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

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

## **BEFORE THE STATE OFFICE**

OF

**ADMINISTRATIVE HEARINGS** 

## OFFICE OF PUBLIC UTILITY COUNSEL'S POST-HEARING INITIAL BRIEF

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## OFFICE OF PUBLIC UTILITY COUNSEL'S <u>POST-HEARING INITIAL BRIEF</u>

#### TO THE HONORABLE ADMINISTRATIVE LAW JUDGES:

The Office of Public Utility Counsel ("OPUC"), representing the interests of residential and small commercial consumers in Texas, respectfully submits this initial post-hearing brief and shows the following:

#### I. Introduction

Southwestern Public Service Company ("SPS" or the "Company") seeks approval to amend its certificate of convenience and necessity ("CCN") number 30153 to convert the three steam turbine units at Harrington Generating Station in Potter County, Texas ("Harrington") from coal generation to natural gas, proposing construction of new gas infrastructure and a gas pipeline, which it would own and operate, so as to burn natural gas in the existing boilers, instead of pulverized coal. SPS has entered into an Agreed Order with the Texas Commission on Environmental Quality ("TCEQ") to cease coal operations at Harrington by 2024.<sup>1</sup> Presently, the Harrington coal units 1, 2 and 3, have net capacities of 340 megawatts ("MW"), 355 MW, and 355

<sup>&</sup>lt;sup>1</sup> Direct Testimony of Karl Nalepa, OPUC Ex. 1 at 24:15-16. ("Nalepa Direct").

MW, respectively.<sup>2</sup> SPS proposes four potential natural gas pipeline routes for consideration.<sup>3</sup> Its estimate for the cost of conversion is approximately \$65 to \$75 million total company, including Allowance for Funds Used During Construction ("AFUDC") of between \$45 million and \$52 million allocated to Texas based on allocation factors in SPS's pending base rate cases which may change by the time this project is complete and placed in service.<sup>4</sup> SPS's estimated AFUDC is \$2.1 million on a total company basis, with approximately \$1.5 million to Texas.<sup>5</sup> SPS did not estimate the bill impacts to consumers of converting Harrington from coal to natural gas operation.<sup>6</sup> SPS is requesting to amend its CCN under Public Utility Regulatory Act ("PURA")<sup>7</sup> §§ 37.053 and 37.056.<sup>8</sup>

In order for the Public Utility Commission of Texas ("Commission") to approve the Company's CCN application, SPS's CCN application must comply with the requirements in PURA § 37.056. The Commission may approve a CCN application only if it finds that the CCN is necessary for the service, accommodation, convenience, or safety of the public.<sup>9</sup> Based upon a thorough review of the Company's CCN application, testimonies filed by the Company and intervening parties, and arguments presented at the hearing on the merits, it is OPUC's assessment that SPS has shown that the proposed conversion of the Harrington Station to natural gas operation

<sup>5</sup> Id.

<sup>&</sup>lt;sup>2</sup> *Id.* at 8:13-15.

<sup>&</sup>lt;sup>3</sup> Application of the Southwestern Public Service Company to Amend its Certificate of Convenience and Necessity to Convert Harrington Generating Station from Coal to Natural Gas, SPS Ex. 1 at 6. ("SPS's Application").

<sup>&</sup>lt;sup>4</sup> Direct Testimony of Mark Lytal on behalf of Southwestern Public Service Company, SPS Ex. 12 at 18:3-7. ("Lytal Testimony").

<sup>&</sup>lt;sup>6</sup> OPUC Ex. 1 (Nalepa Direct) at 16:5-8.

 $<sup>^7</sup>$  Public Utility Regulatory Act, Tex. Util. Code Ann. \$ 11.001-66.016 (West 2007 & Supp. 2014) ("PURA").

<sup>&</sup>lt;sup>8</sup> OPUC Ex. 1 (Nalepa Direct) at 6:9 – 10:1.

<sup>&</sup>lt;sup>9</sup> PURA § 37.056(a) and (c).

is necessary for the service, accommodation, convenience, or safety of the public under PURA § 37.056. The Agreed Order with the TCEQ requires SPS to cease coal operations at Harrington by the end of 2024,<sup>10</sup> and since the boilers are designed for natural gas operations, the conversion is cost effective. However, OPUC urges the Commission to condition its approval of SPS's CCN on a requirement that the proposed natural gas pipeline be depreciated over the appropriate service life for a natural gas transmission pipeline—rather than the current remaining service lives of the Harrington Units.

SPS is not requesting a modification to the Commission approved retirement dates for Harrington, leaving the three boilers' service lives at 60 years—corresponding to the remaining unit lives of twelve, fourteen, and sixteen years, respectively, if the boilers are converted to natural gas operation by 2024.<sup>11</sup> Yet, more than three-fourths of the anticipated cost of the gas conversation is related to installation of the supporting natural gas pipeline—which should have a useful life of as much as 70 years from the time of completion, based on comparisons to other transmission pipelines in Texas.<sup>12</sup> Annual pipeline depreciation expense will be significantly overstated if the pipeline is depreciated over twelve to sixteen years. Assuming a twelve-year service life of a pipeline costing between \$65 million and \$75 million, depreciating the pipeline over seventy years reduces annual depreciation expense by up to \$3.95 million.<sup>13</sup> Therefore, if the Commission approves SPS's request to convert the Harrington Station to natural gas operation, OPUC recommends that the rate treatment of such approval should require that SPS's pipeline

<sup>&</sup>lt;sup>10</sup> Direct Testimony of Jeffery L. West on behalf of Southwestern Public Service Company, SPS Ex. 15 at 19-25. ("West Testimony").

<sup>&</sup>lt;sup>11</sup> OPUC Ex. 3, Southwestern Public Service Company's Response to Office of Public Utility Counsel's Third Request for Information, RFI 3-4 at 8 (Mar. 14, 2022).

<sup>&</sup>lt;sup>12</sup> OPUC Ex. 1 (Nalepa Direct) at 22:13-18.

<sup>&</sup>lt;sup>13</sup> *Id.* at 23:7-12.

cost be separately booked to plant and recovered over 70 years or some other reasonable period commensurate with operation of a natural gas pipeline.<sup>14</sup>

#### **II.** Public Interest

SPS has shown that the proposed conversion of the Harrington Station to natural gas operation is necessary for the service, accommodation, convenience, or safety of the public under PURA § 37.056. The Agreed Order with the TCEQ requires SPS to cease coal operations at Harrington by the end of 2024,<sup>15</sup> and since the boilers are designed for natural gas operations, the conversion is cost effective. However, support for the conversion should be subject to the following condition: the rate treatment of such approval should require that the pipeline cost be separately booked to plant and recovered over 70 years or some other reasonable period commensurate with operation of a natural gas pipeline described above for future ratemaking treatment.

## **III.** SPS's Application

SPS is seeking the following approvals from the Commission:<sup>16</sup>

- 1. Grant an amendment to its CCN authorizing SPS to convert all three units at Harrington Generating Station from coal generation to natural gas generation;<sup>17</sup>
- 2. Authorize the Company to construct, own, and operate a new pipeline to supply natural gas to Harrington Generating Station;<sup>18</sup> and
- 3. Any other relief to which it may be entitled.<sup>19</sup>

<sup>&</sup>lt;sup>14</sup> *Id.* at 23:14 - 24:2.

<sup>&</sup>lt;sup>15</sup> Docket No. 2020-0982-MIS, Agreed Order.

<sup>&</sup>lt;sup>16</sup> SPS Ex. 3 (SPS's Application) at 5-6 and 10.

<sup>&</sup>lt;sup>17</sup> *Id.* at 10.

<sup>&</sup>lt;sup>18</sup> Id.

<sup>&</sup>lt;sup>19</sup> Id.

The Harrington Power Station consists of three coal-powered steam turbine units, located in Potter County, Texas, with a total net capacity of 1,050 MW.<sup>20</sup> Harrington Unit 1 has a net capacity of 340 MW; Harrington Unit 2 has a net capacity of 355 MW; and Harrington Unit 3 has a net capacity of 355 MW.<sup>21</sup> All three of the plant's boilers were designed to burn both coal and natural gas.<sup>22</sup> SPS is seeking approval to amend its existing CCN to convert Harrington from coal generation to natural gas generation.<sup>23</sup>

Monitoring by the TCEQ in 2016 indicated that the Harrington Station was exceeding the National Ambient Air Quality Standards ("NAAQS") for SO<sub>2</sub>.<sup>24</sup> SPS was required to develop an implementation plan to comply with the NAAQS and show that Harrington will achieve compliance with the standards by 2025.<sup>25</sup> SPS presented its plan for complying with the emissions standard to the TCEQ, and entered into an Agreed Order with the TCEQ in 2020 to cease coal operations at Harrington by December 31, 2024.<sup>26</sup>

## IV. SPS's 2019 Analysis Results

SPS conducted an economic analysis in 2019 ("2019 Analysis") to evaluate compliance solutions that included: (1) maintaining coal operations at Harrington by installing environmental controls to comply with NAAQS; or (2) ceasing coal operations, by either converting the units to

- <sup>22</sup> *Id.* at 9:6-7.
- <sup>23</sup> *Id.* at 9:9-11.
- <sup>24</sup> *Id.* at 11:6-12.
- <sup>25</sup> *Id.* at 11:12-14.
- <sup>26</sup> *Id.* at 12:8-9.

 $<sup>^{20}\,</sup>$  Direct Testimony of William A. Grant on behalf of Southern Public Service Company, SPS Ex. 6 at 9:3-4. ("Grant Testimony").

<sup>&</sup>lt;sup>21</sup> *Id.* at 9:4-6.

operate on natural gas or by retiring the units.<sup>27</sup> SPS also considered a combination of these solutions, for example, installing environmental controls on two units and retiring the remaining unit.<sup>28</sup> SPS also evaluated ways to maximize the use of existing generator interconnection rights, such as locating solar generation at the Harrington site.<sup>29</sup>

According to SPS, the 2019 Analysis demonstrated that installing the necessary capitalintensive environmental controls required to maintain coal operations on one or more units at Harrington was among the highest cost options.<sup>30</sup> Thus, SPS concluded that coal operations at Harrington should cease before 2025.<sup>31</sup> Of the remaining compliance options—to convert Harrington to operate on natural gas, or retire Harrington by end of 2024 and seek other resources to replace the capacity, SPS determined to convert the Harrington units to operate on natural gas.<sup>32</sup>

#### V. Harrington Conversion & Costs

Conversion requires SPS to install additional natural gas burners and associated piping and control equipment to convert each unit to run only on natural gas.<sup>33</sup> SPS must also increase the plant's common gas distribution header size to deliver a larger natural gas flow to the three units.<sup>34</sup> SPS must also acquire additional natural gas supply to run the units solely on natural gas.<sup>35</sup> SPS proposes to construct a new 20-inch diameter natural gas supply line from Harrington to northwest

- <sup>31</sup> *Id.* at 24:17-18.
- <sup>32</sup> *Id.* at 24:18-21.
- <sup>33</sup> SPS Ex. 12 (Lytal Testimony) at 8:5-7.
- <sup>34</sup> *Id.* at 8:7-10.

<sup>&</sup>lt;sup>27</sup> Direct Testimony of Ben Elsey on Behalf of Southwestern Public Service Company, SPS Ex. 7 at 24:3-7. ("Elsey Testimony").

<sup>&</sup>lt;sup>28</sup> *Id.* at 24:8-11.

<sup>&</sup>lt;sup>29</sup> Id.

<sup>&</sup>lt;sup>30</sup> *Id.* at 24:14-17.

<sup>&</sup>lt;sup>35</sup> *Id.* at 8:7-10.

of the plant to tap into two different gas supplier transmission lines approximately twenty miles away.<sup>36</sup> The pipelines are El Paso Natural Gas and Natural Gas Pipeline Company of America.<sup>37</sup> SPS estimates the cost to convert the Harrington Station from coal to natural gas to be between \$65 million and \$75 million or \$62/kW to \$71/kW.<sup>38</sup>

Regarding environmental control solutions: SPS's Witness Ben Elsey testified that SPS evaluated two different environmental control solutions: Dry Sorbent Injection ("DSI") and Spray Dryer Absorber ("SDA").<sup>39</sup> DSI and SDA are two methods used to remove acid gases (including SO<sub>2</sub>) from the combustion process.<sup>40</sup> SPS estimated the cost of installing DSI on all three Harrington units to be \$255 million to \$270 million, or \$243/kW to \$257/kW.<sup>41</sup> SPS estimated the cost of installing SDA to be \$510 million to \$555 million, or \$486/kW to \$529/kW.<sup>42</sup>

In the alternative, SPS expects that retiring all three Harrington units would likely require acquisition of replacement firm peaking generation, or battery energy storage.<sup>43</sup> SPS estimates that firm peaking generation, such as a 200 MW combustion turbine, would cost \$100 million, or \$500/kW, and battery energy storage would cost approximately \$1,500/kW.<sup>44</sup>

<sup>&</sup>lt;sup>36</sup> *Id.* at 8:10-12.

<sup>&</sup>lt;sup>37</sup> *Id.* at 14:3-5.

<sup>&</sup>lt;sup>38</sup> SPS Ex. 7 (Elsey Testimony) at 28:1-3.

<sup>&</sup>lt;sup>39</sup> *Id.* at 28:4-5.

<sup>&</sup>lt;sup>40</sup> See EPA, Air Pollution Control Cost Manual, Seventh Edition (Apr. 2021), available at https://www.epa.gov/sites/default/files/2021-05/documents/wet\_and\_dry\_scrubbers\_section\_5\_chapter\_1\_control cost\_manual\_7th\_edition.pdf (Mar. 21, 2022).

<sup>&</sup>lt;sup>41</sup> SPS Ex. 7 (Elsey Testimony) at 28:5-6.

<sup>&</sup>lt;sup>42</sup> *Id.* at 28:6-7 at 28:6-7.

<sup>&</sup>lt;sup>43</sup> *Id.* at 28:8-12.

<sup>&</sup>lt;sup>44</sup> *Id.* at 28:9-12.

## VI. SPS's 2021 Analysis Results

SPS updated its economic analysis in 2021 ("2021 Analysis").<sup>45</sup> SPS explains that its 2021

Analysis uses a similar approach to its 2019 Analysis.<sup>46</sup> However, the 2021 Analysis incorporated several changes:<sup>47</sup>

- 1. It was conducted in SPS's new production cost modeling software, EnCompass;<sup>48</sup>
- 2. It incorporated updated modeling inputs and assumptions, including an updated gas forecast and load forecast;<sup>49</sup>
- 3. The cost of replacement resources incorporated pricing received from SPS's recently issued Request for Information ("RFI");<sup>50</sup> and
- 4. It included the oversight of an Independent Evaluator.<sup>51</sup>

SPS evaluated six scenarios in its 2021 Analysis:<sup>52</sup>

Scenario 1	Retire all	three Harrington	Units by year	end 2024; <sup>53</sup>
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- Scenario 2 Convert all three Harrington Units to operate on natural gas by year end 2024;<sup>54</sup>
- Scenario 3 Install Dry Sorbent Injection on all three Harrington Units by year end 2024;<sup>55</sup>
- Scenario 4 Install Spray Dryer Absorber on all three Harrington Units by year end 2024;<sup>56</sup>

- <sup>46</sup> *Id.* at 26:9-13.
- <sup>47</sup> *Id.* at 26:13-14.
- <sup>48</sup> *Id.* at 26:14-15.
- <sup>49</sup> *Id.* at 26:16-18.
- <sup>50</sup> *Id.* at 26:18-19.
- <sup>51</sup> *Id.* at 26:19-20.
- <sup>52</sup> *Id.* at 29:1-3.
- <sup>53</sup> *Id.* at 29:4.
- <sup>54</sup> *Id.* at 29:5-6.
- <sup>55</sup> *Id.* at 29:7.
- <sup>56</sup> *Id.* at 24:8.

<sup>&</sup>lt;sup>45</sup> *Id.* at 26:1-2.

Scenario 5	Retire Harrington Units 1 & 2 / Convert Harrington Unit 3 to operate on
	natural gas by year end 2024; <sup>57</sup> or

Scenario 6 Retire Harrington Unit 1 / Convert Harrington Units 2 & 3 to operate on natural gas by year end 2024.<sup>58</sup>

SPS conducted sensitivity analyses on natural gas price forecasts, market energy price forecasts, load forecasts, and transmission network upgrade costs for each scenario. With its 2021 Analysis, SPS reached the same conclusion as it did in its 2019 Analysis, <sup>59</sup> that coal operations at Harrington should cease before 2025.<sup>60</sup> Of the remaining compliance options to convert Harrington to operate on natural gas or retire Harrington by end of 2024 and seek other resources to replace the capacity, SPS determined that conversion of the Harrington units to operate on natural gas was the best option.<sup>61</sup> Table 1 summarizes the results of the scenario analyses under SPS's planning load forecast:<sup>62</sup>

Table 1

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

Table 1 is organized so that Scenario 2, which reflects SPS's request to convert all three Harrington units to operate on natural gas by year end 2024, is at the top. The alternative scenarios,

- <sup>58</sup> *Id.* at 24:11-12.
- <sup>59</sup> *Id.* at 33:12-13.
- <sup>60</sup> *Id.* at 33:14-16.
- <sup>61</sup> *Id.* at 31:12-14.
- <sup>62</sup> *Id.* at 32:2.

<sup>&</sup>lt;sup>57</sup> *Id.* at 24:9-10.

as described earlier, are shown below Scenario 2. The short-term and long-term total NPV of each Scenario, and the difference in NPV from Scenario 2, are summarized below Scenario 2.

The results of SPS's analyses compare scenarios over both the short term (2022-2024) and long term (2022-2041). Over the 20-year forecast period, Scenario 2—converting all three Harrington units to operate on natural gas by year end 2024—results in a lower NPV than all other scenarios, aside from Scenario 6—retiring Harrington Unit 1 / converting Harrington Units 2 & 3 to operate on natural gas by year end 2024. However, Scenario 6 reflects a higher NPV in the short-term because SPS assumes the early retirement of Harrington Unit 1 will result in accelerating the collection of the remaining depreciation expense and any decommissioning costs associated with the unit.<sup>63</sup> Conversely, Scenarios 3 and 4 maintain Harrington coal operations and avoid the accelerated recovery of depreciation expense in the short-term but incur significant capital costs related to environmental controls that make the scenarios more costly on a NPV basis over the 20-year forecast period.<sup>64</sup> SPS tested both its planning load forecast and its financial load forecast.<sup>65</sup> SPS's planning load forecast incorporates an additional margin for the uncertainty of oil and gas load growth,<sup>66</sup> so it is somewhat higher than SPS's financial load forecast.<sup>67</sup>

SPS tested its base, high, and low natural gas price forecasts. Low natural gas prices strengthen Scenario 2 - converting all three Harrington units to operate on natural gas by year end 2024 - while also improving the relative NPV of Scenarios 5 and 6.<sup>68</sup> Conversion to natural gas

- <sup>64</sup> OPUC Ex. 1 (Nalepa Direct) at 15:1-5.
- <sup>65</sup> SPS Ex. 7 (Elsey Testimony) at 31:5-6.
- <sup>66</sup> *Id.* at 31:6-9.
- <sup>67</sup> *Id.* at 35:1-3.
- <sup>68</sup> *Id.* at Attachment BRE-1.

<sup>&</sup>lt;sup>63</sup> *Id.* at 33:21 - 34:2.

operation was still the lowest NPV scenario even under high natural gas price sensitives, although the differences were less.<sup>69</sup>

SPS also tested its transmission network upgrade costs assuming a base cost of \$400/kW, a low-cost case of \$200/kW and a high-cost case of \$600/kW.<sup>70</sup> The low-cost case lowers the NPV of Scenario 2, improves the relative NPV of Scenarios 5 and 6, and in fact, makes Scenario 1 —retire all three Harrington units by year end 2024— the lowest NPV over the 20-year forecast period under the low-cost case / high gas price case.<sup>71</sup> The high-cost case strengthens Scenario 2.<sup>72</sup>

With regard to the rate impacts associated with the various scenarios, SPS's position is that this is not a proceeding to change rates and that it does not have all the necessary inputs in the record to calculate bill impacts.<sup>73</sup>

## VII. Evaluation

In order for the Commission to approve an electric utility's CCN application, an electric utility's CCN application must comply with the requirements of PURA § 37.056.<sup>74</sup> Under PURA § 37.056(a), the Commission may approve an application and grant a CCN only if it finds that the CCN is necessary for the service, accommodation, convenience, or safety of the public. PURA § 37.056(c) sets forth the following factors that the Commission must consider in evaluating an electric utility's CCN application:

<sup>&</sup>lt;sup>69</sup> Id.

<sup>&</sup>lt;sup>70</sup> Id.

<sup>&</sup>lt;sup>71</sup> Id.

<sup>&</sup>lt;sup>72</sup> Id.

<sup>&</sup>lt;sup>73</sup> Southwestern Public Service Company's Response to Commission Staff's Fifth Request for Information Question Nos. 5-1 Through 5-5 at 5, OPUC Ex. 2 (Feb. 24, 2022). ("Staff RFI 5").

<sup>&</sup>lt;sup>74</sup> PURA §§ 11.001-66.016.

- (1) the adequacy of 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 Section 39.904(a) of this title.<sup>75</sup>

The Commission has broad authority in considering whether to grant a CCN application

based on the factors provided in PURA § 37.056(c).<sup>76</sup> The Commission weighs these factors on a case-by-case basis.<sup>77</sup> Because some of the factors may compete with one another, the Commission, "may in some cases be required to adjust or accommodate the competing policies and interests involved...None of the statutory factors are intended to be absolute in the sense that anyone should prevail in all possible circumstances."<sup>78</sup> In weighing these competing factors, the Commission is required to exercise its expertise to further the overall public interest.<sup>79</sup>

<sup>&</sup>lt;sup>75</sup> PURA § 37.056(c).

<sup>&</sup>lt;sup>76</sup> Pub. Util. Comm'n v. Texland Elec. Co., 701 S.W.2d 261, 266 (Tex. App.—Austin 1985, writ ref'd n.r.e.).

<sup>&</sup>lt;sup>77</sup> *Id.* ("To implement in particular circumstances such broadly stated legislative objectives and standards, the Commission must necessarily decide what they mean in those circumstances.").

<sup>&</sup>lt;sup>78</sup> *Id.* at 267.

<sup>&</sup>lt;sup>79</sup> Id.

Applying the standard set out in PURA § 37.056, whereby the Commission may approve an application and grant a certificate *only* if the commission finds that the certificate is necessary for the service, accommodation, convenience, or safety of the public,<sup>80</sup> SPS must show that the proposed acquisition will result in the probable improvement of service or lowering of cost to consumers in the area if the certificate is granted.<sup>81</sup>

## VIII. Harrington Conversion Issues & Solutions

There are three issues with SPS's request. First, as SPS has already entered into an Agreed Order to cease coal operations at the Harrington Station, scenarios included in its 2021 Analysis reflecting investment in environmental controls related to continued coal operations are irrelevant in the analysis of options. Second, scenarios incorporating retirement of some or all of the Harrington units assume accelerated recovery of depreciation, which leads to front-end loading of the associated NPVs which is contrary to Commission precedent for rate treatment of early plant retirements.<sup>82</sup> Third, SPS does not recognize any extension of the service life of Harrington after converting the facilities to natural gas operation.<sup>83</sup> This is especially important because the pipeline SPS seeks to construct makes up much of the incremental investment and should have a service life on the order of 70 years, far longer than SPS's current remaining service life for Harrington Station of 12 to 16 years.<sup>84</sup>

<sup>82</sup> OPUC Ex. 1 (Nalepa Direct) at 7:3-6.

<sup>&</sup>lt;sup>80</sup> See PURA § 37.056(a) (emphasis added).

<sup>&</sup>lt;sup>81</sup> See PURA § 37.056(c)(4)(E).

<sup>&</sup>lt;sup>83</sup> *Id.* at 7:11-12.

<sup>&</sup>lt;sup>84</sup> *Id.* at 7:12-15.

The scenarios included in the 2019 Analysis conducted by SPS included options to install environmental controls on the Harrington units and maintaining coal operations.<sup>85</sup> The results of the 2019 Analysis found that installing the capital-intensive environmental controls was among the highest cost options and, therefore, least favorable solutions.<sup>86</sup> Based on its findings, SPS concluded it should cease coal operations at Harrington before 2025.<sup>87</sup> Consequently, SPS entered into its Agreed Order with the TCEQ in October 2020 to cease coal operations at Harrington.<sup>88</sup>

However, in its updated 2021 Analysis, SPS again included scenarios to install environmental controls on the Harrington units and maintain coal operations.<sup>89</sup> As SPS had already committed to ceasing coal operations at Harrington under the Agreed Order, the scenarios to evaluate the NPV of maintaining coal operations are not realistic and do not provide a valid point of cost comparison.

SPS's analyses show that the scenarios adding environmental controls have NPVs \$439,000 to \$695,000 higher than the scenario converting all units to natural gas operation.<sup>90</sup> But the scenarios provide a false sense of support for the natural gas conversion scenarios, as the opportunity to install environmental controls on the Harrington units is no longer an option.<sup>91</sup>

In scenarios that assumed retirement of one or more of the Harrington units, SPS pointed out that the high customer rate impact in the first three years is due to the need to accelerate

- <sup>87</sup> *Id.* at 24:17-18.
- <sup>88</sup> *Id.* at 6:18-19.
- <sup>89</sup> *Id.* at 29:3-12.
- <sup>90</sup> OPUC Ex. 1 (Nalepa Direct) at 18:9-10.
- <sup>91</sup> OPUC Ex. 1 (Nalepa Direct) at 18:10-12.

<sup>&</sup>lt;sup>85</sup> SPS Ex. 7 (Elsey Testimony) at 24:3-6.

<sup>&</sup>lt;sup>86</sup> *Id.* at 24:14-17.

collection on the remaining depreciation expense and any decommissioning costs associated with Harrington 12 to 16 years earlier than currently planned.<sup>92</sup>

OPUC does not agree with SPS's assumption to accelerate depreciation expense and decommissioning costs. The Commission has recent precedent for the treatment of remaining depreciation expense on a generating unit retired early by the utility. In Docket No. 51415, Southwestern Electric Power Company ("SWEPCO") sought approval to retire its Dolet Hills power plant well before the end of its approved service life.<sup>93</sup> The Commission found that with respect to the period after December 31,2021 (the post-retirement phase of the Dolet Hills rate rider), the remaining net book values of Dolet Hills should be placed in a regulatory asset to be amortized without a return. All other cost recovery for Dolet Hills, the Oxbow investment, or Dolet Hills Lignite Company under the Dolet Hills rate rider should cease, as the assets will no longer be providing service.<sup>94</sup> SWEPCO's recovery of Dolet Hills' remaining net book value (whether through depreciation during the operative-plant phase or recovery from the regulatory asset during the post-retirement phase) should be amortized in accordance with the asset's useful life ending in 2046.95 Amortizing these assets in accordance with Dolet Hills' useful life ending in 2046 equitably balanced the interests of SWEPCO and both its current and future customers.<sup>96</sup> The Commission determined that it would be inequitable to SWEPCO's current customers to accelerate SWEPCO's recovery of these assets, as SWEPCO proposed to do, through offsetting

<sup>&</sup>lt;sup>92</sup> SPS Ex. 7 (Elsey Testimony) at 33:18 - 34:2.

<sup>&</sup>lt;sup>93</sup> Application of Southwestern Electric Power Company for Authority to Change Rates, Docket No. 51415, Petition and Statement of Intent to Change Rates at 12-13 (Oct. 14, 2020).

<sup>&</sup>lt;sup>94</sup> Application of Southwestern Electric Power Company for Authority to Change Rates, Docket No. 51415, Order at FOF 60 (Jan. 14, 2022).

<sup>&</sup>lt;sup>95</sup> *Id.* at FOF 61.

<sup>&</sup>lt;sup>96</sup> *Id.* at FOF 63.

the excess accumulated deferred federal income taxes ("ADFIT") SWEPCO owes to its current customers and amortizing the balance over only four years.<sup>97</sup>

Prior to the Dolet Hills decision, the Commission issued a similar decision on SWEPCO's Welsh Unit 2. Because Welsh Unit 2 was no longer used and useful, SWEPCO was barred from including its investment associated with the plant in its rate base and was not able to earn a return on that remaining investment.<sup>98</sup> Allowing SWEPCO a return of, but not on, its remaining investment in Welsh Unit 2 balanced the interests of ratepayers and shareholders with respect to a plant that no longer provides service.<sup>99</sup> It was reasonable for SWEPCO to recover the remaining undepreciated balance of Welsh Unit 2 over the 24-year remaining lives of Welsh Units 1 and 3.<sup>100</sup> The appropriate accounting treatment that results in the appropriate ratemaking treatment is to record the undepreciated balance of Welsh Unit 2 in a regulatory-asset account.<sup>101</sup>

SPS did not consider this precedent in its analysis.<sup>102</sup> SPS instead assumed the retirement of Harrington by the end of 2024 and accelerated collection on the remaining depreciation expense and any decommissioning costs on the units. However, consistent with Docket Nos. 51415 and 46449, the remaining expense should be recovered over the units' remaining approved service lives of 12 to 16 years.

<sup>&</sup>lt;sup>97</sup> *Id.* at FOF 64.

<sup>&</sup>lt;sup>98</sup> Application of Southwestern Electric Power Company for Authority to Change Rates, Docket No. 46449, Order on Rehearing at FOF 68 (Mar. 19, 2018).

<sup>&</sup>lt;sup>99</sup> *Id.* at FOF 69.

<sup>&</sup>lt;sup>100</sup> *Id.* at FOF 70.

<sup>&</sup>lt;sup>101</sup> *Id.* at FOF 71.

<sup>&</sup>lt;sup>102</sup> Southwestern Public Service Company's Response to Office of Public Utility Counsel's First Request for Information Question Nos. 1-1 through 1-17, OPUC Ex. 3, RFI 1-17 at 23, (Jan. 20, 2022). ("SPS Response to OPUC 1").

Table 2, taken from the Direct Testimony of OPUC witness Karl Nalepa, shows the impact of removing the accelerated recovery of remaining depreciation expense on SPS's base case analysis using its planning load forecast.<sup>103</sup> For simplicity, the entire amount of depreciation booked in 2024 has been removed. In practice, this amount would be amortized over the remaining life of the Harrington units.

Table 2 is organized so that Scenario 2, which reflects SPS's request to convert all three Harrington Units to operate on natural gas by year end 2024, is at the top. The alternative scenarios, as described earlier, are shown below Scenario 2. The first-year depreciation for each Scenario, and the difference from Scenario 2, are summarized below Scenario 2. The results show that impact of removing the accelerated recovery of remaining depreciation expense improves the NPV for scenarios where units are retired, relative to the base case.

If the Commission approves an option that incorporates the retirement of the Harrington units, the Commission should reject accelerated recovery of the remaining depreciation expense and treat the retirement of the unit(s) consistent with the treatment adopted in SWEPCO Docket Nos. 51415 and 46449. As shown in Table 2, this could reduce the NPV depending on the scenario implemented.

SPS is not requesting a modification to the Commission approved retirement dates for Harrington in this case, and it is leaving the service lives of the boilers at 60 years, corresponding to ending service years 2036, 2038, 2040—which means remaining lives of 12, 14, and 16 years, respectively—if the boilers are converted to natural gas operation by 2024.<sup>104</sup> More than three-fourths of the anticipated cost of the natural gas conversion is related to installation of the

<sup>&</sup>lt;sup>103</sup> See OPUC Ex. 1 (Nalepa Direct) at 12:9.

<sup>&</sup>lt;sup>104</sup> OPUC Ex. 5, SPS's Response to Office of Public Utility Counsel's Third Request for Information Question Nos. 3-1 through 3-5, RFI 3-4 at 8 (Mar. 14, 2022).

supporting natural gas pipeline.<sup>105</sup> The pipeline should have a useful life of as much as 70 years, based on comparisons to other transmission pipelines in Texas.<sup>106</sup> The impact of applying the remaining service life of the current Harrington boilers to the new pipeline is that the annual depreciation expense will be significantly overstated if the pipeline is depreciated over 12 to 16 years, rather than over 70 years. Conversely, if the pipeline is depreciated over 70 years, SPS will have a significant amount of unrecovered pipeline plant at the time that the Harrington Station is retired. Table 2 compares the annual depreciation of the pipeline assuming a 12-year service life and a 70-year service life:

Service Life (Years)	Annual Depreciation (\$65 million) <sup>107</sup>	Annual Depreciation (\$75 million) <sup>108</sup>
12 <sup>109</sup>	\$4.13 million	\$4.77 million
70 <sup>110</sup>	\$0.71 million	\$0.82 million
Difference	\$3.42 million	\$3.95 million

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As can be seen in Table 2, depreciating the pipeline over 70 years reduces annual depreciation expense by \$3.42 million to \$3.95 million compared to depreciating the pipeline over 12 years.

OPUC acknowledges that depreciation rates are not being set in this proceeding. However,

this proceeding sets the stage for a future rate proceeding in which SPS will seek to recover the

<sup>&</sup>lt;sup>105</sup> SPS Ex. 12 (Lytal Testimony) at Attachment ML-1 showing (\$57.3 million / \$74.6 million = 77%), (Aug. 27, 2021); SPS's Response to OPUC 1 RFI 1-11 at 17 showing (\$49.6 million / \$65.0 million = 76%), (Jan. 20, 2022).

<sup>&</sup>lt;sup>106</sup> Texas Railroad Commission, *Atmos Pipeline Texas*, Docket No. 10580, Direct Testimony of Dane Watson, Exhibit DAW-2 at 31-32 (Mr. Watson recommended a survivor curve with an average service life of 70 years for FERC Account 367, Transmission Mains.) (Dec. 18, 2020).

<sup>&</sup>lt;sup>107</sup> OPUC Ex. 6, SPS's Response to OPUC 1 RFI 1-11 at Attachment G (showing the \$65 million project cost includes \$49.6 million related to pipeline construction).

<sup>&</sup>lt;sup>108</sup> SPS Ex. 12 (Lytal Testimony) at Attachment ML-1 (The \$75 million project cost estimate includes \$57.3 million related to pipeline construction).

<sup>&</sup>lt;sup>109</sup> \$49.6 million / 12 = \$4.13 million and \$57.3 million / 12 = \$4.77 million, assuming no salvage cost.

<sup>&</sup>lt;sup>110</sup> \$49.6 million / 70 =\$0.71 million and \$57.3 million / 70 =\$0.82 million, assuming no salvage cost.

cost of its requested Harrington conversion in rates. In that future rate proceeding, separate depreciation rates will be determined for the generation and pipeline assets. To facilitate that depreciation rate determination, it is reasonable that SPS be ordered to book its pipeline investment to a Federal Energy Regulatory Commission ("FERC") account or accounts separate from its generation investment, and to submit a depreciation study on its pipeline assets in that future rate proceeding so that the Commission may establish the useful life of the pipeline asset.

#### IX. Conclusion

If the Commission approves SPS's request to convert the Harrington Station to natural gas operation, the rate treatment of such approval requires the pipeline cost to be separately booked to plant and recovered over 70 years or some other reasonable period commensurate with a depreciation study and operation of a natural gas pipeline. SPS may be able to recover more of the pipeline cost if it is able to extend the lives of the Harrington units beyond the current retirement dates or use the site to install future gas-fired generation served by the pipeline, if it is economically prudent to do so.

The conversion of the Harrington Station is in the public interest, with two important conditions—that the retirement of any Harrington assets be treated consistent with the Commission's Orders in Docket Nos. 51415 and 46449, and the proposed natural gas pipeline be depreciated over the appropriate service life for a natural gas transmission pipeline and not limited to the current remaining lives of the Harrington Units. Without these required conditions, the cost to customers resulting from the conversion will be higher than necessary and thus the conversion would no longer be in the public interest.

For the reasons stated herein, OPUC respectfully requests that the ALJs adopt and incorporate OPUC's recommendations into the Proposal for Decision as a condition of

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recommending the Commission's approval of the Company's CCN application in this proceeding.

OPUC further asks to be granted any other relief to which it may be entitled.

Respectfully submitted,

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ATTORNEYS FOR THE OFFICE OF PUBLIC UTILITY COUNSEL

## **CERTIFICATE OF SERVICE**

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

I hereby certify that a copy of the foregoing document was served on all parties of record in this proceeding on this 11<sup>th</sup> day of May 2022, by facsimile, electronic mail, and/or first class, U.S. Mail.

Sharbel A. Sfeir Sharbel A. Sfeir