



**TRANSMISSION FACILITY ADJUSTMENT
For the Pro Forma Year Ended May 31, 2016**

<u>Schedule</u>	<u>Description</u>	<u>Page</u>
5-1	Cost Recovery Rate Calculation	2
5-2	Balancing Account	3
5-3	Overall Cost of Service Year 2	4
5-4	Rate Base Year 2	5
5-5	O&M and Taxes Year 2	6
5-6	Cost of Service By Customer Class Year 1	7
5-7	Overall Cost of Service Year 1	8
5-8	Rate Base Year 1	9
5-9	O&M and Taxes Year 1	10
5-10	Other Operating Revenue Year 1	11
5-11	Customer Impact	12



BLACK HILLS POWER
COST RECOVERY RATE - TRANSMISSION FACILITIES
 Rate Calculation Effective June 1, 2015

Line No.	Description	Reference	South Dakota
1			
2	Transmission Facilities Year 2 Revenue Requirement (June 1, 2015 through May 31, 2016)	Schedule 5-3, line 2	\$ 353,298
3			
4	Production Capacity Allocators by Customer Class		
5	Residential	Section No. 3C, Sheet No. 16	34.00%
6	Small General Service	Section No. 3C, Sheet No. 16	34.33%
7	Large General Service and Industrial	Section No. 3C, Sheet No. 16	30.70%
8	Lighting	Section No. 3C, Sheet No. 16	0.97%
9			
10	Revenue Requirement by Customer Class		
11	Residential		
12	Forecasted 2nd Year TFA Revenue Requirement	line 2 x line 5	\$ 120,121
13	Balancing Account Under/(Over) Recovery	Schedule 5-2, line 10	(56,037)
14	Net Residential Revenue Requirement	line 12 + line 13	<u>\$ 64,085</u>
15			
16	Small General Service		
17	Forecasted 2nd Year TFA Revenue Requirement	line 2 x line 6	\$ 121,287
18	Balancing Account Under/(Over) Recovery	Schedule 5-2, line 23	(49,809)
19	Net Small General Service Revenue Requirement	line 17 + line 18	<u>\$ 71,478</u>
20			
21	Large General Service and Industrial		
22	Forecasted 2nd Year TFA Revenue Requirement	line 2 x line 7	\$ 108,462
23	Balancing Account Under/(Over) Recovery	Schedule 5-2, line 36	(48,120)
24	Net Large General Service and Industrial Revenue Requirement	line 22 + line 23	<u>\$ 60,343</u>
25			
26	Lighting		
27	Forecasted 2nd Year TFA Revenue Requirement	line 2 x line 8	\$ 3,427
28	Balancing Account Under/(Over) Recovery	Schedule 5-2, line 49	(372)
29	Net Lighting Revenue Requirement	line 27 + line 28	<u>\$ 3,055</u>
30			
31	Forecasted South Dakota kWh sales		
32	Residential	6/1/15 - 5/31/16 BHP Sales Budget	515,920,540
33	Small General Service	6/1/15 - 5/31/16 BHP Sales Budget	425,969,988
34	Large General Service and Industrial	6/1/15 - 5/31/16 BHP Sales Budget	527,698,670
35	Lighting	6/1/15 - 5/31/16 BHP Sales Budget	14,208,746
36			
37	Transmission Facilities Adjustment Rate / kWh (June 1, 2015 through May 31, 2016)		
38	Residential	line 14 ÷ line 32	\$ 0.00012
39	Small General Service	line 19 ÷ line 33	\$ 0.00017
40	Large General Service and Industrial	line 24 ÷ line 34	\$ 0.00011
41	Lighting	line 29 ÷ line 35	\$ 0.00022



BLACK HILLS POWER
TFA ANNUAL BALANCING ACCOUNT TRUE-UP

Line No.	Actual Jun-14	Actual Jul-14	Actual Aug-14	Actual Sep-14	Actual Oct-14	Actual Nov-14	Actual Dec-14	Actual Jan-15	Forecasted Feb-15	Forecasted Mar-15	Forecasted Apr-15	Forecasted May-15	Forecasted Jun-15
1 Residential													
2 Expected Recovery	\$ 2,607	\$ 5,213	\$ 5,213	\$ 5,213	\$ 5,213	\$ 5,213	\$ 5,213	\$ 5,213	\$ 5,213	\$ 5,213	\$ 5,213	\$ 5,213	\$ 2,607
3 Actual Revenues	3,020	8,271	9,987	8,348	7,549	8,350	12,469	13,151	11,663	11,651	9,642	8,442	3,978
4 Monthly Under/(Over) Recovery	(414)	(3,058)	(4,774)	(3,135)	(2,336)	(3,137)	(7,256)	(7,938)	(6,450)	(6,438)	(4,429)	(3,229)	(1,371)
5													
6 Days in Current Month	30	31	31	30	31	30	31	31	28	31	30	31	30
7 Interest Rate	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
8 Monthly Interest	(2)	(21)	(49)	(66)	(82)	(98)	(145)	(193)	(210)	(272)	(291)	(321)	(321)
9													
10 Balancing Account	\$ (416)	\$ (3,494)	\$ (8,317)	\$ (11,518)	\$ (13,936)	\$ (17,172)	\$ (24,573)	\$ (32,705)	\$ (39,365)	\$ (46,075)	\$ (50,794)	\$ (54,345)	\$ (56,037)
13 Small General Service													
14 Expected Recovery	\$ 2,824	\$ 5,648	\$ 5,648	\$ 5,648	\$ 5,648	\$ 5,648	\$ 5,648	\$ 5,648	\$ 5,648	\$ 5,648	\$ 5,648	\$ 5,648	\$ 2,824
15 Actual Revenues	3,235	10,154	12,039	10,493	9,103	8,414	10,481	10,598	8,855	9,336	8,729	8,915	5,186
16 Monthly Under/(Over) Recovery	(411)	(4,506)	(6,391)	(4,845)	(3,455)	(2,766)	(4,833)	(4,950)	(3,207)	(3,688)	(3,081)	(3,267)	(2,362)
17													
18 Interest:													
19 Days in Current Month	30	31	31	30	31	30	31	31	28	31	30	31	30
20 Interest Rate	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
21 Monthly Interest	(2)	(29)	(67)	(94)	(118)	(131)	(164)	(195)	(194)	(238)	(250)	(279)	(285)
22													
23 Balancing Account	\$ (413)	\$ (4,949)	\$ (11,407)	\$ (16,346)	\$ (19,919)	\$ (22,815)	\$ (27,812)	\$ (32,958)	\$ (36,359)	\$ (40,285)	\$ (43,616)	\$ (47,162)	\$ (49,809)
26 Large General Service and Industrial													
27 Expected Recovery	\$ 4,360	\$ 8,719	\$ 8,719	\$ 8,719	\$ 8,719	\$ 8,719	\$ 8,719	\$ 8,719	\$ 8,719	\$ 8,719	\$ 8,719	\$ 8,719	\$ 4,360
28 Actual Revenues	2,844	12,924	13,654	13,678	13,361	12,568	13,346	12,903	12,435	12,409	11,231	12,117	7,408
29 Monthly Under/(Over) Recovery	1,516	(4,205)	(4,935)	(4,959)	(4,641)	(3,849)	(4,627)	(4,183)	(3,716)	(3,690)	(2,512)	(3,398)	(3,048)
30													
31 Interest:													
32 Days in Current Month	30	31	31	30	31	30	31	31	28	31	30	31	30
33 Interest Rate	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
34 Monthly Interest	9	(16)	(45)	(73)	(103)	(123)	(155)	(181)	(184)	(227)	(235)	(265)	(275)
35													
36 Balancing Account	\$ 1,524	\$ (2,697)	\$ (7,677)	\$ (12,708)	\$ (17,453)	\$ (21,424)	\$ (26,206)	\$ (30,570)	\$ (34,470)	\$ (38,386)	\$ (41,133)	\$ (44,796)	\$ (48,120)
39 Lighting													
40 Expected Recovery	\$ 244	\$ 488	\$ 488	\$ 488	\$ 488	\$ 488	\$ 488	\$ 488	\$ 488	\$ 488	\$ 488	\$ 488	\$ 244
41 Actual Revenues	119	420	459	502	570	600	696	672	547	525	492	431	190
42 Monthly Under/(Over) Recovery	125	68	30	(13)	(82)	(111)	(207)	(183)	(59)	(37)	(4)	57	54
43													
44 Interest:													
45 Days in Current Month	30	31	31	30	31	30	31	31	28	31	30	31	30
46 Interest Rate	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
47 Monthly Interest	1	1	1	1	1	0	(1)	(2)	(2)	(3)	(3)	(3)	(2)
48													
49 Balancing Account	\$ 126	\$ 196	\$ 227	\$ 215	\$ 133	\$ 22	\$ (186)	\$ (372)	\$ (433)	\$ (472)	\$ (479)	\$ (424)	\$ (372)



BLACK HILLS POWER
COST OF SERVICE - TRANSMISSION FACILITIES
Year Two Revenue Requirement Calculation

Line No.	Description	Reference	South Dakota Jurisdiction
1	Operating Revenue Required		
2	Transmission Facilities Revenue		\$ 353,298
3			
4	Operating Expenses		
5	Depreciation	Schedule 5-5, line 6	87,669
6	Assessed Filing Fee	Estimate	5,345
7	Total Operating Expenses		<u>93,014</u>
8			
9	Other Operating Revenues	Schedule 5-10, line 4 * 12	66,828
10			
11	Operating Income Before Tax	(line 2 - line 7 + line 9)	327,112
12			
13	Federal Income Tax	Schedule 5-5, line 15	83,000
14			
15	Return (Operating Income)	Schedule 5-5, line 12 (line 11 - line 13)	<u>\$ 244,112</u>
16			
17	Rate of Return		<u>7.76%</u>
18			
19	Rate Base		
20	Plant in Service	Schedule 5-4, line 2	3,247,000
21	Less: Accumulated Depreciation	Schedule 5-4, line 5	72,178
22	Less: Accumulated Deferred Income Taxes	Schedule 5-4, line 15	29,052
23			
24	Total Rate Base	(line 20 - line 21 - line 22)	<u>\$ 3,145,771</u>



BLACK HILLS POWER
RATE BASE - TRANSMISSION FACILITIES
Year Two Revenue Requirement Calculation

Exhibit 5
Page 5
Schedule 5-4

Line No.	Description	(a) Plant in Service for Rate Base	(b) South Dakota Jurisdictional Allocation	(c) (a) * (b) South Dakota Plant in Service for Rate Base
1	Property, Plant, and Equipment			
2	Lookout to Sundance Hill 69 kV Rebuild	3,247,000	100.00%	3,247,000
3				
4				
5	Book Depreciation Reserve		Schedule 5-5 line 4 x 50% + Schedule 5-9, line 5	72,178
6				
7				
8	Accumulated Deferred Taxes		<u>Year 1</u>	<u>Year 2</u>
9	Transmission Facilities - Plant in Service - South Dakota		3,247,000	1,082,333
10	MACRS Table - Depreciation Rate (20 year life)		<u>3.75%</u>	<u>7.219%</u>
11	South Dakota Tax Depreciation		121,763	78,134
12	South Dakota Book Depreciation		<u>87,669</u>	<u>29,223</u>
13	Timing Difference		34,094	48,911
14	Federal Income Tax Rate		<u>35.00%</u>	<u>35.00%</u>
15	South Dakota Deferred Tax		<u>11,933</u>	<u>17,119</u>
16				
17				
18	South Dakota Rate Base		(line 2 - line 5 - line 15)	<u>\$ 3,145,771</u>
19				



BLACK HILLS POWER
OPERATING EXPENSES AND TAXES - TRANSMISSION FACILITIES
Year Two Revenue Requirement Calculation

Line No.	Description	Reference	South Dakota		
1					
2			South Dakota	Depreciation	Depreciation
3	Depreciation Expense		Plant in Service	Rate	Expense
4	Lookout to Sundance Hill 69 kV Rebuild	Schedule 5-4 ln 2	3,247,000	2.70%	87,669
5					
6					
7	Federal Tax				
8	Rate Base - South Dakota	Schedule 5-4 line 18			3,145,771
9					
10	Interest Expense	calculated			89,969
11	Return on Equity	calculated			154,143
12	Return	line 11 + line 12			244,112
13					
14	Authorized Return - 7.76%	Docket EL14-026			7.76%
15	Federal Tax Expense - South Dakota	((line 11 x line 19) - line 11)			83,000
16					
17					
18	Assumptions				
19	Tax Multiplier - Federal Tax Rate at 35% - tax multiplier	(1/(1-.35))			1.5385
20					



BLACK HILLS POWER
REVENUE REQUIREMENT BY CUSTOMER CLASS - TRANSMISSION FACILITIES
Year One Revenue Requirement Calculation

Line No.	Description	Reference	South Dakota Forecast		EL14-037 Actual EIA Balancing Account	Revised Revenue Requirement by Customer Class
1						
2	Transmission Facilities Annual Revenue Requirement (June 1, 2014 through May 31, 2015)	Schedule 5-7 line 2	\$	316,435		
3						
4	Production Capacity Allocators by Customer Class					
5	Residential	Section No. 3C, Sheet No. 16		34.00%		
6	Small General Service	Section No. 3C, Sheet No. 16		34.33%		
7	Large General Service and Industrial	Section No. 3C, Sheet No. 16		30.70%		
8	Lighting	Section No. 3C, Sheet No. 16		0.97%		
9						
10	Revenue Requirement by Customer Class					
11	Residential	line 2 x line 5	\$	107,588	\$ (45,031)	\$ 62,557
12	Small General Service	line 2 x line 6	\$	108,632	\$ (40,858)	\$ 67,774
13	Large General Service and Industrial	line 2 x line 7	\$	97,145	\$ 7,485	\$ 104,630
14	Lighting	line 2 x line 8	\$	3,069	\$ 2,791	\$ 5,860



BLACK HILLS POWER
COST OF SERVICE - TRANSMISSION FACILITIES
Year One Revenue Requirement Calculation

Line No.	Description	Reference	South Dakota Jurisdiction
1	Operating Revenue Required		
2	Transmission Facilities Revenue		\$ 316,435
3			
4	Operating Expenses		
5	Depreciation	Schedule 5-9, line 6	69,443
5a	Assessed Filing Fee	Docket EL14-013	5,345
6	Property Taxes	Schedule 5-9, line 23	22,188
7	Total Operating Expenses		<u>96,975</u>
8			
9	Other Operating Revenues	Schedule 5-10, line 5	44,013
10			
11	Operating Income Before Tax	(line 2 - line 7 + line 9)	263,473
12			
13	Federal Income Tax	Schedule 5-9, line 17	63,020
14			
15	Return (Operating Income)	Schedule 5-9, line 14 (line 11 - line 13)	<u>\$ 200,453</u>
16			
17	Rate of Return		<u>7.93%</u>
18			
19	Rate Base		
20	Plant in Service	Schedule 5-8, line 6	2,571,954
21	Less: Accumulated Depreciation	Schedule 5-8, line 9	34,721
22	Less: Accumulated Deferred Income Taxes	Schedule 5-8, line 19	9,452
23			
24	Total Rate Base	(line 20 - line 21 - line 22)	<u>\$ 2,527,781</u>



BLACK HILLS POWER
RATE BASE - TRANSMISSION FACILITIES
Year One Revenue Requirement Calculation

Exhibit 5
Page 9
Schedule 5-8

Line No.	Description	(a) Plant in Service for Rate Base	(b) South Dakota Jurisdictional Allocation	(c) (a) * (b) South Dakota Plant in Service for Rate Base	(d) Date in Service	(e) Allocation Based on In-Service Date	(f) (d) * (e) South Dakota Allocation Based on In-Service Date
1	Property, Plant, and Equipment						
2	Custer to Hot Springs 69 kV Rebuild - Phase I	\$ 2,653,751	100.00%	\$ 2,653,751	3/17/2014	54.25% (1)	\$ 1,439,660
3	Custer to Hot Springs 69 kV Rebuild - Phase II	2,008,247	100.00%	2,008,247	9/16/2014	4.11% (1)	82,539
4	Lookout to Sundance Hill 69 kV Rebuild	3,247,000	100.00%	3,247,000	2/3/2015	32.33% (2)	1,049,755
5							
6	Total Plant in Service - Transmission Facilities	<u>\$ 7,908,998</u>		<u>7,908,998</u>			<u>2,571,954</u>
7							
8							
9	Book Depreciation Reserve				Schedule 5-9 line 6 x 50%		<u>34,721</u>
10							
11							
12	Accumulated Deferred Taxes						
13	Transmission Facilities - Plant in Service - South Dakota					line 6	2,571,954
14	MACRS Table - Depreciation Rate (20 year life)						3.75%
15	South Dakota Tax Depreciation					line 13 x line 14	96,448
16	South Dakota Book Depreciation					Schedule 5-9 line 6	69,443
17	Timing Difference					line 15 - line 16	27,006
18	Federal Income Tax Rate						35.00%
19	South Dakota Deferred Tax					line 17 x line 18	9,452
20							
21							
22	South Dakota Rate Base				(line 6 - line 9 - line 19)		<u>\$ 2,527,781</u>
23							
24							

25 Note (1) - Allocation % is for the time period from the in-service date through 9/30/14. The Company requested to shift cost recovery of the Custer to Hot Springs 69 kV
26 line from the TFA rider to base rates in Docket EL14-026.
27 Note (2) - Allocation is for the time period of 2/3/15 through 5/31/15.



BLACK HILLS POWER
OPERATING EXPENSES AND TAXES - TRANSMISSION FACILITIES
Year One Revenue Requirement Calculation

Line No.	Description	Reference	(Note 1)		South Dakota
			South Dakota Plant in Service	Depreciation Rate	Depreciation Expense
1					
2					
3	Depreciation Expense				
4	Custer to Hot Springs 69 kV Rebuild	Schedule 5-8, ln 2 + ln 3	1,522,199	2.70%	41,099
5	Lookout to Sundance Hill 69 kV Rebuild	Schedule 5-8, ln 4	1,049,755	2.70%	28,343
6	Depreciation Expense - South Dakota	line 4 + line 5			<u>69,443</u>
7					
8					
9	Federal Tax				
10	Rate Base - South Dakota	Schedule 5-8 line 22			2,527,781
11					
12	Interest Expense	calculated			83,417
13	Return on Equity	calculated			117,036
14	Return	line 12 + line 13			<u>200,453</u>
15					
16	Authorized Return - 7.93%	Docket EL12-061			7.93%
17	Federal Tax Expense - South Dakota	((line 13 x line 27) - line 13)			<u>63,020</u>
18					
19					
20	Property Taxes				
21	SD Plant in Service - Transmission Facilities	line 4			\$ 1,522,199
22	Effective Blended Tax Rate	Docket No. EL12-061			1.4576%
23	Property Tax - South Dakota	(line 21 x line 22)			<u>\$ 22,188</u>
24					
25					
26	Assumptions				
27	Tax Multiplier - Federal Tax Rate at 35% - tax multiplier	(1/(1-.35))			1.5385
28					
29					
30	Note (1) Depreciation rate is from the 2013 depreciation study that will be filed in the 2014 general rate case.				



BLACK HILLS POWER
OTHER OPERATING REVENUE - TRANSMISSION FACILITIES
Year One Revenue Requirement Calculation

<u>Line No.</u>	<u>Description</u>	<u>Monthly Joint Ownership Agreement Revenue</u>	<u>Number of Months</u>	<u>Total Revenue</u>
1	Rent from Electric Property			
2	Custer to Hot Springs 69 kV Rebuild - Phase I	\$ 4,551 (1)	6	27,306
3	Custer to Hot Springs 69 kV Rebuild - Phase II	3,444 (2)	-	-
4	Lookout to Sundance Hill 69 kV Rebuild	5,569 (3)	3	16,707
5	Total Rent from Electric Property			<u>44,013</u>

Note (1) The line was placed in service on March 17, 2014. Monthly facility payments will be received from April 2014 through September 2014, and then the asset and associated revenues will be rolled into base rates.

Note (2) The line was placed in service on September 16, 2014. Monthly facility payments will be received starting in October and is reflected in in base rates.

Note (3) The line was placed in service on February 3, 2015. Monthly facility payments will be received from March 2015 through May 2015.



**BLACK HILLS POWER
RESIDENTIAL CUSTOMER IMPACT
TFA Rate Change**

<u>LINE NO.</u>	<u>CUSTOMER IMPACT</u>	<u>CURRENT RATES</u>	<u>PROPOSED TFA RATE</u>	<u>INCREASE OR (DECREASE)</u>
1				
2	Residential Service			
3	<i>TRANSMISSION FACILITY ADJUSTMENT RATE</i>			
4	TFA Rate \$ / kWh	\$ 0.00023	\$ 0.00012	\$ (0.00011)
5				
6				
7				
8	Monthly Customer Charge	\$ 10.00		\$ 10.00
9	Energy Charge - Base Rate at average monthly kWh	\$ 0.10697 x	650 kWh	69.53
10	Base Costs	\$ 0.02270 x	650 kWh	14.76
11	Energy Cost Adjustment at average monthly kWh	\$ 0.00700 x	650 kWh	4.55
12	Transmission Facility at average monthly kWh	\$ 0.00023 x	650 kWh	0.15
13	Energy Efficiency at average monthly kWh	\$ 0.00020 x	650 kWh	0.13
14	Current Total Bill at monthly average			\$ 99.12
15	TFA Rate Change at monthly average kWh	\$ (0.00011) x	650 kWh	(0.07)
16	Proposed Total Residential Bill			\$ 99.05
17	Percent Change			-0.07%