

**BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION**

**IN THE MATTER OF SOUTHWESTERN )  
PUBLIC SERVICE COMPANY'S )  
APPLICATION REQUESTING )  
APPROVAL TO RETIRE AND )  
ABANDON PLANT X GENERATING )  
STATION UNIT 1, PLANT X ) CASE NO. 18-00\_\_\_\_\_ -UT  
GENERATING STATION UNIT 2, AND )  
CUNNINGHAM GENERATING )  
STATION UNIT 1, AND )  
DETERMINATION OF RELATED )  
RATEMAKING PRINCIPLES AND )  
TREATMENT. )  
)  
SOUTHWESTERN PUBLIC SERVICE )  
COMPANY, )  
)  
APPLICANT. )  
\_\_\_\_\_ )**

**DIRECT TESTIMONY**

*of*

**RANDY J. LARSON**

*on behalf of*

**SOUTHWESTERN PUBLIC SERVICE COMPANY**

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## **GLOSSARY OF ACRONYMS AND DEFINED TERMS**

<b><u>Acronym/Defined Term</u></b>	<b><u>Meaning</u></b>
Commission	New Mexico Public Regulation Commission
Cunningham 1	Cunningham Generating Station Unit 1
O&M	Operation and Maintenance
Plant X 1	Plant X Generating Station Unit 1
Plant X 2	Plant X Generating Station Unit 2
PSCo	Public Service Company of Colorado
SPP	Southwest Power Pool
SPS	Southwestern Public Service Company, a New Mexico corporation
Xcel Energy	Xcel Energy Inc.

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of  
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1           **I. WITNESS IDENTIFICATION AND QUALIFICATIONS**

2   **Q. Please state your name and business address.**

3   A. My name is Randy J. Larson. My business address is 1800 Larimer Street,  
4       Denver, Colorado 80202.

5   **Q. On whose behalf are you testifying in this proceeding?**

6   A. I am filing testimony on behalf of Southwestern Public Service Company, a New  
7       Mexico corporation (“SPS”) and wholly-owned electric utility subsidiary of Xcel  
8       Energy Inc. (“Xcel Energy”).<sup>1</sup>

9   **Q. By whom are you employed and in what position?**

10   A. I am employed by Xcel Energy Services Inc., the service company subsidiary of  
11       Xcel Energy, as Director of Regional Capital Projects.

12   **Q. Please briefly outline your responsibilities as Director of Regional Capital**  
13       **Projects.**

14   A. My primary responsibility is to manage the capital budget for the generating  
15       facilities of SPS and PSCo. I also provide engineering and other technical support

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<sup>1</sup> Xcel Energy is the parent company of four utility operating companies: Northern States Power Company, a Minnesota corporation; Northern States Power Company, a Wisconsin corporation; Public Service Company of Colorado, a Colorado corporation (“PSCo”); and SPS. Xcel Energy’s natural gas pipeline company is WestGas InterState, Inc. Through a subsidiary, Xcel Energy Transmission Holding Company, LLC, Xcel Energy also owns three transmission-only operating companies: Xcel Energy Southwest Transmission Company, LLC; Xcel Energy Transmission Development Company, LLC; and Xcel Energy West Transmission Company, LLC, all of which are regulated by the Federal Energy Regulatory Commission.

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1 for potential renewable projects. I have managed numerous generating projects  
2 ranging from new construction, plant modifications, and plant decommissioning.

3 **Q. Please describe your educational background.**

4 A. I have a Bachelor of Science degree in Engineering, majoring in mechanical  
5 engineering, from the University of Michigan.

6 **Q. Please describe your professional experience.**

7 A. I have worked in the electric power industry for over 37 years in various positions  
8 with Xcel Energy and PSCo. My experience has included: mechanical and  
9 environmental engineering, supervision of engineering staff, technical design  
10 reviews, managed departmental and project budgets, managing construction  
11 projects, and project manager for the decommissioning of Cherokee Station Units  
12 1 and 2.

13 **Q. Have you attended or taken any special courses or seminars relating to  
14 public utilities?**

15 A. Yes. Over my career, I have attended numerous conferences and seminars related  
16 specifically to the construction and operation of power plants. I have given  
17 technical presentations to internal and external groups on Xcel Energy's response  
18 to Colorado's Clean Air, Clean Jobs Act legislation, solar project installation, and  
19 environmental controls for coal plants.

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1 **Q. Do you hold a professional license?**

2 A. Yes. I am a registered Professional Engineer in the states of Colorado and  
3 Minnesota. I am also a certified Project Management Professional.

4 **Q. Are you a member of any professional organizations?**

5 A. Yes. I am a member of the American Society of Mechanical Engineers.

6 **Q. Have you testified before any regulatory authorities?**

7 A. Yes. I have filed direct and supplemental direct testimony before the Colorado  
8 Public Utilities Commission. My testimony has addressed emissions control  
9 projects, a synchronous condenser project, and decommissioning projects.

1                   **II.     ASSIGNMENT AND SUMMARY OF TESTIMONY AND**  
2                   **RECOMMENDATIONS**

3   **Q.     What are your assignments in this proceeding?**

4   A.     My assignments are to describe three generating units that SPS proposes to retire  
5           and to explain why retirement of those units would satisfy the criteria set forth in  
6           the New Mexico Public Utility Act for abandonment of utility facilities. I also  
7           describe the decommissioning and dismantling processes that SPS plans to  
8           undertake with respect to those units after retirement.

9   **Q.     What generating facilities is SPS proposing to retire and abandon?**

10  A.     SPS is proposing to retire and abandon units at three of its oldest steam turbine  
11          generating stations:

- 12                   • Plant X Generating Station Unit 1 (“Plant X 1”);  
13                   • Plant X Generating Station Unit 2 (“Plant X 2”); and  
14                   • Cunningham Generating Station Unit 1 (“Cunningham 1”).

15          Table RJL-1 (next page) provides pertinent information about each of the three  
16          units:

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**Table RJL-1**

	<b>Plant X 1</b>	<b>Plant X 2</b>	<b>Cunningham 1</b>
Location	Earth, Texas	Earth, Texas	Hobbs, New Mexico
Type of Facility	General Electric Model B1 steam turbine	General Electric Model C1 steam turbine	General Electric steam turbine
Installation Date	1952	1953	1957
Net Dependable Capacity-Summer (MW)	41	90	71
Net Dependable Capacity-Winter (MW)	41	90	71
End of Commission-Approved Service Life <sup>2</sup>	2019	2019	2022

2 **Q. Why is SPS proposing to retire those three units?**

3 A. SPS is proposing to retire the units because they are among the oldest and least  
4 efficient units in the SPS generating fleet, and they would require significant  
5 expenditures in the short term if they were to remain in service. Thus, SPS  
6 customers will realize substantial cost savings if those units are retired. In the

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<sup>2</sup> The service lives for these units were approved in Case No. 12-00350-UT. *See In the Matter of Southwestern Public Service Company's Application for Revision of its Retail Rates Under Advice Notice No. 245*, Case No. 12-00350-UT, Recommended Decision at 185 (Jan. 23, 2014) (approving service lives proposed by SPS), Final Order Partially Adopting Recommended Decision (Mar. 26, 2014).



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1 absence of the units, SPS is still projected to have capacity sufficient to meet  
2 projected peak demand over the next few years.

3 **Q. Please describe at a high level the additional expenditures that would be**  
4 **necessary to continue operating those units.**

5 A. Plant X 1 and Plant X 2 are very near the end of the service lives approved by the  
6 New Mexico Public Regulation Commission (“Commission”) in Case No.  
7 12-00350-UT. If the service lives were extended, it would be necessary for SPS  
8 to incur approximately \$10.5 million (or \$2.3 million New Mexico retail)<sup>3</sup> of  
9 additional capital costs and operation and maintenance (“O&M”) expense  
10 associated with those units. If the units are retired, that expense will not be  
11 necessary. The incremental expense is not warranted given the age and  
12 inefficiency of the units, in combination with projections of future load demand.

13 Cunningham 1 is also nearing the end of its Commission-approved service  
14 life, and retiring the unit will avoid the need to invest additional capital in the unit  
15 and to incur incremental O&M expenses. The retirement of Cunningham 1 will  
16 save customers approximately \$15.5 million of capital and O&M expense on a

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<sup>3</sup> The New Mexico retail amounts are based on the 12 Coincident Peak-Production jurisdictional allocator approved in Case No. 17-00255-UT.

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1 total company basis, which translates to \$3.4 million in savings for New Mexico  
2 retail customers. That expense is not warranted given the age and inefficiency of  
3 the unit, in combination with projections of future load demand.

4 **Q. Does any other witness present testimony on behalf of SPS in this case?**

5 A. Yes. SPS witness Melissa L. Ostrom presents testimony on the following issues:

- 6 • the total plant investment in Plant X 1, Plant X 2, and Cunningham 1;
- 7 • the estimated costs to decommission those units and to dismantle parts  
8 of them;
- 9 • the accumulated reserve collected through September 30, 2018 for  
10 each unit;
- 11 • the expected accumulated reserve as of the requested retirement date  
12 for each unit; and
- 13 • SPS's proposal that the Commission: (1) authorize SPS to recover the  
14 remaining unrecovered investment in the units, (2) authorize SPS to  
15 record in a deferred account the difference between estimated  
16 decommissioning and dismantling costs and actual decommissioning  
17 and dismantling costs, and (3) authorize SPS to recover that balance in  
18 a future proceeding from customers if it is a regulatory asset or to  
19 return that balance to customers in a future case if it is a regulatory  
20 liability.

21 **Q. What are your recommendations in this case?**

22 A. I recommend that the Commission approve SPS's proposal to retire Plant X 1,  
23 Plant X 2, and Cunningham 1. All three units are near the ends of their currently-  
24 approved service lives, and retiring the units will avoid the necessity to incur

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1 significant incremental capital and O&M costs that would be necessary to keep  
2 the units in service. I also recommend that the Commission allow SPS to recover  
3 the remaining unrecovered net plant balance of each of the units at the time it is  
4 retired. Finally, I recommend that the Commission approve SPS's request to  
5 record in a deferred account the difference between the decommissioning and  
6 dismantling costs for the three units and the actual decommissioning and  
7 dismantling costs for those units. I also recommend that SPS be allowed in some  
8 future proceeding to recover that deferred balance from customers if it is a  
9 regulatory asset or to return the deferred balance to customers if it is a regulatory  
10 liability.

1       **III.    STANDARDS FOR ABANDONMENT OF UTILITY FACILITIES**

2       **Q.    What standard applies to an application to abandon facilities used to provide**  
3       **utility service?**

4       A.    I am not an attorney, but it is my understanding that abandonment of utility  
5       facilities is governed by NMSA 1978 § 62-9-5, which provides as follows:

6               No utility shall abandon all or any portion of its facilities subject to  
7               the jurisdiction of the commission, or any service rendered by  
8               means of such facilities, without first obtaining the permission and  
9               approval of the commission. The commission shall grant such  
10              permission and approval, after notice and hearing, upon finding  
11              that the continuation of service is unwarranted or that the present  
12              and future public convenience and necessity do not otherwise  
13              require the continuation of the service or use of the facility; . . . In  
14              considering the present and future public service and convenience  
15              and necessity, the commission shall specifically consider the  
16              impact of the proposed abandonment of service on all consumers  
17              served in this state, directly or indirectly, by the facilities sought to  
18              be abandoned.

19             In prior cases, including SPS’s recent application to abandon the Carlsbad  
20             Generating Facility,<sup>4</sup> the Commission has also applied the *Commuters’ Committee*  
21             four-factor test to determine whether the public convenience and necessity  
22             requires that a utility facility continue operating:

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<sup>4</sup> *In the Matter of the Application of Southwestern Public Service Company’s Application Requesting Approval to Retire and Abandon its Carlsbad Generating Station*, Case No. 17-00089-UT, Final Order Adopting Recommended Decision at 4 (Dec. 7, 2017).

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- 1           1.     The extent of the carrier’s loss on the particular branch or  
2           portion of the service, and the relation of that loss to the  
3           carrier’s operation as a whole;
- 4           2.     The use of the service by the public and the prospects as to  
5           future use;
- 6           3.     A balancing of the carrier’s loss with the inconvenience  
7           and hardship to the public upon discontinuance of the  
8           service; and
- 9           4.     The availability and adequacy of service to be substituted.<sup>5</sup>

10   **Q.     Would retirement of the Plant X 1, Plant X 2, and Cunningham 1 units**  
11   **satisfy the applicable *Commuters’ Committee* standards?**

12   A.     Yes. The first factor refers to the “extent of the carrier’s loss on the particular  
13     branch or portion of the service, and the relation of that loss to the carrier’s  
14     operation as a whole.” As I understand the *Commuters’ Committee* factors, the  
15     first factor refers to the amount it would cost the utility to maintain the facility in  
16     service. As I explained earlier, SPS would incur approximately \$15.5 million  
17     (\$3.4 million New Mexico retail) to keep Cunningham 1 operational until 2022,  
18     and it would incur approximately \$10.5 million (or \$2.3 million New Mexico  
19     retail) to keep Plant X 1 and Plant X 2 operational past the end of their approved  
20     service lives. Those amounts are significant, especially considering that all three

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<sup>5</sup> Case No. 17-00089-UT, Recommended Decision at 9 (citing *Commuters’ Committee v. Pennsylvania Public Utility Comm’n*, 88 A.2d 420, 424 (Pa. Super. 1952)).

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1 units have relatively high heat rates (i.e., are relatively inefficient). They burn  
2 more natural gas to produce a kilowatt-hour of electricity as compared to other  
3 more efficient units.

4 **Q. Please address the second factor, which refers to “use of the service by the  
5 public and the prospects as to future use.”**

6 A. As I noted in the previous answer, all three units have high heat rates relative to  
7 alternative generating resources in the Southwest Power Pool (“SPP”), so it is  
8 unlikely that they will be dispatched very much in the future. And, as I explained  
9 earlier, significant investment would be needed to make that potential use  
10 possible.

11 **Q. The third *Commuters’ Committee* factor refers to a “balancing of the  
12 carrier’s loss with the inconvenience and hardship to the public upon  
13 discontinuance of the service.” How should the Commission view that  
14 balance?**

15 A. This factor weighs heavily in favor of retirement for the reasons I have discussed  
16 previously. The public will experience little or no inconvenience and hardship  
17 from the retirement of the units because they would seldom be dispatched if they  
18 remained in service, and other generation resources within SPP are adequate to

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1 ensure that SPS customers will continue to have safe and reliable service. In  
2 contrast, the cost to customers will be significant if the units are forced to remain  
3 in operation.

4 **Q. Please address the last factor, which is the “availability and adequacy of**  
5 **service to be substituted.”**

6 A. SPP has other generating resources it can dispatch in the few instances in which  
7 Plant X 1, Plant X 2, and Cunningham 1 might otherwise run, and if SPS needs  
8 additional energy to serve load, it can purchase that energy in the SPP Integrated  
9 Marketplace. Thus, substitute service is readily available.

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1                   **IV.    SUPPORT FOR RETIREMENT OF UNITS**

2   **Q.    What topic do you discuss in this section of your testimony?**

3   A.    I explain why SPS has concluded that it is reasonable and prudent to retire  
4          Cunningham 1 before the end of its Commission-approved service life, which is  
5          2022. I also explain why SPS has concluded that it is reasonable and prudent to  
6          retire Plant X 1 and Plant X 2 in 2019 and 2020, respectively.

7   **Q.    Why has SPS determined that early retirement of Cunningham 1 is**  
8          **reasonable?**

9   A.    As I explained in the previous section of my testimony, Cunningham 1 is not  
10         needed to serve load after the proposed 2019 retirement date, so it would only be  
11         reasonable to continue operating the unit through 2022 if it would be more  
12         economical to operate the unit than to retire it. To make that determination, SPS  
13         analyzed the incremental capital and O&M costs necessary to continue operating  
14         the unit.

15   **Q.    What capital and O&M costs did SPS consider in the retirement assessment**  
16         **for Cunningham 1?**

17   A.    SPS considered the following factors related to the early retirement of  
18         Cunningham 1:



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- 1                   • The estimated O&M costs that SPS would incur in the ordinary course  
2                   of business to maintain the unit through 2022 total \$750,000 (or  
3                   \$166,000 New Mexico retail);
- 4                   • The incremental O&M expenditures that SPS would incur if  
5                   Cunningham 1 continues operating until 2022 total approximately \$1.8  
6                   million (or \$400,000 New Mexico retail); and
- 7                   • The capital costs SPS would incur to continue operating the unit  
8                   through 2022 total approximately \$13.0 million (or \$2.9 million New  
9                   Mexico retail).

10 **Q. What types of O&M costs would SPS incur in the ordinary course of**  
11 **business if Cunningham 1 is operated through 2022?**

12 A. SPS would incur the O&M costs common to all of the SPS generating units, most  
13 of which are related to labor costs, environmental permits and fees, chemicals,  
14 water use, and material purchases. These ordinary-course-of-business O&M costs  
15 are estimated to be \$250,000 per year (or \$55,000 New Mexico retail per year).

16 **Q. Please describe the incremental O&M expenditures that would be required if**  
17 **Cunningham 1 is operated through 2022.**

18 A. It is recommended that equipment such as the Cunningham Unit 1 turbine and  
19 generator be overhauled every nine Equivalent Run-Time years. SPS's technical  
20 experts believe the unit can be operated safely and properly through 2019 without  
21 requiring an outage, based on the low-pressure rotor Near-Bore Life Assessment  
22 Summary from SPS's testing consultant. The high-pressure rotor and generator

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1           have already exceeded SPS’s expectations. But if the unit is to continue operating  
2           until 2022, it will be necessary to overhaul the turbine, valves, and generator.  
3           SPS has estimated the cost of the outage to be approximately \$1.8 million (or  
4           \$400,000 New Mexico retail). Table RJJ-2 contains a list of O&M activities that  
5           are included within the budgetary estimate.

**Table RJJ-2**  
**Incremental O&M Costs for Cunningham Unit 1**

<b>Incremental O&amp;M Projects</b>	Cost	
	Total Company	New Mexico Retail
HP-LP Turbine Inspection	\$450,000	\$99,500
LP Turbine Boresonic	\$100,000	\$22,000
Generator Inspection	\$190,000	\$42,000
Cooling Tower repairs	\$350,000	\$77,400
Turbine control & stop valves	\$350,000	\$77,400
Air Ejector Repair	\$50,000	\$11,000
Balance of unit equipment	\$300,000	\$66,300
Total Incremental O&M Cost	\$1,790,000	\$395,600

8    **Q.    Please discuss the additional capital costs that could be required if the unit is**  
9           **operated through 2022.**

10   **A.**    During SPS’s capital budgeting process, the plant engineers, plant managers, and  
11           technical experts identified a number of capital projects that would be required if

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1 Cunningham 1 were to continue operation through 2022. Table RJL-3 lists those  
 2 capital projects:

**Table RJL-3**

<b>Capital Projects</b>	Cost	
	Total Company	New Mexico Retail
Upgrade Continuous Emission Monitoring System	\$249,028	\$55,037
Replace low-pressure rotor assembly	\$9,200,000	\$2,033,264
Replace cooling tower riser pipes	\$776,250	\$171,557
Replace turbine oil centrifuge	\$79,021	\$17,464
Replace north boiler feed pump	\$250,000	\$55,252
Replace main steam pipe and hangers	\$1,139,131	\$251,756
Replace cold side air preheater baskets	\$550,000	\$121,554
Replace cooling tower drift eliminators	\$265,469	\$58,671
Upgrade distributed control system hardware	\$500,000	\$110,503
Total Capital Cost	\$13,008,899	\$2,875,058

4 **Q. Table RJL-3 lists a replacement of the low-pressure rotor assembly at a cost**  
 5 **of \$9.2 million (or \$2.0 million New Mexico retail). Why is that project**  
 6 **necessary?**

7 A. The low-pressure rotor assembly has been bored out twice previously to remove  
 8 cracks. SPS anticipates that additional cracks will have formed by the time the  
 9 next inspection occurs, which will likely be in 2020 if the unit is not retired before

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1 then. If that inspection reveals cracks, it is unlikely that SPS could undertake  
2 additional boring because the material remaining after that boring would not meet  
3 the design standard. Thus, discovery of more cracks would likely require  
4 replacement of the low-pressure rotor.

5 **Q Table RJL-3 also lists a replacement of the main steam piping at a cost of**  
6 **\$1.1 million (or \$252,000 New Mexico retail). Why is that necessary?**

7 A. The pipeline has “creep damage,” which is defined as a time-dependent  
8 deformation of material on a microscopic level at elevated temperature and  
9 constant stress. At this stage in Cunningham 1’s life, the creep damage rate is  
10 almost constant. At some point, the creep damage will result in failure of the  
11 equipment. At a minimum, more frequent inspections are required.

12 **Q. Is it possible that SPS will incur costs for Cunningham 1 in addition to those**  
13 **you have listed if the unit continues to operate through 2022?**

14 Yes. The capital expenditures and O&M expense detailed above are for known  
15 items that need to be addressed to maintain the unit through 2022. In my  
16 experience, as the age of a unit increases, so does the likelihood of unplanned  
17 “emergent” expenditures. Any unplanned expenditures would be in addition to  
18 the expense previously described.

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1 **Q. Are significant improvements required to allow Cunningham 1 to operate**  
2 **through 2019?**

3 A. No. SPS believes it can operate Cunningham 1 through the end of 2019 without  
4 any significant additional capital or O&M investment.

5 **Q. Has SPS performed a similar analysis to determine what costs it would incur**  
6 **if Plant X 1 and Plant X 2 were required to remain in operation beyond**  
7 **December 31, 2019 and December 31, 2020, respectively?**

8 A. Yes. To maintain operation of Plant X 1 and Plant X 2 until 2022, SPS would  
9 incur the following additional costs:

- 10 • SPS would incur O&M costs of approximately \$150,000 per year per  
11 Plant (or \$33,000 per year New Mexico retail) in the ordinary course  
12 of business.
- 13 • Plant X 1 would need to be overhauled in 2020, which would require  
14 SPS to incur capital costs of approximately \$2.8 million (or \$619,000  
15 New Mexico retail) and O&M costs of approximately \$620,000 (or  
16 \$137,000 New Mexico retail).
- 17 • Plant X 2 would need to be overhauled in 2021, which would require  
18 SPS to incur capital costs of approximately \$5.1 million (or \$1.1  
19 million New Mexico retail) and O&M costs of approximately  
20 \$710,000 (or \$157,000 New Mexico retail).
- 21 • In addition to the Plant X 1 overhaul in 2020, SPS would need to make  
22 another capital expenditure of approximately \$450,000 to replace  
23 cooling tower drift eliminators in 2021 and of \$150,000 to replace  
24 pressure relief valves in 2022, for a total of \$600,000 (or \$133,000  
25 New Mexico retail).

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- 1                   • In the year following the overhaul, and each year thereafter, each unit  
2                   would require a short maintenance overhaul, which would require SPS  
3                   to incur additional O&M costs of approximately \$75,000 per  
4                   maintenance overhaul (or \$17,000 New Mexico retail per maintenance  
5                   overhaul).

6   **Q.    Is it possible that SPS will incur costs for Plant X 1 and Plant X 2 in addition**  
7           **to those you have listed if the units continue to operate through 2022?**

8   A.    Yes.  Similar to Cunningham 1, the capital expenditures and O&M expense  
9           estimated for the Plant X 1 and Plant X 2 units are for known items that need to  
10          be addressed to maintain the units through 2022.  Any unplanned expenditure  
11          would be in addition to the expense previously described.

12   **Q.    Are there any other factors to consider when deciding whether Plant X 1 and**  
13           **Cunningham 1 should be retired in 2019 and Plant X 2 should be retired in**  
14           **2020?**

15   A.    Yes.  Plant X 1, Plant X 2, and Cunningham 1 are all gas-fired steam boiler units  
16          with high heat rates.  Because of their age and high heat rates, all three units have  
17          higher emissions than newer, more efficient units, all else being equal.  Retiring  
18          Plant X 1 and Cunningham 1 in 2019 and Plant X 2 in 2020 would produce  
19          environmental benefits by reducing emissions.

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1 **Q. Did SPS's 2018 Integrated Resource Plan contemplate the early retirement of**  
2 **Cunningham 1?**

3 A. Yes.<sup>6</sup>

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<sup>6</sup> *In the Matter of Southwestern Public Service Company's 2018 Integrated Resource Plan for New Mexico*, Case No. 18-00215-UT, 2018 Integrated Resource Plan at 7 (July 16, 2018) (showing the retirement date for Cunningham 1 as 2019).

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1           **V.     DECOMMISSIONING AND DISMANTLING ACTIVITIES**

2   **Q.     What activities are anticipated to decommission Plant X 1, Plant X 2, and**  
3           **Cunningham 1?**

4   **A.**    SPS is not proposing to retire all of the units at either the Plant X or Cunningham  
5           generating stations at this time.  Therefore, the decommissioning and dismantling  
6           procedures for Plant X 1, Plant X 2, and Cunningham 1 will differ from the  
7           decommissioning and dismantling activities that would occur if the entire plant  
8           were being retired.  For Plant X 1, Plant X 2, and Cunningham 1,  
9           decommissioning and dismantling will involve the following activities:

- 10                   • de-energizing and disconnecting unit-specific equipment such as  
11                   transformers, breakers, and load centers;
- 12                   • removing plant supplies (chemicals, fuels, oils, water, etc.) to the  
13                   extent they are unit-specific;
- 14                   • disconnecting utilities to the extent they are unit-specific;
- 15                   • transferring assets of value to other SPS facilities, if they are no longer  
16                   needed for the remaining Plant X and Cunningham units; and
- 17                   • dismantling unit-specific equipment, such as the cooling towers, that  
18                   may pose a safety hazard if left in place.



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1 **Q. Please describe the de-energizing and disconnecting activities that will be**  
2 **necessary for Plant X 1, Plant X 2, and Cunningham 1.**

3 A. The de-energizing and disconnecting activities consist of following the plant  
4 procedures for Locking Out and Tagging Out the energy sources for the  
5 equipment being retired.

6 **Q. What is involved in dismantling the cooling towers of the retired units?**

7 A. A demolition contractor will be hired to tear down the cooling tower structure.  
8 All the material will be disposed of off-site in a landfill appropriate for the  
9 material. The cooling tower basin will be left in place, but holes will be punched  
10 in the bottom so as not to accumulate water. Depending on the depth of the basin,  
11 hand rails may have to be installed around the perimeter to eliminate a fall hazard.

12 **Q. Please explain why utilities are disconnected from the retired units.**

13 A. This is to eliminate the possibility of an accidental equipment start, which would  
14 pose a safety hazard.

15 **Q. How long do you expect the decommissioning and dismantling activities to**  
16 **take?**

17 A. The removal of chemicals and draining of the systems will take 4-6 weeks.  
18 Demolition of the cooling towers will take 4-5 months from the time a Request  
19 for Proposal for demolition is issued.

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1 **Q. What will SPS do with the decommissioned equipment?**

2 A. The remaining Plant X and Cunningham units may be able to use some of the  
3 equipment or components as replacements or spare parts. If they cannot be used  
4 at the remaining Plant X and Cunningham units but can be used at other  
5 generating stations, they will be moved to those other generating stations. A  
6 majority of the equipment will remain in place until the remaining units at the site  
7 are retired and dismantled.

8 **Q. Does SPS expect to receive any offers for the decommissioned equipment?**

9 A. It is very unlikely based on: (1) my experience with past demolitions; (2) the age  
10 of the decommissioned equipment; (3) its present location; (4) the equipment  
11 already on the market; and (5) the change in technology. If items (i.e., spare  
12 parts) are sold, they will be for a nominal value.

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**VI. SUPPORT FOR RECOVERY OF COSTS**

1 **Q. Does prior Commission authority allow recovery of undepreciated**  
2 **investment costs when plants are retired or abandoned?**

3 A. Although I am not an attorney, it is my understanding that in prior cases the  
4 Commission has allowed recovery of undepreciated net plant investment when  
5 plants are abandoned or retired.<sup>7</sup>

6 **Q. Is it reasonable for the Commission to allow SPS to recover the remaining**  
7 **undepreciated investment in Plant X 1, Plant X 2, and Cunningham 1?**

8 A. Yes. The units have provided over 60 years of service to customers, and as I have  
9 explained, it would cost more to continue operating the units than it would to  
10 retire them. Therefore, it serves the interests of both customers and investors to  
11 retire the units but to allow SPS to recover the remaining net investment in those  
12 plants.

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<sup>7</sup> E.g., *In the Matter of the Application of Public Service Company of New Mexico for Approval to Abandon San Juan Generating Station Units 2 and 3, Issuance of Certificates of Public Convenience and Necessity for Replacement Power Resources, Issuance of Accounting Order and Determination of Related Ratemaking Principles and Treatment*, Case No. 13-00390-UT, Final Order at 22 (Dec. 16, 2015).

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**VII. CONCLUSION**

1 **Q. What relief is SPS asking the Commission to grant in this case?**

2 A. SPS is asking the Commission to issue an order authorizing SPS to retire Plant X  
3 1 and Cunningham 1 in 2019 and to retire Plant X 2 in 2020. The units are not  
4 needed for the public convenience and necessity because adequate generating  
5 capacity is available to reliably serve SPS's load without them. Moreover,  
6 retiring Cunningham 1 in 2019 will allow SPS to avoid incurring approximately  
7 \$15.5 million (or \$3.4 million New Mexico retail) of capital and O&M costs that  
8 would be necessary if SPS were required to continue operating Cunningham until  
9 2022. Retiring Plant X 1 in 2019 and Plant X 2 in 2020 will also avoid the  
10 necessity to incur approximately \$10.5 million (or \$2.3 million New Mexico  
11 retail) of additional capital and O&M costs that would be necessary if the units  
12 were to run through 2022.

13 SPS is also asking the Commission for authority to recover the remaining  
14 unrecovered plant investment at the time the plants are retired. Given the  
15 amounts saved by retiring the units, it is reasonable that SPS be allowed to  
16 recover the remaining net plant balances.

17 Finally, SPS requests that the Commission authorize SPS to record in a  
18 deferred account the difference between: (1) the estimated decommissioning and

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1 dismantling costs for the three units; and (2) the actual decommissioning and  
2 dismantling costs for the three units. SPS also asks that it be allowed to recover  
3 that deferred balance in a future proceeding if it is a regulatory asset, or to return  
4 that deferred balance to customers in a future proceeding if it is a regulatory  
5 liability.

6 **Q. Does this conclude your pre-filed direct testimony?**

7 A. Yes.

