



**TRANSMISSION FACILITY ADJUSTMENT**  
**For the Pro Forma Year Ended May 31, 2017**

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**BLACK HILLS ENERGY**  
**COST RECOVERY RATE - TRANSMISSION FACILITIES**  
**Rate Calculation Effective June 1, 2016**

| Line No. | Description  | Reference                         | South Dakota     |
|----------|--|-----------------------------------|------------------|
| 1        |  |                                   |                  |
| 2        | Transmission Facilities Year 3 Revenue Requirement (June 1, 2016 through May 31, 2017) | Schedule 4-3, line 2              | \$ 272,246       |
| 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 3rd Year TFA Revenue Requirement  | line 2 x line 5                   | \$ 92,564        |
| 13       | Balancing Account Under/(Over) Recovery  | Schedule 4-2, line 10             | (14,316)         |
| 14       | Net Residential Revenue Requirement  | line 12 + line 13                 | <u>\$ 78,248</u> |
| 15       |  |                                   |                  |
| 16       | Small General Service  |                                   |                  |
| 17       | Forecasted 3rd Year TFA Revenue Requirement  | line 2 x line 6                   | \$ 93,462        |
| 18       | Balancing Account Under/(Over) Recovery  | Schedule 4-2, line 23             | (19,486)         |
| 19       | Net Small General Service Revenue Requirement  | line 17 + line 18                 | <u>\$ 73,976</u> |
| 20       |  |                                   |                  |
| 21       | Large General Service and Industrial   |                                   |                  |
| 22       | Forecasted 3rd Year TFA Revenue Requirement  | line 2 x line 7                   | \$ 83,579        |
| 23       | Balancing Account Under/(Over) Recovery  | Schedule 4-2, line 36             | (24,397)         |
| 24       | Net Large General Service and Industrial Revenue Requirement                           | line 22 + line 23                 | <u>\$ 59,182</u> |
| 25       |  |                                   |                  |
| 26       | Lighting   |                                   |                  |
| 27       | Forecasted 3rd Year TFA Revenue Requirement  | line 2 x line 8                   | \$ 2,641         |
| 28       | Balancing Account Under/(Over) Recovery  | Schedule 4-2, line 49             | (589)            |
| 29       | Net Lighting Revenue Requirement   | line 27 + line 28                 | <u>\$ 2,052</u>  |
| 30       |  |                                   |                  |
| 31       | Forecasted South Dakota kWh sales  |                                   |                  |
| 32       | Residential  | 6/1/16 - 5/31/17 BHP Sales Budget | 534,996,818      |
| 33       | Small General Service  | 6/1/16 - 5/31/17 BHP Sales Budget | 423,681,795      |
| 34       | Large General Service and Industrial   | 6/1/16 - 5/31/17 BHP Sales Budget | 551,372,025      |
| 35       | Lighting   | 6/1/16 - 5/31/17 BHP Sales Budget | 14,184,532       |
| 36       |  |                                   |                  |
| 37       | Transmission Facilities Adjustment Rate / kWh (June 1, 2016 through May 31, 2017)      |                                   |                  |
| 38       | Residential  | line 14 ÷ line 32                 | \$ 0.00015       |
| 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                 | \$ 0.00014       |



**BLACK HILLS ENERGY**  
**TFA ANNUAL BALANCING ACCOUNT TRUE-UP**

| Line No.                                       | Actual Jan-15 | Actual Feb-15 | Actual Mar-15 | Actual Apr-15 | Actual May-15 | Actual Jun-15 | Actual Jul-15 | Actual Aug-15 | Actual Sep-15 | Actual Oct-15 | Actual Nov-15 | Actual Dec-15 | Actual Jan-16 | Forecast Feb-16 | Forecast Mar-16 | Forecast Apr-16 | Forecast May-16 | Forecast Jun-16 |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>1 Residential</b>                           |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| 2 Expected Recovery                            | \$ 4,670      | \$ 4,670      | \$ 4,670      | \$ 4,670      | \$ 4,670      | \$ 6,423      | \$ 8,176      | \$ 8,176      | \$ 8,176      | \$ 8,176      | \$ 8,176      | \$ 8,176      | \$ 8,176      | \$ 8,176        | \$ 8,176        | \$ 8,176        | \$ 8,176        | \$ 4,088        |
| 3 Actual Revenues                              | 13,151        | 11,282        | 11,038        | 8,244         | 7,685         | 5,991         | 4,083         | 4,413         | 4,010         | 3,252         | 3,403         | 4,982         | 5,550         | 4,691           | 4,629           | 3,819           | 3,660           | 1,989           |
| 4 Monthly Under/(Over) Recovery                | (8,482)       | (6,612)       | (6,368)       | (3,574)       | (3,015)       | 432           | 4,093         | 3,763         | 4,166         | 4,924         | 4,773         | 3,194         | 2,627         | 3,485           | 3,547           | 4,357           | 4,516           | 2,099           |
| 5  |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| 6 Days in Current Month                        | 31            | 28            | 31            | 30            | 31            | 30            | 31            | 31            | 30            | 31            | 30            | 31            | 31            | 29              | 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%         | 7.00%           | 7.00%           | 7.00%           | 7.00%           | 7.00%           |
| 8 Monthly Interest                             | (218)         | (234)         | (298)         | (311)         | (341)         | (329)         | (318)         | (297)         | (265)         | (247)         | (213)         | (202)         | (187)         | (157)           | (148)           | (119)           | (97)            | (82)            |
| 9  |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| 10 Balancing Account                           | \$ (36,884)   | \$ (43,729)   | \$ (50,395)   | \$ (54,280)   | \$ (57,635)   | \$ (57,532)   | \$ (53,757)   | \$ (50,291)   | \$ (46,390)   | \$ (41,712)   | \$ (37,151)   | \$ (34,159)   | \$ (31,720)   | \$ (28,391)     | \$ (24,992)     | \$ (20,753)     | \$ (16,334)     | \$ (14,316)     |
| 11   |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| <b>13 Small General Service</b>                |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| 14 Expected Recovery                           | \$ 5,099      | \$ 5,099      | \$ 5,099      | \$ 5,099      | \$ 5,099      | \$ 6,678      | \$ 8,256      | \$ 8,256      | \$ 8,256      | \$ 8,256      | \$ 8,256      | \$ 8,256      | \$ 8,256      | \$ 8,256        | \$ 8,256        | \$ 8,256        | \$ 8,256        | \$ 4,128        |
| 15 Actual Revenues                             | 10,598        | 9,808         | 9,731         | 8,702         | 8,385         | 7,563         | 5,459         | 6,051         | 5,439         | 4,763         | 4,249         | 5,054         | 5,117         | 4,289           | 4,594           | 4,249           | 4,347           | 2,514           |
| 16 Monthly Under/(Over) Recovery               | (5,499)       | (4,709)       | (4,632)       | (3,603)       | (3,286)       | (885)         | 2,796         | 2,204         | 2,817         | 3,493         | 4,007         | 3,202         | 3,138         | 3,967           | 3,662           | 4,007           | 3,909           | 1,614           |
| 17   |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| 18 Interest:                                   |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| 19 Days in Current Month                       | 31            | 28            | 31            | 30            | 31            | 30            | 31            | 31            | 30            | 31            | 30            | 31            | 31            | 29              | 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%         | 7.00%           | 7.00%           | 7.00%           | 7.00%           | 7.00%           |
| 21 Monthly Interest                            | (220)         | (225)         | (278)         | (291)         | (322)         | (319)         | (315)         | (303)         | (279)         | (269)         | (239)         | (230)         | (212)         | (178)           | (169)           | (142)           | (124)           | (111)           |
| 22   |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| 23 Balancing Account                           | \$ (37,177)   | \$ (42,111)   | \$ (47,021)   | \$ (50,916)   | \$ (54,524)   | \$ (55,728)   | \$ (53,246)   | \$ (51,346)   | \$ (48,808)   | \$ (45,585)   | \$ (41,817)   | \$ (38,845)   | \$ (35,919)   | \$ (32,130)     | \$ (28,638)     | \$ (24,773)     | \$ (20,988)     | \$ (19,486)     |
| 24   |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| <b>26 Large General Service and Industrial</b> |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| 27 Expected Recovery                           | \$ 8,229      | \$ 8,229      | \$ 8,229      | \$ 8,229      | \$ 8,229      | \$ 7,805      | \$ 7,383      | \$ 7,383      | \$ 7,383      | \$ 7,383      | \$ 7,383      | \$ 7,383      | \$ 7,383      | \$ 7,383        | \$ 7,383        | \$ 7,383        | \$ 7,383        | \$ 3,691        |
| 28 Actual Revenues                             | 12,903        | 12,369        | 11,017        | 11,234        | 12,671        | 10,660        | 5,823         | 5,519         | 5,507         | 5,482         | 5,387         | 4,709         | 3,965         | 3,904           | 3,478           | 3,688           | 4,103           | 2,104           |
| 29 Monthly Under/(Over) Recovery               | (4,674)       | (4,140)       | (2,788)       | (3,005)       | (4,442)       | (2,855)       | 1,560         | 1,864         | 1,876         | 1,901         | 1,996         | 2,674         | 3,417         | 3,479           | 3,905           | 3,695           | 3,280           | 1,587           |
| 30   |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| 31 Interest:                                   |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| 32 Days in Current Month                       | 31            | 28            | 31            | 30            | 31            | 30            | 31            | 31            | 30            | 31            | 30            | 31            | 31            | 29              | 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%         | 7.00%           | 7.00%           | 7.00%           | 7.00%           | 7.00%           |
| 34 Monthly Interest                            | (203)         | (207)         | (247)         | (257)         | (294)         | (303)         | (305)         | (296)         | (277)         | (277)         | (258)         | (252)         | (233)         | (200)           | (192)           | (166)           | (153)           | (140)           |
| 35   |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| 36 Balancing Account                           | \$ (34,343)   | \$ (38,689)   | \$ (41,724)   | \$ (44,986)   | \$ (49,723)   | \$ (52,880)   | \$ (51,625)   | \$ (50,057)   | \$ (48,459)   | \$ (46,835)   | \$ (45,097)   | \$ (42,676)   | \$ (39,492)   | \$ (36,213)     | \$ (32,501)     | \$ (28,972)     | \$ (25,845)     | \$ (24,397)     |
| 37   |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| <b>39 Lighting</b>                             |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| 40 Expected Recovery                           | \$ 473        | \$ 473        | \$ 473        | \$ 473        | \$ 473        | \$ 353        | \$ 233        | \$ 233        | \$ 233        | \$ 233        | \$ 233        | \$ 233        | \$ 233        | \$ 233          | \$ 233          | \$ 233          | \$ 233          | \$ 117          |
| 41 Actual Revenues                             | 672           | 569           | 562           | 460           | 281           | 472           | 178           | 201           | 216           | 244           | 264           | 282           | 282           | 241             | 230             | 216             | 186             | 83              |
| 42 Monthly Under/(Over) Recovery               | (199)         | (96)          | (89)          | 13            | 192           | (119)         | 55            | 33            | 18            | (11)          | (31)          | (49)          | (49)          | (8)             | 3               | 17              | 47              | 34              |
| 43   |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| 44 Interest:                                   |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| 45 Days in Current Month                       | 31            | 28            | 31            | 30            | 31            | 30            | 31            | 31            | 30            | 31            | 30            | 31            | 31            | 29              | 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%         | 7.00%           | 7.00%           | 7.00%           | 7.00%           | 7.00%           |
| 47 Monthly Interest                            | (3)           | (3)           | (4)           | (4)           | (3)           | (3)           | (3)           | (3)           | (3)           | (3)           | (3)           | (4)           | (4)           | (4)             | (4)             | (4)             | (4)             | (3)             |
| 48   |               |               |               |               |               |               |               |               |               |               |               |               |               |                 |                 |                 |                 |                 |
| 49 Balancing Account                           | \$ (491)      | \$ (590)      | \$ (683)      | \$ (674)      | \$ (485)      | \$ (608)      | \$ (556)      | \$ (526)      | \$ (511)      | \$ (525)      | \$ (559)      | \$ (612)      | \$ (664)      | \$ (676)        | \$ (677)        | \$ (663)        | \$ (620)        | \$ (589)        |



**BLACK HILLS ENERGY**  
**COST OF SERVICE - TRANSMISSION FACILITIES**  
**Year Three Revenue Requirement Calculation**

| Line No. | Description                             | Reference                                 | South Dakota Jurisdiction |
|----------|---|---|---------------------------|
| 1        | Operating Revenue Required              |   |                           |
| 2        | Transmission Facilities Revenue         |   | \$ 272,246                |
| 3        |   |   |                           |
| 4        | Operating Expenses                      |   |                           |
| 5        | Depreciation                            | Schedule 4-5, line 3                      | 52,608                    |
| 6        | Assessed Filing Fee                     | Docket EL 15-007                          | 3,689                     |
| 7        | Total Operating Expenses                |   | <u>56,296</u>             |
| 8        |   |   |                           |
| 9        | Other Operating Revenues                | Schedule 4-10, (line 4+ line 5) * 12      | (60,852)                  |
| 10       |   |   |                           |
| 11       | Operating Income Before Tax             | (line 2 - line 7 + line 9)                | 155,098                   |
| 12       |   |   |                           |
| 13       | Federal Income Tax                      | Schedule 4-5, line 14                     | 39,354                    |
| 14       |   |   |                           |
| 15       | Return (Operating Income)               | Schedule 4-5, line 11 (line 11 - line 13) | <u>\$ 115,744</u>         |
| 16       |   |   |                           |
| 17       | Rate of Return                          |   | <u>7.76%</u>              |
| 18       |   |   |                           |
| 19       | Rate Base                               |   |                           |
| 20       | Plant in Service                        | Schedule 4-4, line 2                      | 1,948,427                 |
| 21       | Less: Accumulated Depreciation          | Schedule 4-4, line 5                      | 118,206                   |
| 22       | Less: Accumulated Deferred Income Taxes | Schedule 4-4, line 15                     | 338,679                   |
| 23       |   |   |                           |
| 24       | Total Rate Base                         | (line 20 - line 21 - line 22)             | <u>\$ 1,491,542</u>       |



**BLACK HILLS ENERGY**  
**RATE BASE - TRANSMISSION FACILITIES**  
**Year Three Revenue Requirement Calculation**

| Line No. | Description   | (a)<br>Plant in Service for Rate Base                                       | (b)<br>South Dakota Jurisdictional Allocation | (c)<br>(a) * (b)<br>South Dakota Plant in Service for Rate Base |
|----------|---|---|---|---|
| 1        | Property, Plant, and Equipment                            |   |   |   |
| 2        | Lookout to Sundance Hill 69 kV Rebuild                    | \$ 1,948,427  | 100.00%                                       | \$ 1,948,427  |
| 3        |   |   |   |   |
| 4        |   |   |   |   |
| 5        | Book Depreciation Reserve                                 | Docket EL15-007 Year 1 + Schedule 4-9<br>line 6 + Schedule 4-5 line 3 * 50% |   | 118,206   |
| 6        |   |   |   |   |
| 7        |   |   |   |   |
| 8        | Accumulated Deferred Taxes                                | <u>Year 1</u>   | <u>Year 2</u>                                 | <u>Year 3</u>   |
| 9        | Transmission Facilities - Plant in Service - South Dakota | 1,948,427   | 1,948,427                                     | 649,476   |
| 10       | MACRS Table - Depreciation Rate (20 year life)            | <u>51.875%</u>  | <u>3.6095%</u>                                | <u>3.3385%</u>  |
| 11       | South Dakota Tax Depreciation                             | <u>1,010,747</u>  | <u>70,328</u>                                 | <u>21,683</u>   |
| 12       | South Dakota Book Depreciation                            | <u>64,960</u>   | <u>52,608</u>                                 | <u>17,536</u>   |
| 13       | Timing Difference   | <u>945,786</u>  | <u>17,720</u>                                 | <u>4,147</u>  |
| 14       | Federal Income Tax Rate                                   | <u>35.00%</u>   | <u>35.00%</u>                                 | <u>35.00%</u>   |
| 15       | South Dakota Deferred Tax                                 | <u>331,025</u>  | <u>6,202</u>                                  | <u>1,451</u>  |
| 16       |   |   |   |   |
| 17       |   |   |   |   |
| 18       | South Dakota Rate Base                                    | (line 2 - line 5 - line 15)   |   | <u>\$ 1,491,542</u>   |
| 19       |   |   |   |   |



**BLACK HILLS ENERGY**  
**OPERATING EXPENSES AND TAXES - TRANSMISSION FACILITIES**  
**Year Three Revenue Requirement Calculation**

| Line No. | Description   | Reference                       | South Dakota Plant in Service | Depreciation Rate | South Dakota Depreciation Expense |
|----------|---|---------------------------------|-------------------------------|-------------------|-----------------------------------|
| 1        |   |                                 | South Dakota                  | Depreciation      | Depreciation                      |
| 2        | Depreciation Expense                                      |                                 | Plant in Service              | Rate              | Expense                           |
| 3        | Lookout to Sundance Hill 69 kV Rebuild                    | Schedule 4-4 line 2             | \$ 1,948,427                  | 2.70%             | \$ 52,608                         |
| 4        |   |                                 |                               |                   |                                   |
| 5        |   |                                 |                               |                   |                                   |
| 6        | Federal Tax   |                                 |                               |                   |                                   |
| 7        | Rate Base - South Dakota                                  | Schedule 4-4 line 18            |                               |                   | 1,491,542                         |
| 8        |   |                                 |                               |                   |                                   |
| 9        | Interest Expense  | calculated                      |                               |                   | 42,658                            |
| 10       | Return on Equity  | calculated                      |                               |                   | 73,086                            |
| 11       | Return  | line 9 + line 10                |                               |                   | 115,744                           |
| 12       |   |                                 |                               |                   |                                   |
| 13       | Authorized Return - 7.76%                                 | Docket EL14-026                 |                               |                   | 7.76%                             |
| 14       | Federal Tax Expense - South Dakota                        | ((line 10 x line 18) - line 10) |                               |                   | 39,354                            |
| 15       |   |                                 |                               |                   |                                   |
| 16       |   |                                 |                               |                   |                                   |
| 17       | Assumptions   |                                 |                               |                   |                                   |
| 18       | Tax Multiplier - Federal Tax Rate at 35% - tax multiplier | (1/(1-.35))                     |                               |                   | 1.5385                            |
| 19       |   |                                 |                               |                   |                                   |



**BLACK HILLS ENERGY**  
**REVENUE REQUIREMENT BY CUSTOMER CLASS - TRANSMISSION FACILITIES**  
**Year Two Revenue Requirement Calculation**

| Line No. | Description   | Reference                    | South Dakota Forecast |
|----------|---|------------------------------|-----------------------|
| 1        |   |                              |                       |
| 2        | Transmission Facilities Annual Revenue Requirement<br>(June 1, 2015 through May 31, 2016) | Schedule 4-7 line 2          | \$ 288,575            |
| 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              | \$ 98,115             |
| 12       | Small General Service   | line 2 x line 6              | \$ 99,068             |
| 13       | Large General Service and Industrial  | line 2 x line 7              | \$ 88,592             |
| 14       | Lighting  | line 2 x line 8              | \$ 2,799              |



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

| Line No. | Description                             | Reference                                 | South Dakota<br>Jurisdiction |
|----------|---|---|------------------------------|
| 1        | Operating Revenue Required              |   |                              |
| 2        | Transmission Facilities Revenue         |   | \$ 288,575                   |
| 3        |   |   |                              |
| 4        | Operating Expenses                      |   |                              |
| 5        | Depreciation                            | Schedule 4-9, line 4                      | 64,960                       |
| 6        | Assessed Filing Fee                     | Docket EL15-007                           | 3,689                        |
| 7        | Total Operating Expenses                |   | <u>68,649</u>                |
| 8        |   |   |                              |
| 9        | Other Operating Revenues                | Schedule 4-10, line 6                     | (10,412)                     |
| 10       |   |   |                              |
| 11       | Operating Income Before Tax             | (line 2 - line 7 + line 9)                | 209,514                      |
| 12       |   |   |                              |
| 13       | Federal Income Tax                      | Schedule 4-9, line 15                     | 53,161                       |
| 14       |   |   |                              |
| 15       | Return (Operating Income)               | Schedule 4-9, line 12 (line 11 - line 13) | <u>\$ 156,353</u>            |
| 16       |   |   |                              |
| 17       | Rate of Return                          |   | <u>7.76%</u>                 |
| 18       |   |   |                              |
| 19       | Rate Base                               |   |                              |
| 20       | Plant in Service                        | Schedule 4-8, line 5                      | 2,405,927                    |
| 21       | Less: Accumulated Depreciation          | Schedule 4-8, line 8                      | 59,422                       |
| 22       | Less: Accumulated Deferred Income Taxes | Schedule 4-8, line 18                     | 331,652                      |
| 23       |   |   |                              |
| 24       | Total Rate Base                         | (line 20 - line 21 - line 22)             | <u>\$ 2,014,853</u>          |





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

| Line No. | Description   | (a)<br>South Dakota<br>Plant in<br>Service for<br>Rate Base | (b)<br>Allocation<br>Based on<br>Contribution Date | (c)<br>(a) * (b)<br>South Dakota<br>Plant in<br>Service Based on<br>Contribution Date |
|----------|---|---|--|---|
| 1        | Property, Plant, and Equipment                              |   |  |   |
| 2        | Lookout to Sundance Hill 69 kV Rebuild                      | \$ 2,948,427  | 45.75%   | \$ 1,348,905  |
| 3        | Lookout to Sundance Hill 69 kV Rebuild, net of contribution | 1,948,427   | 54.25%   | 1,057,022   |
| 4        |   |   |  |   |
| 5        | Total Plant in Service                                      |   |  | <u>\$ 2,405,927</u>   |
| 6        |   |   |  |   |
| 7        |   |   |  |   |
| 8        | Book Depreciation Reserve                                   | Docket EL15-007 Year 1 + Schedule 4-9 line 4 * 50%          |  | 59,422  |
| 9        |   |   |  |   |
| 10       |   |   |  |   |
| 11       | Accumulated Deferred Taxes                                  |   | <u>Year 1</u>                                      | <u>Year 2</u>   |
| 12       | Transmission Facilities - Plant in Service - South Dakota   |   | 1,948,427  | 649,476   |
| 13       | MACRS Table - Depreciation Rate (20 year life)              |   | <u>51.875%</u>                                     | <u>3.6095%</u>  |
| 14       | South Dakota Tax Depreciation                               |   | <u>1,010,747</u>                                   | <u>23,443</u>   |
| 15       | South Dakota Book Depreciation                              |   | <u>64,960</u>                                      | <u>21,653</u>   |
| 16       | Timing Difference   |   | <u>945,787</u>                                     | <u>1,790</u>  |
| 17       | Federal Income Tax Rate                                     |   | <u>35.00%</u>                                      | <u>35.00%</u>   |
| 18       | South Dakota Deferred Tax                                   |   | <u>331,025</u>                                     | <u>627</u>  |
| 19       |   |   |  |   |
| 20       |   |   |  |   |
| 21       | South Dakota Rate Base                                      |   | (line 5 - line 8 - line 18)                        | <u>\$ 2,014,853</u>   |
| 22       |   |   |  |   |
| 23       |   |   |  |   |

24 Note (1) - Allocation % is for the time period from June 1, 2015 through November 15, 2015. The Company received a \$1 million investment to the  
25 addition from Butte Electric on November 16, 2015.

26 Note (2) - Allocation % is for the time period of November 16, 2015 through May 31, 2016.



**BLACK HILLS ENERGY**  
**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 4-8 line 5             | 2,405,927        | 2.70%        | 64,960       |
| 5        |   |                                 |                  |              |              |
| 6        |   |                                 |                  |              |              |
| 7        | Federal Tax   |                                 |                  |              |              |
| 8        | Rate Base - South Dakota                                  | Schedule 4-8 line 21            |                  |              | 2,014,853    |
| 9        |   |                                 |                  |              |              |
| 10       | Interest Expense  | calculated                      |                  |              | 57,625       |
| 11       | Return on Equity  | calculated                      |                  |              | 98,728       |
| 12       | Return  | line 10 + line 11               |                  |              | 156,353      |
| 13       |   |                                 |                  |              |              |
| 14       | Authorized Return - 7.76%                                 | Docket EL14-026                 |                  |              | 7.76%        |
| 15       | Federal Tax Expense - South Dakota                        | ((line 11 x line 19) - line 11) |                  |              | 53,161       |
| 16       |   |                                 |                  |              |              |
| 17       |   |                                 |                  |              |              |
| 18       | Assumptions   |                                 |                  |              |              |
| 19       | Tax Multiplier - Federal Tax Rate at 35% - tax multiplier | (1/(1-.35))                     |                  |              | 1.5385       |
| 20       |   |                                 |                  |              |              |



**BLACK HILLS ENERGY**  
**OTHER OPERATING REVENUE - TRANSMISSION FACILITIES**  
**Year Two 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               | Lookout to Sundance Hill 69 kV Rebuild                                    |  |                         |                      |
| 3               | System Additions (June - October)   | \$ 5,017   | 5                       | \$ 25,085            |
| 4               | System Additions (November - May)   | \$ 3,315   | 7                       | \$ 23,205            |
| 5               | Investment - (Note 1)   | \$ (8,386)                                       | 7                       | \$ (58,702)          |
| 6               | Other Operating Revenues Year 2   | <u>\$ (54)</u>                                   |                         | <u>\$ (10,412)</u>   |
| 7               |   |  |                         |                      |
| 8               | Note (1) - Investment in new addition, made by Coop on November 16, 2015. |  |                         |                      |
| 9               | Credit will be applied beginning November 2015                            |  |                         |                      |



**BLACK HILLS ENERGY**  
**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               | <b><u>Residential Service</u></b>                           |                      |                          |                               |            |
| 3               | <i>TRANSMISSION FACILITY ADJUSTMENT RATE</i>                |                      |                          |                               |            |
| 4               | TFA Rate  | \$ / kWh             | \$ 0.00010               | \$ 0.00015                    | \$ 0.00005 |
| 5               |   |                      |                          |                               |            |
| 6               |   |                      |                          |                               |            |
| 7               |   |                      |                          |                               |            |
| 8               | Monthly Customer Charge                                     | \$ 9.25              |                          | \$ 9.25                       |            |
| 9               | Energy Charge - Base Rate at average monthly kWh            | \$ 0.09989 x         | 650 kWh                  | 64.93                         |            |
| 10              | Base Costs  | \$ 0.02270 x         | 650 kWh                  | 14.76                         |            |
| 11              | Energy Cost Adjustment at average monthly kWh               | \$ 0.00960 x         | 650 kWh                  | 6.24                          |            |
| 12              | Transmission Facility at average monthly kWh                | \$ 0.00010 x         | 650 kWh                  | 0.07                          |            |
| 13              | Environmental Improvement Adjustment at average monthly kWh | \$ 0.00012 x         | 650 kWh                  | 0.08                          |            |
| 14              | Energy Efficiency at average monthly kWh                    | \$ 0.00040 x         | 650 kWh                  | 0.26                          |            |
| 15              | Current Total Bill at monthly average                       |                      |                          | \$ 95.59                      |            |
| 16              | TFA Rate Change at monthly average kWh                      | \$ 0.00005 x         | 650 kWh                  | 0.03                          |            |
| 17              | Proposed Total Residential Bill                             |                      |                          | \$ 95.62                      |            |
| 18              | Percent Change  |                      |                          | 0.03%                         |            |