

EL98-013



EL 98-013



Northern States Power Company
South Dakota

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JUN 08 1998

SOUTH DAKOTA PUBLIC
UTILITIES COMMISSION

Jim Wilcox, Manager,
Community & Government Relations
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Sioux Falls, SD 57101-0988
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June 5, 1998

** PROPRIETARY VERSION **

Mr. William Bullard, Executive Director
Public Utilities Commission
State of South Dakota
State Office Building
Pierre, SD 57501

RE: Filing Pursuant to SDPUC Cogeneration and Small Power Production
Order, Docket No. F-3365

Dear Mr. Bullard:

Pursuant to the above referenced docket, Northern States Power Company hereby submits for Commission approval the revised rate sheets for the Occasional Delivery Energy Service and Time of Delivery Energy Service. The enclosed tariffs are essentially consistent with those the Commission approved in its June 20, 1996, Order.

The proposed Occasional Delivery Energy Service rate sheet is revised to reflect a five cents per month higher metering charge and increased energy payment. The energy payment is based on the Company's 1998 avoided energy cost estimate.

The proposed Time of Delivery Energy Service rate sheet is revised to reflect a comparable five cents per month increase in metering charge as the Occasional Delivery Energy Service. Similarly, energy and capacity payments are also revised to reflect the Company's 1998 avoided costs projection.


In Attachment 1 are the supporting work papers to illustrate the derivation of these proposed rates. Since a portion of the work papers contains proprietary business information, therefore the Company requests that certain data be treated as confidential information. The Company, however, has also included for public

review a non-proprietary version of this filing for which the specific proprietary information has been deleted.

The Company requests the Commission approve the proposed rate sheets at its earliest convenience. The Company will be prepared to implement these rates two weeks after Commission approval. If you have any questions concerning this filing, feel free to contact me at (605) 339-8350.

If anyone has any questions, please call me at 339-8350

Sincerely,

A handwritten signature in cursive script, appearing to read "J. Wilcox".

Jim Wilcox

c. Kent Larson

enclosures



Northern States Power Company
 Minneapolis, Minnesota 55401

SOUTH DAKOTA ELECTRIC RATE BOOK - SDPUC NO. 2

**OCCASIONAL DELIVERY ENERGY SERVICE
 RATE CODE EDW**

Section No. 9
 1st Revised Sheet No. 2
 Cancelling Original Sheet No. 2

AVAILABILITY

Available to any small qualifying facility (SQF) for the delivery of small amounts of energy.

RATE

Metering Charge for Single Phase Service per Month	\$2.55	1
Payment Schedule for Energy Delivered to Company Energy Payment per kWh	\$0.0229	1

TERMS AND CONDITIONS OF SERVICE

1. Electric service provided by Company to customer at the same site shall be billed in accordance with the appropriate retail electric tariff.
2. Compensation for energy delivered to Company is limited to payment for a maximum 2,000 kWh delivered per month. Delivery of energy to Company in excess of this limit will be uncompensated.
3. The minimum contracted term of service is 12 months.
4. Interconnection charges will be assessed by the Company on an individual basis for all costs associated with addition to or modification of Company facilities to accommodate the SQF. The monthly metering charge recovers the cost of the additional metering equipment and the associated billing, operating, and maintenance expenses. The net interconnection charge recovers those costs incurred for equipment and expenses in excess of metering equipment and expenses. At the option of the SQF, the net interconnection charge will be a single payment or will be a monthly payment. The calculations of such charges are described in Subdivision 1, DEFINITIONS, in this section.
5. Payments are subject to the adjustment provided in Fuel Clause Rider.

Date Filed:

By: Kent T. Larson
 General Manager & Chief Executive
 MSP - South Dakota

Effective Date:

Order No.:

Order Date:



Northern States Power Company
 Minneapolis, Minnesota 55401

SOUTH DAKOTA ELECTRIC RATE BOOK - SDPUC NO. 2

TIME OF DELIVERY ENERGY SERVICE
RATE CODE E52

Section No. 9
 1st Revised Sheet No. 3
 Cancelling Original Sheet No. 3

AVAILABILITY

Available to any small qualifying facility (SQF).

RATE

Metering Charge for Single Phase Service per Month \$4.40

Payment Schedule for Energy Delivered to Company

On Peak Energy Payment per kWh	\$0.0288
Off Peak Energy Payment per kWh	\$0.0145
Capacity Payment for Firm Power per On Peak kWh	\$0.0042

FUEL CLAUSE

Payments subject to the adjustment provided for in Fuel Clause Rider.

DETERMINATION OF FIRM POWER

The SQF will have supplied firm power if during the billing period an on peak capacity factor of at least 65% was achieved. The calculation of the on peak capacity factor will be as follows:

The average on peak period metered capacity delivered to the Company for the on peak period of the billing period divided by the greatest 15 minute metered capacity delivered for the on peak period of the same billing period expressed in percent and rounded to the nearest whole percent. If the percent calculated is 65 or greater, capacity payment will be made. If the percent calculated is less than 65, capacity payment will not be made.

TERMS AND CONDITIONS OF SERVICE

1. Electric service provided by Company to customer at the same site shall be billed in accordance with the appropriate retail electric tariff.
2. The minimum contracted term of service is 12 months.
3. Interconnection charges will be assessed by the Company on an individual basis for all costs associated with addition to or modification of Company facilities to accommodate the SQF. The monthly metering charge recovers the cost of the additional metering equipment and the associated billing, operating, and maintenance expenses. The net interconnection charge recovers those costs incurred for equipment and expenses in excess of metering equipment and expenses. At the option of the SQF, the net interconnection charge will be a single payment or will be a monthly payment. The calculations of such charges are described in Subdivision 1, DEFINITIONS, in this section.

Date Filed:

By: Kent T. Larson

Effective Date:

General Manager & Chief Executive

Docket No.

NSP - South Dakota

Order Date:

GENERATION AND SMALL POWER PRODUCTION

**** PROPRIETARY VERSION ****

**DERIVATION OF METERING COSTS
 OCCASIONAL DELIVERY ENERGY SERVICE**

(1) Installed Cost (Standard Single Phase KWh Meter)	\$66.32
(2) Total Fixed Charge Factor	12.58%
(3) Levelized Cost (1) x (2)	\$8.34
(4) Accounting Expenses \$/Cust/Yr	\$22.67
(5) Total Annual (3) + (4)	\$31.02
(6) Total Monthly (5) / 12	\$2.58
Rounded To	\$2.55

TIME OF DELIVERY ENERGY SERVICE

(7) Installed Cost (Single Phase TOD KWh/KW Meter)	\$240.82
(8) Levelized Cost (7) x (2)	\$30.30
(9) Total Annual (8) + (4)	\$52.97
(10) Total Monthly (9) / 12	\$4.41
Rounded To	\$4.40

(1) Data provided by NSP Metering Dept.

(2) Based on NSP FERC 0033 W. Papers (Docket No. EL92-016) escalated to 1998 level.

CO-GENERATION AND SMALL POWER PRODUCTION

**** PROPRIETARY VERSION ****

**DERIVATION OF ENERGY PAYMENTS
 OCCASIONAL DELIVERY ENERGY SERVICE**

	Annual Average
(1) Estimated System Average Incremental Energy Cost (¢/kWh)	2.12
(2) Energy Loss Factors	0.9240
(3) Estimated System Average Incremental Energy Costs Adjusted for Losses (1)-(2)	2.29 ¢/kWh

TIME OF DAY PURCHASE SERVICE

	Annual On Peak	Annual Off Peak
(1) Estimated System Average Incremental Energy Costs (¢/kWh)	2.64	1.35
(2) Energy Loss Factors	0.9169	0.9279
(3) Estimated System Average Incremental Energy Costs Adjusted for Losses (1)-(2)	2.88 ¢/kWh	1.45 ¢/kWh

COGENERATION AND SMALL POWER PRODUCTION

**** PROPRIETARY VERSION ****

Calculation of Net Annual Avoided Capacity Costs

(1) Installed Cost of C.T. Unit (1999 \$)	\$388 /kW
(2) Inflation Net of Technical Progress	3.00%
(3) Average Service Life	30 Years
(4) Discount Rate (After Tax)	7.52%
Calculation of Marginal Capital Carry Charge Rate	
(5) Present Value of Revenue Requirements	\$474 /kW
(6) Annuity Factor Adjustment for Inflation **	0.06241
(7) Present Value of Revenue Requirements Adjusted for Inflation	\$29.56
(8) Marginal Capital Carrying Charge Rate	0.07620
(9) First Year Revenue Requirement	\$29.56 /kW (1999 \$)
(10) Present Value at 7.52% for 1 year	\$27.50 /kW
(11) Adjusted for 15% Reserve Margin	\$31.62 /kW
(12) Plus \$1.86/kW Fixed O & M (1998 \$)	\$33.48 /kW
(13) Adjusted for Losses	\$37.03 /kW
(14) Net Annual Avoided Capacity Cost	\$37.03 /kW
(15) Net Annual Avoided Capacity Cost Average Over All Hours	0.42 ¢/kWh

** $AF = \frac{1 - (1 + i)^{-n}}{i}$
 $AF = \text{Annuity Factor}$
 $i = \text{Discount Rate}$
 $n = \text{Average Present Value Cost of Original Investment}$
 $i = \text{Discount Rate (After Tax Marginal Cost of Capital) (7.52\%)}$
 $n = \text{Average Net of Technical Progress (3.25\%)}$
 $n = \text{Average Service Life of Investment (30 Year)}$

GENERATION AND SMALL POWER PRODUCTION

**** PROPRIETARY VERSION ****

MARGINAL COST OF CAPITAL

	Capitalization Ratio (%)	Cost (%)	Weighted (%)
Debt	47.70	6.52	3.11
Preferred Stock	7.64	6.23	0.48
Common Stock *	44.66	11.25	5.02
Weighted Average	100.00		8.61

* Based on book value and conversion of Total Equity Plan

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

**IN THE MATTER OF THE FILING BY) ORDER APPROVING TARIFF
NORTHERN STATES POWER COMPANY FOR) REVISIONS
APPROVAL OF ITS REVISED RATE SHEETS)
FOR ITS OCCASIONAL DELIVERY ENERGY) EL98-013
SERVICE AND TIME OF DELIVERY ENERGY)
SERVICE)**

On June 8, 1998, the Public Utilities Commission (Commission) received an application from Northern States Power Company (NSP) requesting approval to revise its rate sheets for the Occasional Delivery Energy Service and Time of Delivery Energy Service. NSP asked for approval of the following revised tariff sheets of its Electric Rate Schedule:

Occasional Delivery Energy Service, Section No. 9, 1st Revised Sheet No. 2
Time of Delivery Energy Service, Section No. 9, 1st Revised Sheet No. 3

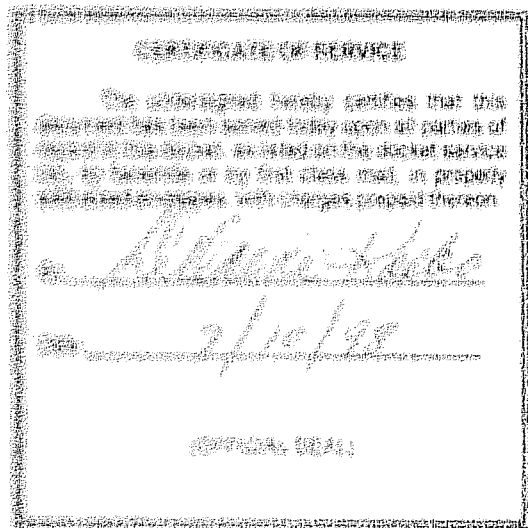
NSP's application stated: "The proposed Occasional Delivery Energy Service rate sheet is revised to reflect a five cents per month higher metering charge and increased energy payment. The energy payment is based on the Company's 1998 avoided energy cost estimate. The proposed Time of Delivery Energy Service rate sheet is revised to reflect a comparable five cents per month increase in metering charge as the Occasional Delivery Energy Service. Similarly, energy and capacity payments are also revised to reflect the Company's 1998 avoided costs projection."

At its regularly scheduled June 30, 1998, meeting, the Commission discussed final approval of the application. Commission Staff recommended approval of the tariff revisions.

The Commission has jurisdiction over this matter pursuant to SDCL Chapter 49-34A, especially 49-34A-4, 49-34A-6, 49-34A-8, 49-34A-10 and 49-34A-12. The Commission found the proposed changes are just and reasonable and approved the revised tariffs. As the Commission's final decision in this matter, it is therefore

ORDERED that NSP's aforementioned revised tariffs are approved and shall be effective for service rendered on and after the date of this Order.

Dated at Pierre, South Dakota, this 9th day of July, 1998.



BY ORDER OF THE COMMISSION:

James A. Burg

JAMES A. BURG, Chairman

Pam Nelson

PAM NELSON, Commissioner

Laska Schoeneelder

LASKA SCHOENEELDER, Commissioner



Northern States Power Company
South Dakota

Jim Wilcox, Manager
Community & Government Relations
300 West Russell Street
P. O. Box 988
Sioux Falls, SD 57101-0988
Telephone (605) 339-8350

July 28, 1998

Mr. William G. Baker, Executive Director
South Dakota Public Utilities Commission
100 West Capitol Building
500 West Capitol Avenue
Sioux Falls, South Dakota 57102-0070

RECEIVED

JUL 28 1998

SOUTH DAKOTA PUBLIC
UTILITIES COMMISSION

RE: Cogeneration and Small Power Production Service Charges
Docket No. EL98-013

Dear Mr. Baker:

Enclosed for your review are copies of Northern States Power Company's South Dakota Electric Rate Book, Supplemental Exhibit No. 1, and the following revised tariff pages reflecting modifications approved by the South Dakota Public Utilities Commission as a result of the Company's request for approval of cogeneration and small power production service charges:

Cogeneration Delivery Energy Service, Section 9, 1st Revised Sheet No. 2
Small Power Production Energy Service, Section 9, 1st Revised Sheet No. 3

On June 8, 1998, the Company filed revised rate sheets pursuant to the Commission's Cogeneration and Small Power Production Order in Docket No. F-3363. The increases in metering charges and energy payments are based on the Company's 1998 avoided cost projections.

The Commission approved NRP's request on July 9, 1998, under Docket No. EL98-013. The revised rates are effective for service rendered on and after the order date.

If you have any questions regarding this matter, please contact me at (605) 339-8350.

Sincerely,

Jim Wilcox

Manager, Community & Government Relations

cc:

Gene F. Larson, NRP-011
Kevin V. Orlowski, NRP-014

NSP Northern States Power Company
 1801 East 17th Street
 South Dakota Electric Rate Book - SDPUC NO. 2

SCATTERED, DELIVERED ENERGY SERVICE
SMALL AMOUNTS

Section No. 9
 1st Revised Sheet No. 2
 Cancelling Original Sheet No. 2

SCOPE
 Available to any small quantity facility (SQF) for the delivery of small amounts of energy

RATES

Metering Charge for Single Phase Service per Month	\$2.55	I
Payment Charge for Energy Delivered to Company Energy Payment per kWh	\$0.0229	I

TERMS AND CONDITIONS OF SERVICE

1. Service to be provided by Company to customer at the same site shall be billed in accordance with the appropriate rate schedule.
2. Compensation for energy delivered to Company is limited to payment for a maximum 2,000 kWh delivered per month. Energy of energy to Company in excess of this limit will be uncompensated.
3. The maximum contracted term of service is 12 months.
4. Interconnection charges will be assessed by the Company on an individual basis for all costs associated with connection to or modification of Company facilities to accommodate the SQF. The monthly metering charge recovers the cost of the additional metering equipment and the associated billing, operating, and maintenance expenses. The net interconnection charge recovers those costs incurred for equipment and expenses associated with metering equipment and expenses. At the option of the SQF, the net interconnection charge will be a single payment or will be a monthly payment. The calculations of such charges are described in Subsection 1, DEFINITIONS, in this section.
5. Customers are subject to the adjustment provided in Fuel Clause Rider

Open Book 4-9-98

By Kent T Larson
 General Manager & Chief Executive
 NSP - South Dakota

Effective Date: 7-9-98
 Order Date 7-9-98

Closed for 11/16/98

NSP Northern States Power Company
 Minnesota, Wisconsin, S.D.
SOUTH DAKOTA ELECTRIC RATE BOARD - SDPUC NO. 2

**TABLE OF CHARGES FOR ENERGY SERVICE
 (BASE RATE) (A)**

Section No. 9
 1st Revised Sheet No. 3
 Cancelling Original Sheet No. 3

FIXED CHARGE
 Applicable to any street lighting facility (S12.5)

NOTE:
 Standing Charge for Single Phase Service per Month \$4.40 I

Payment Schedule for Energy Delivered to Company

Off-peak Energy Payment per kWh	\$0.0289	I
Off-peak Energy Payment per kWh	\$0.0145	I
Capacity Payment for Peak Power per On Peak kWh	\$0.0042	I

FIXED CHARGE
 Payment made for the equipment provided for in Fuel Clause Rider

REQUIREMENTS OF ON PEAK POWER
 The SQF will have supplied firm power if during the billing period an on peak capacity factor of at least 65% was achieved. The calculation of the on peak capacity factor will be as follows:

The average on peak period metered capacity delivered to the Company for the on peak period of the billing period divided by the greatest 15 minute metered capacity delivered for the on peak period of the billing period expressed in percent and rounded to the nearest whole percent. If the percent calculated is 65 or greater, capacity payment will be made. If the percent calculated is less than 65, capacity payment will not be made.

TERMS AND CONDITIONS OF SERVICE

1. Service rendered provided by Company to customer at the same site shall be billed in accordance with the appropriate rates and tariffs.
2. The minimum contracted term of service is 12 months.
3. Interconnection charges will be assessed by the Company on an individual basis for all costs associated with addition to or modification of Company facilities to accommodate the SQF. The monthly metering charge recovers the cost of the additional metering equipment and the associated billing, operating, and maintenance expenses. The net interconnection charge recovers those costs incurred for equipment and expenses in excess of metering equipment and expenses. At the option of the SQF, the net interconnection charge will be a single payment or will be a monthly payment. The calculations of such charges are described in subsection 1, DEFINITIONS, in this section.

Date Sent 6-8-98

By Kent T. Larson
 General Manager & Chief Executive
 NSP - South Dakota

Effective Date: 7-9-98

Checked By: [Signature]

Order Date: 7-9-98