cause of action in any Person not a Party hereto.
- 8.5 Integration; Amendment.** This Agreement, together with all Appendices attached hereto, constitutes the entire agreement between the Parties relating to the transaction described herein and supersedes any and all prior oral or written understandings. No amendment, addition to, or modification of any provision hereof shall be binding upon the Parties, and neither Party shall be deemed to have waived any provision or any remedy available to it unless such amendment, addition, modification or waiver is in writing and signed by a duly authorized officer or representative of the applicable Party or Parties.
- 8.6 Governing Law.** This Agreement is made in the State of Minnesota and shall be interpreted and governed by the laws of the State of Minnesota and/or the laws of the United States, as applicable.
- 8.7 Survival of Obligations.** Cancellation, expiration, or earlier termination of this Agreement shall not relieve the parties of obligations that by their nature should survive such cancellation, expiration or termination, prior to the expiration of the applicable statute of limitations, including warranties, remedies or indemnities, which shall survive for the period of the applicable statute of limitations, and obligations under law.
- 8.8 Relationship of Parties.**
- (a) The duties, obligations, and liabilities of the Parties are intended to be several and not joint or collective. This Agreement shall not be interpreted or construed to create an association, joint venture, fiduciary relationship or partnership between Seller and NSP or to impose any partnership obligation or liability or any trust or agency obligation or relationship upon either Party. Seller and NSP shall not have any right, power, or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.
 - (b) The relationship between NSP and Seller shall be that of contracting party to independent contractor. Accordingly, subject to the specific terms of the Agreement, NSP shall have no general right to prescribe the means by which Seller shall meet its obligations under the Agreement.

- (c) Seller shall be solely liable for the payment of all wages, taxes, and other costs related to the employment of persons to perform Seller's obligations under the Agreement, including all federal, state, and local income, social security, payroll, and employment taxes, and statutorily mandated workers' compensation coverage. None of the persons employed by Seller shall be considered employees of NSP for any purpose; nor shall Seller represent to any Person that he or she is or shall become an NSP employee or agent.

- 8.9 **Good Faith and Fair Dealing; Reasonableness.** The Parties agree to act reasonably and in accordance with the principles of good faith and fair dealing in the performance of the Agreement. Unless expressly provided otherwise in this Agreement, (i) wherever this Agreement requires the consent, approval, or similar action by a Party, such consent, approval or similar action shall not be unreasonably withheld, delayed, or conditioned, and (ii) wherever this Agreement gives a Party a right to determine, require, specify or take similar action with respect to matters, such determination, requirement, specification or similar action shall be reasonable.
- 8.10 **Severability.** Should any provision of this Agreement be or become void, illegal, or unenforceable, the validity or enforceability of the other provisions of the Agreement shall not be affected and shall continue in force. The Parties will, however, use their best endeavors to agree on the replacement of the void, illegal, or unenforceable provision(s) with legally acceptable clauses which correspond as closely as possible to the sense and purpose of the affected provision and this Agreement as a whole.
- 8.11 **Cooperation.** The Parties agree to reasonably cooperate with each other in the implementation and performance of this Agreement. Such duty to cooperate shall not require either Party to act in a manner inconsistent with its rights under this Agreement.
- 8.12 **Counterparts.** This Agreement may be executed in two or more counterparts and by different parties on separate counterparts, all of which shall be considered one and the same agreement and each of which shall be deemed an original.
- 8.13 **Data Practices Act.** If Seller provides NSP with any information that is subject to the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13, NSP agrees to comply with the Act with regard to such information. NSP agrees that any non-public, proprietary information it receives during the course of its performance under this Agreement from Seller, that is identified by Seller as confidential at the time of disclosure to NSP, which concerns the personal, financial, or other affairs of the Seller, its Regents, officers, employees or students, shall be kept confidential.
- 8.14 **Use of University Name or Logo.** NSP agrees not to use the name, logo, or any other marks (including, but not limited to, colors and music) owned by or associated with Seller or the name of any representative of Seller in any sales promotion work or advertising, or any form of publicity, without the prior written permission of Seller in each instance.

- 8.15 Use of NSP or Xcel Energy Name or Logo.** Seller agrees not to use the name, logo, or any other marks (including, but not limited to, colors and music) owned by or associated with NSP or Xcel Energy or the name of any representative of NSP in any sales promotion work or advertising, or any form of publicity, without the prior written permission of NSP in each instance.
- 8.16 Waiver.** The failure of either Party to enforce or insist upon compliance with or strict performance of any of the terms or conditions of this Agreement, or to take advantage of any of its rights there under, shall not constitute a waiver or relinquishment of any such terms, conditions, or rights, but the same shall be and remain at all times in full force and effect.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed as of the day and year first above written.

Dated: October 31, 2019

**NORTHERN STATES POWER
COMPANY, a Minnesota Corporation**

By: 

Name: **Ben J. Van Abel**
Title: **Sr. Vice President, Finance and
Corporate Development
Xcel Energy Services Inc.
Authorized signatory for Northern
States Power Company, a Minnesota
Corporation**

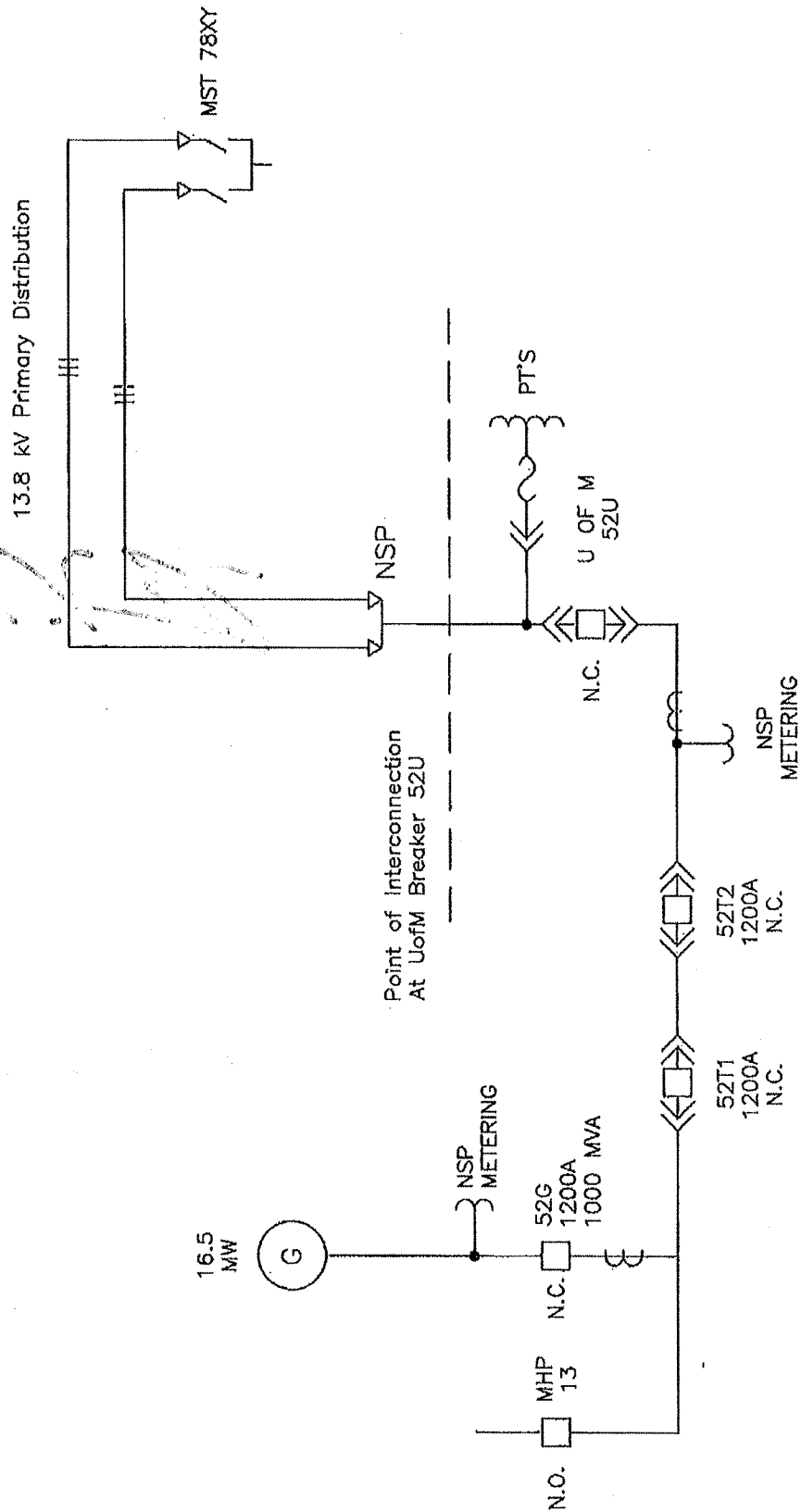
Dated: November 1, 2019

**REGENTS OF THE UNIVERSITY OF
MINNESOTA**

By: 

Name: **Erick Van Meter**
Title: **Director, Energy Management
University of Minnesota
For the Regents of the University of
Minnesota**

APPENDIX A



FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

Form 556

Certification of Qualifying Facility (QF) Status for a Small Power
Production or Cogeneration Facility

General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, www.ferc.gov/QF. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. See 18 C.F.R. § 292.203.

How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button () for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (oir_submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do <i>not</i> use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a) (3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

- (1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
- (2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Notice Requirements link.

What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at <http://earth.google.com>), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-guide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

☐ Non-Public: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.
☐ Public (redacted): Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This public version of the applicants's Form 556 contains all data <u>except</u> for data from the lines indicated below, which has been redacted.
Privileged: Indicate below which lines of your form contain data for which you are seeking privileged treatment
Critical Energy Infrastructure Information (CEII): Indicate below which lines of your form contain data for which you are seeking CEII status

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION
 WASHINGTON, DC

Form 556

Certification of Qualifying Facility (QF) Status for a Small Power
 Production or Cogeneration Facility

Application Information

1a Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility) Regents of the University of Minnesota		
1b Applicant street address 100 Church St. SE		
1c City Minneapolis	1d State/province Minnesota	
1e Postal code 55455	1f Country (if not United States)	1g Telephone number 612-625-0597
1h Has the instant facility ever previously been certified as a QF? Yes ☐ No ☒		
1i If yes, provide the docket number of the last known QF filing pertaining to this facility: QF ____ - ____ - ____		
1j Under which certification process is the applicant making this filing? ☒ Notice of self-certification (see note below) ☐ Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3) Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.		
1k What type(s) of QF status is the applicant seeking for its facility? (check all that apply) ☐ Qualifying small power production facility status ☒ Qualifying cogeneration facility status		
1l What is the purpose and expected effective date(s) of this filing? ☒ Original certification; facility expected to be installed by <u>12/20/19</u> and to begin operation on <u>1/1/20</u> ☐ Change(s) to a previously certified facility to be effective on _____ (identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19) ☐ Name change and/or other administrative change(s) ☐ Change in ownership ☐ Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output ☐ Supplement or correction to a previous filing submitted on _____ (describe the supplement or correction in the Miscellaneous section starting on page 19)		
1m If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19. ☐ The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated _____ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19) ☐ The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted ☐ The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)		

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Contact Information	2a Name of contact person Mike Grimstad		2b Telephone number 612-626-2074			
	2c Which of the following describes the contact person's relationship to the applicant? (check one) ☐ Applicant (self) ☒ Employee, owner or partner of applicant authorized to represent the applicant ☐ Employee of a company affiliated with the applicant authorized to represent the applicant on this matter ☐ Lawyer, consultant, or other representative authorized to represent the applicant on this matter					
	2d Company or organization name (if applicant is an individual, check here and skip to line 2e) ☐ University of Minnesota					
	2e Street address (if same as Applicant, check here and skip to line 3a) ☐ 319-17th Avenue S.E.					
	2f City Minneapolis		2g State/province Minnesota			
	2h Postal code 55455		2i Country (if not United States)			
Facility Identification and Location	3a Facility name South East Plant					
	3b Street address (if a street address does not exist for the facility, check here and skip to line 3c) ☐ 600 Main Street					
	3c Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional. Longitude ☐ East (+) _____ degrees Latitude ☐ North (+) _____ degrees ☐ West (-) _____ degrees ☐ South (-) _____ degrees					
	3d City (if unincorporated, check here and enter nearest city) ☐ Minneapolis		3e State/province Minnesota			
	3f County (or check here for independent city) ☐ Hennepin		3g Country (if not United States)			
Transacting Utilities	Identify the electric utilities that are contemplated to transact with the facility.					
	4a Identify utility interconnecting with the facility Xcel Energy					
	4b Identify utilities providing wheeling service or check here if none ☒					
	4c Identify utilities purchasing the useful electric power output or check here if none ☐ Xcel Energy					
	4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none ☐ Xcel Energy					

Ownership and Operation

5a Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.

Full legal names of direct owners	Electric utility or holding company	If Yes, % equity interest
1) Regents of the University of Minnesota	Yes ☐ No ☒	100 %
2) _____	Yes ☐ No ☐	_____ %
3) _____	Yes ☐ No ☐	_____ %
4) _____	Yes ☐ No ☐	_____ %
5) _____	Yes ☐ No ☐	_____ %
6) _____	Yes ☐ No ☐	_____ %
7) _____	Yes ☐ No ☐	_____ %
8) _____	Yes ☐ No ☐	_____ %
9) _____	Yes ☐ No ☐	_____ %
10) _____	Yes ☐ No ☐	_____ %

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5b Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)

Check here if no such upstream owners exist. ☒

Full legal names of electric utility or holding company upstream owners	% equity interest
1) _____	_____ %
2) _____	_____ %
3) _____	_____ %
4) _____	_____ %
5) _____	_____ %
6) _____	_____ %
7) _____	_____ %
8) _____	_____ %
9) _____	_____ %
10) _____	_____ %

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5c Identify the facility operator
 Veolia Energy Solutions, LLC

6a Describe the primary energy input: (check one main category and, if applicable, one subcategory)

- | | | |
|--|---|--|
| ☐ Biomass (specify) | ☐ Renewable resources (specify) | ☐ Geothermal |
| ☐ Landfill gas | ☐ Hydro power - river | ☒ Fossil fuel (specify) |
| ☐ Manure digester gas | ☐ Hydro power - tidal | ☐ Coal (not waste) |
| ☐ Municipal solid waste | ☐ Hydro power - wave | ☐ Fuel oil/diesel |
| ☐ Sewage digester gas | ☐ Solar - photovoltaic | ☒ Natural gas (not waste) |
| ☐ Wood | ☐ Solar - thermal | ☐ Other fossil fuel (describe on page 19) |
| ☐ Other biomass (describe on page 19) | ☐ Wind | |
| ☐ Waste (specify type below in line 6b) | ☐ Other renewable resource (describe on page 19) | ☐ Other (describe on page 19) |

6b If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)

- ☐ Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)
- ☐ Anthracite culm produced prior to July 23, 1985
 - ☐ Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more
 - ☐ Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more
 - ☐ Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste
 - ☐ Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste
 - ☐ Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation
 - ☐ Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)
 - ☐ Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)
 - ☐ Materials that a government agency has certified for disposal by combustion (describe on page 19)
 - ☐ Heat from exothermic reactions (describe on page 19)
 - ☐ Residual heat (describe on page 19)
 - ☐ Used rubber tires
 - ☐ Plastic materials
 - ☐ Refinery off-gas
 - ☐ Petroleum coke
- ☐ Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)

6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).

Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input
Natural gas	90,866,900 Btu/h	91.7 %
Oil-based fuels	1,531,800 Btu/h	1.6 %
Coal	6,718,700 Btu/h	6.7 %

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Technical Facility Information

Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.

7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	16,425 kW
7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host) , do not include any power consumed by the non-power production activities in your reported parasitic station power.	1,750 kW
7c Electrical losses in interconnection transformers	0 kW
7d Electrical losses in AC/DC conversion equipment, if any	0 kW
7e Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	0 kW
7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	1,750.0 kW
7g Maximum net power production capacity = 7a - 7f	14,675.0 kW

7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.

Facility provides heating steam for University campus and co-generates electric power using a back-pressure steam turbine topping cycle. Facility includes one 200 psig 250,000 Lb/hr dual-fuel (gas/oil)fired package boiler, one 900 psig 200,000 Lb/hr dual-fuel (gas/oil)fired package boiler, one 900 psig 200,000 Klb/hr dual fuel (gas/solid fuel) circulating fluidized bed boiler and a 16,425 KW back-pressure/extracting steam turbine generator. Facility primarily operates in winter heating season and provides back-up service when University's other campus co-generation facility is off-line.

When called into sustained winter season service, combination of circulating fluidized bed boiler and back-pressure/extraction steam turbine operate producing on average 200 psig 120,000 Lbs/hr of steam for campus use and 3,250 KW of power.

Plant normally operates ~100 days/yr on a planned basis.

Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Certification of Compliance with Size Limitations	Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) <i>as amended by</i> Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).																
	8a Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest. Check here if no such facilities exist. ☐ <table border="1"> <thead> <tr> <th>Facility location (city or county, state)</th> <th>Root docket # (if any)</th> <th>Common owner(s)</th> <th>Maximum net power production capacity</th> </tr> </thead> <tbody> <tr> <td>1) _____</td> <td>QF - _____</td> <td>_____</td> <td>_____ kW</td> </tr> <tr> <td>2) _____</td> <td>QF - _____</td> <td>_____</td> <td>_____ kW</td> </tr> <tr> <td>3) _____</td> <td>QF - _____</td> <td>_____</td> <td>_____ kW</td> </tr> </tbody> </table> ☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity	1) _____	QF - _____	_____	_____ kW	2) _____	QF - _____	_____	_____ kW	3) _____	QF - _____	_____	_____ kW
	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity													
	1) _____	QF - _____	_____	_____ kW													
	2) _____	QF - _____	_____	_____ kW													
	3) _____	QF - _____	_____	_____ kW													
8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act? ☐ Yes (continue at line 8c below) ☐ No (skip lines 8c through 8e)																	
8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes ☐ No ☐																	
8d Did construction of the facility commence on or before December 31, 1999? Yes ☐ No ☐																	
8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes ☐ No ☐ If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.																	
Certification of Compliance with Fuel Use Requirements	Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.																
	9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel: ☐ Applicant certifies that the facility will use fossil fuels <i>exclusively</i> for the purposes listed above.																
	9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually: ☐ Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.																

Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

General Cogeneration Information	Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.	
	10a What type(s) of cogeneration technology does the facility represent? (check all that apply)	
	☒ Topping-cycle cogeneration	☐ Bottoming-cycle cogeneration
	10b To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.	
	Check to certify compliance with indicated requirement	Requirement
	☒	Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.
	☒	Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.
	☒	Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.
	☒	Diagram must specify average gross electric output in kW or MW for each generator.
	☒	Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.
☒	At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).	
☒	Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.	
☒	Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.	
☒	Diagram must specify working fluid flow conditions at make-up water inputs.	

EPC Act 2005 Requirements for Fundamental Use
 of Energy Output from Cogeneration Facilities

EPC Act 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPC Act 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.

11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes ☐ No ☒

11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes ☐ No ☒

If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.

11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?

☐ Yes (continue at line 11d below)

☐ No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.

11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?

☐ Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.

☐ No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.

11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?

☐ Yes. The facility is an EPC Act 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.

☒ No. Applicant certifies that energy will *not* be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) *before* selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.

11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?

☐ Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.

☐ No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j *even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2)*.

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = 100 * 11g / (11g + 11h)	%

11j Is the response in line 11i greater than or equal to 50 percent?

Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.

No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. See Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.

Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Usefulness of Topping-Cycle Thermal Output	The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.			
	12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use <i>in separate rows</i>.			
	Name of entity (thermal host) taking thermal output		Thermal host's relationship to facility; Thermal host's use of thermal output	
			Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)	
	1)	Univ.of Minnesota, Minneapolis Campus	Applicant or affiliate Commercial or industrial space heating	130,080,000 Btu/h
	2)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
	3)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
	4)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
	5)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
	6)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed				
12b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.				
Provide university campus with steam for purposes of space heating and cooling, water heating, hospital/clinical operations, and academic research support.				

Topping-Cycle Operating and
Efficiency Value Calculation

Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.

13a Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water	130,080,000 Btu/h
13b Indicate the annual average rate of net electrical energy output	1,714 kW
13c Multiply line 13b by 3,412 to convert from kW to Btu/h	5,848,168 Btu/h
13d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	0 hp
13e Multiply line 13d by 2,544 to convert from hp to Btu/h	0.0 Btu/h
13f Indicate the annual average rate of energy input from natural gas and oil	165,000,000 Btu/h
13g Topping-cycle operating value = $100 * 13a / (13a + 13c + 13e)$	95.7 %
13h Topping-cycle efficiency value = $100 * (0.5 * 13a + 13c + 13e) / 13f$	43.0 %
13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%? ☒ Yes (complies with operating standard) ☐ No (does not comply with operating standard)	
13j Did installation of the facility in its current form commence on or after March 13, 1980? ☒ Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below. ☐ No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.	
13k Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%: ☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)	
13l Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%: ☒ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)	

Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

Usefulness of Bottoming-Cycle Thermal Output	The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.			
	14a Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process <i>in separate rows</i>.			
	Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production		Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)
	1)		Select thermal host's relationship to facility	Yes ☐ No ☐
			Select thermal host's process type	
	2)		Select thermal host's relationship to facility	Yes ☐ No ☐
			Select thermal host's process type	
	3)		Select thermal host's relationship to facility	Yes ☐ No ☐
			Select thermal host's process type	
	☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed			
14b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.				



Bottoming-Cycle Operating and
Efficiency Value Calculation

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).

15a Did installation of the facility in its current form commence on or after March 13, 1980?

- ☐ Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.
- ☐ No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.

15b Indicate the annual average rate of net electrical energy output

kW

15c Multiply line 15b by 3,412 to convert from kW to Btu/h

0 Btu/h

15d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)

hp

15e Multiply line 15d by 2,544 to convert from hp to Btu/h

0 Btu/h

15f Indicate the annual average rate of supplementary energy input from natural gas or oil

Btu/h

15g Bottoming-cycle efficiency value = $100 * (15c + 15e) / 15f$

0 %

15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:

☐ Yes (complies with efficiency standard)

☐ No (does not comply with efficiency standard)

Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

- ☒ He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.
- ☒ He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.
- ☒ He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)
- ☒ The person on whose behalf the filing is made
 - ☐ An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made
 - ☐ An officer, agent, or employee of the governmental authority, agency, or instrumentality on behalf of which the filing is made
 - ☐ A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign
- ☒ He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.
- ☒ He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature	Your address	Date
Erick Van Meter	400 Donhowe Building Minneapolis, MN 55455	12/20/2019

Audit Notes

Commission Staff Use Only:



Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to*. You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

CERTIFICATE OF SERVICE

I, Paget Pengelly, hereby certify that I have this day served copies of the foregoing document on the attached list of persons.

xx by depositing a true and correct copy thereof, properly enveloped with postage paid in the United States mail at Minneapolis, Minnesota

xx electronic filing

DOCKET NO. E002/M-20-____
Xcel Energy's Miscellaneous Electric & Gas Service List

Dated this 6th day of January 2020

/s/

Paget Pengelly
Regulatory Administrator

[illegible]

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
John	Farrell	jfarrell@ilsr.org	Institute for Local Self-Reliance	1313 5th St SE #303 Minneapolis, MN 55414	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Edward	Garvey	edward.garvey@AESLconsulting.com	AESL Consulting	32 Lawton St Saint Paul, MN 55102-2617	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Janet	Gonzalez	Janet.gonzalez@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 55101	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Michael	Hoppe	il23@mtn.org	Local Union 23, I.B.E.W.	932 Payne Avenue St. Paul, MN 55130	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Alan	Jenkins	aj@jenkinsatlaw.com	Jenkins at Law	2265 Roswell Road Suite 100 Marietta, GA 30062	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Linda	Jensen	linda.s.jensen@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota Street St. Paul, MN 551012134	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Richard	Johnson	Rick.Johnson@lawmooss.com	Moss & Barnett	150 S. 5th Street Suite 1200 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Sarah	Johnson Phillips	sarah.phillips@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Mark J.	Kaufman	mkaufman@ibewlocal949.org	IBEW Local Union 949	12908 Nicollet Avenue South Burnsville, MN 55337	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Thomas	Koehler	TGK@IBEW160.org	Local Union #160, IBEW	2909 Anthony Ln St Anthony Village, MN 55418-3238	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Michael	Krikava	mkrikava@briggs.com	Briggs And Morgan, P.A.	2200 IDS Center 80 S 8th St Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Peder	Larson	plarson@larkinhoffman.com	Larkin Hoffman Daly & Lindgren, Ltd.	8300 Norman Center Drive Suite 1000 Bloomington, MN 55437	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Douglas	Larson	dlarson@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Kavita	Maini	kmains@wi.rr.com	KM Energy Consulting, LLC	961 N Lost Woods Rd Oconomowoc, WI 53066	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E St. Paul, MN 55106	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Joseph	Meyer	joseph.meyer@ag.state.mn.us	Office of the Attorney General-RUD	Bremer Tower, Suite 1400 445 Minnesota Street St Paul, MN 55101-2131	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
Stacy	Miller	stacy.miller@minneapolismn.gov	City of Minneapolis	350 S. 5th Street Room M 301 Minneapolis, MN 55415	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
David	Niles	david.niles@avantenergy.com	Minnesota Municipal Power Agency	220 South Sixth Street Suite 1300 Minneapolis, Minnesota 55402	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
Carol A.	Overland	overland@legalelectric.org	Legalelectric - Overland Law Office	1110 West Avenue Red Wing, MN 55066	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
Jeff	Oxley	jeff.oxley@state.mn.us	Office of Administrative Hearings	600 North Robert Street St. Paul, MN 55101	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy	26 E Exchange St, Ste 206 St. Paul, MN 551011667	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
Richard	Savelkoul	rsavelkoul@martinsquires.com	Martin & Squires, P.A.	332 Minnesota Street Ste W2750 St. Paul, MN 55101	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.	76 W Kellogg Blvd St. Paul, MN 55102	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
Byron E.	Starns	byron.starns@stinson.com	STINSON LLP	50 S 6th St Ste 2600 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric
James M	Strommen	jstrommen@kennedy-graven.com	Kennedy & Graven, Chartered	200 S 6th St Ste 470 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Miscl Electric

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric
Lynnette	Sweet	Regulatory.records@xcel energy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric
Thomas	Tynes	jjazynka@energyfreedomc oalition.com	Energy Freedom Coalition of America	101 Constitution Ave NW Ste 525 East Washington, DC 20001	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric
Lisa	Veith	lisa.veith@ci.stpaul.mn.us	City of St. Paul	400 City Hall and Courthouse 15 West Kellogg Blvd. St. Paul, MN 55102	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric
Joseph	Windler	jwindler@winthrop.com	Winthrop & Weinstine	225 South Sixth Street, Suite 3500 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric
Patrick	Zomer	Patrick.Zomer@lawmoss.c om	Moss & Barnett a Professional Association	150 S. 5th Street, #1200 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric