BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF SOUTHWESTERN PUBLIC SERVICE COMPANY'S APPLICATION REQUESTING: (1) ACKNOWLEDGEMENT OF ITS FILING OF THE 2018 ANNUAL RENEWABLE ENERGY PORTFOLIO REPORT; (2) APPROVAL OF ITS ANNUAL RENEWABLE ENERGY PORTFOLIO PROCUREMENT PLAN FOR PLAN YEAR 2020; (3) APPROVAL OF THE PROPOSED RATE FOR ITS 2020 RENEWABLE PORTFOLIO STANDARD RIDER; AND (4) OTHER ASSOCIATED RELIEF,	)	**CASE NO. 19-00134-UT**
SOUTHWESTERN PUBLIC SERVICE COMPANY,	)	
APPLICANT.	)	

DIRECT TESTIMONY

of

BEN R. ELSEY

on behalf of

SOUTHWESTERN PUBLIC SERVICE COMPANY

November 1, 2019

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GLOSSARY OF ACRONYMS AND DEFINED TERMS

Acronym/Defined Term	Meaning
2018 IRP	SPS's 2018 Annual Renewable Energy Portfolio Report
Commission	New Mexico Public Regulation Commission
ETA	Energy Transition Act
IRP	Integrated Resource Plan
MWh	megawatt-hour
Next Plan Year	SPS's filing for Plan Year 2021
Plan Year	SPS's Filing for Plan Year 2020
PPA	Purchased Power Agreement
REC	Renewable Energy Certificate
RPS	Renewable Portfolio Standard
Rule 572	Renewable Energy Rule (17.9.572 NMAC)
SPP	Southwest Power Pool Inc.
SPS	Southwestern Public Service Company, a New Mexico corporation
Xcel Energy	Xcel Energy Inc.
XES	Xcel Energy Services Inc.

LIST OF ATTACHMENTS

Attachment	Description
BRE-1	Forecasted RPS Position

Case No. 19-00134-UT
Direct Testimony
of
Ben R. Elsey

I. WITNESS IDENTIFICATION AND QUALIFICATIONS

Q. Please state your name and business address.

A. My name is Ben R. Elsey. My business address is 1800 Larimer, Denver, Colorado 80202.

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

A. I am filing testimony on behalf of Southwestern Public Service Company, a New Mexico corporation ("SPS") and wholly-owned electric utility subsidiary of Xcel Energy Inc. ("Xcel Energy").

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

A. I am employed by Xcel Energy Services Inc. ("XES") as Analyst II, Resource Planning.

Q. Please briefly outline your responsibilities as Analyst II, Resource Planning.

A. I am responsible for working with other analysts and planners in the development of strategic resource plans for SPS including: need assessment, planning, solicitation and negotiation of long-term purchased power agreements ("PPA"), and financial analysis of various resource and purchase/sales options.

Q. Please describe your educational background.

A. I graduated from Plymouth College of Further Education in Great Britain with a Higher National Certificate in Building Studies in 2004. Since relocating to the United States, I have graduated from Amarillo College with an Associate's Degree in Business Administration in 2017 and am currently pursuing a Bachelor's Degree in Accounting from Colorado State University.

Q. Please describe your professional experience.

A. I began employment with Xcel Energy in June 2012 as a Project Control Specialist in the Engineering and Construction department within Energy Supply. In 2015, I moved into the role of Construction Estimator within the same department. In each of these roles, my responsibilities included producing cost assumptions and estimates to be used in modeling and completing financial analysis and cost forecasting of capital projects. In 2017, I entered into my current position as Analyst II, Resource Planning. Prior to joining Xcel Energy, I worked for various construction companies in Great Britain and the United States as an estimator, quantity surveyor, and contracts manager.

Q. Have you testified or filed testimony before any regulatory authorities?

A. Yes. I filed testimony with the New Mexico Public Regulation Commission ("Commission") in SPS's 2018 RPS filing, Case No. 18-00201-UT.

II. PURPOSE AND SUMMARY OF TESTIMONY

Q. What is the purpose of your testimony in this proceeding?

A. My testimony will support SPS's conclusion that it has sufficient resources (including banked renewable energy certificates ("RECs")) to comply with its 2020 Plan Year and 2021 Next Plan Year Renewable Portfolio Standard ("RPS") requirements. As part of my testimony, I will:

- provide an overview of the Resource Planning process;
- explain external challenges facing Resource Planning when acquiring new renewable generation;
- explain how Resource Planning addresses those external challenges;
- present SPS's RPS requirements in the plan year and next plan year; and
- demonstrate that the portfolio procurement plan is consistent with the integrated resource plan ("IRP") and explain any material differences.

Q. Do you sponsor or co-sponsor any sections of the 2020 RPS Plan presented by SPS witness Ruth M. Sakya?

A. Yes. I co-sponsor Sections II(A), II(B), and II(E) of the 2020 RPS Plan which is provided as Attachment RMS-3 to the Direct Testimony of Ms. Sakya.

Q. Was Attachment BRE-1 prepared by you or under your direct supervision and control?

A. Yes.

III. SPS'S RESOURCE PLANNING PROCESS AND EVALUATION METHODS

Q. Please generally describe SPS's resource planning process.

A. In its simplest form, electric resource planning is the process of using forecasts of customer electric demand and energy to determine the appropriate sources of electric supply that should be developed to meet those customer requirements in a cost-effective and reliable fashion. In conducting resource planning, SPS compares its existing firm generating resources, including owned generating capacity and firm purchased power, to its projected annual peak firm load obligation over the planning period. Required reserve margins are included to determine SPS's capacity position.

Q. Please describe the reserve margin requirement.

A. To provide reliable service, all electric utilities must have more capacity available than the projected peak load to allow for system contingencies, including generating unit or transmission outages, and potential increases in actual load. The available capacity in excess of the projected peak load is referred to as the "reserve margin". Reserve margin requirements are frequently specified by the group of interconnected utilities to which the utility belongs. SPS is a member of

the Southwest Power Pool ("SPP"), which currently requires each member to have a planning reserve margin of 12.0% of its peak demand forecast.

Q. What process does SPS use to assess its electric resource needs to serve customer load?

A. SPS's assessment of electric resource need includes determining both the magnitude of need as well as the type of resources needed (i.e., peaking, intermediate, or baseload). Additionally, resource need assessment must, depending on the jurisdiction, be conducted in accordance with regulatory requirements specifying resource assessment processes and resource specific acquisitions (e.g., requirements for integrated resource planning and amounts of renewable resources in a supply portfolio).

The type of resource that the SPS electric supply system needs is determined through an evaluation of how different resource technologies integrate with SPS's existing electric supply to serve the overall system capacity and energy needs in a least-cost manner. Typical solutions for meeting resource needs consist of the following: enhancing current resources, demand management, building new resources, and conducting competitive bid solicitations for new long-term or short-term energy and capacity. The ultimate decision is made on

economic value of the alternatives, the risks inherent in each alternative, the ability to get the generation installed in a timely manner, and other factors affecting a project's value to SPS and its customers.

Q. Do the updated requirements of the RPS change SPS's planning process?

A. No. SPS already incorporates regulatory requirements, such as the RPS, in its resource planning processes. However, the increase in renewable generation requirement will likely restrict the type of resources SPS seeks in its future acquisition plans.

Q. Do the updated requirements of the RPS change SPS's evaluation process?

A. No, SPS's process does not change, but the new RPS requirements must be considered in that process. Again, SPS already incorporates regulatory requirements when evaluating resource decisions. However, the updated RPS requirements will likely increase the amount of renewable generation SPS is mandated to procure. Therefore, in many future resource planning evaluations, the ultimate decision will be made based on complying with the requirements of the RPS and not necessarily the traditional "least-cost, least-risk" option.

IV. RESOURCE ACQUISITIONS PURSUANT TO THE ENERGY TRANSITION ACT ("ETA")

Q. In the previous section you state that the updated requirements of the RPS will likely increase the amount of renewable generation SPS is mandated to acquire. Please elaborate.

A. The amendments to the RPS require SPS to include renewable energy in its portfolio as demonstrated by retirement of RECs; provided that the associated renewable energy is delivered to SPS and assigned to its New Mexico customers in amounts equivalent to 20% of retail sales to New Mexico customers by 2020, 40% by 2025, 50% by 2030, and 80% by 2040.

Q. What is SPS's estimated compliance position based on existing resources in the portfolio and projected load?

A. Based on current high-level projections, SPS will be able to comply with the 20% requirement through 2024, once the Sagamore Wind facility is commercially operational, which is expected to be in December 2020. Attachment BRE-1 provides SPS's annual projected RPS requirement, generation and retirement of RECs and SPS's compliance position for the years 2020 – 2025.

Q. How will SPS meet the increased RPS requirements?

A. As Ms. Sakya mentions in her direct testimony, SPS is not proposing additional resource acquisitions at this time. However, in order to meet future obligations, SPS will consider options for meeting the increased requirements. These options may include: (1) acquiring additional RECs associated with existing long-term renewable purchase power agreements (e.g., Roswell and Chaves solar PPAs and Roosevelt Wind PPA); (2) purchasing the Texas and/or wholesale share energy and REC allocations of existing renewable resources (e.g., the Sagamore and/or Hale wind facilities; Roswell and Chaves solar PPAs); and (3) acquiring new renewable generation to meet the 40% requirement by 2025. The longer-term RPS compliance plan will almost certainly involve acquiring new renewable generation.

Q. Based on recent history, how long has it typically taken SPS to acquire new renewable generation resources?

A. In the past, SPS has been able to acquire commercially-operational renewable generation in as little as 18 months from the date the need was identified.

Q. Is this historical timeframe a realistic proxy for future renewable acquisitions?

A. I do not believe so. Generally speaking, I recommend SPS begin planning for a new resource three to four years before commercial operation. While this timeframe is relatively conservative when compared to previous renewable acquisitions, it is a reasonable amount of time to begin planning when there is not a need for an expedited acquisition, for example, expiring tax credits.

Q. Are there any reasons SPS may require additional time to acquire new resources?

Yes. As I described earlier in my testimony, SPS is a member of the SPP. It is the responsibility of the SPP to manage and study any requests for interconnecting new generation. In recent years, the SPP interconnection process has been overwhelmed by numerous requests which have created a backlog in processing applications with final results not known for 18 to 24 months. While the SPP implemented changes aimed at resolving the current delays, SPS does not believe immediate relief is forthcoming and SPS anticipates the approval of new requests will continue to take an extended period of time.

Q. Are there any other schedule problems, or impacts to substantive project viability, caused by the SPP generator interconnection backlog?

A. Yes. The sheer volume of requests contained in each interconnection study has often resulted in extremely high transmission upgrade costs being assigned to the proposed projects. Unfortunately, the network upgrade costs can often make or break the economic value of a project. This increases the likelihood that developers will withdraw their projects once the final costs are apparent which triggers yet another round of analyses to be performed by the SPP. This creates more uncertainty throughout the process, and means that there could be numerous projects in development that might not ultimately be viable.

Q. Aside from the backlogged generator interconnection queue, are there any other reasons that may prolong the acquisition of new resources?

A. Yes. The ETA requires the utility to demonstrate that new proposed procurements were the result of a competitive procurement process that included opportunities for bidders to propose purchased power, facility self-build, or facility build-transfer projects. It is possible that this new requirement will increase the time period for issuing and evaluating a request for proposal.

Q. Based on your answers to the previous questions, how long would you recommend planning for a new resource?

A. Once the current issues are factored in, to be conservative I recommend SPS begin planning for a new resource approximately four to five years before commercial operation. Again, planning for this timeframe would not restrict SPS seeking an expedited response if it were deemed necessary or beneficial.

Q. Do the requirements of the existing RPS Rule support your recommended schedule?

A. No. The RPS Rule only requires that SPS seek approval for the Plan Year (SPS's filing for Plan Year 2020). The Next Plan Year (SPS's filing for Plan Year 2021) data is provided for informational purposes only. This relatively short-term planning horizon is not reflective of the long-term nature of resource planning.

V. CALCULATION OF RPS REQUIREMENT FOR THE PLAN YEAR AND NEXT PLAN YEAR

Q. What are SPS's Plan Year and Next Plan Year RPS requirements?

A. The Renewable Energy Act and Renewable Energy Rule (17.9.572 NMAC) ("Rule 572") require SPS to supply no less than 20% of SPS's New Mexico retail energy sales by renewable energy during the Plan Year and Next Plan Year. *See* Rule 572.10(B)(3) and NMSA § 62-16-4 (A)(2).[1] Based on SPS's projected Plan Year and Next Plan Year total retail sales, SPS's overall RPS requirement for the Plan Year and Next Plan Year are 1,880,714 megawatt hour ("MWh") and 2,179,540 MWh, respectively.

Q. How did SPS determine its projected Plan Year and Next Plan Year New Mexico retail energy sales?

A. As part of its normal course of business, SPS projects monthly energy (kWh) sales on an annual basis. XES's Forecasting Department provides total billed retail sales, by month, for each New Mexico retail rate class. SPS's sales forecast is developed using industry standard multiple regression modeling techniques and

[1] Per NMSA § 62-16-7 (B)(2), New Mexico retail energy sales to be reduced by the volume of renewable energy purchased through a voluntary program prior to applying the RPS percentage. *See* Attachment RMS-3 to the Direct Testimony of Ms. Sakya, Appendix A, Line 2.

includes appropriate adjustments to account for energy efficiency and load management programs, new load growth, and customers switching between rate classes.

Q. Do the projected Plan Year and Next Plan Year retail energy sales assume normal weather conditions?

A. Yes. Normal daily weather conditions were based on the average of the last 30 years of historical heating-degree days and cooling-degree days.

Q. What are SPS's projected Plan Year and Next Plan Year overall New Mexico retail energy sales?

A. SPS's Plan Year and Next Plan Year New Mexico retail sales, for all customer classes, are projected to be 9,407,694 MWh and 10,901,410 MWh, respectively. Please refer to Attachment RMS-3, (Appendix A, pages 1-2, line 1) to the direct testimony of Ms. Sakya.

VI. 2018 INTERGRATED RESOURCE PLAN

Q. Is the current RPS filing reflected in SPS's 2018 Annual Renewable Energy Portfolio Report ("2018 IRP")?

A. No. The updated requirements of the RPS set by the ETA came into effect after SPS's 2018 IRP received Commission acceptance; therefore, the updated RPS requirements are not reflected in that filing.

Q. Would the updated requirements of the RPS change the action plan previously filed in the 2018 IRP?

A. As shown in Attachment BRE-1, SPS has sufficient resources, including banked RECs, to comply with the 2020 and 2021 RPS requirements. Therefore, the updated RPS requirements will not change the action plan for Plan Year 2020 or Next Plan Year 2021. However, looking beyond those plan years, SPS's next IRP filing will need to address the increased RPS requirements passed by the ETA. Public meetings for SPS's next IRP will begin during the summer of 2020.

Q. Is the IRP four year action plan reflective of the procurement timeline you describe above?

A. Yes. The 2018 IRP was filed on July 16, 2018 and included an action plan through end of year 2022. This 4-year planning horizon is more reflective of the resource acquisition period I describe in Section IV.

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

A. Yes.

VERIFICATION

STATE OF COLORADO)
) ss.
COUNTY OF DENVER)

BEN R. ELSEY, first being sworn on his oath, states:

I am the witness identified in the preceding direct testimony. I have read the direct testimony and the accompanying attachment(s) and am familiar with their contents. Based upon my personal knowledge, the facts stated in the 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.

BEN R. ELSEY

SUBSCRIBED AND SWORN TO before me this 23 day of October, 2019 by BEN R. ELSEY.

AMANDA CLARK
Notary Public
State of Colorado
Notary ID # 20164004880
My Commission Expires 02-05-2020

Notary Public of the State of Colorado
My Commission Expires: 2/5/20

Southwestern Public Service Company
Summary RPS Position

Line No.								
1	**2019 - RPS Filing**							
2		Unit	2020	2021	2022	2023	2024	2025
3	NM - Load Forecast	GWh	9,408	10,903	11,840	12,627	12,846	12,937
4	REC Requirement	%	20%	20%	20%	20%	20%	40%
5	**NM - RPS Requirements**	**GWh**	**1,882**	**2,181**	**2,368**	**2,525**	**2,569**	**5,175**
6	Existing Agreements & WIP	GWh	1,691	2,728	2,809	2,877	2,899	2,633
7	**Total RECs**	**GWh**	**1,691**	**2,728**	**2,809**	**2,877**	**2,899**	**2,633**
8	**Annual Position - Long (Short)**	**GWh**	**(191)**	**548**	**441**	**352**	**330**	**(2,542)**
9	**Annual Position - Percentage**	**%**	**18%**	**25%**	**24%**	**23%**	**23%**	**20%**
10	**Banked Position - Long (Short)**							
11	Position Long / (Short)	RECs	1,252	1,799	2,240	2,592	2,922	380

Southwestern Public Service Company
RPS Position

Line No.								
1	**REC Requirements**							
2	**Load and Allocation**	**Unit**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
3	Total Retail	GWh	23,878	25,659	26,661	27,539	27,835	27,929
4	NM Retail Allocation	%	39%	42%	44%	46%	46%	46%
5	**NM - Load Forecast**	GWh	**9,408**	**10,903**	**11,840**	**12,627**	**12,846**	**12,937**
6	Less Voluntary Programs (subscribed)	GWh	4	4	4	5	5	5
7	**NM - Adjusted Load Forecast**	**GWh**	**9,404**	**10,899**	**11,836**	**12,622**	**12,841**	**12,932**
8	RPS Requirement	%	20%	20%	20%	20%	20%	40%
9	**NM - RPS Requirements**	**GWh**	**1,882**	**2,181**	**2,368**	**2,525**	**2,569**	**5,175**
10	**Current Position**							
11	**Existing Facilities w/ RECs**	**Unit**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
12	Caprock	GWh	279	281	258	258	259	-
13	San Juan	GWh	354	356	346	346	347	346
14	Sunedsn1	GWh	18	18	22	22	22	22
15	Sunedsn2	GWh	18	18	22	22	22	22
16	Sunedsn3	GWh	18	18	22	22	22	22
17	Sunedsn4	GWh	18	18	23	23	23	23
18	Sunedsn5	GWh	18	18	22	22	22	22
19	Mesaland	GWh	1	1	1	2	2	2
20	NM DG	GWh	0	0	0	0	0	0
21	**Existing REC Acquisitions**	**GWh**	**725**	**727**	**718**	**718**	**720**	**460**
22	**Construction WIP**		**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
23	Hale	GWh	889	955	999	1,031	1,041	1,038
24	Sagamore	GWh	77	1,045	1,092	1,128	1,139	1,135
25	**RECs from Construction WIP**	**GWh**	**966**	**2,001**	**2,091**	**2,159**	**2,179**	**2,173**

Southwestern Public Service Company
RPS Position

Line No.								
26	**Existing Agreements + Work in Progress**	**GWh**	**1,691**	**2,728**	**2,809**	**2,877**	**2,899**	**2,633**
27		**GWh**	**(191)**	**548**	**441**	**352**	**330**	**(2,542)**
28		%	17.97%	25.02%	23.73%	22.78%	22.57%	20.35%
29	**Filing Month**	Month	7	7	7	7	7	7
30	**Opening Banked Position**							
31	RECs less than 1 year old	MWh	588,632	704,520	1,136,703	1,170,448	1,198,724	1,208,087
32	RECs less than 2 years old	MWh	596,275	547,212	662,595	1,069,939	1,393,244	1,714,157
33	RECs less than 3 years old	MWh	257,530	-	-	-	-	-
34	RECs less than 4 years old	MWh	-	-	-	-	-	-
35	RECs lost this period	MWh		-	-	-	-	-
36	**RECs Generated this Period before Filing Date**	MWh	986,328	1,591,384	1,638,628	1,678,213	1,691,322	1,535,720
37	**RECs Generation this Period after Filing Date**	MWh	704,520	1,136,703	1,170,448	1,198,724	1,208,087	1,096,943
38	**RECs Available During this Period**							
39	RECs Generated after Filing Date	MWh	704,520	1,136,703	1,170,448	1,198,724	1,208,087	1,096,943
40	RECs less than 1 year old	MWh	1,574,960	2,295,904	2,775,330	2,848,662	2,890,045	2,743,807
41	RECs less than 2 years old	MWh	596,275	547,212	662,595	1,069,939	1,393,244	1,714,157
42	RECs less than 3 years old	MWh	257,530	-	-	-	-	-
43	RECs less than 4 years old	MWh	-	-	-	-	-	-
44	**RECs to be Retired this Period**	MWh	1,881,553	2,180,521	2,367,987	2,525,356	2,569,132	5,174,769
45	**Closing Banked Position**							
46	RECs Generated after Filing Date	MWh	704,520	1,136,703	1,170,448	1,198,724	1,208,087	380,139
47	RECs less than 1 year old	MWh	547,212	662,595	1,069,939	1,393,244	1,714,157	-
48	RECs less than 2 years old	MWh	-	-	-	-	-	-
49	RECs less than 3 years old	MWh	-	-	-	-	-	-
50	RECs less than 4 years old	MWh	-	-	-	-	-	-
51	**Final Position**	**RECs**	**1,251,732**	**1,799,298**	**2,240,387**	**2,591,968**	**2,922,244**	**380,139**