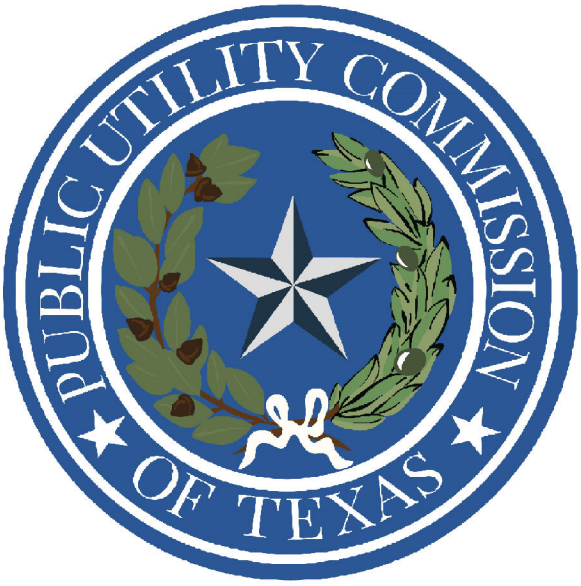

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Public Utility Commission of Texas

December 14, 2022

Your ref: TPWD Project No. 47298

John Silovsky
Wildlife Habitat Assessment Program
Wildlife Division
Texas Parks & Wildlife Department
4200 Smith School Road
Austin, Texas 78744-3291

Re: Response to Texas Parks and Wildlife Department Recommendations and Comments related to PUC Docket No. 52485, SOAH Docket No. 473-22-1073, *Application of Southwestern Public Service Company to Amend Its Certificate of Convenience and Necessity to Convert Harrington Generating Station from Coal to Natural Gas*

Dear Mr. Silovsky:

In accordance with the requirements of §12.0011 of the Texas Parks and Wildlife Code, the Public Utility Commission of Texas provides a written response to the recommendations and comments of the Texas Parks and Wildlife Department filed in the above styled case.

The Commission's responses are contained in the attached proposal for decision and order. Because the Department's recommendations and comments were submitted in connection with a contested case, the Commission's decisions were based on admitted evidence and matters officially noticed as required by the Administrative Procedures Act, Tex. Gov't Code Ann. § 2001.141.

If you have any questions or need further information, please do not hesitate to contact me at 512-936-7215.

Sincerely,

Stephen Journeay,
Commission Counsel

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State Office of Administrative Hearings

Kristofer S. Monson
Chief Administrative Law Judge

July 25, 2022

TO: Stephen Journeay, Commission Counsel
Commission Advising and Docket Management
William B. Travis State Office Building
1701 N. Congress, 7th Floor
Austin, Texas 78701

VIA EFILE TEXAS

Re: SOAH Docket No. 473-22-1073; PUC Docket No. 52485; *Application of Southwestern Public Service Company to Amend its Certificate of Convenience and Necessity to Convert Harrington Generating Station from Coal to Natural Gas*

Dear Mr. Stephen Journeay

Enclosed is the Proposal for Decision (PFD) in the above-referenced case. By copy of this letter, the parties to this proceeding are being served with the PFD.

Please place this case on an open meeting agenda for the Commissioners' consideration. Please notify the undersigned Administrative Law Judges and the parties of the open meeting date, as well as the deadlines for filing exceptions to the PFD, replies to the exceptions, and requests for oral argument.

Cassandra Quinn,
Administrative Law Judge
Enclosure

Ross Henderson,
Administrative Law Judge

xc:
All Parties of Record

SOAH Docket No. 473-22-1073 Suffix: PUC
PUC Docket No. 52485

BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

APPLICATION OF SOUTHWESTERN PUBLIC SERVICE COMPANY TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY TO CONVERT HARRINGTON GENERATING STATION FROM COAL TO NATURAL GAS

TABLE OF CONTENTS

LIST OF ACRONYMS AND ABBREVIATIONS

TERM	DEFINITION
Agreed Order	Agreed order executed by SPS and the TCEQ and approved in October 2020
AFUDC	Allowance for Funds Used During Construction
Application	SPS's application filed August 27, 2021
ALJ	Administrative Law Judge
AXM	Alliance of Xcel Municipalities
CCN	Certificate of Convenience and Necessity
CO_2	Carbon Dioxide
Commission	Public Utility Commission of Texas
CTG	Combustion Turbine Generator
EA	Environmental Assessment
FERC	Federal Energy Regulatory Commission
Harrington	Harrington Generating Station
IE	Independent Evaluator
IRP	Integrated Resource Plan
kW	Kilowatt
MW	Megawatt
NAAQS	National Ambient Air Quality Standard
NPV	Net Present Value
O&M	Operations and Maintenance
OPUC	Office of Public Utility Counsel
PFD	Proposal for Decision
PO	Preliminary Order
PURA	Public Utility Regulatory Act
RFI	Request for Information
RFP	Request for Proposals
SOAH	State Office of Administrative Hearings
SO_2	Sulfur Dioxide
SPS	Southwestern Public Service Company
Staff	Staff of the Public Utility Commission of Texas

TERM	DEFINITION
SWEPCO	Southwestern Electric Power Company
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TIEC	Texas Industrial Energy Consumers
Tolk	Tolk Generating Station
TPWD	Texas Parks and Wildlife Department

SOAH Docket No. 473-22-1073 **Suffix: PUC**
PUC Docket No. 52485

BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS

APPLICATION OF SOUTHWESTERN PUBLIC SERVICE COMPANY TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY TO CONVERT HARRINGTON GENERATING STATION FROM COAL TO NATURAL GAS

PROPOSAL FOR DECISION

Southwestern Public Service Company (SPS) filed an application (Application) with the Public Utility Commission of Texas (Commission) requesting to amend its certificate of convenience and necessity (CCN) to convert the three existing coal-powered steam turbine units at the Harrington Generating Station (Harrington) to be fueled by natural gas. The Application also seeks authorization for SPS to construct, own, and operate a new pipeline to supply natural gas to Harrington. For the reasons discussed below, the Administrative Law Judges (ALJs) recommend granting the Application.

I. JURISDICTION, NOTICE, AND PROCEDURAL HISTORY (PRELIMINARY ORDER (PO) ISSUES 1-7)

The Commission has jurisdiction over the Application under Public Utility Regulatory Act (PURA)[1] §§ 14.001, 37.051, 37.053, 37.056, and 37.058 and 16 Texas Administrative Code (TAC) § 25.101(b). The State Office of Administrative Hearings (SOAH) has jurisdiction over all matters relating to the conduct of a hearing in this matter under Texas Government Code § 2003.049 and PURA § 14.053.

SPS filed the Application on August 27, 2021.[2] The Commission ALJ found the Application administratively complete on October 6, 2021.[3] The Application was referred to SOAH on December 13, 2021.[4] The following parties were granted intervenor status in this docket: Adobe Creek, Ltd.; Windtree Manor, Ltd.; Texas Industrial Energy Consumers (TIEC); Sierra Club; the Alliance of Xcel Municipalities (AXM); and the Office of Public Utility Counsel (OPUC).[5] Commission staff (Staff) is also a party to this docket. On December 16, 2021, the Commission issued a Preliminary Order containing a list of issues to be addressed in this proceeding.[6] The Preliminary Order also concluded that this proceeding is not subject to any deadline in PURA and determined as a threshold matter that the

[1] Public Utility Regulatory Act, Tex. Util. Code §§ 11.001-66.016 (PURA).

[2] SPS Ex. 1 (Application).

[3] Commission Order No. 4 (Oct. 6, 2021).

[4] Order of Referral (Dec. 13, 2021).

[5] Commission Order No. 2 (Sept. 21, 2021); Commission Order No. 5 (Oct. 21, 2021); Commission Order No. 8 (Dec. 3, 2021); SOAH Order No. 2 (Jan. 5, 2022).

[6] Preliminary Order (Dec. 16, 2021).

Commission's jurisdiction over the Application encompasses SPS's request for authorization to construct a natural gas pipeline to supply Harrington.[7]

On November 4, 2021, SPS filed its proof of notice attesting to the method and recipients of notice and supplemented that proof of notice on November 23, 2021.[8] On November 29, 2021, Staff recommended notice be found sufficient under 16 TAC § 22.52(a). In Order No. 7 issued on November 29, 2021, the Commission ALJ found the notice sufficient.

SPS filed direct testimony with its Application. OPUC, AXM, and Sierra Club filed direct testimony on March 25, 2022. Staff filed direct testimony on April 11, 2022. SPS filed rebuttal testimony on April 13, 2022. TIEC filed a statement of position on April 20, 2022. Staff filed a statement of position on April 21, 2022. Neither Adobe Creek, Ltd. nor Windtree Manor, Ltd. filed testimony or a statement of position in this proceeding.

The hearing on the merits in this matter was held on April 26, 2022, by videoconference before ALJs Cassandra Quinn and Ross Henderson. SPS, AXM, Sierra Club, OPUC, TIEC, and Staff participated in the hearing. Neither Adobe Creek, Ltd. nor Windtree Manor, Ltd. appeared at the hearing. Initial briefs were filed by SPS, AXM, Sierra Club, OPUC, and Staff on May 11, 2022. The same parties each timely filed reply briefs on May 25, 2022. No other parties submitted briefing.

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[7] Preliminary Order (Dec. 16, 2021) at 3-6.

[8] SPS Exs. 2-3 (SPS Proof of Notice); SPS Ex. 4 (SPS Supplement to Proof of Notice).

II. APPLICABLE LAW

Under PURA § 37.056(a), the Commission may grant a CCN application only if it finds the certificate is necessary for the service, accommodation, convenience, or safety of the public. The Commission must consider the factors listed in PURA § 37.056(c):

> (1) the adequacy of the existing service;
> (2) the need for additional service;
> (3) the effect of granting the certificate on the recipient of the certificate and any electric utility serving the proximate area; and
> (4) other factors, such as:
> (A) community values;
> (B) recreational and park areas;
> (C) historical and aesthetic values;
> (D) environmental integrity;
> (E) the probable improvement of service or lowering of cost to consumers in the area if the certificate is granted; and
> (F) to the extent applicable, the effect of granting the certificate on the ability of this state to meet the goal established by [PURA § 39.904(a)].

These factors reflect potentially competing policies and interests whose relative weight will vary with the particular circumstances of each case.[9]

[9] *See Public Util. Comm'n of Tex. v. Texland Elec. Co.*, 701 S.W.2d 261, 266-67 (Tex. App.—Austin 1985, writ ref'd n.r.e.) ("To implement in particular circumstances such broadly stated legislative objectives and standards, the Commission must necessarily decide what they mean in those circumstances; and because some of them obviously compete *inter se*, the agency may in some cases be required to adjust or accommodate the competing policies and

Consequently, "[n]one of the statutory factors is intended to be absolute in the sense that any one shall prevail in all possible circumstances," but must instead be balanced to the end of furthering "the overall public interest."[10]

After considering the listed factors, the Commission may grant the certificate as requested; grant the certificate for the construction of a portion of the requested facility or the partial exercise of the requested right or privilege; or refuse to grant the certificate.[11]

III. BACKGROUND

Harrington consists of three coal-powered steam turbine units located north of Amarillo in Potter County, Texas, with a total net capacity of 1,050 megawatts (MW).[12] Harrington Unit 1 has a net capacity of 340 MW, and Harrington Units 2 and 3 each have a net capacity of 355 MW. All three of the plant's boilers were designed to burn both coal and natural gas.

Pursuant to an agreed order (Agreed Order) executed by SPS and the Texas Commission on Environmental Quality (TCEQ), Harrington must cease operating on coal by January 1, 2025.[13] The Agreed Order resulted from an exceedance of the

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interests involved. For example, a 'need' for additional service implies a relative requirement, ranging from imperative need to one that is minimal; and, if a 'need' be sufficiently grave, it may have to prevail notwithstanding an adverse [e]ffect upon another interest, such as the environment," and *vice versa*).

[10] *Texland Elec. Co.*, 701 S.W.2d at 267.

[11] PURA § 37.056(b).

[12] SPS Ex. 5 (Grant Dir.) at 9.

[13] SPS Ex. 15 (West Dir.) at 10.

National Ambient Air Quality Standard (NAAQS) for sulfur dioxide (SO_2), as shown by air quality monitoring data collected in Potter County near Harrington from 2017 to 2019.[14] Harrington is the primary source of SO_2 emissions in Potter County and was deemed to be the major contributor to the exceedance of the NAAQS.[15] SPS was required to develop an implementation plan to comply with the standard and show that Harrington would achieve compliance by 2025.[16] After evaluating its compliance options (discussed below), SPS determined that converting the units to operate on natural gas was the best option. SPS presented this proposal to the TCEQ, and it is reflected in the Agreed Order, which was approved in October 2020.[17]

The conversion would require modifying each of Harrington's existing units and the plant's natural gas supply system, including the construction of a new 20-inch-diameter natural gas supply pipeline.[18] SPS has proposed four potential natural gas pipeline routes, each of which would tap into existing gas pipelines northwest of Amarillo and run approximately 20 to 22 miles to Harrington.[19] SPS estimates the cost of conversion ranges from $65 million to $75 million on a total company basis, including allowance for funds used during construction (AFUDC), with $45 million to $53 million of the cost allocated to Texas.[20] The majority of the cost is due to the proposed pipeline, which is estimated to cost $57 million total

[14] SPS Ex. 15 (West Dir.) at 8-9 & Att. JLW-1 at 2-3.

[15] SPS Ex. 15 (West Dir.) at 8-9.

[16] SPS Ex. 5 (Grant Dir.) at 11; SPS Ex. 15 (West Dir.) at 10.

[17] SPS Ex. 15 (West Dir.) at 10.

[18] SPS Ex. 12 (Lytal Dir.) at 8.

[19] SPS Ex. 1 (Application) at 6.

[20] SPS Ex. 12 (Lytal Dir.) at 18.

company.[21] SPS desires pipeline construction to begin in 2023 to support a commissioning date in August 2024 and conversion of the generating units in September 2024 following peak summer demand, with the final unit conversion in Spring 2025.[22]

AXM and Sierra Club oppose SPS's proposal to convert all three units at Harrington to natural gas. AXM contends that SPS has not shown that conversion is a better option than replacing Harrington with new gas-fired combustion turbines at the same site. Sierra Club proposes that SPS convert only two of the three Harrington units and either retire or "mothball"[23] the third unit. Staff and OPUC support SPS's conversion proposal, but advocate that the Commission impose certain conditions on approval.[24] AXM and Sierra Club also propose certain conditions if, contrary to their recommendations, the Commission grants SPS's Application. Their various proposed conditions are described below. The only party to address the routing of the proposed natural gas pipeline was Staff, which supports SPS's proposed Route 2.

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[21] SPS Ex. 12 (Lytal Dir.) at Att. ML-1.

[22] SPS Initial Brief at 6.

[23] "Mothball" refers to "the state in which a unit is unavailable for service but can be brought back into service after some repairs with appropriate amount of notification, typically weeks or months." SPS Ex. 13 (Lytal Reb.) at 9-10.

[24] Staff Initial Brief at 8; OPUC Initial Brief at 2-4. Staff's Initial Brief does not contain page numbers, so citations in this PFD are based on the page numbering in the brief's table of contents, which identifies the Introduction as being on page 8.

IV. DISCUSSION AND ANALYSIS

Of the factors the Commission must consider under PURA § 37.056(c), the parties' arguments generally focus on the need for additional service and the potential cost to consumers. The parties do not dispute that SPS will have a need for capacity when it ceases coal operations at Harrington at the end of 2024.[25] However, AXM and Sierra Club question whether the conversion of Harrington's three units to natural gas is the best, most cost-effective solution to meet that need. The ALJs therefore address the factors of need and cost first. Next, the ALJs discuss the various conditions the parties propose be applied to the project, followed by a brief summary of the remaining issues identified in the Commission's Preliminary Order, which are generally uncontested.

A. ASSESSMENT OF NEED AND ECONOMICS (PO ISSUES 10-16, 18, 30, 31, AND 32)

1. SPS's Proposal to Convert Harrington to Natural Gas

SPS explains that it will continue to need the capacity and voltage support provided by Harrington well after 2024 when the plant must cease coal operations.[26] According to SPS, operating its system without Harrington or adequate replacement resources would create serious reliability risks, especially during severe weather events, depending on the availability of renewable

[25] *See* AXM Ex. 1 (Norwood Dir.) at 5; Sierra Club Ex. 1 (Glick Dir.) at 29; OPUC Ex. 1 (Nalepa Dir.) at 24-25.

[26] SPS Initial Brief at 9.

generation and the voltage demanded by the system.[27] Without Harrington, SPS would also be forced below the Southwest Power Pool's minimum reserve margin of 12%.[28]

In addressing this need, SPS maintains that it has been proactive and thorough in examining all the potential scenarios for replacing, converting, or retrofitting Harrington.[29] In 2019, before entering into the Agreed Order, SPS assessed its compliance options to reduce Harrington's SO_2 emissions by conducting an economic analysis that evaluated (1) maintaining coal operations by installing environmental controls, or (2) ceasing coal operations by either converting the units to operate on natural gas or retiring the units.[30] The analysis also evaluated a combination of these solutions, for example, installing environmental controls on two units and retiring the remaining unit. Due to the high cost of installing environmental controls, SPS concluded it should cease coal operations at Harrington before 2025. Of the remaining options available, SPS determined that converting the units to operate on natural gas was a reasonable and cost-effective solution. That option was then reflected in the Agreed Order.[31]

In September 2020, SPS conducted a Request for Information (RFI) to identify potential and existing generation resources to replace its coal-fired

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[27] SPS Ex. 5 (Grant Dir.) at 15.

[28] SPS Ex. 7 (Elsey Dir.) at 10.

[29] SPS Initial Brief at 3; SPS Reply Brief at 7-10.

[30] SPS Ex. 7 (Elsey Dir.) at 24.

[31] SPS Ex. 15 (West Dir.) at 10.

generation, including the Harrington units.[32] The RFI sought to understand the extent to which market participants could develop, construct, and bring to commercial operation generation resources by the deadline for ceasing coal operations.[33] Based on commitments SPS made in New Mexico, SPS hired an Independent Evaluator (IE) to oversee the RFI process, the bids received, and SPS's analysis of the options.[34] SPS received 18 bids ranging from new gas units, renewable energy, and battery storage located throughout SPS's territory, including proposals to interconnect new generation at Harrington and other SPS sites.[35] SPS contends the RFI, which was not binding on respondents, was more effective than a Request for Proposals (RFP) because the RFI presented a "very low bar" for participation and avoided the chilling effect that RFPs typically have due to their binding nature.[36]

In 2021, SPS updated its economic analysis of the options for Harrington using different modeling software and the cost information obtained from the RFI. SPS relies on the updated analysis to support its request in this case. The updated analysis specifically evaluated the following six options:

Scenario 1: Retire all three Harrington units

Scenario 2: Convert all three Harrington units to operate on natural gas

[32] SPS Ex. 5 (Grant Dir.) at 10; SPS Ex. 10 (Koujak Dir.) at 7.

[33] SPS Ex. 10 (Koujak Dir.) at 9.

[34] SPS Ex. 10 (Koujak Dir.) at 7.

[35] Transcript (Tr.) at 70.

[36] SPS Initial Brief at 12-15; Tr. at 71-72.

Scenario 3: Install Dry Sorbent Injection (an environmental control for SO_2 emissions) on all three Harrington units

Scenario 4: Install Spray Dryer Absorber (an environmental control for SO_2 emissions) on all three Harrington units

Scenario 5: Retire Harrington Units 1 & 2 / Convert Harrington Unit 3 to operate on natural gas

Scenario 6: Retire Harrington Unit 1 / Convert Harrington Units 2 & 3 to operate on natural gas

For each of the scenarios, SPS conducted sensitivity analyses to test key variables, including: (1) base, high, and low natural gas and market energy price forecasts; (2) transmission interconnection costs for new resources of $200/kilowatt (kW), $400/kW, and $600/kW; and (3) financial (median) and planning (high) load forecasts.[37] Factoring in the sensitivity analyses, SPS's updated economic analysis included 36 different modeling runs.[38]

The results are presented over two different periods: (1) a 3-year period (2022-2024), and (2) a 20-year period (2022-2041).[39] For SPS's base case scenario, which used the base natural gas price forecast, $400/kW interconnection cost, and planning load forecast, the modeling produced the following results:

[37] SPS Ex. 7 (Elsey Dir.) at 29; *see also* SPS Ex. 14 (Goodenough Dir.) at 7, 14 (explaining difference between the financial and planning load forecasts).

[38] SPS Ex. 10 (Koujak Dir.) at Att. DDK-1 at 14.

[39] SPS Ex. 7 (Elsey Dir.) at 31.

Planning Load Forecast (Base Gas - $400/kW network upgrades)

Scenario	Action Period Delta ($M)	Action Period NPV ($M) 2022-2024	Planning Period Delta ($M)	Planning Period NPV ($M) 2022 - 2041
Scenario 2	$0	$ 2,450	$0	$ 11,949
Scenario 1	$168	$ 2,618	$123	$ 12,072
Scenario 3	($10)	$ 2,440	$439	$ 12,388
Scenario 4	($10)	$ 2,440	$695	$ 12,644
Scenario 5	$92	$ 2,542	$62	$ 12,011
Scenario 6	$39	$ 2,490	($5)	$ 11,944

SPS's proposed "convert all" scenario (Scenario 2) is listed first, with the net present value (NPV) cost difference of the remaining options shown over the short-term and long-term periods.

SPS emphasizes that its modeling used assumptions that were intentionally advantageous for an early retirement of all three Harrington units to "stress test" whether early retirement could be economical, even under extremely favorable, unlikely, and aggressive assumptions for replacement resources.[40] Using those favorable assumptions for alternatives, SPS acknowledges its modeling shows that retiring one Harrington unit could potentially cost slightly less—$5 million (NPV) over the 20-year planning period—but argues those potential savings would be

[40] SPS Initial Brief at 16. In particular, the modeling assumed an "impractical" amount of renewable generation between 2023 and 2025; that the renewable generation would qualify for existing federal tax credits that step down or expire after 2025; that interconnection costs would be lower than the current interconnection cost of $934/kW; that combustion turbines and battery energy storage resources would be exempt from the additional network upgrade costs on the assumption they would use generator replacement rules; and that new renewable generation could be co-located at SPS's Tolk and Harrington sites using surplus interconnection rules and without requiring transmission network upgrades. SPS Ex. 8 (Elsey Reb.) at 32-34.

more than offset by $39 million (NPV) in additional costs in the short-term period of 2022-2024.[41] SPS notes that the same size pipeline is needed whether two or three units are converted, which results in the incremental cost of converting the third unit being only $2.6 million.[42]

In addition, SPS asserts that qualitative issues, not just quantifiable costs, should be fully considered in this case.[43] SPS contends that full conversion presents the lowest risk that SPS will lack needed capacity in 2026 and beyond.[44] SPS notes that no economic modeling tool is able to independently predict emergency situations or locational reliability constraints that could cause all three units to be needed after 2024.[45] Full conversion also allows SPS to seamlessly maintain its existing 1,050 MW of interconnection rights at Harrington.[46] If SPS was required to retire even one unit, it could be forced to relinquish 340 MW of interconnection rights and thereby limit its options for existing or future generation at the site.[47] The IE, SPS witness D. Dean Koujak, testified that it is hard to quantify the importance of SPS's interconnection rights, but there is no doubt those rights are increasingly valuable due to the costs related to incorporating new-build resources into the Southwest Power Pool system.[48] According to SPS, conversion also avoids

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[41] SPS Ex. 8 (Elsey Reb.) at 34.

[42] SPS Initial Brief at 11; SPS Ex. 7 (Elsey Dir.) at 37.

[43] SPS Initial Brief at 19.

[44] SPS Initial Brief at 4.

[45] SPS Ex. 11 (Koujak Reb.) at 6.

[46] SPS Ex. 11 (Koujak Reb.) at 9.

[47] SPS Ex. 11 (Koujak Reb.) at 6.

[48] SPS Ex. 11 (Koujak Reb.) at 11.

supply chain and inflation risks if SPS were required to retire Harrington and replace it with new units.[49]

Considering all these factors, SPS maintains that full conversion of Harrington is the best, most cost-effective option among the feasible alternatives to meet its continued need for capacity. SPS notes that Harrington currently serves as a peaking unit providing substantial reactive power, voltage support, and frequency support and that, after conversion, it can continue in this role and will actually be more responsive and flexible with natural gas as its fuel source.[50]

2. Alternative Proposal to Retire and Replace Harrington

a) AXM's Position

AXM contends that SPS has not shown that converting Harrington to run on natural gas is the best option when compared to retiring and replacing the plant with new combustion turbine generators (CTGs) at the same site. Therefore, AXM urges that SPS's proposed conversion of Harrington be rejected.

AXM does not dispute that SPS will have a capacity need in 2025 without the current Harrington units, but asserts that SPS needs new CTGs, not converted coal units.[51] AXM notes that the likely useful life of the converted Harrington units

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[49] SPS Ex. 11 (Koujak Reb.) at 8.

[50] SPS Initial Brief at 12; SPS Ex. 13 (Lytal Reb.) at 7.

[51] AXM Initial Brief at 4-5.

is only 10-15 years, whereas the average useful life of new CTGs is 40-45 years.[52] AXM also questions SPS's contention that the converted units will support intermittent operations of renewable resources. AXM witness Scott Norwood testified that the ramp rate for the converted units is only 2 MW per minute and that SPS's production modeling of the converted units did not consider the proposed Harrington gas unit start-up times, which are critical capabilities for reliable support of renewable energy resources.[53] In addition, SPS's own production modeling for its 2021 economic analysis indicated that the average annual capacity factor of the converted Harrington units would be less than 0.07% during their first 12 years of service (2025-2036).[54] According to Mr. Norwood, this modeling raises serious questions regarding SPS's proposal to invest $75 million for conversion and a new gas pipeline when the converted units are not ideally suited for peaking service and will rarely operate.[55]

AXM points out that SPS already plans to install new CTGs in the next several years to meet its increasing capacity requirements by 2030, as shown by SPS's New Mexico Integrated Resource Plan (IRP).[56] Thus, allowing SPS to move forward with conversion rather than replacement is akin, in AXM's view, to renovating a home when it is known that the home will soon need to be rebuilt.[57] AXM argues that SPS's customers will be forced to pay $75 million now, only to

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[52] AXM Ex. 1 (Norwood Dir.) at 8; Tr. at 169-71.

[53] AXM Ex. 1 (Norwood Dir.) at 8 & Att. SN-3.

[54] AXM Ex. 1 (Norwood Dir.) at 8.

[55] AXM Ex. 1 (Norwood Dir.) at 8.

[56] AXM Ex. 1 (Norwood Dir.) at 9.

[57] AXM Initial Brief at 5.

receive a generating plant that is not suited for backing up renewable generating resources, does not provide peaking service benefits, and has only one-fourth the service life of a new CTG unit.

Moreover, AXM notes that SPS's 2021 economic analysis showed that the cost difference, on an NPV basis, between converting Harrington to natural gas versus retiring and replacing the plant is approximately 1% more over a 20-year period (2022-2041). According to AXM, this difference is nominal and well within the expected range of a modeling error for a 20-year forecast of a large utility system, such as SPS's.[58] Further, when evaluating the conversion option, SPS's analysis did not factor in the additional cost of later replacing the converted units with new generating resources in 10-15 years.[59]

Additionally, AXM argues that SPS's forecasted costs include questionably high interconnection costs.[60] SPS's economic analyses evaluated interconnection costs of $200/kW, $400/kW, and $600/kW, and SPS stated that interconnection costs may be as high as $934/kW.[61] Yet, according to AXM, SPS failed to support these costs with concrete evidence in the form of a firm bid or an instance of another utility paying such high amounts for interconnection costs.[62] Further, AXM notes that SPS confirmed that, as long as new generating resources are in service within three years of the retirement date, SPS will maintain its

[58] AXM Ex. 1 (Norwood Dir.) at 12.

[59] AXM Reply Brief at 4.

[60] AXM Initial Brief at 10-11.

[61] SPS Ex. 7 (Elsey Dir.) at 40-41.

[62] AXM Initial Brief at 10-11.

interconnection rights at Harrington if it retires and replaces the existing units with new generating resources.[63] Thus, AXM urges that SPS's assumptions regarding high interconnection costs should be rejected.

In response to SPS's contentions that, absent conversion, it would not be able to provide necessary transmission-voltage support or meet the Southwest Power Pool's 12% minimum reserve margin, AXM asserts that SPS has sufficient time to retire Harrington and replace its coal units with new CTGs at the same site, although AXM acknowledges that SPS would need to move expeditiously to conduct a competitive-bidding process for the replacement resources.[64] AXM also asserts that SPS can supplement any interruption to capacity during construction of replacement generating resources by deferring its current plans to retire approximately 650 MW of capacity supplied from other SPS gas-fired units over the next several years.[65] Similarly, SPS could supplement its capacity requirements by relying on short-term capacity purchases as it has done in the past.[66]

AXM also criticizes SPS's issuance of a non-binding RFI when evaluating replacement capacity options, rather than a binding RFP.[67] AXM notes that SPS's 2020 RFI discloses to respondents that any information submitted in response is not binding and does not constitute a commitment upon which SPS will take

[63] AXM Ex. 14 (SPS Response to AXM RFI No. 5-18).

[64] AXM Reply Brief at 2-3.

[65] AXM Ex. 1 (Norwood Dir.) at 9.

[66] AXM Ex. 1 (Norwood Dir.) at 9.

[67] AXM Initial Brief at 11-13.

action.[68] Without a binding bid, AXM asserts that the Commission does not have a reliable benchmark against which to evaluate whether SPS's customers are receiving the best option.

Additionally, AXM notes that the RFI was intended to analyze replacement generating resources for SPS's *Tolk* Generating Station (Tolk), not Harrington. Thus, AXM concludes that the RFI was not tailored to attract bids concerning replacement of Harrington, making it more difficult for respondents to provide a meaningful and accurate response.

AXM also asserts that the results of the RFI are not reliable because the RFI was unclear as to when SPS would need replacement resources. The RFI states that SPS has a minimum net capacity need of approximately 500 MW beginning in 2023 and a maximum net capacity need of approximately 2,200 MW beginning summer 2025.[69] However, the RFI also states that SPS will consider a scenario in which all of its coal-burning units are retired or replaced before 2030.[70] AXM contends that it is nearly impossible to provide accurate pricing information to a solicitation if the in-service date is a moving target and the solicitation itself is not binding.

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[68] AXM Initial Brief at 12. In particular, the RFI states that:

> This announcement constitutes a Request for Information ("RFI") notice soliciting current pricing, technical characteristics, and other relevant information for potential generating resources. This is not a Request for Proposal ("RFP") or solicitation for formal proposals. This RFI does not constitute a commitment, implied or otherwise, that SPS will take action in this matter. SPS will not be responsible for any costs incurred in furnishing SPS responsive information.

AXM Ex. 2 at 4 (SPS Response to AXM RFI No. 1-18).

[69] AXM Ex. 2 at 4.

[70] AXM Ex. 2 at 4.

AXM disagrees with SPS that the RFI produced a more robust response than an RFP would have.[71] While SPS states that the binding nature of an RFP typically has a chilling effect on responses,[72] AXM questions the value of responses that are not for a specific project and that do not provide a firm offer to conduct work within a stated timeline. According to AXM, SPS's proposition that more non-binding responses are better than fewer, but more qualified and binding, responses should be rejected. Similarly, the idea that it is better to set a "low bar" for participation through an RFI rather than a "high bar" through an RFP is illogical, in AXM's view, because SPS should be aiming to gather reliable sources of pricing information, not simply the most pricing information. Finally, although AXM acknowledges that an RFP is more costly for developers to respond to, AXM notes that whoever ultimately carries out the work will have to go through the time and expense of providing a firm pricing estimate; thus, the additional cost of the RFP to developers is immaterial.

b) SPS's Position

SPS contends that AXM's primary recommendation for new gas generation is not justified by its high cost.[73] SPS states that the installation of new CTGs would be significantly more expensive than conversion, at least $500 million more by a

[71] AXM Reply Brief at 5-6

[72] SPS Initial Brief at 14.

[73] SPS Initial Brief at 17-19.

conservative estimate.[74] According to SPS, it is misleading for AXM to characterize the cost difference as within 1% because SPS analyzed the economics of the options using its *total system* cost of $12 billion.[75] Based on that analysis, retiring and replacing all units at Harrington would cost at least $123 million more from 2022-2041 than converting all of the units. While, mathematically, the cost difference can be described as within 1%, it does not reflect the true cost impact to customers, in SPS's view, because it is simply comparing a large number, $12 billion, to a smaller number, $123 million. In addition, the $123 million is likely understated because SPS witness Ben Elsey used favorable modeling assumptions to "stress test" the economics of the "convert all" scenario versus the "retire/replace all" scenario.[76]

SPS asserts that Mr. Norwood's analysis of the "retire/replace all" scenario reflects a misunderstanding of what SPS modeled.[77] For that scenario, SPS's modeling concluded that the most cost-effective replacement resources for Harrington were a combination of new wind, solar, and gas generation.[78] The recommendation did not include only new CTGs, nor in the timeframe Mr. Norwood identified. It is therefore incorrect to suggest that new CTGs would cost the same as the "retire/replace all" option that SPS modeled. SPS also points out that Mr. Norwood did not independently evaluate or calculate the actual costs of new CTGs. In contrast, in rebuttal testimony, Mr. Elsey estimated that,

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[74] SPS Ex. 8 (Elsey Reb.) at 37.

[75] SPS Initial Brief at 18-19; SPS Reply Brief at 15.

[76] SPS Ex. 8 (Elsey Reb.) at 29, 32-34.

[77] SPS Initial Brief at 20-22; SPS Reply Brief at 15-16.

[78] SPS Ex. 8 (Elsey Reb.) at 40-41.

compared to converting all units at Harrington, the cost of new CTGs is $160 million (NPV) more expensive over the next two years and $119 million (NPV) more expensive over the next 20 years.[79] And again, SPS asserts, the cost difference is likely greater because Mr. Elsey used conservative assumptions in the analysis.[80] For instance, his analysis of the cost to replace Harrington with new CTGs did not include the cost of a new gas pipeline; yet, to perform the replacement at the same site would still require a new pipeline and therefore this cost would not be avoided.[81]

Similarly, SPS argues that AXM's evaluation of the New Mexico IRP is flawed.[82] While the plan includes installation of new CTGs in 2030, SPS states that it is incorrect to conclude that SPS can simply accelerate that timing and install the new generation sooner because the plan assumed all Harrington units would be converted to natural gas *and* SPS would need new CTGs in the future.[83] Thus, contrary to AXM's assertion, new CTGs are needed in addition to, not instead of, the converted Harrington units.

SPS also disagrees with AXM's critiques regarding interconnection costs.[84] SPS notes that the Southwest Power Pool, not SPS, assigns interconnection costs and its current interconnection study (2017-01 DISIS) assigns interconnection

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[79] SPS Ex. 8 (Elsey Reb.) at 41-42.

[80] SPS Ex. 8 (Elsey Reb.) at 41.

[81] SPS Ex. 8 (Elsey Reb.) at 42.

[82] SPS Initial Brief at 19-20.

[83] SPS Ex. 8 (Elsey Reb.) at 43.

[84] SPS Reply Brief at 17-18.

costs of $934/kW.[85] Thus, AXM's claim that SPS has not supported interconnection costs that high is incorrect. Moreover, SPS did not use that amount in its modeling, so there is no way, SPS argues, that the highest (and actual current level of) interconnection costs could have affected the economic results. Instead, SPS's modeling used interconnection cost sensitivities of $200/kW, $400/kW, and $600/kW, which, according to SPS, favor scenarios with new resources because they suppress the likely true cost of interconnection. Even with those lower interconnection cost assumptions, converting all three units to natural gas was still more cost effective than retiring and replacing them with new generation. Had SPS modeled the full interconnection cost of $934/kW, the scenarios involving new resources would be even more expensive as compared to full conversion.

Additionally, SPS criticizes AXM's contention that SPS would be able to maintain its existing 1,050 MW of interconnection rights at Harrington if new generation is installed within three years of retiring the units, as it is not possible to meet that timeline with new CTGs.[86] The minimum procurement time period for commercial operation for new, large generation units is approximately four years *without* a backlog of interconnection requests.[87] The approximately five-year backlog for new interconnections in the Southwest Power Pool would delay the commercial operation of new units even further. Given these timing issues, SPS maintains that it would not be possible to permit and construct new CTGs in time

[85] SPS Ex. 7 (Elsey Dir.) at 40.

[86] SPS Reply Brief at 18-19.

[87] SPS Ex. 11 (Koujak Reb.) at 15-16.

to meet SPS's capacity and reliability needs; thus, AXM's proposal for new CTGs is infeasible.[88]

SPS also argues that new CTGs would not provide material operational benefits that would outweigh the capital investment.[89] SPS states that the efficiency of the current or converted Harrington units is comparable to CTGs, even if CTGs have faster start times and ramp rates.[90] Moreover, the Southwest Power Pool is a day-ahead market, so unless there is an unexpected outage, SPS will have at least 24 hours' notice of the need to use Harrington.[91] Regarding the ramp rate, Harrington can currently "ramp" up to 360 MW per hour under current operating parameters using coal and can be at full operation in less than three hours.[92] SPS explains that the ramp rate is expected to improve after conversion to natural gas operations such that it will take less than two hours for the units to reach full capacity.[93]

SPS further contends that AXM's proposal would create a reliability risk.[94] SPS notes that AXM witness Norwood recognized that if SPS did not have replacement capacity at Harrington in 2025, SPS would need to either delay retirement of existing, aging gas units or purchase short-term capacity to meet its

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[88] SPS Reply Brief at 14.

[89] SPS Initial Brief at 23; SPS Reply Brief at 14.

[90] SPS Ex. 8 (Elsey Reb.) at 37.

[91] SPS Ex. 6 (Grant Reb.) at 22.

[92] SPS Ex. 6 (Grant Reb.) at 22.

[93] SPS Ex. 6 (Grant Reb.) at 22.

[94] SPS Initial Brief at 22-24.

planning reserve margin and serve customer load.[95] However, SPS witness Mark Lytal testified that SPS does not have enough existing gas capacity to compensate for the loss of Harrington and that extending the life of only 515 MW of capacity through 2030 would cost up to $35 million.[96] For short-term capacity, SPS has no guarantee it would be available. In addition, the cost of purchasing the short-term capacity SPS would need to meet its required planning reserve margin would be approximately $20 million per year.[97] Therefore, the cost of delay caused by pursuing the new units as AXM proposes could exceed the cost of conversion.

Finally, SPS disagrees with AXM's position that SPS should have conducted a binding RFP in lieu of the RFI.[98] SPS argues that an RFP—due to its formality, costs to participate, and firm commitment required from bidders—would actually hinder SPS's ability to obtain necessary information to fully analyze the Harrington conversion scenario. SPS witness Koujak testified that an RFI is designed for the utility to get necessary information about resource options and pricing, while an RFP would trigger significant costs for developers to provide firm bids, without producing "appreciably greater certainty around pricing."[99] Also, contrary to AXM's assertions, SPS states that the RFI was not directed only at Tolk, but instead addressed replacement of all SPS's coal-fired units, which necessarily included Harrington.[100] SPS contends that conducting the Tolk and Harrington

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[95] AXM Ex. 1 (Norwood Dir.) at 9.

[96] SPS Ex. 13 (Lytal Reb.) at 8-9.

[97] SPS Ex. 8 (Elsey Reb.) at 44-45.

[98] SPS Initial Brief at 12-15; SPS Reply Brief at 19-22.

[99] Tr. at 156-57.

[100] SPS Ex. 10 (Koujak Dir.) at 7.

analyses simultaneously was reasonable given that the facilities are approximately the same size and the retirement dates being evaluated are only a year apart.[101] As to AXM's claims that the RFI was unclear, SPS responds that the timing of the need for the replacement resources was plainly stated in the RFI and that bidders had multiple ways to communicate with SPS to obtain additional information, if necessary. SPS notes that the IE was able to conclude that: (1) the design of the RFI was consistent with similar solicitations regarding its clarity and brevity; (2) SPS conducted the RFI process in a fair and complete fashion that aligned with the intent of the solicitation and overall process; and (3) SPS used a fair solicitation and evaluation process for the bids received.[102]

3. Alternative Proposal to Retire One Unit and Convert Two Units at Harrington

a) Sierra Club's Position

Sierra Club advocates that the Commission authorize SPS to convert only two Harrington units to natural gas, with the third unit, specifically Unit 1,[103] being either retired or "mothballed."

Sierra Club begins by noting that, of the six scenarios SPS modeled, only two are feasible—converting either all three or just two Harrington units to natural

[101] SPS Ex. 7 (Elsey Dir.) at 39.

[102] SPS Ex. 10 (Koujak Dir.) at Att. DDK-1 at 5, 7, 16.

[103] Sierra Club states that Unit 1 is the oldest and least efficient of the three units. Sierra Club Initial Brief at 2 n.6.

gas.[104] In contrast, the two pollution control options that SPS modeled are barred by the TCEQ Agreed Order, which requires SPS to cease coal operations, and SPS showed that alternative resources cannot be acquired in time to provide the capacity needed to retire all three (or even two) Harrington units by the end of 2024.[105]

In considering the remaining options, Sierra Club contends SPS's own economic analysis and the IE's review show that, under every resource plan scenario, retiring one Harrington unit is the least-cost, best option for customers over the long term from 2022 through 2040.[106] As discussed above, SPS's 2021 economic analysis considered six scenarios for Harrington, with various sensitivity analyses for each scenario, for a total of 36 modeling runs. The IE's report included the following table ranking the "best" and "next best" scenarios for each run, with Scenario 2 being SPS's proposed "convert all" option and Scenario 6 being Sierra Club's proposed "retire one/convert two" option:[107]

[104] Sierra Club Initial Brief at 8; Sierra Club Reply Brief at 2.

[105] SPS Ex. 8 (Elsey Reb.) at 11.

[106] SPS Ex. 10 (Koujak Dir.) at Att. DDK-1 at 14; SPS Ex. 7 (Elsey Dir.) at Att. BRE-1.

[107] SPS Ex. 10 (Koujak Dir.) at Att. DDK-1 at 14.

Table 3. Impact of Assumptions on Scenario Ranking

Load Case	Interconnection Cost Assumption	Gas Forecast	Best Scenario	Next Best Scenario
Financial	200	Base	5	6
Financial	400	Base	6	2
Financial	600	Base	6	2
Planning	200	Base	6	5
Planning[2]	***400***	***Base***	***6***	***2***
Planning	600	Base	6	2
Financial	200	High	1	6
Financial	400	High	6	2
Financial	600	High	6	2
Planning	200	High	6	1
Planning	400	High	6	2
Planning	600	High	6	2
Financial	200	Low	6	2
Financial	400	Low	6	5
Financial	600	Low	6	2
Planning	200	Low	6	2
Planning	400	Low	6	2
Planning	600	Low	6	2

Sierra Club emphasizes that for each sensitivity run, the IE's report shows that retiring one or more of the Harrington units is the best outcome.

In addition, Sierra Club notes that, under SPS's base case (the highlighted row in the table above), retiring one unit saves customers $5 million (NPV) over the long term compared to converting all three.[108] Savings are up to $24 million (NPV) under a high gas, optimistic planning load forecast and up to $55 million (NPV) under the high gas, median financial load forecast.[109] The average savings under all scenarios and sensitivities tested in SPS's modeling is $25 million (NPV).[110]

[108] SPS Ex. 7 (Elsey Dir.) at Att. BRE-1.

[109] SPS Ex. 7 (Elsey Dir.) at Att. BRE-1.

[110] SPS Ex. 10 (Koujak Dir.) at Att. DDK-1 at 15.

Furthermore, Sierra Club argues that SPS's analysis understates the costs of its preferred "convert all" scenario in several ways.[111] First, Sierra Club contends SPS substantially understates the sustaining capital costs at the plant after it converts to gas.[112] As Sierra Club witness Devi Glick explained, SPS assumes annual capital expenditures of $3.75 million for all three units after conversion, which is significantly lower than the historical average of $18.6 million annual capital cost for operating Harrington; significantly lower than the average $12.5 million annual costs other utilities report to the U.S. Energy Information Agency for operating similarly sized gas plants; and less than SPS's own reported annual $8.6 million spending at similar gas steam units, scaled to a plant the size of Harrington.[113] Ms. Glick also testified that SPS underestimates the fixed operations and maintenance (O&M) costs that could be avoided by early retirement.[114] Sierra Club argues that, by understating both the capital and fixed O&M costs of converting the units, SPS in turn understates the likely savings of retiring Unit 1.

In addition, Sierra Club contends that retiring Unit 1 would avoid potential future environmental compliance costs.[115] Sierra Club notes that, for SPS's 2021 New Mexico IRP, SPS modeled carbon price sensitivities, but did not do so here. If a carbon price is imposed, Sierra Club contends that Harrington would be impacted more than other gas plants in SPS's fleet because it is an inefficient, relatively slow-

[111] Sierra Club Initial Brief at 4, 12-15.

[112] Sierra Club Initial Brief at 12; Sierra Club Reply Brief at 10-11.

[113] Sierra Club Ex. 1 (Glick Dir.) at 40-41.

[114] Sierra Club Ex. 1 (Glick Dir.) at 45, 49.

[115] Sierra Club Initial Brief at 13-15; Sierra Club Reply Brief at 11-12.

ramping gas unit that lacks the flexibility to quickly support wind and solar.[116] Additionally, Sierra Club claims SPS has not considered the compliance risks associated with other impending environmental regulations, such as the Clean Air Act's Regional Haze Rule and the Environmental Protection Agency's recently proposed Good Neighbor Rule, each of which is designed to reduce nitrogen oxide pollution.[117] The Harrington units do not have pollution controls for nitrogen oxides,[118] so in Sierra Club's view, it was unreasonable for SPS to assume the converted units will not incur environmental compliance costs. Sierra Club notes that SPS witness Jeffery West estimated that, if SPS were required to install selective catalytic reduction to control nitrogen oxides at Harrington, it could cost as much as $20-$30 million per unit.[119]

Sierra Club also criticizes SPS for focusing on rate increases predicted by its modeling for the "retire one" scenario in the short term (2022-2024).[120] These initial cost impacts, according to Sierra Club, are largely driven by SPS's assumption that retirement necessarily accelerates SPS's collection of Unit 1's remaining book balance and return on investment. Sierra Club emphasizes that the Commission has broad authority to mitigate any rate increases that may result from the early retirement of Unit 1, including extending the depreciation of the plant or limiting shareholders' collection of profits. In support, Sierra Club cites the Commission's decisions in two prior rate cases for Southwestern Electric Power

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[116] Sierra Club Ex. 1 (Glick Dir.) at 36.

[117] Sierra Club Ex. 1 (Glick Dir.) at 19-21.

[118] Tr. at 132.

[119] Tr. at 135.

[120] Sierra Club Initial Brief at 18-20; Sierra Club Reply Brief at 13-14.

Company (SWEPCO), Docket Nos. 51415 and 46449, in which the utility proposed early plant retirements and the Commission allowed shareholders to recover their capital investment under the original depreciation schedule, but disallowed a return on that investment after retirement.[121] Sierra Club claims the same approach would be appropriate for Harrington given that SPS has continued to invest substantial amounts in the plant even though it has become increasingly uneconomic to operate and because prior extensions of the plant's useful life have already enabled SPS's shareholders to recover more return on their investment, for a longer period, than originally anticipated.[122]

In addition to the cost issues, Sierra Club asserts that SPS failed to demonstrate any firm capacity or reliability need for converting Harrington Unit 1.[123] Sierra Club notes that, under SPS's financial (median) load forecast, SPS could retire Unit 1 and still have a capacity surplus until the end of 2025,[124] giving SPS nearly four years to procure additional resources. Moreover, Sierra Club emphasizes that, according to SPS's own economic modeling supporting the Application, Unit 1 will *never* run after it is converted, and the other two units will operate only minimally.[125] Similarly, Sierra Club points out that SPS's July 2019 Transmission Planning Study concluded that the "Harrington units did not make it into the economic dispatch used in the models for this study, leading us to believe

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[121] *See Application of Southwestern Electric Power Company for Authority to Change Rates*, Docket No. 51415, Order at 12 (Jan. 14, 2022); *Application of Southwestern Electric Power Company for Authority to Change Rates*, Docket No. 46449, Order on Rehearing at 20 (Mar. 19, 2018).

[122] Sierra Club Initial Brief at 18-19.

[123] Sierra Club Initial Brief at 15-18; Sierra Club Reply Brief at 6-8.

[124] *See* SPS Ex. 8 (Elsey Reb.) at 11-12.

[125] Sierra Club Ex. 1 (Glick Dir.) at 29-30.

that these units may not be dispatched when converted."[126] Thus, Sierra Club argues SPS does not need the full capacity of Harrington and can instead meet its energy needs through a combination of its lower cost generation resources and market purchases. In addition, Sierra Club maintains that retiring Unit 1 is the lowest-risk option because SPS would retain the option to convert it to natural gas within a matter of months if SPS actually needs the capacity in the future.[127]

Sierra Club also urges that SPS's additional modeling conducted as part of its rebuttal case should be discounted.[128] This modeling, according to Sierra Club, was designed to make it appear that the Harrington units would run more frequently by arbitrarily reducing Harrington's minimum-up time from 72 hours to 18 hours and removing 1,000 MW of planned wind resources. Yet, even with those new, more favorable assumptions, Sierra Club notes that the model predicts Unit 1 will only operate at a 0.5% to 1.8% capacity factor.[129] Thus, SPS is asking customers to pay $5 million more for a power plant that operates, under SPS's most favorable assumptions, only 43 to 157 hours a year.

Finally, Sierra Club argues that the conversion of Harrington Unit 1 is not needed for transmission system reliability.[130] In support, Sierra Club cites SPS's July 2019 Transmission Planning study, which as noted above indicated that the Harrington units "may not be dispatched when converted," and further concluded

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[126] Sierra Club Ex. 1 (Glick Dir.) at Att. DG-8 at 2.

[127] Sierra Club Initial Brief at 4.

[128] Sierra Club Initial Brief at 16-17.

[129] SPS Ex. 8 (Elsey Reb.) at 50.

[130] Sierra Club Initial Brief at 17-18.

that "if the Harrington generation is converted to natural gas but is not dispatched, it is the same as retiring the generation," because unused units are not able to provide transmission support.[131] The Transmission Planning group went on to conclude that the retirement of the Harrington units "had no adverse impacts on the local SPS transmission system" and that "the Harrington generation should be replaced and relocated to the south west part of the SPS transmission system."[132] Sierra Club asserts that, if the three units can be retired without transmission reliability issues, SPS could certainly retire Unit 1 and convert the other two units while maintaining safe and reliable service.

b) SPS's Position

SPS maintains that converting all three units is more cost effective than converting only two units.[133] SPS notes that, because the same size gas pipeline is needed to serve either two or three units,[134] the incremental cost to convert the third unit is only $2.6 million.[135] The investment of that incremental amount allows SPS to maintain the 340 MW of capacity at Unit 1, which equates to a cost of $7.65/kW.[136] For comparison, two new combustion turbines that provide

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[131] Sierra Club Ex. 1 (Glick Dir.) at Att. DG-8 at 2, 20.

[132] Sierra Club Ex. 1 (Glick Dir.) at Att. DG-8 at 14, 21.

[133] SPS Initial Brief at 25.

[134] SPS Ex. 12 (Lytal Dir.) at 11.

[135] SPS Ex. 8 (Elsey Reb.) at 9.

[136] SPS Ex. 8 (Elsey Reb.) at 10.

approximately the same amount of firm and dispatchable capacity (400 MW) would be expected to cost at least $200 million or $500/kW.[137]

SPS also disagrees with Sierra Club that SPS's economic analysis supports retiring one unit. SPS acknowledges that the analysis shows there could be a savings of $5 million (NPV) in a "retire one" scenario versus full conversion over the long-term period (2022-2041).[138] However, between 2022-2024, the modeling shows that the cost to convert only two units is $39 million (NPV) *more* than converting all the units.[139]

SPS also contends Sierra Club has taken out of context the table in the IE's report ranking the modeling results.[140] While the table does show the favorable economic results of converting all three units (Scenario 2) or converting two units and retiring one unit (Scenario 6), the report states that "[g]iven the relative proximity of the results, the decision to convert the Harrington station partially or fully should carefully consider other qualitative factors and optionality."[141] The IE, Mr. Koujak, concluded that "[t]he results of the analysis show that either Scenarios 2 or 6 can be deemed prudent paths forward."[142] According to SPS, the qualitative issues distinguishing the two options include real-world reliability issues that are not accurately captured in economic modeling, such as voltage and

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[137] SPS Ex. 8 (Elsey Reb.) at 10.

[138] SPS Ex. 7 (Elsey Dir.) at 32 (Table BRE-2).

[139] SPS Ex. 8 (Elsey Reb.) at 34.

[140] SPS Reply Brief at 24-25.

[141] SPS Ex. 10 (Koujak Dir.) at Att. DDK-1 at 15.

[142] SPS Ex. 10 (Koujak Dir.) at Att. DDK-1 at 15.

transmission support benefits, and the long-term economic value of maintaining SPS's interconnection rights of up to 1,050 MW at Harrington.[143] Mr. Koujak explained that he could reasonably foresee real-world economic value in converting all three units that could easily eclipse the $5 million gap between converting all three units versus only two.[144] Additionally, the cost differential equates to approximately $250,000 per year, which is within the margin of error for modeling purposes.[145]

SPS also challenges Sierra Club's contention that SPS does not need the 340 MW of capacity from Unit 1.[146] SPS points out that Sierra Club witness Glick acknowledged that, because she was looking at data for New Mexico rather than Texas, her direct testimony erroneously stated that SPS did not have a capacity need until 2027 when it actually has a need as soon as 2025 or 2026, depending on load growth.[147] Thus, while Ms. Glick advocated for retirement of one unit by the end of 2024, the evidence demonstrates an immediate capacity need in 2025 (under the planning forecast). SPS witness William Grant also testified that Unit 1 would be expected to run more frequently than the modeling predicts.[148] Additionally, SPS states that, because Harrington will primarily be a peaking unit, it will run when needed during peaks, meaning that during the hours its runs, customers will

[143] SPS Ex. 11 (Koujak Reb.) at 5.

[144] SPS Ex. 11 (Koujak Reb.) at 6.

[145] SPS Ex. 11 (Koujak Reb.) at 5.

[146] SPS Initial Brief at 27-30.

[147] Tr. at 108-12; *see also* SPS Ex. 8 (Elsey Reb.) at 11-12.

[148] Tr. at 120-26.

need the power supplied by Harrington most—i.e., in the dead heat of summer or during a winter weather event.[149]

In addition, SPS asserts that Sierra Club's reliance on the 2019 Transmission Planning Study as support that Unit 1 will not be dispatched is misplaced.[150] SPS points out that the study assumed hypothetical new generation "without the required transmission system upgrades needed for interconnection."[151] Thus, SPS states that, in effect, the study called for SPS to spend approximately $190 million on a new transmission line if Harrington were retired, an amount that far exceeds the cost of conversion.[152]

Furthermore, in SPS's view, Sierra Club's approach is short-sighted and needlessly risky.[153] SPS contends that Sierra Club failed to consider the following real-world conditions and risks that are avoided if all three Harrington units are converted to natural gas:

- The capacity shortfalls in 2025 and 2026 are significant and would be challenging to replace.[154]
- The Southwest Power Pool's five-year backlog for interconnecting new generation would interfere with SPS's ability to timely obtain new generation.[155]

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[149] SPS Reply Brief at 26.

[150] SPS Reply Brief at 28-29.

[151] Sierra Club Ex. 1 (Glick Dir.) at Att. DG-8 at 2.

[152] SPS Ex. 6 (Grant Reb.) at 20-21.

[153] SPS Initial Brief at 28-30.

[154] SPS Ex. 8 (Elsey Reb.) at 11.

- If SPS is required to secure capacity immediately after any unit is retired in 2024, it could be forced to accept the cost of new resources, including those with high interconnection costs (currently, $934/kW in the Southwest Power Pool), due to a lack of options.[156]
- To achieve commercial operation of new capacity by 2025 or 2026, SPS would likely have to restrict replacement generation to generators with existing interconnection agreements, which could require a substantial cost premium that is not captured in SPS's economic analysis.[157]
- SPS's capacity needs will actually be greater than the modeled amounts because in 2023 the Southwest Power Pool plans to implement a new method for accrediting capacity for renewable energy and battery energy storage that will negatively impact those resources, resulting in them not counting as much towards the capacity requirements.[158]
- External factors such as COVID-19, high inflation, and import tariffs have exacerbated supply chain problems, leading to instances where developers have withdrawn or delayed proposed projects,[159] which adds to the risks SPS would face if it had to obtain replacement generation capacity for Unit 1.

In addition, as to Sierra Club's proposed alternative to "mothball" Unit 1, SPS asserts that the costs associated with doing so are significant.[160]

SPS also counters Sierra Club's contention that it did not model reasonable values for future capital costs, fixed O&M expense, and future environmental

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[155] SPS Ex. 8 (Elsey Reb.) at 14-15.

[156] SPS Ex. 8 (Elsey Reb.) at 27.

[157] SPS Ex. 8 (Elsey Reb.) at 15.

[158] SPS Ex. 8 (Elsey Reb.) at 57-58.

[159] SPS Ex. 8 (Elsey Reb.) at 15.

[160] SPS Ex. 13 (Lytal Reb.) at 10 (describing as "costly" the procedures necessary to maintain the integrity of the equipment and prevent damage during downtime and then restore it to service).

regulations.[161] SPS notes that its capital cost estimates are based on SPS's experience with operating similar plants and are actual budgeted amounts approved by SPS management.[162] In contrast, SPS claims Sierra Club witness Glick's capital cost estimates are overstated due to unreasonable assumptions,[163] and her complaint about the fixed O&M expense is based on a misunderstanding of an SPS discovery response.[164] As to environmental compliance costs, SPS states that no current or pending policy requires a cost adder for carbon dioxide (CO_2) and that the proposed Good Neighbor Rule may change prior to its adoption, and even if not, SPS will work to secure allowances through the trading program the proposed rule would establish.[165]

4. ALJs' Analysis

As an initial matter, the ALJs find that SPS demonstrated it will have a need for capacity when it ceases coal operations at Harrington at the end of 2024. The evidence showed that the additional capacity will be needed as soon as 2025 or 2026 depending on load growth.[166] The question then—as stated in the Commission's Preliminary Order—is whether the proposed conversion of

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[161] SPS Reply Brief at 26-27.

[162] SPS Ex. 13 (Lytal Reb.) at 12.

[163] SPS Ex. 8 (Elsey Reb.) at 63-64, 67.

[164] SPS Ex. 8 (Elsey Reb.) at 68-69.

[165] SPS Ex. 8 (Elsey Reb.) at 70-71; SPS Ex. 16 (West Reb.) at 9-10.

[166] SPS Ex. 8 (Elsey Reb.) at 11-12.

Harrington to natural gas is "a prudent alternative to meet that need to maintain capacity."[167]

The parties do not dispute that SPS's economic analysis modeled each of the possible options for replacing Harrington's 1,050 MW of capacity. Of those options, only three have been advocated for by any party in this proceeding—SPS proposes the "convert all" option, AXM proposes the "retire and replace" option, and Sierra Club proposes the "retire one/convert two" option.

Starting with AXM's proposal, it is clear that retiring Harrington and replacing it with new CTGs would be much more costly at the outset than conversion. However, given that new CTGs would be expected to have a significantly longer useful life than the converted units (40-45 years versus 10-15 years),[168] the initial cost difference alone does not preclude that option. Nevertheless, the evidence showed that retiring and replacing Harrington with new CTGs is not feasible in the timeframe needed because the minimum procurement time for commercial operation is approximately four years and could be even longer given the Southwest Power Pool's backlog for new interconnections.[169] This timeframe would have been difficult for SPS to meet even if it had started the process before entering into the Agreed Order in late 2020, and thus, the infeasibility of replacing Harrington with new CTGs does not appear to be due to delay on SPS's part.

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[167] Preliminary Order at 8 (Dec. 16, 2021) (Issue 12.b).

[168] AXM Ex. 1 (Norwood Dir.) at 8; Tr. at 169-71.

[169] SPS Ex. 11 (Koujak Reb.) at 15-16.

While AXM indicates that SPS could address any capacity needs during construction by delaying retirement of other SPS gas units or purchasing short-term capacity, the ALJs agree with SPS that these alternatives present reliability risks because SPS does not have enough existing gas capacity to cover the loss of Harrington and there is no guarantee that short-term capacity would be available. These options also come with their own costs, which could be significant.[170] Accordingly, the ALJs find that SPS was reasonable in not seeking to retire Harrington and replace it with new CTGs.

The ALJs also do not find AXM's criticisms of the RFI process persuasive. The IE confirmed that the RFI was likely to result in SPS obtaining more information on the availability and costs of its replacement options because the RFI provided a lower bar to participation than an RFP. The RFI was also sufficiently clear that SPS was seeking information about replacing all of its coal-fired generation, including Harrington, and in specifying the timeframe in which replacement resources would be needed. As such, the ALJs find SPS's RFI generated sufficient and reliable information for the Commission to consider in determining which option to choose for Harrington.

The choice then comes down to whether SPS should convert all three Harrington units to natural gas or only two. Sierra Club raises some compelling points for limiting the conversion to just two units. In particular, SPS's 2021 economic analysis shows that retiring one unit is less expensive on an NPV basis

[170] *See* SPS Ex. 13 (Lytal Reb.) at 8-9; SPS Ex. 8 (Elsey Reb.) at 44-45.

than converting all three units over the long-term period modeled (2022-2041). In addition, even under the revised modeling SPS prepared in rebuttal, the capacity factor for Unit 1 is exceedingly low, only 0.5% to 1.8%,[171] meaning it will rarely, if ever, run. SPS's modeling also does not account for the possibility that Harrington's converted units may be subject to environmental compliance costs over the next 20 years.

However, several factors weigh against these concerns in favor of converting all three units. Notably, the IE concluded that both options, either converting all three units or just two, "can be deemed prudent paths forward."[172] With respect to the issue of cost, the apparent savings of the "retire one/convert two" option are likely overstated because SPS's modeling used assumptions that favored retirement of the Harrington units.[173] In addition, because both options require the installation of the same size natural gas pipeline—which accounts for most of the cost of conversion—the incremental cost of retaining Unit 1's 340 MW of capacity is relatively small, only $2.6 million or $7.65/kW.[174] While Sierra Club contends that SPS could "mothball" Unit 1 and convert it only if needed, there are additional costs to maintain the unit in that state, which would narrow the incremental cost gap further. Furthermore, the ALJs agree with the IE that in deciding between the options it is appropriate to consider qualitative factors in addition to cost. SPS persuasively explained that retiring Unit 1 would pose reliability risks and could result in the loss of its interconnection rights, which are increasingly valuable given

[171] SPS Ex. 8 (Elsey Reb.) at 50.

[172] SPS Ex. 10 (Koujak Dir.) at Att. DDK-1 at 15.

[173] *See* SPS Ex. 8 (Elsey Reb.) at 32-34.

[174] SPS Ex. 8 (Elsey Reb.) at 10.

the current cost of new interconnection rights. Sierra Club's proposed alternative of mothballing Unit 1 would mean that it is unable to immediately serve as a peaking unit and thus may be unavailable when SPS's customers might need it most, such as during the summer heat or a winter weather event. The full conversion of Harrington is also supported by OPUC and Staff.

Therefore, on balance, the ALJs conclude that SPS met its burden to show that converting all three units at Harrington to natural gas is a prudent alternative to meet its projected capacity need, even when factoring in the potential cost to customers.

B. Parties' Proposed Conditions (PO Issues 33, 41)

1. Depreciation of retired assets

As noted above, OPUC recommends approval of the conversion of all three units at Harrington to natural gas. Nevertheless, in a scenario in which the Commission instead decides in favor of retirement of one or more units at Harrington, OPUC advocates for a condition that would apply to depreciation of those retired assets. OPUC states that SPS's analyses of the options for Harrington included scenarios that assumed retirement of one or more units at Harrington.[175] In those scenarios, SPS used assumptions that included accelerated depreciation and decommissioning costs of any retired assets. OPUC states that SPS's treatment of the retired assets in its analyses ignored Commission precedent and

[175] OPUC Initial Brief at 13.

resulted in a higher NPV increased cost to customers over proper treatment of those assets.[176] Although this change in the NPV did not change OPUC's ultimate conclusion that conversion of Harrington is in the public interest, OPUC urges that in the event of a decision that results in an early retirement of Harrington assets, depreciation and decommissioning costs should instead be treated consistent with the Commission's orders in Docket Nos. 51415 and 46449.[177] OPUC asserts that in those dockets, the Commission ordered remaining depreciation expenses related to retirements be placed into a regulatory asset and depreciated over the remaining useful life of the assets (without additional return on investment).[178] OPUC did not offer a specific condition to be adopted in this proceeding to address its concern.

SPS and Staff counter that, consistent with Commission precedent, depreciation and service lives of retired assets are more appropriately addressed in a rate case proceeding. Staff notes that the two dockets cited by OPUC as precedent were rate proceedings and not CCN proceedings.

As discussed above, the ALJs find that the Commission should approve conversion of all three units at Harrington. However, even if the Commission were to instead choose to retire one or more of the units, the ALJs agree with SPS and Staff that the treatment of depreciation for retired assets at Harrington should be addressed in a future rate proceeding, not this proceeding.

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[176] OPUC Ex. 1 (Nalepa Direct) at 7.

[177] OPUC Initial Brief at 17.

[178] OPUC Initial Brief at 15-17.

2. Depreciation of the pipeline

If the Commission approves conversion of one or more Harrington units, OPUC requests that the Commission require SPS to separately book the pipeline costs to a pipeline Federal Energy Regulatory Commission (FERC) account as part of any order granting its CCN amendment.[179] OPUC argues that the useful life of the generation facility is much shorter than the useful life of the pipeline (about 12 to 16 years compared to approximately 70 years by OPUC's estimation).[180] Therefore, OPUC further requests that in a future rate proceeding SPS be ordered to depreciate the pipeline (consistent with the useful life of the pipeline) separate from the depreciation of the generation facility.[181] OPUC argues that, because the remaining service life of the generation facility is much lower than the service life of the pipeline, a failure to depreciate the pipeline separately from the generation will result in substantially higher consumer rates.[182] OPUC argues that the precedent in Commission Docket Nos. 51415 and 46449 mandates that the remaining undepreciated expense of the generation facility be separately booked from the proposed pipeline expense.[183] OPUC is concerned that SPS will improperly include the pipeline costs in its generation plant accounts and "make it impossible to distinguish and separate rates for the pipeline and plant in a future rate proceeding."[184]

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[179] OPUC Reply Brief at 2.

[180] OPUC Ex. 1 (Nalepa Dir.) at 22.

[181] OPUC Proposed Findings of Fact, Conclusions of Law, and Ordering Paragraphs at 2.

[182] OPUC Ex. 1 (Nalepa Dir.) at 23. Mr. Nalepa calculated that depreciating the pipeline over 70 years reduces depreciation expenses by $3.42 million to $3.95 million annually compared to depreciating the pipeline over 12 years.

[183] OPUC Reply Brief at 2.

[184] OPUC Reply Brief at 2.

Staff and SPS respond that OPUC's proposed conditions are premature and unnecessary. They argue that the Commission will set the appropriate depreciation rate for the Harrington pipeline in the first base rate case in which SPS seeks to include those assets in base rates.

The ALJs agree with SPS and Staff that the treatment of depreciation for the proposed pipeline to Harrington is more appropriately addressed in a future rate proceeding. In addition, OPUC's concern that the commingling of the generation and pipeline expenses could potentially make OPUC's advocated rate treatment more difficult to quantify was conclusory. Therefore, the ALJs decline to address the appropriate rate treatment of the pipeline in this proceeding.

3. Capital cost cap for converting Harrington

While Staff and AXM differ in their overall recommendations on whether the Commission should grant the Application, they agree that a cost recovery cap should be implemented if the Commission approves conversion of the Harrington units. AXM witness Norwood proposed a "soft" cap of $70 million for the project, which represents the midpoint of SPS's estimates for the cost of the generation conversion and the pipeline.[185] In its post-hearing briefs, Staff recommends instead that a "hard" cost cap of $70 million, including AFUDC, be imposed on the project.[186] Staff's stated reason is to protect customers from potential cost

[185] AXM Ex. 1 (Norwood Dir.) at 17.

[186] Staff Initial Brief at 12-13.

overruns. Staff argues that a cost cap would be consistent with past Commission precedent (citing Docket No. 33891).[187] Staff also argues that a cost cap is warranted because SPS neglected to file its Application timely enough to allow the Commission the opportunity to consider further evaluation of alternatives to the conversion project.[188]

SPS responds that Staff's proposed hard cap and AXM's proposed soft cap are inappropriate. SPS denies that it failed to use diligence to find a solution for Harrington.[189] SPS also argues that Docket No. 33891 cited by Staff was an exceptional case, with markedly different circumstances inapplicable in this case. SPS notes that the significant cost of the proposed project in Docket No. 33891 (the Turk Plant, a $1.522 billion coal plant located in Arkansas) dwarfs the $70 million estimated cost of SPS's proposed project—lessening the risk of cost overruns in this project having a significant impact on customers.[190] SPS also argues that the costs of the project in Docket No. 33891 were disputed, with competing evidence provided, which bore on whether the proposed project was reasonable when compared with alternative options.[191] According to SPS, the reasoning supporting the cost cap for Docket No. 33891 does not apply to this proceeding because no party presented any evidence that SPS's construction cost estimates were uncertain or unreliable, nor did any party present evidence that SPS could construct generation resources sufficient to replace Harrington for less than the

[187] *See Application of Southwestern Electric Power Company for a Certificate of Convenience and Necessity Authorization for Coal Fired Power Plant in Arkansas*, Docket No. 33891, Order at 7 (Aug. 12, 2008).

[188] Staff Initial Brief at 12-13.

[189] SPS Reply Brief at 10-13.

[190] SPS Reply Brief at 10-13.

[191] SPS Reply Brief at 10-13.

cost of conversion of the boilers to natural gas. SPS also argues that the Commission does not routinely impose costs caps in CCN amendment cases—with Docket No. 33891 being the only CCN case in which a hard cost cap was ordered in over 100 cases before the Commission over the past two years.[192] Lastly, SPS responds that the ultimate cost to convert Harrington will be evaluated in a later base rate case where the Commission can consider whether any specific cost was unreasonable or imprudent.

The ALJs find that a cost cap has not been shown to be warranted in this matter. The ALJs specifically find that the timeliness of SPS's application, or alleged lack of diligence, is not relevant to whether a cost cap is needed or justified. SPS also adequately explained the timeline of its efforts to find a solution for Harrington.[193] Further, the ALJs find the precedent cited by Staff is inapplicable to the facts of this case. Unlike in Docket No. 33891, insufficient evidence was introduced in this case to demonstrate a probability that cost overruns are likely enough to warrant the unusual imposition of a cost cap in a CCN proceeding. The parties will also have an opportunity to address any cost overruns in a future proceeding when SPS seeks recovery of the costs. Therefore, the ALJs decline to recommend a cost cap in this matter.

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[192] SPS Reply Brief at 10-13.

[193] *See* SPS Reply Brief at 7-10.

4. Capital expense cap

As discussed above, Sierra Club argues that SPS's evaluation of options significantly underestimated annual capital costs for Harrington after conversion and neglected to consider future environmental compliance costs—thereby improperly skewing any decision in favor of conversion, rather than other options. Sierra Club advocates for a condition capping SPS's annual capital expense at Harrington to the amount SPS estimated in this proceeding ($3.75 million) and barring recovery of any future environmental compliance costs.[194]

SPS responds that Sierra Club has provided no record evidence nor any Commission precedent to support its proposed capital expense cap.[195] SPS argues that a future rate case is the appropriate forum to consider the prudence of expenses.

The ALJs decline to recommend Sierra Club's proposed capital expense cap. Sierra Club provided no Commission precedent to support it, and these costs are more appropriately addressed in a future rate case where the Commission can consider SPS's actual capital costs and future environmental compliance costs, if any.

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[194] Sierra Club Initial Brief at 21.

[195] SPS Reply Brief at 30.

5. TPWD recommendations

The Texas Parks and Wildlife Department (TPWD) recommended conditions to protect fish and wildlife resources pursuant to its authority in Texas Parks and Wildlife Code § 12.0011(b)(2) and (b)(3).[196] Staff witness John Poole reviewed the Environmental Assessment (EA) submitted with the Application, as well as TPWD's proposed conditions, and recommended several mitigation measures to address the bulk of TPWD's concerns.[197] The measures include the following proposed ordering paragraphs:

1. If SPS encounters any archeological artifacts or other cultural resources during Proposed Project construction, work must cease immediately in the vicinity of the artifact or resource, and the discovery must be reported to the Texas Historical Commission. In that situation, SPS must take action as directed by the Texas Historical Commission.

2. SPS must take precautions to avoid disturbing occupied nests and take steps to minimize the burden of construction on migratory birds during the nesting season of the migratory bird species identified in the area of construction.

3. SPS must exercise extreme care to avoid affecting non-targeted vegetation or animal life when using chemical herbicides to control vegetation within rights-of-way. SPS must ensure that the use of chemical herbicides to control vegetation within the rights-of-way complies with rules and guidelines established in the Federal Insecticide Fungicide and Rodenticide Act and with Texas Department of Agriculture regulations.

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[196] Staff Ex. 1 (Poole Dir.) at 28.

[197] Staff Ex. 1 (Poole Dir.) at 28.

4. SPS must minimize the amount of flora and fauna disturbed during construction of the Proposed Project, except to the extent necessary to establish appropriate right-of-way clearance. In addition, SPS must revegetate, using native species and must consider landowner preferences and wildlife needs in doing so. Furthermore, to the maximum extent practical, SPS must avoid adverse environmental influence on sensitive plant and animal species and their habitats, as identified by TPWD and the United States Fish and Wildlife Service.

5. SPS must implement erosion-control measures as appropriate. Erosion control measures may include inspection of the right-of-way before and during construction to identify erosion areas and implement special precautions as determined necessary. SPS must return each affected landowner's property to its original contours and grades unless otherwise agreed to by the landowner or the landowner's representative. SPS is not required to restore the original contours and grades where a different contour or grade is necessary to ensure the safety or stability of the project's structures or the safe operation and maintenance of the [pipeline].

6. SPS must use best management practices to minimize the potential impacts to migratory birds and threatened or endangered species.

7. SPS must cooperate with directly affected landowners to implement minor deviations from the approved route to minimize the burden of the pipeline. Any minor deviations from the approved route must only directly affect landowners who were sent notice of the pipeline in accordance with 16 TAC § 22.52(a)(3) and landowners that have agreed to the minor deviation.

8. SPS must report the project approved by the Commission on its monthly construction progress reports before the start of construction to reflect the final estimated cost and schedule. In addition, SPS must provide final construction costs, with any necessary explanation for cost variance, after completion of construction when all costs have been identified.[198]

[198] Staff Ex. 1 (Poole Dir.) at 17-19.

SPS generally does not oppose adoption of Staff's proposed mitigation measures and agrees that Mr. Poole's specific measures are consistent with industry best management practices and are routinely included in Commission orders approving CCN amendment applications.[199] SPS states that it is committed to collaborating with TPWD on implementing its recommendations to the extent reasonably possible and in keeping with normal practices. However, SPS complains that Mr. Poole's recommendation that SPS be required to collaborate with TPWD to adopt its recommendations to the extent reasonably possible is too vague.[200] However, SPS notes that some of TPWD's recommendations are not applicable to all areas of the project and that these additional TPWD recommendations should not be incorporated into the final order. Accordingly, SPS provided amendments to Staff's proposed mitigation measures in SPS's proposed ordering paragraphs to address these alleged instances.[201]

Because Staff's recommended mitigation measures are essentially uncontested, the ALJs find they should be adopted as proposed by Staff. The ALJs decline to incorporate SPS's proposed changes to Staff's proposed mitigation measures because SPS did not persuasively demonstrate that the changes are necessary.

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[199] SPS Ex. 18 (Santos Reb.) at 6 ("The recommendations . . . are consistent with industry best management practices and should be adopted").

[200] The ALJs note that Staff did not include a specific condition requiring collaboration in its recommendations.

[201] SPS Reply Brief at Att. A at 15-17 (Proposed Order).

6. Filing of New Mexico IRPs

To address its concern that SPS was untimely in submitting the Application, Staff proposes that a compliance project be opened to require SPS to file its New Mexico IRPs with the Commission.[202] Staff states that New Mexico requires SPS to file an IRP every three years that forecasts system needs and resources 20 years into the future. Staff requests that SPS be required to file its IRP with the Commission within two working days of its filing in New Mexico. Staff argues this information would allow Staff and interested persons in Texas to access information about SPS's resource needs and provide Staff and other interested persons more time to raise concerns with SPS's resource planning activities, in advance of SPS filing a future application for a generation CCN. If such a project were opened, Staff recommends that SPS be allowed to request termination of this requirement in its next CCN application for generation resources.

While encouraged by Staff's desire to be more aware of its IRP activities, SPS notes there is currently no formal process whereby SPS could seek the guidance of the Commission in advance of filing a case such as this one.[203] As such, SPS asserts that it should not be punished for operating in accordance with applicable law or for making a filing that is compliant with Commission generation CCN precedent.

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[202] Staff Initial Brief at 13 (citing *Integrated Resource Plans for Electric Utilities*, New Mexico Public Regulation Commission, 17.7.3.9).

[203] SPS Reply Brief at 6-7.

The ALJs decline to recommend Staff's request. While requiring such a compliance project may be within the discretion of the Commission, Staff provides no rule or precedent in support of such a recommendation being appropriate in this case.

7. Requirement for a binding RFP

As discussed above, AXM opposes the conversion of Harrington from coal to natural gas power and argues that SPS erred by relying on the 2020 non-binding RFI instead of conducting a binding RFP. However, in the event that the Commission approves conversion of Harrington, as recommended by the ALJs, AXM urges the Commission to include conditions directing SPS to: (1) issue an RFP within 45 days of the final order in this case for binding bids to provide replacement generating resources (including required interconnection costs) for the Harrington units by the end of 2024, and (2) present its evaluation of any proposals received when it seeks final approval and cost recovery for the Harrington gas-conversion project.

SPS responds that if conversion is approved, an RFP would not be needed because SPS will no longer require additional replacement resources for Harrington. Further, SPS argues that an RFP would require bidders to incur significant and unnecessary costs to develop a firm bid.

The ALJs agree with SPS. If the Commission approves SPS's request to convert Harrington, an RFP would be unnecessary and a waste of potential bidders' resources. The ALJs recommend rejection of these proposed conditions.

C. Remaining Issues

1. Natural Gas Pipeline Route (PO Issues 2, 19, and 21-29)

Although the Commission does not typically consider or authorize natural gas pipelines, after reviewing threshold briefing on the issue, the Commission determined it has exclusive original jurisdiction over SPS's proposed construction, ownership, and operation of the proposed 20-inch natural gas pipeline to supply Harrington because it is part of the Application and necessary for the conversion of the plant.[204] As such, the Commission referred issues relating to the routing of the pipeline that are required to be considered in routing decisions for electric transmission lines.[205] Those routing issues are addressed here.

In its Application, SPS proposed four natural gas pipeline routes running approximately 20 to 22 miles from existing natural gas lines located near Amarillo to Harrington and included an alternative route analysis and impact assessment of the pipeline routes.[206] Regarding the proposed routes, SPS's experts concluded the routes will not have a significant impact on the human environment and will not

[204] Preliminary Order at 4-5 (Dec. 16, 2021).

[205] *See* 16 TAC § 25.101(b)(3)(B).

[206] SPS Ex. 1 (Application) at 6.

unduly impair any important environmental integrity.[207] SPS identified 15 landowners who own property within 500 feet of the proposed pipeline centerlines, but none of the potential pipeline routes have habitable structures within 500 feet of the centerline.[208] None of the parties in this proceeding challenged any of the proposed routes or challenged the adequacy of the number of routes presented to the Commission.

Staff reviewed the proposed routes and concluded that the proposed routes were adequate in number and geographic diversity.[209] Staff also found that each of the proposed routes was acceptable from an environmental and land use perspective, but recommended "that Route 2 is the best route when weighing, as a whole, the factors set forth in PURA § 37.056(c) and 16 TAC § 25.101(b)(3)(B)."[210] Staff's recommendation was based on evidence that Route 2:

- is the shortest route at 19.01 miles;
- has the shortest length and area across bottomland/riparian brushland or shrubland, 11.8 miles and 71.5 acres;
- has the shortest area across highly erodible soils, 0.2 acres;
- has the shortest area across poor revegetation potential soils, 4.0 acres;
- has the shortest length and area across high probability areas for archaeological sites, 11.0 miles and 66.9 acres; and

[207] SPS Ex. 17 (Santos Dir.) at 12.

[208] SPS Ex. 17 (Santos Dir.) at 13.

[209] Staff Ex. 1 (Poole Dir.) at 17.

[210] Staff Ex. 1 (Poole Dir.) at 17.

- contains no archaeological or historical sites within its construction right of way.[211]

Additionally, TPWD recommended that Route 2 be selected because it found Route 2 would result in the least adverse impacts to natural resources.[212]

The referred routing issues are uncontested. The ALJs find that the evidence supports a finding that each of the proposed pipeline routes are appropriate and consistent with maintaining the factors found in PURA § 37.056(c). However, in the Preliminary Order, the Commission requested that the ALJs additionally weigh the factors in 16 TAC § 25.101(b)(3)(B) (which relate to transmission line routing). Staff's determination that Route 2 is the best route, after the factors have been weighed, was uncontroverted and supported by the evidence. SPS does not oppose Staff's recommendation. Therefore, the ALJs find that each of the proposed pipeline routes are appropriate, but Route 2 is the best route when the factors set forth in PURA § 37.056(c) and 16 TAC § 25.101(b)(3)(B) are weighed.

2. Public Input (PO Issue 8)

SPS held a virtual public meeting via Zoom videoconference with a formal question-and-answer session for all landowners owning property within 500 feet of a proposed pipeline centerline.[213] At the end of the public meeting, participants

[211] Staff Ex. 1 (Poole Dir.) at 32.

[212] Staff Ex. 1 (Poole Dir.) at 28.

[213] SPS Ex. 17 (Santos Dir.) at Att. AS-2.

were provided an opportunity to submit comments or questions. SPS received no responses from affected landowners or the public.[214]

3. Natural Gas Fuel Source (PO Issues 14-16, 18)

PO Issue 14. "Are the data and analysis provided in SPS's application regarding projected natural gas prices appropriate in light of more current economic conditions?"

PO Issue 18(c). "Does SPS's analysis of the lowering of cost of service, if any, sufficiently account for the effects of any recent escalation in commodity costs?"

SPS states that it relied on standard methodology to develop fuel price forecasts.[215] SPS asserts that short-term increases in natural gas costs should not materially affect its forecasts.[216] Finally, SPS argues that any changes that affect natural gas costs should affect other commodity pricing and therefore have similar impacts on alternative replacement options.[217] These assertions were not disputed. Therefore, the ALJs find that SPS adequately addressed these issues.

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[214] SPS Ex. 17 (Santos Dir.) at Att. AS-2.

[215] SPS Ex. 10 (Koujak Dir.) at Att. DDK-1.

[216] Staff Ex. 5 (SPS Response to Staff RFI 9-6) at 11.

[217] Staff Ex. 5 (SPS Response to Staff RFI 9-6) at 11.

PO Issue 15. "Did SPS adequately consider alternative sources of natural gas and alternative locations for interconnections with existing pipelines?"

SPS indicates it "selected interconnection points to existing pipelines based on the available pipelines in the area of Harrington" and, from preliminary discussions with the representatives for those pipelines regarding supply, SPS "is confident that it will be able to secure gas for Harrington in the same manner that it has for its other natural gas plants."[218] SPS asserts that it will be able to benefit from a diversity of natural gas supplies by connecting to two natural gas pipelines. No party alleged SPS failed to consider a better alternative source of natural gas or locations for interconnection. The ALJs find that SPS adequately considered alternative sources of natural gas and alternative locations for interconnections with existing pipelines.

PO Issue 16. "Did SPS adequately consider entering into firm fuel supply or firm transportation contracts as an alternative to constructing a new natural gas pipeline?"

SPS argues that it does not have the option to enter into a firm fuel supply or firm fuel transportation contract as an alternative to constructing a new pipeline because existing pipeline infrastructure is insufficient to serve the gas needs of a converted Harrington.[219] This assertion was not contested. Therefore, the ALJs find that SPS adequately addressed this issue.

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[218] SPS Initial Brief at 33 (citing SPS Ex. 17 (Santos Dir.) at Att. AS-2 at 21-22).

[219] SPS Initial Brief at 35; SPS Ex. 12 (Lytal Dir.) at 9.

PO Issue 18(a). "What are the potential economic or reliability benefits associated with dual-fuel and fuel-storage capabilities?"

SPS's current request does not include dual-fuel or fuel-storage capabilities. SPS indicates such a request would require additional investment. No party presented evidence on this issue. Given that SPS has not requested this capability, the ALJs find this issue is not applicable.

4. Effect on Utilities in the Southwest Power Pool (PO Issue 17)

No party contested the proposed conversion on the grounds that it would adversely impact SPS or other electric utilities. SPS states that after conversion, the same amount of firm and dispatchable generation will be available at the same location. SPS concludes that energy prices, congestion charges, and reliability must-run requirements would be negatively impacted only if conversion is not approved. The ALJs find that there has not been a showing that the proposed conversion would aversely impact SPS or other electric utilities.

5. Effect on Community and Environment (PO Issues 19-20)

The effect of the proposed pipeline routes on community values, recreational and park areas, historical and aesthetic values, and environmental integrity were addressed above. This subsection pertains to those same factors as

they relate to the proposed conversion of Harrington. No party argued the proposed conversion of Harrington would have negative impacts to community values, recreational and park areas, historical and aesthetic values, or environmental integrity. In fact, Staff concludes that the proposed conversion would not have a significant negative impact on environmental integrity, community values, recreational and park areas, or aesthetic values.[220] SPS argues that the proposed project will have an "insignificant impact on the human environment and will not unduly impair any important environmental integrity" and that the proposed conversion of Harrington will positively impact environmental integrity by significantly lowering greenhouse gas emissions.[221] SPS states that "SO_2 emissions will be reduced in excess of 90% and compliance with NAAQS requirements will be demonstrated" and that other pollutants such as carbon monoxide and CO_2 will be significantly reduced.[222] Therefore, the ALJs find that the proposed conversion will not have a significant negative impact on community values, recreational and park areas, or aesthetic values, but will have a positive impact on the environment through improved emissions and air quality.

Regarding PO Issue 20, although Sierra Club argued that SPS made carbon-free replacement of Harrington impossible due to the timing of the Application,[223] no party directly addressed whether the proposed conversion would affect retirement or modification of any *other* facility in a manner that affects

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[220] SPS Initial Brief at 20-22.

[221] SPS Ex. 17 (Santos Dir.) at Att. AS-2.

[222] SPS Ex. 15 (West Dir.) at 16.

[223] Sierra Club Initial Brief at 2.

environmental integrity—which is the issue referred by the Commission.[224] Therefore, the ALJs conclude that there has not been a showing that the proposed conversion would affect retirement or modification of any other facility in a manner that affects environmental integrity.

6. Renewable Energy Goals

Under PURA § 37.056(c), the Commission must consider, to the extent applicable, the effect of granting a CCN on the state's ability to meet the renewable energy goal established by PURA § 39.904(a). However, the goal in PURA § 39.904(a) for 10,000 MW of renewable capacity to be installed in Texas by January 1, 2025, has already been met. Therefore, the proposed conversion of Harrington and construction of the new pipeline cannot adversely affect the state's renewable energy goal.

7. Other Regulatory Approvals (PO Issues 34 through 38)

In order to convert the Harrington units, SPS must seek other regulatory approvals listed in the EA.[225] On August 6, 2021, SPS filed a CCN amendment application with NMPRC regarding the proposed conversion. On April 27, 2021, NMPRC approved the application.[226] SPS has stated it will seek necessary permits

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[224] Preliminary Order at 10 (Dec. 16, 2021). PO Issue 20: Will the proposed conversion of the Harrington station change SPS's plans for retiring or modifying any other generation facilities in a manner that affects environmental integrity?

[225] SPS Ex. 17 (Santos Dir.) at Att. AS-2.

[226] SPS Initial Brief at 40. The ALJs take official notice of the NMPRC's decision. *See* 16 TAC § 22.222.

from the Railroad Commission of Texas, including an amendment to its T-4 permit to allow for operation of the proposed pipeline, if the Application is approved by the Commission.[227] SPS states it will file a Form PS-48 with the Railroad Commission of Texas at least 60 days before beginning construction on the pipeline.[228] Other than the commitments discussed above, SPS represents it has not made any additional commitments to any other regulatory authority regarding the facilities proposed in the Application.[229] It is uncontested that SPS has or plans to seek approval from all necessary regulatory authorities. Therefore, the ALJs find that SPS has adequately addressed the Preliminary Order issues relating to other regulatory approvals.

8. Permits (PO Issue 39)

SPS states that it must seek the environmental and construction-related permits, licenses, plans, and permissions listed in the EA.[230] SPS witness Santos testified that, prior to construction, SPS will obtain road-crossing permits from the Texas Department of Transportation for any crossing of state-maintained roadways, and will coordinate with the U.S. Army Corps of Engineers, if necessary, and complete construction activities in compliance with all Section 404 Clean Water Act permit regulations.[231] In briefing, the parties did not specifically address whether SPS has made all necessary communications to any relevant state or

[227] SPS Ex. 17 (Santos Dir.) at Att. AS-2.

[228] SPS Initial Brief at 41.

[229] SPS Initial Brief at 41.

[230] SPS Ex. 17 (Santos Dir.) at Att. AS-2 at 12-13.

[231] SPS Ex. 17 (Santos Dir.) at 13, 18.

federal agencies. However, the EA shows that SPS has in fact sent communications to all of the relevant entities.[232] SPS has also represented that if any authorization is required, it will obtain such authorization prior to construction. No other party contests that SPS has or plans to seek all necessary permits, licenses, plans, and permissions. Therefore, the ALJs find that SPS adequately addressed this issue.

9. Limitation of Authority (PO Issue 40)

Section IV of the Preliminary Order requires that conversion of Harrington must be commercially operational within seven years after a Commission order granting SPS's CCN amendment. No party, including SPS, proposed a change to this limit on authority. Accordingly, the ALJs find the evidence demonstrates the seven-year limit should not be changed.

D. CONCLUSION

For the reasons discussed above, the ALJs conclude that SPS met its burden to show that the proposed conversion of all three Harrington units to natural gas is necessary for the service, accommodation, convenience, or safety of the public.[233] Additionally, the ALJs recommend that the Commission approve SPS's proposal to construct, own, and operate a new pipeline along Route 2 to supply natural gas to Harrington.

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[232] SPS Ex. 17 (Santos Dir.) at Att. AS-2 at 17-18 & Appendix B.

[233] *See* PURA § 37.056(a).

V. FINDINGS OF FACT

Applicant

1. Southwestern Public Service Company (SPS) is incorporated under the laws of the State of New Mexico and is a wholly owned subsidiary of Xcel Energy, Inc.

2. SPS is a fully integrated utility that owns equipment and facilities to generate, transmit, distribute, and sell electricity in Texas and New Mexico.

3. In Texas, SPS is authorized under certificate of convenience and necessity (CCN) number 30153 to provide service to the public and to provide retail electric utility service within its certificated service area.

Application

4. On August 27, 2021, SPS filed an application with the Public Utility Commission of Texas (Commission) to amend its CCN to convert all three generation units at Harrington Generating Station (Harrington) from coal generation to natural gas generation (Application). The Application additionally requests that the Commission authorize SPS to construct, own, and operate a new pipeline to supply natural gas to Harrington.

5. Harrington is located north of Amarillo in Potter County, Texas.

6. Harrington consists of three coal-powered steam turbine units with a total net capacity of 1,050 megawatts (MW).

7. All three of Harrington's boilers were designed to burn both coal and natural gas.

8. On October 5, 2021, Commission staff (Staff) recommended that the application be deemed administratively complete.

9. No party challenged the sufficiency of the application.

10. In its Preliminary Order issued on December 13, 2021, the Commission concluded as a threshold issue that it had exclusive jurisdiction over the Application, including for the construction of the new pipeline that would supply natural gas to Harrington.

Notice

11. On November 4, 2021, SPS filed the affidavit of Michael K. Knapp, case specialist with SPS, attesting that notice of the application was provided on August 27, 2021: (1) by email to all parties of record in SPS's most recent rate case, Docket No. 51802; and (2) by mail to the City of Amarillo, the county judge of Potter County, the Texas Parks and Wildlife Department (TPWD), and all directly affected landowners. Additionally, SPS filed publishers' affidavits attesting that notice was published as follows: (1) in the *Amarillo Globe-News*, a newspaper of general circulation in Potter County, on October 14, 2021; (2) in the *Booker News*, a newspaper of general circulation in Lipscomb County, on October 14, 2021; (3) in the *Caprock Courier*, a newspaper of general circulation in Briscoe, Cottle, Hall, King, and Motley counties, on October 14, 2021; (4) in the *County Star-News*, a newspaper of general circulation in Wheeler County, on October 14, 2021; (5) in the *Dalhart Texan*, a newspaper of general circulation in Dallam and Hartley counties, on October 15, 2021; (6) in the *Miami Chief*, a newspaper of general circulation in Roberts County, on September 30 and October 7, 14, and 21, 2021; (7) in the *Muleshoe Journal*, a newspaper of general circulation in Bailey County, on October 14, 2021; (8) in the *Pampa News*, a newspaper of general circulation in Gray County, on October 16, 2021; and (9) in the *Sherman County Gazette*, a newspaper of general circulation in Sherman County, on October 14, 2021.

12. On November 23, 2021, SPS filed a publisher's affidavit attesting that notice was published in the *Lubbock Avalanche-Journal*, a newspaper of general circulation in Cochran, Crosby, Dawson, Floyd, Gaines, Garza, Hale, Hockley, Lamb, Lubbock, Lynn, Motley, Terry, and Yoakum counties, on October 15, 2021.

13. In Commission Order No. 7 issued on November 29, 2021, the Commission Administrative Law Judge (ALJ) found SPS's notice sufficient.

Public Input

14. SPS hosted a live virtual public meeting on April 29, 2021, via Zoom videoconference in lieu of an in-person meeting.

15. SPS invited all landowners with property within 500 feet of a proposed pipeline centerline to the public meeting and provided them an overview map of the proposed pipeline routes, a questionnaire, a landowner's bill of rights, a permission to survey form, a brochure from the Commission with information about CCN amendment proceedings, a comment form, and instructions on how to access the live virtual public meeting.

16. Four landowners attended the virtual public meeting.

17. SPS did not receive any completed questionnaires or written comments from the landowners or other members of the public.

Intervenors

18. Adobe Creek, Ltd., Windtree Manor, Ltd., Texas Industrial Energy Consumers (TIEC), Sierra Club, the Alliance of Xcel Municipalities (AXM), and the Office of Public Utility Counsel (OPUC) filed motions to intervene in this docket.

19. In Commission Order No. 2 issued on September 21, 2021, the Commission ALJ granted the motions to intervene of Adobe Creek, Ltd., Windtree Manor, Ltd., and TIEC.

20. In Commission Order No. 5 issued on October 21, 2021, the Commission ALJ granted the motion to intervene of Sierra Club.

21. In Commission Order No. 8 issued on December 3, 2021, the Commission ALJ granted the motion to intervene of AXM.

22. In State Office of Administrative Hearings (SOAH) Order No. 2 issued on January 5, 2022, the SOAH ALJ granted the motion to intervene of OPUC.

Statements of Position and Testimony

23. On August 27, 2021, SPS filed the direct testimonies of William A. Grant, Jeffrey L. West, John M. Goodenough, Ben R. Elsey, Mark Lytal, D. Dean Koujak, and Anastacia Santos. These direct testimonies were admitted at the hearing.

24. On March 25, 2022, AXM filed the direct testimony of Scott Norwood. This direct testimony was admitted at the hearing.

25. On March 25, 2022, Sierra Club filed the direct testimony of Devi Glick. This direct testimony was admitted at the hearing.

26. On March 25, 2022, OPUC filed the direct testimony of Karl Nalepa. This direct testimony was admitted at the hearing.

27. On April 5, 2022, Staff filed the direct testimony of John Poole. This direct testimony was admitted at the hearing.

28. On April 13, 2022, SPS filed the rebuttal testimonies of Mr. Grant, Mr. Elsey, Mr. Koujak, Mr. Lytal, Mr. West, and Ms. Santos. These rebuttal testimonies were admitted at the hearing.

29. On April 20, 2022, TIEC filed a statement of position.

30. On April 21, 2022, Staff filed a statement of position.

31. On April 21, 2022, SPS filed an errata to the rebuttal testimony of Mr. Grant. This rebuttal testimony was admitted at the hearing.

32. On April 26, 2022, Sierra Club filed an errata to the direct testimony of Ms. Glick. This direct testimony was admitted at the hearing.

Referral to SOAH for Hearing

33. On December 13, 2021, the Commission referred this docket to SOAH and filed a Preliminary Order identifying the issues to be addressed in this proceeding.

34. On January 4, 2022, SOAH convened a prehearing conference in this docket by videoconference, at which time a procedural schedule was discussed.

35. In SOAH Order No. 3 issued on January 24, 2022, the SOAH ALJs scheduled the hearing on the merits to begin on April 26, 2022.

36. On April 26, 2022, the hearing on the merits convened before SOAH ALJs Cassandra Quinn and Ross Henderson by videoconference. The following parties made appearances through their legal counsel and participated in the hearing: SPS, Staff, AXM, OPUC, Sierra Club, and TIEC. Neither Adobe Creek, Ltd. nor Windtree Manor, Ltd. appeared at the hearing.

37. The record closed on May 25, 2022, with the filing of the parties' post-hearing reply briefs.

Adequacy of Existing Service and Need for Additional Service

38. SPS and the Texas Commission on Environmental Quality (TCEQ) executed an agreed order (Agreed Order) in TCEQ Docket No. 2020-0982-MIS requiring SPS to cease coal operations at Harrington by January 1, 2025, to avoid non-compliance with federal National Ambient Air Quality Standards (NAAQS) for sulfur dioxide (SO_2).

39. SPS is a member of the Southwest Power Pool (SPP).

40. SPP requires that each member in SPP have a planning reserve margin of at least 12% of its peak demand forecast.

41. If SPS retired Harrington on or before January 1, 2025, rather than converting Harrington to be powered by natural gas, SPS would not meet its planning reserve margin requirements in SPP, unless SPS secured replacement generation resources.

42. SPS modeled different scenarios under a variety of conditions to determine the cost of replacement generation resources under both resource planning and financial planning forecasts.

43. SPS modeled the following compliance options to reduce SO_2 emissions at Harrington:

a. Retirement of all three Harrington units and replacement of Harrington's generation capacity with replacement resources;

b. Conversion of all three Harrington units to operate on natural gas;

c. Installation of Dry Sorbent Injection (an environmental control for SO_2 emissions) on the Harrington units;

d. Installation of Spray Dry Absorber (an environmental control for SO_2 emissions) on the Harrington units;

e. Retirement of Harrington Units 1 and 2 and conversion of Harrington Unit 3 to operate on natural gas; and

f. Retirement of Unit 1 and conversion of Harrington Units 2 and 3 to operate on natural gas.

44. Due to the high cost of installing environmental controls, SPS reasonably concluded that it should cease coal operations at Harrington before 2025.

45. In evaluating replacement resources, SPS considered the construction of new natural gas combustion turbines.

46. Retiring and replacing Harrington with new natural gas combustion turbines at the same site is not feasible in the timeframe needed.

47. In evaluating replacement resources, SPS also considered proposals from 18 companies that proposed eight key technologies: solar, solar plus storage, wind, gravitational energy storage, combined cycle plus hydrogen storage, liquid air energy storage, flow energy storage, and compressed air batteries.

48. SPS's modeling was reviewed and approved by an independent evaluator (IE).

49. The IE concluded that either converting all three units at Harrington or just two units "can be deemed prudent paths forward."

50. Because the same size natural gas pipeline is needed whether two or three units are converted, the incremental cost to retain the 340 MW of capacity of

Unit 1, the oldest and most likely unit to be retired, is relatively small, only $2.6 million or $7.65/kilowatt.

51. In deciding between the options, it is appropriate to consider qualitative factors in addition to cost.

52. Retiring Unit 1 would pose reliability risks and could result in the loss of SPS's interconnection rights at Harrington, which are increasingly valuable given the current cost of new interconnection rights.

53. Mothballing Unit 1 would mean that it is unable to immediately serve as a peaking unit and thus may be unavailable when SPS's customers might need it most, such as during the summer heat or a winter weather event.

54. SPS demonstrated that the most feasible and cost-effective option for maintaining the necessary generation capacity provided by Harrington is conversion of all three boilers from coal to natural gas.

55. SPS's request does not include dual-fuel or fuel-storage capabilities, which would require additional investment.

56. SPS demonstrated that entering into a firm fuel contract in lieu of building a new pipeline was not feasible because the existing natural gas pipeline serving Harrington is not large enough to serve the fuel needs of the converted boilers.

57. SPS selected interconnection points to existing pipelines based on the available pipelines in the area of Harrington and discussed supply with representatives for those pipelines.

58. SPS will be able to benefit from a diversity of natural gas supplies by connecting to two natural gas pipelines.

59. SPS demonstrated that it used reasonable methods to develop fuel price forecasts used in its modeling.

60. The conversion of all three Harrington units is a prudent alternative to meet the need to maintain necessary capacity.

Effect of Granting the CCN on SPS and Other Electric Utilities

61. SPS's conversion of Harrington will not likely have any adverse impacts on other electric utilities in Texas.

62. After the conversion of Harrington, the same amount of firm and dispatchable generation will be available at the same location.

63. Conversion of Harrington will allow SPS to maintain compliance with SPP's reserve margin requirements.

64. Conversion of Harrington will allow SPS to maintain voltage stabilization provided by the Harrington units, which positively impacts the overall reliability of SPP and benefits SPP members.

65. If conversion of Harrington is not approved, SPS would need to secure replacement resources for Harrington at a higher cost than conversion and would need to invest in voltage stabilization.

66. No party argued or presented evidence that the proposed conversion will adversely impact SPS or other electric utilities.

Pipeline Routes

67. The Application included four alternative routes.

68. The four routes range in length from approximately 19.01 to 21.81 miles.

69. None of the proposed pipeline routes have habitable structures within 500 feet of the centerline.

70. All alternative routes are viable and constructible.

Route Adequacy

71. No party requested a hearing on route adequacy.

72. Given the location of existing pipeline interconnection points and the nature of the area where the alternatives are located, the Application provided an adequate number of reasonably differentiated routes to conduct a proper evaluation.

Effect on Customers, the Community, and the Environment

73. The conversion of all three Harrington Units is the most cost-effective alternative for SPS to meet the minimum reserve requirements in SPP after weighing all qualitative and quantitative factors.

74. If conversion of Harrington is not approved, SPS would need to secure replacement resources at a higher cost, which would negatively impact its customers through higher bills.

75. Conversion of Harrington from coal to natural gas will positively impact the environment through improved emissions and air quality.

76. There is no evidence that the proposed conversion would affect retirement or modification of any other facility in a manner that affects environmental integrity.

77. Continued operation of the pipeline and Harrington post-conversion is unlikely to have any significant adverse impact on the community because the pipeline will be below ground and Harrington will continue to operate as a power plant.

78. The environmental assessment (EA) performed by POWER Engineers (POWER) analyzed the possible effects of the pipeline facilities on numerous environmental factors.

79. Review of information from the Texas Parks and Wildlife Department (TPWD) and the U.S. Fish and Wildlife Service (USFWS) indicates no federally listed or state-listed plant or animal species within the study area for the potential pipeline routes.

80. It is unlikely that the pipeline facilities will have significant adverse impacts on populations of any federally listed endangered or threatened species.

81. It is unlikely that the pipeline will have any significant adverse impacts on the physiographic or geologic features and resources of the area.

82. It is unlikely that construction, operation, and maintenance of the pipeline will adversely affect groundwater resources within the study area.

83. The pipeline is anticipated to have short-term minimal impacts to soil, water, and ecological resources. Most of the impacts will be during construction.

84. The impacts to vegetation will result from clearing and maintaining right-of-way for the construction, operation, and maintenance of the pipeline.

85. None of the proposed pipeline routes cross critical habitat.

86. None of the proposed pipeline routes cross sensitive vegetation communities.

87. None of the proposed pipeline routes cross wetlands.

88. SPS can construct the pipeline facilities in an ecologically sensitive manner on any of the proposed routes.

89. The following factors favor selection of Route 2:

    a. It is the shortest route at 19.01 miles;

    b. It has the shortest length and area across bottomland/riparian brushland or shrubland, 11.8 miles and 71.5 acres;

    c. It has the shortest area across highly erodible soils, 0.2 acres;

    d. It has the shortest area across poor revegetation potential soils, 4.0 acres;

    e. It has the shortest length and area across high probability areas for archaeological sites, 11.0 miles and 66.9 acres; and

    f. It contains no archaeological or historical sites within its construction right of way.

90. It is appropriate for SPS to employ erosion control during initial construction of the pipeline. SPS indicated that prior to construction it would develop a Stormwater Pollution Prevention Plan (SWPPP) to minimize potential impacts associated with soil erosion, compaction, and off-right-of-way sedimentation. The SWPPP will also establish criteria for mitigating soil compaction and revegetation to ensure adequate soil stabilization during construction and operation.

91. After Commission approval of a route, field surveys may be performed, if necessary, to identify potential suitable habitat for federally and state-listed animal species and determine the need for any additional species-specific surveys. If potential suitable habitat is identified or federally or state-listed animal species are observed during a field survey of the Commission-approved route, SPS will cooperate with TPWD and USFWS to determine avoidance or mitigation strategies.

92. SPS will mitigate any effect on federally listed plant or animal species according to standard practices and measures taken in accordance with the Endangered Species Act.

93. It is appropriate for SPS to minimize the amount of flora and fauna disturbed during construction of the pipeline facilities.

94. It is appropriate for SPS to re-vegetate cleared and disturbed areas using native species consistent with SPS's standard vegetation management practices and operational needs.

95. It is appropriate for SPS to avoid, to the maximum extent possible, causing adverse environmental effects on sensitive plant and animal species and their habitats.

96. It is appropriate for SPS to take precautions to avoid disturbing occupied nests and take steps to minimize the burden of construction on migratory birds during the nesting season of the migratory bird species identified in the area of construction.

97. It is appropriate for SPS to implement erosion-control measures and return each affected landowner's property to its original contours and grades unless the landowners agree otherwise. However, it is not appropriate for SPS to

restore original contours and grades where different contours or grades are necessary to ensure the safe operation and maintenance of the pipeline.

98. It is appropriate for SPS to exercise extreme care to avoid affecting non-targeted vegetation or animal life when using chemical herbicides to control vegetation within rights-of-way. The use of chemical herbicides to control vegetation within rights-of-way is required to comply with the rules and guidelines established in the Federal Insecticide, Fungicide, and Rodenticide Act and with the Texas Department of Agricultural regulations.

99. It is appropriate for SPS to use best management practices to minimize potential harm that the approved route presents to any migratory birds and threatened or endangered species.

100. It is unlikely that the presence of pipeline facilities below ground along any of the proposed routes will adversely affect the environmental integrity of the surrounding landscape.

101. All of the proposed routes, including Route 2, are environmentally acceptable.

Recreational and Park Areas: Historical and Aesthetic Values

102. There are no parks or recreational areas impacted by the proposed conversion of Harrington or any of the proposed pipeline routes.

103. No National Register of Historic Places properties, State Antiquities Landmarks or Official Texas Historical Markers located in the area will be impacted by the proposed conversion of Harrington or any of the proposed pipeline routes.

104. The landscape within the study area includes residential developments, oil and gas developments, wind farms, and existing pipelines. Once construction is complete, SPS's proposed pipeline will be below ground.

105. No party challenged the proposed conversion of Harrington or the proposed pipeline on the grounds of adverse impacts to recreational and park areas, historical values, or aesthetic values.

106. The conversion of Harrington and the construction of the pipeline will not adversely affect recreational and park areas, historical values, or aesthetic values.

Renewable Energy Goal

107. The goal in Public Utility Regulatory Act (PURA), Texas Utilities Code § 39.904(a) for 10,000 MW of renewable capacity to be installed in Texas by January 1, 2025, has already been met.

108. The proposed conversion of Harrington and construction of the new pipeline cannot adversely affect the goal for renewable energy development established in PURA § 39.904(a).

Reliability

109. Conversion of Harrington will positively affect the reliability in the SPP transmission system by allowing SPS to meet SPP's minimum reserve requirements.

110. Conversion of Harrington will also allow SPS to maintain the voltage support capabilities of Harrington.

Texas Parks and Wildlife Department

111. TPWD's wildlife habitat assessment program provided information and recommendations regarding the preliminary study area for the proposed pipeline to POWER on June 1, 2021.

112. On October 28, 2021, a letter from TPWD was filed in this proceeding making various comments and recommendations regarding the proposed pipeline facilities.

113. TPWD included comments and recommendations regarding the pipeline facilities and potential impacts on sensitive fish and wildlife resources, habitats, or other sensitive natural resources. The letter includes concerns, comments, and recommendations that are often provided by TPWD regarding CCN amendment applications before the Commission involving

the construction of new utility facilities. POWER and SPS have already taken into consideration several of the recommendations offered by TPWD as SPS follows many of the recommendations in the TPWD letter relating to proper use and placement of sediment-control fencing, avoiding impacts to water resources, avoiding potential impacts to endangered species, and re-vegetation of disturbed areas where appropriate.

114. TPWD's letter identified Route 2 as the route that best minimizes adverse impacts on natural resources.

115. SPS will implement mitigation measures and best management practices set forth in the EA, those included in the recommendations of the Commission's engineering staff, and those typically included in the Commission's final orders in CCN amendment applications involving the construction of new utility facilities. The mitigation measures and best management practices recommended by Staff, combined with the mitigation practices set out in the environmental assessment, will minimize the impact of pipeline construction on wildlife, minimize disruption of flora and fauna, and result in revegetation with native species following construction.

116. SPS will use avoidance and mitigation procedures to comply with laws protecting federally listed species.

117. SPS will revegetate disturbed areas to the extent that revegetation does not interfere with the normal operation and maintenance of the pipeline.

118. SPS's standard vegetation-removal, construction, and maintenance practices adequately mitigate concerns expressed by the TPWD.

119. SPS will use appropriate avian protection procedures.

120. SPS will comply will all environmental laws and regulations, including those governing threatened and endangered species.

121. SPS will cooperate with the USFWS and the TPWD if threatened or endangered species' habitats are identified during field surveys.

122. Staff's recommended mitigation measures included in the ordering paragraphs in this Order, coupled with SPS's current practices, are

reasonable measures for a utility to undertake when constructing a pipeline and are sufficient to address the TPWD's comments and recommendations.

Other Regulatory Approvals

123. SPS obtained regulatory approval from the New Mexico Public Regulation Commission (NMPRC) for the conversion of Harrington on April 27, 2022.

124. NMPRC's approval of the conversion of Harrington included minor reporting conditions: (1) SPS must file with the NMPRC all construction reports; (2) SPS must file with the NMPRC actual costs of the project, including allowance for funds used during construction, within one month of becoming available; (3) SPS must file with the NMPRC notice of Harrington's commercial operation date post-conversion; and (4) SPS must file with the NMPRC a notice when fuel costs shall first be included in SPS's Fuel and Purchased Power Cost Adjustment Clause.

125. Upon approval of this Application, SPS will seek necessary permits from the Railroad Commission of Texas, including an amendment to its T-4 permit to allow for operation of the proposed pipeline, and SPS will file a Form PS-48 with the Railroad Commission at least 60 days before beginning construction on the pipeline.

126. SPS has made no other commitments to any other regulatory authorities regarding the proposed project.

Permits

127. SPS sent communications to the federal, state, and local governmental entities listed in the EA regarding the proposed conversion.

128. Before beginning construction of the pipeline facilities approved by this Order, SPS will obtain any necessary permits from the Texas Department of Transportation or any other applicable state agency if the facilities cross state-owned or -maintained properties, roads, or highways.

129. Before beginning construction of the pipeline facilities approved by this Order, SPS will obtain a miscellaneous easement from the General Land

Office if the pipeline facilities cross any state-owned riverbed or navigable stream.

130. Before beginning construction of the pipeline facilities approved by this Order, SPS will obtain any necessary permits or clearances from federal, state, or local authorities.

131. It is appropriate for SPS, before commencing construction, to obtain a general permit to discharge under the Texas Pollutant Discharge Elimination System for stormwater discharges because of construction activities as required by the TCEQ. In addition, it is appropriate for SPS, before commencing construction, to prepare the necessary stormwater pollution prevention plan, to submit a notice of intent to the TCEQ, and to comply with all other applicable requirements of the general permit.

132. It is appropriate for SPS to conduct a field assessment of the approved route before beginning construction of the pipeline facilities approved by this Order to identify water resources, cultural resources, potential migratory bird issues, and threatened and endangered species' habitats disrupted by the pipeline. As a result of these assessments, SPS will identify all necessary permits from Potter County and federal and state agencies. SPS will comply with the relevant permit conditions during construction and operation of the pipeline facilities along the approved route.

Limitation of Authority

133. It is reasonable and appropriate for a CCN order not to be valid indefinitely because it is issued based on the facts known at the time of issuance.

134. Seven years is a reasonable and appropriate limit to place on the authority granted in this Order for SPS to convert Harrington to natural gas and construct the pipeline.

VI. CONCLUSIONS OF LAW

1. The Commission has jurisdiction over this application under PURA §§ 14.001, 37.051, 37.053, 37.056, and 37.058.

2. SPS is an electric utility as defined in PURA §§ 11.004 and 31.002(6).

3. SPS is not a participant in the retail competition market under PURA, Chapter 39, Subchapter I.

4. SPP is a regional transmission organization approved by the Federal Energy Regulatory Commission that meets the requirements of PURA § 39.151 as an independent system operator.

5. SPS must obtain the approval of the Commission to convert Harrington's generating units from coal to natural gas, and to build, own, and operate the pipeline supplying natural gas to the converted Harrington station, and to provide service to the public from the converted Harrington station.

6. SOAH exercised jurisdiction over the proceeding under PURA § 14.053 and Texas Government Code §§ 2001.058, 2003.021, and 2003.049.

7. The application is sufficient under 16 Texas Administrative Code (TAC) § 22.75(d).

8. The Commission processed this docket in accordance with the requirements of PURA, the Administrative Procedure Act, and the Commission's rules.

9. SPS provided notice of the application in compliance with PURA § 37.054 and 16 TAC § 22.52(a).

10. There is good cause under 16 TAC § 22.5(b) to grant an exception to 16 TAC § 22.52(a)(4), which requires a utility to hold an in-person public meeting, and instead allow SPS to have held an online public meeting.

11. SPS provided notice of the online public meeting in compliance with 16 TAC § 22.52(a)(4).

12. The hearing on the merits was set, and notice of the hearing was provided, in compliance with PURA § 37.054 and Texas Government Code §§ 2001.051-.052.

13. The conversion of all three Harrington units and the construction and operation of the pipeline along Route 2 are necessary for the service, accommodation, convenience, or safety of the public within the meaning of PURA § 37.056 and 16 TAC § 25.101.

14. Route 2 best meets the routing criteria set forth in PURA § 37.056 and 16 TAC § 25.101(b)(3)(B).

VII. ORDERING PARAGRAPHS

1. The Commission adopts the proposal for decision, including findings of fact and conclusions of law.

2. The Commission amends SPS's CCN No. 30153 to allow SPS to convert all three existing coal-powered steam turbine units at Harrington to be fueled by natural gas.

3. The Commission amends SPS's CCN No. 30153 to allow SPS to build, own, and operate a pipeline along Route 2 for supplying natural gas to the converted Harrington station.

4. SPS must obtain all permits, licenses, plans, and permissions required by state and federal law that are necessary to construct the pipeline facilities and the conversion of Harrington station approved by this Order, and if SPS fails to obtain any such permit, license, plan, or permission, it must notify the Commission immediately.

5. SPS must identify any additional permits that are necessary, consult any required agencies (such as the U.S. Army Corps of Engineers and the USFWS), obtain all necessary environmental permits, and comply with the relevant conditions before construction and during construction and operation of the pipeline facilities approved by this Order.

6. If SPS encounters any archeological artifacts or other cultural resources during construction, work must cease immediately in the vicinity of the artifact or resource, and SPS must report the discovery to, and act as directed by the Texas Historical Commission.

7. Before beginning construction, SPS must undertake appropriate measures to identify whether a potential habitat for endangered or threatened species exists and must respond as required.

8. SPS must use best management practices to minimize the potential harm to migratory birds and threatened or endangered species.

9. SPS must take precautions to avoid disturbing occupied nests and take steps to minimize the burden of construction on migratory birds during the nesting season of the migratory bird species identified in the area of construction.

10. SPS must exercise extreme care to avoid affecting non-targeted vegetation or animal life when using chemical herbicides to control vegetation within the right-of-way. SPS must ensure that the use of chemical herbicides to control vegetation within the rights-of-way complies with rules and guidelines established in the Federal Insecticide Fungicide and Rodenticide Act and with Texas Department of Agriculture regulations.

11. SPS must minimize the amount of flora and fauna disturbed during construction of the pipeline facilities, except to the extent necessary to establish appropriate right-of-way clearance for the pipeline facilities. In addition, SPS must re-vegetate using native species and must consider landowner preferences and wildlife needs in doing so. Furthermore, to the maximum extent practicable, SPS must avoid adverse environmental effects on sensitive plant and animal species and their habitats, as identified by the TPWD and the USFWS.

12. SPS must implement erosion-control measures as appropriate. Erosion-control measures may include inspection of the right-of-way before and during construction to identify erosion areas and implement special precautions as determined necessary. SPS must return each affected landowner's property to its original contours and grades unless otherwise agreed to by the landowner or the landowner's representative. SPS is not required to restore original contours and grades where a different contour or

grade is necessary to ensure the safety or stability of the pipeline facilities or the safe operation and maintenance of the pipeline facilities.

13. SPS must cooperate with directly affected landowners to implement minor deviations from the approved route to minimize the burden of the pipeline facilities. Any minor deviations in the approved route must only directly affect landowners who were sent notice of the pipeline facilities in accordance with 16 TAC § 22.52(a)(3) and that have agreed to the minor deviation.

14. The Commission does not permit SPS to deviate from the approved route in any instance in which the deviation would be more than a minor deviation without first further amending its CCN.

15. SPS must include the pipeline facilities approved by this Order on its monthly construction progress reports before the start of construction to reflect the final estimated cost and schedule in accordance with 16 TAC § 25.83(b). In addition, SPS must provide final construction costs, with any necessary explanation for cost variance, after completion of construction when SPS identifies all charges.

16. The Commission grants a good cause exception to allow SPS to have held an online public meeting in lieu of the requirement for an in-person public meeting under 16 TAC § 22.52(a)(4).

17. The Commission limits the authority granted by this Order to a period of seven years from the date of this Order unless the converted Harrington station and the supply pipeline are operational before that time.

18. The Commission denies all other motions and any other request for general or specific relief that have not been expressly granted.

SIGNED July 25, 2022.

Cassandra Quinn,
Administrative Law Judge

Ross Henderson,
Administrative Law Judge

PUC DOCKET NO. 52485
SOAH DOCKET NO. 473-22-1073

APPLICATION OF SOUTHWESTERN PUBLIC SERVICE COMPANY TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY TO CONVERT HARRINGTON GENERATING STATION FROM COAL TO NATURAL GAS	§	PUBLIC UTILITY COMMISSION OF TEXAS

ORDER

This Order addresses the application of Southwestern Public Service Company (SPS) to amend its certificate of convenience and necessity (CCN) number 30153 to convert the Harrington generating station from coal to natural gas. The State Office of Administrative Hearings (SOAH) administrative law judge (ALJ) issued a proposal for decision recommending that the Commission amend SPS's CCN to include both the conversion of all three existing coal-powered steam turbine units of the Harrington station to be fueled by natural gas and the construction and operation of a pipeline along route 2 for supplying natural gas to the converted Harrington station. The SOAH ALJs also recommended that the Commission not impose any conditions on the amendment of SPS's CCN. The Commission adopts the proposal for decision to the extent provided in this Order.

The Commission makes the following modifications to the proposal for decision. The Commission corrects a factual error in finding of fact 10, adds new finding of fact 14A to support conclusion of law 10, and adds new findings of fact 66A and 66B for completeness. The Commission also modifies finding of fact 60, so that there is no confusion that the Commission's decision in this proceeding relates to granting a CCN, not approving capital investments as in a base-rate proceeding. The Commission deletes finding of fact 115 and replaces finding of fact 122 with standard language and adds new findings of fact 122A and 122B, which are standard in the Commission's orders in electric CCN proceedings. The Commission modifies finding of fact 119 and conclusion of law 10 for clarity.

The Commission adds conclusion of law 1A to reflect the threshold legal determination made in the Commission's preliminary order as described in finding of fact 10. The Commission

also adds new findings of fact 37A, 37B, 40A, and 40B to address additional procedural history and testimony admitted after the proposal for decision was issued.

The Commission makes non-substantive changes for such matters as capitalization, spelling, grammar, punctuation, style, correction of numbering, and readability.

I. Findings of Fact

The Commission adopts the following findings of fact.

Applicant

1. SPS is incorporated under the laws of the State of New Mexico and is a wholly owned subsidiary of Xcel Energy, Inc.

2. SPS is a fully integrated utility that owns equipment and facilities to generate, transmit, distribute, and sell electricity in Texas and New Mexico.

3. In Texas, SPS is authorized under CCN number 30153 to provide service to the public and to provide retail electric utility service within its certificated service area.

Application

4. On August 27, 2021, SPS filed an application with the Commission to amend its CCN to convert all three generation units at the Harrington generating station from coal generation to natural gas generation. The application additionally requests that the Commission authorize SPS to construct, own, and operate a new pipeline to supply natural gas to Harrington.

5. Harrington is located north of Amarillo in Potter County, Texas.

6. Harrington consists of three coal-powered steam turbine units with a total net capacity of 1,050 megawatts (MW).

7. All three of Harrington's boilers were designed to burn either coal or natural gas.

8. On October 5, 2021, Commission Staff recommended that the application be deemed administratively complete.

9. No party challenged the sufficiency of the application.

10. In its preliminary order filed on December 16, 2021, the Commission concluded as a threshold issue that it had exclusive jurisdiction over the application, including for the construction of the new pipeline that would supply natural gas to Harrington.

Notice

11. On November 4, 2021, SPS filed the affidavit of Michael K. Knapp, case specialist with SPS, attesting to the provision of notice of the application on August 27, 2021 by email to all parties of record in SPS's most recent rate case, Docket No. 51802,[1] and by mail to the City of Amarillo, the county judge of Potter County, the Texas Parks and Wildlife Department, and all directly affected landowners. Additionally, SPS filed publishers' affidavits attesting to the publication of notice as follows: (a) in the *Amarillo Globe-News*, a newspaper of general circulation in Potter County, on October 14, 2021; (b) in the *Booker News*, a newspaper of general circulation in Lipscomb County, on October 14, 2021; (c) in the *Caprock Courier*, a newspaper of general circulation in Briscoe, Cottle, Hall, King, and Motley counties, on October 14, 2021; (d) in the *County Star-News*, a newspaper of general circulation in Wheeler County, on October 14, 2021; (e) in the *Dalhart Texan*, a newspaper of general circulation in Dallam and Hartley counties, on October 15, 2021; (f) in the *Miami Chief*, a newspaper of general circulation in Roberts County, on September 30 and October 7, 14, and 21, 2021; (g) in the *Muleshoe Journal*, a newspaper of general circulation in Bailey County, on October 14, 2021; (h) in the *Pampa News*, a newspaper of general circulation in Gray County, on October 16, 2021; and (i) in the *Sherman County Gazette*, a newspaper of general circulation in Sherman County, on October 14, 2021.

12. On November 23, 2021, SPS filed a publisher's affidavit attesting that notice was published in the *Lubbock Avalanche-Journal*, a newspaper of general circulation in Cochran, Crosby, Dawson, Floyd, Gaines, Garza, Hale, Hockley, Lamb, Lubbock, Lynn, Motley, Terry, and Yoakum counties, on October 15, 2021.

13. In Order No. 7 filed on November 29, 2021, the Commission ALJ found SPS's notice of the application sufficient.

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[1] *Application of Southwestern Public Service Company for Authority to Change Rates*, Docket No. 51802, Order (May 20, 2022).

Public Input

14. SPS hosted a live virtual public meeting on April 29, 2021, by videoconference in lieu of an in-person meeting.

14A. The COVID-19 pandemic and the social-distancing recommendations made by the Centers for Disease Control and Prevention and the State of Texas constitute good cause for SPS to have held an online public meeting by webinar rather than hold an in-person public meeting for these transmission facilities.

15. SPS invited all landowners with property within 500 feet of a proposed pipeline centerline to the public meeting and provided them an overview map of the proposed pipeline routes, a questionnaire, a landowner's bill of rights, a permission-to-survey form, a brochure from the Commission with information about CCN amendment proceedings, a comment form, and instructions on how to access the live virtual public meeting.

16. Four landowners attended the virtual public meeting.

17. SPS did not receive any completed questionnaires or written comments from the landowners or other members of the public.

Intervenors

18. Adobe Creek, Ltd., Windtree Manor, Ltd., Texas Industrial Energy Consumers (TIEC), Sierra Club, the Alliance of Xcel Municipalities, and the Office of Public Utility Counsel (OPUC) filed motions to intervene in this docket.

19. In Commission Order No. 2 filed on September 21, 2021, the Commission ALJ granted the motions to intervene of Adobe Creek, Ltd., Windtree Manor, Ltd., and TIEC.

20. In Commission Order No. 5 filed on October 21, 2021, the Commission ALJ granted the motion to intervene of Sierra Club.

21. In Commission Order No. 8 filed on December 3, 2021, the Commission ALJ granted the motion to intervene of the Alliance of Xcel Municipalities.

22. In SOAH Order No. 2 filed on January 5, 2022, the SOAH ALJ granted the motion to intervene of OPUC.

Statements of Position and Testimony

23. On August 27, 2021, SPS filed the direct testimonies of William A. Grant, Jeffrey L. West, John M. Goodenough, Ben R. Elsey, Mark Lytal, D. Dean Koujak, and Anastacia Santos. These direct testimonies were admitted at the hearing.

24. On March 25, 2022, the Alliance of Xcel Municipalities filed the direct testimony of Scott Norwood. This direct testimony was admitted at the hearing.

25. On March 25, 2022, Sierra Club filed the direct testimony of Devi Glick. This direct testimony was admitted at the hearing.

26. On March 25, 2022, OPUC filed the direct testimony of Karl Nalepa. This direct testimony was admitted at the hearing.

27. On April 5, 2022, Commission Staff filed the direct testimony of John Poole. This direct testimony was admitted at the hearing.

28. On April 13, 2022, SPS filed the rebuttal testimonies of Mr. Grant, Mr. Elsey, Mr. Koujak, Mr. Lytal, Mr. West, and Ms. Santos. These rebuttal testimonies were admitted at the hearing.

29. On April 20, 2022, TIEC filed a statement of position.

30. On April 21, 2022, Commission Staff filed a statement of position.

31. On April 21, 2022, SPS filed errata to the rebuttal testimony of Mr. Grant. This rebuttal testimony was admitted at the hearing.

32. On April 26, 2022, Sierra Club filed errata to the direct testimony of Ms. Glick. This direct testimony was admitted at the hearing.

Referral to SOAH for Hearing

33. On December 13, 2021, the Commission referred this docket to SOAH and filed a preliminary order identifying the issues to be addressed in this proceeding.

34. On January 4, 2022, SOAH convened a prehearing conference in this docket by videoconference, at which time a procedural schedule was discussed.

35. In SOAH Order No. 3 filed on January 24, 2022, the SOAH ALJs scheduled the hearing on the merits to begin on April 26, 2022.

36. On April 26, 2022, the hearing on the merits convened before SOAH ALJs Cassandra Quinn and Ross Henderson by videoconference. The following parties made appearances through their legal counsel and participated in the hearing: SPS, Commission Staff, the Alliance of Xcel Municipalities, OPUC, Sierra Club, and TIEC. Neither Adobe Creek, Ltd. nor Windtree Manor, Ltd. appeared at the hearing.

37. The record closed on May 25, 2022, with the filing of the parties' post-hearing reply briefs.

Return from SOAH

37A. On September 7, 2022, SPS filed the responsive testimony of Ben R. Elsey.

37B. In Order No. 9 filed on September 14, 2022, the Commission ALJ admitted the responsive testimony of Mr. Elsey into the evidentiary record.

Adequacy of Existing Service and Need for Additional Service

38. SPS and the Texas Commission on Environmental Quality (TCEQ) executed an agreed order in TCEQ Docket No. 2020-0982-MIS requiring SPS to cease coal operations at Harrington by January 1, 2025, to avoid non-compliance with federal National Ambient Air Quality Standards for sulfur dioxide (SO2).

39. SPS is a member of the Southwest Power Pool (SPP).

40. SPP requires that each member in SPP have a planning reserve margin of at least 12% of its peak-demand forecast.

40A. SPP recently increased the planning reserve margin to 15%.

40B. SPS will require between 116 MW and 157 MW of additional capacity on an annual basis to meet the 3% increase to the planning-reserve-margin requirement.

41. If SPS retired Harrington on or before January 1, 2025, rather than converting Harrington to be powered by natural gas, SPS would not meet its planning reserve margin requirements in SPP unless SPS secured replacement generation resources.

42. SPS modeled different scenarios under a variety of conditions to determine the cost of replacement generation resources under both resource planning and financial planning forecasts.

43. SPS modeled the following compliance options to reduce SO2 emissions at Harrington:

a. Retirement of all three Harrington units and replacement of Harrington's generation capacity with replacement resources;

b. Conversion of all three Harrington units to operate on natural gas;

c. Installation of dry sorbent injection (an environmental control for SO2 emissions) on the Harrington units;

d. Installation of spray dry absorber (an environmental control for SO2 emissions) on the Harrington units;

e. Retirement of Harrington units 1 and 2 and conversion of Harrington unit 3 to operate on natural gas; and

f. Retirement of unit 1 and conversion of Harrington units 2 and 3 to operate on natural gas.

44. Due to the high cost of installing environmental controls, SPS reasonably concluded that it should cease coal operations at Harrington before 2025.

45. In evaluating replacement resources, SPS considered the construction of new natural gas combustion turbines.

46. Retiring and replacing Harrington with new natural gas combustion turbines at the same site is not feasible in the timeframe needed.

47. In evaluating replacement resources, SPS also considered proposals from 18 companies that proposed eight key technologies: solar, solar plus storage, wind, gravitational energy storage, combined cycle plus hydrogen storage, liquid air energy storage, flow energy storage, and compressed air batteries.

48. SPS's modeling was reviewed and approved by an independent evaluator.

49. The independent evaluator concluded that either converting all three units at Harrington or just two units "can be deemed prudent paths forward."

50. Because a natural gas pipeline of the same size is needed whether two or three units are converted, the incremental cost to retain the 340 MW of capacity of unit 1, the oldest and most likely unit to be retired, is relatively small, only $2.6 million or $7.65 per kilowatt.

51. In deciding between the options, it is appropriate to consider qualitative factors in addition to cost.

52. Retiring unit 1 would pose reliability risks and could result in the loss of SPS's interconnection rights at Harrington, which are increasingly valuable given the current cost of new interconnection rights.

53. Mothballing unit 1 would mean that it is unable to immediately serve as a peaking unit and thus may be unavailable when SPS's customers might need it most, such as during the summer heat or a winter weather event.

54. SPS demonstrated that the most feasible and cost-effective option for maintaining the necessary generation capacity provided by Harrington is converting all three boilers from coal to natural gas.

55. SPS's request does not include dual-fuel or fuel-storage capabilities, which would require additional investment.

56. SPS demonstrated that entering into a firm fuel contract in lieu of building a new pipeline was not feasible because the existing natural gas pipeline serving Harrington is not large enough to serve the fuel needs of the converted boilers.

57. SPS selected interconnection points to existing pipelines based on the available pipelines in the area of Harrington and discussed supply with representatives for those pipelines.

58. SPS will be able to benefit from a diversity of natural gas supplies by connecting to two natural gas pipelines.

59. SPS demonstrated that it used reasonable methods to develop fuel-price forecasts used in its modeling.

60. The conversion of all three Harrington units is an appropriate alternative to meet the need to maintain necessary capacity.

Effect of Granting the CCN on SPS and Other Electric Utilities

61. SPS's conversion of Harrington will not likely have any adverse impacts on other electric utilities in Texas.

62. After the conversion of Harrington, the same amount of firm and dispatchable generation will be available at the same location.

63. Conversion of Harrington will allow SPS to maintain compliance with SPP's reserve margin requirements.

64. Conversion of Harrington will allow SPS to maintain voltage stabilization provided by the Harrington units, which positively impacts the overall reliability of SPP and benefits SPP members.

65. If conversion of Harrington is not approved, SPS would need to secure replacement resources for Harrington at a higher cost than conversion and would need to invest in voltage stabilization.

66. No party argued or presented evidence that the proposed conversion will adversely impact SPS or other electric utilities.

Costs

66A. The conversion of all three units, including the construction of a new 20-inch-diameter natural gas pipeline, is estimated to cost between $65 and $75 million, $45 to $52 million of which will be allocable to SPS's Texas ratepayers.

66B. The construction of the new natural gas pipeline is estimated to cost approximately $57 million on a total-company basis.

Pipeline Routes

67. The application included four alternative routes.

68. The four routes range in length from 19.01 to 21.81 miles.

69. None of the proposed pipeline routes have habitable structures within 500 feet of the centerline.

70. All alternative routes are viable and constructible.

Route Adequacy

71. No party requested a hearing on route adequacy.

72. Given the location of existing pipeline interconnection points and the nature of the area where the alternatives are located, the application provided an adequate number of reasonably differentiated routes to conduct a proper evaluation.

Effect on Customers, the Community, and the Environment

73. The conversion of all three Harrington units is the most cost-effective alternative for SPS to meet the minimum reserve requirements in SPP after weighing all qualitative and quantitative factors.

74. If conversion of Harrington is not approved, SPS would need to secure replacement resources at a higher cost, which would negatively impact its customers through higher bills.

75. Conversion of Harrington from coal to natural gas will positively impact the environment through improved emissions and air quality.

76. There is no evidence that the proposed conversion would affect retirement or modification of any other facility in a manner that affects environmental integrity.

77. Continued operation of the pipeline and Harrington post-conversion is unlikely to have any significant adverse impact on the community because the pipeline will be below ground and Harrington will continue to operate as a power plant.

78. The environmental assessment performed by POWER Engineers analyzed the possible effects of the pipeline facilities on numerous environmental factors.

79. Review of information from the Texas Parks and Wildlife Department and the U.S. Fish and Wildlife Service indicates no federally listed or state-listed plant or animal species within the study area for the potential pipeline routes.

80. It is unlikely that the pipeline facilities will have significant adverse impacts on populations of any federally listed endangered or threatened species.

81. It is unlikely that the pipeline will have any significant adverse impacts on the physiographic or geologic features and resources of the area.

82. It is unlikely that construction, operation, and maintenance of the pipeline will adversely affect groundwater resources within the study area.

83. The pipeline is anticipated to have short-term minimal impacts on soil, water, and ecological resources. Most of the impacts will be during construction.

84. The impacts to vegetation will result from clearing and maintaining right-of-way for the construction, operation, and maintenance of the pipeline.

85. None of the proposed pipeline routes cross critical habitat.

86. None of the proposed pipeline routes cross sensitive vegetation communities.

87. None of the proposed pipeline routes cross wetlands.

88. SPS can construct the pipeline facilities in an ecologically sensitive manner on any of the proposed routes.

89. The following factors favor selection of route 2:

    a. It is the shortest route at 19.01 miles;

    b. It has the shortest length and area across bottomland and riparian brushland or shrubland, 11.8 miles and 71.5 acres;

    c. It has the shortest area across highly erodible soils, 0.2 acres;

    d. It has the shortest area across soils with poor potential for revegetation, 4.0 acres;

    e. It has the shortest length and area across areas with a high probability for archaeological sites, 11.0 miles and 66.9 acres; and

    f. It contains no archaeological or historical sites within its construction right of way.

90. It is appropriate for SPS to employ erosion control during initial construction of the pipeline. SPS indicated that prior to construction it would develop a stormwater pollution prevention plan to minimize potential impacts associated with soil erosion, compaction, and off-right-of-way sedimentation. The stormwater pollution prevention plan will also establish criteria for mitigating soil compaction and revegetation to ensure adequate soil stabilization during construction and operation.

91. After Commission approval of a route, field surveys may be performed, if necessary, to identify potential suitable habitat for federally and state-listed animal species and determine the need for any additional species-specific surveys. If potential suitable habitat is identified or federally or state-listed animal species are observed during a field survey of the Commission-approved route, SPS will cooperate with the Texas Parks and Wildlife Department and the United States Fish and Wildlife Service to determine avoidance or mitigation strategies.

92. SPS will mitigate any effect on federally listed plant or animal species according to standard practices and measures taken in accordance with the Endangered Species Act.

93. It is appropriate for SPS to minimize the amount of flora and fauna disturbed during construction of the pipeline facilities.

94. It is appropriate for SPS to re-vegetate cleared and disturbed areas using native species in accordance with SPS's standard vegetation management practices and operational needs.

95. It is appropriate for SPS to avoid, to the maximum extent possible, causing adverse environmental effects on sensitive plant and animal species and their habitats.

96. It is appropriate for SPS to take precautions to avoid disturbing occupied nests and take steps to minimize the burden of construction on migratory birds during the nesting season of the migratory bird species identified in the area of construction.

97. It is appropriate for SPS to implement erosion-control measures and return each affected landowner's property to its original contours and grades unless the landowners agree otherwise. However, it is not appropriate for SPS to restore original contours and grades where different contours or grades are necessary to ensure the safe operation and maintenance of the pipeline.

98. It is appropriate for SPS to exercise extreme care to avoid affecting non-targeted vegetation or animal life when using chemical herbicides to control vegetation within rights-of-way. The use of chemical herbicides to control vegetation within rights-of-way is required to comply with the rules and guidelines established in the Federal Insecticide, Fungicide, and Rodenticide Act and with the Texas Department of Agriculture's regulations.

99. It is appropriate for SPS to use best management practices to minimize potential harm that the approved route presents to any migratory birds and threatened or endangered species.

100. It is unlikely that the presence of pipeline facilities below ground along any of the proposed routes will adversely affect the environmental integrity of the surrounding landscape.

101. All of the proposed routes, including route 2, are environmentally acceptable.

Recreational and Park Areas; Historical and Aesthetic Values

102. There are no parks or recreational areas impacted by the proposed conversion of Harrington or any of the proposed pipeline routes.

103. No National Register of Historic Places properties, State Antiquities Landmarks, or Official Texas Historical Markers located in the area will be impacted by the proposed conversion of Harrington or any of the proposed pipeline routes.

104. The landscape within the study area includes residential developments, oil and gas developments, wind farms, and existing pipelines. Once construction is complete, SPS's proposed pipeline will be below ground.

105. No party challenged the proposed conversion of Harrington or the proposed pipeline on the grounds of adverse impacts to recreational and park areas, historical values, or aesthetic values.

106. The conversion of Harrington and the construction of the pipeline will not adversely affect recreational and park areas, historical values, or aesthetic values.

Renewable Energy Goal

107. The goal in PURA[2] § 39.904(a) for 10,000 MW of renewable capacity to be installed in Texas by January 1, 2025, has already been met.

108. The proposed conversion of Harrington and construction of the new pipeline cannot adversely affect the goal for renewable energy development established in PURA § 39.904(a).

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[2] Public Utility Regulatory Act, Tex. Util. Code §§ 11.001–66.016 (PURA).

Reliability

109. The conversion of Harrington will positively affect the reliability in the SPP transmission system by allowing SPS to meet SPP's minimum reserve requirements.

110. The conversion of Harrington will also allow SPS to maintain the voltage support capabilities of Harrington.

Texas Parks and Wildlife Department

111. The Texas Parks and Wildlife Department's wildlife habitat assessment program provided information and recommendations regarding the preliminary study area for the proposed pipeline to POWER Engineers on June 1, 2021.

112. On October 28, 2021, a letter from the Texas Parks and Wildlife Department was filed in this proceeding making various comments and recommendations regarding the proposed pipeline facilities.

113. The Texas Parks and Wildlife Department included comments and recommendations regarding the pipeline facilities and potential impacts on sensitive fish and wildlife resources, habitats, or other sensitive natural resources. The letter includes concerns, comments, and recommendations that are often provided by the Texas Parks and Wildlife Department regarding CCN amendment applications before the Commission involving the construction of new utility facilities. POWER Engineers and SPS have already taken into consideration several of the recommendations offered by the Texas Parks and Wildlife Department as SPS follows many of the recommendations in the Texas Parks and Wildlife Department letter relating to proper use and placement of sediment-control fencing, avoiding impacts to water resources, avoiding potential impacts to endangered species, and re-vegetation of disturbed areas where appropriate.

114. The Texas Parks and Wildlife Department's letter identified route 2 as the route that best minimizes adverse impacts on natural resources.

115. DELETED.

116. SPS will use avoidance and mitigation procedures to comply with laws protecting federally listed species.

117. SPS will revegetate disturbed areas to the extent that revegetation does not interfere with the normal operation and maintenance of the pipeline.

118. SPS's standard vegetation-removal, construction, and maintenance practices adequately mitigate concerns expressed by the Texas Parks and Wildlife Department.

119. SPS will use appropriate avian protection procedures, if applicable.

120. SPS will comply with all environmental laws and regulations, including those governing threatened and endangered species.

121. SPS will cooperate with the United States Fish and Wildlife Service and the Texas Parks and Wildlife Department if threatened or endangered species' habitats are identified during field surveys.

122. The standard mitigation requirements included in the ordering paragraphs of this Order, coupled with SPS's current practices, are reasonable measures for a transmission service provider to undertake when constructing a transmission line and sufficiently address the Texas Parks and Wildlife Department's comments and recommendations.

122A. This Order addresses only those recommendations by the Texas Parks and Wildlife Department for which there is record evidence.

122B. The recommendations and comments made by the Texas Parks and Wildlife Department do not necessitate any modifications to the proposed conversion or pipeline.

Other Regulatory Approvals

123. SPS obtained regulatory approval from the New Mexico Public Regulation Commission for the conversion of Harrington on April 27, 2022.

124. The New Mexico Public Regulation Commission's approval of the conversion of Harrington included minor reporting conditions. The New Mexico Public Regulation Commission required SPS to file with the New Mexico Public Regulation Commission all construction reports; actual costs of the project, including allowance for funds used during construction, within one month of becoming available; notice of Harrington's commercial operation date post-conversion; and a notice when fuel costs shall first be included in SPS's fuel and purchased power cost adjustment clause.

125. Upon approval of this application, SPS will seek necessary permits from the Railroad Commission of Texas, including an amendment to its T-4 permit to allow for operation of the proposed pipeline, and SPS will file a Form PS-48 with the Railroad Commission at least 60 days before beginning construction on the pipeline.

126. SPS has made no other commitments to any other regulatory authorities regarding the proposed project.

Permits

127. SPS sent communications to the federal, state, and local governmental entities listed in the environmental assessment regarding the proposed conversion.

128. Before beginning construction of the pipeline facilities approved by this Order, SPS will obtain any necessary permits from the Texas Department of Transportation or any other applicable state agency if the facilities cross state-owned or -maintained properties, roads, or highways.

129. Before beginning construction of the pipeline facilities approved by this Order, SPS will obtain a miscellaneous easement from the General Land Office if the pipeline facilities cross any state-owned riverbed or navigable stream.

130. Before beginning construction of the pipeline facilities approved by this Order, SPS will obtain any necessary permits or clearances from federal, state, or local authorities.

131. It is appropriate for SPS, before commencing construction, to obtain a general permit to discharge under the Texas Pollutant Discharge Elimination System for stormwater discharges because of construction activities as required by TCEQ. In addition, it is appropriate for SPS, before commencing construction, to prepare the necessary stormwater pollution prevention plan, to submit a notice of intent to TCEQ, and to comply with all other applicable requirements of the general permit.

132. It is appropriate for SPS to conduct a field assessment of the approved route before beginning construction of the pipeline facilities approved by this Order to identify water resources, cultural resources, potential migratory bird issues, and threatened and endangered species' habitats disrupted by the pipeline. As a result of these assessments,

SPS will identify all necessary permits from Potter County and federal and state agencies. SPS will comply with the relevant permit conditions during construction and operation of the pipeline facilities along the approved route.

Limitation of Authority

133. It is reasonable and appropriate for a CCN order not to be valid indefinitely because it is issued based on the facts known at the time of issuance.

134. Seven years is a reasonable and appropriate limit to place on the authority granted in this Order for SPS to convert Harrington to natural gas and construct the pipeline.

II. Conclusions of Law

The Commission adopts the following conclusions of law.

1. The Commission has authority over this application under PURA §§ 14.001, 37.051, 37.053, 37.056, and 37.058.

1A. Under PURA §§ 37.051, 37.053, 37.056, and 37.058, the Commission has exclusive original jurisdiction over this application for the conversion of the Harrington station, including for the construction of a 20-inch pipeline that will supply natural gas to the station.

2. SPS is an electric utility as defined in PURA §§ 11.004 and 31.002(6).

3. SPS is not a participant in the retail competition market under PURA, chapter 39, subchapter I.

4. The Southwest Power Pool is a regional transmission organization approved by the Federal Energy Regulatory Commission that meets the requirements of PURA § 39.151 as an independent system operator.

5. SPS must obtain the approval of the Commission to convert Harrington's generating units from coal to natural gas, to build, own, and operate the pipeline supplying natural gas to the converted Harrington station, and to provide service to the public from the converted Harrington station.

6. SOAH exercised jurisdiction over the proceeding under PURA § 14.053 and Texas Government Code §§ 2001.058, 2003.021, and 2003.049.

7. The application is sufficient under 16 Texas Administrative Code (TAC) § 22.75(d).

8. The Commission processed this docket in accordance with the requirements of PURA, the Administrative Procedure Act,[3] and the Commission's rules.

9. SPS provided notice of the application in compliance with PURA § 37.054 and 16 TAC § 22.52(a).

10. There is good cause under 16 TAC § 22.5(b) to grant an exception to the requirements of 16 TAC § 22.52(a)(4) for SPS to have held an online public meeting instead of an in-person public meeting.

11. SPS provided notice of the online public meeting in compliance with 16 TAC § 22.52(a)(4).

12. The hearing on the merits was set, and notice of the hearing was provided, in compliance with PURA § 37.054 and Texas Government Code §§ 2001.051 and 2001.052.

13. The conversion of all three Harrington units and the construction and operation of the pipeline along route 2 are necessary for the service, accommodation, convenience, or safety of the public within the meaning of PURA § 37.056 and 16 TAC § 25.101.

14. Route 2 best meets the routing criteria set forth in PURA § 37.056 and 16 TAC § 25.101(b)(3)(B).

III. Ordering Paragraphs

In accordance with these findings of fact and conclusions of law, the Commission issues the following orders:

1. The Commission adopts the proposal for decision, including findings of fact and conclusions of law, to the extent provided in this Order.

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[3] Tex. Gov't Code §§ 2001.001–.903.

2. The Commission amends SPS's CCN number 30153 to include the conversion of all three existing coal-powered steam turbine units at Harrington to be fueled by natural gas.

3. The Commission amends SPS's CCN number 30153 to include the construction, ownership, and operation of a pipeline along route 2 for supplying natural gas to the converted Harrington station.

4. SPS must obtain all permits, licenses, plans, and permissions required by state and federal law that are necessary to construct the pipeline facilities and convert the Harrington station as approved by this Order, and if SPS fails to obtain any such permit, license, plan, or permission, it must notify the Commission immediately.

5. SPS must identify any additional permits that are necessary, consult any required agencies (such as the U.S. Army Corps of Engineers and the United States Fish and Wildlife Service), obtain all necessary environmental permits, and comply with the relevant conditions before construction and during construction and operation of the pipeline facilities approved by this Order.

6. If SPS encounters any archeological artifacts or other cultural resources during construction, work must cease immediately in the vicinity of the artifact or resource, and SPS must report the discovery to, and act as directed by, the Texas Historical Commission.

7. Before beginning construction, SPS must undertake appropriate measures to identify whether a potential habitat for endangered or threatened species exists and must respond as required.

8. SPS must use best management practices to minimize the potential harm to migratory birds and threatened or endangered species.

9. SPS must take precautions to avoid disturbing occupied nests and take steps to minimize the burden of construction on migratory birds during the nesting season of the migratory bird species identified in the area of construction.

10. SPS must exercise extreme care to avoid affecting non-targeted vegetation or animal life when using chemical herbicides to control vegetation within the right-of-way. Herbicide use must comply with rules and guidelines established in the Federal Insecticide,

Fungicide, and Rodenticide Act and with the Texas Department of Agriculture's regulations.

11. SPS must minimize the amount of flora and fauna disturbed during construction of the pipeline facilities, except to the extent necessary to establish appropriate right-of-way clearance for the pipeline facilities. In addition, SPS must re-vegetate using native species and must consider landowner preferences and wildlife needs in doing so. Furthermore, to the maximum extent practicable, SPS must avoid adverse environmental effects on sensitive plant and animal species and their habitats, as identified by the Texas Parks and Wildlife Department and the United States Fish and Wildlife Service.

12. SPS must implement erosion-control measures as appropriate. Erosion-control measures may include inspection of the rights-of-way before and during construction to identify erosion areas and implement special precautions as determined reasonable to minimize the effect of vehicular traffic over the areas. Also, SPS must return each affected landowner's property to its original contours and grades unless otherwise agreed to by the landowner or the landowner's representative. However, the Commission does not require SPS to restore original contours and grades where a different contour or grade is necessary to ensure the safety or stability of the pipeline facilities or the safe operation and maintenance of the pipeline facilities.

13. SPS must cooperate with directly affected landowners to implement minor deviations in the approved route to minimize the disruptive effect of the pipeline facilities. Any minor deviations from the approved route must only directly affect landowners who were sent notice of the pipeline facilities in accordance with 16 TAC § 22.52(a)(3) and have agreed to the minor deviation.

14. The Commission does not permit SPS to deviate from the approved route in any instance in which the deviation would be more than a minor deviation without first further amending the relevant CCN.

15. SPS must include the pipeline facilities approved by this Order on its monthly construction progress reports before the start of construction to reflect the final estimated cost and schedule in accordance with 16 TAC § 25.83(b). In addition, SPS must provide final

construction costs, with any necessary explanation for cost variance, after completion of construction when SPS identifies all charges.

16. The Commission grants a good-cause exception under 16 TAC § 22.5(b) to the requirements of 16 TAC § 22.52(a)(4) for SPS to have held an online public meeting instead of an in-person public meeting.

17. The Commission limits the authority granted by this Order to a period of seven years from the date of this Order unless the converted Harrington station and the supply pipeline are operational before that time.

18. The Commission denies all other motions and any other requests for general or specific relief that have not been expressly granted.

Signed at Austin, Texas the 29th day of September 2022.

PUBLIC UTILITY COMMISSION OF TEXAS

PETER M. LAKE, CHAIRMAN

WILL MCADAMS, COMMISSIONER

LORI COBOS, COMMISSIONER

JIMMY GLOTFELTY, COMMISSIONER

KATHLEEN JACKSON, COMMISSIONER