

## **Filing Receipt**

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#### **SOAH DOCKET NO. 473-24-02691 PUC DOCKET NO. 55255**

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| PUBLIC SERVICE COMPANY TO    | § | DEFORE THE STATE OFFICE |
| AMEND ITS CERTIFICATE OF     | § |                         |
| CONVENIENCE AND NECESSITY TO | § |                         |
| CONSTRUCT GENERATION         | § | OF                      |
| FACILITIES IN LAMB COUNTY,   | Š | Or                      |
| TEXAS AND LEA COUNTY, NEW    | § |                         |
| MEXICO; FOR GOOD-CAUSE       | § |                         |
| EXCEPTIONS; AND FOR RELATED  | § | ADMINISTRATIVE HEADINGS |
| RELIEF                       | Š | ADMINISTRATIVE HEARINGS |

# SOUTHWESTERN PUBLIC SERVICE COMPANY'S RESPONSE TO TEXAS INDUSTRIAL ENERGY CONSUMERS' SIXTH REQUEST FOR INFORMATION QUESTIONS NOS. 6-1 THROUGH 6-11

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|     | Exhibit SPS-TIEC 6-2(HSPM) (filenames: SPS-TIEC 6-2(a)-(e)(HSPM).xlsx) | 16 |
|     | Exhibit SPS-TIEC 6-5(CONF) (filename: SPS-TIEC 6-5(CONF).xlsx)         |    |
|     | Exhibit SPS-TIEC 6-8(HSPM)) (filename: SPS-TIEC 6-8(HSPM).xlsx)        |    |
|     | Exhibit SPS-TIEC 6-10(V) (filename: SPS-TIEC 6-10(V).xlsx)             |    |

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# SOUTHWESTERN PUBLIC SERVICE COMPANY'S RESPONSE TO TEXAS INDUSTRIAL ENERGY CONSUMERS' SIXTH REQUEST FOR INFORMATION QUESTION NOS. 6-1 THROUGH 6-11

Southwestern Public Service Company ("SPS") files this response to the Texas Industrial Energy Consumers' ("TIEC") Sixth Request for Information, Question Nos. 6-1 through 6-11. In accordance with the Commission's *Order Suspending Rules* entered in Docket No. 50664, SPS has provided notice, by email, to all parties that SPS's Responses to TIEC's Sixth Request for Information and accompanying exhibits (excluding voluminous and exhibits provided pursuant to the protective order) have been filed with the Commission and are available for download from the Commission's Interchange website.

#### I. WRITTEN RESPONSES

SPS's written responses to TIEC's Sixth Request for Information are attached and incorporated by reference. Each response is stated on or attached to a separate page on which the request has been restated. SPS's responses are made in the spirit of cooperation without waiving SPS's right to contest the admissibility of any of these matters at hearing. In accordance with 16 Tex. Admin. Code § 22.144(c)(2)(A) ("TAC"), each response lists the preparer or person under whose direct supervision the response was prepared and any sponsoring witness. When SPS provides certain information sought by the request while objecting to the provision of other information, it does so without prejudice to its objection in the interests of narrowing discovery disputes under 16 TAC § 22.144(d)(5). Pursuant to 16 TAC § 22.144(c)(2)(F), SPS stipulates that its responses may be treated by all parties as if they were made under oath.

#### II. INSPECTIONS.

If responsive documents are more than 100 pages but less than eight linear feet in length, the response will indicate that the attachment is voluminous ("V") and will be provide by secured document transfer link.

If a response or the responsive documents are provided pursuant to the protective order in this docket, the response will indicate that it or the attachment is either confidential ("CONF") or highly sensitive protected material ("HSPM") as appropriate under the protective order. Confidential and highly sensitive protected materials will be served on all parties that have signed and filed the certification under the protective order entered in this docket. Confidential and highly sensitive responsive voluminous documents will be provided by secured document transfer link.

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ATTORNEYS FOR SOUTHWESTERN PUBLIC SERVICE COMPANY

#### RESPONSES

#### **QUESTION NO. TIEC 6-1:**

Referring to the Direct Testimony of Ben R. Elsey at page 18, lines 4 to 5, please define "on-peak".

#### **RESPONSE:**

The third-party vendors that provided the market energy prices define "on-peak" as 7am to 10pm, Monday through Friday.

Preparer: Ben R. Elsey Sponsor: Ben R. Elsey

#### **QUESTION NO. TIEC 6-2:**

Referring to the Direct Testimony of Ben R. Elsey at page 27, lines 22 to 23, and page 29, lines 11 to 18, please provide workpapers supporting the levelized cost of capacity of BESS resources that SPS considered in its RFP process in "live" EXCEL format with all formulae and links intact.

#### **RESPONSE:**

Please refer to SPS's response to subpart (a) of Question No. TIEC 1-19 for the workpapers for Bids 33, 34, 35, 36, 37, and 38.

Please refer to Exhibit SPS-TIEC 6-2(HSPM) for the workpapers for Bids 40, 41, 42, 43, and 44.

SPS does not have workpapers for PPA BESS resources as they were bid on a levelized cost basis.

Preparer: Ben R. Elsey Sponsor: Ben R. Elsey

#### **QUESTION NO. TIEC 6-3:**

Referring to SPS's Response to TIEC 1-10:

- a. Please explain how cost-effectiveness between a tax credit transfer and delayed utilization of tax credits will be determined.
- b. Please provide an example showing how SPS would determine whether a tax credit transfer or delayed utilization of tax credits against SPS's own tax liability is more cost effective.

#### **RESPONSE:**

SPS filed an objection to this question on October 31, 2023.

#### **QUESTION NO. TIEC 6-4:**

Will all of the energy discharged from the SPS Battery Project be sold into the SPP market?

- a. Please explain how energy discharged from the battery will be any different from the energy produced at a renewable or non-renewable generator.
- b. Please provide an illustration showing how the total energy discharged from the SPS Battery Project and the excess incremental energy above system demand for a typical day are determined.

#### **RESPONSE:**

As a participant in the Southwest Power Pool Integrated Market ("IM"), SPS must sell all of its power into the IM and then SPS purchases the power it needs to serve its customers from the IM.

- a. Energy discharged from the battery will not be different from power produced from other generators.
- b. SPS calculates its off-system sales on an hourly basis. If SPS's generation exceeds its obligation load, the incremental excess energy is an off-system sale ("OSS"). During an operating hour in which SPS had OSS, SPS ranks each MWh of energy sales by its incremental generation cost and then assigns the energy with the highest incremental cost to OSS. In the example operating hour below, SPS generates 1,100 hours at a range of incremental costs, including 50MWh from the battery at \$40/MWh.

| Sales and Incremental  | Sales Assigned | Sales Assigned to |
|------------------------|----------------|-------------------|
| Cost                   | to Load        | OSS               |
| 500 MWh at \$0         | 500 MWh        | 0 MWh             |
| 200 MWh at \$30        | 100 MWh        | 0 MWh             |
| 100 MWh at \$40 (BESS) | 100 MWh        | 0 MWh             |
| 100 MWh at \$50        | 100 MWh        | 0 MWh             |
| 200 MWh at \$70        | 100 MWh        | 100 MWh           |
| Total MWhs             | 1000 MWh       | 100 MWh           |
| Average \$/MWh         | \$22           | \$70              |

Preparer: Jeffrey C. Haskins

Ben R. Elsey Sponsor:

#### **QUESTION NO. TIEC 6-5:**

Referring to SPS's Responses to TIEC 1-16(b) and AXM 1-4, Exhibit SPS-AXM 1-4(b):

- a. Please provide the derivation of the High and Low case gas prices shown in SPS's Response to OPUC 2-25, Exhibit SPS-OPUC-2-25, based on the gas market forecasts provided in Exhibit SPS-AXM-1-4(b).
- b. Please provide SPS's base natural gas forecast in "live" Excel format with all formulae and links intact.
- c. Please provide the derivation of the Base, Low, and High energy prices shown in SPS's Response to OPUC 2-25, Exhibit SPS-OPUC-2-25. Provide in "live" Excel format with all formulae and links intact.

#### **RESPONSE:**

- a. Please refer to Exhibit SPS-TIEC 6-5(CONF).
- b. Please refer to subpart (a).
- c. Please refer to subpart (a).

Preparer: Ben R. Elsey Sponsor: Ben R. Elsey

#### **QUESTION NO. TIEC 6-6:**

Referring to SPS's Response to TIEC 1-18:

- a. What was the assumed cost to serve expected unserved energy (EUE) included in SPS's modeling?
- b. Please explain how the assumed cost to serve EUE was developed.
- c. Do the NPV costs for each portfolio shown in the table assume that costs have been paid to meet the "trivial amounts" of EUE in each scenario?

#### RESPONSE:

- a. SPS incorporates a two-step process for the cost of expected unserved energy ("EUE"). First, SPS assumes \$1,000,000/MWh in 2018 dollars, escalated at 2% per year for the cost of EUE. This ensures EnCompass adds sufficient resources in the optimized expansion plans to ensure energy adequacy, while still limiting EnCompass' ability to allow for only minimal amounts of EUE. Second, if the modeling results show EUE, SPS replaces the cost of EUE in the EnCompass output files with \$2,000/MWh in 2018 dollars, escalated at 2% per year, this ensures the results of the analysis are not skewed by a trivial amount of EUE. However, as shown in SPS's response to Question No. TIEC 1-18, none of the scenarios included any EUE, so the second step was not necessary in SPS's 2022 RFP EnCompass analysis.
- b. As EUE represents a risk to system reliability, SPS assumed a cost of EUE that is high enough to ensure EnCompass will add new resources to avoid EUE. However, SPS limited the ability of EnCompass to allow only minimal amounts of EUE rather than add new, potentially more expensive generating resources. SPS evaluated \$1,000,000/MWh to achieve these goals. As explained in subpart a of this response, the \$2,000/MWh for EUE was used as a check.
- c. As described in subpart (a) and shown in SPS's response to Question No. TIEC 1-18 none of the scenarios included any EUE. Therefore, none of the NPV costs for each portfolio includes cost for EUE.

Preparer: Ben R. Elsey Sponsor: Ben R. Elsey

#### **QUESTION NO. TIEC 6-7:**

Referring to SPS's Response to TIEC 1-21:

- a. Please explain why SPS selected only BESS projects to meet its dispatchable requirements.
- b. Was the cost effectiveness of each firm and dispatchable load measured using the levelized cost of energy or the levelized cost of capacity? Please provide the levelized cost of energy or levelized cost of capacity (whichever was used to determine the most cost-effective firm and dispatchable load.) for each dispatchable project submitted in the RFP.

#### RESPONSE:

- a. SPS does not have a specific requirement for dispatchable capacity. SPS selected the BESS projects for reasons beyond their dispatchable characteristics. SPS's recommended portfolio includes a new dispatchable thermal PPA and a service-life extension of two existing gas generating units. However, as described in SPS's response to Question No. TIEC 1-21, SPS also selected two BESS projects as the next most-cost effective firm and dispatchable resources after the shortlisted projects.
- b. SPS assumes this question is referring to firm and dispatchable *resources*. Dispatchable resources were ranked using the levelized cost of capacity. Please refer to Attachment BRE-5(HSPM) to the Direct Testimony of Ben R. Elsey.

Preparer: Ben R. Elsey Sponsor: Ben R. Elsey

#### **QUESTION NO. TIEC 6-8:**

Referring to SPS's Response to TIEC 1-22, please provide the quantitative analysis in "live" Excel format demonstrating that it would be more economical to retire Cunningham Unit 2 in 2027 rather than extend its useful life. If no quantitative analysis was conducted, please explain why not.

#### RESPONSE:

Please refer to Exhibit SPS-TIEC 6-8(HSPM), which contains an estimate of the capital and O&M costs required to extend the useful life of Cunningham Unit 2 beyond 2027. SPS did not conduct any further "quantitative analysis in 'live' Excel format demonstrating that it would be more economical to retire Cunningham Unit 2 in 2027 rather than extend its useful life" because by 2027, Cunningham Unit 2, which had an original expected service life of 40 years, would be over 62 years old. And under current design parameters, it would not be possible to continue to operate Cunningham Unit 2 after the new solar generation is installed in 2027.

Preparer: Mark Lytal Sponsor: Mark Lytal

#### **QUESTION NO. TIEC 6-9:**

Referring to SPS's Response to OPUC 2-25, Exhibit SPS-OPUC 2-25, tab 'Gen', please provide the hourly load profiles for each of SPS's proposed solar generation projects in "live" EXCEL format with all formulae and links intact.

#### **RESPONSE:**

Please refer to tab "12x24" of Attachments ML-12, ML-13, and ML-14 to the Direct Testimony of Mark Lytal for the hourly generation profiles for the SPS Solar Projects.

Preparer: Mark Lytal Sponsor: Mark Lytal

#### **QUESTION NO. TIEC 6-10:**

Please provide the hourly load profiles for existing solar projects.

#### **RESPONSE:**

Please refer to Exhibit SPS-OPUC 3-10(V) for the hourly solar production of the Chaves and Roswell solar facilities for the years 2020–2022.

Please refer to Exhibit SPS-TIEC 6-10(V) for the hourly solar production of the Sun Edison solar facilities for the years 2020–2022.

Preparer: Ben R. Elsey Sponsor: Ben R. Elsey

#### **QUESTION NO. TIEC 6-11:**

Referring to SPS's Response to OPUC 2-25, Exhibit SPS-OPUC 2-25:

- a. Please explain why only the Waha natural gas prices were used to estimate the market electricity prices.
- b. Please identify which natural gas hub locations were used to calculate the Low and High case gas prices.

#### **RESPONSE:**

a. SPS did not use the Waha natural gas price forecast to estimate the base market energy prices. As shown in Exhibit SPS-TIEC 6-5(CONF), SPS used the average Southwest Power Pool South Hub market energy prices from Wood-Mackenzie and IHS Markit (now S&P Global).

SPS then calculated a market implied heat rate from the base market energy prices using the Waha natural gas price. SPS then multiplied the market implied heat rate by SPS's low and high Waha natural gas prices to calculate the low and market energy prices. SPS used the Waha natural gas forecast due to its proximity to the Southwest Power Pool South hub.

b. Please refer to SPS's response to subpart (a) of this request.

Preparer: Ben R. Elsey Sponsor: Ben R. Elsey

#### CERTIFICATE OF SERVICE

I certify that on the 8th day of November 2023, notice of the filing of the foregoing instrument with the PUCT was served on all parties of record by electronic service in this proceeding in accordance with the Order Suspending Rules issued in Project No. 50664.

Andrea Moore Stover

SOUTHWESTERN PUBLIC SERVICE COMPANY

Exhibit SPS-TIEC 6-2(HSPM) SOAH Docket No. 473-24-02691

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SOUTHWESTERN PUBLIC SERVICE COMPANY'S RESPONSE TO TEXAS INDUSTRIAL ENERGY CONSUMERS' SIXTH REQUEST FOR INFORMATION QUESTIONS NOS. 6-1 THROUGH 6-11

## **Exhibit SPS-TIEC 6-2(HSPM)**

### See files entitled:

Exhibit SPS-TIEC 6-2(a)(HSPM).xlsm Exhibit SPS-TIEC 6-2(b)(HSPM).xlsm Exhibit SPS-TIEC 6-2(c)(HSPM).xlsm Exhibit SPS-TIEC 6-2(d)(HSPM).xlsm Exhibit SPS-TIEC 6-2(e)(HSPM).xlsm

### CONFIDENTIAL MATERIALS PROTECTED PURSUANT TO PROTECTIVE ORDER ISSUED IN DOCKET NO. 55255

SOUTHWESTERN PUBLIC SERVICE COMPANY

Exhibit SPS-TIEC 6-5(CONF) SOAH Docket No. 473-24-02691

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## **Exhibit SPS-TIEC 6-5(CONF)**

See file entitled:

Exhibit SPS-TIEC 6-5(CONF).xlsx

SOUTHWESTERN PUBLIC SERVICE COMPANY

Exhibit SPS-TIEC 6-8(HSPM) SOAH Docket No. 473-24-02691

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## **Exhibit SPS-TIEC 6-8(HSPM)**

See file entitled:

Exhibit SPS-TIEC 6-8(HSPM).xlsx

AMEND ITS CERTIFICATE OF

**CONSTRUCT GENERATION** 

Exhibit SPS-TIEC 6-10(V) SOAH Docket No. 473-24-02691 PUC Docket No. 55255

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## Exhibit SPS-TIEC 6-10(V)

See file entitled:

Exhibit SPS-TIEC 6-10(V).xlsx

The following files are not convertible:

Exhibit SPS-TIEC 6-10(V).xlsx

Please see the ZIP file for this Filing on the PUC Interchange in order to access these files.

Contact centralrecords@puc.texas.gov if you have any questions.