

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF SOUTHWESTERN)
PUBLIC SERVICE COMPANY'S)
APPLICATION REQUESTING)
APPROVAL OF TWO LONG TERM)
PURCHASED POWER AGREEMENTS,)
)
SOUTHWESTERN PUBLIC SERVICE)
COMPANY,)
)
APPLICANT)
)
)
_____)**

CASE NO. 23-00384-UT

DIRECT TESTIMONY

of

BEN R. ELSEY

on behalf of

SOUTHWESTERN PUBLIC SERVICE COMPANY

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GLOSSARY OF ACRONYMS AND DEFINED TERMS

<u>Acronym/Defined Term</u>	<u>Meaning</u>
All-Source RFP	All-Source Request for Proposal
BESS	Battery Energy Storage Systems
Borger	Borger Energy Associates, LLC
Borger Facility	230 MW natural gas cogeneration facility owned by Borger
Borger LTPPA	15-year PPA between SPS and Borger for 230 MW
CCN	Certificate of Public Convenience & Necessity
COD	Commercial Operation Date
Commission	New Mexico Public Regulation Commission
Cunningham	Cunningham Generation Station
DISIS	Definitive Interconnection System Impact
Dispatchable LTPPAs	Natural Gas Generation and Battery Energy Storage Resource Power Purchase Agreements
Harrington	Harrington Generating Station
IE	Independent Evaluator
IRP	Integrated Resource Plan
LTPPA	Long-Term Purchase Power Agreements
LTPPAs	Borger LTPPA and Wildcat BESS LTPPA
Maddox	Maddox Generating Station
MW	Megawatt
OATT	Open Access Transmission Tariff

<u>Acronym/Defined Term</u>	<u>Meaning</u>
Plant X	Plant X Generating Station
PRM	Planning Reserve Margin
PVRR	Present Value Revenue Requirement
RTO	Regional Transmission Organizations
Rule 551	17.9.551 NMAC
Spring 2023 Forecast	SPS load forecast published in the Spring of 2023
SPS	Southwestern Public Service Company, a New Mexico corporation
Southwest Power Pool	Southwest Power Pool, Inc.
STSP	Specialized Technical Support Personnel
Summer 2023 Forecast	SPS load forecast published in the Summer of 2023
Wildcat	Wildcat Ranch Energy Storage, LLC
Wildcat BESS	15-Year Battery Energy Storage Resource
Xcel Energy	Xcel Energy Inc.

LIST OF ATTACHMENTS

<u>Attachment</u>	<u>Description</u>
BRE-1	2022 SPS All-Source RFP Independent Evaluator's Report (<i>Filename: BRE-1.pdf</i>)
BRE-2	2022 SPS All-Source RFP (<i>Filename: BRE-2.pdf</i>)
BRE-3	2022 SPS RFP Evaluation Guide (<i>Filename: BRE-3.pdf</i>)

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Direct Testimony
of
Ben R. Elsey

1 **I. WITNESS IDENTIFICATION AND QUALIFICATIONS**

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

3 A. My name is Ben R. Elsey. My business address is 1800 Larimer Street, Denver,
4 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”).

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

10 A. I am employed by Xcel Energy as Director, Resource Planning & Bidding.

11 **Q. Please outline your responsibilities as Director, Resource Planning & Bidding.**

12 A. My duties include managing analysts and planners in the development of strategic
13 resource planning, including need assessment, planning, and financial analysis of
14 various resource and purchase/sales options. I am also responsible for managing
15 various state resource planning processes to ensure that regulatory requirements are
16 fulfilled.

17 **Q. Please summarize your educational background.**

18 A. I graduated from City College, Plymouth in Great Britain with a Higher National
19 Certificate in Building Studies. Since relocating to the United States, I have

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1 graduated with an associate degree in Business Administration from Amarillo
2 College and a bachelor's degree in Accounting from Colorado State University.

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

4 A. I began employment with Xcel Energy in June 2012 as a Project Control Specialist
5 in the Engineering and Construction department within Energy Supply. In 2015, I
6 moved into the role of Construction Estimator within the same department. In
7 2017, I assumed the role of Resource Planning Analyst II, and I was promoted to
8 the role of Manager, Resource Planning and Bidding in 2020. In January 2023, I
9 was promoted to my current position of Director, Resource Planning and Bidding.
10 Before joining Xcel Energy, I worked for various construction companies in Great
11 Britain and the United States as an estimator, quantity surveyor, and contracts
12 manager.

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

14 A. Yes. I have filed testimony before the New Mexico Public Regulation Commission
15 ("Commission") in SPS's 2018, 2019, 2020, 2021, and 2022 Renewable Portfolio
16 Standard filings, Case Nos. 18-00201-UT, 19-00134-UT, 20-00143-UT, 21-00172-
17 UT, and 22-00177-UT, in SPS's Certificate of Public Convenience and Necessity
18 ("CCN") proceeding to convert the Harrington Generating Station ("Harrington")

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1 from coal to natural gas, Case No. 21-00200-UT, and in SPS's most recent New
2 Mexico base rate case filing, Case No. 22-00286-UT.

3 I have also testified on behalf of SPS before the Public Utility Commission
4 of Texas in SPS's pending CCN case for approval to construct multiple solar
5 generation facilities and a battery energy storage system ("BESS"), Docket No.
6 55255; SPS's CCN application to convert Harrington from coal to natural, Docket
7 No. 52485; and SPS's most recent Texas base rate case filing, Docket No. 54634.

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

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

3 A. My testimony:

- 4 • explains why SPS needs additional generation capacity;
- 5 • explains the structure of SPS’s All-Source Request for Proposals (“All-
6 Source RFP”) issued by SPS and the role of the Independent Evaluator
7 (“IE”);
- 8 • addresses the bid evaluation process and the modeling conducted to produce
9 the Recommended Portfolio, which included two power purchase
10 agreements (“LTPPAs”) with dispatchable facilities (“Dispatchable
11 LTPPAs”), including the model sensitivity analyses;
- 12 • discusses further increases to SPS’s load forecast since the creation of the
13 Recommended Portfolio; and
- 14 • addresses the requirements in 17.551.8(D)(6), (8)-(10) (“Rule 551”).

15 **Q. Please summarize your testimony and recommendations.**

16 A. SPS needs the additional generation capacity provided by the LTPPAs. SPS has
17 evaluated resource bids submitted in response to its 2022 All-Source RFP and
18 created a resource portfolio to address these capacity needs through 2027 in the
19 most reliable and cost-effective manner. The inclusion of the new PPA with Borger
20 Energy Associates LLC (“Borger”) for 230 megawatts (“MWs”) from an existing
21 natural gas cogeneration facility over a 15-year term (“Borger LTPPA”) in the

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1 Recommended Portfolio presents \$128 million savings as compared to the
2 Recommended Portfolio without the new Borger LTPPA.¹ Further, the LTPPA
3 with Wildcat Ranch Energy Storage, LLC (“Wildcat”) for 48 MW from Wildcat’s
4 BESS over a 15-year term (“Wildcat BESS LTPPA”) utilizes surplus
5 interconnection rights to increase the accredited capacity at the point of
6 interconnection of an existing wind facility in Texas. It is also located in the South
7 Plains region, a relatively beneficial location based on the nature of SPS’s service
8 territory and load. Ultimately, based on resource analysis performed as a result of
9 the 2022 All-Source RFP, I recommend that the Commission approve SPS’s
10 request to approve the LTPPAs. SPS’s requests are discussed in more detail by
11 SPS witness Brooke A. Trammell and the specifics of the LTPPAs are supported
12 SPS witness John L. Bornhofen.

13 **Q. Were Attachments BRE-1 through BRE-3 prepared by you or under your**
14 **direct supervision and control?**

15 A. Yes.

¹ This analysis is discussed in more detail in Section V.B of my testimony.

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1 Southwest Power Pool, Inc. RTO, which requires each member to have a minimum
2 summer PRM of 15% of its peak demand forecast, pursuant to Southwest Power
3 Pool's rules for net planning capability. Compliance with the Southwest Power
4 Pool minimum PRM is necessary, and it would be imprudent for a utility to have
5 reserves below the PRM. The PRM is, however, only one of many considerations
6 in the resource planning process and does not substitute for SPS's overall resource
7 planning approaches that are necessary to adequately plan for expected customer
8 needs. Other considerations include, but are not limited to, operational constraints,
9 such as congestion management and transmission stability, and ensuring there is
10 sufficient energy available to serve forecasted load at all times.

11 **Q. Has the Southwest Power Pool PRM requirement always been 15%?**

12 A. No. The summer PRM requirement had been 12%; however, in October 2022, the
13 Southwest Power Pool increased it to 15% effective Summer 2023. The Southwest
14 Power Pool's most recent loss of load expectation draft study results shows a
15 potential increase of the summer PRM up to 18% is possible.

16 **Q. How does SPS prepare its demand and energy forecast?**

17 A. The primary forecasting technique for load forecasting is regression modeling.
18 Regression models are designed to identify and quantify the statistical relationship

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1 between historical sales of customers and a set of independent predictor variables,
2 such as historical economic and demographic indicators, historical electricity
3 prices, or historical weather. Once this relationship is defined, a forecast is
4 developed by simulating the relationship over the forecast period using projected
5 levels of the independent predictor variables.

6 **Q. How does SPS project new load growth?**

7 A. SPS adjusts its load forecast model results to include new load growth identified by
8 SPS account managers. These adjustments account for load changes that are not
9 embedded in historical sales data and include expected load growth due to oil and
10 gas production. SPS releases two load forecasts annually, one in the spring and one
11 in the summer.

12 **Q. How does SPS determine the amount of its capacity?**

13 A. When calculating the capacity of the generation fleet for capacity planning
14 purposes, SPS adheres to the requirements specified in Attachment AA of the
15 Southwest Power Pool's Open Access Transmission Tariff ("OATT") and
16 supporting business practices. Specifically, the OATT requires SPS to only count a
17 resource's accredited capacity towards its PRM requirements.

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1 **Q. What is accredited capacity?**

2 A. Accredited capacity refers to the amount of a resource's capacity that may be
3 counted towards a utility's capacity requirements—the amount of capacity needed
4 to serve its planned system peak demand together with the PRM. A resource's
5 accredited capacity may be significantly lower than its nameplate capacity, which
6 refers to the maximum generation capability of a unit.

7 **Q. How is accredited capacity determined?**

8 A. The Southwest Power Pool requires accredited capacity to be calculated according
9 to the methodology contained in Attachment AA of the OATT. This methodology
10 is determined by Southwest Power Pool's Supply Adequacy Working Group, of
11 which I am a member, and can change as best practices are developed. The
12 methodology considers the resource's reliability and the alignment of its production
13 with periods of peak system demand, which results in different resource types
14 having different ratios of accredited capacity to nameplate capacity. For example,
15 wind resources have relatively low ratios of accredited capacity to nameplate
16 capacity because the high wind production hours of the day (and year) do not
17 consistently align well with periods of system peak demand. On the other hand,
18 hours of high solar production in West Texas and New Mexico often coincide with

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1 periods of peak demand, which means the solar projects in the Recommended
2 Portfolio in West Texas and New Mexico will have a relatively high accredited
3 capacity value.

4 SPS submits its capacity position, including supporting documentation, to
5 the Southwest Power Pool on an annual basis for validation and approval. Because
6 accredited capacity determinations are based on each individual resource’s
7 performance, capacity accreditations can vary from year to year.

8 **Q. Please describe SPS’s projected capacity needs at the time bids received in the**
9 **2022 All-Source RFP were evaluated.**

10 A. As shown below in Table BRE-1, at the time of evaluating bids submitted in
11 response to the 2022 All-Source RFP and based on SPS’s New Mexico capacity
12 position, SPS projected a capacity need of 224 megawatts beginning in 2026, which
13 increased to 527 MW in 2027.

14 **Table BRE-1: System Capacity Need (NM Position)**

Line #	Description	2024	2025	2026	2027
1	Current Accredited Capacity (MW)	5,418	5,411	5,158	4,918
2	Firm Load Obligation (MW) (Spring 2023 Forecast)	4,332	4,580	4,680	4,735
3	Planning Reserve Margin (MW)	650	687	702	710
4	Capacity Need (MW)	4,982	5,267	5,382	5,445
5	PRM Capacity Surplus or Shortfall	436	144	(224)	(527)

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1 These projections assume the Southwest Power Pool Summer PRM will remain at
2 15%.

3 **Q. What do you mean by SPS’s New Mexico capacity position?**

4 A. The amounts in Table BRE-1 reflect systemwide numbers; however, the amount
5 of SPS’s accredited capacity differs between SPS’s New Mexico and Texas
6 jurisdictions due to differences in the approved portfolio of resources in each state.
7 The Current Accredited Capacity figure in Table BRE-1 includes all resources
8 approved by the Commission.

9 **Q. What is driving SPS’s changing capacity position between 2024 and 2027?**

10 A. The three primary drivers impacting SPS’s capacity position are: (1) projected
11 customer load growth; (2) the retirement of aging SPS gas generating units; and (3)
12 the expiration of certain LTPPAs.

13 **Q. Please discuss SPS’s projected customer load growth.**

14 A. As shown on line 2 of Table BRE-1, SPS’s Firm Load Obligation is expected to
15 increase from 4,332 MW in 2024 to 4,735 MW in 2027 based on the Spring 2023
16 forecast.

17 **Q. Has SPS recently retired any aging gas generating units?**

18 A. Yes. SPS retired (“Plant X Generating Station”) Plant X Unit 3 in 2022 and has

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1 informed the Commission of its intent to retire Plant X Generating Station Unit 1,
2 Plant X Unit 2, and Cunningham Generating Station (“Cunningham”) Unit 1 by the
3 end of 2023. Plant X Units 1 and 2 were commissioned in 1952 and 1953 and have
4 a combined capacity of 150 MW. Cunningham Unit 1 was commissioned in 1957
5 and has a capacity of 72 MW. Although these units have reliably provided power
6 for SPS for decades, they have reached the end of their intended, and greatly
7 extended, service lives. It is no longer economical to operate or refurbish those
8 units because of their age, high heat rates, and operational condition.

9 **Q. Which existing SPS gas generating units and purchased power agreements are**
10 **currently scheduled to retire or expire in 2024 - 2027?**

11 A. The following SPS gas generating units and LTPPAs are currently scheduled to
12 retire or expire before Summer 2027:

- 13 • Cunningham Unit 2, which was commissioned in 1965 and has an
14 accredited capacity rating of 183 MW, is currently scheduled to retire at the
15 end of 2025;
- 16 • Maddox Generating Station (“Maddox”) Unit 2, which was commissioned
17 in 1975 and has an accredited capacity rating of 61 MW, is also currently
18 scheduled to retire at the end of 2025;
- 19 • SPS’s LTPPA with Caprock, an 80 MW wind facility that provides 7 MW
20 of accredited capacity, is scheduled to expire on 12/30/2024;
- 21 • SPS’s LTPPA with San Juan Mesa, a 120 MW wind facility that provides

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- 1 9 MW of accredited capacity, is scheduled to expire on 12/21/2025;
- 2 • SPS's LTPPA with Wildorado Wind, a 161 MW wind facility that provides
3 20 MW of accredited capacity, is scheduled to expire on 04/26/2027; and
- 4 • SPS's LTPPA with Borger, two natural gas units with a current combined
5 accredited capacity of 220 MW, is scheduled to expire on or before
6 12/31/2026.

7 In total, SPS has 825 MW of generation, with an accredited capacity totaling 500
8 MW, which is scheduled to retire or expire between 2024 - 2027. The impact of the
9 unit retirements and expiring LTPPAs is shown above in Table BRE-1, line 1.

10 **Q. What happens if SPS has insufficient accredited capacity?**

11 A. Ensuring SPS has enough generating resources to meet the Southwest Power Pool's
12 PRM requirement is critical to ensure system reliability. Put another way,
13 insufficient capacity to meet peak demand would risk system reliability and
14 increase the likelihood of a loss-of-load event. Furthermore, SPS would be in
15 violation of the Southwest Power Pool's OATT requirements and would be subject
16 to a deficiency payment.

17 **Q. Would the recommend Portfolio meet the capacity needs identified in the 2022
18 All-Source RFP?**

19 A. Yes, and the next section of my testimony addresses the Recommended Portfolio
20 in more detail.

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1 **IV. OVERVIEW OF THE RECOMMENDED PORTFOLIO**

2 **Q. What do you address in this section of your Direct Testimony?**

3 A. I provide an overview of the Recommended Portfolio, which includes the
4 generation resources that SPS is presenting in Case No. 23-00252-UT, the LTPPAs
5 in this case, and two service-life extensions of existing gas generation units. The
6 Recommended Portfolio is comprised of the following:

7 **Table BRE-2: SPS's Recommended Portfolio**

Resource:	Structure:	Resource Type:	Maximum Capability:	Location:
Plant X1&2 Solar Project	Self-build	Solar	150 MW	Lamb County, Texas
Cunningham 1 Solar Project	Self-build	Solar	72 MW	Lea County, New Mexico
Cunningham 2 Solar Project	Self-build	Solar	196 MW	Lea County, New Mexico
Cunningham 1 Battery	Self-build	BESS	36 MW	Lea County, New Mexico
Borger LTPPA	LTPPA	Natural gas	230 MW	Hutchinson County, Texas
Wildcat BESS LTPPA	LTPPA	BESS	48 MW	Cochran County, Texas
Cunningham Unit 2	Service-life extension from 2025 to 2027	Natural gas	183 MW	Lea County, New Mexico

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Resource:	Structure:	Resource Type:	Maximum Capability:	Location:
Maddox Unit 2	Service-life extension from 2025 to at least 2028	Natural gas	61 MW	Lea County, New Mexico

1 SPS is seeking approval of the proposed self-build projects identified in the
 2 Recommended Portfolio in Case No. 23-00252-UT, and of the Dispatchable
 3 LTPPAs in this proceeding to meet SPS’s projected capacity need through 2027.
 4 Approval of the Recommended Portfolio as identified at the time of the 2022 RFP
 5 evaluation, secures additional energy and capacity in order to provide incremental
 6 reliability and resiliency benefits, and reduce risk.

7 **Q. How did SPS select the resources included in the Recommended Portfolio?**

8 A. As I further detail in Section V of my testimony, SPS relied upon its production
 9 cost model software, EnCompass to first select the lowest cost bids received from
 10 the company’s 2022 RFP to meet SPS’s entire capacity need through 2027, which
 11 included the new Borger LTPPA. SPS then conducted further qualitative and
 12 quantitative reviews of the modeling results, including extending the retirement
 13 dates of existing natural gas generating units and adding incremental battery energy

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1 storage, to create the Recommended Portfolio, which included the Wildcat BESS
2 LTPPAs for which SPS currently as a PPA through 2048.

3 **Q. Can you describe the new resources SPS selected as part of the**
4 **Recommended Portfolio?**

5 A. Yes. SPS selected 454 MW of new company-built (also referred to as “self-build”)
6 solar and BESS resources at the site of existing retiring gas-steam generation. SPS
7 has filed an application to amend its CCN with the Commission in Case No. 23-
8 00252-UT requesting approval from the Commission to construct these resources.
9 SPS also selected two new long-term LTPPAs: 1) the Borger LTPPA for generation
10 from Borger’s existing and currently operating natural gas cogeneration facility;
11 and 2) the Wildcat BESS LTPPA for the use of a 48 MW BESS which will be
12 located at the existing Wildcat wind generating facility.

13 **Q. How much accredited capacity will the new resources included in the**
14 **Recommended Portfolio provide?**

15 A. SPS projects the new resources included in the Recommend Portfolio, will provide
16 approximately 224 MW of accredited capacity in Summer 2026 and 581 MW of
17 accredited capacity by Summer 2027. As shown below in Table BRE-3, the new
18 resources included in the Recommended Portfolio alone do not enable SPS to meet

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1 the Southwest Power Pool’s PRM requirement. In the near term, SPS will meet the
2 remaining capacity need by extending the lives of Cunningham Unit 2 and Maddox
3 Unit 2.

4 **Table BRE-3: Capacity Position – New Resources Only (NM Position)**

	2024	2025	2026	2027
Spring 2023 Capacity Position (MW)	436	144	(224)	(527)
New Resources – Accredited Capacity (MW)	0	0	224	581
Resulting Capacity Position	436	144	0	54

5 **Q. How did SPS estimate the accredited capacity that new resources will provide?**

6 A. SPS relied upon the Southwest Power Pool’s effective load carrying capability
7 studies to estimate the future value of accredited capacity for solar and battery
8 energy storage resources. The actual accredited capacity for the solar and battery
9 energy storage resources will be reevaluated each year based on annual effective
10 load carrying capability studies.

11 **Q. Please describe the service-life extensions contained in the Recommended**
12 **Portfolio.**

13 A. As part of the Recommended Portfolio, SPS has proposed to extend the service life
14 of Cunningham Unit 2 through the commercial operation of the replacement solar
15 facility. This ensures near continuous capacity and energy near load in the southern

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1 portion of SPS’s service territory. Cunningham Unit 2 is 58 years old and is nearing
2 its end of life as a generating asset. Additionally, SPS is extending the service life
3 of Maddox Unit 2 at least through 2028 in order to serve a short-term capacity need.
4 Maddox Unit 2 is 48 years old and is currently scheduled to be retired in 2025.

5 **Q. What is SPS’s expected capacity position with the extensions of Cunningham
6 Unit 2 and Maddox Unit 2?**

7 A. Table BRE-4 shows the impact of the full Recommended Portfolio on SPS’s
8 expected capacity position.

9 **Table BRE-4: System Capacity Need – Recommended Portfolio (NM
10 Position)**

	2024	2025	2026	2027
Spring 2023 Capacity Position (MW)	436	144	(224)	(527)
New Resources – Accredited Capacity (MW)	0	0	224	581
Cunningham 2 & Maddox 2 Extension	0	0	245	62
Resulting Capacity Position	436	144	245	116

11 **Q. How did SPS estimate the accredited capacity that new resources will provide?**

12 A. SPS relied upon the Southwest Power Pool’s effective load carrying capability
13 studies to estimate the future value of accredited capacity for solar and battery
14 energy storage resources. The actual accredited capacity for the solar and battery
15 energy storage resources will be reevaluated each year based on annual effective

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1 load carrying capability studies.

2 **Q. Will the LTPPAs provide any benefits beyond capacity?**

3 A. Yes. The Wildcat BESS LTPPA will provide critical, dispatchable energy that can
4 ‘ramp-up’ and ‘ramp-down’ to follow fluctuations in customer demand and
5 renewable energy production. Furthermore, technical capabilities such as ramping
6 has the potential to generate ancillary service revenue from the Southwest Power
7 Pool’s Integrated Market. As discussed below, the Wildcat BESS LTPPA may also
8 generate revenue from energy arbitrage, which would further decrease customer
9 costs. Energy arbitrage refers to storing energy at times of lower system energy
10 prices and discharging that energy at time of higher system energy prices.

11 The Borger LTPPA will provide SPS’s customers with a source of reliable
12 and efficient natural gas generation which will help SPS to maintain a reliable and
13 affordable system. Additionally, since the Borger facility is a currently operating
14 natural gas cogeneration facility, the new Borger PPA presents minimal project
15 deliverability risk.

16 **Q. Will the LTPPAs provide any other additional benefits?**

17 A. Yes. The LTPPAs both utilize existing interconnection rights, which enables SPS
18 to acquire additional capacity without having to pay for transmission upgrades.

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1 SPS estimates avoided upgrade costs to be \$200/kW and \$600/kW, an estimate
2 derived from evaluation of the average transmission network upgrade costs
3 assigned to the generators in the region. This estimate is in line with the \$364/kW
4 average upgrade costs assigned by the Southwest Power Pool to the last group of
5 projects that completed the interconnection process.

6 **Q. Are the LTPPAs consistent with SPS’s integrated resource plan (“IRP”) as**
7 **required by Rule 551.8(D)(8)?**

8 A. Yes. SPS’s current IRP (“2021 IRP”) contemplates the issuing of an all-source
9 RFP to solicit capacity to meet SPS’s capacity requirements through 2027.² SPS
10 committed that the RFP would be “all-source”, competitive, and use an independent
11 monitor to oversee the RFP process. The 2022 All-Source RFP was issued in a
12 manner consistent with this description.

13 On October 13, 2023, SPS submitted a new IRP (“2023 IRP”), which has
14 yet to be approved by the Commission.³ The proposed IRP specifically describes
15 the 2022 All-Source RFP and the selection of the LTPPAs. Thus, the LTPPAs are

² *In the Matter of Southwestern Public Service Company’s 2021 Integrated Resource Plan for New Mexico*, Case No. 21-00169-UT, Southwestern Public Service Company’s Supplemental Filing at 8-9 (Nov. 17, 2022).

³ *In the Matter of Southwestern Public Service Company’s 2023 Integrated Resource Plan for New Mexico*, Case No. 23-00073-UT, 2023 Integrated Resource Plan (Oct. 13, 2023).

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1 consistent with both SPS's 2021 IRP and SPS's proposed 2023 IRP.

2 **Q. Should SPS rely on short-term capacity purchases to solve any future capacity**
3 **position deficiency?**

4 A. No. I would not recommend relying on short-term capacity purchases to solve
5 future long-term growing capacity needs. Other utilities within the Southwest
6 Power Pool are also impacted by changing resource adequacy requirements. In
7 fact, SPS was contacted by several utilities seeking to purchase capacity after the
8 Southwest Power Pool increased the PRM requirement from 12% to 15%. It is
9 uncertain whether capacity will be available for purchase later in the decade and if
10 so at what cost. This risk further underscores the importance of maintaining a
11 reasonable amount of capacity beyond the minimum required by the PRM.

12 **Q. Could SPS cover its capacity requirements through market purchases?**

13 A. No. Section 9 of Attachment AA to the Southwest Power Pool OATT requires load
14 serving entities, such as SPS, to carry enough capacity on their system to meet their
15 load obligations plus the minimum PRM requirement. Failure to have this amount
16 of capacity secured would subject SPS to penalties.

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V. **HOW SPS SELECTED THE RECOMMENDED PORTFOLIO**

A. **2022 All-Resource RFP**

Q. What do you address in this section of your testimony?

A. I provide an overview of SPS's 2022 All-Source RFP and SPS's process for evaluating the bids before advancement to EnCompass modeling. The IE's Report provides a detailed description of SPS's RFP and evaluation process and is included as Attachment BRE-1 to my Direct Testimony. In addition, I have attached a copy of the RFP document and the bid evaluation as Attachments BRE-2 and BRE-3 to my Direct Testimony.

Q. Please describe the scope of SPS's 2022 All-Source RFP.

A. SPS solicited bids for up to 947 MW of new or existing capacity resources under three different alternatives:

Option 1A: Up to 222 MW of capacity, with a Commercial Operation Date ("COD") no later than May 1, 2026, for the reuse of SPS's interconnection rights at the Plant X Unit 1, Plant X Unit 2, and Cunningham Unit 1 retiring generating units.

Option 1B: Up to 261 MW of capacity, with a COD no later than May 1, 2027, for the reuse of SPS's interconnection rights at the Cunningham Unit 2 and Maddox Unit 2 retiring generation units.

Option 2: Accredited capacity, with a COD no later than May 1, 2027, at a new or existing generator interconnection located in the 05-Southwest Group of

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1 Southwest Power Pool. Proposals must, at a minimum, have completed Phase
2 2 of Southwest Power Pool’s Definitive Interconnection System Impact Study
3 (“DISIS”).

4 **Q. Why did SPS choose the three options included in the RFP?**

5 A. SPS recognized the potential value of avoiding transmission network upgrade costs
6 by siting new generation at the location of retiring gas steam units. As a result, SPS
7 created Option 1A to incorporate the units SPS planned to retire at the end of 2023
8 and Option 1B to include the units that were scheduled to retire at the end of 2025.
9 All bidders were permitted to submit projects utilizing SPS’s existing
10 interconnection rights.

11 The intent of including Option 2 was to cast a wide net of potential projects
12 by allowing bidders to bid in any resource type, at any location within SPS’s service
13 territory, under any ownership structure.

14 **Q. What types of resources were eligible for consideration under the RFP?**

15 A. The RFP was open to all resource types, including, but not limited to, firm and
16 dispatchable generation, wind, solar, wind plus storage, solar plus storage, and
17 stand-alone storage. Both existing and new generating resources were eligible.

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1 **Q. Why did SPS require proposals under Option 2 to have completed Phase 2 of**
2 **the DISIS?**

3 A. Southwest Power Pool's Definitive Interconnection System Impact Study DISIS
4 process is severely backlogged. Generation requests submitted in the second half
5 of 2017 are just now completing the process. Projects that had not completed Phase
6 2 by the time of the bid submittal would not be able to begin commercial operations
7 within the required time frame. Additionally, it would be difficult for a bidder to
8 submit a firm proposal without having completed Phase 2 of the DISIS.
9 Transmission network upgrade costs are calculated as part of the Southwest Power
10 Pool's DISIS process and not directly by the bidders. After the Southwest Power
11 Pool has completed the Phase 2 study, bidders generally have a sufficiently solid
12 estimate of the transmission network upgrade costs in order to submit firm pricing
13 in response to an RFP.

14 **Q. Please summarize the role of the IE.**

15 A. Prior to issuing the All-Source RFP on November 28, 2022, SPS issued a separate
16 RFP to acquire the services of an IE. On October 17, 2022, SPS selected
17 Guidehouse as the IE. The primary role of Guidehouse was to ensure the RFP was
18 conducted in a fair and transparent manner, which included ensuring adherence to

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1 SPS's separation protocols. Guidehouse's findings are included on page 13 of the
2 IE Report (Attachment BRE-1).

3 **Q. Will you elaborate on SPS's separation protocols?**

4 A. The All-Source RFP allowed SPS to bid its own self-built projects, and therefore
5 separation protocols (also known as a firewall) were established to ensure the SPS
6 bid team was not privy to information that was not available to external parties. The
7 separation protocols created three distinct teams: (1) the bid evaluation team; (2)
8 the bid development team; and (3) the specialized technical support personnel
9 ("STSP") team. The bid evaluation team, of which I was a member, was unable to
10 discuss the RFP directly with the bid development team, and the bid development
11 team was not able to discuss proposals directly with the bid evaluation team.
12 Instead, any question from the bid development team or bid evaluation team was
13 handled identically to questions from other bidders and was overseen by the IE. In
14 addition, the bid evaluation team did not disclose information on other proposals,
15 nor were the results of the All-Source RFP shared with the bid development team
16 until the RFP recommendation was publicly available and the separation protocols
17 ended.

18 Recognizing Xcel Energy has limitations on the number of technical experts

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1 needed to both prepare and evaluate new generating resources, SPS also established
2 the STSP team. The STSP team could assist both the bid development team and the
3 bid evaluation team but could not act as a conduit of information.

4 **Q. Did Guidehouse provide input and feedback when preparing the All-Source
5 RFP materials and process?**

6 A. Yes. In addition to reviewing and approving SPS's separation protocols,
7 Guidehouse was involved throughout the All-Source RFP, which included creating
8 the RFP materials, developing the bid evaluation, and scoring process, overseeing
9 communication with bidders, and reviewing the EnCompass modeling.

10 **Q Did the size of SPS's capacity need change between issuance and completion
11 of the All-Source RFP?**

12 A. Yes. The All-Source RFP initially sought generating resources to meet a capacity
13 need of 947 MW calculated using SPS's existing portfolio of resources approved
14 in Texas. The equivalent capacity need using SPS's existing portfolio of resources
15 approved in New Mexico was 873 MW, which corresponds with Table BRE-3 in
16 my direct testimony in SPS's 2022 Rate Case – Case No. 22-00286-UT.

Year	2023	2024	2025	2026	2027
Capacity Position	718	(32)	(330)	(612)	(873)

17 After issuing the All-Source RFP, a large customer load that was scheduled

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1 to interconnect to the SPS system before Summer 2024 was amended. All else
2 being equal this lowered SPS's capacity need through 2027. However, in keeping
3 with normal business practices, SPS also updated its load forecast in Spring 2023
4 and continued to see significant load growth--which offset some of the delayed
5 large customer load. In total, the net impact of continued load growth and the
6 amendment to the load decreased SPS's capacity need from 947 MW to 606 MW
7 (Texas Position).

8 **Q. Was the change in SPS's capacity need during the All-Source RFP**
9 **communicated to the IE?**

10 A. Yes. The 2022 All-Source RFP was issued based on SPS's load forecast prepared
11 in the summer of 2022. In the spring of 2023, SPS released an updated load forecast.
12 SPS provided updated load information to the IE and the change in the capacity
13 position was addressed on page 9 of the IE's report.

14 **Q. Please describe the bids submitted under the RFP.**

15 A. As described on page 4 of the Independent Evaluators report,

16 Bids were due on February 27, 2023, with any self-build bids due three days
17 earlier on February 24, 2023. A total of 78 bids were received from 9
18 bidders for 23 distinct projects totaling approximately 1,100 MW of solar,
19 1,130 MW of wind, 450 MW of thermal, 1,100 MW of standalone battery
20 storage, and an additional 680 MW of hybrid battery storage at solar and
21 wind facilities, for a total of about 4,500 MW of potential nameplate
22 capacity. Of the 78 bids received, 23 were for Options 1A or 1B (reuse of
23 Company interconnection rights) and 55 were for Option 2. There were 12
24 self-build bids, for 6 distinct projects, totaling 480 MW of solar, 800 MW
25 of standalone battery storage, and an additional 240 MW of hybrid battery
26 storage, for a total of 1,520 MW of nameplate capacity.

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1 **B. The Resource Selection Process (Rule 551.8(D)(10))**

2 **Q. How did SPS select the new resources from the bids received?**

3 A. Pursuant to the RFP Evaluation Guide (Attachment BRE-3), SPS performed an
4 initial completeness review and a threshold review, which eliminated bids which
5 failed to provide firm pricing or otherwise failed to meet the requirements of the
6 RFP. SPS then scored the remaining 49 bids using the approach outlined in the
7 RFP Evaluation Guide, which considered certain components such as pricing,
8 capacity deliverability, congestion, and bidder strength.

9 SPS used its EnCompass model—a commercial power planning model built
10 using EnCompass software—to compare the different bids and identify the
11 proposals that best met SPS’s needs.

12 **Q. Can you explain how SPS’s EnCompass modeling identified the resources**
13 **included in the Recommended Portfolio?**

14 A. Yes. First, SPS required its entire updated capacity need through 2027 to be fulfilled
15 only with proposals that were received from the RFP and advanced to EnCompass
16 modeling. This approach established a baseline against which further refinements
17 could be evaluated. SPS initially did not allow alternative actions, such as extending
18 the service lives of any existing generating units and did not allow short-term

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1 capacity purchases to meet the capacity need. Upon evaluating the All-Source RFP
2 results, SPS discovered EnCompass was required to select more costly and lower-
3 scoring projects to fulfill a very small capacity need in 2026, before more
4 economical projects (e.g., Cunningham 2 solar replacement project) were available
5 for selection in 2027.

6 To resolve the very small binding capacity constraint in 2026, SPS included
7 an assumption that Maddox Unit 2 could be extended through at least the summer
8 of 2026 and then re-optimized the EnCompass model. This resolved the very small
9 capacity constraint in 2026 and resulted in a more economic portfolio of resources
10 that lowered total system costs by approximately \$43M through 2042, on a present
11 value revenue requirement (“PVRR”) basis.

12 Next, in addition to the Maddox Unit 2 extension, SPS re-optimized
13 EnCompass assuming up to 25 MW of short-term capacity purchases in 2026 and
14 2027. Note, allowing the model to select up to 25 MW of short-term capacity
15 purchases in 2026 and 2027 was a modeling sensitivity. As I discussed above,
16 short-term capacity purchases are not a prudent resource selection at this time. This
17 sensitivity decreased costs by an *additional* approximately \$24 million through
18 2042, on a PVRR basis and resulted in:

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- 1 i. the three lowest-cost solar resources being recommended (on an
2 Levelized Cost of Energy basis);
- 3 ii. the lowest cost firm and dispatchable project being recommended
4 (on an Levelized Cost of Capacity basis), and
- 5 iii. only projects scoring highly on SPS’s bid evaluation process being
6 recommended.

7 These recommended projects were shortlisted after review and approval from the
8 IE. The results of EnCompass analysis are summarized below in Table BRE-5.

9 **Table BRE-5: EnCompass Analysis Summarized**

	NPV (\$M) 2023-2042	Delta (\$M)
Base Case	\$14,640	-
Base Case with Maddox 2 Extension	\$14,597	(\$43)
Base Case with Maddox 2 Extension + Short Term Capacity Purchases	\$14,573	(\$67)

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1 **Q. Please elaborate on why SPS conducted the short-term capacity purchases**
2 **modeling sensitivity?**

3 A. No. Due to the separation protocols that were followed during SPS's evaluation of
4 the RFP, the bid evaluation team was prohibited from discussing its evaluation with
5 members of the bid development team. In an abundance of caution, the bid
6 evaluation team also did not discuss the potential of extending the retirement dates
7 of existing units and used short-term capacity purchases as a placeholder for the
8 purposes of modeling. Once the separation protocols were removed, SPS identified
9 the extension of Maddox Unit 2 by three years and the short-term extension of
10 Cunningham Unit 2 as more favorable than short-term capacity purchases.

11 **Q. Did SPS conduct any further sensitivity analysis?**

12 A. Yes. SPS conducted a sensitivity analysis that excluded the new Borger LTPPA.
13 As part of this sensitivity analysis SPS then reoptimized the EnCompass model
14 with the remaining proposals from the 2022 RFP. Under this scenario the total
15 system cost was approximately \$128 million more expensive, on a PVRR basis,
16 than the corresponding scenario that included the new Borger LTPPA. For the
17 purposes of this proceeding, Ms. Trammell and I refer to this sensitivity analysis as
18 the "no new gas" analysis.

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1 **Q. What steps did SPS take after identifying the shortlisted bids?**

2 A. SPS continued reviewing the shortlisted bids as well as other projects that had
3 performed highly on the RFP to meet its capacity position and provide additional
4 reliability and resiliency benefits, specifically from dispatchable capacity. SPS
5 determined that it needed to select an additional firm and dispatchable project or
6 projects to replace the recently retired dispatchable Plant X Unit 3 and the
7 scheduled retirements of additional dispatchable generating units. SPS selected two
8 additional dispatchable resources—the Cunningham 1 Battery and the Wildcat
9 BESS PPA—to address these concerns.

10 **Q. How did SPS select the BESS projects?**

11 A. SPS received several proposals for BESS projects that were relatively close in cost
12 and were the next most cost-effective firm and dispatchable resources after the
13 shortlisted projects. Without a clear cost ‘winner’ between the individual firm and
14 dispatchable projects, SPS opted for the two smallest combined batteries that met
15 the remaining capacity need.

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1 **Q. Why did SPS choose two smaller batteries to meet the remaining capacity need**
2 **instead of one larger battery?**

3 A. Because there were relatively small economies of scale savings for choosing a
4 single larger battery over two smaller batteries, proceeding with two separate
5 projects reduces the risk of one project failing, for example, during contract
6 negotiations or because of potential supply-chain issues. Furthermore, proceeding
7 with two different batteries at different locations provides geographical diversity
8 benefits and enhances system reliability, stability, and resiliency.

9 **Q. Why didn't SPS add additional BESS projects to meet the remaining entire**
10 **capacity need?**

11 A. SPS considered both the incremental cost and reliability benefits of acquiring
12 additional batteries. Although it is desirable to add even more storage resources
13 from a system reliability perspective, SPS is conscientious of the cost impact to
14 customers of 'overbuilding' new resources. SPS determined extending the service
15 lives of Maddox Unit 2 and Cunningham Unit 2 would be a lower cost option to
16 meet the remaining capacity need. Further resource additions in the 2028 through
17 2030 timeframe will be addressed in SPS's resource planning processes.

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1 **Q. Will the additional BESS projects included in the Recommended Portfolio**
2 **provide any additional benefits beyond capacity?**

3 A. Yes. As discussed above, the BESS projects will provide valuable dispatchable
4 capacity and potentially generate revenue from the sale of ancillary services. The
5 BESS projects also provide additional fuel diversity benefits and a hedge against
6 any interruption in fuel supply (e.g., correlated gas outages during winter events).
7 Each of these benefits add additional reliability and resiliency to the SPS system.
8 Furthermore, the BESS projects provide opportunities for energy arbitrage benefits
9 by charging during times of low energy costs (e.g., during times of high wind
10 production) and discharge during times of high energy costs (e.g., during peak
11 demand periods), which would have the benefit of lowering fuel and energy costs
12 for SPS's customers compared to what they otherwise would be.

13 **Q. Is the Recommended Portfolio a reasonable and prudent way to meet SPS's**
14 **capacity needs?**

15 A. Yes. The Recommended Portfolio provides a balanced mix of new renewable
16 generation, firm and dispatchable resources including battery energy storage, and
17 the short-term extension of existing gas generation to ensure SPS can serve
18 customers and meet the Southwest Power Pool's PRM requirement.

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1 **Q. Do the LTPPAs provide safe and reliable electric service at the lowest**
2 **reasonable cost in accordance with Rule 551.8(D)(6)?**

3 A. Yes. SPS's All-Source RFP process ensured that SPS selection of resources
4 necessary to meet SPS's reliability and safety needs at the lowest reasonable cost.
5 SPS's EnCompass modeling considered both the acquisition costs and expected
6 maintenance and fuel costs over the life of the project as required by Rule
7 551.8(D)(6).

8 **Q. Could utility-owned resources have been constructed as an alternative to the**
9 **LTPPAs with greater benefit to ratepayers (Rule 551.8(D)(9))?**

10 A. No. As part of the EnCompass modeling process, the SPS's self-build team's
11 proposals were compared against third-party bid submissions including the
12 LTPPAs. The Borger PPA was the least expensive project proposed on a capacity
13 basis and was significantly less expensive than SPS's self-build proposals. The
14 Wildcat BESS PPA was also cheaper than the self-build team's proposals.

15 **Q. What is the impact if the Commission does not approve the LTPPAs?**

16 A. If the Commission were to reject SPS's application and SPS was unable to fulfill
17 its capacity needs through the addition of the LTPPAs, this would create reliability,
18 resource adequacy, and financial risk for SPS and its customers. As a Load

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1 Responsible Entity in Southwest Power Pool, SPS must have sufficient generation
2 capacity to meet load obligations as well as the Southwest Power Pool's increased
3 summer PRM. Without the capacity from SPS's Recommended Portfolio, SPS will
4 be capacity deficient in the very near term. It would be imprudent for SPS to expect
5 to be able to rely on capacity purchases to address a resource need, particularly
6 when the resource adequacy requirements of all loads serving entities in the
7 Southwest Power Pool have increased – making the availability of capacity through
8 even short-term market purchases increasingly unlikely in the future. If SPS is
9 unable to meet its capacity requirements through the timely All-Source RFP
10 discussed in this proceeding, it will potentially be subject to financial penalties from
11 Southwest Power Pool.

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1 **VI. SUMMER 2023 LOAD FORECAST UPDATE**

2 **Q. Has SPS updated its load forecast since evaluating the 2022 All-Source RFP?**

3 A. Yes. As discussed above, SPS normally creates two load forecasts per year—one
4 in the spring and one in the summer. The 2022 RFP was evaluated using the load
5 forecast prepared in the spring of 2023 (“Spring 2023 Forecast”)—the most recent
6 forecast available at the time. SPS has since released an updated load forecast in
7 the summer of 2023 (“Summer 2023 Forecast”).

8 **Q. How does the Summer 2023 Forecast compare to the Spring 2023 Forecast
9 used to evaluate the 2022 RFP?**

10 A. As shown below in Table BRE-6, SPS’s projected peak demand increased by
11 between 226 MW and 296 MW between 2024 and 2027.

12 **Table BRE-6: Summer 2023 vs Spring 2023 Load Forecast**

Line #	Description	2024	2025	2026	2027
1	Spring 2023 Forecast	4,332	4,580	4,680	4,735
2	Summer 2023 Forecast	4,558	4,844	4,923	5,031
3	Increase	226	264	243	296

13 **Q. What is driving this acceleration in projected load growth?**

14 A. The acceleration in projected load growth is largely driven by oil and gas
15 development and electrification of operations in the Permian Basin. Further, a host

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1 of other industries, such as aerospace and aviation, other fuels production, data
2 centers, manufacturing, and distribution centers, continue to be attracted to SPS's
3 service territory due to high electric reliability, attractive energy prices, and
4 economic development foundations such as available land, qualified workforces,
5 and transportation capabilities.

6 **Q. How does the increase in projected demand impact SPS's accredited capacity**
7 **need?**

8 A. Assuming the Southwest Power Pool maintains its current 15% PRM requirement,
9 SPS's accredited capacity need increases by an additional 260 MW to 340 MW
10 between 2024 and 2027. The additional accredited capacity need is greater than the
11 limited headroom created by extending Cunningham Unit 2 and Maddox Unit 2,
12 discussed earlier in my testimony and shown in Table BRE-3. In other words, SPS
13 could still potentially be short of capacity even if the entire Recommended Portfolio
14 of resources is approved.

15 **Q. Has SPS taken other actions to increase its capacity position?**

16 A. Yes. SPS is currently pursuing other options to increase its capacity position and
17 decrease its firm load obligation. For example, SPS is actively pursuing demand

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1 response programs in both Texas and New Mexico.⁴ Demand response programs
2 reduce SPS's firm load obligation and in turn its capacity need. SPS expects
3 demand response programs could significantly reduce SPS's capacity need.

4 **Q. Can SPS rely on its proposed demand response programs and voluntary**
5 **renewable program in place of any components of the Renewable Portfolio?**

6 A. No. Even if these programs are approved and customers fully participate, SPS
7 would still have relatively minimal capacity headroom over the minimum amount
8 required by Southwest Power Pool in 2027. This additional capacity might
9 ultimately be required to meet Southwest Power Pool's minimum PRM
10 requirement if the actual load that materializes in 2027 exceeds SPS's current
11 forecasts. It may also be required if Southwest Power Pool were to increase its
12 PRM requirement. If SPS were to lack additional capacity when it was needed,
13 SPS could be forced to purchase capacity or pay a deficiency payment, and the
14 shortfall could also pose a reliability risk. In short, it is prudent for SPS to have a

⁴In SPS's current Texas rate case, Docket No. 54634, SPS proposed to increase its existing Interruptible Credit Option MW cap from 85 MW to 120 MW in 2024 and 200 MW in 2025. In New Mexico, SPS has proposed to establish a similar Interruptible Credit Option, without a MW cap, in NMPRC Case No. 22-00124-UT.

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1 reasonable amount of additional capacity above Southwest Power Pool's
2 minimums.

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

4 A. Yes.

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF SOUTHWESTERN)
PUBLIC SERVICE COMPANY'S)
APPLICATION REQUESTING)
APPROVAL OF TWO LONG TERM)
PURCHASED POWER AGREEMENTS,)
)
SOUTHWESTERN PUBLIC SERVICE)
COMPANY,)
)
APPLICANT)**

CASE NO. 23-00384-UT

VERIFICATION

On this day, November 21, 2023 I, Ben R. Elsey, swear and affirm under penalty of perjury under the law of the State of New Mexico, that my testimony contained in Direct Testimony of Ben R. Elsey is true and correct.

/s/ Ben R. Elsey

_____)
BEN R. ELSEY



Xcel Energy

2022 SPS All-Source RFP

**Closing Report of Guidehouse, Inc. as Independent
Evaluator**

Prepared for:

Xcel Energy

Submitted by:

Ralph Luciani, Director
Guidehouse Inc.

guidehouse.com

June 23, 2023

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Executive Summary

Background

This report summarizes the assessments and findings of Guidehouse Inc. as the independent evaluator (“IE”) for the 2022 SPS All-Source Request for Proposals (the “RFP”) as performed by Southwestern Public Service Company (the “Company”), a wholly-owned electric utility subsidiary of Xcel Energy Inc. The purpose of the RFP was to solicit proposals for the Company to fill a need for capacity as identified in the Company’s most recent Integrated Resource Plan (“IRP”) supplement. The Company retained Guidehouse in October 2022 as the IE to independently evaluate the RFP process, using its prior experience with utilities across the U.S. with similar procurements for generating resources.¹

The Company issued the RFP on November 28, 2022 seeking up to 947 megawatts (“MW”) of accredited capacity² under three different alternatives:³

- Option 1A: Up to 222 MW of capacity, with a Commercial Operation Date (“COD”) no later than May 1, 2026, for the reuse of the Company’s interconnection rights at the Plant X Unit 1 (“X1”), Plant X Unit 2 (“X2”) and Cunningham Unit 1 retiring generating units.
- Option 1B: Up to 261 MW of capacity, with a COD no later than May 1, 2027, for the reuse of the Company’s interconnection rights at the Cunningham Unit 2 and Maddox Unit 2 retiring generation units.
- Option 2: Accredited capacity, with a COD no later than May 1, 2027, at a new or existing generator interconnection located in the 05-Southwest Group of the Southwest Power Pool (“SPP”).

The RFP was open to any resource technology, including, but not limited to, thermal (e.g., natural gas fired), wind, solar, wind plus storage, solar plus storage, and standalone storage. Both existing and new generating resources were eligible. Resources had to be larger than 5 MW at a single location.

Build transfer (“BTs”), and self-build projects could bid into Options 1A and 1B, and BTs, self-build projects and Purchased Power Agreements (“PPAs”) could bid into Option 2.⁴ Given the potential for Company self-build bids, under the oversight of the IE, an internal firewall between

¹ Guidehouse has led or assisted utilities with the procurement of more than 1 gigawatt of resources in the U.S. and has served as the IE or equivalent for utility procurement of renewables in many states, including Arizona, Connecticut, Hawaii, Massachusetts, Michigan, Minnesota, New Jersey, New Mexico, New York, Ohio, Pennsylvania, and Texas.

² Accredited capacity refers to the value of the capacity for reserve purposes. Accredited capacity ratings for solar and wind resources are substantially below nameplate capacity ratings under Southwest Power Pool rules.

³ After the November 2022 issuance of the RFP, the total firm summer accredited capacity need sought by 2027 was adjusted downward from 947 MW to 606 MW based on spring 2023 capacity and load forecast updates. The cited figures are the Company’s capacity position in Texas; the Company’s capacity need is about 78 MW lower from a New Mexico perspective.

⁴ Under a BT, a third party develops and constructs the project, and the Company assumes 100% ownership upon completion. Company ownership is required under the Southwest Power Pool generating facility replacement rules to reuse the existing Company interconnection rights under Option 1A and 1B.



the Company staff who may work on self-build bids and Company staff on the RFP evaluation team was established for the RFP on October 26, 2022.

Bids were due on February 27, 2023, with any self-build bids due three days earlier on February 24, 2023. A total of 78 bids were received from 9 bidders for 23 distinct projects⁵ totaling approximately 1,100 MW of solar, 1,130 MW of wind, 450 MW of thermal, 1,100 MW of standalone battery storage, and an additional 680 MW of hybrid battery storage at solar and wind facilities, for a total of about 4,500 MW of potential nameplate capacity. Of the 78 bids received, 23 were for Options 1A or 1B (reuse of Company interconnection rights) and 55 were for Option 2. There were 12 self-build bids, for 6 distinct projects, totaling 480 MW of solar, 800 MW of standalone battery storage, and an additional 240 MW of hybrid battery storage, for a total of 1,520 MW of nameplate capacity.

Starting in March 2023, Completeness, Threshold and Scoring reviews were performed on the RFP bids as monitored and examined by the IE. During the RFP evaluation process, 8 bids did not pass the Completeness Review and 21 bids did not pass the Threshold Review as they did not meet the evaluation criteria outlined in the RFP.⁶ The remaining 49 bids that entered the Scoring stage encompassed 15 distinct projects totaling about 3,000 MW of potential nameplate capacity.

In accordance with the RFP evaluation process, a series of analytic steps were applied to select the shortlisted bids, including price and non-price evaluations and EnCompass modeling.⁷ With the approval of the IE, four projects from two bidders were selected for the shortlist on May 31, 2023. The shortlisted bids were comprised of:

- A PPA from a third-party bidder for 230 MW of dispatchable capacity under Option 2.
- Three solar self-build projects, two under Option 1A and one under Option 1 B, encompassing 418 MW of solar nameplate capacity.

Together these short-listed projects meet the Company's currently projected firm accredited capacity needs through 2027.

IE Process

The IE worked closely with the Company's RFP evaluation team throughout the RFP development process to ensure that the RFP was clear and transparent, that the requested bidder submittal items were aligned with the scoring criteria, and that all items necessary for evaluation were requested in the RFP. The IE reviewed the entire set of proposed RFP materials and provided comments and suggestions based on experience with similar RFPs. The Company incorporated these suggestions in the final RFP to the satisfaction of the IE. Prior to bids being received, the IE and the Company worked together to create an RFP Evaluation

⁵ Distinct projects are projects that could be independently selected. For example, a proposal with a bid for a solar project at a site and a second bid adding battery storage at that same site would be considered one distinct project as only one bid could be selected.

⁶ Of the 29 bids that did not pass the Completeness/Threshold Reviews, the reasons included lack of standard bid firm pricing, lack of site control, and/or impermissible site location. Throughout the Completeness and Threshold review process, all bidders were given ample opportunity to address or cure deficiencies identified by the Company evaluation team. The IE monitored and reviewed the Completeness/Threshold Review forms for each proposal and agreed with Company findings.

⁷ EnCompass is a commercial power planning model used by the Company to develop resource plans.



Guide and associated scoring sheets to be used to evaluate each proposal consistent with the evaluation process and criteria described in the RFP.

The IE had full access to the Company RFP evaluation team files throughout the RFP process, including all evaluation and scoring files. The IE was copied on or forwarded emails to and from the RFP mailbox and reviewed all responses to bidder questions prior to posting on the RFP website. The IE and the RFP evaluation team leads met regularly (weekly or more) throughout the RFP process to discuss any pending issues and concerns. The Company consulted the IE on a timely basis of any changes to the separation protocol roster or any potential breaches.⁸ The IE reviewed the results of the Completeness and Threshold reviews for each bid, asked clarifying questions of the RFP evaluation team, and independently agreed with Company findings. The IE reviewed the scoring process for the remaining bids and approved the selection of the final shortlist. Throughout the process, the IE had full access to the information needed to ensure that the RFP would be conducted in a fair and transparent manner.

Summary of Findings

Guidehouse has completed its assessment of the RFP and finds the following:

- The Guidehouse overall assessment is that the RFP was conducted on a fair and consistent basis, with 418 MW of solar nameplate capacity and 230 MW of dispatchable capacity successfully selected for the shortlist to meet the Company's firm capacity needs.
- The RFP completeness and material threshold evaluations were performed for each proposal on a fair and consistent basis using the process described in the RFP. Respondents were given ample opportunity to cure deficiencies within a reasonable period. The criteria used were reasonable and consistent with similar criteria we have developed or observed.
- The RFP scoring and selection stage, including the economic and noneconomic scoring, was based on reasonable criteria and performed on a fair and consistent basis using the process described in the RFP. The EnCompass modeling used to select the optimal bid portfolio among the various technologies bid was reasonable and consistent with other RFP processes we have developed or observed.
- There was strong interest in the RFP, as evidenced by the number of bids received and the number of bidders.
- With respect to messages between the Company, interested parties, and respondents, we observed that the Company's responses were timely, consistent, and fair, indicating a high level of engagement by the Company.
- Based on the IE's review and observations, there is no evidence that the evaluation and selection process caused any unfair advantage or disadvantage to any interested party or respondent, including the Company's self-build bids.

⁸ No separation protocol breaches were reported during the separation period.



This report summarizes Guidehouse's review and findings as of the date of this report. We relied on documents, correspondence, analyses, and other information provided to us by the Company to perform our work. While we believe this information to be reliable, it has not been independently verified for either accuracy or validity, and no assurances are offered with respect thereto. Guidehouse makes no representations, warranties, or opinions concerning the enforceability or legality of the laws, regulations, rules, agreements, or other similar documents reviewed as part of its work. Guidehouse and its employees are independent contractors providing professional services to the Company and are not officers, employees, or agents of the Company.



1. General RFP Background

This report summarizes the assessments and findings of Guidehouse Inc. as the independent evaluator (“IE”) for the 2022 SPS All-Source Request for Proposals (the “RFP”) as performed by Southwestern Public Service Company (the “Company”), a wholly-owned electric utility subsidiary of Xcel Energy. The purpose of the RFP was to solicit proposals for the Company to fill a need for capacity and energy as identified in the Company’s most recent Integrated Resource Plan (“IRP”) supplement. The Company retained Guidehouse in October 2022 as the IE to independently evaluate the RFP process, using its prior experience with utilities across the U.S. with similar procurements for generating resources.

The Company issued the RFP on November 28, 2022 seeking up to 947 megawatts (“MW”) of accredited capacity of any resource technology. Bids were due on February 27, 2023, with any self-build bids due three days earlier on February 24, 2023.

2. RFP Development and Design

2.1 Establishment of Separation Protocols

Given the potential for self-build bids to be submitted in this RFP, an internal communications protocol (“Separation Protocol” or “firewall”) was established requiring that those at the Company involved in self-build proposals would have no communication related to this RFP with members of the RFP evaluation team other than through the same process available to all other potential bidders. Under the Separation Protocol, no self-build team member was permitted access to the RFP evaluation team SharePoint site containing files and materials used in the RFP evaluation process. Along with this internal separation, the Separation Protocol also governed the communication process the RFP evaluation team would use to communicate with bidders, both external and internal to the Company.

During the development of the separate Company self-build and bid evaluation teams, it was determined that certain areas of expertise were not served by enough Company employees to divide the groups effectively while maintaining necessary skills and experience. To address this issue, a “Specialized Technical Support Personnel” (“STSP”) category was created. STSP team members, because of the scarcity of their expertise within the utility, were designated and authorized to provide information to both the RFP Evaluation Team and the Self Build Team. The STSP team members could not share information about RFP-related support provided to the RFP Evaluation Team to members of the Self-Build Team, and vice versa.

Under the oversight of the IE, the internal firewall between the Company self-build team, the RFP evaluation team and the STSP was established on October 26, 2022. A roster of the members of each team was created and managed by the RFP Evaluation Team Leader. Each team member signed an acknowledgement that they understood and would follow the separation protocols. Updates to the rosters were issued periodically by the RFP Evaluation Team Lead to all team members so that they could be aware of any changes to the team rosters. Any new members of the teams also signed an acknowledgement.

The IE and the RFP Evaluation Team Lead closely monitored the separation protocol throughout the RFP process. Responses to any questions that arose with respect to the protocols were discussed and approved by the IE. The IE monitored all communications with potential and actual bidders by the RFP evaluation team through the time of the final shortlist notification. In particular, the IE was copied on or forwarded all communications with bidders through the RFP mailbox. As planned, the separation protocol was terminated upon the selection and IE approval of the short-list on May 31, 2023. Over the course of the RFP process, there were no reported breaches to the Separation Protocol.

2.2 RFP Design

This section summarizes the design of the RFP. The IE worked closely with the Company throughout the RFP development process to ensure that the RFP was clear and transparent, that the requested submittal items were aligned with the scoring criteria, and that all items necessary for evaluation were requested in the RFP. The IE reviewed the entire set of proposed RFP materials and provided comments and suggestions based on our experience with similar RFPs. The Company incorporated these suggestions in the final RFP to the satisfaction of the IE. Prior to bids being received, the IE and the Company worked together to



create an RFP Evaluation Guide and associated scoring sheets to be used to evaluate each proposal consistent with the evaluation process and criteria described in the RFP.

The IE had full access to the Company RFP evaluation team files throughout the RFP process, including all evaluation and scoring files. The IE was copied on or forwarded emails to and from the RFP mailbox and reviewed all responses to bidder questions prior to posting on the RFP website. The IE and the RFP evaluation team leads met regularly (weekly or more) throughout the RFP process to discuss any pending issues and concerns. The IE reviewed the results of the Completeness and Threshold reviews for each bid, asked questions of the RFP evaluation team, and independently agreed with Company findings. The IE reviewed the scoring process for the remaining bids and approved the selection of the final shortlist. Throughout the process, the IE had full access to the information needed to ensure that the RFP would be conducted in a fair and transparent manner.

2.2.1 Qualifying Bids

The RFP sought up to 947 MW of new or existing capacity resources utilizing SPS's existing interconnection rights at Plant X Unit 1, Plant X Unit 2, Cunningham Unit 1, Cunningham Unit 2, and Maddox Unit 2 and/or new or existing projects located within the 05-Southwest region of the Southwest Power Pool.

The RFP was open to any resource technology, including, but not limited to, thermal (e.g., natural gas fired), wind, solar, wind plus storage, solar plus storage, and stand-alone storage. Both existing and new generating resources were eligible. Resources had to be larger than 5 MW at a single location.

Proposals could be submitted under three different alternatives:

- Option 1A: Up to 222 MW of capacity, with a Commercial Operation Date ("COD") no later than May 1, 2026, for the reuse of the Company's interconnection rights at the Plant X Unit 1 ("X1"), Plant X Unit 2 ("X2") and Cunningham Unit 1 retiring generating units.
- Option 1B: Up to 261 MW of capacity, with a COD no later than May 1, 2027, for the reuse of the Company's interconnection rights at the Cunningham Unit 2 and Maddox Unit 2 retiring generation units.
- Option 2: Accredited capacity, with a COD no later than May 1, 2027, at a new or existing generator interconnection located in the 05-Southwest Group of the Southwest Power Pool ("SPP").

The interconnection rights available under Option 1A and Option 1B are based on nameplate capacity ratings (rather than accredited capacity) under Southwest Power Pool generating replacement rules. Proposals under Option 2 needed to be, at a minimum, in a Southwest Power Pool generation interconnection queue where the Phase 2 Study has been completed.

2.2.2 Bid Contract Type

The RFP allowed bidders to submit proposals for build transfer agreements ("BTs") and self-build under Option 1A, Option 1B and Option 2. Bidders were required to submit BT bids with



no exceptions to the BT Purchase and Sale Term Sheets supplied in the RFP documentation. If they submitted this “standard bid”, bidders also could submit an alternative BT bid for the same project with specific red-lines to the BT term sheets and adjusted pricing. Self-build bids also were permitted under these options and were required to adhere to the same requirements and form submittals as all other proposals. Under Southwest Power Pool generating facility replacement rules, Company ownership is required under Southwest Power Pool rules to reuse the interconnection rights at the Company’s retiring units, therefore PPA proposals were not permitted for Option 1A and Option 1B.

Under Option 2, BT, self-build, and PPA proposals were allowed for new or existing interconnection projects not acting as replacement generation at one of the designated retiring Company units. Bidders were required to submit bids with no exceptions to the BT Purchase and Sale Term Sheets or no exceptions to the Model PPAs, as applicable to the proposed project structure, supplied in the RFP documentation. If they submitted this “standard bid”, bidders also could submit an alternative bid for the same project with specific red-lines to the BT Purchase and Sale Term Sheets or Model PPAs, as applicable, and adjusted pricing. PPA bids could have terms between 10 and 25 years.

2.2.3 Bid Fees

A \$5,000 fee was required for each proposal submitted, payable to the Company. A separate bid evaluation fee was required for project proposals with different COD, interconnection choice, pricing, sites, PPA term length, equipment type, or MW size.

A second bid fee of \$1/kW was required for bidders selected to begin negotiation of a Power Purchase Agreement or Purchase and Sale Agreement. This second bid fee was refundable upon successful execution of an agreement, or, for PPAs, the second bid fee could be applied to financial obligations pursuant to the PPA.

2.2.4 RFP Schedule

The RFP was issued on November 28, 2022. An optional Notice of Intent to Respond could be submitted. An RFP pre-bid meeting for interested parties took place on December 13, 2022. Respondent questions could be submitted through January 27, 2023, with responses being posted no later than February 6, 2023. Self-build bids were due on February 24, 2023, and all other bids were due on February 27, 2023.

2.2.5 Project Qualification and Scoring

As described in Section 5 of the RFP (“RFP Proposal Evaluation”), the objective of the evaluation was to identify proposals that meet the resource objectives identified in the solicitation in a reliable and cost-effective manner, and which are likely to be developed and placed into commercial operation no later than May 1, 2026 for Option 1A and no later than May 1, 2027 for Option 1B and Option 2. A three-phased approach was applied in evaluating each bid proposal: 1) Completeness Review, 2) Threshold Review and 3) Key parameters review and scoring.



Completeness Review. This review focused on whether proposals complied with all bid submittal requirements, including bid fees and submission of all required information and forms, with bidders provided an opportunity to cure any proposals with deficiencies.

Threshold Review. This review focused on whether proposals met the minimum threshold criteria for the bid to be considered able to meet the core RFP objectives, including COD, size, location and technical requirements, site control and permitting, firm pricing, technical feasibility, capacity accreditation requirements, and submission of a standard bid with acceptance of the standard Model PPAs or Purchase and Sale Agreement Term Sheets without exceptions. Again, an opportunity to cure was offered to bidders for any failure to meet threshold criteria.

Key Parameters Review and Scoring. Three criteria were identified for scoring, including pricing (65 of a total possible 100 points), capacity deliverability and risk (20 points), and transmission congestion at the resource location relative to Company load (15 points). In addition, three criteria were identified that could reduce the overall proposal score. These criteria included insufficient bidder strength and execution (up to a 10-point deduction), proposed exceptions to the BT Purchase and Sale Term Sheet or Model PPA for alternative priced bids (10 points), and insufficient use of diverse suppliers (10 points).

To perform these reviews, an RFP Evaluation Process document ("Evaluation Guide") was prepared by the Company with the IE's assistance describing in detail the evaluation process to be conducted by the RFP evaluation team and STSP once bids were submitted. Detailed proposal review forms were created with a series of questions grouped by subject area and assigned to members of the RFP evaluation team and STSP with relevant subject matter knowledge.⁹

Scoring questions were developed to be used in assessing the criteria scores. The price evaluation was based on financial modelling of the projects Levelized Cost of Electricity ("LCOE"). Given the difficulty of comparing bid economics across different generation types, a procedure was developed for modeling the RFP bids in the EnCompass model to select the lowest cost portfolio of bids.

⁹ The Company hired outside consultants to assist with certain aspects of the RFP evaluations. Each consultant was required to establish a firewall between this RFP assistance and any existing work being performed by the consultant with RFP bidders.



3. RFP Process

This section described the procedural steps that took place during the RFP process. Key procedural steps included:

- The RFP was posted on the Company RFP website on November 28, 2022. At that time, an email announcing the issuance of the RFP and referring interested parties to the Company’s RFP website was forwarded to an email list of developers maintained by the Company.
- A pre-bid meeting was held on December 13, 2022 to inform interested developers about the RFP and answer questions. Interested parties could attend the meeting in person in Amarillo, TX or virtually.
- Throughout the RFP process, the Company used a specific email address to receive proposals and to communicate with bidders (SPSRFP2022@xcelenergy.com).
- Seven prospective bidders pre-submitted an optional Notice of Intent to bid.
- Questions on the RFP were submitted by potential bidders through the RFP question deadline date of January 27, 2023. A total of 42 questions were submitted, resulting in 42 entries in the *RFP Question and Answer Log* posted on the RFP website for all potential bidders to review. The last set of questions and answers was posted on February 6, 2023. The IE reviewed all questions and answers prior to Company posting. The 42 questions covered seven general topics, as summarized in Table 1.

Table 1: Bidder Questions by Topic

Question Topic	Number of Questions
Accredited Capacity	4
Bid Fees	5
Bidder Forms	5
Clarification of RFP Requirements	11
Interconnection	5
Project Qualifications Needed	7
RFP Process/Miscellaneous	5

- Twelve Company self-build bids were submitted on February 24, 2023 in accordance with the RFP schedule submission deadline for self-build bids.
- A total of 66 third-party bids were submitted by February 27, 2023, in accordance with the RFP schedule submission deadline. A number of these bids were alternative variations for procurement of the same resource or for an option to add battery storage to a solar or wind resource at the same site.
- In sum, a total of 78 bids were received from 9 bidders from 23 distinct projects totaling approximately 1,100 MW of solar, 1,130 MW of wind, 450 MW of thermal, 1,100 MW of



standalone battery storage, and an additional 680 MW of hybrid battery storage at solar and wind facilities, for a total of 4,500 MW of potential nameplate capacity.¹⁰

- There were 12 self-build bids, for 6 distinct projects, totaling 480 MW of solar, 800 MW of standalone battery storage, and an additional 240 MW of hybrid battery storage, for a total of 1,520 MW of nameplate capacity.
- Of the 78 bids received:
 - 23 were for Options 1A or 1B (reuse of Company interconnection rights) and 55 were for Option 2.
 - 19 were BTs, 12 were self-build, 45 were PPAs, and 2 were joint PPA/BTs.
 - 34 were alternative bids which proposed exceptions to the BT Purchase and Sale Term Sheet or Model PPA and provided alternative pricing.

3.1 Proposal Evaluations

3.1.1 Completeness and Threshold Reviews

Using the proposal review forms developed prior to bid submissions, subject matter experts (STSP) from the Company performed a detailed examination of each of the qualification criteria for each proposal. Where needed, a series of follow-up questions were prepared by the Company and sent to individual bidders from the RFP email address. In general, these questions focused on any criteria where qualifications were not met or where further clarification was required. The IE monitored all communications with bidders throughout this process by being copied on all bidder question emails submitted to or from the RFP mailbox during the due diligence process.

As shown in Table 2, of the 78 bids: 8 did not pass the Completeness Review, 21 did not pass the Threshold Review, and 49 advanced to Scoring.

Table 2: Bid Evaluations by Stage

Category	No. of Bids
Did Not Pass Completeness Review	8
Did Not Pass Threshold Review	21
Reached Scoring Stage	49
Total	78

¹⁰ Many of the bids were for variations on projects, e.g., adding battery storage, alternative pricing, and alternative project structure (BT or PPA). The capacity figures cited are the total amount of distinct project capacity that could be independently procured.



All 8 bids that did not pass the Completeness Review failed to provide a firm standard bid. Bids eliminated in this stage either failed to cure “indicative bid” status or failed to provide firm pricing.

Of the 21 bids that did not pass the Threshold review, the main reasons for not meeting RFP requirements included not providing a standard bid fully accepting the terms of the Model PPA, not having site control, and being located outside of the RFP area.

Throughout the Completeness and Threshold Review processes, all bidders were given ample opportunity to address or cure deficiencies identified by the Company evaluation team. The IE monitored and reviewed the Completeness and Threshold review forms for each proposal and agreed with Company findings. The reasons that bids did not meet the Completeness and Threshold criteria are summarized in Table 3.

Table 3: Reason for Not Meeting Completeness/Threshold Criteria

Category	No. of Bids
Standard Bid/Firm Pricing	24
Site Control	3
Site Location	2
Total	29

3.1.2 Bid Scoring and EnCompass Modeling

To allow a fair and consistent evaluation basis across the bids, standard bids were used in developing bid scores and in the EnCompass modeling used to select bids.¹¹ Of the 49 remaining bids, 29 were standard bids and 20 were alternative priced bids with proposed exceptions to the BT Purchase and Sale Term Sheet or Model PPA. Each standard bid was analyzed using the scoring evaluation guidelines summarized in the RFP Evaluation Guide discussed above. Certain bids took longer to reach, or fail to reach, the scoring stage as cure questions were issued, responses were received, and follow-up cure questions were issued over the course of the RFP evaluation process.

As shown in Table 4, of the 29 standard bids that passed the Completeness and Threshold reviews:

- There were 6 BT bids, 11 PPA bids, and 12 self-build bids from a total of 5 bidders.
- 8 bids were for Option 1A, 4 bids were for Option 1B, and 17 bids were for Option 2.
- There were 15 distinct projects totaling approximately 840 MW of solar, 330 MW of wind, 280 MW of thermal, 1,090 MW of standalone battery storage, and an additional 470 MW

¹¹ Per the RFP Evaluation Guide, alternative priced bids with markups to the BT Purchase and Sale Term Sheet or Model PPA were assessed and to be considered as part of potential short-list discussions.



of hybrid battery storage at solar and wind facilities, for a total of 3,000 MW of potential capacity.¹²

Table 4: Standard Bids by Type Passing the Threshold Review

	Bids	Distinct Projects	Solar MW	Wind MW	Hybrid Added MW	Thermal MW	Standalone Storage MW
Option 1A	8	4	370	150	290	0	0
Option 1B	4	2	260	0	130	0	0
Option 2	17	9	210	180	50	280	1,090
Total	29	15	840	330	470	280	1,090

A series of analytic steps were then applied, in accordance with the RFP Evaluation Guide, to select the shortlisted bids, as discussed in turn below.

Step 1: Update to Capacity Needed. At the time the RFP was issued in November 2022, the Company identified a firm summer accredited capacity need of 698 MW in 2026 and 947 MW in 2027. Subsequently, a load forecast update was performed and an existing PPA was extended through 2026. With these updates, the firm summer accredited capacity need was reduced to 303 MW in 2026 and 606 MW in 2027.¹³

Step 2: Bid Scoring. Using the scoring approach outlined in the RFP Evaluation Guide and the scoring sheets for each bid, the remaining 29 standard bids were scored based on the price and non-price scoring factors described above. The pricing component of the bid scores were calculated using Company LCOE models that were reviewed by the IE.¹⁴ Similarly, in accordance with the RFP Evaluation Guide, the other RFP scoring criteria applicable to the standard bids, including Capacity Deliverability and Risk, Congestion, Bidder Strength and Execution, and Certified Diverse Suppliers were scored. Each of these scores were reviewed and accepted by the IE. Total scores for each of the bids were then calculated and the bids were ranked by total score.

Regardless of price score, to be selected for the short-list, each scored standard bid needed to exceed the minimum non-price criteria score (“quality risk screen”), which, as described in the RFP Evaluation Guide, was based on project and capacity deliverability, congestion, and bidder strength.

Step 3: EnCompass Analysis. Given the difficulty of comparing bid economics across different generation types, a procedure was developed for modeling the RFP bids in the EnCompass

¹² Distinct projects are those that could be independently selected. For example, a proposal with one bid for a solar project at a site and a second bid adding battery storage at that same site would be considered one distinct project as only one bid could be selected.

¹³ These figures are the Company’s firm summer capacity need from a Texas perspective; the capacity shortfall from a New Mexico perspective is 78 MW lower.

¹⁴ To determine pricing scores, projects were divided into three categories: (1) predominately ‘energy-based’ resources (e.g., solar and wind), (2) predominately ‘capacity-based’ resources (e.g., battery storage), or (3) hybrid energy and capacity resources (e.g., combined wind and battery proposals). The projects in each respective category were ranked and scored against one another based on their levelized cost of energy (energy-based resources) or levelized cost of capacity (capacity-based resources). For hybrid resources, the levelized cost of energy included the revenue requirement for the additional battery capacity.



model to select the lowest cost portfolio of bids.¹⁵ In this EnCompass modeling, renewable generic capacity used to meet reserve targets through 2027 was removed, and RFP bids could be selected by the model as replacement. Distinct projects could only be selected once. Thus, for example, if a solar only and a solar plus storage hybrid were bid for the same site, the model could choose only one. Similarly, the model could select Options 1A and 1B bids only up to the maximum amount of Company transmission rights available.

The RFP Evaluation Guide originally envisioned a screening process based on total bid score for specific RFP bids to be included in the EnCompass modeling. Given the number of bids received, after consultation with the IE, it was agreed that all 29 standard bids that successfully completed the Completeness and Threshold review would advance to economic modeling in EnCompass. The initial set of RFP projects selected by EnCompass (the “lowest cost portfolio”) would then be compared to the project bid scores. If the EnCompass model selected low scoring projects, then the model would be rerun to ascertain whether there was an alternative preferred portfolio with increased cost but reduced risk that did not choose low scoring projects.

Step 4: EnCompass Modeling Runs

The EnCompass model was run to identify the lowest cost portfolio of bids that met Company firm summer accredited capacity needs in 2026 and in 2027. Only a subset of the bids had CODs by May 1, 2026 that would allow the bids to meet 2026 firm summer capacity needs. In the initial model run, EnCompass selected four high scoring bids and one low scoring bid as the lowest cost portfolio. The low scoring bid selected did not pass the quality risk screen. Based on further review, it was determined that EnCompass selected the low scoring bid in order to fully meet 2026 firm summer accredited capacity needs, and that this subsequently resulted in an “overbuild” (more firm capacity than needed to meet reserve needs) in both 2026 and 2027.¹⁶

To further address the 2026 firm summer capacity need, the EnCompass model was allowed to extend the life of Maddox 2 through 2026 and the EnCompass model was rerun. This resulted in overall system cost savings. In this model run, EnCompass selected three high scoring bids and one low scoring bid that did not pass the quality risk screen.¹⁷ The “overbuild” of firm capacity above the reserve target in 2026 and 2027 in this run was much smaller. Based on further review, it was determined that the low scoring bid was selected by EnCompass over a smaller, but less expensive and higher scoring bid to fully meet 2026 firm summer capacity needs.

As a result, a third EnCompass model was run assuming a small (≤ 25 MW) short-term firm capacity purchase in 2026 and 2027 along with the Maddox 2 extension. This run resulted in additional system cost savings and selected four high scoring projects while meeting the Company’s firm summer accredited capacity needs in 2026 and 2027. After review and acceptance by the IE, these four projects were selected for the shortlist.

¹⁵ The EnCompass model is used by the Company to develop resource plans.

¹⁶ EnCompass can choose to install more firm capacity than needed to meet the reserve target in a particular year if that will yield overall system cost savings. This generally results from the discrete sizes of the new capacity types that can be selected. In this case, the discrete capacity sizes of the RFP bids available in 2026 and 2027 resulted in EnCompass installing more firm capacity than needed to meet reserve needs in both 2026 and 2027.

¹⁷ The same three high scoring bids were also selected in the initial EnCompass model run. The same low scoring project was also selected, this time without any added battery capacity.



3.1.3 Shortlist

The bids selected for the shortlist are summarized in Table 5, which is sorted from highest to lowest bid score. Table 5 lists the bid name, the bidder, the nameplate capacity in MW for each bid, the PPA term (if applicable) in years, whether the bid is Option 1A, Option 1B, or Option 2, the total bid score, and the rank by total score among all 15 distinct projects that passed the Completion and Threshold Reviews.¹⁸

Of the 12 self-build bids submitted, three solar bids were selected for the short-list totaling 418 MW (nameplate). Two of the self-build solar facility bids selected were under Option 1A and one was under Option 1B. In addition, one thermal gas-fired 230 MW third-party PPA bid was selected under Option 2. With the small short-term capacity purchase discussed above, these four bids combined to meet the Company’s firm summer 2026 and 2027 accredited capacity needs.

As shown in Table 5, four of the top five highest scored projects (of the 15 distinct projects that passed the Completeness and Threshold reviews) were selected for the shortlist using the combined bid scoring/EnCompass modeling approach.¹⁹ The 4th and 6th highest scored bids were for standalone battery storage projects and were not selected by EnCompass in any run indicating lower value from a system portfolio perspective.²⁰

Table 5: Shortlisted Bids

Bid	Bidder	MW	Type	PPA Term	Option	Total Score	Score Rank
Plant X1-2 Solar	Xcel Energy	150	Solar	N/A	1A	87.5	1
Cunningham 2 Solar	Xcel Energy	196	Solar	N/A	1B	83.8	2
		230	Thermal	15	2	75.0	3
Cunningham 1 Solar	Xcel Energy	72	Solar	N/A	1A	62.0	5

In sum, with the review and approval of the IE, four distinct projects were selected for the short list comprised of a total of 418 MW of self-build solar capacity and a 230 MW of thermal capacity PPA. The IE closely monitored the project scoring process and the selection of the shortlist and approved the selection on May 31, 2023. This concluded the IE’s monitoring of the RFP process.

¹⁸ EnCompass was used to pick which options at each distinct project were chosen. The scores for the alternative options for selected projects (e.g., additional hybrid capacity at a selected solar site) are not included in this ranking.

¹⁹ The three highest scored projects were selected in all three EnCompass model runs. The 5th highest bid score project was selected in the first EnCompass model run, but not in the second. In the third EnCompass model run, the 5th highest bid score project replaced the project with the 14th highest bid score.

²⁰ Note that pricing scores for the bids were developed separately by energy, capacity, and hybrid project category, making the EnCompass modeling the key comparator of project economics from a portfolio perspective.



4. Recommendations

The IE worked closely with the Company throughout the development of the solicitation, the administration of the bidding, and the evaluation of the bids. The Company adopted Guidehouse recommendations throughout this process and we have no specific additional recommendations at this time. We expect that additional refinements to the RFP documents and process will be made in future Company RFPs to reflect: 1) the questions from the bidders during the RFP, 2) the responses of bidders in their submitted proposals to the various forms and other RFP requests for information, and 3) any additional best practices developed through other RFPs in the U.S. and shared with the Company by Guidehouse.

5. Findings

The following is our independent assessment of whether the goals of the RFP were achieved and whether the overall RFP process was fair and consistent

- The Guidehouse overall assessment is that the RFP was conducted on a fair and consistent basis, with 418 MW of solar nameplate capacity and 230 MW of dispatchable capacity successfully selected for the shortlist to meet the Company's firm capacity needs.
- The RFP completeness and material threshold evaluations were performed for each proposal on a fair and consistent basis using the process described in the RFP. Respondents were given ample opportunity to cure deficiencies within a reasonable period. The criteria used were reasonable and consistent with similar criteria we have developed or observed.
- The RFP scoring and selection stage, including the economic and noneconomic scoring, was based on reasonable criteria and performed on a fair and consistent basis using the process described in the RFP. The EnCompass modeling used to select the optimal bid portfolio among the various technologies bid was reasonable and consistent with other RFP processes we have developed or observed.
- There was strong interest in the RFP, as evidenced by the number of bids received and the number of bidders.
- With respect to messages between the Company, interested parties, and respondents, we observed that the Company's responses were timely, consistent, and fair, indicating a high level of engagement by the Company.
- Based on the IE's review and observations, there is no evidence that the evaluation and selection process caused any unfair advantage or disadvantage to any interested party or respondent, including the Company's self-build bids.

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SOUTHWESTERN PUBLIC SERVICE COMPANY

2022 REQUEST FOR PROPOSALS

RFP Issue Date: November 28, 2022

Self-Build Proposals Due: February 24, 2023

Proposals Due: February 27, 2023

RFP Website:

my.xcelenergy.com/s/renewable/developers/2022-sps-rfp

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GLOSSARY OF ACRONYMS AND DEFINED TERMS

Acronym/Defined Term	Meaning
2021 IRP	2021 New Mexico Integrated Resource Plan
ASC	Accounting Standards Codification
BESS	Battery Energy Storage System
BT	Build-transfer
C1	Cunningham Unit 1
C2	Cunningham Unit 2
COD	Commercial Operation Date
Company	Southwestern Public Service Company, a New Mexico corporation
CNP	Capacity Need Period
EOY	End-of-Year
FASB	Financial Accounting Standards Board
FERC	Federal Energy Regulatory Commission
GFR	Generating Facility Replacement
GI	Generator Interconnection
GIA	Generator Interconnection Agreement
GIP	Generator Interconnection Process
GIF	Generator Interconnection Request
IE	Independent Evaluator
IRA	Inflation Reduction Act
ITC	Investment Tax Credit
M2	Maddox Unit 2
MW	Megawatt
MWh	Megawatt-Hour
MWac	Megawatt Alternating-current
OATT	Open Access Transmission Tariff
POD	Point of Delivery
POI	Points of Interconnection
PPA	Purchased Power Agreements
PRM	Planning Reserve Margin
PSA	Purchase and Sale Agreement
PTC	Production Tax Credit
RFP	Request for Proposals
RIS	Replacement Impact Study
Self-Build	Company Self-Build
SPS	Southwestern Public Service Company, a New Mexico corporation
X1	Plant X Unit 1
X2	Plant X Unit 2

Notice of Disclaimer

The information contained in this Request for Proposals ("RFP") for capacity generation resources has been prepared solely to assist respondents (a.k.a., Bidders) in deciding whether to submit a proposal. Southwestern Public Service Company ("SPS") or the ("Company") does not represent this information to be comprehensive or to contain all the information that a respondent may need to consider in order to submit a proposal. None of SPS, its affiliates, or their respective employees, directors, officers, customers, agents and consultants makes, or will be deemed to have made, any current or future representation, promise or warranty, express or implied, as to the accuracy, reliability or completeness of the information contained herein, or in any document or information made available to a respondent, whether or not the aforementioned parties knew or should have known of any errors or omissions, or were responsible for their inclusion in, or omission from, this RFP.

SPS reserves the right to modify, supplement or withdraw this RFP at any time at its sole discretion, whether due to changes in law, regulation or otherwise, and including by issuing one or more addenda to this RFP during this solicitation, which addenda shall become a part of this RFP. No part of this RFP and no part of any subsequent correspondence by SPS, its affiliates, or their respective employees, directors, officers, customers, agents or consultants shall be taken as providing legal, financial or other advice or as establishing a contract or contractual obligation. Contractual obligations on the part of SPS will arise only if and when definitive agreements have been approved and executed by the appropriate parties having the authority to approve and enter into such agreements. SPS reserves the right to request from a respondent (a.k.a., Bidder) information that is not explicitly detailed in this document, obtain clarification from respondents concerning proposals, conduct contract development discussions with selected respondents, conduct discussions with members of the evaluation team and other support resources as described in this RFP and in compliance with applicable Federal Energy Regulatory Commission ("FERC") Code of Conduct rules and provide data to and conduct discussions with the Independent Evaluator ("IE") as necessary for the IE to satisfy the IE's role.

SPS will, in its sole discretion and without limitation, evaluate proposals and proceed in the manner SPS deems appropriate, which may include but may not be limited to reasonable deviations from SPS's expected evaluation process, the waiver of any requirements, and requests for additional information. SPS reserves the right to reject any, all or portions of any proposal received for failure to meet any criteria set forth in this RFP or otherwise and to accept proposals other than the lowest cost proposals. SPS also may decline to enter into any agreement with any respondent, terminate negotiations with any respondent or abandon the RFP process in its entirety at any time, for any reason and without notice thereof. Each respondent, in submitting its proposal, agrees not to seek legal recourse against SPS, its affiliates, or their respective employees, directors, officers, customers, agents or consultants for rejection of their proposals or for failure to execute an agreement for any reason. SPS and its affiliates shall not be liable to any respondent or other party in law or equity for any reason whatsoever for any acts

or omissions arising out of or in connection with this RFP. By submitting its proposal, each respondent waives any right to challenge any valuation by SPS of its proposal or any determination of SPS to select or reject its proposal. Each respondent, in submitting its proposal, irrevocably agrees and acknowledges that it is making its proposal subject to and in agreement with the terms of this RFP.

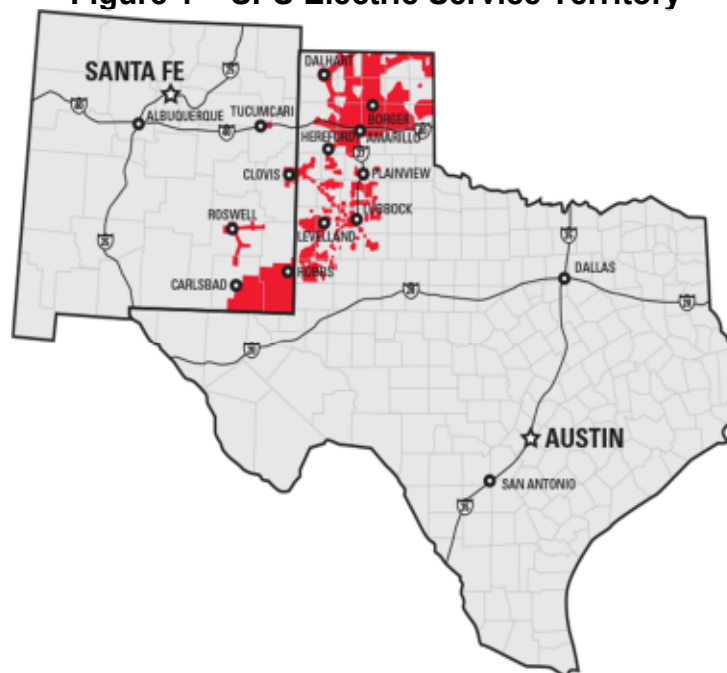
Each respondent shall be liable for all its costs incurred to prepare, submit, respond or negotiate its proposal, including Bid Evaluation Fees, and any resulting agreement and for any other activity related thereto, and SPS shall not be responsible for any of the respondent's costs.

SECTION 1. INTRODUCTION AND BACKGROUND

Xcel Energy Inc., headquartered in Minneapolis, Minnesota, is a U.S. investor-owned holding company, parent of four major electric and natural gas utilities. The four Xcel Energy operating companies have regulated utility operations in the eight western and midwestern states of Minnesota, Wisconsin, North Dakota, South Dakota, Michigan, Colorado, Texas, and New Mexico. The operating companies of Xcel Energy provide, collectively, energy-related products and services to approximately 4.3 million customers. More information about Xcel Energy is available at www.xcelenergy.com.

SPS, a New Mexico corporation, is headquartered in Amarillo, Texas and is one of the four Xcel Energy Inc. operating companies. SPS has served customers in the panhandle and south plains of Texas and eastern New Mexico since the early 1900s. Figure 1 below shows SPS's electric service territory.

Figure 1 – SPS Electric Service Territory



For more than a decade, SPS has strived to serve its customers with a reliable, secure, diverse, and increasingly cleaner mix of generating resources, while working to keep customer energy bills low. SPS has continued along this path by adding 1,230 megawatts (“MW”) of low-cost wind generation to its fleet since 2018 and has a goal of reducing carbon emissions 80% by 2030 and delivering carbon-free electricity by 2050¹. Additionally, SPS is a member of the Southwest Power Pool Inc., which allows its customers to benefit from a consolidated balancing

¹ Xcel Energy’s Sustainability Report can be found here: [Sustainability Report | Xcel Energy](#)

authority as well as the diversified mix of generating resources connected across 17 states. More information about the Southwest Power Pool is available at www.spp.org.

In its 2021 New Mexico Integrated Resource Plan (“2021 IRP”), SPS highlighted the expected transition of its generation fleet over the 20-year planning period of the 2021 IRP. The changes include:

- Operational changes to SPS’s existing coal generating units;
- Retirement of several SPS-owned gas steam generating units by 2030, with SPS’s existing portfolio of gas steam generating units scheduled to retire within the planning period;
- A continued transition to more clean energy in its portfolio of generating resources; and
- A continued need for firm peaking and load-following resources to provide reliability and energy when intermittent resources, such as wind and solar, are not available.

SPS also highlighted in its 2021 IRP challenges with respect to the Southwest Power Pool Generator Interconnection Process (“GIP”). Although the Southwest Power Pool has mapped out a plan to improve its GIP schedule and address queue backlogs, it is possible that it will take some time to see improvement. As a result, there is value to SPS customers in utilizing SPS’s existing interconnection rights set forth in the Southwest Power Pool’s generator replacement rules. These rules provide SPS and its customers opportunities to optimize resource options.

Since filing the 2021 IRP, there have been significant changes to federal tax law provisions, the Southwest Power Pool’s Planning Reserve Margin (“PRM”) requirements, and SPS’s projected load growth. In the third quarter of 2022, President Biden signed into law the Inflation Reduction Act (“IRA”) which extended federal Production Tax Credits (“PTC”) and Investment Tax Credits (“ITC”) and included additional tax incentives related to energy resources. These tax provisions are expected to continue to support low-cost clean energy resources. Also, the Southwest Power Pool continues to re-evaluate resource adequacy requirements, including increasing its PRM requirement from 12% to 15% beginning in the summer of 2023. Although SPS is initially compliant with the increased PRM requirement, the increase will accelerate SPS’s need for additional capacity in the future. Finally, SPS’s load forecast is projecting substantial load growth in the future, adding to the potential need for capacity. On November 17, 2022, SPS filed a notice with the New Mexico Public Regulation Commission containing supplemental information to SPS’s 2021 IRP describing these changes.

This potential capacity need is shown in Table 1 below from 2023 to 2027, the Capacity Need Period (“CNP”), with the earliest project need starting in 2024.²

² SPS’s capacity position in Texas is shown. The Texas capacity position is 73 - 86MW lower than New Mexico due to a differing generation portfolio mix.

Table 1 - SPS's Capacity Need Period³

Capacity Need Period	2023	2024	2025	2026	2027
Capacity Position (MWac)	632	(118)	(416)	(698)	(947)

Given the background above, SPS is issuing this all-source RFP to seek firm proposals⁴ for projects that will provide accredited capacity during the CNP for any of the following options:

RFP Option 1A and Option 1B - Replacement Generation:

Option 1A – Firm proposals for up to 222 megawatts alternating-current (“MWac”) of electric capacity resources (RFP Projects) utilizing the Southwest Power Pool’s generator replacement rules to replace the following SPS retiring generating units:

- Plant X Unit 1 (“X1”) [48 MWac],
- Plant X Unit 2 (“X2”) [102 MWac], and
- Cunningham Unit 1 (“C1”) [72 MWac]

Option 1A replacement resources must have a commercial operation date (“COD”) no later than May 1, 2026. RFP proposals submitted for Option 1A can be single RFP Projects at any one of these unit sites or a packaged RFP Project inclusive of a combination of these unit sites.

Option 1B – Firm proposals for up to 258 MWac of electric capacity resources (RFP Projects) utilizing the Southwest Power Pool’s generator replacement rules to replace the following SPS retiring generating units:

- Cunningham Unit 2 (“C2”) [196 MWac]
- Maddox Unit 2 (“M2”) [65 MWac]

Option 1B replacement resources must have a COD no later than May 1, 2027. RFP proposals submitted for Option 1B can be single RFP Projects at one of these unit sites or a packaged RFP Project inclusive of both unit sites.

RFP Option 2 – New/Existing Interconnection:

Option 2: – Firm proposals for RFP Projects providing accredited capacity to SPS during the CNP Shown in Table 1, utilizing a new or existing generator interconnection.

SPS will evaluate RFP Project proposals with proposed CODs within, or before, the 2023 to 2027 CNP. Based on Table 1, up to 947 MW of accredited capacity may be collectively selected under Option 1A, Option 1B, and Option 2.

³ SPS is currently evaluating alternative solutions to reduce the capacity needs shown in Table 1. As a result, SPS may acquire less capacity in this RFP than shown in Table 1.

⁴ The terms “proposal” and “bid” are used interchangeably in this RFP document.

See Section 2 of this RFP document for more information on RFP Project option details and eligible RFP Project Structures. **Bidders may bid into one or more options at the Bidder's choosing; however, any individual proposal must not combine an Option 1A or Option 1B bid with an Option 2 bid.**

SPS will utilize the services of an IE to advise SPS through the bid solicitation, bid evaluation and advancement, and ultimately bid selection, if any, processes.

1.1 PRIMARY RFP OBJECTIVES

The main objectives of this RFP are:

- Solicit potential capacity solutions to address the projected capacity shortfall for the CNP, as shown in Table 1;
- Be proactive in maintaining system reliability with the added challenges of inflation, supply chain issues, and gas price impacts; and
- Evaluate the utilization of SPS's existing points of interconnection with the Southwest Power Pool Transmission System due to the planned retirement of SPS's gas-fired X1, X2, C1, C2, and M2.

1.2 REGULATORY CONTEXT

SPS may require certain regulatory approvals from jurisdictions in which it operates. Such approvals may include, but are not limited to, approval of any RFP Projects resulting from this RFP, including terms of applicable agreements and regulatory treatment of applicable costs, which SPS may consider in its sole discretion consistent with the terms of the model contracts included in Appendix A and Appendix B hereto for different RFP Projects and project structures.

1.3 CONTACTS AND COMMUNICATIONS

The primary point of contact for all communications between SPS and potential bidders is the RFP Project Manager who may be contacted at:

SPSRFP2022@xcelenergy.com

Any questions with respect to this RFP should be submitted to the RFP Project Manager at the above email address before the deadline indicated in section 4.1.

The SPS 2022 RFP webpage can be found at:

my.xcelenergy.com/s/renewable/developers/2022-sps-rfp

SECTION 2. ELIGIBLE PROJECT INFORMATION

2.1 RFP PROJECT OPTIONS

RFP Option 1A and RFP Option 1B - Replacement Generation:

Option 1A – All-source, site-specific, firm proposals for up to 222 MWac of electric capacity generating resources (RFP Projects) to replace SPS’s retiring X1 [48 MWac], X2 [102 MWac], and C1 [72 MWac] generating units utilizing these generator’s existing interconnections. These units are planned to retire on or before End of Year (“EOY”) 2023. Pursuant to the Southwest Power Pool rules, these interconnections must be repowered within three years of the unit’s retirement date. RFP Projects bid into Option 1A must have a COD on or before May 1, 2026 to be considered a valid proposal. RFP Projects bid into Option 1A must include firm pricing for all collector substation(s), generator transmission tie-lines, dead-end structures, etc. required to interconnect to any one of the three respective existing Points of Interconnection (“POI”). Proposals for replacement of X1 and X2 may be bid as separate RFP Projects, each with its own bid fee, or as a combined RFP Project with one bid fee. Proposals under this Option 1A may be offered as either Build-Transfer (“BT”) or Company Self-build (“self-build”). Power Purchase Agreements (“PPAs”) will not be considered as the Southwest Power Pool generator replacement rules require continued ownership of these resources using existing SPS interconnections.

Option 1B – All-source, site-specific, firm proposals for up to 258 MWac of electric capacity generating resources (RFP Projects) to replace SPS’s retiring C2 [169 MWac] and M2 [65 MWac] generating units utilizing these generator’s existing interconnections. These units are planned to retire on or before EOY 2025. Pursuant to the Southwest Power Pool rules, these interconnections must be repowered within three years of the unit’s retirement date. However, for the purposes of this RFP, RFP Projects bid into Option 1B must have a COD on or before May 1, 2027 to be considered a valid proposal. RFP Projects bid into Option 1B must include firm pricing for all collector substation(s), generator transmission tie-lines, dead-end structures, etc. required to interconnect to the respective existing POI. Proposals under this Option 1B may be offered as either BT or self-build. PPAs will not be considered as the Southwest Power Pool generator replacement rules require continued ownership of these resources using existing SPS interconnections.

RFP Option 2 – New/Existing Interconnection:

Option 2 – All-source firm proposals for RFP Projects providing capacity during the CNP shown in Table 1 of this RFP. RFP Projects bid into Option 2 must have a firm COD within the CNP in Table 1. Additionally, to be considered, RFP Projects bid into Option 2 must be in a Southwest Power Pool Generator Interconnection (“GI”) queue with at least Phase 2 studies complete. RFP Project proposals with (i) completed Phase 3 studies, (ii) in active negotiation of a Generator

Interconnection Agreement (“GIA”), or (iii) possess an executed GIA with the Southwest Power Pool may be given a preference in the evaluation process. RFP Projects bid into Option 2 must include and clearly identify firm pricing for all required Southwest Power Pool GIA costs, including but not limited to, network upgrades, facility upgrades, collector substation(s), generator transmission tie-lines, dead-end structures, etc. required to interconnect at the RFP Project’s POI. Option 2 RFP Project proposals may be offered as a PPA, BT, or self-build.

A summary of the eligible project types and parameters can be seen in Table 2. Each major parameter is further described in Section 2.2 below.

Table 2 - Eligible Project Types and Parameters

RFP Project Types		
Parameter	RFP Option 1A and 1B	RFP Option 2
Resource Types	All	All
Approximate MWac Target	Option 1A - Up to 222 MWac Option 1B - Up to 258 MWac	Up to 947 MW, inclusive of RFP Option 1
Minimum Size for Project Site	> 5 MWac	> 5 MWac
Project Structure	BT, Self-build	PPA, BT, Self-build
Timing	Option 1A - COD on or before May 1, 2026 Option 1B - COD on or before May 1, 2027	COD before May 1, 2027
Geography	Option1A - X1, X2, or C1 Option 1B - C2 or M2	05-Southwest Group
GIP DISIS	N/A	Phase 2 complete, or better

Note: Option 1 existing interconnection MWac capacity shall not be exceeded under any circumstance. Up to 947 MW of aggregate accredited capacity across Option 1A, Option 1B, and Option 2 may be selected at SPS’s discretion.

2.2 ELIGIBLE RFP PROJECT STRUCTURES

a. Build-Transfer (BTs)

Under this project structure, SPS will assume 100% ownership of the RFP Project as outlined in the Purchase and Sale Term Sheet, which are provided in Appendix A to this RFP. BT proposals must include a bid price that is fully compliant with (i) SPS’s Purchase and Sale Term Sheet and (ii) the conditions and requirements stated in SPS Technical Specifications which are provided in Appendix C to this RFP.

The Company requires every bidder to provide a proposal and associated firm bid price (Standard Bid Price) that is fully compliant with SPS's Purchase and Sale Term Sheet without markup or exceptions. For avoidance of doubt, exceptions include any and all redline edits as well as any indication, inference, notes, remarks, statements, assumptions or expectation that such may be negotiated following a selection of the bid submitted. Should a proposal be selected, the Bidder, must in good faith have certified that their standard bid price reflects the terms of SPS's Purchase and Sale Term Sheet in its entirety (aside from bracketed and/or project specific details), Bidder can meet any and all obligations under the Purchase and Sale Term Sheet, and Bidder understands and accepts any and all associated risk therein.

Separately, and at Bidder's discretion, the Bidder may choose to additionally provide an alternative firm bid price including any proposed exceptions or redlines to SPS's Purchase and Sale Term Sheet that the Company may choose to also consider in its evaluation. If a Bidder chooses to submit an alternative bid price and associated exceptions, then Bidder must provide those written exceptions in the form of a comprehensive redline version of SPS's Purchase and Sale Term Sheet in Microsoft Word (i.e., .doc or .docx) format along with clearly stated reasons for taking each exception. Respondents should note, per Section 5.3 of this RFP, that exceptions may lower the project score.

b. Power Purchase Agreements (PPAs)

SPS will consider PPAs as an eligible project structure for wind, solar, solar + storage, and dispatchable bids for Option 2. All PPA proposals must include a bid price that is fully compliant with SPS's Model PPA, which are provided in Appendix B to this RFP.

Bidders who intend to submit technologies that are not listed above, or that do not have a model PPA, should contact the RFP manager.

The Company requires every bidder to provide a proposal and associated firm bid price (Standard Bid Price) that is fully compliant with SPS's Model PPA without markup or exceptions. For avoidance of doubt, exceptions include any and all redline edits as well as any indication, inference, notes, remarks, statements, assumptions or expectation that such may be negotiated following a selection of the bid submitted. Should a proposal be selected, the Bidder, must in good faith have certified that their standard bid price reflects the terms of SPS's Model PPA in its entirety (aside from bracketed and/or project specific details), Bidder can meet any and all obligations under the Model PPA, and Bidder understands and accepts any and all associated risk therein.

Separately, and at bidder's discretion, the bidder may choose to additionally provide an alternative firm bid price including any proposed exceptions or

redlines to SPS's Model PPA that the Company may choose to also consider in its evaluation. If a Bidder chooses to submit an alternative bid price and associated exceptions, then bidder must provide those written exceptions in the form of a comprehensive redline version of SPS's Model PPA in Microsoft Word format along with clearly stated reasons for taking each exception. Respondents should note, per Section 5.3 of this RFP, that exceptions may lower the project score.

c. Company Self-Build (SB)

SPS will consider self-built projects in this RFP. Any such proposals will pay a bid fee and provide all relevant bid information that the RFP requires to evaluate the proposed project on a fair, impartial and consistent basis with any third-party proposals. The due date for the submission of any self-built proposal will be at least one day earlier than that for third-party proposals.

2.3 PRODUCT DESCRIPTION

RFP Project: Proposals may be for existing or new, to-be-built, facilities that are or will be complete and commercially operable, including all facilities necessary to generate and deliver energy at the POI, by the commercial operation date specified in the proposal. All resource types are eligible, including, but not limited to, wind, solar, wind plus storage, solar plus storage, stand-alone storage, natural-gas-fired, and hydrogen-fueled technologies. Proposals that incorporate a transition over time to carbon-free, for example, a gas-fired combustion turbine generator that transitions to hydrogen-fueled, will also be considered.

Product: SPS is seeking RFP Projects that have an established development plan and that convey all energy, capacity, ancillary services including reactive supply and voltage control, and any environmental benefits generated from the proposed project. Note that all RFP Projects are expected to be able to supply accredited capacity as a Planning Resource that SPS can use to meet its PRM requirements within the Southwest Power Pool Resource Adequacy construct.

Project Size: Each RFP Project must have a nominal AC electrical output exceeding 5 MWac at each location and point of interconnection (i.e., not the result of aggregated smaller projects at different sites/locations). For BT proposals, SPS ownership of 100% of the project and all associated facilities is required.

Interconnection and Location:

Depending upon the RFP Project's intended option, the RFP Project must be located within one or more of the following areas:

- Transmission Interconnection for Option 1A and Option 1B: Reuse of X1, X2, C1, C2 or M2 existing POIs.
- Transmission Interconnection for Option 2 (New/Existing): Located anywhere within Southwest Power Pool 05-Southwest Group

Joint proposals, such as multiple locations with joint pricing in a single bid, are allowed as long as each separate location independently meets the Project Size, Product, and RFP Project requirements in this section (i.e., minimum interconnection of 5 MWac at each location).

Expected Online Date: The RFP Proposal(s) should have an expected commercial operation date within, or before, the Capacity Need Period as shown in Table 1 of Section 1 of this RFP.

2.4 SPECIAL CONDITIONS

These special conditions apply to all RFP Projects.

Certified Diverse Suppliers:

The Company has a strong preference for projects that utilize contractors and/or suppliers that are classified as certified Diverse Suppliers. Projects will be scored in the RFP in accordance with this preference. The Company requests all proposals to include a completed Subcontracting Plan for this project and an overview of your subcontracting program that reflects the percentage of business done with diverse suppliers in 2021. A template Subcontracting Plan is provided in Appendix D for completion in the RFP proposal.

A certified Diverse Supplier means any contractor or supplier that falls into at least one of the following business groups: Small Disadvantaged Business, Woman-Owned Business, HUBZone Business, Veteran-Owned Business, Service-Disabled Veteran-Owned Business, Minority-Owned Business, LGBT-Owned Business and Disability-Owned Business.

To be eligible for classification as a certified Diverse Supplier, bidders must supply documentation confirming the status of contractors and/or suppliers as certified by a third party, including: the Small Business Administration, regional affiliates of Disability: IN, National LGBT Chamber of Commerce (NGLCC), National Minority Supplier Development Council (NMSDC), National Veteran Business Development Council (NVBDC), the Women Business Enterprise National Council (WBENC), or other national, state and local agencies as deemed acceptable by Company.

Ownership Requirements for Utilization of Existing SPS Interconnection Rights:

As noted in Section 1 of this RFP, one of the objectives of this RFP is to allow SPS to evaluate the re-use its existing interconnection rights. In order to accomplish this and comply with Southwest Power Pool interconnection rules, SPS must own the generation proposed to utilize this interconnection re-use approach (Option 1A and Option 1B). For the purposes of this RFP, this means that only BT and self-build bids will be considered for existing interconnection re-use.

2.5 PRICING

Regardless of whether the proposal is a PPA, self-build, or BT, proposal pricing must be for a complete RFP Project that meets the definitions in Section 2.2, including but not limited to all generating equipment and appurtenances, balance of plant equipment, operations and maintenance, and required transmission or interconnection costs. If the RFP Project includes a Battery Energy Storage System (“BESS”), the proposal price must also include all equipment associated with the energy storage system.

Bidders must offer firm pricing valid through the duration of this RFP, and, if the proposal is selected for negotiations, the completion of negotiations resulting in an executed PPA or Purchase and Sale Agreement (“PSA”). Indicative pricing in a proposal will not be acceptable. All pricing must be in terms of current year United States dollars, also referred to as escalated or nominal dollars.

A. BT and Self-Build Pricing

Within the Standard Bidder Forms (attached in Appendix F), Form D1A provides the pricing template for BT and SB proposals.

The bid price shall include:

- the cost to fully comply with conditions and requirements stated in the applicable SPS Technical Specification provided in Appendix C to this RFP and the applicable SPS Term Sheet provided in Appendix A to this RFP;
- all costs associated with the development, procurement, construction, commissioning, and applicable testing of the RFP Project. The proposal shall not be contingent upon awarding an operations and maintenance contract; and
- transfer of all property rights and/or any land lease(s)/easements.

SPS will not make any progress payments. On Standard Bidder Form D1A, SPS requests bidders to list the schedule and amounts of ongoing payments to be assumed by SPS post-closing that separately identifies payments for land and easement costs, optional items available for selection at SPS’s discretion, and all other payments to be made by SPS post-closing. Bids should also include a Long-Term Services Agreement of the type mentioned in Appendix A if applicable, but the base bid and Purchase Price shall not be contingent upon the Long-Term Services Agreement. Payments can be made in a periodic or single lump sum manner, and all payments made prior to the assumption of ownership of the RFP Project by SPS require security in the form of a letter of credit in favor of SPS. SPS will add its projected costs associated with the Allowance for Funds Used during Construction to all payments made prior to the in-service date. The Company will also add its projected Construction Oversight Costs

(Company costs to manage and verify the construction is completed in accordance with the Technical Requirements) to the BT bid price for evaluation. Therefore, BT bidders shall not include these SPS costs in their pricing.

Separately, and at the bidder's discretion, the bidder may choose to additionally provide an alternative firm bid price using Form D1B including any proposed exceptions or redlines to SPS's Purchase and Sale Term Sheet that the Company may choose to also consider in its evaluation. If a bidder chooses to submit an alternative bid price and associated exceptions, then the bidder must provide those written exceptions in the form of a comprehensive redline version of SPS's Purchase and Sale Term Sheet in Microsoft Word (i.e., .doc or .docx) format along with clearly stated reasons for taking each exception. Respondents should note, per Section 5.3 of this RFP, that exceptions may lower the project score.

Related to the BT and SB bid pricing, bidders will be responsible for identifying the level of federal tax credit qualification they expect the project to attain and for providing a plan or detailed description of the process for doing so. The tax credit in place on the day of bid submittal should be the tax credit discussed in the proposal. SPS reserves the right to request bidders provide updated tax credit information and expected qualification if tax policy changes during the RFP or in subsequent contract negotiation processes.

B. PPA Pricing

The price template for PPA's is contained on Form D1A for renewable PPAs and Form D1A (thermal) or D1C (storage) for dispatchable PPAs. Bidders may propose PPA term lengths between 10 and 25 years. Note: Each separate PPA term length proposed constitutes a separate bid.

All pricing must be in terms of current year United States dollars, also referred to as escalated or nominal dollars. For example, a \$50 per megawatt-hour ("MWh") energy price proposal for 2024 means that in 2024 energy from the facility will be purchased at an all-inclusive Energy Payment Rate of \$50/MWh.

All PPA proposals shall include a bid price that is fully compliant with the applicable SPS Model Power Purchase Agreements provided in Appendix B to this RFP.

Separately, and at the bidder's discretion, the bidder may choose to additionally provide an alternative firm bid price, using Form D1B for renewable PPAs and Form D1B (thermal) or D1D (storage) for dispatchable PPAs, including any proposed exceptions or redlines to SPS's Model PPA that the Company may choose to also consider in its evaluation. If a bidder chooses to submit an alternative bid price and associated exceptions, then

the bidder must provide those written exceptions in the form of a comprehensive redline version of SPS's Model PPA in Microsoft Word format (i.e., .doc or .docx) along with clearly stated reasons for taking each exception. Respondents should note, per Section 5.3 of this RFP, that exceptions may lower the project score.

Bidders will be responsible for identifying the level of federal tax credit qualification they expect the project to attain and for providing a plan or detailed description of the process for doing so. The tax credit in place on the day of bid submittal should be the tax credit discussed in the proposal. SPS reserves the right to request bidders provide updated pricing if tax policy changes during the RFP or in subsequent contract negotiation processes.

SPS requires fixed price proposals that contain a fixed base price, with or without a fixed annual escalator. Respondents may not submit proposals with variable base year pricing or variable annual escalators.

2.6 REGULATORY APPROVALS

SPS will submit to applicable regulatory agencies any agreement(s) it enters into with successful Bidder(s), if any, for all necessary review and approvals. SPS further reserves the right to terminate such agreements if, among other things, SPS fails to receive satisfactory assurance that SPS will be able to recover all of its costs associated with such agreements in a manner satisfactory to SPS. These termination provisions are presented in the Purchase and Sale Term Sheet (Appendix A to this RFP) or Model Energy or Power Purchase Agreements (Appendix B to this RFP) as applicable to the RFP Project proposal.

2.7 CONTRACT ACCOUNTING

All contracts proposed to be entered into as a result of this RFP will be assessed by SPS for appropriate accounting and/or tax treatment. Respondents shall be required to supply promptly to SPS any and all information that SPS requires in order to make such assessments.

By submitting a proposal, each respondent agrees to make available to SPS at any point in the bid evaluation process any financial data associated with the respondent and its proposed RFP Project so SPS can independently verify the respondent's information in the above matters. Financial data may include, but shall not be limited to, data supporting the economic life (both initial and remaining) of the facility, the fair market value of the facility, and any and all other costs and financing arrangements (including debt specific to the asset being proposed) associated with the respondent's proposal. SPS may also use financial data contained in the respondent's financial statements (e.g., income statements, balance sheets, etc.) as may be necessary.

a. Additional PPA Requirement

SPS is aware that certain contract approaches – especially with respect to battery energy storage – could result in either (i) a contract that must be accounted for by SPS as a finance lease or an operating lease pursuant to Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 842, or (ii) consolidation of the seller or assets owned by the seller onto the Company’s balance sheet pursuant to the variable interest entity requirements of FASB ASC 810. The following shall therefore apply to any proposal submitted pursuant to this RFP:

- The Company is unwilling to be subject to any accounting or tax treatment that results from a PPA’s finance lease or consolidated variable interest entity classification. As a result, in their proposal(s), respondents shall (i) state that the respondent has considered applicable accounting standards in regard to finance leases and consolidated variable interest entities, (ii) summarize any changes that the respondent proposes to the Model Energy or Power Purchase Agreements (Appendix B to this RFP) in order to attempt to address these issues, and (iii) state that, to the respondent’s knowledge and belief, the respondent’s proposal will not result in such treatment as of the date of the proposal.
- As applicable, the Company will not execute Power Purchase Agreement without confirmation from the Company’s external auditors that the Power Purchase Agreement will not be classified as a finance lease or a consolidated variable interest entity.

SECTION 3. INTERCONNECTION REQUIREMENTS

3.1 GENERAL INFORMATION

While the associated interconnection costs differ for each of the RFP options, each proposal shall include, and clearly identify, all applicable interconnection costs within its pricing proposal. More details about each interconnection option are provided below.

3.2 TRANSMISSION INTERCONNECTION FOR OPTION 1A AND OPTION 1B – UTILIZATION OF EXISTING X1, X2, C1, C2, OR M2 POIS

RFP Projects proposing to utilize one or more of SPS's existing POIs at X1, X2, C1, C2, or M2 must be compliant with Southwest Power Pool Generating Facility Replacement ("GFR") rules in the Open Access Transmission Tariff ("OATT")⁵. RFP Projects submitted under Option 1A or Option 1B shall include Bidder's firm cost for all transmission facilities necessary to deliver energy from the RFP Project(s) location to the selected existing POI. For the purposes of this RFP, the POI shall be the respective dead-end structures at X1, X2, C1, C2, or M2 115kV substations per the diagrams provided in Appendix E. Bidder shall provide in its RFP Project proposal(s) details of its interconnection plan to deliver energy into the selected POI or POIs, including but not limited to, detailed plans for route, design, regulatory approval (if required), and permitting information. SPS reserves the right to request additional information or add cost to reflect any provisions at the specified POI SPS deems necessary to complete the interconnection. All electrical interconnection facilities must meet the technical requirements in Appendix C as well as the SPS transmission interconnection requirements found at: <https://www.transmission.xcelenergy.com/Interconnections>.

Although SPS will be responsible for submitting the Southwest Power Pool GFR request and associated study and security deposit(s), RFP Projects submitted under Option 1A or Option 1B must include the required information/data per section 8.2 of Attachment V of the OATT, Generator Interconnection Procedures, including 8.2.a.1, 8.2.a.2, 8.2.c., 8.2.d, and 8.2.e. If an RFP Project is selected to move forward, SPS will submit the required Southwest Power Pool GFR request inclusive of the information/data submitted with the RFP Project proposal. Furthermore, Option 1A or Option 1B RFP proposals shall meet the requirements of Southwest Power Pool Attachment V Generator Interconnection Procedures and Appendix 6 GIA of Attachment V. Pursuant to Southwest Power Pool rules, SPS may request from selected Bidder(s), and submit to the Southwest Power Pool, GFR revisions utilizing Bidder(s) information to support Southwest Power

⁵ Southwest Power Pool GFR processes can be found in the OATT found at the Southwest Power Pool website referenced in Section 1 of this RFP.

Pool's GFR Replacement Impact Study ("RIS").⁶ If the Southwest Power Pool determines there is a materially adverse impact during its RIS analysis, SPS will coordinate in good faith with the Bidder to address the issue(s). However, if Southwest Power Pool deems any materially adverse impact as a "*Material Modification*," SPS may withdraw the GFR associated with the RFP Project and notify the Bidder that the proposal is rejected.

3.3 TRANSMISSION INTERCONNECTION FOR OPTION 2 – NEW / EXISTING GENERATOR INTERCONNECTION

Proposals submitted under Option 2 must, at a minimum, be in a Southwest Power Pool GI queue where the Phase 2 Study has been completed. However, Option 2 RFP Project proposals with completed GI Facilities studies, in negotiations for a GIA, or having an executed GIA with the Southwest Power Pool will be given a higher score in the evaluation process.

Option 2 proposals must include information that allows SPS to confirm the proposed RFP Project's interconnection status and its ability to demonstrate deliverability of accredited capacity as a Capacity Resource within the Southwest Power Pool Resource Adequacy construct. As indicated in the Standard Bidder Forms provided in Appendix F to this RFP, this required information includes all pertinent Southwest Power Pool or bidder prepared studies including Generator Interconnection Request ("GIR") information, GI study information, GIA information, Southwest Power Pool document links, general project transmission information, congestion and curtailment analyses, and Bidder's point of contact for all transmission related items.

Option 2 proposals shall identify all anticipated interconnection and/or system upgrade costs including, but not limited to, cost of installing interconnection facilities, network upgrades, facility upgrades, affected system upgrades, system protection facilities, collector substation(s), generator transmission tie-lines, dead-end structures, etc. required to interconnect and deliver energy from the RFP Project(s) location to the RFP Project(s) POI. Option 2 proposals shall also include a discussion of any potentially unknown or contingent costs for which the RFP Project may be responsible. As indicated in the Standard Bidder Forms provided in Appendix F to this RFP, bidders are requested to attach third party studies on projected interconnection/system upgrade costs related to the RFP Project(s). All electrical interconnection facilities must meet the applicable technical requirements in Appendix C as well as the transmission interconnection guidelines found at: <https://www.transmission.xcelenergy.com/Interconnections>

⁶More information on Southwest Power Pool's GIP, GIA, RIS, and GIR can be found at the Southwest Power Pool website referenced in Section 1 of this RFP.

SECTION 4. RFP SCHEDULE AND PROPOSAL CONTENT REQUIREMENTS

4.1 SCHEDULE

The schedule for this RFP is provided in Table 4 below. SPS reserves the right to revise this schedule at any time in its sole discretion. In the event SPS elects to negotiate a PPA, SPS would plan for the completion of contract development and the signing of project agreements as quickly as possible while still providing sufficient time for the proposal review and evaluation process. Under such circumstances, SPS's goal is to complete contract development discussions, sign contracts and receive Commission approval pursuant to the schedule below.

Proposals are due by 5:00 PM CST February 27, 2023.

Table 4 – SPS 2022 RFP Schedule

RFP Issued	November 28, 2022
Pre-bid meeting	Week of December 12, 2022 ⁷
Last date for bidders to submit questions	January 27, 2023
Last date for responses to bidder questions	February 6, 2023
Self-bid Proposals Due	February 24, 2023 by 5:00 PM CST
Proposals Due	February 27, 2023
Bidder advancement notice	Approximately 45 days after proposal due date
Contract negotiations complete	Approximately 120 days after proposal due date
Application for Regulatory Approval	Approximately 3Q 2023

4.2 MINIMUM REQUIREMENTS FOR PROPOSALS

This section describes the minimum requirements that all proposals must satisfy to be eligible for this solicitation. Unless SPS in its sole discretion elects otherwise, proposals that do not comply with these requirements will be deemed ineligible and will not be considered further. SPS reserves the right to reject any proposal for any reason in its sole discretion.

- Proposals must include all applicable content requirements described in

⁷ Details for the pre-bid meeting will be posted on the RFP website within 7 days of the RFP issuance date.

Section 4.6, including clear and complete written descriptions of all information requested and completed forms.

- Proposals must clearly specify all pricing terms in accordance with Section 4.6.
- Proposals must demonstrate an acceptable level of development and technology risk, as determined by SPS's bid evaluation team.
- Proposals must clearly demonstrate any financing requirements and an indicative financing structure (construction and permanent) for any proposed resources that will be delivered under the proposals. Respondents should include a description of how current financial markets are likely to impact the respondent's ability to access the debt and tax equity markets.
- Each respondent must present clear and sufficient proof that it has or can secure an adequate and confirmed supply of all equipment and materials necessary to construct and commission a complete, commercially operable, RFP Project sufficient (at a minimum) to meet the RFP requirements.
- Respondents must provide the required bid fee (described in Section 4.5) for each proposal submitted and agree to pay another fee upon bid shortlisting.
- All respondents are expected to provide truthful and accurate statements as part of their bids. Any false statements will result in project disqualification.
- No respondent may act through partnership, joint venture, consortium, or other association or otherwise act in concert with any other person unless it provides written notification of such to the Company as part of its proposal.

4.3 PROPOSAL SUBMISSION DEADLINE

All proposals will be accepted until 5:00 p.m. Central Standard Time on the date indicated in Section 4.1. All proposals must be transmitted electronically, via email, to the RFP Project Manager at:

SPSRFP2022@xcelenergy.com

Any proposals, or documents included therein, that exceed 35 MB in size, shall be transmitted upon request to the RFP Project Manager, via a secure upload to the XpressDRIVE File Exchange.

Proposals received later than the due date and time indicated will be rejected and returned unopened unless the Company determines, at its sole discretion, to consider such proposals.

Each proposal submitted must be a complete and electronically signed original proposal. If a bidder submits multiple RFP Project proposals, they must all be clearly marked and differentiated. Joint or bundled proposals, such as multiple sites with joint pricing in a single bid, are allowed as long as each separate location independently meets the RFP Product requirements in Section 2.2 (i.e., minimum interconnection of 5 MWac).

4.4 INFORMATION POLICY AND INTERNAL COMMUNICATIONS PROTOCOL

To obtain additional information about this RFP, potential respondents as well as all other parties may only submit inquiries via email at:

SPSRFP2022@xcelenergy.com

Potential respondents as well as all other parties should not attempt to acquire information through any other means including telephone calls to SPS. SPS will maintain a log of all inquiries and coordinate the preparation of written responses. SPS will periodically post responses to questions on the RFP website and these responses will be filed as addendums to the RFP. The deadline for submitting questions is indicated in Section 4.1. Questions may no longer be accepted after this deadline. All filed addendums will be posted by SPS on the RFP website. Bidders are responsible for monitoring the RFP website for updated addenda. SPS has established this information policy to ensure that all respondents have the same timely access and knowledge about the bidding and evaluation process.

a. Internal Communications Protocol

As indicated in this RFP, SPS may potentially submit its own self-build proposal into the RFP. As a general best practice, SPS has established an internal separation protocol that creates a “firewall” with respect to communications related to this RFP between SPS staff who may work on potential self-build proposals and SPS staff on the bid evaluation team and specialized technical support personnel.

This firewall is designed to safeguard against the self-build team obtaining information that is not available to other potential bidders. The separation protocol also governs the communication process the bid evaluation team will use to communicate with all bidders, both internal and external to SPS. The Independent Evaluator hired by the Company monitors the firewall and communications between the bid evaluation team and bidders pertaining to the RFP and includes a review of the firewall and team structures.

For the current RFP, the internal firewall has been in place since October

26, 2022 and will remain in place through the selection of bids by SPS, if any, unless otherwise modified by the Company as approved by the IE.

4.5 BID EVALUATION FEES

a. First Bid Fee

Each bidder shall pay by wire transfer on or before the Proposal Due Date a fee of \$5,000 for each proposal submitted. A separate bid evaluation fee is required for project proposals with different CODs, interconnection choice, pricing, PPA term length, equipment type, or MWac size. RFP Projects on different sites, regardless of similarities in size or COD, also require a separate bid fee for proposal evaluation and due diligence through RFP completion. Bid fees shall be paid by wire transfer to SPS. An additional bid fee is required for a joint bid comprised of more than one project (with additional bid fees due for each joint bid variation), and each individual project included in the joint bid must have submitted a bid fee as well. An additional bid fee is not required for an alternative bid that is submitted in addition to a standard bid – there must be no changes to the standard bid other than price and written red-lined exceptions to the pro forma agreements. In response to a bidder sending an email to the RFP email address, SPSRFP2022@xcelenergy.com, no earlier than 10 business days prior to the Proposal Due Date, SPS will email a response with wire transfer instructions. No cashier's checks will be accepted.

SPS will not refund any bid fees associated with any bid, regardless of the success or failure of that bid, or any potential misunderstanding by the bidder of the RFP bid requirements.

b. Second Bid Fee

Any bidder(s) selected to begin negotiation of a Power Purchase Agreement or Purchase and Sale Agreement shall be required to submit a Second Bid Fee of \$1/kW (e.g., 100 MWac Project * \$1/kW = \$100,000) to SPS prior to commencement of negotiations. Upon execution of an Agreement the Second Bid Fee shall, at the option of the bidder, be either refunded to the bidder or, for Power Purchase Agreements only, be applied to fulfill the bidder's obligations under Article 11 of the Power Purchase Agreement. However, if the bidder and the Company fail to execute an Agreement due to, in whole or in part, bidder's actions or inactions that do not reflect or conform to bidder's representations or commitments made during the RFP bidding process, the bidder shall surrender the Second Bid Fee.

4.6 PROPOSAL CONTENT REQUIREMENTS

This section outlines the content and format requirements for all proposals submitted in response to this RFP. Unless SPS, in its sole discretion elects otherwise, proposals that do not include the information requested in this section

will be deemed incomplete and ineligible for further consideration.⁸ SPS reserves the right to conduct any further due diligence it considers necessary to fully understand and evaluate proposals.

Bidders are encouraged to provide as much information as possible to assist in the evaluation of their proposals. A complete proposal will include a complete, electronically signed original proposal, assembled in the following format:

Section 1 – Executive Summary

All bidders shall provide an RFP Project summary and overview including narrative that addresses why the proposal provides value to SPS and its customers. Bidder shall also provide detail on background and experience in developing similar projects as well as any applicable references (including contact name, contact number and project name) from projects where the bidder has completed development and construction of a similar facility.

Relevant Bidder Experience

All proposals must describe the respondent's qualifications and experience in developing, constructing, commissioning, and operating, as applicable, generation facilities similar to the proposed RFP Project, including the experience, qualifications and safety record of key personnel who will manage development and an overview of utility scale project(s) the respondent has developed during the last 5 years. If a project team is in place, the proposal should identify the members of the team who will be responsible for design, siting, permitting, financing, construction, and operation of the facility; if such a group is not in place, the proposal must set forth the respondent's plan for assembling such team (including process and timing). If an Engineering, Procurement, and Construction ("EPC") contractor or any other contractors will be utilized, the same level of information must also be provided for each separate entity, along with a clear description of their role in the RFP Project's development. This part of Section 1 is also required in addition to the Standard Bidder Form.

Section 2 – Standard Bidder Forms (Appendix F)

All bidders shall complete one of three alternative sets of forms in Appendix F and provide all information that is applicable to bidders' respective RFP Project(s). The three alternative sets of forms are: (1) Renewable PPA, (2) Dispatchable PPA, and (3) Company Ownership. Standard Bidder Forms will be made available on the Company's website at the following link:

my.xcelenergy.com/s/renewable/developers/2022-sps-rfp

Renewable PPA Set of Forms

⁸ Applicants will be given the opportunity to remedy deficiencies.

Below is a list and brief description of each form:

Form A – Notice of Intent to Respond (optional): As a potentially large number of RFP Projects may be submitted, bidders are encouraged, but not required, to submit the Notice of Intent to Respond during the first three weeks the RFP is open. This form is optional for all bid types.

Form A1 – Confidentiality: Form 1 is required for all bid types. Any person that receives confidential or Highly Confidential information belonging to SPS shall be required to execute the confidentiality agreement set forth in Form A1.

Form B – Bid Certification: Form B is required for all bids. Bidders must make several certifications, including:

1. All statements and representations made in Bidder's proposal are true to the best of the bidder's knowledge and belief;
2. The Bidder agrees to be bound by the representations, terms and conditions contained in the RFP including restrictions on the bidder's claim of confidentiality;
3. The bidder accepts the term sheets and technical specifications included in the RFP, except as specifically noted in writing;
4. The bidder certifies that (i) the bidder has considered applicable accounting standards regarding capital lease and variable interest entities and (ii) to the bidder's knowledge and belief, the bidder's proposal should not result in capital lease or VIE treatment to SPS;
5. The Bidder acknowledges that the officer whose signature appears in Form B can contractually commit the bidder for its proposal.

Forms C1 & C2 – Cover Sheet: Form C1 is required for all bids. Bidders will provide basic RFP Project description and company information including, but not limited to, contact information, RFP Project name, location, nameplate capacity, etc. If the bidder is proposing multiple technologies (e.g., solar + storage), the Bidder should complete Form C1 for the primary technology and Form C2 for up to two additional technologies.

If necessary, bidders can provide additional Forms C2.

Form D1A – Pricing: Form D1A is required for all bids. For all proposals, Bidders must provide expected generation levels for each year of the RFP Project's expected life, net of expected degradation impacts, if any, parasitic loads, and losses. Expected generation shall be estimated at the Point of Delivery ("POD").

Bidders must offer firm pricing valid through the duration of this RFP, and, if proposal is selected for negotiations, the completion of negotiations resulting in an executed PPA. Indicative pricing in a proposal will not be acceptable.

Form D1B – Pricing: Bidders may choose to additionally provide an alternative firm bid price using Form D1B, including any proposed exceptions or redlines to

SPS's Model PPA that the Company may choose to also consider in its evaluation. If a Bidder chooses to submit an alternative bid price and associated exceptions, the bidder must provide those written exceptions in the form of a comprehensive redline version of SPS's model PPA in Microsoft Word format along with clearly stated reasons for taking each exception. Respondents should note, per Section 5.3 of this RFP, that exceptions may lower the project score.

Form D2 – Interconnection Details: Proposals must include a summary of all anticipated costs related to the delivery of energy from the RFP Project to the POI/POD included in their pricing proposal. The bidder shall provide a detailed explanation of the basis for the electrical interconnection cost estimates.

Form E – Construction Milestones: Form E is required for all bid types. Bidders are to provide proposed dates for each significant construction milestone, as shown on a detailed development schedule provided with the proposal. Milestones should be based on the requirements to achieve the proposed commercial operation date. The dates for the major milestones should also be indicated on Standard Bidder Form E.

Form F1-F4 – Technical Descriptions: There are four versions of this form that correspond to different technology types – one for wind, one for solar, and two for storage – which are eligible for inclusion in a proposal. Each technology type included in a proposal must have this Form included, for example a solar + storage proposal must include both the Solar and Storage Form sheets in the proposal.

Provide all pertinent technical information for the RFP Project including detailed equipment and facility information in Form F. If Bidder has not finalized the major equipment manufacturer(s), they must identify the options and provide the applicable production data and equipment warranty information for each option considered, as well as contingency plans in the event the preferred option in the RFP is unavailable at the time of procurement.

Equipment Description

At a minimum, proposals should indicate for all major equipment planned, 1) the name of the manufacturer, 2) model(s), 3) key metrics and characteristics of the equipment, 4) contracting status, 5) site plans and 6) availability of equipment and planned or estimated delivery dates.

Form F5 – Production Profile: Form F5 is required for all bids. Regarding specific year production, proposals must include the average annual P50 performance estimates for recent years. Estimated Annual and Hourly Energy Production should be as delivered to the POD and net of any plant degradation over time. Time is hour ending, Central Standard Time, do not adjust for daylight savings time. Explain fully the meteorological data, and sources, used for the annual estimates and provide all losses assumed. Provide all losses assumed in the generation of the energy production profile. The annual P50, P75, and P90 study and hourly generation shall be from a qualified external consultant unaffiliated with the Respondent. Bidders are requested to attach or provide detail from any third-

party pre-construction energy production reports used for this section, including the contact information, and experience of the third party.

Form G – Creditworthiness: Form G is required for all bids. Proposals must include detail and address all questions regarding the financial aspects of all projects including financing information, credit history, and legal claims. The most recent three fiscal year-end financial statements need to be provided; preference will be given to audited statements but unaudited will be accepted.

Form H – Siting and Environmental: Proposals must provide all requested details regarding site control, permitting, environmental studies, and legal claims. SPS will evaluate whether each bidder's proposal includes the required environmental approvals and permits for construction of the RFP Project and whether the appropriate timelines have been included in the project schedule.

Form I – Warranties, 1Line, Safety: Form I is required for all bids. Proposals will need to include copies of warranties and data sheets for the proposed system and a satisfactory electrical one-line diagram as outlined in the Standard Bidder Form. PPA bids that contain a BESS component will need to provide additional data regarding BESS fire safety considerations.

Form J – Projects History: Form J is required for all bids. Bidders should provide a list of similar projects and identify any similar projects contracted within the last five years that have not been placed into service, or are expected to not be placed into service, consistent with the originally executed contract terms.

Form K – Storage Projects History: Form K is only mandatory for proposals which include a BESS component. Bidders should provide a list of similar projects and identify any storage projects contracted within the last five years that have not been placed into service, or are expected to not be placed into service, consistent with the originally executed contract terms.

Form L – Additional Information: Proposals must include estimates of socioeconomic impacts from the RFP Project, including 1) construction and ongoing operational jobs; 2) landowner payments and tax payments; 3) a description of any discussions with local government(s) regarding the RFP Project (or letters of support or clarification from local governments); and 4) a description of any additional socioeconomic factors or information that should be considered in the evaluation of the proposal.

Dispatchable PPA Set of Forms

Below is a list and brief description of each form:

Form A – Notice of Intent to Respond (optional): As a potentially large number of RFP Projects may be submitted, bidders are encouraged, but not required, to

submit the Notice of Intent to Respond during the first three weeks the RFP is open. This form is optional for all bid types.

Form A1 – Confidentiality: Form 1 is required for all bid types. Any person that receives confidential or Highly Confidential information belonging to SPS shall be required to execute the confidentiality agreement set forth in Form A1.

Form B – Bid Certification: Form B is required for all bids. Bidders must make several certifications, including:

1. All statements and representations made in bidder's proposal are true to the best of the bidder's knowledge and belief;
2. The bidder agrees to be bound by the representations, terms and conditions contained in the RFP including restrictions on the bidder's claim of confidentiality;
3. The bidder accepts the term sheets and technical specifications included in the RFP, except as specifically noted in writing;
4. The bidder certifies that (i) the bidder has considered applicable accounting standards regarding capital lease and variable interest entities and (ii) to the bidder's knowledge and belief, the bidder's proposal should not result in capital lease or VIE treatment to SPS;
5. The bidder acknowledges that the officer whose signature appears in Form B can contractually commit the bidder for its proposal.

Forms C1 & C2 – Cover Sheet: Form C1 is required for all bids. Bidders will provide basic RFP Project description and company information including, but not limited to, contact information, RFP Project name, location, nameplate capacity, etc. If the bidder is proposing multiple technologies (e.g., CT + storage), the bidder should complete Form C1 for the primary technology and Form C2 for up to two additional technologies.

If necessary, bidders can provide additional Forms C2.

Form D1A/D1C – Pricing: Bidders are required to complete either, or both, Form D1A for thermal resources, and/or Form D1C for storage resources. For thermal proposals, Bidders must provide any applicable capacity prices, tolling costs, and turbine start costs. For storage proposals, Bidders must provide any applicable battery energy payment rate, capacity payment rate, and annual round trip efficiency.

Bidders must offer firm pricing valid through the duration of this RFP, and, if proposal is selected for negotiations, the completion of negotiations resulting in an executed PPA. Indicative pricing in a proposal will not be acceptable.

Form D1B/D1D – Pricing: Bidders may choose to additionally provide an alternative firm bid price using Form D1B for thermal resources and/or Form D1D for storage resources, including any proposed exceptions or redlines to SPS's Model PPA that the Company may choose to also consider in its evaluation. If a

Bidder chooses to submit an alternative bid price and associated exceptions, the bidder must provide those written exceptions in the form of a comprehensive redline version of SPS's model PPA in Microsoft Word format along with clearly stated reasons for taking each exception. Respondents should note, per Section 5.3 of this RFP, that exceptions may lower the project score.

Form D2 – Interconnection Details: Proposals must include a summary of all anticipated costs related to the delivery of energy from the RFP Project to the POI/POD included in their pricing proposal. The bidder shall provide a detailed explanation of the basis for the electrical interconnection cost estimates.

Form E – Construction Milestones: Form E is required for all bid types. Bidders are to provide proposed dates for each significant construction milestone, as shown on a detailed development schedule provided with the proposal. Milestones should be based on the requirements to achieve the proposed commercial operation date. The dates for the major milestones should also be indicated on Standard Bidder Form E.

Form F1-F5 – Technical Descriptions: For thermal resources, Bidders must provide the requested capacity, performance, and heat rate information on Forms F1-F3. For storage resource, Bidders must provide the requested technical information on Forms F4 and F5. Bidders that are proposing a thermal and storage resource must complete all forms.

Form G – Natural Gas: For thermal resources, Bidders must provide the requested information and details regarding the natural gas supply. Bidders should also identify any back-up fuel capabilities and, if applicable, the maximum hydrogen capability of the resource.

Form H – Emissions: For thermal resources, Bidders must provide pertinent emissions rates for the primary fuel type and, where applicable, any back-up fuel.

Form I – Creditworthiness: Form I is required for all bids. Proposals must include detail and address all questions regarding the financial aspects of all projects including financing information, credit history, and legal claims. The most recent three fiscal year-end financial statements need to be provided; preference will be given to audited statements but unaudited will be accepted.

Form J – Siting and Environmental: Proposals must provide all requested details regarding site control, permitting, environmental studies, and legal claims. SPS will evaluate whether each bidder's proposal includes the required environmental approvals and permits for construction of the RFP Project and whether the appropriate timelines have been included in the project schedule.

Form K – Warranties, 1Line, Safety: Form K is required for all bids. Proposals will need to include copies of warranties and data sheets for the proposed system and a satisfactory electrical one-line diagram as outlined in the Standard Bidder

Form. PPA bids that contain a BESS component will need to provide additional data regarding BESS fire safety considerations.

Form L – Projects History: Form J is required for all bids. Bidders should provide a list of similar projects and identify any similar projects contracted within the last five years that have not been placed into service, or are expected to not be placed into service, consistent with the originally executed contract terms.

Form M - Storage Projects History: Form M is only mandatory for proposals which include a BESS component. Bidders should provide a list of similar projects and identify any storage projects contracted within the last five years that have not been placed into service, or are expected to not be placed into service, consistent with the originally executed contract terms.

Form N - Additional Information: Proposals must include estimates of socioeconomic impacts from the RFP Project, including 1) construction and ongoing operational jobs; 2) landowner payments and tax payments; 3) a description of any discussions with local government(s) regarding the RFP Project (or letters of support or clarification from local governments); and 4) a description of any additional socioeconomic factors or information that should be considered in the evaluation of the proposal.

Company Ownership Set of Forms

Below is a list and brief description of each form:

Form A – Notice of Intent to Respond (optional): As a potentially large number of RFP Projects may be submitted, bidders are encouraged, but not required, to submit the Notice of Intent to Respond during the first three weeks the RFP is open. This form is optional for all bid types.

Form A1 – Confidentiality: Form 1 is required for all bid types. Any person that receives confidential or Highly Confidential information belonging to SPS shall be required to execute the confidentiality agreement set forth in Form A1.

Form B – Bid Certification: Form B is required for all bids. Bidders must make several certifications, including:

1. All statements and representations made in bidder's proposal are true to the best of the bidder's knowledge and belief;
2. The bidder agrees to be bound by the representations, terms and conditions contained in the RFP including restrictions on the bidder's claim of confidentiality;
3. The bidder accepts the term sheets and technical specifications included in the RFP, except as specifically noted in writing;
4. The bidder acknowledges that the officer whose signature appears in Form B can contractually commit the bidder for its proposal.

Forms C1 & C2 – Cover Sheet: Form C1 is required for all bids. Bidders will provide basic RFP Project description and company information including, but not limited to, contact information, RFP Project name, location, nameplate capacity, etc. If the bidder is proposing multiple technologies (e.g., CT + storage), the bidder should complete Form C1 for the primary technology and Form C2 for up to two additional technologies.

If necessary, bidders can provide additional Forms C2.

Form D1A – Pricing: Form D1A is required for all bids. Bidders will provide a schedule of payments amounts from SPS to the bidder. For renewable projects, Bidders must provide expected generation levels for each year of the RFP Project’s expected life, net of expected degradation impacts, if any, parasitic loads, and losses. Expected generation shall be estimated at the Point of Delivery (“POD”)

Form D1B/D1D – Pricing: Bidders may choose to additionally provide an alternative firm bid price using Form D1B, including any proposed exceptions or redlines to SPS’s Purchase and Sales Term Sheet that the Company may choose to also consider in its evaluation. If a Bidder chooses to submit an alternative bid price and associated exceptions, the bidder must provide those written exceptions in the form of a comprehensive redline version of SPS’s Purchase and Sales Term Sheet in Microsoft Word format along with clearly stated reasons for taking each exception. Respondents should note, per Section 5.3 of this RFP, that exceptions may lower the project score.

Form D1C – Expenses: For D1C is required for company Self-build projects only. The form is not required for Bidders proposing Build-Transfer projects, as it will be completed by the Company. Bidders who are proposing the sale of an existing asset may use this form for estimating on-going expenses, but should note that the estimates may be amended by the Company. Bidders who complete Form D1C are required to enter annual fixed O&M, variable O&M, non-capital maintenance expenses and on-going capital expenditure on an annual basis for the expected life of the facility.

Form D2 – Interconnection Details: Proposals must include a summary of all anticipated costs related to the delivery of energy from the RFP Project to the POI/POD included in their pricing proposal. The bidder shall provide a detailed explanation of the basis for the electrical interconnection cost estimates.

Form E – Construction Milestones: Form E is required for all bid types. Bidders are to provide proposed dates for each significant construction milestone, as shown on a detailed development schedule provided with the proposal. Milestones should be based on the requirements to achieve the proposed commercial operation date. The dates for the major milestones should also be indicated on Standard Bidder Form E.

Forms F1-F3 – Thermal Information: Forms F1-F3 are required for thermal projects. For combined cycle generation, Bidders shall complete and provide each Form for each operating mode.

Form F4-F7 – Technical Descriptions: There are several versions of this form that correspond to different renewable and storage technology types which are eligible for inclusion in a proposal. Each technology type included in a proposal must have this Form included; for example a solar + storage proposal must include both the Solar and Storage Form sheets in the proposal.

Provide all pertinent technical information for the RFP Project including detailed equipment and facility information in Form F. If Bidder has not finalized the major equipment manufacturer(s), they must identify the options and provide the applicable production data and equipment warranty information for each option considered, as well as contingency plans in the event the preferred option in the RFP is unavailable at the time of procurement.

Equipment Description

At a minimum, proposals should indicate for all major equipment planned, 1) the name of the manufacturer, 2) model(s), 3) key metrics and characteristics of the equipment, 4) contracting status, 5) site plans and 6) availability of equipment and planned or estimated delivery dates.

Form F8 – Production Profile: Form F8 is required for all renewable bids. Regarding specific year production, proposals must include the average annual P50 performance estimates for recent years. Estimated Annual and Hourly Energy Production should be as delivered to the POD and net of any plant degradation over time. Time is hour ending, Central Standard Time, do not adjust for daylight savings time. Explain fully the meteorological data, and sources, used for the annual estimates and provide all losses assumed. Provide all losses assumed in the generation of the energy production profile. The annual P50, P75, and P90 study and hourly generation shall be from a qualified external consultant unaffiliated with the Respondent. Bidders are requested to attach or provide detail from any third-party pre-construction energy production reports used for this section, including the contact information, and experience of the third party.

Form G – Natural Gas: For thermal resources, Bidders must provide the requested information and details regarding the natural gas supply. Bidders should also identify any back-up fuel capabilities and, if applicable, the maximum hydrogen capability of the resource.

Form H – Emissions: For thermal resources, Bidders must provide pertinent emissions rates for the primary fuel type and, where applicable, any back-up fuel.

Form I – Creditworthiness: Form I is required for BT bids. Proposals must include detail and address all questions regarding the financial aspects of all projects including financing information, credit history, and legal claims. The most recent

three fiscal year-end financial statements need to be provided; preference will be given to audited statements but unaudited will be accepted.

Form J – Siting and Environmental: Form J is required for all bids. Proposals must provide all requested details regarding site control, permitting, environmental studies, and legal claims. SPS will evaluate whether each bidder's proposal includes the required environmental approvals and permits for construction of the RFP Project and whether the appropriate timelines have been included in the project schedule.

Form K – Warranties, 1Line, Safety: Form K is required for all bids. Proposals will need to include copies of warranties and data sheets for the proposed system and a satisfactory electrical one-line diagram as outlined in the Standard Bidder Form. PPA bids that contain a BESS component will need to provide additional data regarding BESS fire safety considerations.

Form L – Projects History: Form L is required for all bids. Bidders should provide a list of similar projects and identify any similar projects contracted within the last five years that have not been placed into service, or are expected to not be placed into service, consistent with the originally executed contract terms.

Form M - Storage Projects History: Form M is only mandatory for proposals which include a BESS component. Bidders should provide a list of similar projects and identify any storage projects contracted within the last five years that have not been placed into service, or are expected to not be placed into service, consistent with the originally executed contract terms.

Form N: PTC/ITC and Additional Information: Form N is required for all bids. Proposals must include estimates of socioeconomic impacts from the RFP Project, including 1) construction and ongoing operational jobs; 2) landowner payments and tax payments; 3) a description of any discussions with local government(s) regarding the RFP Project (or letters of support or clarification from local governments); 4) a description of any additional socioeconomic factors or information that should be considered in the evaluation of the proposal; and (5) PTC/ITC compliance strategy information.

Section 3 – Term Sheet (Appendix A) or Model PPA (Appendix B) Exceptions

If an alternative price bid is submitted in addition to the standard bid, in this section, respondents with PPA or BT contract structures are required to clearly document any exceptions to the applicable Term Sheet or PPA template by providing a redline version of the document in Microsoft Word with their Proposal and reason for taking each exception(s). Bidders should also provide the information highlighted in yellow on the Term Sheet or PPA for their project. Please note that the alternative price submitted for the Project will be assumed to take into account compliance with the redlined version of the PPA or Term Sheet submitted by the bidder.

4.7 CLARIFICATION OF PROPOSALS

While evaluating proposals, SPS may request clarification or additional information about any item in the proposal. Such requests will be sent via email to respondents identified on Standard Bidder Form C1 by the RFP Project Manager, typically, and respondents are required to provide a written or electronic response back to the RFP Project Manager within four (4) business days, or the Company may deem the respondent to be non-responsive and either suspend or terminate evaluation of the associated proposal. Respondents are encouraged to provide an alternate point of contact to ensure a timely response to clarification questions.

Any amendment, modification, addenda, or clarification to a bid are binding and will be treated the same as any original RFP proposal. SPS will only accept amendments, modifications, or addenda to a bid in response to a request for clarification from SPS.

Bidders are responsible for carefully examining and understanding all RFP documents and requirements, nature of the work to be performed, and any other requirements listed in this RFP document. A lack of understanding or ignorance of these requirements will in no way relieve the bidder of obligations of their bid(s) or of any resulting contract.

4.8 CONFIDENTIALITY

Respondents are allowed to identify any information in their proposals that respondents claim should be considered to be confidential or proprietary. With respect to such confidential and proprietary information, the Company shall use the same means it uses to protect its own confidential or proprietary information, but in any event not less than reasonable means, to prevent the disclosure and to protect the confidentiality of the confidential or proprietary information. Nonetheless, SPS reserves the right to release all proposals to its affiliates and such affiliates' agents, advisors, consultants for purposes of proposal evaluation. SPS will, to the extent required by law, advise each agent, advisor or consultant that receives such claimed confidential information of its obligations to protect such information. In addition, all information, regardless of its confidential or proprietary nature, will be subject to review by the Southwest Power Pool and other governmental authorities and courts with jurisdiction, and may be subject to legal discovery. It is not SPS's intent to enter into any separate confidentiality, non-disclosure, or similar agreements as a condition to receiving a respondent's proposal.

Bidders should clearly identify each page and piece of information claimed by bidder to be confidential, trade secret or non-public information. Bidders must provide written justification for any such claim(s). Bidders acknowledge and agree that notwithstanding its designation of certain materials as confidential, trade secret or non-public, SPS will have the right in its sole discretion to disclose such materials provided to it by a bidder in any regulatory proceeding or as required by law, as set forth below.

In the event that confidential information is disclosed to: (1) the IE; (2) the PUC of Texas or the New Mexico PRC, their staffs, parties, intervenors, participants or consumer counsel in any regulatory or administrative proceedings before the PUC of Texas or New Mexico PRC; or, (3) in compliance with a regulatory requirement of the PUC of Texas or New Mexico PRC, the Company shall submit such confidential information in accordance with the confidentiality rules and procedures of the PUC of Texas or New Mexico PRC, as applicable, or any applicable protective order or signed non-disclosure agreement. In the event that confidential information must otherwise be disclosed pursuant to other applicable law or regulation (e.g., pursuant to subpoena or civil discovery), the Company shall notify the respondent sufficiently in advance to allow the respondent a reasonable opportunity to obtain a protective order or seek other remedies, prior to disclosure by the Company.

4.9 ADDENDA TO THE RFP

Any additional responses required from respondents as a result of an Addendum to this RFP shall become part of each proposal. Respondents must list all Addenda issued by SPS at the bottom of the Bid Certification Form (Standard Bidder Form B).

SECTION 5. RFP PROPOSAL EVALUATION

The objective of SPS's evaluation is to identify proposals that meet the resource objectives identified in the solicitation in a reliable and cost-effective manner and which is likely to be successfully developed and ultimately placed into commercial operation.

An evaluation team, made up of individuals from various groups within SPS will evaluate proposals; however, SPS reserves the right to retain the services of outside experts to assist in the evaluation of proposals. The RFP Project Manager may contact respondents directly, via email, at any point during the evaluation process for the purposes of clarifying proposals.

SPS will use a three phased approach to evaluating bid proposals offered in the RFP. The three phases include:

- a. Completeness review
- b. Threshold review
- c. Key parameters review and scoring

Based upon the results of the complete evaluation, SPS will determine which proposals will be included in the final selection. Although it is not anticipated, SPS may conclude that no offered resource meets the Company's objectives of the solicitation and no proposal will be selected.

5.1 COMPLETENESS REVIEW

The completeness review ensures compliance with all bid submittal requirements (fees, complete information provided in bid responses, submission of all required information and forms, etc.). SPS reserves the right to reject any, all, or portions of any proposal received for failure to meet any criteria set forth in this RFP.

5.2 THRESHOLD REVIEW

The threshold review ensures the bidder and RFP Project parameters comply with all RFP requirements and seeks to identify any fatal flaws or critical risks in the proposal's ability to reach its proposed COD at the proposed price and capacity level. Factors analyzed include, but are not limited to:

- a. Whether the proposed RFP Project type meets size, location, and technical requirements
- b. Proposed project timeline
- c. Site control and permitting
- d. Exceptions to the applicable model PPA template or Purchase and Sale Agreement (PSA) term sheet
- e. Interconnection approach and associated risk
- f. Potential for Southwest Power Pool Capacity accreditation
- g. Accounting assessment
- h. Financial Viability of the project and bidder

- i. Socioeconomic factors, including use of labor covered by a collective
- j. bargaining agreement and local community considerations
- k. Sourcing practices
- l. For proposals including BESS technologies: documentation of adequate fire safety measures
- m. For self-build and BT bids: compliance with the applicable Technical Specifications

Appendix H provides additional detail regarding the questions and issues considered as part of the threshold review. Any proposal that does not meet the above threshold requirements, based on an analysis of all supporting information and data in the bid forms, will be excluded from further evaluation.

5.3 KEY PARAMETERS REVIEW AND SCORING

Proposals remaining after the Completeness and Threshold Reviews will be scored in a third stage of the evaluation process. The Company has identified the following key parameters to evaluate the RFP Projects during this stage:

Score Components:

- a. Pricing
- b. Capacity Deliverability and Risk
- c. Congestion

Score Deductions:

- d. Bidder Strength and Execution
- e. Exceptions to the applicable Model PPA or PSA template (for alternative price bids)
- f. Certified Diverse Suppliers

Each proposal evaluated during this stage will receive a score between 0 and 100 points, with weighting as stated below:

- a. **Pricing:** The Company will evaluate proposals' pricing using levelized cost methodology based on the technology type, RFP project pricing, its energy production, and the amount of accredited capacity it can deliver. The proposal pricing score will have a maximum point value of 65 points out of the 100 total possible points.
- b. **Capacity Deliverability and Risk:** The Company will provide a score to each proposal based upon how sufficiently it has demonstrated the deliverability of its proposed level of accredited capacity on the timeline in this proposal, including how well the bidder has identified potential risks and mitigated those risks through the proposal design. The maximum points for this category will constitute 20 points out of the 100 total possible points.
- c. **Congestion:** Future and historic on-peak Southwest Power Pool Day

Ahead LMP congestion levels relative to SPS will be assessed using the nearest PNode in existence as of January 1, 2021. The maximum score will constitute 15 points of the 100 total proposal points. Bids can receive the maximum score by being in the quartile of bids with the smallest congestion level relative to SPS.

- d. **Bidder Strength and Execution:** The Company will evaluate each proposal based on the strength of the bidder, including the level of financial strength of the bidder relative to the size of the proposed project, whether the project is likely to achieve the estimated level of ITC estimated in the proposal, and the number of similar projects of the bidder that have failed or had to reopen executed contracts with off-takers in recent years. Bidder Strength is not a percentage of the total score but will act only as a detractor to the total score. If there are concerns regarding the bidder strength, the final score will be decreased by up to 10 points from the 100 total proposal points.
- e. **Exceptions to the applicable Model PPA or PSA template (for Alternative Price Bids):** The number and type of exceptions made to the Company's applicable model Agreement or term sheet. Similar to the Bidder Strength category, this is not a percentage of the total score but will act only as a detractor to the total score. If material exceptions are made to the Model PPA or PSA term sheet, the final score will be decreased by up to 10 points from the 100 total proposal points. In addition, a cost adder may be assigned to a proposal with exceptions to the Model PPA or PSA term sheet that would result in material additional cost risk to the Company.
- f. **Certified Diverse Suppliers:** The Company will assess each proposal based on the proposal's intended use of certified Diverse Suppliers during construction and/or operations of the Solicitation Project, noting the Company's preference for the use of certified Diverse Suppliers. This category is not a percentage of the total score but will only act as a deduction from the total score. A maximum of 10 points out of the 100 total possible points may be deducted for proposals that fail to use certified Diverse Suppliers during construction and/or operations of the Solicitation Project.

5.4 FINAL PROJECT SELECTION AND BIDDER NOTIFICATION

SPS plans to complete the evaluation of bids and provide notification to bidders of the status of their proposal by the timeframe shown in Table 3 of Section 4.1 of this RFP.

Attachments

Appendix A

SPS's Build-Transfer Term Sheet

See files titled:

SPS RFP: BOT Solar + Storage Term Sheet.docx

SPS RFP: BOT Solar Term Sheet.docx

Appendix B

SPS's Model PPA Templates

See files titled:

Model Renewable Power Purchase Agreement.docx

Model Solar + Storage Power Purchase Agreement.docx

Appendix C

SPS Resource Technical Requirements

See files titled:

**SPS Technical Specification for Transmission Interconnected Renewable
Generation.pdf**

Appendix D

SPS Template Subcontractor Plan

See file titled ***SPS Template Subcontractor Plan.pdf***

NOTE: A separate subcontractor plan must be submitted for each bid

Appendix E

Point Of Interconnection for Transmission-Interconnected RFP Projects

Appendix F

Proposal Forms and Instructions

See file titled ***2022 RFP_Bidder Forms.xlsx***

As discussed in Section 4, the completed forms, attachments and narrative topic discussions, will comprise a complete proposal. The contents of each form and any special instructions for completing the forms are described in section 4.6 of this document. These forms can be downloaded from the RFP web site and are expected to be completed and submitted in Microsoft Excel format.

If additional space is needed to elaborate on information requested on any form, please attach additional sheets with the heading "Form – Additional Information."

If certain information is requested that does not apply to the proposal, the respondent must indicate that the information is not applicable. If appropriate, the respondent should explain why the information is not applicable.

Appendix G

NOT USED

Appendix H

Questions and Topics Covered in Threshold Analysis

See file titled **2022 SPS RFP – Threshold Analysis Details**

Appendix I

NOT USED

Appendix J

NERC BESS Safety

See files titled:

NERC Lesson Learned: BESS Cascading Thermal Runaway.pdf

XCEL ENERGY

2022 Southwestern Public Service Company (SPS) RFP Evaluation Guide

2/2023 (Appendix 3 Added 5/2023)

II - Internal Information

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Evaluation Process Overview

The 2022 SPS Request for Proposal (the “RFP”) evaluation process encompasses four core phases, each of which is described in more detail throughout this document:

1. Completeness Review
2. Threshold Review
3. Project Scoring & Selection
4. Final Shortlist

All project proposals¹ must pass both the Completeness Review and Threshold Review to be considered qualified for the Project Scoring & Selection phase. The Project Scoring & Selection phase is composed of two parts: a scoring step and a selection step. Project proposals are initially scored on several Key Parameters with the intent of a subset of projects to be moved forward to EnCompass portfolio modeling. Then EnCompass portfolio modeling is used to ultimately select the preferred set of projects. In the final phase, the Final Shortlist phase, the RFP Evaluation Team will review the selected bids to ensure they are ready for shortlisting. Subsequently the selection will be reviewed by the Independent Evaluator (“IE”), Guidehouse, and approved by Company executives.

Pursuant to the established Separation Protocol described below, the Bid Evaluation Team will be supported by Specialized Technical Support Personnel (“STSP”) (consisting of Subject Matter Experts), as well as external consultants, as required, for targeted portions of each bid evaluation. The entire RFP evaluation process will be overseen by the IE.

Communications & Communications Breach Protocols

Because the Company may submit its own project bid(s) into the RFP, the Bid Evaluation Team has established a Separation Protocol to ensure fair treatment and evaluation of third-party and Company Self-build (“Self-build”) bids. The Bid Evaluation Team must not communicate directly or indirectly with potential bidders or other interested parties about this RFP, including Self-Build Team members, during the RFP process, outside of the official RFP email. STSP may communicate with either the Bid Evaluation Team or the Self-build team but shall not be a conduit of information between the two teams.

To this end, an internal “firewall” with respect to this RFP has been established between the Bid Evaluation Team and the Self-Build team members. The STSP may assist either team but may not share information between the teams. The team members all have acknowledged a formal Separation Protocol document dictating the terms of all communications regarding this RFP. This Separation Protocol shall be in force from the effective date set forth in the Separation Protocol through the selection of bids by SPS, if any, unless otherwise modified by the Company as approved by the IE. Formal communication of the termination of the Separation Protocol will be through a notification by the RFP Project Manager via email to the Team Leads.

¹ The terms proposal(s) and bid(s) are used interchangeably throughout this document.

If any team members become aware of a breach of the internal firewall, they are to immediately inform the RFP Project Manager, who will in turn notify the IE. The IE will assess the materiality of the breach and any impact on the RFP and will provide direction to the RFP Project Manager on actions that need to be taken in order to minimize the impact of the breach. The IE Report will refer to any breach(es) that occurred and the actions that were taken to minimize the impact and preserve the unbiased and transparent nature of the RFP.

All direct communication with the bidders will be managed by the RFP Project Manager. The Bid Evaluation Team and STSP will notify the RFP Project Manager if they are contacted by any bidder outside of the official RFP email medium and will not respond to any bidder questions or comments related to this RFP. The RFP Project Manager will contact such bidder by email and inform them that all inquiries regarding the 2022 SPS RFP must be according to the method described in the RFP.

Evaluation Process Timeline

Below is the currently planned timeline. Final timeline is contingent on number of bids received.

- **February 23:** EnCompass model input assumptions, other than the load and fuel forecast, are locked down by 5:00 PM CST
- **February 24:** Any Self-Build Bids received electronically by 5:00 pm CST (and remain unopened until **February 27** at 5:00 PM CST).
- **February 27:** Bids received electronically by 5:00 pm CST.
- **February 28-March 10:** Bids opened, catalogued, and all documents posted to firewalled library on SharePoint.² Completeness Review completed by primary reviewers; number of bids assessed by RFP Manager to ensure no adjustments to evaluation process timeline need to be made.
- **March 13:** Notification of bids passing the primary Completeness Review is provided to all members of the Bid Evaluation Team, STSP, and designated third party consultants. Work commences on Threshold and Scoring Reviews.
- **March 27:** EnCompass modeling completed using latest load and fuel forecast and identifying capacity expansion plan using generic new resources.
- **March 28:** Primary target for Threshold reviews, including review of O&M plans for Power Purchase Agreements (“PPA”). Primary target for questions back to bidders.
- **April 7:** Third party reviews (UL) complete. Deadline for O&M cost streams for BT and Self-Build bids complete. Last date allows for Material Threshold and Scoring questions to be completed by STSP.
- **April 11:** Consensus on any bids that may potentially need adjustment on bidder-provided critical values (annual Net Capacity Factor (“NCF”), tax credits, interconnection costs).
- **April 13:** Targeted date for completion of Revenue Requirements and LCOE calculations for BT and Self-Build bids.
- **April 14:** Bids scored and bids moving forward to EnCompass are identified.

² Access restricted to Bid Evaluation Team members, STSP tasked with RFP Administration and conducting primary Completeness Reviews, and the IE.

- **April 17:** EnCompass optimization modeling begins.
- **May 12:** Executive approval on or before this date; final rankings and shortlist to be passed to Independent Evaluator for final confirmation.
- **May 19:** Final certification from Independent Evaluator. Shortlisted bidders are notified of their status. Other bidders are notified that their bids are no longer under consideration. End of firewall.

RFP Project Evaluation Stages

After bids are received electronically, catalogued, and posted on the RFP SharePoint site, the Bid Evaluation Team and STSP will proceed with the bid due diligence and the Completeness, Threshold, and Scoring reviews as described in the RFP and summarized in this overall process diagram in **Figure 1** below.

Each step in the overall process will be described in more detail later in this section.

Figure 1. RFP Project Evaluation Analysis Flow

RFP Project analysis process flow

Evaluation stage	Completeness review	Threshold review	Project Scoring & Selection		Final shortlist
Teams Involved	Bid Evaluation & STSP ⁽¹⁾	Bid Evaluation & STSP ⁽¹⁾	Bid Evaluation & STSP ⁽¹⁾		Bid Evaluation
Key Activities	<ul style="list-style-type: none"> Ensure required Proposed Information is provided and the Bid Form completed Identify bid deficiencies Forward the bid to the appropriate bid analyst 	<ul style="list-style-type: none"> Review Key Parameters outlined in RFP Identify bid deficiencies not previously noted 	<ul style="list-style-type: none"> Continued Due Diligence Q&A, L&C, and Answer Requested questions IE Evaluation Team and STSP assess bid entry fee Parameters and score adjustments Bids are ranked based on scores 	<ul style="list-style-type: none"> Structure number of bid to score review, amount of projects passed to EnCompass for portfolio modeling EnCompass optimization process results of projections are identified 	<ul style="list-style-type: none"> Last chance for any deficiencies, due to any questions, notes contained in overall portfolio and request for updates occur Reviewing bid circulation Executive review and sign off based on all bid and information
Opportunity to cure?	Yes	Case by case, depending on the issue(s) and feasibility of cure	No		No

Notes:

1) Specialized Technical Support Personnel.

2) The Independent Evaluator will provide its independent review of each phase as defined in its scope of work.

Completeness and Threshold Reviews

Tools Used: Completeness and Threshold Form (Bid Evaluation Team), Key Parameter Review Form (STSP)

The Bid Evaluation Team and STSP will work together to complete these two stages of the evaluation. Assigned STSP members will perform reviews of aspects of each bid according to predetermined questions and ratings scales that have been reviewed and approved by the IE. The Bid Evaluation Team will take the results from each of the detailed reviews and fill out a Completeness and Threshold Form for each

proposal³, as well as identify any proposals with deficiencies. The RFP Project Manager will be notified of any deficiencies. The RFP Project Manager will subsequently notify bidders of any deficiencies and will provide bidders a chance to cure such proposals deficiencies. Additionally, the IE will review the Completeness and Threshold Forms for each proposal to help ensure all proposals are treated consistently and in accordance with the defined methodology and process for this stage.

Completeness Review

The Completeness Review will cover the following categories, as mentioned in the RFP:

- Compliance with all bid submittal requirements (fees, complete information provided in bid responses)
- Confirmation that all forms required for the bid type have been submitted
 - Required forms for each bid type are listed in the main RFP.

These items will be graded simultaneously by the Bid Evaluation Team and STSP⁴ as “Sufficient” or “Deficient” on the Completeness and Threshold review form for each bid during the bid opening process. Bids failing the Completeness Form will be given 5 business days to cure deficiencies. If deficiencies are not cured, the bid will be removed from further evaluation. Once all and any bidders have cured any deficiencies, this same group of primary evaluators will provide a secondary review of each item reviewed in the Completeness portion of the Completeness and Threshold Form.

Threshold Review and Assessment by STSP

The Threshold Review will cover the categories summarized in RFP Appendix H, including:

- Diverse Suppliers
- Capacity Deliverability Risk
- Eligibility of RFP Project type, size, location, and anticipated commercial operation date (COD)
- Interconnection viability
- Compliance with technical specifications
- Bidder creditworthiness and experience
- AGC verification
- Sourcing requirements
- Accounting assessment
- Battery Energy Storage System (“BESS”) Fire Safety (for projects inclusive of BESS technology)
- Exceptions to applicable Model PPA or Term Sheet

As these are specialized categories requiring subject matter expertise to effectively review, STSP will complete this step using the “Key Parameter Review Form”. This form lists the STSP responsible for review of predetermined questions created by the Bid Evaluation Team regarding each subject. This form,

³ In the event that a single project has multiple bids (i.e., multiple PPA bids or a PPA and a BT bid), each separate bid will have a separate Completeness and Threshold Form completed.

⁴ As needed, the Bid Evaluation Team evaluators may work with any STSP necessary to grade a question.

including the scales each STSP will use to rate each question, is reviewed by the IE prior to the launch of the RFP evaluation.

The predetermined questions the STSP will use are in two categories:

- Material Threshold Questions: graded as “Pass” or “Fail”, these are questions for which a bid must pass for further evaluation to be conducted.
- Scoring Questions: These are detailed subject matter questions that will factor into the score for each bid during the Project Scoring & Selection phase. These questions are graded as a “Red”, “Amber” or “Green”. While the specific meaning of “Red”, “Amber” and “Green” grades for each question or subject matter are defined in the Key Parameter Review Form, these color ratings have the following general meaning:
 - “Red” = Answer indicates a high level of risk for the project (typically 0 points)
 - “Amber” = Answer is satisfactory but is not fully clear or connotes some level of risk with the response (typically 5 points)
 - “Green” = No concerns or “satisfactory” (typically 10 points)

STSP are expected to provide written comments for each Material Threshold and Scoring question. Once STSP have completed the Key Parameter Review Form for each bid, a reviewer from the Bid Evaluation Team will incorporate the Material Threshold Questions into each Completeness and Threshold Form, including confirmation of any bids that have failed one or more Material Threshold Questions during the Threshold Review. Like the Completeness Review, the RFP Project Manager will be notified of any deficiencies resulting from STSP reviews of Material Threshold Questions. Depending upon the type and magnitude of the deficiency, the Bid Evaluation team will decide whether it is possible for the bidder to cure a deficiency; if so, the bidder will be notified and subsequently given 5 business days to cure the deficiency. If bid deficiencies are not cured or addressed in a timely manner, these proposals will be disqualified and will not progress to the Project Scoring and Selection phase. Once any applicable bidders have either cured deficiencies or been disqualified, a secondary reviewer from the Bid Evaluation Team will conduct a secondary review on the Threshold Review form and the RFP Project Manager will confirm which bids pass to the Project Scoring and Selection Reviews and communicate these results to the IE. Bids that pass the Completeness and Threshold reviews will be considered qualified proposals and will proceed on to the Project Scoring and Selection phase.

Project Scoring and Selection Reviews

Because this RFP evaluates several fundamentally different generation types, sizes, and contract types, modeling within the Company’s capacity expansion software, EnCompass, is an important part of the bid selection and shortlisting process. As such, this phase of the bid evaluation is composed of two steps: 1) a scoring step, which takes place outside of EnCompass, and 2) a selection step, which takes place within the EnCompass analysis. Both steps, as well as tools and resources used to accomplish each step, are outlined below.

Scoring Step

Tools Used:

SPS RFP Evaluation Scoring Calculator (Bid Evaluation Team)
SPS RFP Price Screener (Bid Evaluation Team)
SPS BOT Gas Term Sheet 10.26.22 (STSP)
SPS BOT Solar + Storage Term Sheet 10.26.22 (STSP)
SPS BOT Solar Term Sheet 10.26.22 (STSP)
SPS BOT Storage Term Sheet 11.30.22(STSP)
SPS BOT Wind Term Sheet 10.26.22 (STSP)
SPS Model Dispatchable PPA 11.9.2022(4835559.1) (STSP)
SPS Model Standalone Storage PPA_12_1_2022_(4842977.1) Rev 1 (STSP)
SPS Model Solar Plus Storage _PPA__11_14_2022(4843055.1) Rev 1 (STSP)
SPS Model Renewable PPA__11.09.22(4832860.1) (STSP)
Cost Estimate for SPS RFP Template 07-06-22 (STSP)
Cost Estimate for SPS RFP Template under 50 MW 07-06-22 (STSP)

In the scoring step, a reviewer from the Bid Evaluation Team will incorporate the “Scoring Questions” from the Threshold Review into the SPS RFP Evaluation Scoring Calculator. Additionally, STSP will continue to conduct bid due diligence as well as provide calculations for the remaining bids including LCOE and Revenue Requirement(s), annual Capital (“CapEx”) and Operations and Maintenance (“O&M”) expenditures for Build-Transfer and Self-Build bids, collectively known as “Company Ownership” bids/proposals, and congestion differentials. This information will be incorporated into the SPS RFP Evaluation Scoring Calculator to create an overall score and ranking for each bid. If a single project has multiple bids submitted (i.e., multiple PPAs, or a PPA and BT), each bid will be scored separately using the SPS RFP Evaluation Scoring Calculator.

In this stage, bids will be grouped by technology type (e.g., wind, solar, solar + storage hybrids, wind + storage hybrids, storage only, dispatchable) and, as discussed further below, by contracting type, to create Bid Assessment Groups. For this bid evaluation process, bids that combine a generation component with a storage component, typically a BESS, are collectively known as “hybrid proposals”, “hybrid bids”, or “hybrids”. Hybrids include solar+ and wind+ proposals among other potential generation plus storage proposals. Depending on the bids received, additional Bid Assessment Groups may be created if the bid technology type is viewed as not directly comparable to other technology types without Encompass modeling to ascertain the bid value relative to other technology types. Those projects with the highest overall scores in each Bid Assessment Group will then be selected to be further analyzed in Encompass as described in more detail below.

The overall score has a maximum of 100 points, and is calculated based on the following three Key Parameters:

1. Price (65% weighting)
2. Project & Capacity Deliverability Risk (20%)
3. Congestion (15%)

In addition to these three Key Parameters, the following four parameters will act as deductors only, with deductions from the overall score occurring for project risks or deficiencies:

1. Bidder Strength (10%)
2. Exceptions to Model PPAs /BT Term Sheets (10%)
3. Certified Diverse Supplier (10%)

As discussed below, Price will be scored by comparing levelized costs for the bids within each Bid Assessment Group that reach the scoring stage. The other Key Parameters would be scored by comparing scores for that parameter across all bids that reach the scoring stage.

Overview of Key Parameters

1. Price

Bids within each Bid Assessment Group will be compared through a levelized cost analysis using pricing, performance, and other pertinent information provided in each respective project proposal, except where material differences identified by STSP and/or a qualified third party (UL) warrant re-evaluation.⁵ Since Company Ownership proposals do not contain ongoing CapEx and O&M costs, these costs will be calculated for inclusion in the levelized cost analysis by STSP for the generation component and, as required, by UL for the storage component. For PPA bids, O&M plan descriptions will be reviewed by STSP during the Threshold Review for feasibility due diligence. Price will be evaluated separately by Bid Assessment Group. Additionally, depending on the technology group and project structure, the following bid evaluation procedures will apply.

Standalone Renewable Technology Bids (no storage component)

For standalone renewable generation proposals, pricing evaluation will be based on respective LCOE within each technology group, regardless of project structure. In the case of PPA proposals, LCOE is provided in the applicable Appendix F Bid Form(s) (levelized as necessary for bids with escalating prices), and in the case of BT or Self-Build proposals, LCOE will be calculated with the “SPS RFP Price Screener”, utilizing information provided in the applicable Appendix F Bid Forms and the STSP/UL provided ongoing CapEx and O&M cost information.

Hybrid and Dispatchable Technology Bids

For hybrid and dispatchable proposals, PPA proposals will be evaluated separately from BT and Self-Build (“Company Ownership”) proposals due to pricing and performance variability differences that are difficult to assess outside of EnCompass modeling. PPA hybrid and dispatchable proposals will be evaluated separately from Company Ownership hybrid and dispatchable proposals. Within each respective project structure, each proposal will be evaluated based on respective LCOE by technology

⁵ There are three anticipated scenarios for which modification(s) may occur; each will be discussed with the IE: NCF estimates, tax credit estimates, projects opting to reuse existing interconnections and associated interconnection costs.

group. In the case of a PPA proposals, LCOE is provided within the applicable Appendix F Bid Form(s) (levelized as necessary for bids with escalating prices), and in the case of Company Ownership proposals, LCOE will be calculated by the “SPS RFP Price Screener”, utilizing information provided in the applicable Appendix F Bid Forms and the STSP/UL provided ongoing CapEx and O&M cost information.

This yields the following Bid Assessment Groups that will be separately scored against each other with respect to price, with the highest overall scored bids within each Bid Assessment Group being included in Encompass modeling:

1. Solar only
2. Wind only
3. Solar + Storage PPA
4. Solar + Storage Company Ownership
5. Wind + Storage PPA
6. Wind + Storage Company Ownership
7. Standalone Storage PPA
8. Standalone Storage Company Ownership
9. Dispatchable PPA
10. Dispatchable Company Ownership

Bids may not be received for any particular Bid Assessment Group, eliminating that group from further consideration. Additional technologies may be bid that would require an additional Bid Assessment Group to be formed and scored separately.

Production profiles, which contribute to the levelized cost analysis, will be verified by an external third party (UL) for BT and Self-Build proposals. Production profiles for PPA proposals will also be reviewed by the external third party as “red-flag” review(s).

For each Bid Assessment Group, the levelized cost range (from minimum to maximum bid price received) – is divided into a maximum of 10 equal increments that are used to score bids. Bids will receive a score based on which increment its bid price falls into. For instance, a proposal that falls into the most attractive price increment will receive 10 points, a proposal that falls into the next increment will receive 9 points, etc. The price score will constitute 65% of the overall evaluated value of the proposal. Thus, for example, a proposal with a price score of 10 points, will receive 65 overall points ($65 * 10 / 10$), while a proposal with a price score of 5 points will receive 32.5 overall points ($65 * 5 / 10$). If there are fewer than 10 bids in a bid technology group, the number of equal increments will be equal to the number of bids, with the maximum score being equal to the number of bids. If, for example, there are 6 bids. The lowest cost bid will receive a score of 6, and would receive 65 overall points ($65 * 6/6$).

2. Project & Capacity Deliverability Risk

While projects with fatal flaws will have been eliminated in the Threshold Review, all proposals remaining in the Project Scoring & Selection stage will be assigned a score based on the remaining risks of delivering their proposed amount of firm capacity on their proposed timeline. Projects will be scored on risks associated with their development status, major equipment supply and pricing uncertainty, ability to interconnect with the Southwest Power Pool depending on the RFP Option selected, local community considerations, and path for obtaining the expected level of capacity accreditation.

For the purposes of this section and computation of the scores, green ratings from each applicable STSP on each of the “Scoring Questions” portion of the Threshold will be assigned a value of 10 points, amber ratings will be assigned a value of 5 points, and red ratings will be assigned a value of 0 points. The quartile of bids (collectively including the bids from all of the Bid Assessment Groups) with the highest summed total score from the “Scoring Questions” for environmental permitting, siting & land rights, accounting, engineering & technical review, equipment supply, local community considerations, interconnection, and capacity accreditation will receive 10 points. The next 50%, ranked by summed total score, will receive 5 points, and the quartile with the lowest summed total score will receive 0 points. The Project & Capacity Deliverability Risk score will constitute 20% of the overall evaluated value of the proposal. Thus, for example, a bid with a Project & Capacity Deliverability Risk score of 10 will receive 20 overall points ($20 * 10 / 10$) and a bid with a score of 5 will receive 10 overall points ($20 * 5 / 10$). If fewer than 4 total bids, the scoring evaluation will be assessed with the participation and approval of the IE.

3. Congestion

All projects will be assessed for the risk that congestion may impact the financial viability and performance of the bid. The Company will assess this risk by the bidder’s performance question in the Project Scoring & Selection stage regarding curtailment during the Threshold review and by averaging estimates of contemporary congestion and projected congestion in the vicinity of the proposed project, relative to the Company’s load-weighted SPP system node (SPS.SPS). The steps for projected congestion rating are as follows:

- a. STSP will determine the nearest CPNode in proximity to the RFP Project’s location based on the interconnection information provided within the Appendix F bid forms.⁶
- b. The Company will compute the average of on-peak SPP Day Ahead LMP congestion level differential from SPS.SPS observed at this CPNode from January 2021 – January 2023.
- c. The Company will also calculate the estimated on-peak SPP Day Ahead LMP congestion level different from SPS.SPS projected for this CPNode using the SPP ITP2023 Year 5 (2028), run by the Xcel Energy Transmission Planning team, in PROMOD.

⁶ CPNode must be planned for commercial operation within the Southwest 05 region of the Southwest Power Pool during the Capacity Need Period.

d. The Company will average the two estimated congestion levels to obtain an indicative estimate of average level of congestion for the bid over the next ten years.

e. All bids with estimated congestion levels, regardless of generation type or Project structure, will be ranked according to their averaged congestion estimate. Those bids (collectively including the bids from all of the Bid Assessment Groups) in the worst quartile of congestion levels will receive 0 points. Those bids in the middle 50% of congestion levels will receive 5 points. Bids in the best quartile of congestion levels will receive 10 points.

f. If any bids receive a “red” rating on the curtailment Scoring question, they will receive 0 additional points, amber will receive 1 point, and green will receive 2 points in addition to the points in e. above.

g. The Congestion Score is calculated by adding the scores in e. and f. together.

The Congestion Score will constitute the remaining 15% of the overall evaluated value of the proposal and will apply all technology groups. Thus, for example, a bid with a Congestion Score of 12 in part g. will receive 15 overall points ($1.25 * 12$), while a bid with a Congestion Score of 6 will receive 7.5 overall points ($1.25 * 6$).

Overview of Deductors

1. Bidder Strength

Bidder Strength acts as a deductor in the event of concerns with the bidder’s qualifications or recent project execution history. All proposals that have passed the Credit/Risk, project execution history, and tax credit “Scoring Questions” in the Threshold review with an all-green result will receive 0 points. Proposals that have passed these “Scoring Questions” with any amber results will have 5 points removed from their total bid evaluation score. Proposals that have passed these “Scoring Questions” with any red results, will have 10 points subtracted from their overall point total. In this manner, Bidder Strength will act a source of potential reduction to the overall evaluated value of the proposal.

2. Certified Diverse Suppliers

All proposals that have passed the Certified Diverse Suppliers “Scoring Questions” will have 0 points deducted from their overall bid score. All proposals that have passed the certified Diverse Suppliers due diligence with any amber results, will have 5 points removed from their overall bid score. Any proposals that have passed the certified Diverse Suppliers due diligence with any red results, will have 10 points removed from their overall bid score. In this manner, Certified Diverse Suppliers will act as a source of potential reduction to the overall evaluated value of the proposal.

3. Exceptions to Model PPA Template or Build-Transfer Term Sheet

The section “Threshold Review and Assessment by STSP” discusses that STSP will answer both Material Threshold questions, which will remove a bid from contention, and Scoring questions. If a conforming bid is submitted to the RFP that also contains a redlined template and alternative pricing option to the Model PPA Template or Build Transfer Term Sheet:

- Material Threshold Review: the STSP will verify that the bid contains a bid price that fully complies with the Model PPA or Build Transfer Term Sheet.

- Scoring Questions: the redlined exceptions and alternative pricing option will be used to help score the Exceptions to the Model PPA or Build-Transfer Term Sheet “deductor” for the alternative pricing bid.

To the extent that proposed redlines for an alternative pricing option proposal are insufficiently detailed (e.g., “to be discussed”) or are material and unacceptable to the Company, this will be interpreted as representing potentially problematic future redlines and will be scored accordingly.

All proposals that pass the “Scoring Questions” with no material redlines to the PPA template or Term Sheet (all-green result) will have no adjustment to their overall score. Alternative-priced proposals that pass this scoring evaluation with an intermediate level of proposed edits to the PPA template or Term Sheet (amber result), will have 5 points removed from their total bid evaluation score. Alternative-priced proposals that pass this scoring evaluation with a material level of impact or large number of edits to the PPA template or Term Sheet (red result) will have 10 points removed from their total bid evaluation score. In this manner, exceptions to the Model PPA Template or Build-Transfer Term Sheet will act a source of potential reduction to the overall evaluated value of the proposal.

The contribution to the total score is aggregated across the above parameters to obtain a total score for each proposal that passes the Completeness and Threshold requirements. The bids are then sorted from high score to low score within each Bid Assessment Group.

Prior to forwarding select bids to EnCompass, a quality risk screen will be applied.

Quality Risk Screen: To further ensure that quality is considered appropriately in the Scoring phase, a Quality Screen will be applied. This Quality Screen will eliminate any bids with high project risk from being selected for modeling in EnCompass. The scores pertaining directly to project risk, which include Project & Capacity Deliverability (0 to 20 points), Congestion Risk (0 to 15 points), Bidder Strength (0 to negative 10 points) and Contract Exceptions (0 to negative 10 points). If, in aggregate, these scores sum to 10 or less, then the project would be set aside and only receive consideration in the event there are insufficient bids available to meet the target procurement levels. Should there be insufficient capacity, the RFP Evaluation Team will discuss with the IE the next score step, if any, for this quality screen.

Forwarding to the Next Step

Because of the breadth of different bid types and technologies in this solicitation, EnCompass modeling will act as a second round of scoring in the selection process. Once all proposals remaining after the Completeness and Threshold Reviews have been scored, the Company will identify the bids that will be moved forward to the selection step, involving capacity expansion plan modeling in EnCompass⁷. Note

⁷ As an example, the Company has stated a need shortlist at least 947 MW from this RFP. If only 600 MW of bids are received and all pass the Threshold Review, the Company would move all 600 MW of bids forward to EnCompass modeling.

that if multiple bids are submitted for a single project (i.e., multiple PPAs of different terms, both a PPA and a BT), they are all eligible to be passed to EnCompass modeling, based on overall scoring within each Bid Assessment Group.

Scoring & Selection Phase: Selection Step

The bids moved forward to the selection step will be formatted and prepared for EnCompass modeling by Bid Assessment Group. To ensure the firm capacity requirements of the system are met throughout the bid evaluation planning period and to evaluate bids of different term lengths, a terminal value adjustment will be made to bids that do not extend through the end of the cost modeling period, which is 2042.⁸ Once adjusted, bids of all Project Structures and technologies will be evaluated using the EnCompass model to identify the portfolio of bids which result in the lowest overall system cost. As a general matter, only Standard Bids (those without markups to the PPA template or BT term sheet) are expected to be analyzed in Encompass. This ensures a proper comparison between bids. Alternative priced bids with markups will be assessed and may be considered during short-list discussions. For alternative bids with substantial price reductions and minimal transfer of risk to the Company in the proposed markups, these bids may be included in the Encompass modeling in alternate scenarios or sensitivities.

The dedicated EnCompass model used to select the bids will be established from a baseline model as described below:

To establish a baseline scenario in the EnCompass modeling, we will first run an expansion plan with generic resources filling in the capacity needs in the RFP, in line with our current regulatory filings and taking into consideration the latest available load and fuel forecasts. Once the baseline expansion plan is determined in Encompass, we will then remove the capacity met by generic resources through 2027 (the Capacity Need Period or CNP), the capacity this RFP is targeted toward fulfilling. The top-rated bids of each Bid Assessment Group then will be input into the Encompass model as possible resource selections to fill the resulting capacity “hole” in the expansion plan. The expansion plan after the CNP will be locked in, so that EnCompass will only need to select the bids to fill the CNP capacity “hole”. If all the bids of a particular Bid Assessment Group (e.g., solar) made available to Encompass are selected by Encompass in filling the capacity “hole”, then an additional bid from this Bid Assessment Group (with the next highest total score) will be input into Encompass and Encompass will be rerun. This process will be repeated until there is at least one bid of each Bid Assessment Group that is not selected by Encompass or all of the bids in a Bid Assessment Group are selected.

Additional analysis will be considered in the following cases as a matter of quality and confirmation analysis:

1. If Encompass selects a project with a lower total score than another project of the same technology type (e.g., because of a lower cost), then the relative savings will be evaluated to assess the cost savings of selecting this project and not the higher scored project. In particular,

⁸Terminal Value Adjustment methodology is outlined in Appendix 2 of this Bid Evaluation Process, as reviewed with the IE and confirmed via email 2/15/2023.

the quality difference will be assessed to ascertain whether the cost savings are material enough to justify selecting the bid with the lower total score.

2. If projects with relatively high costs are selected by Encompass to meet CNP reserve requirements (e.g., because of a limited number of available bids), each of these selected projects will be reviewed to assess whether an alternative acquisition process (e.g., a future RFP) likely would yield a more cost-effective resource for SPS customers. As a general matter, projects that are more than 15% higher in cost than generic Encompass cost assumptions for that technology or 15% higher in cost than the lowest cost bid for that Bid Assessment Group will be reviewed. This may result in total capacity less than the full RFP capacity request being selected in this RFP.

Bids passing the spreadsheet screening in the Scoring step and selected by the EnCompass modeling will populate the proposed initial shortlist.

Final Short List

The final shortlist will comprise the RFP Projects with the highest overall evaluated value as indicated by the scoring and modeling selection phases. At the end of the final shortlist period, the full and final proposed shortlist would be passed to Company executives and to the Independent Evaluator for final review and approval. Once the final shortlist has been established and confirmed, the shortlisted RFP Projects can then move to the contract negotiations phase. The final shortlist will consist of only RFP Projects that are earmarked to move on to the negotiations phase.

Appendix 1

RFP Bid Data Handling and Additional Quality Control

RFP Bid Data Handling

For the duration of the entire RFP evaluation process, access to the RFP SharePoint site will be controlled by the RFP Project Manager and will be limited to the Bid Evaluation Team members, STSP (including specified third parties), and the IE. The IE will review the evaluations to help ensure all proposals are treated in accordance with the defined process.

After the final RFP proposal shortlist has been established, the data will not be shared with other internal parties unless a business need arises.

Additional Quality Control

In addition to full audit and review by the IE, the following additional steps are taken to provide additional levels of quality control for the evaluation.

During the Completeness, Threshold, and Project Scoring & Selection phases, Bid Evaluation Team members and STSP will serve as primary or secondary evaluators, as needed, to help maintain an unbiased evaluation. As detailed in the Completeness and Threshold Review section, the Completeness Review will be completed simultaneously by primary Bid Evaluation Team reviewers and the Threshold portion of the Completeness and Threshold Form for each bid will be completed by STSP and reviewed by the Bid Evaluation Team.

Should the secondary review arrive at different conclusions with respect to any individual ratings, the secondary reviewer will discuss with the primary reviewer, and if no consensus results, the rating will be considered by the full Bid Evaluation Team.

Appendix 2

Terminal Value Methodology

The Company's resource planning software, EnCompass, will be used to allow for a fair comparison between all RFP Proposals, including PPA Proposals with differing term lengths. The purpose of this document is to describe how the EnCompass model will be set up and run to effectively create "equal" term lengths for PPA Proposals to be compared against all RFP Proposals within the EnCompass model.

When bids with a shorter term, like 10 or 15 years, are compared within EnCompass against an RFP Proposal with a 25-year term, assumptions must be made regarding the type of energy and capacity the Company would procure at the end of the proposed term length (i.e., the terminal value).

Given recent experience bid evaluation and modeling experience within the Company, the Company has selected the Replacement Chain method to use in assessing terminal value as follows:

Replacement Chain: As outlined below, the following details contain PSCo regulatory filings regarding the bid evaluation method for uneven term lengths in Colorado. This method will be used in the EnCompass modeling of 2022 SPS RFP bids of unequal term length. The Company prefers this method because it has been through a stakeholder process in Colorado that focused on balancing different concerns and considerations about future cost assumptions to use as adjustments for comparing all bid lengths. Additionally, the extended RFP bids are compared against other bids on an even playing field: they all contain actual site-specific information and contractual constraints, and the replacement energy (adjusted for inflation) inherently includes the same cost categories.

When considering PPA Proposals with shorter term lengths, this Replacement Chain method will be utilized within the EnCompass analysis as described in the 2022 SPS RFP Evaluation Process, specifically the section titled "*Scoring & Selection Phase: Selection Step*".

ERP Settlement for Xcel Energy's Colorado OpCo (Public Service Company of Colorado)

Proceeding No. 21A-0141E

Filed: March 31, 2021 (Corrected August 13, 2021)

[Regulatory Filing Excerpt Begins Below]

Computer Modeling and Portfolio Development

EnCompass will be used in developing portfolios of proposals/bids that are advanced to this stage of the competitive acquisition. The modeling framework Public Service will employ in the Phase II portfolio analysis is the same as that used to develop alternative plans that are discussed in ERP Volume 1 with two exceptions: (1) actual bids are used to meet RAP needs instead of generic estimates, and (2) bids will be extended through the end of the modeling period to ensure the RAP portfolio firm capacity meets the PRM obligation through the end of the modeling and is not rejected by the model.

How to model bids that do not extend through the planning period has been vigorously discussed in past ERPs, and in the last ERP the Company presented two separate views of portfolios using what was termed the "Replacement Method" and "Annuity Method." For this ERP, the Company is proposing minor modifications that incorporate positions taken by other parties in past ERPs with the objective of effectuating a fair evaluation of competing bids. The Company proposes to use one single unified method that closely resembles the previous annuity method where all bids are extended through the end of the Planning Period using an appropriate and relevant financial analysis methodology often called a "replacement chain" analysis.

In this method, to extend bids that do not extend to the end of the modeling period, the bid will be sequentially "repeated" as many times as is necessary, keeping all parameters

of the bid equivalent from both a financial and operational perspective. For operational characteristics, the exact same specifications of the bid⁴⁴ will be repeated using the same pattern (if it varies by year) as the original bid. As an example, for a sample 15-year bid, year 16 will have the specifications of year 1, year 17 will have year 2, etc.

All financial parameters, such as fixed or variable PPA payments, will be repeated so as to be equivalent to the bid proposal's costs throughout its term. In practice, the bid costs that are supplied in nominal dollars will first be converted to levelized equivalent fixed or variable costs using the Company's WACC. Then the levelized value will be escalated using the assumption for general inflation (2%) to the start of the repeat period and applied for the same number of years as the bid term. If a second "repeat" period is then needed (i.e. two times the bid term still does not extend through the modeling period), a third (or however many are necessary) repeat will be constructed in the same manner.

Company proposals will include the same costs and benefits as those applied in the initial economic screening of bids described earlier in this section. Company proposals and BOTs will be modeled using traditional capital revenue requirements when reporting annual total system costs. Since the useful lives of Company self-build proposals typically will extend through the end of the Planning period, generally no assumptions need be made on how to extend the lives of Company proposals. However, in the event a Company proposal does need to be backfilled, it will be done in the same manner as the bids. Just as with PPAs, the actual annual costs of the bid will be used for the bid period, and any extension will use the levelized cost escalated to the repeat year(s).

This extension process for bids is not in any way intended to represent "re-contracting" or any specific assumption regarding what resources will be chosen in the future years after the bid expires or what prices they will be offered at. It is simply a financial analysis methodology used to evaluate competing projects/proposals with unequal lives. In financial literature it is often referred to as the "replacement chain" approach. Ideally this approach would have enough replacements made to evaluate all the projects on a least common multiple of years (for example a 20-year bid and a 25-year bid would be evaluated over a 100-year period with 5 and 4 repetitions, respectively). However, this is not practical in computer modeling given the possibility of widely disparate lives leading to extremely long study periods (as in the given example in the previous sentence), nor is it consistent with Commission resource planning rules which require that NPV be calculated over a Planning Period of determinate length. Additionally, given that the economics of the portfolios are primarily evaluated on the basis of NPV, impacts beyond the modeling period have only small impacts due to the time value of money/discount rate, and there is little precision lost by cutting off all values past the modeling period.

⁴⁴ Such as capacity factor, nameplate capacity and generation profile for renewable bids, and heat rate and forced outage rate for dispatchable bids.

Appendix 3

Bid Evaluation Guide Revisions

Due to the lower than anticipated volume of bids received, the Price scoring process of this Bid Evaluation Guide (see pages 9-10) was modified. In particular, the division into 10 Bid Assessment Groups was narrowed into 3 price scoring categories to achieve a reasonable range in price scores among the bids received. The revised procedure, developed in conjunction with the IE, is as follows:

1. All projects that successfully complete the completeness and threshold reviews will be scored as follows with respect to Price:
 - a. Projects will be divided into three categories: (1) predominately 'energy-based' resources (e.g., solar and wind), (2) predominately 'capacity-based' resources (e.g., battery storage), or (3) hybrid energy and capacity resources (e.g., combined wind and battery proposals)
 - b. The projects in each respective category will be ranked against one another based on their levelized cost of energy (energy-based resources) or levelized cost of capacity (capacity-based resources). For hybrid resources, the levelized cost of energy is applied where the cost also includes the revenue requirement for the battery. Projects that rank in the top quartile in each respective category will receive 100% of the 65 points available, projects that rank in the second quartile will receive 66.66% of the 65 points available, projects that rank in the third quartile will receive 33.33% of the 65 points available, and projects that rank in the final quartile will receive 0% of the 65 points available.
 - c. "Sister projects" are projects at the same site with bid variations such as in-service dates, size, or contract type. "Sister projects" within the same category will be ranked based on their average LCOE for the respective category. For example, if Bidder A has two "sister projects" for the same site with two different possible in-service dates and the LCOE of one project is \$34 and the LCOE of the second project is \$36, both projects will be scored based on the \$35 average. This is to avoid multiple bid variations for a project at the same site impacting the price quartiles among competing bids.
 - d. The remainder of the project scoring process, i.e., the Project & Capacity Deliverability Risk and Congestion, will remain as outlined in the Bid Evaluation Guide.
 - e. The projects will then be ranked based on overall score.
2. All projects that successfully complete the completeness and threshold review will also advance to economic modeling in EnCompass:
 - a. The portfolio of projects selected by EnCompass, will be termed the "lowest cost" portfolio of resources, and will be compared against the overall score rankings outlined in (1) above. If Encompass selects lower ranked projects, then a reasonable number of alternative portfolios will be run, wherein the lower ranked project(s) will be omitted from EnCompass. EnCompass would then be re-optimized without the project(s) to determine the incremental increase in PVRR associated with removing the lower scoring

project(s). SPS will then calculate an alternative portfolio of resources which it may recommend as its preferred portfolio if the increased cost of the portfolio is determined to be preferable to the risk(s) associated with the omitted project.

General Revisions and/or Corrections

1. During the bid evaluation process, the BE Team and STSP recognized the technical specifications included in the RFP appendices did not cover repowered projects proposed as Company Ownership project structures. The issue was brought to the IE for guidance. The RFP Project Manager submitted Bidder Information Request(s) to the Bidder to facilitate STSP developed estimate(s) for cost adder(s) to levelize bid(s) with other bids. There were two bids, Bids #2 and #4, that were proposed as repowered projects for company ownership and the STSP cost estimates were added into the evaluation.
2. During the bid evaluation process, the BE Team and STSP recognized that Bids #23 and #24 excluded costs for the RFP Project's generation tie line(s). The issue was brought to the IE for guidance. As defined in the RFP Document, the BE Team has the option to include STSP cost estimate adders to bids to levelize the RFP Project(s) with other bids. The BE Team noted this option and if these bids required more detailed evaluation, then a cost estimate adder would be pursued from STSP and applied if necessary.
3. During the rating process, minor refinements were made to the Threshold and Scoring Questions after discussion with the IE to align with the RFP Evaluation Guide or to clarify the rating scale to be applied.

Encompass Revisions and/or Corrections

Demand and Energy Forecast:

During the normal course of business, Xcel Energy produces two demand and energy forecasts each year, one in the summer and one in the spring. EnCompass was updated to include the Spring 2023 demand and energy forecast after its release.

Commodity and Market Energy Price Forecasts:

During the normal course of business, Xcel Energy produces two natural gas, coal, and market energy price forecasts, one in the spring and one in the fall. EnCompass was updated to include the Spring 2023 commodity and market energy price forecast after its release.

Updated Information Available

Blackhawk Interim Purchase Power Agreement:

On March 9, 2023, SPS executed Amendment No. 2 to the Borger Energy Associates, LLC PPA, which effectively extended the Blackhawk PPA through end of year 2026. SPS updated EnCompass to reflect this extension.

Short-term Capacity Price:

Updated the cost/revenue associated from short-term capacity price to reflect recent capacity sales executed by SPS.

Generic Resource Updates:

Following advancements in the Good Neighbor Rule (environmental legislation impacting NOx emissions), SPS removed non-controlled generic combustion turbine generators (“CTG”) from its list of available generic resources. EnCompass was updated to only CTGs equipped with selective catalytic reduction (“SCR”).

In accordance with NREL ATB data, SPS had previously modeled generic batteries with a 15-year life. SPS increased the life of generic batteries to 20-years to create equity with the battery proposals received in the RFP. Further, SPS changed the maximum annual throughput of generic batteries to the equivalent of 365 full cycles per year – again to create equity between generic and RFP battery proposals.

Finally, SPS set a limit of two new CTGs with SCRs per year and removed the limit of generic battery energy storage that was previously set at 300 MW per year. SPS removed the limit for generic battery additions to create equity with RFP battery proposals that had no such limit.

Other minor refinements to the EnCompass modeling inputs were made as needed as runs were performed and error-checking was completed.

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