

EL 96-006

121

DOCKET NO. EL 96-006

In the Matter of

IN THE MATTER OF THE FILING BY
NORTHERN STATES POWER
COMPANY FOR APPROVAL OF THE
REVISED RATE SHEETS FOR THE
OCCASIONAL DELIVERY ENERGY
SERVICE AND TIME OF DELIVERY
ENERGY SERVICE

Public Utilities Commission of the State of South Dakota

DATE

MEMORANDA

5/6 96 Filed and docketed;
6/20 96 Order approving tariff revision;
6/30 96 Docket closed.



EL 96-006

Northern States Power Company
South Dakota

May 1, 1996

500 West Russell
PO Box 988
Sioux Falls, SD 57101-0988
Telephone (605) 339-8200

Mr. William Bullard, Jr., Executive Director
South Dakota Public Utilities Commission
State Office Building
500 East Capitol Avenue
Pierre, SD 57501

RECEIVED

MAY 14 1996

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

SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

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 August 29, 1994 Order.

The proposed Occasional Delivery Energy Service rate sheet is revised to reflect a slightly higher metering charge and energy payment. The energy payment is based on the Company's 1996 avoided energy cost level.

The proposed Time of Delivery Energy Service rate sheet is revised to reflect a comparable slight increase of metering charge as the Occasional Delivery Energy Service. Also, energy and capacity payments are revised to reflect the Company's 1996 avoided costs.

In Attachment 1 are the supporting workpapers to illustrate the derivation of these proposed rates.

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 Mr. Duff Robinson at (605)339-8345.

Sincerely,

James C. Wilcox
Community and Government Relations Manager

Enclosures: several

Tariff

OCCASIONAL DELIVERY ENERGY SERVICE

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 \$2.50 I
Payment schedule for energy delivered to Company
Energy payment per kilowatt hour 1.54¢ I

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 2000 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.

Rate Code

Occasional Delivery QR800

Date Filed:

By: Michael J. Hanson
General Manager & Chief Executive

Effective:

SDPOC Docket No.

Order Date:

TIME OF DELIVERY ENERGY SERVICE

Availability: Available to any small qualifying facility (SQF).

Rate:

Metering charge for single phase service per month \$4.35 I
Payment schedule for energy delivered to Company
On-peak energy payment per kilowatt hour 1.86¢ I
Off-peak energy payment per kilowatt hour 1.37¢ I
Capacity payment per on-peak kWh for 0.42¢ firm power. R

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

Determination of Firm Power: The small qualifying facility will have supplied firm power if during the billing period an on-peak capacity factor of at least 65 percent 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.

Rate Code

On-Peak Delivery QT800
Off-Peak Delivery QT801

Date Filed: By: Michael J. Hanson
General Manager & Chief Executive

Effective:

SDPOC Docket No.

Order Date:

COGENERATION AND SMALL POWER PRODUCTION

DERIVATION OF METERING COSTS

OCCASIONAL DELIVERY ENERGY SERVICE

(1) Installed Cost (Standard Single Phase KWh Meter)	\$65.00
(2) Total Fixed Charge Factor	12.71%
(3) Levelized Cost (1)/(2)	\$8.26
(4) Accounting Expenses \$/Cust/Yr	\$21.58
(5) Total Annual (3)+(4)	\$29.84
(6) Total Monthly (5)/12	\$2.49
Rounded To	\$2.50

TIME OF DELIVERY ENERGY SERVICE

(7) Installed Cost (Single Phase TOD KWh/KW Meter)	\$240.00
(8) Levelized Cost (7)/(2)	\$30.50
(9) Total Annual (8)+(4)	\$52.08
(10) Total Monthly (9)/(12)	\$4.34
Rounded To	\$4.35

Source:

(1&7) Data provided by NSP Metering Dept

(4) Based on NSP ECCOSS Workpapers (Docket No. EL92-018) escalated to 1996 level.

COGENERATION AND SMALL POWER PRODUCTION

DERIVATION OF ENERGY PAYMENTS

OCCASIONAL DELIVERY ENERGY SERVICE		
	Annual Average	
(1) Estimated System Average Incremental Energy Cost (¢/kWh)	1.42	
(2) Energy Loss Factors	0.9240	
(3) Estimated System Average Incremental Energy Costs Adjusted for Losses (1)-(2)	1.54 ¢/kWh	

TIME OF DAY PURCHASE SERVICE		
	Annual On Peak	Annual Off Peak
(1) Estimated System Average Incremental Energy Costs (¢/kWh)	1.71	1.27
(2) Energy Loss Factors	0.9169	0.9279
(3) Estimated System Average Incremental Energy Costs Adjusted for Losses (1)-(2)	1.86 ¢/kWh	1.37 ¢/kWh

COGENERATION AND SMALL POWER PRODUCTION

Calculation of Net Annual Avoided Capacity Costs

(1) Completed Cost of Planned C.T. Unit (1999 \$)	\$388 /kW
(2) Inflation Net of Technical Progress	3.25%
(3) Average Service Life	30 Years
(4) Discount Rate	9.15%
Calculation of Marginal Capital Carry Charge Rate	
(5) Present Value of Revenue Requirements	\$495 /kW
(6) Annuity Factor Adjustment for Inflation **	0.07273
(7) Present Value of Revenue Requirements Adjusted for Inflation	\$36.01
(8) Marginal Capital Carrying Charge Rate	0.09281
(9) First Year Revenue Requirement	\$36.01 /kW (1999 \$)
(10) Present Value at 9.15% for 3 years	\$27.69 /kW
(11) Adjusted for 15% Reserve Margin	\$31.84 /kW
(12) Plus \$1.67/kW Fixed O & M (1996 \$)	\$33.51 /kW
(13) Adjusted for Losses	\$37.07 /kW
(14) Net Annual Avoided Capacity Cost	\$37.07 /kW
(15) Net Annual Avoided Capacity Cost Average Over All Hours	0.42 ¢/kWh

** $AC = K \cdot (1+j)^t \cdot (1-i)^t \cdot (1+r)^t \cdot [1 - (1-i) \cdot (1+j) \cdot (1+r)^t]^{-1}$
where AC = Annual Charge in year t

t = Year (*1)

K = Total Present Value Cost of Original Investment

r = Discount Rate (Overall Marginal Cost of Capital) (9.15%)

j = Inflation Rate Net of Technological Progress (3.25%)

n = Expected Service Life of Investment (30 Yrs)

COGENERATION AND SMALL POWER PRODUCTION

MARGINAL COST OF CAPITAL

	Capitalization Ratio (%)	Cost (%)	Weighted (%)
Debt	43.35	7.16	3.10
Preferred Stock	8.26	7.36	0.61
Common Stock *	48.39	11.25	5.44
Weighted Average	100.00		9.15

* Implied ROE resulting from Settlement in District ELFC-016

8-1-6
1-6
8

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

IN THE MATTER OF THE APPLICATION OF)
NORTHERN STATES POWER COMPANY FOR) ORDER APPROVING TARIFF
APPROVAL TO REVISE ITS OCCASIONAL) REVISIONS
DELIVERY ENERGY SERVICE AND TIME OF) EL96-006
DELIVERY ENERGY SERVICE)

On May 6, 1996, 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. 7, 7th Revised Sheet No. 2
Time of Delivery Energy Service, Section No. 7, 7th Revised Sheet No. 3

NSP's application stated: "The proposed Occasional Delivery Energy Service rate sheet is revised to reflect a slightly higher metering charge and energy payment. The energy payment is based on the Company's 1996 avoided energy cost level. The proposed Time of Delivery Energy Service rate sheet is revised to reflect a comparable slight increase of metering charge as the Occasional Delivery Energy Service. Also, energy and capacity payments are revised to reflect the Company's 1996 avoided costs."

At its regularly scheduled June 12, 1996, 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, specifically 49-34A-4, 49-34A-6, 49-34A-8, 49-34A-10 and 49-34A-12. The Commission found the rate 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 30th day of June, 1996.

CERTIFICATE OF SERVICE	
The undersigned hereby certifies that this document has been served today upon all parties of record in this docket, as listed on the docket service list, by facsimile or by first class mail in properly addressed envelopes, with charges prepaid thereon.	
By	<u>Alfred A. Libs</u>
Date	<u>6/30/96</u>
(OFFICIAL SEAL)	

BY ORDER OF THE COMMISSION:

Kenneth Stofferahn
KENNETH STOFFERAHN, Chairman

James A. Burg
JAMES A. BURG, Commissioner

Laska Schoenfelder
LASKA SCHOENFELDER, Commissioner