



414 Nicollet Mall
Minneapolis, MN 55401

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July 3, 2019

—Via Electronic Filing—

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: COMPLIANCE FILING
BUSINESS INCENTIVE AND SUSTAINABILITY (BIS) RIDER
POLAR SEMICONDUCTOR
DOCKET NO. E002/GR-12-961

Dear Mr. Wolf:

Northern States Power Company, doing business as Xcel Energy, submits this filing in compliance with the Company's Business Incentive and Sustainability (BIS) Rider and the Minnesota Public Utilities Commission's April 8, 2016 Order in the above-referenced docket.

The Company's BIS Rider tariff requires the following:

...no later than 30 days after the Company signs a new ESA with a customer to be served under the BIS Rider, the Company must file with the Commission a report showing the incremental revenues and the incremental costs associated with the new ESA. If no party objects to the ESA within 30 days of the filing date, the ESA is deemed to be approved.

Ordering Paragraph 2 of the April 8, 2016 Order states:

2. Required Xcel [Energy] to provide the information in items 1 – 6, below, in both its annual December 1 compliance report on all BIS electric service agreements and in its compliance filings on new BIS electric-service agreements, as agreed to by Xcel and the Office of the Attorney General (OAG) at hearing on March 31, 2016.
 - 1) Xcel will provide information about the cumulative generation capacity that is necessary to serve the new load incentivized by the BIS Rider and its relationship to, and impacts on, (a) the Company's overall generation requirements; and (b) the Company's efforts to reduce the system peak through load management and demand response. . . .;

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- 2) *Xcel will provide information about the relationship between customers added to the BIS Rider and any sales forecasts provided for pending rate cases or other dockets involving sales forecasting. . . .;*
- 3) *Xcel will provide more information about the energy audit and other sustainability efforts required by the language of the BIS Rider tariff. The BIS Rider, while offering discounts aimed at increasing usage, requires customers to participate in sustainability and conservation programs. . . .;*
- 4) *Xcel will provide more information about the impact of the BIS Rider discount on incentivizing new energy consumption by business customers. . . .;*
- 5) *Xcel will provide information about the “Revenue Recovery” provision (noted above) of the BIS Rider Tariff – whether and how Xcel has sought, or intends to seek, recovery of the shortfall related to the BIS discount from other customer classes; and*
- 6) *Xcel will provide information about the amount of BIS Rider discounts and their financial impact on other classes. . . .*

Polar Semiconductor, LLC

The Electric Service Agreement (ESA) with Polar Semiconductor, which was executed on June 4, 2019, is included as **Attachment A** to this filing. Polar Semiconductor manufactures semiconductors used in the automotive industry and chose to expand their business in Minnesota due in part to the incentives offered by the BIS Rider.

Polar Semiconductor’s expansion takes place at their existing plant. Polar Semiconductor was waiting for the right economic times to make this expansion in a shell space in an existing building.

Consistent with the Department’s March 3, 2015 comments regarding our February 25, 2015 filing for another customer on the BIS rider, we analyzed the “worst case” scenario by assigning all currently known potential incremental generation and distribution costs to serve the expansion of Polar Semiconductor.

First, there are no current distribution upgrades required to serve this customer. Second, although the BIS Rider discount will be applied in a period where Xcel Energy has no incremental capacity need, for purposes of this analysis, we used the Commission-approved methodology of assigning generation capacity to near-term situations when the Company has longer-term needs for the generation capacity.

We provide the margin analysis for Polar Semiconductor as **Attachment B** to this filing. Attachment B provides supporting detail for the Incremental Energy, Capacity,

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and Distribution Costs, as well as the expected revenues after application of the BIS Rider discount for the period of June 4, 2019 through June 3, 2025, the time period covered by the Polar Semiconductor BIS Rider ESA. As evidenced by Attachment B, even under our worst case scenario analysis, the estimated incremental revenue of **[PROTECTED DATA BEGINS PROTECTED DATA ENDS]** for Polar Semiconductor during the BIS Rider discount period is more than the incremental cost of **[PROTECTED DATA BEGINS PROTECTED DATA ENDS]**.

Finally, we provide, as **Attachment C**, the additional information required by the Commission's April 8, 2016 Order for Polar Semiconductor.

This filing contains information marked as protected data pursuant to Minn. Rule 7829.0500. The protected data in this case is protected pursuant to Minn. Stat. § 13.37, subd. 1(b) and is considered sensitive by Xcel Energy and our customer. These provisions derive economic value, actual or potential, from not being generally known to, and not being readily ascertainable by other means by other persons who can obtain economic value from its disclosure or use. This filing also includes "private data on individuals" such as premise numbers. This information is maintained by the Company as private customer data, and for this reason, pursuant to Minn. Stat. § 13.679, we have excised this data from the public version of our filing.

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 me at holly.r.hinman@xcelenergy.com or (612) 330-5941 or Jennifer Roesler at jennifer.roesler@xcelenergy.com or (612) 330-1925 if you have any questions regarding this filing.

Sincerely,

/s/

HOLLY HINMAN
REGULATORY MANAGER

Enclosures
c: Service List



Electric Service Agreement


THIS AGREEMENT, Made this 4 day of June, 2019, by and between NORTHERN STATES POWER COMPANY, D/B/A XCEL ENERGY, a Minnesota Corporation, hereinafter called the "Company," and POLAR SEMICONDUCTOR hereinafter called the "Customer" engaged in the business of design and manufacture, industrial instrumentation.

WITNESSETH: That the parties hereto, each in consideration of the agreements of the other, agree as follows:

- 1. KIND OF SERVICE: Company agrees to supply and Customer agrees to accept electric service in 3 Phase, 4 Wire. Alternating Current at a nominal frequency of 60 Hertz and a nominal voltage of 13,800 , for Customer's use solely for operation of electric equipment not installed by Customer on the property known as Polar Semiconductor located at 2800 East Old Shakopee Road, Bloomington, MN 55425, "Fab 3", Premise 304316736.
- 2. CAPACITY COMMITMENT: Company agrees to provide and keep available throughout the term of this Agreement for Customer's use at the above location 2500 kilovolt-amperes of capacity. Company also agrees to provide additional capacity to an aggregate of 5500 kilovolt-amperes upon reasonable notice from Customer specifying the additional amount of capacity and the date same will be required. Reasonable notice shall be construed as meaning ample time in which Company can provide such additional capacity in its system as may be necessary.
- 3. ANNUAL MINIMUM CHARGE: **N/A**
- 4. TERM: This Agreement shall commence at 12:01 A.M. 6/4/2019, and shall continue for a period ending at 12:01 A.M. on 6/3/2025, and, if not then terminated by at least six months prior written notice by either party, shall continue further until so terminated; provided, that in the event Company continues to supply electric service to customer at this location subsequent to the termination hereof.
- 5. RATE: Customer agrees to qualify for and elects the rate schedule now in effect being the one attached hereto (Rate Code: A15: General Service Time of Day).
- 6. PAYMENT OF BILLS: All bills are payable at Company's office on or before the date the bill is due for service supplied by Company in the preceding billing period.
- 7. TERMS AND CONDITIONS: The service hereunder shall be supplied for Customer's use subject to the General Rules and Regulations of Company on file with the state Regulatory Commission as they now exist or may hereafter be changed. A copy of such rules and regulations is available from the Company. This Agreement is also subject to Sections(s) 1 and 2 appearing under the heading "Additional Terms and Conditions" on the reverse side of or attached to this Agreement. Customer agrees to use electrical service only as herein stated and will not assign this Agreement except upon written consent of Company.

XCEL ENERGY 
Chris Conrad, Director of Large Accounts

By _____
NSP-Minnesota


ALAN R. BOGERT

By _____
FACILITIES ENGINEERING MANAGER
Title

**Additional Terms and Conditions
to
Electric Service Agreement**

Between

**Northern States Power Company
and
Polar Semiconductor**

Section 1: Business Incentive and Sustainability Rider

The Company's Business Incentive and Sustainability Rider (as may be amended from time to time, the "Sustainability Rider") is available to new or existing demand-metered commercial and industrial customers with significant new Qualified Billing Demand (as defined in the Sustainability Rider). Customer has billing demand of 2,030+ KW at the property described in Paragraph 1 of the Electric Service Agreement that qualifies as Qualified Billing Demand. In addition to any provisions contained herein, service for the Qualified Billing Demand shall also be subject to the provisions of the Sustainability Rider as it appears in the Company's Tariff Book. A copy of the Sustainability Rider is available from the Company. This Section 1 is effective for a period of six years beginning on 6/4/2019, the date upon which the customer commenced taking Service under the Sustainability Rider.

Section 2: Impact of Agreement

Nothing in this Agreement shall impact the Customer's obligation to purchase all of its electric power and electric energy from the Company during the full term of Section 1.

Polar Semiconductor Margin Contribution Analysis

Year	Polar Semiconductor kWh Usage				Polar Semiconductor Incremental Energy Cost Analysis				Total Incremental Energy Costs
	Summer		Winter		Summer		Winter		
	1	2	3	4	5	6	7	8	9 = (1 * 5) + (2 * 6) + (3 * 7) + (4 * 8)
	On-Peak kWh	Off-Peak kWh	On-Peak kWh	Off-Peak kWh	Marginal On-Peak (\$ per kWh)	Marginal Off-Peak (\$ per kWh)	Marginal On-Peak (\$ per kWh)	Marginal Off-Peak (\$ per kWh)	Total Incremental Energy Costs
	[PROTECTED DATA BEGINS]								
1									
2									
3									
4									
5									
6									
7									

PROTECTED DATA ENDS]

Year	Polar Semiconductor Incremental Capacity Cost Analysis			Incremental Distribution Cost Analysis	Polar Semiconductor Margin Contribution Analysis		
	10	11	12 = 10 * 11	13	14 = 13 + 12 + 9	15	16 = 15 - 14
	Polar Semiconductor Annual Peak Billing Demands (kW)	Incremental Capacity Cost per kW per Yr	Total Incremental Capacity Costs	Incremental Distribution Costs *	Total Incremental Energy, Capacity and Distribution Costs	Polar Semiconductor Electric Revenue After BIS Rider Discount **	Polar Semiconductor Electric Revenue in Excess of Incremental Costs
	[PROTECTED DATA BEGINS]						
1							
2							
3							
4							
5							
6							
7							

PROTECTED DATA ENDS]

* no additional investment was required to serve the load.

** Excludes Taxes and City Fees.

Business Incentive and Sustainability (BIS) Rider

Additional Information in compliance with the Minnesota Public Utilities
Commission's April 8, 2016 Order.

BIS Rider Customer Name: Polar Semiconductor

- 1) Information about the cumulative generation capacity that is necessary to serve the new load incentivized by the BIS Rider and its relationship to, and impacts on, (a) the Company's overall generation requirements; and (b) the Company's efforts to reduce the system peak through load management and demand response.**

The generation capacity necessary to serve the new load is 22,660 kW (22.7 MW).

- a) The BIS incentivized load represents a 0.24% increase of the Company's overall generation requirements, and therefore does not materially impact the Company's overall generation requirements.
- b) The 2020-2034 Upper Midwest Resource Plan (Docket No. E002/RP-19-368) forecasts Load Management resources exceeding 10% of the total NSP System Obligation. While the BIS Rider has incentivized new load growth, this load will not have a material impact on the Company's efforts to reduce the system peak through load management and demand response.

- 2) Information about the relationship between customers added to the BIS Rider and any sales forecasts provided for pending rate cases or other dockets involving sales forecasting.**

The Minnesota sales forecast was not adjusted for the load increase associated with Polar Semiconductor's application for the BIS Rider. The Company will capture the increase in sales from the Polar Semiconductor BIS Rider in the established forecasting process.

3) Information about the energy audit and other sustainability efforts required by the language of the BIS Rider tariff. The BIS Rider, while offering discounts aimed at increasing usage, requires customers to participate in sustainability and conservation programs.

BIS Rider customers participate in Xcel Energy's energy conservation program. The Company offers many packages that address energy conservation. Our program for new customers typically starts with our Energy Design Assistance program. This program helps customers by providing comprehensive energy modeling for new buildings, recommends energy efficiency measures that can be incorporated into the building's construction. If the customer plans to operate its business in an existing building, we often include the customer in our Process Efficiency program. This holistic program provides a broad opportunity for customers to participate in all of our programs. We work with them to establish long term goals and track results.

Polar Semiconductor is an active, engaged participant in Xcel Energy's Process Efficiency Program and has worked with Xcel Energy on a variety of conservation measures and sustainability programs. Since 2016, Polar Semiconductor has worked with Xcel Energy on 13 energy-efficiency projects, saving 4.6 GWH of electricity. The conservation effort is led by a Polar Semiconductor Executive Sponsor and cross-functional engagement in annual joint energy efficiency planning and achievements.

4) Information about the impact of the BIS Rider discount on incentivizing new energy consumption by business customers.

The BIS Rider provides a competitive platform to attract customers. We've heard from customers that the BIS Rider played an important role in their decision to locate or expand operations in Minnesota. The BIS Rider helps provide an incentive package, along with local and state government initiatives, to get businesses, and the jobs they generate, into Minnesota.

Polar Semiconductor considered multiple other locations outside of Minnesota prior to deciding to move ahead with expanding their manufacturing output. Polar Semiconductors' parent company, Allegro Microsystems, Inc., has ready access to offshore contract manufacturers. In order to remain competitive, Polar Semiconductor has to continually work to keep pace with these potentially lower cost options. It is estimated that nearly \$46 of the expense of every wafer manufactured comes from electrical power. Opportunities for savings such as that offered by the BIS Rider help keep Polar Semiconductor competitive in a global market and are instrumental in influencing the decision to continue expansion in Minnesota.

5) Information about the “Revenue Recovery” provision of the BIS Rider Tariff – whether and how Xcel has sought, or intends to seek, recovery of the shortfall related to the BIS discount from other customer classes.

We will request revenue recovery of BIS discounts in our next rate case filing, as provided in the tariff. The anticipated method for the recovery request will be to allocate the cost of BIS discounts to each customer class on the basis of present revenue, consistent with past practice and direction from the Commission. The estimated year 1 BIS Rider discount for this customer is estimated as \$153,714 at the present rate level.

6) Information about the amount of BIS Rider discounts and their financial impact on other classes.

Recovery of the BIS Rider discount for this customer will not begin until Commission approved rates from our next rate case filing become effective. The total level of current and projected discounts approved by the Commission will be included in proposed class cost responsibilities using a present class revenue based allocation. As an example, the table below provides the class cost recovery of the year 1 BIS Rider discount for this customer based on present rate levels.

Class	Present Revenue \$1,000s	Allocation	BIS Year 1
Residential	\$1,136,824	36.73%	\$56,456
Non-Demand	\$108,661	3.51%	\$5,396
Demand	\$1,821,366	58.84%	\$90,452
Lighting	\$27,733	0.90%	\$1,377
Interdepartmental	\$644	0.02%	\$32
Retail	\$3,095,228	100.00%	\$153,714

CERTIFICATE OF SERVICE

I, Jim Erickson, 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/GR-12-961

Dated this 3rd day of July 2019

/s/

Jim Erickson
Regulatory Administrator

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_12-961_Official List
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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