ROE = 4.17%

**Deficiency = \$19,368** 

% Increase = 11.53%

Required ROE = 10.65%

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Northern States Power Company (SD)

Electric Utility - South Dakota Retail Jurisdiction

Cost of Service Study

**2011 Interim Level** 

**Summary Reports** 

# Northern States Power Company (SD) Electric Utility - South Dakota Retail Jurisdiction Cost of Service Study 2011 Interim Level

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Docket No. EL12-046

(Dollars in Thousands)

#### Rate Base Summary

		Total Company Electric		SD Retail Electric			All Other			
		Beginning <u>Balance</u>	Ending Balance	Average <u>Balance</u>	Beginning <u>Balance</u>	Ending Balance	Average <u>Balance</u>	Beginning Balance	Ending Balance	Average <u>Balance</u>
1	Plant Investment	14,035,819	14,035,819	14,035,819	817,856	817,856	817,856	13,217,963	13,217,963	13,217,963
2	Depreciation Reserve	(6,676,170)	(6,676,170)	(6,676,170)	(386,643)	(386,643)	(386,643)	(6,289,527)	(6,289,527)	(6,289,527)
3	Net Utility Plant	7,359,649	7,359,649	7,359,649	431,213	431,213	431,213	6,928,436	6,928,436	6,928,436
4	C.W.I.P.	0	0	0	0	0	0	0	0	0
5	7 toodinalated Beloned Taxee	(1,453,668)	(1,453,668)	(1,453,668)	(82,551)	(82,551)	(82,551)	(1,371,117)	(1,371,117)	(1,371,117)
	Other Rate Base:									
6	Cash Working Capital	(66,229)	(66,229)	(66,229)	(2,247)	(2,247)	(2,247)	(63,981)	(63,981)	(63,981)
7	Materials & Supplies	124,370	124,370	124,370	7,206	7,206	7,206	117,164	117,164	117,164
8	Fuel Inventory	87,684	87,684	87,684	4,958	4,958	4,958	82,726	82,726	82,726
9	Non-Plant Assets & Liab	(10,225)	(10,225)	(10,225)	(713)	(713)	(713)	(9,512)	(9,512)	(9,512)
10	Prepaids & Other	85,027	85,027	85,027	9,643	9,643	9,643	75,384	75,384	75,384
11	Total Rate Base	6,126,609	6,126,609	6,126,608	367,508	367,508	367,509	5,759,100	5,759,100	5,759,100

Northern States Power Company (SD)
Electric Utility - South Dakota Retail Jurisdiction
Cost of Service Study
2011 Interim Level

Docket No. EL12-046 Attachment 3 Page 3 of 6

(Dollars in Thousands)

### **Income Statement Summary**

		Total Company Electric	SD Retail Electric	All Other	
	Operating Revenues	<del></del>	<u> </u>		
1	Retail	3,118,088	168,052	2,950,036	
2	CIP Adjustment to Program Costs	0	· -	0	
3	Interdepartmental	548	-	548	
4	Other Operating	658,638	34,610	624,028	
5	Gross Earnings Tax	0	<u> </u>	0	
6	Total Operating Revenues	3,777,274	202,662	3,574,612	
	Expenses				
	Operating Expenses:				
7	Fuel & Purchased Energy	1,228,064	68,425	1,159,639	
8	Power Production	738,723	42,836	695,887	
9	Transmission	191,059	10,530	180,529	
10	Distribution	112,873	6,814	106,059	
11	Customer Accounting	59,283	3,915	55,368	
12	Customer Service & Information	115,326	250	115,076	
13	Sales, Econ Dvlp & Other	254	52	202	
14	Administrative & General	212,214	12,619	199,595	
15	Total Operating Expenses	2,657,796	145,441	2,512,355	
16	Depreciation	347,673	21,357	326,316	
17	Amortization	24,694	464	24,230	
	Taxes:				
18	Property	128,737	5,971	122,766	
19	Gross Earnings	0	-	0	
20	Deferred Income Tax & ITC	190,787	13,963	176,823	
21	State & Federal Income (see Page 3)	(26,168)	(5,066)	(21,101)	
22	Payroll & Other	30,956	1,846	29,110	
23	Total Taxes	324,312	16,714	307,598	
24	Total Expenses	3,354,475	183,976	3,170,499	
25	AFUDC	0	<u> </u>	0	
26	Total Operating Income	422,799	18,686	404,113	

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(Dollars in Thousands)

#### **Income Tax Summary**

		Total Company Electric	SD Retail Electric	All Other
	Income Before Taxes			
1	Total Operating Revenues	3,777,274	202,662	3,574,612
2	less: Total Operating Expenses	(2,657,796)	(145,441)	(2,512,355)
3	Book Depreciation & Amortization	(372,367)	(21,821)	(350,546)
4	Taxes (Other Than Current Income)	(350,480)	(21,780)	(328,699)
5	Total Before Tax Book Income	396,631	13,620	383,012
	Tax Additions			
6	Book Depreciation	347,673	21,357	326,316
7	Deferred Income Taxes & ITC	190,787	13,963	176,823
8	Nuclear Fuel Burn (ex D&D)	112,373	6,485	105,888
9	Nuclear Outage Accounting	59,808	3,415	56,393
10	Avoided Tax Interest	33,117	1,888	31,229
11	Open Line	0	0	0
12	Open Line	0	0	0
13	Open Line	0	0	0
14	Open Line	0	0	0
15	Open Line	0	0	0
16	Other Book Additions	0	0	0
17	Total Tax Additions	743,758	47,108	696,649
	Tax Deductions			
18	Debt Interest Expense	176,446	10,584	165,862
19	Tax Depreciation & Removal	953,710	63,171	890,539
20	Manufacture Production Deduction	0	0	0
21	Open	0	0	0
22	Open	0	0	0
23	Open	0	0	0
24	Other Tax/Book Timing Differences	77,093	4,582	72,511
25	Net Preferred Stock Deduction	0	0	0
26	Total Tax Deductions	1,207,249	78,337	1,128,912
27	State Taxable Income	(66,860)	(17,609)	(49,251)
28	State Income Tax Rate	8.89%	0.00%	N/A
29	State Taxes before Credits	(5,944)	0	(5,944)
30	State Credits	0	0	0
31	Total State Income Taxes	(5,944)	0	(5,944)
32	Federal Taxable Income	(60,917)	(17,609)	(43,307)
33	Federal Income Tax Rate	35.00%	35.00%	35.00%
34	Federal Tax before Credits	(21,321)	(6,163)	(15,158)
35	Federal Tax Credits	(1,097)	(1,097)	(45.450)
36	Total Federal Income Taxes	(20,224)	(5,066)	(15,158)
37	Total Federal & State Income Taxes	(26,168)	(5,066)	(21,101)

## Northern States Power Company (SD) Electric Utility - South Dakota Retail Jurisdiction Cost of Service Study 2011 Interim Level

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### **Revenue Requirement & Return Summary**

(Dollars in Thousands)

				Weighted				
	<b>Capital Structure</b>	Rate	Ratio	Cost	<b>Composite</b>	Income Tax Rates		
1	Long Term Debt	6.1187%	47.1100%	2.8800%	State of Sou	th Dakota Tax rate		0.00%
2	Short Term Debt	0.0000%	0.0000%	0.0000%	Federal Stat	utory Tax rate	35.00%	
3	Preferred Stock	0.0000%	0.0000%	0.0000%	Federal Effe	ctive Tax Rate (1-State Ra	te*Fed Rate)	<u>35.00%</u>
4	Common Equity	10.6500%	52.8900%	5.6300%	Total South	<b>Dakota Composite Tax F</b>	Rate	35.00%
5	Required Rate of Return		8.5100%	Total Corporate Composite Tax Rate			40.78%	
				Total Comp	any Electric	SD Retail Electric		All Other

Rate of Return (ROR)	Total Company Electric	SD Retail Electric	All Other
6 Total Operating Income	422,799	18,686	404,113
7 Total Average Rate Base	6,126,608	367,509	5,759,100
8 ROR (Operating Income / Rate Base)	6.90%	5.08%	7.02%
Return on Equity (ROE)			
9 Total Operating Income	422,799	18,686	404,113
10 Debt Interest (Rate Base * Weighted Debt Cost)	(176,446)	(10,584)	(165,862)
11 Preferred Stock (Rate Base * Weighted Preferred Cost)	0	0	0
12 Earnings Available for Common	246,353	8,102	238,251
Equity Rate Base ( Rate Base * Equity Ratio)	3,240,363	194,375	3,045,988
<b>14 ROE</b> (Earnings for Common / Equity Rate Base)	7.60%	4.17%	7.82%
Revenue Deficiency			
15 Require Operating Income (Rate Base * Required Retu	rn) 521,374	31,275	490,099
16 Operating Income	422,799	18,686	404,113
17 Operating Income Deficiency	98,575	12,589	85,986
18 Revenue Conversion Factor ( 1/(1-Composite Tax R	ate))1.68858_	1.53846	N/A
19 Revenue Deficiency (Income Deficiency * Conversion Fa	actor) <b>166,452</b>	19,368	147,084
Total Retail Revenue Requirements			
20 Retail Related Revenues	3,118,636	168,052	2,950,584
21 Revenue Deficiency	166,452	19,368	147,084
22 Total Retail Revenue Requirements	3,285,088	187,420	3,097,668
23 Percentage Increase (Decrease)	5.34%	11.53%	4.98%

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(Dollars in Thousands)

#### Rate Base Detail - Cash Working Capital

	<u>Expenses</u>	Total Company Electric		SD Retail Electric				All Other		
	Includable Expenses	Lead Days	<u>Dollars</u>	Dollar x Days		<u>Dollars</u>	Dollar x Days		<u>Dollars</u>	Dollar x Days
	Fuel Expenses									
1	Coal & Rail Transport	18.10	344,376	6,233,206		19,471	352,425		324,905	5,880,781
2	Gas for Generation	37.01	103,070	3,814,621		5,827	215,657		97,243	3,598,963
3	Oil	19.40 0.00	2,413 100,902	46,812 0		136 5,691	2,638 0		2,277 95,211	44,174 0
4	Nuclear & EOL		,							ŭ
5 6	Nuclear Disposal	76.13	<u>11,471</u> 562,232	<u>873,287</u> 10,967,926		<u>662</u> 31,787	<u>50,398</u> 621,119		10,809 530,445	<u>822,889</u> 10,346,807
	Purchased Power									
7	Purchases	33.09	875,869	28,982,505		49,450	1,636,301		826,419	27,346,205
8	Interchange	38.21	124,334	4,750,802		7,153	273,316		117,181	4,477,486
	•		1,000,203	33,733,307		56,603	1,909,617		943,600	31,823,691
	Labor & Related Costs									
9	Regular Payroll	11.89	388,024	4,613,605		23,174	275,539		364,850	4,338,067
10	Incentive Compensation	252.18	19,694	4,966,433		895	225,701		18,799	4,740,732
11	Pension & Benefits	16.80	<u>81,934</u>	1,376,491		<u>4,964</u>	<u>83,395</u>		<u>76,970</u>	1,293,096
12	Subtotal Labor & Related		489,652	10,956,529		29,033	584,635		460,619	10,371,894
13	All Other Operating Expenses	29.21	605,709	17,692,760		28,018	818,406		577,691	16,874,354
14 15	Property Tax	355.99	128,737	45,829,085		5,971	2,125,616		122,766	43,703,468
16	Employer's Payroll Taxes	28.44	30,956	880,389		1,846	52,500		29,110	827,888
17	Gross Earnings Tax	43.45	0,550	000,505		0	02,500		23,110	027,000
18	Federal Income Tax	36.75	(20,224)	(743,224)		(5,066)	(186,186)		(15,158)	(557,038)
19	State Income Tax	36.75	(5,944)	(218,438)		0	0		(5,944)	(218,438)
20	State Sales Tax Customer Billings	43.45	0	0		0	0		o´	0
21	Total Expenses	42.67	2,791,321	119,098,333	39.99	148,192	5,925,707	42.82	2,643,130	113,172,626
22	Net Annual Expense Amount			326,297			16,235			310,062
	Revenues	Lag Days	Dollars	Dollar x Days		Dollars	Dollar x Days		Dollars	Dollar x Days
23	Computer Billing 100.00%	33.62	3,118,088	104,819,058		168,052	5,649,312		2,950,036	99,169,746
24	Hand Billed 0.00%	33.62	0	0		0	0,0.10,0.12		0	0
25	Retail Revenue Adjustments	0.00	0	0		0	0		0	0
26	Interdepartmental	0.00	548	0		0	0		548	0
27	Late Payment	0.00	0	0		0	0		0	0
28	Connect and Trouble Charges	33.62	2,176	73,149		246	8,270		1,930	64,880
29	CIP Incentive	0.00	39,317	0		0	0		39,317	0
30	Rentals	-11.29	4,187	(47,271)		251	(2,834)		3,936	(44,437)
31	Interchange Revenues	38.21	439,393	16,789,214		25,087	958,582		414,306	15,830,632
32	Sales for Resale	41.06	66,242	2,719,897		3,607	148,103		62,635	2,571,793
33 34	Production Associated Revenues MISO	41.06 14.00	5,875 8,931	241,228 125,034		332 31	13,632 434		5,543 8,900	227,596
34 35	Point to Point Firm	14.00 41.06	56,409	2,316,154		3,255	434 133,650		8,900 53,154	124,600 2,182,503
35 36	Services & Facilities	41.06	8,743	358,988		3,255 500	20,530		8,243	338,458
36 37	Ancillary	41.06	23,479	964,048		1,355	55,636		22,124	908,411
38	Distribution Associated Revenues	33.62	23,479 159	5,345		1,355	55,636 0		159	5,345
39	Other	33.62	8,540	287,078		218	7,322		8,322	279,756
40	JOA - Rev fr/to PSC	41.06	(4,813)	(197,622)		(272)	(11,168)		(4,541)	(186,453)
41	(blank)	0.00	0	0		0	0		0	0
42	(blank)	0.00	0	0		0	0		0	0
43	(blank)	0.00	0	0		0	0		0	0
44	Total Revenues	34.01	3,777,274	128,454,299	34.45	202,662	6,981,470	33.98	3,574,612	121,472,829
45	Net Annual Amount			351,930			19,127			332,802
46	Expense / Revenue Factor		ı	0.7390		r	0.7312			
47	Allocated Revenue Amount			260,068		ļ	13,986			
48	Net Cash Working Capital	Page 1 - Line 6		(66,229)			(2,249)			(63,980)