





Michael J. Hanson  
General Manager and Chief Executive

March 28, 1995

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



Northern States Power Company  
South Dakota

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

RECEIVED

MAR 30 1995

SOUTH DAKOTA PUBLIC  
UTILITIES COMMISSION

Dear Mr. Bullard:

Enclosed for your copy of Northern States Power Company's electric rate book are the following tariff pages:

*Residential Heat Pump Service, Sheet No: 6.2, Revision 3*  
*Controlled Air Conditioning and Water Heating Rider, Sheet No: 22, Revision 8*  
*Small General Service, Sheet No: 24, Revision 12*  
*Small General Time of Day Service, Sheet No: 26, Revision 12*

The attached tariff pages reflect approval by the Commission of the Company's filings made on January 9, 1995, regarding the following three miscellaneous rate changes:

- 1) Petition for Approval of a Residential Heat Pump Service Tariff,
- 2) Petition for Approval to Revise the Existing Controlled Air Conditioning and Water Heating Rider, and
- 3) Petition for Approval to Revise the Existing Small General and Small General Time of Day Service Tariffs.

Approval was granted on March 7, 1995, by the South Dakota PUC under Order No: EL95-001. The effective date is the order date.

Sincerely,

Michael J. Hanson  
General Manager and Chief Executive

enclosures

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**Northern States Power Company  
South Dakota**

Michael J. Hanson  
General Manager and Chief Executive

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

January 6, 1995

RECEIVED

Mr. Marshall Damgaard, Executive Director  
South Dakota Public Utilities Commission  
500 East Capitol Avenue  
Pierre, South Dakota 57501

JAN 9 1995

SD PUBLIC UTILITIES  
COMMISSION

Dear Mr. Damgaard:

Enclosed please find an original and 10 copies of three miscellaneous changes to the Northern States Power Company's electric rate book. NSP respectfully requests Commission approval of these proposals.

If anyone has any questions regarding this matter please feel free to call Jim Wilcox at (605) 339-8350.

Thank you.

Sincerely,

Michael J. Hanson  
General Manager and Chief Executive

Enclosures

cc: Jim Wilcox

011.42.2448

**PUBLIC UTILITIES COMMISSION**

**STATE OF SOUTH DAKOTA**

In the Matter of the Request for )  
Approval of a Heat Pump Tariff by )  
Northern States Power Company )

Petition for Approval  
Docket No. EL95-0\_\_

DOCKET  
NUMBER EL 95-001

**PETITION FOR APPROVAL  
of  
HEAT PUMP TARIFF**

**Introduction**

Pursuant to South Dakota Codified Laws, Chapter 49-34A, Northern States Power (NSP) hereby submits for approval a Heat Pump Tariff. This proposed tariff is a new option we intend to offer customers as a way to encourage energy efficiency and promote electrification technologies that will be beneficial to the NSP load factor and to our business. For purposes of this filing we have followed the outline as provided in South Dakota Public Utilities Commission Administrative Rules Section 20:10:13:26.

**(1) Name and address of the public utility and Representative**

Jim Wilcox, Manager of Customer Services  
Northern States Power Company  
PO Box 988  
Sioux Falls, SD 57101-0988  
605-339-8350

**(2) Section and sheet number of the tariff schedule;**

NSP proposes this tariff be implemented in our rate book on file with the SD Public Utilities Commission within Section 3, and under sheet number 6.2.

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(3) Description of the change.

NSP proposes to offer a new space heating and cooling rate option to residential customers. This tariff implements a "firm" winter-time rate of 4.28 cents per kWh rate for space heating and an "interruptible" summer-time rate to customers of 6.16 cents per kWh rate for cooling. The NSP "Saver's Switch" technology would be used to cycle the heat pump's cooling on summer control days. This tariff is also proposed to implement metering the heating and cooling energy used by a heat pump separately from the other electrical energy the customer may use.

(4) Reason for the change.

We have encouraged heat pumps in the past through our "dual fuel" program implemented with an energy-controlled non-demand metered tariff filed and approved in section 3 under sheet number 6.1. The apparent shortcoming of this tariff is the NSP requirement for load control and the customer's additional needed capital cost due to our requirement that the electric space heating be supplemented with a backup alternate fuel source. We do not propose any change to this tariff and intend to maintain this rate as an option to existing and future customers that desire this option. In fact, because of the interruptible nature of this tariff, we intend to continue this as a lower cost rate option for those customers willing to participate.

We have also somewhat encouraged heat pumps through the residential "end step" rate on usage beyond 1,000 kWh per month implemented with our residential service tariffs filed and approved in section 3 under sheet numbers 1 and 4. The apparent shortcoming of this tariff is the fact that it is implemented with a single meter and that our customers usage patterns vary by customer and month to month such that the energy sales made for space heating cannot be distinguished enough to allow promotion of the heat pump technology.

This proposed heat pump tariff expands the number of rate options available to our customers and addresses the shortcomings mentioned above. Further, we believe that the heat pump technology has been improved in recent years to a point of serious commercial viability. We believe that heat pumps represent an important energy efficiency technology that will benefit our customers and with the proper rate incentives and promotion will attract customers providing NSP with a business opportunity.

(5) Present Rate

The above mentioned energy-controlled tariff and our residential end-step are both providing limited sales of energy for heat pump use. There is no present rate directly comparable to this proposed tariff.

01322412

(6) Proposed rate

An enclosed proposed tariff page is included following this petition to implement this rate. In summary, we propose a fixed charge of \$2.50 per month to help defray the cost of the additional metering equipment and administration of meter reading and billing. This is the same fixed charge we now apply to our dual fuel customers. The proposed firm winter energy rate of 4.28 cents per kWh matches the rate being implemented now under our residential "end-step" rate. The 6.16 cents per kWh summer rate proposed is the same as our residential rate with a saver's switch rider discount. The remaining terms and conditions are intended to keep this option as simple as possible in order to assist in the attraction of customers desiring to install a heat pump.

(7) Proposed effective date of the new rate

We propose to make this rate effective on March 1, 1995 or as soon as practical.

(8) Approximation of annual amount of increase or decrease in revenue.

For purposes of this analysis the average heating kWh usage for a high efficiency heat pump for a typical house over a normal heating season is about 8,000 kWh per heating season. This multiplied by our proposed tariff of 4.28 cents per kWh plus the monthly charge results in an approximate annual increase in revenue of about \$350 per participant. We expect that 200 customers will participate on this rate over the next 5 years.

(9) Points affected

The proposed rate will be effective throughout the NSP South Dakota service territory.

(10) Estimation of the number of customers whose cost of service will be affected and annual amounts of either increases or decreases, or both, in cost of service to those customers.

We expect no additional capital costs as a result of this program. Any incremental fuel and variable operation and maintenance and administrative expenses will be recovered through this tariff in the sales of additional energy to these new customers.

Over the long-term, additional energy sales without any additional demand requirements raises our customer's overall load factor and should result in spreading our fixed costs over more energy sales, thereby having a downward effect on the cost to all of our other customers.

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(11) Statement of facts, expert opinions, documents, and exhibits to support the proposed change.

Heat pumps are recognized as a beneficial electrification technology. They are more efficient in processing and delivering primary energy to a user as heat energy than any other delivery process now available. Many customers perceive heat pumps as a cleaner and safer way to heat their homes than with fossil fueled systems.

There are other subtle advantages of designing a heat pump into new construction. Heat pumps eliminate the need for a chimney system saving the new home owner money and tightening the building envelope from infiltration heat energy losses. The home can also be more safely "air tightened" as there is no risk of combustion products entering the home from the heat pump.

Separately metering the heat pump also provides energy efficiency information directly to our customers and should make them more aware of their heating and cooling energy usage. This awareness is believed to engender additional energy conservation.

RESIDENTIAL HEAT PUMP SERVICE (2 meter rate)

Availability: Available to residential customers with air source or ground source heat pumps. This rate is for homes with separately metered heat pumps. Electric water heaters and other additional loads may be served by this rate with prior Company approval. This meter will have a direct load control device that is controlled by the Company.

Rate:

Customer Charge per Month \$2.50

Service at Secondary Voltage:

Energy Charge - per kWh

June-September 6.16¢

Other Months 4.28¢

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

Surcharge: In certain communities bills are subject to a surcharge provided for in the Surcharge Rider.

Late Payment Charges: A late payment charge of 1% of the unpaid balance will be added to the next month's bill after the date due.

Terms and Conditions of Service:

1. The Heat Pump Service shall be permanently wired, separately served and metered, and at no time connected to facilities servicing other customer loads without prior approval from the Company. Customer must provide 2 meter sockets as specified by the Company. The Company will provide both meters and the direct load control device.
2. The duration and frequency of interruptions will be determined by the Company. Air Conditioning will be cycled on a schedule of 15 minutes on and 15 minutes off for a maximum of six hours per day. Air Conditioning interruptions will normally occur on high demand weekdays during the summer months. Interruptions may occur at times when, in the Company's opinion, the reliability of the system is endangered.
3. Company shall not be liable for any loss or damage caused by or resulting from any interruption of service.
4. Service availability is limited to those units sized for summer cooling requirements, as determined by the Company.
5. Customers selecting the Residential Heat Pump Service must remain on this service for a minimum of one year.
6. Company will keep this service available for a minimum of five years.
7. The summer rate reflects the discount received from the Controlled Air Conditioning Rider.
8. The rate contemplates that this service will utilize existing facilities with no additional major expenditures. Customer shall reimburse Company for any expenditures for facilities necessary to serve this load which would not otherwise be required to serve customer's load.

Rate Code

AH800

Filing Date: \_\_\_-\_\_\_-95

By: Michael J. Hanson  
General Manager & Chief Executive

Effective: \_\_\_-\_\_\_-95

SDPUC Docket No: EL95-0\_\_

Order Date: \_\_\_-\_\_\_-95



01324.15

**PUBLIC UTILITIES COMMISSION**

**STATE OF SOUTH DAKOTA**

**In the Matter of the Request for )  
Approval of change to the )  
Controlled Air Conditioning )  
Rider )**

**Petition for Approval  
Docket No. EL95-0\_\_**

**PETITION FOR APPROVAL  
To expand the availability of the  
Controlled Air Conditioning Rider**

**Introduction**

Pursuant to South Dakota Codified Laws, Chapter 49-34A, Northern States Power (NSP) hereby submits for approval to expand the availability of the Controlled Air Conditioning Rider to include General Service Customers in Tariff Section No: 3 sheet No: 22. For the purposes of this filing we have followed the outline as provided in South Dakota Public Utilities Commission Administrative Rules Section 20:10:13:26.

**(1) Name and address of the public utility and Representative:**

**Jim Wilcox, Manager of Customer Services  
Northern States Power Company  
500 West Russell Street,  
P. O. Box 988  
Sioux Falls, SD 57101-0988**

**(2) Present Rate, Section and sheet number of the tariff schedule:**

**Controlled Air Conditioning and Water Heating Rider  
Section 3, sheet number 22**

**(3) Description of the change**

**This program has already been approved for Small General Service customers and this filing expands this approval to include those larger customers who have qualifying air conditioning equipment.**

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(4) Reason for the change

To provide a direct load control option to commercial customers that have qualifying central air conditioning (AC) units sized at 7.5 tons or less. On NSP system peak days, the switch will interrupt the AC compressor control circuit for 15 minutes each half hour. The system uses random start times to reduce the number of units that are on at any one time to halve the total number controlled. For example, if 100 units are controlled, only 50 units will be allowed to operate and 50 units will have the compressor control circuit interrupted.

The commercial Controlled Air Conditioning program is an extension of the residential Controlled Air Conditioning program. NSP has about 6,000 switches installed on residential units at this time. It is expected that commercial units are more likely to be operating during peak times than residential units and therefore the impact of controlling them will equal or exceed the impact of the residential program. It is estimated that a switch will save 0.45 kW per ton (a 5 ton unit will reduce system peak demand by 2.25 kW).

This program is a service to our customers by providing an option for them to reduce their electric bills. This program is also intended to improve the utilization of NSP's generation, transmission, and distribution equipment. Finally, this filing expands our controlled air conditioning program to general service customers with qualifying equipment.

(5) Estimation of the number of customers whose cost of service will be affected and annual amounts of either increases or decreases, or both, in cost of service to those customers.

It is estimated that about 100 customers may participate with this change. NSP will provide \$5/ton customer discount during the 4 summer billing months. The revenue impact will average \$100 per switch per year. There is no cost to the customer for installation of the switch.

There will be a \$300 per switch cost to NSP for the switch and installation. We estimate that NSP will save 2.25 kW of peak demand per switch installed.

(6) Approximation of annual amount of increase or decrease in revenue:

This will result in a decrease in revenue of about \$10,000 per year if 100 customers participate.

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**(7) Proposed effective date**

We propose to make this change effective on March 1, 1995 or as soon as practical.

**(8) Points affected**

The proposed rate change will be effective throughout the NSP South Dakota service territory.

**CONTROLLED AIR CONDITIONING AND WATER HEATING RIDER**

**Availability:** Available to Residential Service, Residential Service-Underground, General Service, and Small General Service customers with 1) Company controlled central air conditioning, or 2) Company controlled heat pumps receiving Energy-Controlled Service (Non-Demand Metered) with optional non-interruptible service during June through September. Company controlled electric water heating is also available to residential customers with a controlled central air conditioner or heat pump, with the exception of electric water heaters served with the Energy-Controlled Service (Non-Demand Metered) rate schedule.

**Rider: Residential Central Air Conditioning**

A 15% discount will apply to the energy charge during the billing months of June through September.

**Residential Electric Water Heating**

A 2% discount will apply to energy charges during each billing month provided total energy use is not less than 300 kWh.

**Commercial Central Air Conditioning**

A \$5 per ton per month credit shall be applied to customer's bill during each summer billing month provided total energy use is not less than 2000 kWh per month

**Terms and Conditions:**

1. The duration and frequency of interruptions will be determined by Company. Air conditioning will be cycled on a schedule of 15 minutes on and 15 minutes off for a maximum of six hours per day. Air conditioning interruptions will normally occur on high demand weekdays. Water heating interruptions will normally occur for up to six consecutive hours per day during summer months and two five-hour periods during other months. Air conditioning and water heating interruptions will not normally occur during the observation day of the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
2. Company shall not be liable for any loss or damage caused by or resulting from any interruption of service.
3. To be eligible for this service, customer must agree to allow Company load control for a minimum term of one year.
4. The storage capacity of the water heater shall be 40 gallons or more in order to be eligible for this service.
5. The Residential Central Air Conditioning energy charge discount for Energy-Controlled Service (Non-Demand Metered) customers will also apply to their standard service energy charge.
6. Rider availability for heat pump installations is limited to those sized for summer cooling requirements, as determined by Company.

Rate Code	A/C	A/C and WH
<b>Residential Overhead</b>		
Without Space Heating	AE900	AE910
Space Heating	AF900	AF910
Energy Controlled (Non-Demand Metered)	AL910	
<b>Residential Underground</b>		
Without Space Heating	AE903	AE913
Space Heating	AF903	AF913
Energy-Controlled (Non-Demand Metered)	AL913	
<b>Small General Service Discount</b>	DE900	
<b>General Service Discount</b>	GE900	

**Filing Date:** By: Michael J. Hanson  
 General Manager & Chief Executive **Effective:**

**SDFUC Docket No:** **Order Date:**

30-1-1995

**PUBLIC UTILITIES COMMISSION**

**STATE OF SOUTH DAKOTA**

<b>In the Matter of the Request for</b>	)	<b>Petition for Approval</b>
<b>Approval of change to a Small</b>	)	<b>Docket No. EL95-0__</b>
<b>General Service condition of</b>	)	
<b>Service</b>	)	

**PETITION FOR APPROVAL**

of a

**Change to the Conditions of Service for Small General Service and Small General Time of Day Tariffs**

**Introduction**

Pursuant to South Dakota Codified Laws, Chapter 49-34A, Northern States Power (NSP) hereby submits for approval a change in Conditions of Service to the Small General Service Tariff Section No: 3 sheet No: 24 and Small General Time of Day Service Tariff Section No: 3 sheet 26. For the purposes of this filing we have followed the outline as provided in South Dakota Public Utilities Commission Administrative Rules Section 20:10:13:26.

**(1) Name and address of the public utility:**

Jim Wilcox, Manager of Customer Services  
Northern States Power Company  
500 West Russell Street,  
P. O. Box 988  
Sioux Falls, SD 57101-0988

**(2) Present Rate, Section and sheet number of the tariff schedule:**

Small General Service	Section 3, sheet number 24
Small General Time of Day Service	Section 3, sheet number 26

**(3) Description of the change**

To allow a customer who only occasionally exceeds the 25 kW demand limit to remain on the small general service if they can demonstrate that load requirements do not exceed 25 kW during NSP system peaks.

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**(4) Reason for the change**

To reduce the cents per kWh impact to certain small low load factor customers who occasionally exceed the 25 kW demand limit and would see significant cents per kWh variations as a result of a change to the general service rate as currently required by the Conditions of Service.

When a customer uses less than 25 kW demand they have a choice between the Small General Service Tariff or the General Service Tariff. The medium and high load factor customers benefit from the General Service Tariff which bills them based on peak demand (kW) and energy usage (kWh). The very low load factor customers benefit from the Small General Service Tariff which bills them based on kWh usage only.

The situation exists where a low load factor customer will only occasionally go over the 25 kW limit (for example a church that has a lutefisk dinner once a year). For churches, this situation would tend to happen when it does not contribute to the NSP system peak. Under our present tariff conditions, exceeding the 25 kW limit requires a rate change from Small General Service to General Service. The result of the rate change would be to increase that customer's bill from \$1200 per year to \$1700 per year.

By modifying the Conditions of Service, this customer would be allowed to stay on the Small General Service rate and not experience the increase in their bill. This change would also encourage facilities like small churches to improve the utilization of their facilities without worry that an occasional increase in off-peak demand above 25kW will require them to switch to the General Service rate.

**(5) Estimation of the number of customers whose cost of service will be affected and annual amounts of either increases or decreases, or both, in cost of service to those customers.**

It is expected that about 50 customers will benefit from this change and will save them an average of about \$500 per year.

**(6) Approximation of annual amount of increase or decrease in revenue:**

This will result in a decrease in revenue of about \$25,000 per year.

**(7) Proposed effective date**

We propose to make this change effective on March 1, 1995 or as soon as practical.

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**(8) Points affected**

**The condition that a certain customers must change from small general to general service when their load exceeds 25kW throughout the NSP South Dakota service territory.**

NORTHERN STATES POWER COMPANY (MINNESOTA)  
Minneapolis, Minnesota 55401  
South Dakota Electric SDFUC No. 1

Section No: 3  
12th Revised Sheet No: 24  
Cancelling 11th Revised Sheet No: 24

**SMALL GENERAL SERVICE**

**Availability:** Available to any non-residential customer for single or three phase electric service supplied through one meter.

**Rate:**

	<u>Oct-May</u>	<u>June-Sept</u>
Customer Charge per Month	\$7.25	\$7.25
Energy Charge		
All kWh per month - per kWh	5.83¢	6.83¢

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

**Monthly Minimum Charge:** Customer charge.

**Surcharge:** In certain communities bills are subject to a surcharge provided for in Surcharge Rider.

**Late Payment Charge:** A late payment charge of 1% of the unpaid balance will be added to the next month's bill after the date due.

**Terms and Conditions of Service:**

1. Company shall install a demand meter for a customer when:
  - a. Customer's connected load is estimated to be 20 kW or greater, or
  - b. Customer is served single-phase and has a service entrance capacity greater than 200 amperes, or
  - c. Customer is served three-phase at 120/208 or 120/240 volts and has a service entrance capacity greater than 200 amperes, or
  - d. Customer is served three-phase at 240/480 or 277/480 volts and has a service entrance capacity greater than 100 amperes, or
  - e. Customer's average monthly kWh use for four consecutive months exceeds 3,500 kWh.

If a demand meter is installed in accordance with the above, the customer may remain on the Small General Service schedule as long as his maximum demand is less than 25 kW. When the customer achieves an actual maximum demand of 25 kW or greater, the customer will be placed on the General Service schedule in the next billing month. Customer with a billing demand of less than 25 kW for twelve consecutive months will be given the option of returning to the Small General Service schedule.

If the customer only occasionally exceeds the 25 kW demand limit, they may remain on the Small General Service schedule with Company approval. Company approval requires that the customer can demonstrate that load requirements do not exceed 25 kW during NSP system peaks. N

2. Standby and Supplementary Service is available for any Small General Service customer subject to the provisions in the General Rules and Regulations.

Rate Code

Small General Service DC800

Date Filed:

By: Michael J. Hanson  
General Manager & Chief Executive

Effective:

SDFUC Docket No.

Order Date:



SMALL GENERAL TIME OF DAY SERVICE (Continued)

Terms and Conditions of Service:

1. Customer selecting the above time of day rate schedule will remain on this rate for a period of not less than twelve months. While served under this schedule, the Small General Service rate is unavailable.
2. Company shall install a demand meter for a customer when:
  - a. Customer's connected load is estimated to be 20 kW or greater, or
  - b. Customer is served single-phase and has a service entrance capacity greater than 200 amperes, or
  - c. Customer is served three-phase at 120/208 or 120/240 volts and has a service entrance capacity greater than 200 amperes, or
  - d. Customer is served three-phase at 240/480 or 277/480 volts and has a service entrance capacity greater than 100 amperes, or
  - e. Customer's average monthly kWh use for four consecutive months exceeds 3,500 kWh.

If a demand meter is installed in accordance with the above, the customer may remain on the Small General Time of Day Service schedule as long as his maximum demand is less than 25 kW. When the customer achieves an actual maximum demand of 25 kW or greater, the customer will be placed on the General Time of Day Service schedule in the next billing month. Customer with a billing demand of less than 25 kW for twelve consecutive months will be given the option of returning to the Small General Time of Day Service schedule.

If the customer only occasionally exceeds the 25 kW demand limit, they may remain on the Small General Time of Day Service schedule with Company approval. Company approval requires that the customer can demonstrate that load requirements do not exceed 25 kW during NSP system peaks.

3. Standby and Supplementary Service is available under this rate subject to the provisions of the General Rules and Regulations and as provided for elsewhere in this rate.
4. Optional Time of Day Metering Service: Optional metering is available for time of day customers subject to the provisions in the General Rules and Regulations. If optional metering service is applicable, the time of day metering charge will be waived and the monthly minimum charge is \$7.25.

Date Filed:

By: Michael J. Hanson  
General Manager & Chief Executive

Effective:

SDFUC Docket No.

Order Date:

NORTHERN STATES POWER COMPANY (MINNESOTA)  
Minneapolis, Minnesota 55401  
South Dakota Electric SDPUC No. 1

Section No: 3  
12th Revised Sheet No: 24  
Cancelling 11th Revised Sheet No: 24

SMALL GENERAL SERVICE

DOCKET 95-001

Availability: Available to any non-residential customer for single or three phase electric service supplied through one meter.

Rate:

	Oct-May	June-Sept
Customer Charge per Month	\$7.25	\$7.25
Energy Charge		
All kwh per month - per kwh	5.83¢	6.83¢

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

Monthly Minimum Charge: Customer charge.

Surcharge: In certain communities bills are subject to a surcharge provided for in Surcharge Rider.

Late Payment Charge: A late payment charge of 1% of the unpaid balance will be added to the next month's bill after the date due.

Terms and Conditions of Service:

1. Company shall install a demand meter for a customer when:
  - a. Customer's connected load is estimated to be 20 kW or greater, or
  - b. Customer is served single-phase and has a service entrance capacity greater than 200 amperes, or
  - c. Customer is served three-phase at 120/208 or 120/240 volts and has a service entrance capacity greater than 200 amperes, or
  - d. Customer is served three-phase at 240/480 or 277/480 volts and has a service entrance capacity greater than 100 amperes, or
  - e. Customer's average monthly kwh use for four consecutive months exceeds 3,500 kwh.

If a demand meter is installed in accordance with the above, th customer may remain on the Small General Service schedule as long as his maximum demand is less than 25 kW. When the customer achieves an actual maximum demand of 25k W or greater, the customer will be placed on the General Service schedule in the next billing month. Customer with a billing demand of less than 25 kW for twelve consecutive months will be given the option of returning to the Small General Service schedule.

If the customer only occasionally exceeds the 25 kW demand limit, they may remain on the Small General Service schedule with Company approval. Company approval requires that the customer can demonstrate that load requirements do not exceed 25 kW during NSP system peaks. NSP system peaks typically occur on hot, humid weekdays during June through September. Customers using this provision which have central air conditioning must agree to the terms of the Company's Controlled Air Conditioning Rider.

2. Standby and Supplementary Service is available for any Small General Service customer subject to the provisions in the General Rules and Regulations.

Rate Code

Small General Service DC800

Date Filed:

By: Michael J. Hanson  
General Manager & Chief Executive

Effective:

SDPUC Docket No. EL95-001

Order Date:

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NORTHERN STATES POWER COMPANY (MINNESOTA)  
 Minneapolis, Minnesota 55401  
 South Dakota Electric SDPUC No. 1

Section No: 3  
 12th Revised Sheet No: 26  
 Cancelling 11th Revised Sheet No: 26

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**SMALL GENERAL TIME OF DAY SERVICE (Continued)**

**Terms and Conditions of Service:**

1. Customer selecting the above time of day rate schedule will remain on this rate for a period of not less than twelve months. While served under this schedule, the Small General Service rate is unavailable.
2. Company shall install a demand meter for a customer when:
  - a. Customer's connected load is estimated to be 20 kW or greater, or
  - b. Customer is served single-phase and has a service entrance capacity greater than 200 amperes, or
  - c. Customer is served three-phase at 120/208 or 120/240 volts and has a service entrance capacity greater than 200 amperes, or
  - d. Customer is served three-phase at 240/480 or 277/480 volts and has a service entrance capacity greater than 100 amperes, or
  - e. Customer's average monthly kWh use for four consecutive months exceeds 3,500 kWh.

If a demand meter is installed in accordance with the above, the customer may remain on the Small General Time of Day Service schedule as long as his maximum demand is less than 25 kW. When the customer achieves an actual maximum demand of 25 kW or greater, the customer will be placed on the General Time of Day Service schedule in the next billing month. Customer with a billing demand of less than 25 kW for twelve consecutive months will be given the option of returning to the Small General Time of Day Service schedule.

If the customer only occasionally exceeds the 25 kW demand limit, they may remain on the Small General Time of Day Service schedule with Company approval. Company approval requires that the customer can demonstrate that load requirements do not exceed 25 kW during NSP system peaks. NSP system peaks typically occur on hot, humid weekdays during June through September. Customers using this provision, which have central air conditioning, must agree to the terms of the Company's Controlled Air Conditioning Rider.

3. Standby and Supplementary Service is available under this rate subject to the provisions of the General Rules and Regulations and as provided for elsewhere in this rate.
4. Optional Time of Day Metering Service: Optional metering is available for time of day customers subject to the provisions in the General Rules and Regulations. If optional metering service is applicable, the time of day metering charge will be waived and the monthly minimum charge is \$7.25.

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Date Filed:

By: Michael J. Hanson  
 General Manager & Chief Executive

Effective:

SDPUC Docket No. EL95-001

Order Date:

813224226



DOANE 7.95-001

**Northern States Power Company  
South Dakota**

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

January 30, 1995

Ms. Sue Cichos, Acting Executive Director  
South Dakota Public Utilities Commission  
500 East Capitol Avenue  
Pierre, South Dakota 57501

RECEIVED  
FEB 1 1995  
SOUTH DAKOTA PUBLIC  
UTILITIES COMMISSION

Dear Ms. Cichos:

Enclosed please find an original and 10 copies of Residential Heat Pump Tariff sheet and the Controlled Air Conditioning tariff sheet which is part of the miscellaneous change to the Northern States Power Company's electric rate book. These sheets replace the draft tariff sheets that were submitted on January 13, 1995.

If anyone has any questions regarding this matter please feel free to call Jim Wilcox at (605) 339-8350.

Thank you.

Sincerely,

Jim Wilcox  
Manager of Customer Services

Enclosures

cc: Michael J. Hanson  
General Manager and Chief Executive

**RESIDENTIAL HEAT PUMP SERVICE (2 Meter Rate)**

**Availability:** Available to residential customers with air source or ground source heat pumps. This rate is for residences with separately metered heat pumps. Electric water heaters and other additional loads may be served by this rate with prior Company approval. This meter will have a direct load control device that is controlled by the Company.

**Rate:**

Customer Charge per Month	\$2.50
Energy Charge - per kWh	
June-September	6.16¢
Other Months	4.28¢

**Fuel Clause:** Bills are subject to the adjustment provided for in the Fuel Clause Rider.

**Surcharge:** In certain communities bills are subject to a surcharge provided for in Surcharge Rider.

**Late Payment Charges:** A late payment charge of 1% of the unpaid balance will be added to the next month's bill after the date due.

**Terms and Conditions of Service:**

1. The Heat Pump Service shall be permanently wired, separately served and metered, and at no time connected to facilities servicing other customer loads without prior approval from the Company. Customer must provide 2 meter sockets as specified by the Company. The Company will provide both meters and the direct load control device.
2. The duration and frequency of interruptions will be determined by the Company. The direct load control device will be cycled on a schedule of 15 minutes on and 15 minutes off normally for six hours with a maximum of eight hours per day. Interruptions will normally occur on high demand weekdays during summer months. Interruptions may occur at times when, in the Company's opinion, the reliability of the system is endangered.
3. Company shall not be liable for any loss or damage caused by or resulting from any interruption of service.
4. In conjunction with this rate, the non-heat pump usage meter will be placed on the Controlled Air Conditioning Rider. The summer heat pump energy charge is equivalent to the Residential Service rate less the discount received under the Controlled Air Conditioning Rider for Residential Central Air Conditioning.
5. Customers selecting the Residential Heat Pump Service must remain on this service for a minimum of one year.
6. Company will keep this service available for a minimum of five years.
7. The rate contemplates that this service will utilize existing facilities with no additional major expenditures. Customer shall reimburse Company for any expenditures for facilities necessary to serve this load which would not otherwise be required to serve customer's load.

Rate Code

AH800

Filing Date:

By: Michael J. Hanson  
General Manager & Chief Executive

Effective:

SDPUC Docket No: EL95-001

Order Date:

**CONTROLLED AIR CONDITIONING AND WATER HEATING RIDER**

**Availability:** Available to Residential Service, Residential Service-Underground, General Service, and Small General Service customers with 1) Company controlled central air conditioning, or 2) Company controlled heat pumps receiving Energy-Controlled Service (Non-Demand Metered) with optional non-interruptible service during June through September. Company controlled electric water heating is also available to residential customers with a controlled central air conditioner or heat pump, with the exception of electric water heaters served with the Energy-Controlled Service (Non-Demand Metered) rate schedule.

**Rider: Residential Central Air Conditioning**

A 15% discount will apply to the energy charge during the billing months of June through September.

**Residential Electric Water Heating**

A 2% discount will apply to energy charges during each billing month provided total energy use is not less than 300 kWh.

**Commercial Central Air Conditioning**

A \$5 per ton per month credit shall be applied to customer's bill during each summer billing month provided total energy use is not less than 2000 kWh per month

**Terms and Conditions:**

1. The duration and frequency of interruptions will be determined by the Company. Air conditioning will be cycled on a schedule of 15 minutes on and 15 minutes off normally for six hours with a maximum of eight hours per day. Interruptions will normally occur on high demand weekdays. Water heating interruptions will normally occur for up to six consecutive hours per day during summer months and two five-hour periods during other months. Air conditioning and water heating interruptions will not normally occur during the observation day of the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
2. Company shall not be liable for any loss or damage caused by or resulting from any interruption of service.
3. To be eligible for this service, customer must agree to allow Company load control for a minimum term of one year.
4. The storage capacity of the water heater shall be 40 gallons or more in order to be eligible for this service.
5. The Residential Central Air Conditioning energy charge discount for Energy-Controlled Service (Non-Demand Metered) customers will also apply to their standard service energy charge.
6. Rider availability for heat pump installations is limited to those sized for summer cooling requirements, as determined by Company.

Rate Code	A/C	A/C and WH
<u>Residential Overhead</u>		
Without Space Heating	AE900	AE910
Space Heating	AF900	AF910
Energy Controlled (Non-Demand Metered)	AL910	
<u>Residential Underground</u>		
Without Space Heating	AE903	AE913
Space Heating	AF903	AF913
Energy-Controlled (Non-Demand Metered)	AL913	
<u>Small General Service Discount</u>	DE900	
<u>General Service Discount</u>	GE900	

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

Effective:

SDFUC Docket No:

Order Date:

NORTHERN STATES POWER COMPANY (MINNESOTA)  
Minneapolis, Minnesota 55401  
South Dakota Electric SDFUC No.1

Section No: 3  
3rd Revised Sheet No: 6.2  
Cancelling 2nd Revised Sheet No: 6.2

**RESIDENTIAL HEAT PUMP SERVICE (2 Meter Rate)**

**Availability:** Available to residential customers with air source or ground source heat pumps. This rate is for residences with separately metered heat pumps. Electric water heaters and other additional loads may be served by this rate with prior Company approval. This meter will have a direct load control device that is controlled by the Company.

**Rate:**

Customer Charge per Month	\$2.50
Energy Charge - per kWh	
June-September	6.16¢
Other Months	4.23¢

**Fuel Clause:** Bills are subject to the adjustment provided for in the Fuel Clause Rider.

**Surcharge:** In certain communities bills are subject to a surcharge provided for in Surcharge Rider.

**Late Payment Charges:** A late payment charge of 1% of the unpaid balance will be added to the next month's bill after the date due.

**Terms and Conditions of Service:**

1. The Heat Pump Service shall be permanently wired, separately served and metered, and at no time connected to facilities servicing other customer loads without prior approval from the Company. Customer must provide 2 meter sockets as specified by the Company. The Company will provide both meters and the direct load control device.
2. The duration and frequency of interruptions will be determined by the Company. The direct load control device will be cycled on a schedule of 15 minutes on and 15 minutes off normally for six hours with a maximum of eight hours per day. Interruptions will normally occur on high demand weekdays during summer months. Interruptions may occur at times when, in the Company's opinion, the reliability of the system is endangered.
3. Company shall not be liable for any loss or damage caused by or resulting from any interruption of service.
4. In conjunction with this rate, the non-heat pump usage meter will be placed on the Controlled Air Conditioning Rider. The summer heat pump energy charge is equivalent to the Residential Service rate less the discount received under the Controlled Air Conditioning Rider for Residential Central Air Conditioning.
5. Customers selecting the Residential Heat Pump Service must remain on this service for a minimum of one year.
6. Company will keep this service available for a minimum of five years.
7. The rate contemplates that this service will utilize existing facilities with no additional major expenditures. Customer shall reimburse Company for any expenditures for facilities necessary to serve this load which would not otherwise be required to serve customer's load.

**Rate Code**

AH800

**Filing Date:**

By: Michael J. Hanson  
General Manager & Chief Executive

**Effective:**

**SDPUC Docket No:** EL95-001

**Order Date:**

NORTHERN STATES POWER COMPANY (MINNESOTA)  
 Minneapolis, Minnesota 55401  
 South Dakota Electric SDPUC No.1

Section No: 3  
 3rd Revised Sheet No: 6.2  
 Cancelling 2nd Revised Sheet No: 6.2

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<b>Rate:</b>		
Customer Charge per Month		\$2.50
Energy Charge - per kWh		
June-September		6.16¢
Other Months		4.28¢

**Fuel Clause:** Bills are subject to the adjustment provided for in the Fuel Clause Rider.

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Rate Code

AH800

Filing Date:

By: Michael J. Hanson  
 General Manager & Chief Executive

Effective:

SDPUC Docket No: EL95-001

Order Date:



NORTHERN STATES POWER COMPANY (MINNESOTA)  
 Minneapolis, Minnesota 55401  
 South Dakota Electric SDFUC No. 1

Section No: 3  
 8th Revised Sheet No: 22  
 Cancelling 7th Revised Sheet No: 22

**CONTROLLED AIR CONDITIONING AND WATER HEATING RIDER**

**Availability:** Available to Residential Service, Residential Service-Underground, General Service, and Small General Service customers with 1) Company controlled central air conditioning, or 2) Company controlled heat pumps receiving Energy-Controlled Service (Non-Demand Metered) with optional non-interruptible service during June through September. Company controlled electric water heating is also available to residential customers with a controlled central air conditioner or heat pump, with the exception of electric water heaters served with the Energy-Controlled Service (Non-Demand Metered) rate schedule.

**Rider: Residential Central Air Conditioning**

A 15% discount will apply to the energy charge during the billing months of June through September.

**Residential Electric Water Heating**

A 2% discount will apply to energy charges during each billing month provided total energy use is not less than 300 kWh.

**Commercial Central Air Conditioning**

A \$5 per ton per month credit shall be applied to customer's bill during each summer billing month provided total energy use is not less than 2000 kWh per month

**Terms and Conditions:**

1. The duration and frequency of interruptions will be determined by the Company. Air conditioning will be cycled on a schedule of 15 minutes on and 15 minutes off normally for six hours with a maximum of eight hours per day. Interruptions will normally occur on high demand weekdays. Water heating interruptions will normally occur for up to six consecutive hours per day during summer months and two five-hour periods during other months. Air conditioning and water heating interruptions will not normally occur during the observation day of the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.
2. Company shall not be liable for any loss or damage caused by or resulting from any interruption of service.
3. To be eligible for this service, customer must agree to allow Company load control for a minimum term of one year.
4. The storage capacity of the water heater shall be 40 gallons or more in order to be eligible for this service.
5. The Residential Central Air Conditioning energy charge discount for Energy-Controlled Service (Non-Demand Metered) customers will also apply to their standard service energy charge.
6. Rider availability for heat pump installations is limited to those sized for summer cooling requirements, as determined by Company.

Rate Code	A/C	A/C and WH
<b>Residential Overhead</b>		
Without Space Heating	AE900	AE910
Space Heating	AF900	AF910
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Filing Date: By: Michael J. Hanson  
 General Manager & Chief Executive

Effective:

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