treatment plant. The secondary pond would continue to receive water from the primary pond, and then discharge the treated combined effluent via Outfall 101 into SWEPCO Lake. SWEPCO is soliciting ADEQ's agreement that no additional treatment will be required, that no liner will be required in either the primary or secondary ash ponds, and that Outfall 101 will continue at its current location as is contained in the pre-draft NPDES renewal permit. Note: following PE certification of ash removal from the primary ash pond, SWEPCO will update the name of this pond to the "Primary Settling Pond", or similar name.

#### 2 – New coal pile run-off ponds:

SWEPCO is proposing to construct two new ponds, operating in series, dedicated to receiving coal pile runoff. The primary coal pile runoff pond would be located immediately east of the coal pile, and the second runoff pond would receive flow from the primary runoff pond but would be located within the current footprint of the primary ash pond. Polymer chemicals may be used to aid settling of fine coal particles in the ponds as needed. The ponds would be monitored to determine the amount of fines contained and accumulated coal would be periodically removed and placed back on the coal pile for combustion in the plant's boiler. The ponds would be constructed to facilitate removal of accumulated coal and may include concrete or other foundation sufficient to support heavy equipment, but no liner is currently planned. SWEPCO would like to continue to have the coal pile runoff stream be a constituent of wastewater Outfall 101, and identify the two new coal pile runoff ponds as new best management practices under the current permit requirement (Part II, Other Conditions, Item No. 7), and be monitored at the current wastewater Outfall 101.

SWEPCO is soliciting ADEQ's agreement that these two proposed unlined coal pile runoff ponds:

- 1. Be considered as storm water best management practices,
- 2. That the discharge from the ponds to the primary ash pond would continue as a source of wastewater to Outfall 101, and
- 3. That TSS would continue to be monitored at Outfall 101 as is currently the case.

#### 3 – Regulation of demineralizer waste streams

Upon completion and connection of the proposed submerged flight conveyor system, ash would no longer be sluiced to the primary ash pond. At that time, Flint Creek would also lose the exclusion currently available for hazardous waste management due to co-disposal of demineralizer waste streams with coal ash (Bevill Amendment exclusion). The demineralizer process generates wastewater with pH ranging from less than 2 to greater than 12.5 standard units, making them otherwise potentially subject to hazardous waste regulation. SWEPCO is considering mixing the acidic and caustic phases in a RCRA elementary neutralization unit, rendering the mixture non-hazardous for subsequent discharge to the primary ash pond. SWEPCO is requesting agreement by ADEQ regarding the general intent to neutralize the demineralizer regeneration waste streams within the pH range of 2 – 12.5, then discharge them as a source of wastewater to Outfall 101.

As time is of the essence to achieve compliance with the referenced regulations with this project, any expedited attention that can be given to these questions would very much be appreciated.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the

information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Upon ADEQ's review of the attached document, please contact either Randy Solomon at 214-777-1043, or Scott Carney at 479-444-4726, and we will set up a conference call to discuss these items.

~~~

Sara Vestfals,

Sincerely,

Manager, Flint Creek Power Plant

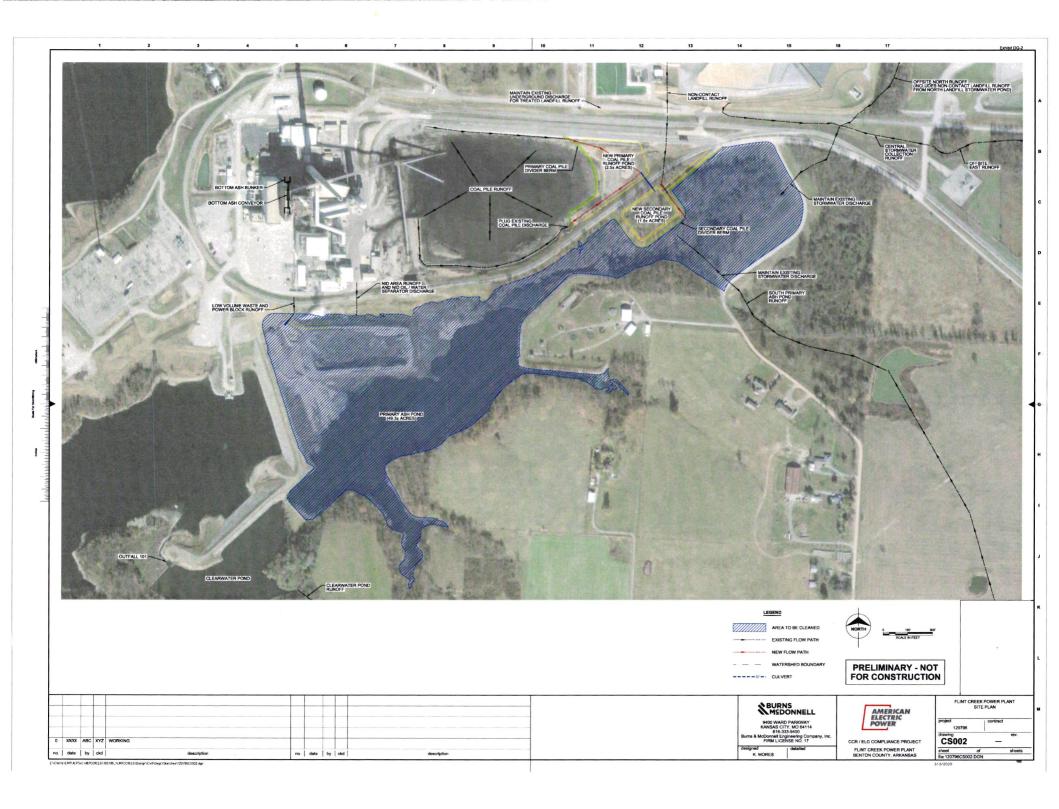
Cc: David Hall (ec)

Scott Carney (ec) Ivaunna Neigler (ec) Randy Solomon

File: FLC 180.05.2020

### Attachment

Southwestern Electric Power Company
Flint Creek Power Plant
Aerial Photo – New Proposed Coal Pile Runoff Ponds



Direct Testimony of Devi Glick, Exhibit DG-3

## Exhibit DG-3 SWEPCO Responses to Requests for Information, Public

| Data Request                                            | File Type |
|---------------------------------------------------------|-----------|
| SWEPCO Response to Sierra Club 1-7                      | PDF       |
| SWEPCO Response to Sierra Club 1-7, Attachment 2        | PDF       |
| SWEPCO Response to Sierra Club 1-7, Attachment 3        | PDF       |
| SWEPCO Response to Sierra Club 1-8                      | PDF       |
| SWEPCO Response to Sierra Club 1-9                      | PDF       |
| SWEPCO Response to Sierra Club 1-9, Attachment 1        | PDF       |
| SWEPCO Response to Sierra Club 2-2                      | PDF       |
| SWEPCO Response to Sierra Club 2-3                      | PDF       |
| SWEPCO Response to Sierra Club 2-6                      | PDF       |
| SWEPCO Response to Sierra Club 2-13                     | PDF       |
| SWEPCO Response to Sierra Club 2-17                     | PDF       |
| SWEPCO Response to Sierra Club 3-1                      | PDF       |
| SWEPCO Response to Sierra Club 3-2                      | PDF       |
| SWEPCO Response to Sierra Club 4-1                      | PDF       |
| SWEPCO Response to Sierra Club 5-2                      | PDF       |
| SWEPCO Response to CARD 1-16, Supplemental              | PDF       |
| SWEPCO Response to CARD 1-16, Supplemental Attachment 2 | PDF       |
| SWEPCO Response to CARD 2-10, Supplemental              | PDF       |
| SWEPCO Response to CARD 2-10, Supplemental Attachment 2 | Excel     |

<sup>\*</sup>CONFIDENTIAL Excel files were submitted via CD to the Commission pursuant to TAC § 22.71(d).

### SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO SIERRA CLUB'S FIRST SET OF REQUESTS FOR INFORMATION

#### **Ouestion No. Sierra Club 1-5:**

For each of the Company's coal- or solid-fuel units (Dolet Hills, Flint Creek, Pirkey, Turk, and Welsh), please produce any analysis or assessment conducted since 2015, of the economics of continued operation, i.e., a retirement study, of the unit or any unit replacement studies done by the Company.

#### Response No. Sierra Club 1-5:

Please see Sierra Club 1-5 Attachment 1 for the results of a Pirkey unit disposition analysis conducted at the request of stakeholders during the 2018 SWEPCO Arkansas IRP process. Please see Sierra Club 1-5 HIGHLY SENSITIVE Attachment 2 and Sierra Club 1-5 HIGHLY SENSITIVE Attachment 3 for the results of a 2019 Dolet Hills unit disposition analysis. Please see Sierra Club 1-5 HIGHLY SENSITIVE Attachment 4 and Sierra Club 1-5 HIGHLY SENSITIVE Attachment 4 sposition analysis. Please see Sierra Club 1-5 HIGHLY SENSITIVE Attachment 6 for the results of the 2020 analysis to evaluate the economics of making CCR and ELG retrofits at the Flint Creek, Pirkey and Welsh units.

Sierra Club 1-5 HIGHLY SENSITIVE Attachments 2 through 6 responsive to this request are HIGHLY SENSITIVE PROTECTED MATERIAL under the terms of the Protective Order. Due to current restrictions associated with COVID-19, this information is being provided electronically and a secure login to access the information will be provided upon request to individuals who have signed the Protective Order Certification.

Prepared By: Mark A. Becker Title: Mng Dir Res Plnning&Op Anlysis

Prepared By: Joseph S. Perez Title: Forecast Analyst Prin

Sponsored By: Thomas P. Brice Title: VP Regulatory & Finance

### SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO SIERRA CLUB'S FIRST SET OF REQUESTS FOR INFORMATION

#### **Ouestion No. Sierra Club 1-7:**

For each of the Company's coal- or solid-fuel units (Dolet Hills, Flint Creek, Pirkey, Turk, and Welsh), please provide the following historical annual data since 2010 and by month for 2019 and 2020 (or earliest available):

- a. Installed Capacity
- b. Unforced Capacity
- c. Capacity Factor
- d. Equivalent Availability Factor (EAF)
- e. Heat Rate
- f. Forced or random outage rate
- g. Effective forced outage rate (EFORd)
- h. Fixed O&M costs
- i. Non-Fuel Variable O&M costs
- j. Fuel Costs (by fuel type)

### **Response No. Sierra Club 1-7:**

Per agreement with counsel for Sierra Club, SWEPCO is providing the following data since 2015:

a-g: The requested information for the period 2015 - November 2020 is provided in Sierra Club 1-7 Highly Sensitive Confidential Attachment 1.

h-i: From an Accounting perspective, the Company does not separately track variable and fixed O&M costs. For the period 2015 - November 2020, total O&M for each of SWEPCO's solid fuel units is provided in Sierra Club 1-7 Attachment 2.

j: For the eligible solid fuel costs, please refer to Sierra Club 1-7 Attachment 3.

Sierra Club 1-7 HIGHLY SENSITIVE Attachment 1 responsive to this request is HIGHLY SENSITIVE PROTECTED MATERIAL under the terms of the Protective Order. Due to current restrictions associated with COVID-19, this information is being provided electronically and a secure login to access the information will be provided upon request to individuals who have signed the Protective Order Certification.

Prepared By: Tara D. Beske Title: Regulatory Consultant Staff

Prepared By: Michael H. Ward

Title: Regulatory Consultant Staff

Sponsored By: Amy E. Jeffries

Title: Coal Procurement Mgr

Sponsored By: Monte A. McMahon

Title: VP Generating Assets SWEPCO

### SWEPCO Generation Solid Fuel Unit Annual O&M for the Period 2015 - 2018

| Unit        | 2015         | 2016         | 2017         | 2018         |
|-------------|--------------|--------------|--------------|--------------|
| Dolet Hills | \$20,260,071 | \$20,976,483 | \$20,613,371 | \$17,130,286 |
| Flint Creek | \$16,498,691 | \$21,014,690 | \$17,900,009 | \$19,294,844 |
| Pirkey      | \$26,166,028 | \$22,118,487 | \$20,989,822 | \$21,681,269 |
| Turk        | \$24,174,600 | \$23,214,029 | \$22,479,710 | \$22,688,161 |
| Welsh 0     | \$15,858,249 | \$18,355,445 | \$15,301,908 | \$15,808,434 |
| Welsh 1     | \$3,855,594  | \$10,305,616 | \$1,821,337  | \$4,452,094  |
| Welsh 3     | \$8,436,981  | \$4,932,485  | \$4,696,583  | \$3,487,476  |

### SWEPCO Generation Solid Fuel Unit Monthly O&M for the Period January 2019 - November 2020

| Unit               | 2019         | 2020                 | Unit     | 2019         | 2020         |
|--------------------|--------------|----------------------|----------|--------------|--------------|
| <b>Dolet Hills</b> | \$12,307,859 | \$11,537,702         | Turk     | \$21,345,975 | \$20,384,993 |
| (01) Jan           | \$819,812    | \$1,484,241          | (01) Jan | \$1,931,532  | \$1,548,813  |
| (02) Feb           | \$1,441,760  | \$1,271,111          | (02) Feb | \$1,577,069  | \$1,583,141  |
| (03) Mar           | \$1,465,024  | \$3,480,577          | (03) Mar | \$1,671,273  | \$1,885,464  |
| (04) Apr           | \$187,340    | -\$1,151,890         | (04) Apr | \$2,030,905  | \$1,634,836  |
| (05) May           | \$528,010    | \$638,847            | (05) May | \$3,495,586  | \$2,221,157  |
| (06) Jun           | \$1,438,950  | \$668,435            | (06) Jun | \$1,047,414  | \$1,870,750  |
| (07) Jul           | \$906,326    | \$1,721,398          | (07) Jul | \$1,669,197  | \$1,651,409  |
| (08) Aug           | \$1,378,104  | \$865,553            | (08) Aug | \$1,566,128  | \$1,699,715  |
| (09) Sep           | \$1,052,041  | \$458,285            | (09) Sep | \$1,672,294  | \$1,927,878  |
| (10) Oct           | \$1,208,789  | \$1,368,666          | (10) Oct | \$1,552,967  | \$1,791,422  |
| (11) Nov           | \$1,015,813  | \$732,479            | (11) Nov | \$1,614,768  | \$2,570,408  |
| (12) Dec           | \$865,890    |                      | (12) Dec | \$1,516,842  |              |
|                    |              |                      |          |              |              |
| Flint Creek        | \$16,190,693 | \$15,635,636         | Welsh 0  | \$15,815,372 | \$13,711,305 |
| (01) Jan           | \$1,331,879  | \$1,245,271          | (01) Jan | \$1,315,552  | \$1,196,706  |
| (02) Feb           | \$1,018,427  | \$1,223,613          | (02) Feb | \$1,204,683  | \$1,116,810  |
| (03) Mar           | \$1,003,222  | \$1,624 <i>,</i> 748 | (03) Mar | \$1,215,852  | \$1,287,057  |
| (04) Apr           | \$1,626,830  | \$2,414,460          | (04) Apr | \$1,364,871  | \$796,667    |
| (05) May           | \$1,415,351  | \$1,628,830          | (05) May | \$1,127,232  | \$1,061,953  |
| (06) Jun           | \$1,060,592  | \$1,406,771          | (06) Jun | \$967,194    | \$1,460,908  |
| (07) Jul           | \$1,283,825  | \$1,264,924          | (07) Jul | \$1,300,865  | \$1,134,922  |
| (08) Aug           | \$1,319,915  | \$1,161,502          | (08) Aug | \$1,257,968  | \$1,215,005  |
| (09) Sep           | \$1,301,400  | \$1,369,396          | (09) Sep | \$1,212,273  | \$1,435,540  |
| (10) Oct           | \$1,422,240  | \$1,230,416          | (10) Oct | \$2,311,885  | \$1,885,992  |
| (11) Nov           | \$1,671,031  | \$1,065,705          | (11) Nov | \$1,073,399  | \$1,119,745  |
| (12) Dec           | \$1,735,981  |                      | (12) Dec | \$1,463,598  |              |
|                    |              |                      |          |              |              |

SOAH Dock**Exhhibit-犯多38** PUC Docket No. 51415 Sierra Club's 1st, Q. # Sierra Club 1-7 Attachment 2 Page 2 of 2

### **SWEPCO Generation Solid Fuel Unit** Monthly O&M for the Period January 2019 - November 2020

| Unit     | 2019         | 2020         | Unit     | 2019        | 2020        |
|----------|--------------|--------------|----------|-------------|-------------|
| Pirkey   | \$22,386,198 | \$18,023,228 | Welsh 1  | \$4,075,792 | \$3,318,599 |
| (01) Jan | \$1,563,114  | \$1,461,247  | (01) Jan | \$239,179   | \$226,687   |
| (02) Feb | \$1,378,548  | \$1,319,539  | (02) Feb | \$292,869   | \$133,851   |
| (03) Mar | \$1,537,458  | \$1,682,480  | (03) Mar | \$627,808   | \$157,423   |
| (04) Apr | \$1,537,519  | \$1,232,256  | (04) Apr | \$992,568   | \$248,782   |
| (05) May | \$1,738,297  | \$1,375,530  | (05) May | \$473,069   | \$95,427    |
| (06) Jun | \$1,255,810  | \$2,035,530  | (06) Jun | \$191,944   | \$181,491   |
| (07) Jul | \$1,650,368  | \$1,688,999  | (07) Jul | \$150,578   | \$292,941   |
| (08) Aug | \$1,455,580  | \$1,264,709  | (08) Aug | \$257,866   | \$292,448   |
| (09) Sep | \$2,506,110  | \$1,853,911  | (09) Sep | \$59,325    | \$574,121   |
| (10) Oct | \$3,551,991  | \$2,566,950  | (10) Oct | \$237,607   | \$887,393   |
| (11) Nov | \$1,212,896  | \$1,542,077  | (11) Nov | \$196,529   | \$228,035   |
| (12) Dec | \$2,998,507  |              | (12) Dec | \$356,450   |             |
|          |              |              |          |             |             |
|          |              |              | Welsh 3  | \$3,812,649 | \$1,865,342 |
|          |              |              | (01) Jan | \$183,868   | \$204,315   |
|          |              |              | (02) Feb | \$118,347   | \$121,582   |
|          |              |              | (03) Mar | \$156,080   | \$120,935   |
|          |              |              | (04) Apr | \$57,751    | \$251,520   |
|          |              |              | (05) May | \$212,504   | \$412,709   |
|          |              |              | (06) Jun | \$89,217    | \$185,443   |
|          |              |              | (07) Jul | \$180,865   | \$161,230   |
|          |              |              | (08) Aug | \$231,976   | \$89,282    |
|          |              |              | (09) Sep | \$392,888   | \$126,535   |
|          |              |              | (10) Oct | \$1,566,649 | \$87,824    |
|          |              |              | (11) Nov | \$101,585   | \$103,967   |
|          |              |              | (12) Dec | \$520,919   |             |
|          |              |              |          |             |             |

#### Eligible Cost

|             |      | 9.2.0 0001  |    |              |                 |    |           |    |             |
|-------------|------|-------------|----|--------------|-----------------|----|-----------|----|-------------|
| Plant       | Year | Month       | (  | Coal/Lignite | Fuel Oil        |    | Gas       |    | Total       |
| Welsh       | 2015 | <del></del> | \$ | 143,318,002  | \$<br>2,534,273 |    |           | \$ | 145,852,275 |
| Flint Creek | 2015 |             | \$ | 28,600,621   | \$<br>289,430   |    |           | \$ | 28,890,051  |
| Turk        | 2015 |             | \$ | 49,338,621   |                 | \$ | 150,539   | \$ | 49,489,160  |
| Pirkey      | 2015 |             | \$ | 138,247,695  |                 | \$ | 256,358   | \$ | 138,504,053 |
| Dolet Hills | 2015 |             | \$ | 79,706,649   |                 | \$ | 280,684   | \$ | 79,987,333  |
| Welsh       | 2016 |             | \$ | 95,921,292   | \$<br>1,817,381 |    |           | \$ | 97,738,673  |
| Flint Creek | 2016 |             | \$ | 19,129,617   | \$<br>512,377   |    |           | \$ | 19,641,994  |
| Turk        | 2016 |             | \$ | 54,887,412   |                 | \$ | 203,785   | \$ | 55,091,197  |
| Pirkey      | 2016 |             | \$ | 152,119,108  |                 | \$ | 159,389   | \$ | 152,278,496 |
| Dolet Hills | 2016 |             | \$ | 64,362,101   |                 | \$ | 214,878   | \$ | 64,576,979  |
| Welsh       | 2017 |             | \$ | 130,901,847  | \$<br>1,372,561 |    |           | \$ | 132,274,408 |
| Flint Creek | 2017 |             | \$ | 25,188,969   | \$<br>455,433   |    |           | \$ | 25,644,402  |
| Turk        | 2017 |             | \$ | 61,184,719   |                 | \$ | 135,450   | \$ | 61,320,169  |
| Pırkey      | 2017 |             | \$ | 122,258,810  |                 | \$ | 322,168   | \$ | 122,580,978 |
| Dolet Hills | 2017 |             | \$ | 33,913,785   |                 | \$ | 340,397   | \$ | 34,254,182  |
| Welsh       | 2018 |             | \$ | 121,849,896  | \$<br>1,261,573 |    |           | \$ | 123,111,469 |
| Flint Creek | 2018 |             | \$ | 23,203,210   | \$<br>517,938   |    |           | \$ | 23,721,148  |
| Turk        | 2018 |             | \$ | 56,052,380   |                 | \$ | 420,229   | \$ | 56,472,608  |
| Pirkey      | 2018 |             | \$ | 132,615,314  |                 | \$ | 255,136   | \$ | 132,870,450 |
| Dolet Hills | 2018 |             | \$ | 48,882,174   |                 | \$ | 1,161,126 | \$ | 50,043,300  |

| Welsh       | 2019 | January   | \$<br>12,841,691 | \$<br>43,981  |                | \$<br>12,885,672 |
|-------------|------|-----------|------------------|---------------|----------------|------------------|
|             |      | February  | \$<br>9,110,702  | \$<br>157,880 |                | \$<br>9,268,583  |
|             |      | March     | \$<br>10,714,859 | \$<br>45,688  |                | \$<br>10,760,547 |
|             |      | April     | \$<br>5,825,323  | \$<br>230,113 |                | \$<br>6,055,436  |
|             |      | May       | \$<br>10,429,707 | \$<br>100,041 |                | \$<br>10,529,748 |
|             |      | June      | \$<br>9,700,824  | \$<br>143,618 |                | \$<br>9,844,442  |
|             |      | July      | \$<br>9,925,957  | \$<br>106,963 |                | \$<br>10,032,920 |
|             |      | August    | \$<br>10,149,784 | \$<br>88,834  |                | \$<br>10,238,618 |
|             |      | September | \$<br>9,001,393  | \$<br>34,750  |                | \$<br>9,036,143  |
|             |      | October   | \$<br>4,832,999  | \$<br>192,772 |                | \$<br>5,025,771  |
|             |      | November  | \$<br>9,393,916  | \$<br>82,461  |                | \$<br>9,476,377  |
|             |      | December  | \$<br>5,953,672  | \$<br>74,143  |                | \$<br>6,027,815  |
| Flint Creek | 2019 | January   | \$<br>2,910,130  | \$<br>3,699   |                | \$<br>2,913,829  |
|             |      | February  | \$<br>2,510,496  | \$<br>7,417   |                | \$<br>2,517,913  |
|             |      | March     | \$<br>2,149,504  | \$<br>33,998  |                | \$<br>2,183,502  |
|             |      | Aprıl     | \$<br>(48,305)   | \$<br>420     |                | \$<br>(47,885)   |
|             |      | May       | \$<br>2,091,256  | \$<br>95,185  |                | \$<br>2,186,441  |
|             |      | June      | \$<br>2,086,834  | \$<br>19,427  |                | \$<br>2,106,261  |
|             |      | July      | \$<br>2,222,670  | \$<br>18,576  |                | \$<br>2,241,246  |
|             |      | August    | \$<br>2,234,552  | \$<br>20,180  |                | \$<br>2,254,732  |
|             |      | September | \$<br>2,285,601  | \$<br>16,958  |                | \$<br>2,302,559  |
|             |      | October   | \$<br>1,459,195  | \$<br>15,072  |                | \$<br>1,474,267  |
|             |      | November  | \$<br>702,840    | \$<br>128,061 |                | \$<br>830,901    |
|             |      | December  | \$<br>1,072,724  | \$<br>98,624  |                | \$<br>1,171,348  |
| Turk        | 2019 | January   | \$<br>5,267,570  |               | \$<br>65,235   | \$<br>5,332,804  |
|             |      | February  | \$<br>4,950,244  |               | \$<br>(46,508) | \$<br>4,903,736  |
|             |      | March     | \$<br>5,404,213  |               | \$<br>7,108    | \$<br>5,411,321  |
|             |      | April     | \$<br>3,967,428  |               | \$<br>737      | \$<br>3,968,164  |
|             |      | May       | \$<br>1,637,922  |               | \$<br>30,994   | \$<br>1,668,916  |
|             |      | June      | \$<br>4,972,769  |               | \$<br>8,028    | \$<br>4,980,797  |
|             |      | July      | \$<br>4,722,813  |               | \$<br>3,920    | \$<br>4,726,733  |
|             |      | August    | \$<br>4,845,424  |               | \$<br>1,499    | \$<br>4,846,922  |
|             |      | September | \$<br>5,062,356  |               | \$<br>(1,280)  | \$<br>5,061,076  |
|             |      | October   | \$<br>4,867,982  |               | \$<br>7,274    | \$<br>4,875,256  |
|             |      | November  | \$<br>4,999,535  |               | \$<br>(5,523)  | \$<br>4,994,012  |
|             |      | December  | \$<br>5,092,406  |               | \$<br>6,730    | \$<br>5,099,136  |
| Pirkey      | 2019 | January   | \$<br>16,328,331 |               | \$<br>33,709   | \$<br>16,362,040 |
|             |      | February  | \$<br>11,780,299 |               | \$<br>3,633    | \$<br>11,783,932 |
|             |      | March     | \$<br>12,418,150 |               | \$<br>33,411   | \$<br>12,451,561 |
|             |      | April     | \$<br>12,880,580 |               | \$<br>24,482   | \$<br>12,905,062 |
|             |      | May       | \$<br>13,964,619 |               | \$<br>24,247   | \$<br>13,988,865 |
|             |      | June      | \$<br>9,246,786  |               | \$<br>21,316   | \$<br>9,268,103  |
|             |      | July      | \$<br>11,193,951 |               | \$<br>39,584   | \$<br>11,233,535 |
|             |      | August    | \$<br>12,515,432 |               | \$<br>7,168    | \$<br>12,522,600 |
|             |      | September | \$<br>(49,528)   |               | \$<br>14,919   | \$<br>(34,609)   |
|             |      | October   | \$<br>(49,528)   |               | \$<br>8,725    | \$<br>(40,803)   |
|             |      | November  | \$<br>3,741,262  |               | \$<br>93,396   | \$<br>3,834,658  |
|             |      | December  | \$<br>5,738,408  |               | \$<br>8,787    | \$<br>5,747,195  |
| Dolet Hills | 2019 | January   | \$<br>1,620      |               | \$<br>-        | \$<br>1,620      |
|             |      | February  | \$<br>1,617      |               | \$<br>4,934    | \$<br>6,551      |
|             |      | March     | \$<br>1,373,781  |               | \$<br>-        | \$<br>1,373,781  |
|             |      | April     | \$<br>-          |               | \$<br>44,325   | \$<br>44,325     |
|             |      | May       | \$<br>4,599,496  |               | \$<br>0        | \$<br>4,599,496  |
|             |      | June      | \$<br>12,098,749 |               | \$<br>55,649   | \$<br>12,154,398 |
|             |      | July      | \$<br>12,229,257 |               | \$<br>18,280   | \$<br>12,247,537 |
|             |      | August    | \$<br>11,877,765 |               | \$<br>29,600   | \$<br>11,907,364 |
|             |      | September | \$<br>11,557,598 |               | \$<br>22,012   | \$<br>11,579,610 |
|             |      | October   | \$<br>846,655    |               | \$<br>21,909   | \$<br>868,564    |
|             |      | November  | \$<br>-          |               | \$<br>8,059    | \$<br>8,059      |
|             |      | December  | \$<br>-          |               | \$<br>18,610   | \$<br>18,610     |
|             |      |           |                  |               |                |                  |

| Welsh       | 2020 | January   | \$ | 3,848,226  | \$<br>37,841  |    |           | \$<br>3,886,067  |
|-------------|------|-----------|----|------------|---------------|----|-----------|------------------|
|             |      | February  | \$ | 3,839,386  | \$<br>20,971  |    |           | \$<br>3,860,357  |
|             |      | March     | \$ | 4,441,535  | \$<br>39,459  |    |           | \$<br>4,480,993  |
|             |      | April     | \$ | 3,428,747  | \$<br>96,857  |    |           | \$<br>3,525,604  |
|             |      | May       | \$ | 7,540,602  | \$<br>142,792 |    |           | \$<br>7,683,394  |
|             |      | June      | \$ | 6,889,501  | \$<br>206,504 |    |           | \$<br>7,096,005  |
|             |      | July      | \$ | 9,155,523  | \$<br>126,504 |    |           | \$<br>9,282,027  |
|             |      | August    | \$ | 10,355,313 | \$<br>99,227  |    |           | \$<br>10,454,540 |
|             |      | September | \$ | 4,219,504  | \$<br>88,157  |    |           | \$<br>4,307,661  |
|             |      | October   | \$ | 5,687,708  | \$<br>243,374 |    |           | \$<br>5,931,082  |
|             |      | November  | \$ | 9,418,673  | \$<br>139,947 |    |           | \$<br>9,558,621  |
|             |      | December  |    |            |               |    |           | \$<br>-          |
| Flint Creek | 2020 | January   | \$ | 1,498,588  | \$<br>11,574  |    |           | \$<br>1,510,162  |
|             |      | February  | \$ | 1,529,866  | \$<br>15,074  |    |           | \$<br>1,544,940  |
|             |      | March     | \$ | 26,273     | \$<br>4,849   |    |           | \$<br>31,123     |
|             |      | April     | \$ | (97,567)   | \$<br>-       |    |           | \$<br>(97,567)   |
|             |      | May       | \$ | 477,051    | \$<br>118,103 |    |           | \$<br>595,154    |
|             |      | June      | \$ | 1,767,210  | \$<br>57,226  |    |           | \$<br>1,824,436  |
|             |      | July      | \$ | 2,058,653  | \$<br>39,783  |    |           | \$<br>2,098,436  |
|             |      | August    | \$ | 2,391,575  | \$<br>13,851  |    |           | \$<br>2,405,427  |
|             |      | September | \$ | 2,081,558  | \$<br>15,639  |    |           | \$<br>2,097,197  |
|             |      | October   | \$ | 2,219,054  | \$<br>40,133  |    |           | \$<br>2,259,187  |
|             |      | November  | \$ | 1,458,837  | \$<br>44,554  |    |           | \$<br>1,503,391  |
|             |      | December  |    |            |               |    |           | \$<br>-          |
| Turk        | 2020 | January   | \$ | 4,187,459  |               | \$ | 1,197     | \$<br>4,188,656  |
|             |      | February  | \$ | 3,858,210  |               | \$ | 749       | \$<br>3,858,958  |
|             |      | March     | \$ | 4,073,571  |               | \$ | 3,886     | \$<br>4,077,458  |
|             |      | Aprıl     | \$ | 3,037,661  |               | \$ | 1,189     | \$<br>3,038,849  |
|             |      | May       | \$ | 1,391,974  |               | \$ | 35,730    | \$<br>1,427,704  |
|             |      | June      | \$ | 3,689,172  |               | \$ | 13,989    | \$<br>3,703,162  |
|             |      | July      | \$ | 4,792,091  |               | \$ | 15,832    | \$<br>4,807,923  |
|             |      | August    | \$ | 5,297,737  |               | \$ | 14,280    | \$<br>5,312,017  |
|             |      | September | \$ | 4,345,452  |               | \$ | (8)       | \$<br>4,345,445  |
|             |      | October   | \$ | 3,398,829  |               | \$ | 53,255    | \$<br>3,452,084  |
|             |      | November  | \$ | 5,489,500  |               | \$ | (8,118)   | \$<br>5,481,382  |
|             |      | December  |    |            |               |    |           | \$<br>-          |
| Pirkey      | 2020 | January   | \$ | 8,093,619  |               | \$ | (238,438) | \$<br>7,855,182  |
|             |      | February  | \$ | 9,640,965  |               | \$ | 254,968   | \$<br>9,895,933  |
|             |      | March     | \$ | 8,628,679  |               | \$ | 70,616    | \$<br>8,699,295  |
|             |      | April     | \$ | 6,567,000  |               | \$ | (59,588)  | \$<br>6,507,411  |
|             |      | May       | \$ | 1,545,814  |               | \$ | 53,937    | \$<br>1,599,751  |
|             |      | June      | \$ | 2,944,900  |               | \$ | 18,689    | \$<br>2,963,589  |
|             |      | July      | \$ | 15,720,574 |               | \$ | 18,516    | \$<br>15,739,090 |
|             |      | August    | \$ | 17,118,172 |               | \$ | 18,843    | \$<br>17,137,015 |
|             |      | September | \$ | 966,983    |               | \$ | 3,701     | \$<br>970,685    |
|             |      | October   | \$ | 3,573,922  |               | \$ | 14,884    | \$<br>3,588,806  |
|             |      | November  | \$ | 16,731,895 |               | \$ | 53,335    | \$<br>16,785,230 |
|             |      | December  |    |            |               |    |           | \$<br>-          |
| Dolet Hills | 2020 | January   | \$ | -          |               | \$ | -         | \$<br>-          |
|             |      | February  | \$ | -          |               | \$ | 2,386     | \$<br>2,386      |
|             |      | March     | \$ | -          |               | \$ | -         | \$<br>-          |
|             |      | April     | \$ | -          |               | \$ | 2,029     | \$<br>2,029      |
|             |      | May       | \$ | (507,082)  |               | \$ | (2)       | \$<br>(507,084)  |
|             |      | June      | \$ | 14,973,462 |               | \$ | 17,281    | \$<br>14,990,743 |
|             |      | July      | \$ | 3,015,657  |               | \$ | 84,906    | \$<br>3,100,563  |
|             |      | August    | \$ | 10,618,072 |               | \$ | 35,830    | \$<br>10,653,902 |
|             |      | September | \$ | 20,242,021 |               | \$ | 31,233    | \$<br>20,273,255 |
|             |      | October   | \$ | 13,180,945 |               | \$ | 117,059   | \$<br>13,298,004 |
|             |      | November  | \$ |            |               | \$ | 140,241   | \$<br>140,241    |
|             |      | December  | Τ' |            |               | •  | ,         | \$<br>           |
|             |      |           |    |            |               |    |           |                  |

### SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO SIERRA CLUB'S FIRST SET OF REQUESTS FOR INFORMATION

#### **Question No. Sierra Club 1-8:**

For each of the Company's coal- or solid-fuel units (Dolet Hills, Flint Creek, Pirkey, Turk, and Welsh), for each of the years 2021 through 2030, please identify the Company's most recent projection of:

- a. Installed Capacity
- b. Unforced Capacity
- c. Capacity factor
- d. Availability
- e. Heat rate
- f. Forced or random outage rate
- g. Fixed O&M cost
- h. Variable O&M cost
- i. Fuel cost

#### Response No. Sierra Club 1-8:

Please refer to Sierra Club 1-8 Highly Sensitive Attachment 1.

Sierra Club 1-8 HIGHLY SENSITIVE Attachment 1 responsive to this request is HIGHLY SENSITIVE PROTECTED MATERIAL under the terms of the Protective Order. Due to current restrictions associated with COVID-19, this information is being provided electronically and a secure login to access the information will be provided upon request to individuals who have signed the Protective Order Certification.

Prepared By: Mark A. Becker Title: Mng Dir Res Plnning&Op Anlysis

Prepared By: Joseph S. Perez Title: Forecast Analyst Prin

Sponsored By: Amy E. Jeffries Title: Coal Procurement Mgr

### SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO SIERRA CLUB'S FIRST SET OF REQUESTS FOR INFORMATION

#### **Question No. Sierra Club 1-9:**

Refer to the "Flint Creek Power Plant Notice of Intent to Comply With the Site-Specific Alternative to Initiation of Closure CCR Unit – Primary Bottom Ash Pond," submitted to by SWEPCO-AEP to the U.S. EPA on November 30, 2020.

- a. Produce any evaluation(s) that the Company performed to determine that converting Flint Creek to dry ash handling, as opposed to retiring the unit, is in customers' best interest.
- b. State the total cost of the projects the Company intends to undertake at Flint Creek to allow compliance with the CCR Rule and ELG Rule, and of these total costs, please provide the amount that will be apportioned to SWEPCO's Texas, Arkansas, and Louisiana customers, respectively.
- c. Please provide the year that these costs have been or will be incurred.
- d. Please provide a detailed description of each project element.
- e. Please provide all studies, reports, or analyses of alternative compliance options.

#### Response No. Sierra Club 1-9:

- a. Please see the response for Sierra Club 1-5 for the Flint Creek unit disposition analysis that evaluated installing the necessary CCR and ELG retrofits versus retiring the unit.
- b. Please see Sierra Club 1-9 Attachment 1 for SWEPCO's share of the CCR/ELG compliance costs. SWEPCO has not apportioned these costs to their Texas, Arkansas and Louisiana customers.
- c. See the response to b.
- d. The following is a description of the Flint Creek project elements:
  - Dry Ash Handling Systems
    - o Removal of the current bottom ash hoppers, crushers, and jet pumps
    - o Installation of new UBDC and associated equipment to collect and dewater bottom ash, economizer ash, and pyrites from the unit.
    - o Installation of dry flight conveyors to transport economizer ash from the economizer hoppers on the unit to the UBDC.
    - o Rerouting the wet pyrite sluicing system to the UBDC.
    - o Installation of a new concrete ash bunker to collect and temporarily store CCR material from the UBDC.
    - o Installation of a sump at the new ash bunker to collect contact stormwater or excess quench water and return to UBDC.
    - o CCR material from ash bunker will be either sold for beneficial reuse or hauled to onsite landfill for disposal.

- Pond Closure by Removal and construction of new Coal Pile Runoff Pond (CPRP)
  - Serpentine diversion channel will be installed within the current PBAP footprint to allow for CCR wastestreams to be rerouted to facilitate the CCR material removal and pond closure and repurposing steps below.
  - CCR material from the PBAP to be removed via mechanical excavation and dredging. All CCR material will either be sold for beneficial reuse or hauled to the onsite landfill for disposal.
  - o Following the removal of CCR material, the existing PBAP will be repurposed as the Wastewater Pond (WWP) and will receive low volume wastewater and coal pile runoff flows from the plant along with stormwater runoff from the surrounding area. The WWP will continue to discharge to the Clearwater Pond (a non-CCR unit) before ultimately discharging to SWEPCO Lake through NPDES Outfall #101.
  - o Installation of a Coal Pile Runoff Pond at east end of the coal pile storage area and north of the rail line.
  - A tank-based chemical treatment system will be designed and installed to treat the influent to the Wastewater Pond and Coal Pile Runoff Ponds as needed to ensure compliance with plant discharge requirements.
- e. Please see the response to a.

Prepared By: Mark A. Becker Title: Mng Dir Res Plnning&Op Anlysis

# SOAH DockexNibi+13Q130538 PUC Docket No. 51415 Sierra Club's 1st, Q. # Sierra Club 1-9 Attachment 1

|              | SWEPCo         |
|--------------|----------------|
|              | Share          |
|              | Flint Creek    |
|              | CCR/ELG Cost   |
|              | <u>(\$000)</u> |
| 2021         | 12,573         |
| 2022         | 9,779          |
| <u> 2023</u> | <u>4,441</u>   |
| Total        | 26,793         |

### SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO SIERRA CLUB'S SECOND SET OF REQUESTS FOR INFORMATION

#### Question No. SC 2-2:

Refer to SWEPCO's response to Sierra Club 1-5, Attachment 6 and the CCR and ELG retrofits analysis.

- a. Indicate which modeling software was used to conduct the analysis.
- b. Provide all workbooks, with formulas intact, used to develop the results shown in Attachment 6.
- c. Provide a list of all capital expenditures associated with CCR and ELG compliance included in each of the six modeled scenarios for each unit and provide the cost of each.
- d. Provide the following forecasts utilized for this analysis:
  - i. EIA commodity price forecasts (with and without CO2 price)
  - ii. SPP market price forecasts (with and without CO2 price)
  - iii. CO2 price forecasts
- e. Explain why the Company used the EIA commodity price forecasts instead of AEP's own forecasts.
- f. Provide each the following inputs for each unit, both new and existing, modeled at the highest level of granularity used in conducting the retrofit analysis:
  - i. Coal price (\$/MMBtu)
  - ii. Natural Gas price (\$/MMBtu)
  - iii. Heat rate for each unit (Btu)
  - iv. Capital expenditures (\$)
  - v. Variable Operation and Maintenance (\$/MWh)
  - vi. Fixed Operation and Maintenance (\$/MW)
- g. For each replacement resource available to the model, provide each of the following inputs for each resource at the highest level of granularity used in conducting the retrofit analysis:
  - i. Replacement resource options
  - ii. Replacement resource size (MW)
  - iii. Year replacement resource is available (year)
  - iv. Cost of replacement resource option (\$/MW)
  - v. Annual capacity factor
- h. Provide the following outputs by unit:
  - i. Annual generation (MWh)
  - ii. Fuel costs (\$)
  - iii. VOM costs (\$)
  - iv. FOM costs (\$)
  - v. Capital expenditures for ELG and CCR environmental compliance (\$)
  - vi. Other capital expenditures (\$)
  - vii. Energy and ancillary market revenues (\$)

- i. Explain the End Effects assumptions and methodology used.
- i. Provide the discount rate used.

### Response No. SC 2-2:

- a. The modeling software used to conduct the CCR/ELG retrofit analysis was Plexos developed by Energy Exemplar.
- b. Please see SC 2-2 HS Attachments 1 through 11 for the workbooks used to develop the results shown in SC 1-5 Attachment 6.
- c. Please see SC 2-2 HS Attachment 12 for all capital expenditures associated with CCR and ELG compliance included in each of the six modeled scenarios for each unit and provide the cost of each.
- d. Please see the supplemental response to CARD 2-10 for the commodity prices forecasts used in the analysis.
- e. The EIA's Annual Energy Outlook (AEO) is a widely recognized, readily accessible and fee-free resource for long-term energy market projections. It is also well understood that the AEO is based upon the assumption regulations remain unchanged and long-term energy projections lack certain RTO-level granularity. As such, AEPSC utilized the Aurora energy market simulation model to produce the Companies' EIA-Based Fundamentals Forecast based upon EIA inputs to serve as a reference point against which ratepayer benefits may be compared and assessed.
- f. Please see SC 2-2 HS Attachment 13 for new and existing unit information used in the analysis.
- g. Please see SC 1-8 and SC 2-2 HS Attachment 14 for replacement resource inputs used in the analysis.
- h. Please see SC 1-8 for Generation, VOM, and FO&M. See also SC 2-2 HS Attachment 15 for outputs by unit from the analysis.
- i. The End-Effects period takes into account the costs of those new resource additions after the end of the planning period. The infinite end-effects period was selected to allow the model to capture the long-run costs of resource additions made near the end of the Planning Period.
- j. The discount rate used in the analysis was 6.98%

The attachments responsive to this request are HIGHLY SENSITIVE MATERIAL under the terms of the Protective Order. Due to current restrictions associated with COVID-19, this information is being provided electronically and a secure login to access the information will be provided upon request to individuals who have signed the Protective Order Certification.

Prepared By: Mark A. Becker Title: Mng Dir Res Plnning&Op Anlysis

Prepared By: Joseph S. Perez Title: Forecast Analyst Prin

Sponsored By: Thomas P. Brice Title: VP Regulatory & Finance

### SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO SIERRA CLUB'S SECOND SET OF REQUESTS FOR INFORMATION

#### **Question No. SC 2-3:**

Refer to SWEPCO response to Sierra Club 1-9(d) regarding the description of the projects that the Company intends to undertake and the costs that will be incurred to comply with ELG and CCR requirements for the Flint Creek coal unit. For each step or item described under the Dry Ash Handling System and the Pond Closure by Removal and construction of new Coal Pile Runoff Pond projects, indicate the following:

- a. Whether the step or item is required if the plant retires prior to October 17, 2028.
- b. Whether the step or item is required if the plant retires prior to December 31, 2028.
- c. The cost of each step or item.

### Response No. SC 2-3:

- a. b. The first three bulleted items in SC 1-9 (d) under "Pond Closure by Removal of new Coal Pile Runoff Pond (CPRP)" are required whether Flint Creek retires prior to October 17, 2028 or prior to December 31, 2028. The remaining items are tied to compliance with ELG and CCR requirements impacting operation of the unit beyond these time frames and would not be required. c. The Company does not maintain project estimates at the bulleted item level provided in its response to SC 1-9 part d. The following reflects the cost estimates maintained by the Company, for the project elements provided by the Company in SC 1-9 part d:
  - Dry Ash Handling Systems: \$26.7 million
  - Pond Closure by Removal and construction of new Coal Pile Runoff Pond: \$26.8 million
    - Pond Closure: \$17.6 millionPond Repurpose: \$9.2 million

Prepared By: Tara D. Beske Title: Regulatory Consultant Staff

### SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO SIERRA CLUB'S SECOND SET OF REQUESTS FOR INFORMATION

#### **Ouestion No. SC 2-6:**

For each of the Company's solid-fuel units (Dolet Hills, Flint Creek, Pirkey, Turk, and Welsh), provide the following information about future planned capital expenditures.

- a. Provide a forecast of annual capital expenditures for each generation unit over the next ten years.
- b. Provide a specific accounting of all projects and capital expenditures already scheduled or planned at SWEPCO's solid fuel units (coal and lignite) over the next ten years.

#### Response No. SC 2-6:

a. See Sierra Club 2-6 Highly Sensitive Attachment 1 for a 10-year capital forecast of capital expenditures by plant. Forecasts are not maintained at the unit level.

b. See Sierra Club 2-6 Highly Sensitive Attachment 2 for a 10-year forecast of capital expenditures by project.

Company budget forecasts are updated annually. The capital forecast included in Highly Sensitive Confidential Attachments 1 and 2 does not reflect the Company's announcement to retire the Dolet Hills and Pirkey Plants in 2021 and 2023, respectively, or that the Welsh Plant will cease using coal in 2028.

The attachments responsive to this request are HIGHLY SENSITIVE MATERIAL under the terms of the Protective Order. Due to current restrictions associated with COVID-19, this information is being provided electronically and a secure login to access the information will be provided upon request to individuals who have signed the Protective Order Certification.

Prepared By: Tara D. Beske Title: Regulatory Consultant Staff

### SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO SIERRA CLUB'S SECOND SET OF REQUESTS FOR INFORMATION

#### Question No. SC 2-13:

Provide total energy and ancillary service market revenues by plant for each of SWEPCO's solid fuel units (coal and lignite) for the period 2015 – 2020. Indicate whether the values represent SWEPCO's share or total unit.

### Response No. SC 2-13:

Please see Sierra Club 2-13 HIGHLY SENSITIVE Attachment 1 for the requested information. Data prior to May 2015 is not archived and thus is not available.

The attachment responsive to this request is HIGHLY SENSITIVE MATERIAL under the terms of the Protective Order. Due to current restrictions associated with COVID-19, this information is being provided electronically and a secure login to access the information will be provided upon request to individuals who have signed the Protective Order Certification.

Prepared By: Scott E. Mertz Title: Regulatory Consultant Staff

Sponsored By: Scott E. Mertz Title: Regulatory Consultant Staff

### SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO SIERRA CLUB'S SECOND SET OF REQUESTS FOR INFORMATION

#### **Question No. SC 2-17:**

Refer to Schedule H-5.3b at pages 4-7.

- a. Please explain whether (and what portion of) the identified ELG or CCR costs at Flint Creek could be avoided by a commitment to cease burning coal under the CCR Rule's alternative closure provisions, 40 C.F.R. § 257.103, or the ELG Rule, 40 C.F.R. § 423.19(f).
- b. Has SWEPCO conducted any economic or technical alternatives analysis (including any retirement versus retrofit analysis) for the Company's CCR or ELG compliance costs at its coal-burning units? If yes, please provide all such analyses, including all supporting calculations, data, documents, technical or economic reports or presentations, modeling input and output files, and workpapers associated with each such analysis. If the Company did not conduct any such analyses, explain why.
- c. Please provide the CCR and ELG project cost and schedule for each of SWEPCO's coal plants, including a detailed summary of the actual cost for completed phases of the projects, the date of completion, and all anticipated remaining costs and spend dates.
- d. At any time after EPA issued its proposed revised ELG Rule in November 2019, 84 Fed. Reg. 64,620, or after its final rule, 85 Fed. Reg. 64,650, did SWEPCO conduct any further economic, technical, or alternatives analysis (including any retirement analysis) for the Company's ELG costs referenced in Schedule H-5.3b at pages 4-7. If yes, please provide all such analyses, including all supporting calculations, data, documents, technical or economic reports or presentations. If not, please explain why.
- e. At any time after EPA issued its proposed revised CCR Rule in December 2019, 84 Fed. Reg. 65,941, or after its final rule, 85 Fed. Reg. 53,516, did SWEPCO conduct any further economic, technical, or alternatives analysis (including any retirement analysis) for the Company's CCR costs referenced in Schedule H-5.3b at pages 4-7. If yes, please provide all such analyses, including all supporting calculations, data, documents, technical or economic reports or presentations. If not, please explain why.

#### Response No. SC 2-17:

a. See Attachments 1 and 2 provided in the Company's response to part c of this question, for costs labeled "CCR/ELG". It is that portion of future costs that would not be required, if before October 2021, the Company declared its intention to retire Flint Creek by the end of 2028.

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- b. Please see the supplemental response to CARD 2-10 for the Company's CCR/ELG analysis of Welsh 1&3, Pirkey and Flint Creek.
- c. See Sierra Club 2-17 Attachments 1, 2, and 3, for a detailed summary of the historical and forecasted SWEPCO share of the cost for each phase of the CCR and ELG projects, which include direct and indirect capital install costs, capital removal, and AFUDC. Also included are the CCR/ELG project estimated completion dates by phase.
- d. Please see the response to SC 2-17 b.

e. Please see the response to SC 2-17 b.

Prepared By: Mark A. Becker Title: Mng Dir Res Plnning&Op Anlysis

Prepared By: Tara D. Beske Title: Regulatory Consultant Staff

Sponsored By: Brian Bond Title: VP External Affairs

| SWE                                  | SWEPCO CCR/ELG Project Annual Costs <sup>123</sup> |              |               |             |               |               |  |  |  |
|--------------------------------------|----------------------------------------------------|--------------|---------------|-------------|---------------|---------------|--|--|--|
|                                      | < 2020                                             | 2021         | 2022          | 2023        | 2024 >        | Total         |  |  |  |
| Flint Creek - 50%                    | \$1,986,963                                        | \$7,883,347  | \$ 13,000,145 | \$3,210,858 |               | \$ 26,081,313 |  |  |  |
| Direct Cost                          |                                                    |              |               |             |               | \$ 20,228,821 |  |  |  |
| CCR/ELG                              | \$1,258,823                                        | \$ 2,814,563 | \$ 7,629,123  | \$1,373,896 |               | \$ 13,076,404 |  |  |  |
| Pond Closure-Primary Bottom Ash Pond | \$ 149,091                                         | \$3,442,701  | \$ 2,504,912  | \$1,055,712 |               | \$ 7,152,416  |  |  |  |
| Indirect Cost                        |                                                    |              |               |             |               | \$ 5,852,493  |  |  |  |
| CCR/ELG                              | \$ 558,295                                         | \$ 832,807   | \$ 2,293,578  | \$ 537,697  |               | \$ 4,222,376  |  |  |  |
| Pond Closure-Primary Bottom Ash Pond | \$ 20,755                                          | \$ 793,276   | \$ 572,534    | \$ 243,553  |               | \$ 1,630,117  |  |  |  |
| Welsh - 100%                         | \$3,662,482                                        | \$3,424,341  | \$ 3,120,146  | \$ -        | \$ 11,082,181 | \$ 21,289,149 |  |  |  |
| Direct Cost                          |                                                    |              |               |             |               | \$ 16,917,015 |  |  |  |
| CCR/ELG                              | \$2,128,015                                        |              | Project (     | Cancelled   |               | \$ 2,128,015  |  |  |  |
| Pond Closure-Primary Bottom Ash Pond | \$ 471,000                                         | \$ 253,000   | \$ -          | \$ -        | \$ 8,940,000  | \$ 9,664,000  |  |  |  |
| Pond Closure-Bottom Ash Storage Pond | \$ -                                               | \$2,562,500  | \$ 2,562,500  | \$ -        | \$ -          | \$ 5,125,000  |  |  |  |
| Indirect Cost                        |                                                    |              |               |             |               | \$ 4,372,134  |  |  |  |
| CCR/ELG                              | \$ 992,817                                         |              | Project (     | Cancelled   |               | \$ 992,817    |  |  |  |
| Pond Closure-Primary Bottom Ash Pond | \$ 70,650                                          | \$ 51,195    | \$ -          | \$ -        | \$ 2,142,181  | \$ 2,264,026  |  |  |  |
| Pond Closure-Bottom Ash Storage Pond | \$ -                                               | \$ 557,646   | \$ 557,646    | \$          | \$ -          | \$ 1,115,291  |  |  |  |
| Pirkey - 85.96%                      | \$ 2,155,441                                       | \$ 308,499   | \$ 514,926    | \$1,730,452 |               | \$ 4,709,319  |  |  |  |
| Direct Cost                          |                                                    |              |               |             |               | \$ 4,140,343  |  |  |  |
| CCR/ELG                              | \$1,994,610                                        |              | Project (     | Cancelled   |               | \$ 1,994,610  |  |  |  |
| Pond Closure-Bottom Ash Ponds        | \$ 71,519                                          | \$ 227,794   | \$ 415,187    | \$1,431,234 |               | \$ 2,145,734  |  |  |  |
| Indirect Cost                        |                                                    |              |               |             |               | \$ 568,975    |  |  |  |
| CCR/ELG                              | \$ 73,846                                          |              | Project (     | Cancelled   | ·             | \$ 73,846     |  |  |  |
| Pond Closure-Bottom Ash Ponds        | \$ 15,467                                          | \$ 80,705    | \$ 99,739     | \$ 299,218  |               | \$ 495,130    |  |  |  |

<sup>&</sup>lt;sup>1</sup>Includes SWEPCO share of direct and indirect capital install costs, capital removal, and AFUDC.

<sup>&</sup>lt;sup>2</sup>Welsh and Pirkey CCR/ELG cost transferred to O&M expense

<sup>&</sup>lt;sup>3</sup>As of January 31, 2021.

| SWEPCO CCR/ELG Project Stage Costs <sup>123</sup> |             |                         |             |                                       |             |                         |      |            |  |
|---------------------------------------------------|-------------|-------------------------|-------------|---------------------------------------|-------------|-------------------------|------|------------|--|
|                                                   | Stag        | e 0-2                   | Sta         | ge 3-4                                | Stage 5-7   |                         |      |            |  |
|                                                   | Actual      | Estimate To<br>Complete | Actual      | Estimate To<br>Complete               | Actual      | Estimate To<br>Complete |      | Total      |  |
| Flint Creek - 50%                                 |             |                         |             |                                       |             |                         | \$ 2 | 26,081,313 |  |
| Direct Cost                                       |             |                         |             | -                                     |             |                         | \$ : | 20,228,821 |  |
| CCR/ELG                                           | \$1,242,707 |                         | \$145,369   | \$2,941,440                           |             | \$8,746,888             | \$ : | 13,076,404 |  |
| Pond Closure-Primary Bottom Ash Pond              | \$ 73,260   |                         | \$100,123   | \$ 143,747                            |             | \$6,835,287             | \$   | 7,152,416  |  |
| Indirect Cost                                     |             |                         |             |                                       |             |                         | \$   | 5,852,493  |  |
| CCR/ELG                                           | \$ 473,076  |                         | \$ 85,219   | \$ 832,807                            |             | \$2,831,275             | \$   | 4,222,376  |  |
| Pond Closure-Primary Bottom Ash Pond              | \$ 10,377   |                         | \$ 15,566   | \$ 788,087                            |             | \$ 816,086              | \$   | 1,630,117  |  |
| Welsh - 100%                                      |             |                         | <del></del> | · · · · · · · · · · · · · · · · · · · | <del></del> |                         | \$ : | 21,289,149 |  |
| Direct Cost                                       | ,           |                         |             |                                       |             |                         | \$   | 16,917,015 |  |
| CCR/ELG                                           | \$2,128,015 |                         | F           | roject Cancell                        | ed          |                         | \$   | 2,128,015  |  |
| Pond Closure-Primary Bottom Ash Pond              | \$ 471,000  |                         | \$129,463   | \$ 123,537                            |             | \$8,940,000             | \$   | 9,664,000  |  |
| Pond Closure-Bottom Ash Storage Pond              | \$ -        |                         |             | \$ 750,000                            |             | \$4,375,000             | \$   | 5,125,000  |  |
| Indirect Cost                                     | -           |                         |             |                                       |             |                         | \$   | 4,372,134  |  |
| CCR/ELG                                           | \$ 992,817  |                         | F           | Project Cancell                       | ed          |                         | \$   | 992,817    |  |
| Pond Closure-Primary Bottom Ash Pond              | \$ 70,650   |                         | \$ 21,917   | \$ 29,278                             |             | \$2,142,181             | \$   | 2,264,026  |  |
| Pond Closure-Bottom Ash Storage Pond              | \$ -        |                         |             | \$ 177,750                            |             | \$ 937,541              | \$   | 1,115,291  |  |
| Pirkey - 85.96%                                   |             |                         |             |                                       |             |                         | \$   | 4,709,319  |  |
| Direct Cost                                       |             |                         |             |                                       |             |                         | \$   | 4,140,343  |  |
| CCR/ELG                                           | \$1,994,610 |                         | F           | roject Cancell                        | ed          |                         | \$   | 1,994,610  |  |
| Pond Closure-Bottom Ash Ponds                     | \$ 71,519   |                         |             | \$ 361,032                            |             | \$1,713,183             | \$   | 2,145,734  |  |
| Indirect Cost                                     |             |                         |             |                                       |             |                         | \$   | 568,975    |  |
| CCR/ELG                                           | \$ 73,846   |                         | F           | Project Cancell                       | ed          |                         | \$   | 73,846     |  |
| Pond Closure-Bottom Ash Ponds                     | \$ 15,467   |                         |             | \$ 80,705                             |             | \$ 398,958              | \$   | 495,130    |  |

<sup>&</sup>lt;sup>1</sup>Includes SWEPCO share of direct and indirect capital install costs, capital removal, and AFUDC.

 $<sup>^{2}\</sup>mbox{Welsh}$  and Pirkey CCR/ELG cost transferred to O&M expense.

<sup>&</sup>lt;sup>3</sup>As of January 31, 2021

| SWEPCO CCR/ELG Project Stage <sup>123</sup> Completion Dates |           |                   |        |                 |           |            |  |  |  |
|--------------------------------------------------------------|-----------|-------------------|--------|-----------------|-----------|------------|--|--|--|
|                                                              | Stage 0-2 |                   | Stag   | ge 3-4          | Stage 5-7 |            |  |  |  |
|                                                              | Actual    | Schedule          | Actual | Schedule        | Actual    | Schedule   |  |  |  |
| Flint Creek                                                  |           |                   |        |                 |           |            |  |  |  |
| CCR/ELG                                                      | 12/1/2020 |                   |        | 1/1/2022        |           | 2/28/2023  |  |  |  |
| Pond Closure-Primary Bottom Ash Pond                         | 8/1/2020  |                   |        | 4/1/2021        |           | 2/28/2023  |  |  |  |
| Welsh                                                        |           | -                 | -      | •               |           |            |  |  |  |
| CCR/ELG                                                      | 12/1/2020 |                   |        | Project Cancell | ed        |            |  |  |  |
| Pond Closure-Primary Bottom Ash Pond                         |           | 3/1/2021          |        | 2/1/2027        |           | 10/17/2028 |  |  |  |
| Pond Closure-Bottom Ash Storage Pond                         |           |                   |        | 6/1/2021        |           | 10/1/2022  |  |  |  |
| Pirkey                                                       |           |                   | = - :: |                 |           |            |  |  |  |
| CCR/ELG                                                      | 12/1/2020 | Project Cancelled |        |                 |           |            |  |  |  |
| Pond Closure-Bottom Ash Ponds                                | 8/1/2020  |                   |        | 4/1/2021        |           | 10/17/2023 |  |  |  |

<sup>&</sup>lt;sup>1</sup>Stage 0-2: Study to Conceptual Design

<sup>&</sup>lt;sup>2</sup>Stage 3-4: Preliminary & Detail Engineering and Design

<sup>&</sup>lt;sup>3</sup>Stage 5-7: Construction, Commissioning, Start Up, and Close Out

### SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO SIERRA CLUB'S THIRD SET OF REQUESTS FOR INFORMATION

### Question No. Sierra Club 3-2:

Refer to SWEPCO response to Sierra Club 1-5, Highly Sensitive Attachment 6.

- a. For each unit, indicate whether the units were modeled with an economic or a selfcommitment status for each year of the analysis. If not exclusively one or the other, state how unit commitment was modeled.
- b. Indicate the date the study was conducted.
- c. Indicate the regulation or rationale behind each of the retirement date assumption listed.
- d. Indicate the date used in this analysis, by which ELG compliance must be achieved.
- e. Indicate the date used in this analysis, by which CCR compliance must be achieved.
- f. For all scenarios indicate whether CCR compliance costs, ELG compliance costs, or both ELG and CCR costs were included or excluded.

#### Response No. Sierra Club 3-2:

- a. The units were assumed to be economically committed and dispatched in the modeling to produce the unit information found in SC 1-5 Highly Sensitive Attachment 6.
- b. Please see the response to SC 3-3 a. for the date the study was conducted.
- c. The rationale behind the retirement date assumptions is compliance with the CCR and/or ELG rules.
- d. Achieving CCR compliance at each facility listed below is dependent on future operations of the plant (cease or continue burning coal) and need for alternative disposal capacity at the plant when the CCR impoundment ceases operation. The CCR rule allows the plant to continue operating the CCR impoundment until October 15,2023 while additional disposal capacity is provided. Flint Creek Plant will be providing additional disposal capacity and then will close the Primary Bottom Ash Pond (BAP) per the date shown below. The CCR rule also allows a plant that commits to cease burning coal to continue operating the CCR impoundments as long as the plant ceases burning coal and the CCR impoundments are closed by October 17, 2023 (plants with impoundments less than 40 acres Pirkey) or October 17, 2028 (for impoundments 40 acres and greater Welsh). The dates provided are based on the current individual CCR impoundment plan that was submitted to EPA for approval on November 30, 2020. The current plans are ultimately dependent on EPA approval, with the exception of the Welsh Bottom Ash Storage Pond (BASP) which will cease operation no later than April 11, 2021.
  - Welsh BASP Cease Operation and Initiate Closure by April 11, 2021
  - Welsh Primary Bottom Ash Pond (BAP) Cease Burning Coal and Complete Closure by October 17, 2028

- Flint Creek Primary BAP- Complete Closure by February 28, 2023
- Pirkey East BAP- Complete Closure by January 2023
- Pirkey West BAP- Complete Closure by October 17, 2023
- e. All plants must comply by a date to be established in each facility's National Pollutant Discharge Elimination System (NPDES) wastewater permit. The latest possible date allowed under the current ELG rule is December 31, 2025. However, an option is available in the rule to allow the plant to cease combustion of coal (i.e., retire or repower) and to continue to operate without further ELG-related retrofits until no later than December 31, 2028. We have filed permit requests to reflect site-specific dates under this revised framework that became effective in December 2020.
  - The current permit for Flint Creek is based on the prior ELG rule and contains a date of December 31, 2023. We have filed a request to indicate the date should be revised to November 30, 2022.
  - The current permit for Welsh similarly contains a date of December 31, 2023 based on the prior rule. We have filed a request to modify the permit to reflect that the facility will permanently cease coal combustion on or before December 31, 2028, and therefore no technology retrofits are required.
  - The current permit for Pirkey contains no relevant date, but is in the renewal process with the state agency. We have filed information that the facility will permanently cease coal combustion on or before October 17, 2023, and therefore no technology retrofits are required.

f. In the CCR+ELG Expenditure scenario both CCR and ELG compliance costs were included. In the No CCR Expenditure scenario, no CCR or ELG compliance costs were not included. In the CCR Expenditure scenario, only CCR compliance costs were included.

Prepared By: Mark A. Becker Title: Mng Dir Res Plnning&Op Anlysis

Sponsored By: Thomas P. Brice Title: VP Regulatory & Finance

### SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO SIERRA CLUB'S FOURTH SET OF REQUESTS FOR INFORMATION

#### **Question No. Sierra Club 4-1:**

Refer to SWEPCO response to Sierra Club 1-5, Highly Sensitive Attachment 6.

- a. Indicate the date counsel requested the SWEPCO Unit Disposition Analysis.
- b. Please define and provide a brief explanation of the following the following terms as used in the spreadsheet:
  - i. CPW
  - ii. Planning Period
  - iii. End-Effects
- c. Describe each of the specific planning periods, and explain why each planning period was selected for study.
- d. For each of the portfolios listed in Column A,
  - i. Please provide an itemized list and explanation of the costs and anticipated schedule of expenditures included in each scenario.
  - ii. For each portfolio listed in Column A, what costs for environmental compliance are included in the "no CCR expenditure" for the specified unit in each scenario?
  - iii. Do the "no CCR expenditure" portfolios for each unit assume ELG and CCR expenditures at all other units?
  - iv. Do the "no CCR expenditure" portfolios for each unit assume no ELGexpenditures at that unit?
- e. Did SWEPCO run any scenarios that included no expenditures on ELG and CCR compliance at more than one unit in a given scenario? If yes, please indicate if various combinations of "no expenditure" at different units were included and what those combinations were.
- f. Why did the analysis not include a baseline scenario of no CCR and no ELG expenditures at all units?
- g. For the EIA Commodity Price Forecast with Carbon Pricing, what year did SWEPCO assume carbon pricing to begin? What carbon pricing is being used in the analysis?
- h. State in narrative form why the Flint Creek expenditure appears to be more favorable when a carbon price is assumed for one of the planning periods studied.
- i. For each of the retirement date assumptions, please state the reasoning for the three specific dates chosen.
- j. Why did SWEPCO assume a March 2028 retirement for the "no CCR expenditure" assumption at Flint Creek?

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PUC DOCKET NO. 51415
Sierra Club's 4th RFI, Q. # Sierra Club 4-1
Page 2 of 2

#### **Response No. Sierra Club 4-1:**

- a. Counsel requested the SWEPCO Unit Disposition Analysis on February 21, 2020.
- b.
- i. CPW is the acronym for Cumulative Present Worth which takes a series of future costs and present values them to the present day costs.
- ii. The Planning Period is the period of time that the Plexos model develops the optimal plan (i.e. lowest cost mix) of new resource additions. The Planning Period for this analysis was selected to be long enough for the model to determine the year over year impacts of resources added in the optimal plan.
- iii. Please see SC 2-2 for a description of the End-Effects period.
- c. Please see the response to b. ii and iii.

d.

- i. Please see the response to SC 2-2 c. for a list of all CCR and ELG related costs assumed in each scenario.
- ii. Please see the response to SC 2-2 c. for the environmental compliance costs assumed in the No CCR Expenditure scenarios.
- iii. In the No CCR Expenditure profiles for a specific unit, CCR and ELG expenditures are assumed to be spent at the other units
- iv. No ELG expenditures are assumed at a unit in the No CCR Expenditure scenarios.
- e. No. The economic analysis that supported the decision to retire Pirkey, Welsh 1 and Welsh 3 and Flint Creek's continued operation were performed on a individual basis.
- f. The baseline scenario where CCR and ELG expenditures were made at all units was selected to measure the economic impact of not making those expenditures at specific units. Only one baseline scenario was needed to determine those economic impacts and there was no need for a second baseline scenario.
- g. Please see the response to SC 2-2 d. for the year carbon pricing was assumed to begin and the carbon pricing assumed in the EIA Commodity Price Forecast with Carbon Pricing.
- h. The reason why making the Flint Creek CCR and ELG expenditures is more favorable under the EIA with Carbon Pricing scenario than the EIA without Carbon Pricing scenario is due to differences in capacity expansion plans between those two carbon pricing scenarios.
- i. The CCR+ELG Expenditure retirement date assumes that the units will run through the end of their operating life. The No CCR Expenditure retirement date is determined by when the units need to cease operations to allow the existing ponds to be remediated prior to the ELG compliance date. The CCR Expenditure retirement date is determined by the ELG compliance date.
- j. Please see the response to i.

Prepared By: Mark A. Becker Title: Mng Dir Res Plnning&Op Anlysis

Sponsored By: Thomas P. Brice Title: VP Regulatory & Finance

### SOUTHWESTERN ELECTRIC POWER COMPANY'S RESPONSE TO SIERRA CLUB'S FIFTH SET OF REQUESTS FOR INFORMATION

#### **Question No. SC 5-2:**

Regarding the option to convert Welsh to operate on natural gas.

- a. Indicate the outage length necessary to complete the conversion.
- b. State the date on which the Company expects to begin construction on the conversion.
- c. Provide the date by which a conversion to natural gas will be completed. If the Company is considering multiple time frames, provide all potential completion dates.
- d. Provide summer and winter capacity of the unit after its conversion to run on natural gas.
- e. Provide the total cost of the conversion.
- f. Provide an annual breakdown of costs that will be incurred by ratepayers.

Indicate how SWEPCO plans to recover the cost of the conversion (i.e., through which docket or rate mechansim).

### Response No. SC 5-2:

SWEPCO has conducted only a conceptual review of the conversion of the Welsh units to operate on natural gas. SWEPCO has not fully scoped the project nor consulted an Engineering, Procurement, and Construction contractor. Therefore the responses below are preliminary.

- a. It could take approximately 12 weeks or more to convert the Welsh unit to a gas fired facility.
- b. The Company is continuing to evaluate the Welsh gas conversion. At this time, there is no expected construction start date for the Welsh gas conversion.
- c. Please see the response to b.
- d. The winter and summer capacity of the Welsh gas conversion would be 525 MW.
- e. The total capital cost of the Welsh gas conversion would be approximately \$32 million.
- f. The analysis of the annual breakdown of gas conversion costs to the customer has not been performed.
- g. Because SWEPCO has not decided to undertake the conversion, SWEPCO has not developed a cost recovery plan. However, if a conversion is undertaken, the capital investment would be eligible for recovery in base rates.

Prepared By: Mark A. Becker Title: Mng Dir Res Plnning&Op Anlysis

# SOUTHWESTERN ELECTRIC POWER COMPANY'S SUPPLEMENTAL RESPONSE TO CITIES ADVOCATING REASONABLE DEREGULATION'S FIRST SET OF REQUESTS FOR INFORMATION

### **Question No. CARD 1-16:**

Provide annual capital expenditures at each SWEPCO power plant for each of the last four calendar years, the test year, and as requested in rates for the first time in this case.

### **Response No. CARD 1-16:**

See Schedule H 5-3.b, for the information requested.

#### **Supplemental Response CARD 1-16:**

For Schedule H-5.3b expenditures broken down by those requested for the first time in rates and the test year period, please see CARD 1-16 Supplemental Attachments 1 and 2.xlsx.

Prepared By: Tara D. Beske Title: Regulatory Consultant Staff

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| Location                                 | Project Description                      | Apr 2019-Mar 2020 |
|------------------------------------------|------------------------------------------|-------------------|
| 1320 Central Maint Facility SWEPCO       | WSX114593 Tooling Contigency New Tools O | 335,814.6400      |
| 1320 Central Maint Facility SWEPCO Total |                                          | 335,814.6400      |
| 168 SWEPCO Generation                    | 000005264 SEPCo-G Capital Software Dev   | 8,011,150.3600    |
|                                          | 000017845 Alliance RCM Cap Blkt          | 13,925.6200       |
|                                          | 000021554 SWEPCO DHLC/Pirkey Land Acq    | 580,394.2600      |
|                                          | 000025252 2018 Gen Plt Cap Blkt - SEP-G  | 407,787.8000      |
|                                          | IT1681421 Maximo Imp - SEP - G           | 2,610,644.3200    |
|                                          | IT168BILL Corp Prgrm Billing - SWEPCO Ge | 1,205,653.7200    |
|                                          | REOSWE003 Mobile Test Equipment-SWEGEN   | (953.9200)        |
| 168 SWEPCO Generation Total              |                                          | 12,828,602.1600   |
| Arsenal Hill Plant                       | 000012163 J.L.Stall @ Arsenal Hill Const | 4,957.2400        |
|                                          | ARS5BATTY STATION BATTERY #5             | 50,481.1700       |
|                                          | ARS5MSHGR Replace U5 Steam Line Hanger   | 704.1200          |
|                                          | ARS5MVALV PROVIDE PLATFORMS FOR MISC ARE | 2,949.3200        |
|                                          | ARS6ABELV Replace elevator control sys   | 264,177.2100      |
|                                          | ARS6ABT3K Unit 6 Siemens HMI             | 208,833.5400      |
|                                          | ARS6AHREJ ARS 6A HRSG EXP JOINT          | 72,749.4400       |
|                                          | ARS6ASCRR Stall U6A SCR Catalyst Replace | 752,547.2900      |
|                                          | ARS6B555A 6B Main Steam Non Return Valve | 16,153.3400       |
|                                          | ARS6BHREJ ARS 6B HRSG EXP JOINT          | 75,547.1400       |
|                                          | ARS6BSCRR Stall U6B SCR Catalyst Replace | 757,194.8100      |
|                                          | ARS6DEMMB ARS STALL DEMIN MIXED BED      | 28,046.2200       |
|                                          | ARS6GSUSP STALL SPARE GSU / 6S & 6 AB    | 1,000,264.1500    |
|                                          | ARS6HOIST ARS STALL UNIT MONORAILS       | 16,045.2600       |
|                                          | ARS6HVACR STALL AIR CONDITIONING UNIT    | 43,632.8900       |
|                                          | ARS6OUTCP Stall Outage Capital           | 158,746.0100      |
|                                          | ARS6STMAJ STEAM TURBINE MAJOR - 6        | 2,408,292.0500    |
|                                          | ARS6TOOLC ARS6 TOOLS OVER 1K             | 41,207.8800       |
|                                          | ARSBAYOU1 Stall-Bayou Bank Stabilization | 1,391,472.6700    |
|                                          | ARSOUTPPB ARS OUTAGE                     | 34,280.2700       |
|                                          | ARSREOICE REO Ice Machine                | 5,270.6500        |
|                                          | ARSSRISSU ARS Capital Storeroom Issues   | 4,469.1900        |
|                                          |                                          |                   |

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| Location                 |           | Project Description            | Apr 2019-Mar 2020 |
|--------------------------|-----------|--------------------------------|-------------------|
|                          | REOSWE008 | HVAC Replacement REO           | 65,315.0900       |
| Arsenal Hill Plant Total |           |                                | 7,403,336.9500    |
| Dolet Hills Plant        | DLHCI0033 | Construct New Landfill Cell    | 28,695.1300       |
|                          | DLHCI0042 | DH Rpl Boiler Duct, Insulation | 13,043.7800       |
|                          | DLHCI0043 | DHPS-Upgrade Air Heaters       | 2,769.3000        |
|                          | DLHCI0044 | Rpl Boiler Furnace Lwr Tubing  | (169.6300)        |
|                          | WSX111023 | Dolet Hills-Ppb Other Producti | 1,460,529.2100    |
| Dolet Hills Plant Total  |           |                                | 1,504,867.7900    |
| Flint Creek Plant        | 000013017 | FLC Expansion Joint Replace    | 463.3100          |
|                          | 000013154 | FLC Replace Conveyor Belts     | 102,474.6200      |
|                          | 000013169 | FLC Small Tools Coal Yard      | 9,384.4200        |
|                          | 000013666 | FLC Instrumentation Upgrades   | 66,155.1500       |
|                          | 000013705 | FLC Small Tools Misc           | 152,402.3400      |
|                          | 000013708 | FLC Install New Platform       | 45,365.7300       |
|                          | 000020379 | FLC U1 DBA Conver (CCR/ELG)    | 401,395.9700      |
|                          | 000021701 | FC U1 NOx Mods                 | (12,425.1000)     |
|                          | FC001LFEX | Flint Creek LF Lateral Exp     | 1,482.5000        |
|                          | FLCFGDFAN | ID Fan Labor                   | 128,887.5200      |
|                          | FLCSTATOR | FLC Spare Stator Bars          | 974,388.3500      |
|                          | FLCU10025 | FLC Dumper PLC Upgrade         | 28,096.1100       |
|                          | FLCU10156 | FLC U1C 4-kV Switchgear Repl   | (150.0000)        |
|                          | FLCU10245 | Pump Replacement               | 55,378.2000       |
|                          | FLCU10247 | FLCU1 Generator Stator Rewind  | 241,620.5700      |
|                          | FLCU10261 | Misc Valve Replacement         | 1,182.3000        |
|                          | FLCU10330 | Replace Misc BOP Valves        | 7,878.0700        |
|                          | FLCU10417 | Yokogawa Probe and Analyzers   | 2,234.3500        |
|                          | FLCU10420 | Replace Capacitor Bank Swgear  | 377,945.1900      |
|                          | FLCU10424 | NERC Compliance DDR Req.       | 238.7500          |
|                          | FLCU10442 | Replace Motor Pump City Lake   | 10,245.3200       |
|                          | FLCU10454 | Replace Generator Bushings & C | (43.4600)         |
|                          | FLCU10458 | Repl Tripper & Coal Belt Contr | 20,208.3500       |
|                          | FLCU10463 | Crowder Family Land Purchase   | 804.2400          |

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| Location                |           | Project Description            | Apr 2019-Mar 2020 |
|-------------------------|-----------|--------------------------------|-------------------|
|                         | FLCU10469 | Replace C Pulv Rotating Seg    | 84,050.6300       |
|                         | FLCU10472 | PULV REPLACE ROLL WHEEL ASSE   | 129,515.8000      |
|                         | FLCU10481 | HU Diff Relay Replacement      | 49,449.7300       |
|                         | FLCU10482 | Rep Ik Sootblower 54 12 & 4    | 13,201.8100       |
|                         | FLCU10483 | Purchase AC VFD for Maint Bldg | (216.5200)        |
|                         | FLCU10485 | Replace NID Recycle Rotary Fee | 8,025.0800        |
|                         | FLCU10486 | Primary BA Pond Oil Boom       | 2,685.1900        |
|                         | FLCU10489 | MOTOR REWINDS                  | 7,820.2500        |
|                         | FLCU10491 | Replace Demin Work Stations    | 37,756.2000       |
|                         | FLCU10493 | Replace Reheat Attemper Nozzle | 9,805.7000        |
|                         | FLCU10497 | Replace ISO Valves NID Cooler  | 5,298.4700        |
|                         | FLCU10519 | CH 1C Main Feed to Dumper      | 57,798.3600       |
|                         | FLCU10520 | DISCHARGE CHECK VALVE          | 1,219.8400        |
|                         | FLCU10521 | Replace Bags in Ash Silo Bagho | 11,295.1700       |
|                         | FLCU10523 | Replace 1CH1 Breaker           | 4,879.6600        |
|                         | FLCU10528 | Replace "B2" Flyash crossover  | 4,875.5400        |
|                         | FLCU10529 | Replace J- Duct Exhauster      | 7,489.7700        |
|                         | FLCU10530 | Purchase Motors Over 10H       | 12,432.1800       |
|                         | FLCU10531 | REPL CONTROLS BUNKER DUST      | 5,953.0100        |
|                         | FLCU10534 | Pulv Swing Gate Switch and Sol | 195,250.5700      |
|                         | FLCU10535 | Pump Replacement               | 6,235.8900        |
|                         | FLCU10538 | C GSU Cooling Pumps and Valves | 121,967.8800      |
|                         | FLCU10540 | Repl "A" Lime Transport Blower | 9,409.6800        |
|                         | FLCU10546 | DCS Controls Switch Upgrade    | 7,689.8600        |
|                         | FLCU10548 | CSP Pumps                      | 31,821.0100       |
|                         | FLCU10553 | Replace Pinion Gear At Dumper  | 2,919.1000        |
| Flint Creek Plant Total |           |                                | 3,444,242.6600    |
| Knox Lee Plant          | ARCFLA168 | Arc Flash Protectn Swi SWEPCO  | 1,133.8500        |
|                         | KXL0CM001 | Small Tools and Misc Equipment | 103,575.5100      |
|                         | KXL0CM006 | KXL U0 Replace Oil Booms       | 164.3200          |
|                         | KXL0CM025 | KXL U0 Admin Offices           | 783,694.1500      |
|                         | KXL0CW007 | Replace Chlorinator Skid       | 116,912.6700      |
|                         |           |                                |                   |

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| Location             |           | Project Description              | Apr 2019-Mar 2020 |
|----------------------|-----------|----------------------------------|-------------------|
|                      | KXL0CW008 | KXL U0 Reverse Osmosis System    | 125,114.2200      |
|                      | KXL5CB003 | KXL U5 Boiler Gas Header Vlvs    | 305,754.1700      |
|                      | KXL5CB009 | KXL U5 Boiler Lighting           | (128.8500)        |
|                      | KXL5CB010 | KXL U5 Replace Air Compressor    | 96,975.8200       |
|                      | KXL5CD008 | KXL U5 Annunciator Controls      | 11,535.3900       |
|                      | KXL5CD009 | KXL5 AMMONIA INJECTION SYSTEM    | 92,564.1500       |
|                      | KXL5CE003 | KXL U5 NERC Relays Replacement   | 10,711.4100       |
|                      | KXL5CE007 | KXL5 U5 RELAY                    | 6,147.4400        |
|                      | KXL5CG004 | Replace Generator Leads U5       | 176,925.1300      |
|                      | KXL5CH002 | KXL U5 Air Heater Seals Rpl      | 190,118.5300      |
|                      | KXL5CM004 | KXL U5 Expansion Joint Upgrade   | 97,021.8700       |
|                      | KXL5CM014 | KXL U5 TDL Laser Analyzer        | 197,160.7900      |
|                      | KXL5CM021 | KXL 5 USED Oil Storage Tank      | 8,878.7300        |
|                      | KXL5CV004 | KXL U5 SW Piping                 | 73,314.1100       |
|                      | KXL5CW001 | KXL U5 Service Water Pump        | 2,926.5000        |
|                      | KXL5CW002 | KXL U5 Boiler Silica Analyzer    | 14,884.1900       |
|                      | NRCPSWPC  | NERC CIP SWEPCO                  | 4,682.7500        |
|                      | SWE168RTU | SWEPCO Gen RTU Upgrade           | 3,880.6400        |
| Knox Lee Plant Total |           |                                  | 2,423,947.4900    |
| Lieberman Plant      | LBM0CCOOL | Turbine Lube Oil Cooler          | 303,847.2500      |
|                      | LBM0CCTFL | Comp. Turbine Floor Lighting     | 55,208.3800       |
|                      | LBM0CG202 | Water Treatment Building         | 9,127.2700        |
|                      | LBM0CGATE | Entrance Gate Replacement        | 12,942.0000       |
|                      | LBM0CM10  | 1 U0 Valve Replacement/Upgrades  | 295,448.8100      |
|                      | LBM0CM104 | 4 U0 Small Tools & MiscEquipment | 31,446.4500       |
|                      | LBM0CN100 | U0 CATHODIC PROTECTION           | (3,725.7500)      |
|                      | LBM0CT200 | Replacement of Transformer       | 329,983.6000      |
|                      | LBM0CT201 | Lighting Transformer             | 24,652.2900       |
|                      | LBM0CTRAN | Replacement of Transmitters      | 6,055.1900        |
|                      | LBM3CPIRB | U3 Pilot Igniter Rebuild         | 127,851.3700      |
|                      | LBM3CPUM  | P U3 Boiler Chemical Pump        | 147.1100          |
|                      | LBM4CHTW  | L Upgrading Hot Well Controls    | 845.2100          |

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| Location              | Project Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Apr 2019-Mar 2020 |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
|                       | LBM4CPIRB U4 Pilot Igniter Rebuild                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 30,177.3400       |
|                       | LBMCALARM Alarm System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 23,029.8900       |
| Lieberman Plant Total |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1,247,036.4100    |
| Lone Star Plant       | LNS000611 Capital PPB - Misc Project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | (46,036.4800)     |
| Lone Star Plant Total | The state of the s | (46,036.4800)     |
| Mattison Plant        | 000014768 TON Plant Improvements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 31,295.1800       |
|                       | HDMU00002 HDM Small Tools                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3,544.9700        |
|                       | HDMU00074 Construct Maintenance Building                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 177,815.4700      |
|                       | HDMU00075 Purchase Capital Tools                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 13,759.7500       |
|                       | HDMU00076 GE Stationary Blade Replace                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 473,407.0100      |
|                       | HDMU40012 Set of CT Transition Pieces                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 619,310.1400      |
| Mattison Plant Total  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1,319,132.5200    |
| Pirkey Plant          | 000026191 PRK CCR/ELG Compliance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1,814,669.5500    |
|                       | PRK10C220 CY CONVEYOR BELTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 67,593.9100       |
|                       | PRK10C251 PULV GRINDING TABLES BOWL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 204,331.2700      |
|                       | PRK10C302 Boiler Duct Exp Joints                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 56,084.0400       |
|                       | PRK12C704 PRK Controls BMS CC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 5,365,607.3920    |
|                       | PRK13C600 Precip Rappers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 21,730.3800       |
|                       | PRK14C810 ASH ECON ASH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 10,211.8300       |
|                       | PRK18C001 CAP OUTAGE < \$100K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (1,516.6600)      |
|                       | PRK18C002 CAP NON-OUTAGE <\$100K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 11,648.0700       |
|                       | PRK19C001 CAP OUTAGE < \$100k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 737,138.0300      |
|                       | PRK19C002 CAP NON-OUTAGE < \$100K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 902,368.6500      |
|                       | PRK20C002 CAP NON-OUTAGE <\$100K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 116,874.7600      |
|                       | PRKCAHT61 PAH SUPPORT/GUIDE BEARING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 91,088.9000       |
|                       | PRKCBLR60 BOILER HEADER INSULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 45,149.7500       |
|                       | PRKCCNT01 RVP CONTROL CARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 10,673.8700       |
|                       | PRKCCNV02 CONVEYOR PULLEY REPLACEMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 19,690.2200       |
|                       | PRKCCYD03 A1 OR A2 RING GRANULATOR REBUI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 35,585.0100       |
|                       | PRKCDEM00 Demin Analyzers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 37,033.5800       |
|                       | PRKCFDR01 STOCK FEEDER BELTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 3,978.4400        |
|                       | PRKCFGD51 FGD Valves Recycle                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 31,994.8100       |
|                       | •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | •                 |

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|                    | PRKCFGD60 FGD CONTROLS UPGRADE           | 3,778,091.2300    |
|                    | PRKCRLY01 RELAYS FOR DME                 | 170,040.7400      |
|                    | PRKCSFD01 STOCK FEEDER BELTS             | 9,062.2500        |
|                    | PRKCSLG02 A FILTER CAKE VACUUM DRUM REPL | (35,187.9500)     |
|                    | PRKCWTR02 POND EVAPORATOR INSTALL        | 623,694.8700      |
|                    | PRKPSC223 R/R 2019                       | 100,114.9000      |
|                    | PRKXENV01 Pirkey Landfill Area K Cell 1  | 1,034,077.1700    |
|                    | PRKXENV03 PRK Landfill Expansion         | 61,808.3500       |
|                    | PRKXFAN50 ID Fan Blades B                | 495,673.4600      |
|                    | PRKXGEN51 CI VOLTAGE REGULATOR           | 137,768.8900      |
| Pirkey Plant Total |                                          | 15,957,079.7120   |
| Turk Plant         | TRKAPEXBU TRK MATS REDUNDANT APEX BACKUP | 101,972.0900      |
|                    | TRKBAYLIT TRK TURBINE HI BAY LIGHTS      | 29,707.2300       |
|                    | TRKBLRHVA TRK HVAC BOILER SAMPLE ROOM    | 6,038.3600        |
|                    | TRKC2BELT TRK CONVEYOR 2 BELT REPLACEMEN | 115,763.5300      |
|                    | TRKC5BELT TRK CONVEYOR 5 BELT REPLACEMEN | 89,912.7200       |
|                    | TRKCANNON TRK SCR AIR CANNONS            | 30,272.0000       |
|                    | TRKCOALYD TRK MISC COAL EQUIP            | 4,452.1600        |
|                    | TRKCOGLTK TRK WWTP COAGULANT STRG TANK   | 9,461.4100        |
|                    | TRKCVBELT TRK COAL CONV BELT REPLACEMENT | 85,530.3500       |
|                    | TRKCYCRIC TRK CY RECLAIM TUNNEL CRICKETS | 667,702.9000      |
|                    | TRKCYELEV TRK COAL YARD ELEVATOR CRUSHER | 42,331.7200       |
|                    | TRKFLAHTR TRK RAS FLUIDIZING AIR HEATER  | 6,812.9100        |
|                    | TRKFURNTR TRK OFFICE FURNITURE           | 3,638.6300        |
|                    | TRKGAITON TRK GAITRONICS SYSTEM          | 10,323.5400       |
|                    | TRKGENPLF TRK GENERAL PLATFORMS          | 90,684.5500       |
|                    | TRKGENUPS TRK PLANT UPS UPGRADES         | 3,126.4900        |
|                    | TRKHEATTR TRK WT HEAT TRACE INST CONTROL | 163.3300          |
|                    | TRKHVACCN TRK HVAC CONTROL SYS FOR ADMIN | 45,392.3600       |
|                    | TRKIDFNCL TRK #1 ID FAN LUBE OIL COOLER  | 13,881.9900       |
|                    | TRKMOTORS TRK MISC MOTORS                | 36,023.1200       |
|                    | TRKMOWR19 TRK NEW EXMARK MOWER ZEROTURN  | 8,761.7500        |

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|                  | TRKMSCPPB TRK MISC PPB PROJECTS          | 374,962.2500      |
|                  | TRKPLGRZO TRK PLVR GRINDING ZONE REPLACE | 199,171.5900      |
|                  | TRKPLTRAN TRK PLANT TRANSMITTERS         | 50,750.7800       |
|                  | TRKPRESBL TRK PRESSURE BLOWER 1 N 1CP    | 899.6200          |
|                  | TRKPULVER TRK PULVERIZER WHEEL REPLAC    | 2,493.2500        |
|                  | TRKPUMPSO TRK MISC PUMPS                 | 13,910.5400       |
|                  | TRKRAILR2 Turk Rail Replacement          | 4,171,468.6400    |
|                  | TRKRCDAC1 TRK CY RCD AC UNIT             | 10,290.2000       |
|                  | TRKSAFETY TRK SAFETY ENHANCEMENTS        | 2,725.3600        |
|                  | TRKSBCONT TRK SOOTBLWR HYDROJET CONTROLS | 3,984.5800        |
|                  | TRKSCRHR1 TRK SCR ACOUSTIC CLNR 1 & 2 LY | 61,733.0800       |
|                  | TRKSLKHTR TRK LIME SLAKER 1 HTR RECTFR   | 7,044.9800        |
|                  | TRKTOOLSO TRK TOOLS MISC                 | 163,819.9300      |
|                  | TRKTRBAVR TRK MAIN & BFP TRB AVR CONT UP | 351,008.1800      |
|                  | TRKUPGRAD TRK MISC UPGRADES              | 4,176.7600        |
|                  | TRKVALVES TRK PPB MISC VALVES            | 37,500.5000       |
|                  | TRKVFDDRV TRK CONST ELEV VARI AC DRIVES  | 812.3400          |
| Turk Plant Total |                                          | 6,858,705.7200    |
| Welsh Plant      | 000020364 WSH U0 DBA Conversion          | 937,832.7300      |
|                  | WSHCU0003 WSH U0 Parts Sox Under 50K     | 58,791.9300       |
|                  | WSHCU0009 WSH U0 Ultra Filter Membranes  | 169,760.9800      |
|                  | WSHCU0019 WSH U0 Coal Car Dumper Replace | 40,379.4700       |
|                  | WSHCU0024 WSH U0 Small Tools             | 311,068.1600      |
|                  | WSHCU0025 WSH U0 RO Membrane             | 7,604.1500        |
|                  | WSHCU0042 WSH U0 COAL YARD 4KV FEED JH   | 426,348.9700      |
|                  | WSHCU0102 WSH U0 COAL YARD CONVEYOR BELT | 194.9600          |
|                  | WSHCU0103 WSH U0 COAL YARD MOTORS        | 114,314.0300      |
|                  | WSHCU0104 WSH U0 COAL YARD GEARBOXES     | 5,345.7400        |
|                  | WSHCU0106 WSH U0 CAPITAL INSTRUMENTATION | 2,503.3500        |
|                  | WSHCU0107 WSH U0 PUMP REPLACE/OVERHAUL   | 87,298.2600       |
|                  | WSHCU0108 WSH U0 CAPITAL MOTOR REWINDS   | 486.2200          |
|                  | WSHCU0114 WSH U0 CONVEYOR CONTROL SYSTEM | 1,673.4600        |

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|                   | WSHCU0117 | WSH U0 TRIPPER CONTROLS        | 170,251.4700      |
|                   | WSHCU0120 | WSH U0 ASH POND LAND ACQUISTIO | 4,552.1800        |
|                   | WSHCU1003 | WSH U1 Parts Sox Under 50K     | 410,635.5000      |
|                   | WSHCU1004 | WSH U1 Replace Clinker Grinder | (32,211.2800)     |
|                   | WSHCU1005 | WSH U1 Pulv Cmpnt Changeout    | 331,100.1200      |
|                   | WSHCU1007 | WSH U1 CSP Contractor Labor    | 89,620.1900       |
|                   | WSHCU1028 | WSH U1 Capital Motor Rewinds   | 38,426.6300       |
|                   | WSHCU1029 | WSH U1 Valve Replacement       | 321,353.1700      |
|                   | WSHCU1030 | WSH U1 Platforms               | 112,745.8500      |
|                   | WSHCU1053 | WSH U1 Pump Rep/Cap Overhaul   | 291,125.2600      |
|                   | WSHCU1107 | WSH U1 CAPITAL INSTRUMENTATION | 4,313.3900        |
|                   | WSHCU1108 | WSH U1 SEL 487E RELAY/COMPUTER | 1,957.8100        |
|                   | WSHCU1110 | WSH U1 BYPRODUCT DRY UNLOADING | 6,197.2700        |
|                   | WSHCU1113 | U1 FABRIC FILTER OPACITY MONIT | 126,081.6200      |
|                   | WSHCU3003 | WSH U3 Parts Sox Under 50K     | 77,406.9200       |
|                   | WSHCU3005 | WSH U3 Pulv Cmpnt Changeout    | 539,458.2000      |
|                   | WSHCU3007 | WSH U3 CSP Contractor Labor    | 26,861.2300       |
|                   | WSHCU3028 | WSH U3 Capital Motor Rewinds   | 46,293.0800       |
|                   | WSHCU3029 | WSH U3 Valve Replacement       | 66,594.0200       |
|                   | WSHCU3030 | WSH U3 Platforms               | 26,359.3600       |
|                   | WSHCU3049 | WSH U3 Expansion Joints Boiler | 40,601.6900       |
|                   | WSHCU3053 | WSH U3 Pump Rep/Cap Overhaul   | 280,969.6900      |
|                   | WSHCU3110 | WSH U3 CAPITAL INSTRUMENTATION | 7,300.4200        |
|                   | WSHCU3111 | BYPRODUCT DRY UNLOADING SYS    | 4,883.5800        |
|                   | WSHCU3113 | U3 FABRIC FILTER OPACITY MONIT | 163,155.0600      |
|                   | WWSHPPBNB | WSH Capital Non-Budgeted       | 1,528,757.5500    |
| Welsh Plant Total |           |                                | 6,848,392.3900    |
| Wilkes Plant      | WLKC00004 | Miscellaneous Tools and Equip  | 197,598.1400      |
|                   | WLKC00105 | PLATFORMS                      | (505.4800)        |
|                   | WLKC00106 | WLK CATHODIC PROT NAT GAS LINE | 10,668.0700       |
|                   | WLKC00111 | UO WILKES PI SERVERS INSTALL   | 4,506.5600        |
|                   | WLKC00114 | REPL TRANSFORMER AT LODGE      | (64.5100)         |
|                   |           |                                |                   |

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| Location           |           | Project Description            | Apr 2019-Mar 2020 |
|--------------------|-----------|--------------------------------|-------------------|
|                    | WLKC00115 | U0 INTRASITE COMMUNICATION INS | 56.9700           |
|                    | WLKC00116 | REPLACE LODGE FLOOR            | (1,943.1800)      |
|                    | WLKC00117 | UO DEMIN RESIN REPLACEMENT     | 24,290.1100       |
|                    | WLKC00118 | UO PAVE PLANT ROAD ENTRANCE    | 92,323.4400       |
|                    | WLKC00119 | REPLACE ALL CABIN WINDOWS      | 18,802.2100       |
|                    | WLKC10048 | U1 HYDROGEN SUPPLY SYS REPL    | 76,262.5000       |
|                    | WLKC10051 | U1 INSTALL HYDROGEN SAMPLE PAN | (163.5100)        |
|                    | WLKC10052 | U1 REPL HYDROGEN PANEL ANNUNCI | 9,985.0700        |
|                    | WLKC10053 | U1 REPLACE CEMS EQUIPMENT      | 63,798.8700       |
|                    | WLKC10054 | U1 REPLACE BLACKSTART BATTERY  | 4,366.3000        |
|                    | WLKC20003 | U2 Retube B FW Htr             | 129,262.0900      |
|                    | WLKC20052 | U2 REPL HYDROGEN PANEL ANNUNCI | 908.2700          |
|                    | WLKC20053 | U2 REPLACE CEMS EQUIPMENT      | 11,124.7500       |
|                    | WLKC30043 | U3 RETAINING RING REPLACEMENT  | 428,767.6500      |
|                    | WLKC30045 | U3 INSTALL HYDROGEN SAMPLE PAN | 301.2400          |
|                    | WLKC30046 | U3 REPL HYDROGEN PANEL ANNUNCI | 1,536.8400        |
|                    | WLKC30047 | U3 REPLACE CEMS EQUIPMENT      | 11,447.0100       |
|                    | WLKC30052 | U3 COMB TEMP VAL CTRL CABINETS | 15,874.4800       |
|                    | WLKC30053 | U3 MDBFP MOTOR ROTOR REBAR/REW | 120,029.4800      |
|                    | WLKCI3012 | U3 TURBINE VIBRATION SYS RPL   | 160,089.3100      |
|                    | WLKCI3019 | U3 TURBINE CONTROLS            | 1,388,235.8400    |
| Wilkes Plant Total |           |                                | 2,767,558.5200    |

# SOUTHWESTERN ELECTRIC POWER COMPANY'S SUPPLEMENTAL RESPONSE TO CITIES ADVOCATING REASONABLE DEREGULATION'S SECOND SET OF REQUESTS FOR INFORMATION

#### **Question No. CARD 2-10:**

Please provide SWEPCO's most recent studies evaluating the economic viability of continued operations of each Company owned generating unit, and supporting scheduled retirement dates of such units, along with underlying commodity price and operating cost assumptions.

#### Response:

Please see the workpaper entitled "Brice WP - Pgs from Filed App and Testimony - 10.6.20," which SWEPCO submitted with the native files provided with its rate-filing package for Dolet Hills.

Please see CARD 2-10 Attachment 1 for Pirkey.

#### **Supplemental Response No. CARD 2-10:**

Please see CARD 2-10 Supplemental HIGHLY Sensitive Attachment 1 for the most recent study evaluating the economic viability of the continued operations of Flint Creek, Welsh 1 &3 and Pirkey, and their operating costs. Please see CARD 2-10 Supplemental Attachment 2 and Attachment 3 for the commodity price forecasts used in the most recent analysis of those units. Please see the response to SC 1-5 for the most recent study evaluating the economic viability of the continued operation of Dolet Hills, and the operating costs of the unit. Please see CARD 2-10 Supplemental Attachment 4 and Attachment 5 for the commodity price forecast used in the most recent economic viability analysis of Dolet Hills. Attachments 2 – 5 are provided electronically on the PUC Interchange.

CARD 2-10 Supplemental HIGHLY SENSITIVE Attachment 1 responsive to this request is HIGHLY SENSITIVE PROTECTED MATERIAL under the terms of the Protective Order. Due to current restrictions associated with COVID-19, this information is being provided electronically and a secure login to access the information will be provided upon request to individuals who have signed the Protective Order Certification.

Prepared By: Mark A. Becker Title: Mng Dir Res Plnning&Op Anlysis

Sponsored By: Thomas P. Brice Title: VP Regulatory & Finance

Direct Testimony of Devi Glick, Exhibit DG-4

# Exhibit DG-4 SWEPCO Responses to Requests for Information, Highly Sensitive Confidential

| Data Request                                                    | File Type |
|-----------------------------------------------------------------|-----------|
| SWEPCO Response to Sierra Club 1-5, HS Attachment 6             | Excel     |
| SWEPCO Response to Sierra Club 1-8, HS Attachment 1             | PDF       |
| SWEPCO Response to Sierra Club 2-2, HS Attachments 1 through 14 | Excel     |
| SWEPCO Response to Sierra Club 2-6, HS Attachment 1             | PDF       |
| SWEPCO Response to Sierra Club 2-6, HS Attachment 2             | PDF       |
| SWEPCO Response to Sierra Club 2-13, HS Attachment 1            | Excel     |
| SWEPCO Response to Sierra Club 3-1, HS Attachment 4             | PDF       |

<sup>\*</sup>CONFIDENTIAL Excel files were submitted via CD to the Commission pursuant to TAC § 22.71(d).