### BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

PUBLIC SERVICE COMPANY'S  APPLICATION REQUESTING  APPROVAL TO RETIRE AND  ABANDON PLANT X GENERATING  STATION UNIT 1, PLANT X  GENERATING STATION UNIT 2, AND  CUNNINGHAM GENERATING  STATION UNIT 1, AND  DETERMINATION OF RELATED  RATEMAKING PRINCIPLES AND  TREATMENT.  SOUTHWESTERN PUBLIC SERVICE  COMPANY,  APPLICANT.  APPLICANT.    APPLICANT.	IN THE MATTER OF SOUTHWESTERN	)
APPROVAL TO RETIRE AND ABANDON PLANT X GENERATING STATION UNIT 1, PLANT X GENERATING STATION UNIT 2, AND CUNNINGHAM GENERATING STATION UNIT 1, AND DETERMINATION OF RELATED RATEMAKING PRINCIPLES AND TREATMENT.  SOUTHWESTERN PUBLIC SERVICE COMPANY,  O CASE NO. 18-00329-UT CASE NO. 18	PUBLIC SERVICE COMPANY'S	)
ABANDON PLANT X GENERATING  STATION UNIT 1, PLANT X  GENERATING STATION UNIT 2, AND  CUNNINGHAM GENERATING  STATION UNIT 1, AND  DETERMINATION OF RELATED  RATEMAKING PRINCIPLES AND  TREATMENT.  SOUTHWESTERN PUBLIC SERVICE  COMPANY,  )	APPLICATION REQUESTING	)
STATION UNIT 1, PLANT X  GENERATING STATION UNIT 2, AND CUNNINGHAM GENERATING STATION UNIT 1, AND DETERMINATION OF RELATED RATEMAKING PRINCIPLES AND TREATMENT.  SOUTHWESTERN PUBLIC SERVICE COMPANY,  CASE NO. 18-00329-UT  CASE NO. 18-00329-UT  OCASE NO.	APPROVAL TO RETIRE AND	)
GENERATING STATION UNIT 2, AND CUNNINGHAM GENERATING STATION UNIT 1, AND DETERMINATION OF RELATED RATEMAKING PRINCIPLES AND TREATMENT.  SOUTHWESTERN PUBLIC SERVICE COMPANY, )	ABANDON PLANT X GENERATING	)
CUNNINGHAM GENERATING STATION UNIT 1, AND DETERMINATION OF RELATED RATEMAKING PRINCIPLES AND TREATMENT.  SOUTHWESTERN PUBLIC SERVICE COMPANY, )	STATION UNIT 1, PLANT X	) CASE NO. 18-00329-UT
STATION UNIT 1, AND  DETERMINATION OF RELATED  RATEMAKING PRINCIPLES AND  TREATMENT.  SOUTHWESTERN PUBLIC SERVICE  COMPANY,  )	GENERATING STATION UNIT 2, AND	)
DETERMINATION OF RELATED  RATEMAKING PRINCIPLES AND  TREATMENT.  SOUTHWESTERN PUBLIC SERVICE  COMPANY,  )	<b>CUNNINGHAM GENERATING</b>	)
RATEMAKING PRINCIPLES AND  TREATMENT.  SOUTHWESTERN PUBLIC SERVICE  COMPANY,  )	STATION UNIT 1, AND	)
TREATMENT. ) SOUTHWESTERN PUBLIC SERVICE COMPANY, )	DETERMINATION OF RELATED	)
SOUTHWESTERN PUBLIC SERVICE ) COMPANY, )	RATEMAKING PRINCIPLES AND	)
COMPANY,	TREATMENT.	)
COMPANY,		)
	SOUTHWESTERN PUBLIC SERVICE	)
APPLICANT. )	COMPANY,	)
APPLICANT. )		)
)	APPLICANT.	)
		_ )

### SUPPLEMENTAL DIRECT TESTIMONY

of

## RANDY J. LARSON

on behalf of

### SOUTHWESTERN PUBLIC SERVICE COMPANY

**DECEMBER 10, 2018** 

## TABLE OF CONTENTS

GLO:	SSARY OF ACRONYMS AND DEFINED TERMS	iii
I.	WITNESS IDENTIFICATION AND PURPOSE OF SUPPLEMENTAL TESTIMONY	1
II.	OPERATION OF THE THREE UNITS	3
III.	DISMANTLEMENT OF UNITS	6
IV.	CUSTOMER SAVINGS	8
VERI	FICATION	10

#### GLOSSARY OF ACRONYMS AND DEFINED TERMS

#### Acronym/Defined Term Meaning

CCN Certificate of Public Convenience and

Necessity

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

SPS Southwestern Public Service Company, a New

Mexico corporation

1 2		I. <u>WITNESS IDENTIFICATION AND PURPOSE OF</u> <u>SUPPLEMENTAL TESTIMONY</u>
3	Q.	Please state your name and business address.
4	A.	My name is Randy J. Larson. My business address is 1800 Larimer Street,
5		Denver, Colorado 80202.
6	Q.	On whose behalf are you testifying in this proceeding?
7	A.	I am filing supplemental testimony on behalf of Southwestern Public Service
8		Company, a New Mexico corporation ("SPS").
9	Q.	Are you the same Randy J. Larson who filed direct testimony on behalf of
10		SPS in this docket?
11	A.	Yes.
12	Q.	What is the purpose of your supplemental direct testimony?
13	A.	The purpose of my supplemental direct testimony is to respond to certain
14		questions posed by the Hearing Examiner during the Prehearing Conference held
15		in this case on November 20, 2018. In particular, I address questions related to
16		the operations of Plant X Generating Station Unit 1 ("Plant X 1"), Plant X
17		Generating Station Unit 2 ("Plant X 2"), and Cunningham Generating Station
18		Unit 1 ("Cunningham 1"). I also respond to questions about recent capital

1		additions to those units, and I address the possible reuse of some parts of those
2		units after their decommissioning.
3	Q.	Are any other witnesses filing supplemental direct testimony on behalf of
4		SPS?
5	A.	Yes. SPS witness William A. Grant testifies regarding the ratemaking treatment
6		that SPS is asking the New Mexico Public Regulation Commission
7		("Commission") to approve in this case. Mr. Grant also testifies regarding certain
8		aspects of the operations of the three units and regarding the availability of
9		substitute power if the units are retired. SPS witness Melissa L. Ostrom responds
10		to questions regarding accounting and depreciation issues, among other things.

#### II. OPERATION OF THE THREE UNITS

2	Q.	One of the Hearing Examiner's questions asks about the life expectancy of
3		Plant X 1, Plant X 2, and Cunningham 1. What were the Commission-
4		approved service lives of the three units at the times the Commission granted
5		the Certificates of Public Convenience and Necessity ("CCN") for those
6		units?
7	A.	The Commission approved the CCNs for the three units in 1976. <sup>1</sup> It appears that
8		the Commission-approved service life for each unit at that time was 40 years,
9		because in a case brought two years later, the Commission approved SPS's
10		request to reduce the average service life of each SPS gas-fired unit from 40 years
11		to 35 years. <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> In the Matter of the Application of Southwestern Public Service Company for a Certificate of Public Convenience and Necessity for Its Existing Plant and System, Case No. 1253, Order Issuing Certificate of Public Convenience and Necessity at 4 (Feb. 5, 1976).

<sup>&</sup>lt;sup>2</sup> In the Matter of Tariff Filings Under Advice Notice No. 110 Applicable to All New Mexico Customers of Southwestern Public Service Company, Case No. 1453, Final Order at 5 (Dec. 28, 1978) ("Average service lives for Southwestern's gas fired plants should be reduced from 40 to 35 years."). SPS has not been able to find a Commission order approving the 40-year service lives that were in effect before 1978.

- 1 Q. What is the current life expectancy of each of the three units that SPS is
- 2 seeking to retire?
- 3 A. Table RJL-S1 shows the service life expectancy of each of the three units based
- 4 on the current Commission-approved service lives:

5 Table RJL-S1

	Plant X 1	Plant X 2	Cunningham 1
Installation Date	1952	1953	1957
End of Current Commission- Approved Service Life <sup>3</sup>	2019	2019	2022
Life Expectancy Under Current Commission- Approved Service Life	67 years	66 years	65 years

- Table RJL-S2 (next page) shows the actual service life of each unit if the
- 7 Commission approves the retirement dates requested by SPS in this case:

<sup>&</sup>lt;sup>3</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).

Table RJL-S2

1

2

3

4

5

6

	Plant X 1	Plant X 2	Cunningham 1
Installation Date	1952	1953	1957
Retirement Date Requested by SPS	2019	2020	2019
Life Expectancy Under SPS Retirement Date	67 years	67 years	62 years

- SPS's request would increase the service life of Plant X 2 by one year compared to the Commission-approved service life, and it would reduce the service life of Cunningham 1 by three years compared to the current Commission-approved service life. But as Table RJL-S1 and Table RLS-S2 demonstrate, all three of the units have far exceeded the 40-year service lives that existed at the time the Commission issued the CCN for those units.
- 9 Ms. Ostrom testified in her direct testimony that the current depreciation rates for Plant X 1, Plant X 2, and Cunningham 1 were established in Case No. 12-00350-UT. Has SPS made any capital additions to those units since the depreciation rates were established?
- 12 A. Yes. Ms. Ostrom's supplemental direct testimony contains a list of the capital additions to those units since January 1, 2015, along with the costs incurred for each capital addition.

# III. <u>DISMANTLEMENT OF UNITS</u>

2	Q.	When do you expect Plant X 1, Plant X 2, and Cunningham 1 to be actually
3		dismantled?
4	A.	The current plan is to dismantle the units when the last remaining unit at each
5		generating station is retired. For example, under the current Commission-
6		approved depreciation lives, Plant X Unit 3 is expected to be retired in 2024, and
7		Plant X Unit 4 is expected to be retired in 2027. Thus, assuming Plant X Unit 4 is
8		retired on December 31, 2027, I expect the decommissioning and dismantling of
9		all Plant X units to begin sometime in 2028, or shortly thereafter. Similarly the
10		decommissioning of Cunningham 1 would begin after the final remaining three
11		units reach their retirement dates. The final two units, Cunnginham 3 and
12		Cunningham 4, are currently scheduled to retire on December 31, 2040.
13	Q.	Do you expect that some of the components of Plant X 1, Plant X 2, and
14		Cunningham 1 can be used at other SPS facilities after those units are
15		decommissioned?
16	A.	I consider it unlikely that any material portion of the components from those units
17		will be usable at other SPS facilities. As I have noted, all three units will have
18		been in service for over 60 years by the time they are decommissioned, and

therefore many of the components at the three units are quite old. Not all of the component parts of the units are 60 years old, of course, because SPS has made capital improvements on the units from time to time. In my experience, however, it is not economical to replace a component part of a functioning unit with a part from a retired unit. The component part from the retired plant has likely already experienced some degree of fatigue or wear, and therefore the used part will likely be less reliable going forward than a new part would be. The savings that would result from installing used parts on a generating unit are illusory if the retrofitted unit must be taken out of service more often afterward to deal with issues related to the used parts. Having said that, if SPS identifies some component parts from Plant X 1, Plant X 2, or Cunningham 1 that appear to be good candidates for retrofitting at other SPS units or generating stations, SPS will use those components to the extent possible.

### IV. CUSTOMER SAVINGS

2	Q.	Your direct testimony also characterized the customer savings as
3		"substantial." Aside from the savings attributable to avoided upgrades, what
4		savings were you referring to?
5	A.	In addition to the avoided capital upgrades, SPS would avoid the incremental
6		operation and maintenance ("O&M") costs associated with normal operation of
7		the units, as I explained in my direct testimony. Leaving aside the incremental
8		O&M costs associated with upgrades, retiring Cunningham 1 in 2019 would avoid
9		the need to incur \$750,000 (\$166,000 New Mexico retail) in O&M costs during
10		the period from 2020-2022.4 For Plant X 1 and Plant X 2 to remain operational
11		until 2022, the incremental O&M costs would total approximately \$900,000
12		(\$210,000 New Mexico retail). <sup>5</sup>
13		It is also important to note that the capital and O&M savings that I have
14		identified account for only the foreseeable upgrades and O&M activities. In my
15		experience, it is common for a utility to encounter unforeseen expenses,

<sup>&</sup>lt;sup>4</sup> Direct Testimony of Randy J. Larson at 14.

<sup>&</sup>lt;sup>5</sup> Direct Testimony of Randy J. Larson at 18. I calculated this amount by taking the \$150,000 per unit per year and multiplying it by two units for a total of \$300,000, and then multiplying that by three for the additional three years of operation from 2020-2022.

especially with units nearing the ends of their service lives, as these three units are. Moreover, older plants can also create reliability concerns. For example, both Plant X 1 and Plant X 2 have experienced several unplanned output derates or outages during 2018. In addition to the direct capital costs and O&M expense associated with bringing these units back online, there is also a decrease in unit reliability. And for the duration of the unplanned derate or outage, the unit is not available to be dispatched if called upon. Q. Does this conclude your prefiled supplemental direct testimony?

- 8
- 9 A. Yes.

1

2

3

4

5

6

#### VERIFICATION

STATE OF COLORADO	)
	) ss.
COUNTY OF DENVER	)

RANDY J. LARSON, first being sworn on his oath, states:

I am the witness identified in the preceding supplemental direct testimony. I have read the supplemental direct testimony and am familiar with its contents. Based upon my personal knowledge, the facts stated in the supplemental direct testimony are true. In addition, in my judgment and based upon my professional experience, the opinions and conclusions stated in the testimony are true, valid, and accurate.

SUBSCRIBED AND SWORN TO before me this \_\_\_\_\_ day of December, 2018 by RANDY J. LARSON.

SCHUNA D WRIGHT Notary Public State of Colorado Notary ID # 19974007693 My Commission Expires 05-06-2021

Notary Public, State of Colorado

My Commission Expires: N