



SOUTH DAKOTA ELECTRIC RATE BOOK

ENERGY STORAGE SERVICE
RATE DESIGNATION - ES
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Section No. 3A
Eleventh Revised Sheet No. 6
Replaces Tenth Revised Sheet No. 6

ENERGY STORAGE SERVICE

AVAILABLE

To customers installing certain energy efficient electrical equipment that will increase off-peak electrical use and reduce the Company's On-Peak demand, at points on the Company's existing secondary distribution lines supplied by its interconnected transmission system. The rate has been developed as part of the Company's Demand-Side Management strategy.

APPLICABLE

At the customer's election, to General Service customers who operate Company approved energy storage facilities for the purpose of utilizing off-peak electric energy for space conditioning, water heating, battery charging, water pumping, and/or snowmaking. Electric energy will be supplied through a separately metered circuit utilizing the same transformer and service used to serve the balance of the customer's electrical load.

CHARACTER OF SERVICE

Alternating current, 60 hertz, at the voltage and phase of the Company's established distribution system most available to the location of the customer. Energy Storage Service will be provided on a Time-Of-Use schedule for qualified Partial Storage and Geothermal systems. The number of off-peak hours available will amount to eight hours each day during the winter season, twelve hours each day during the summer season, and 24 hours a day on weekends and major holidays during both summer and winter seasons.

NET MONTHLY BILL

Rate

Customer Charge

\$14.00 per month

(I)

Energy Charge

Off-Peak: \$0.0111 per kWh

(R)

On-Peak: \$0.0311 per kWh

(R)

Capacity Charge

Off-Peak: no charge

On-Peak: \$10.85 per kW of Billing Capacity

(R)

Minimum

The Customer Charge

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By: Jerrad Hammer
Director-Regulatory
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of South Dakota dated Dec. 28, 2018)

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Eighth Revised Sheet No. 7
Replaces Seventh Revised Sheet No. 7

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BILLING CAPACITY

Customer's average kilowatt load during the fifteen minute period of maximum On-Peak use during the month.

Power Factor Adjustment – If the power factor for the month (determined at the Company's option by permanent measurement or by a test of not less than fifteen minute duration under conditions which the Company determines to be normal) is less than eighty-five percent (85%) at the point of delivery, the Billing Capacity will be increased by multiplying by eighty five percent (85%) and dividing by the power factor expressed in percent. Power factor is defined to be the quotient obtained by dividing the kilowatt-hours used during the month by the square root of the sum of the squares of the kilowatt-hours used and the lagging reactive kilovolt-ampere-hours supplied during the same period. Any leading kilovolt-ampere-hours supplied during the period will not be considered.

Penalty for Non-compliance

If a Partial Storage customer exceeds their partial storage Limit (expressed in kW) during peak time periods, a penalty of five (5) times the Capacity Charge per kW will be assessed for the difference in kW that the maximum billing capacity exceeds the partial storage limit. The partial storage limit will be determined using design day load profiles from standard industry load calculation methods. A conversion factor of 0.75 kW per ton will be used for Cool Storage applications.

COST ADJUSTMENT

The above schedule of charges shall be adjusted in accordance with the applicable Cost Adjustment tariffs in Section No. 3C, Tariff Sheet No. 11. (T)

When the billing period includes a change in the charges of an above referenced Cost Adjustment tariff, the customer's bill shall be prorated accordingly.

PAYMENT

Net monthly bills are due and payable twenty days from the date of the bill, and after that date the account becomes delinquent. A late payment charge of 1.5% on the current unpaid balance shall be calculated and included as part of each monthly billing. A non-sufficient funds charge of \$15.00 shall apply to process a payment from a customer that is returned to the Company by the bank as not payable. If a bill is not paid, the Company shall have the right to suspend service, providing ten (10) days written notice of such suspension has been given. When service is suspended for nonpayment of a bill, a Customer Service Charge will apply.



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TERMS AND CONDITIONS

1. Service will be rendered under the Company's General Rules and Regulations where not inconsistent with any specific provisions of this rate schedule or the service contract.
2. Service will be provided under this rate schedule only to customers who have contracted for service for an initial term of not less than three years. The contract may be terminated at any time on or after the expiration date of the initial term by twelve months written notice.
3. The Company will supply and maintain Time-of-Use metering to provide Off-Peak energy to Full Storage systems and to provide On-Peak and Off-Peak energy for Partial Storage and Geothermal systems.
4. The Company shall have the right to inspect all wiring and equipment connected to the storage circuit. In the event the Company finds that the customer's wiring has been altered or arranged in any manner so that energy is used in any equipment other than Company approved energy storage facilities, the contract for service under this rate schedule may be terminated.
5. The Company may, at its option, install in the energy storage circuit load limiting devices to limit the total load to be served through the energy storage circuit.

6. Off-Peak Hours:

<u>Summer Months</u>	(April 1 – October 31)	10:00 p.m. – 10:00 a.m.	Monday through Friday
<u>Winter Months</u>	(November 1 – March 31)	11:00 p.m. – 7:00 a.m.	Monday through Friday
<u>Both Seasons</u>	Saturdays, Sundays, and major holidays are considered Off-Peak.		

The hours may be shifted one (1) hour in accordance with the recognized Daylight Savings Time (DST) in the local area and customers will be notified prior to such change.



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7. MEANS OF CONTROL:

On Full Storage and Partial Storage systems, Company will install time of use metering to monitor on-peak demand limits. If the On-Peak limit is exceeded the Penalty for Non-Compliance will be assessed.

8. QUALIFIED SYSTEMS:

- A. Full Storage – Available to heating, water heating, cooling, battery storage and water pumping applications that are able to store energy during Off-Peak periods for use during On-Peak periods.
- B. Partial storage – Cooling – Partial storage equipment size must be at least 25% less than conventional equipment size during On-Peak time periods. Chiller equipment, cooling tower pumps and fans, and cool water circulating pumps qualify for the rate. Air handling equipment and hot water circulating pumps do not qualify. A penalty for non-compliance will be assessed if the partial storage limit is exceeded.
- C. Partial Storage – Heating and Water Heating – Electric heating and water heating equipment used with Off-Peak storage capability and a heat storage medium (sand, bricks, liquid, etc.) qualify for partial storage when used in the applications listed below. A penalty for non-compliance will be assessed if the partial storage limit is exceeded.
 - 1. An Electric Boiler used in combination with water loop heat pumps qualifies for Partial Storage. The Electric Boiler size must be 25% less than conventional equipment during On-Peak periods. Water-loop heat pumps, air handling equipment, and circulating pumps do not qualify.
 - 2. Resistance Heat and Water Heating qualify for Partial Storage when no more than 50% of the system capacity is allowed to operate during On-Peak periods.
- D. Geothermal Applications – Geothermal heat pumps, associated air handling equipment and circulating pumps qualify for the rate. Supplementary resistance heat associated with each heat pump or supplementary electric boiler heat associated with the geothermal system also qualify for the rate.
- E. Partial Storage – Snowmaking – Partial storage equipment size must be at least 50% less than conventional equipment during On-Peak time periods. Primary snowmaking equipment eligible for the rate includes air compressors and water pumps.



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8. DESIGN REVIEW:

Detailed design information must accompany each Energy Storage Application including:

- A. A 24-hour design day cooling, heating, water pumping, and/or snowmaking load profile using standard industry load calculation methods.
- B. A system description with operating strategy. The Demand-Side Management Department shall review and approve the Energy Storage Application and proposed contract.

TAX ADJUSTMENT

Bills computed under the above rate shall be adjusted by the applicable proportionate part of any impost, assessment, or charge imposed or levied by any governmental authority as a result of laws or ordinances enacted, which is assessed or levied on the basis of revenue for electric energy or service sold, and/or the volume of energy generated and sold.