## Derivation of Metering Costs - State of South Dakota

OCCASIONAL DELIVERY ENERGY SERVICE			
STANDARD KWH METER	Single Phase		
(1) Installed Cost	\$98.67		
(2) L.A.R.R.	8.92%		
(3) Levelized Cost (1)*(2)	\$8.80		
(4) Accounting Expenses \$/Cust/Yr	\$37.73		
(5) Total Annual (3)+(4)	\$46.53		
(6) Total Monthly (5)/12	\$3.88		
	Proposed \$3.75 Current \$3.75		

## TIME OF DELIVERY ENERGY SERVICE

TOD KW/KWH METER	Single Phase
(7) Installed Cost	\$172.53
(8) Levelized Cost (7)*(2)	\$15.39
(9) Total Annual (8)+(4)	\$53.12
(10) Total Monthly (9)/12	\$4.43
	Proposed \$4.75
	Current \$4.75

#### Source

- (1)(7) Data provided by NSP Metering Dept.
- (2) Based on cost of capital on page 4
- (4) Based on NSP ECCOSS Workpapers (Docket No. EL22-017).

# Derivation of Energy Payments - State of South Dakota

OCCASIONAL DELIVERY ENERGY SERVICE	
	Annual Average
(1) Estimated System Average	
Incremental Energy Costs for 2023 (¢/kWh)	3.478
101 2023 (¢/ kw 11)	
(2) Energy Loss Factors	0.96516
(3) Estimated System Average	
Incremental Energy Costs	3.60
Adjusted for Losses (1)/(2)	
(4) In \$/KWh (3)/100	\$0.0360

TIME OF DAY PURCHASE SERVICE			
	Annual On Peak	Annual Off Peak	
(1) Estimated System Average			
Incremental Energy Costs for 2023 (¢/kWh)	4.528	2.917	
(2) Energy Loss Factors	0.9613	0.9672	
(3) Estimated System Average			
Incremental Energy Costs Adjusted for Losses(1)/(2)	4.71	3.02	
(4) In \$/KWh (3)/100	\$0.0471	\$0.0302	

#### **PUBLIC DOCUMENT**

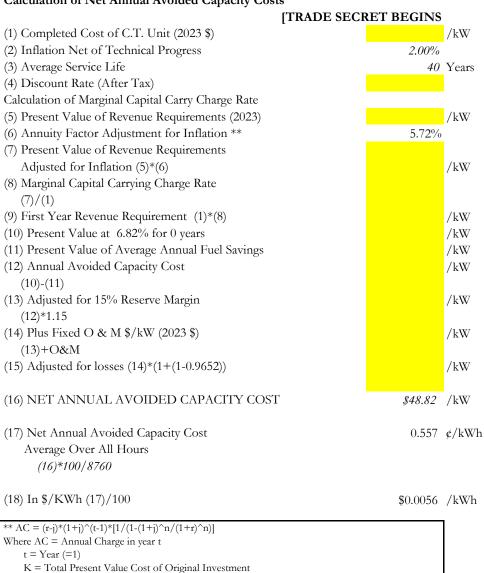
#### CONFIDENTIAL INFORMATION HAS BEEN EXCISED

Northern States Power Company
Electric Operations - State of South Dakota
COGENERATION AND SMALL POWER PRODUCTION FILING

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### Calculation of Net Annual Avoided Capacity Costs

r = Discount Rate (Overall Marginal Cost of Capital) (6.82%) j = Inflation Rate Net of Technology Progress (2.00%) n = Expected Service Life of Investment (40 Years)



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### PUBLIC DOCUMENT

### CONFIDENTIAL INFORMATION HAS BEEN EXCISED

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Electric Operations - State of South Dakota

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# Marginal Cost of Capital

(Before Tax)	Capitalization			
	Ratio (%)	Cost (%)	Weighted (%)	
[TRADE SECRET BEGINS				
Debt				
Preferred Equity				
Common Equity				
TRADE SECRET ENDS]				
Weighted Average	100.00%		6.82% *	

(After Tax)	Capitalization			
	Ratio (%)	Cost (%)	Weighted (%)	
[TRADE SECRET BEGINS				
Debt				
Preferred Equity				
Common Equity				
TRADE SECRET ENDS]				
Weighted Average	100.00%		6.75%	

<sup>\*</sup> SD Commission approval of settlement in Docket No. EL14-058.

Source

Information based on Company's 2014 Rate Case settlement (Confidential).