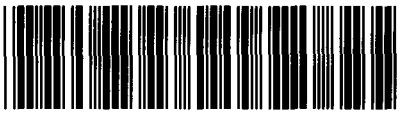

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SOAH DOCKET NO. 473-19-6862
PUC DOCKET NO. 49737

APPLICATION OF SOUTHWESTERN ELECTRIC POWER COMPANY FOR CERTIFICATE OF CONVENIENCE AND NECESSITY AUTHORIZATION AND RELATED RELIEF FOR THE ACQUISITION OF WIND GENERATION FACILITIES	**§**	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

COMMISSION STAFF'S INITIAL BRIEF

PUBLIC UTILITY COMMISSION OF TEXAS LEGAL DIVISION

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COMMISSION STAFF'S INITIAL BRIEF

I. INTRODUCTION

Southwestern Electric Power Company (SWEPCO) seeks the Public Utility Commission of Texas's (Commission) approval to amend its Certificate of Convenience and Necessity (CCN) to include the selected wind facilities (SWFs). However, SWEPCO currently does not have a need for additional generation capacity. Therefore, the primary analysis for the Commission to consider is whether the net benefits to ratepayers exceed the costs borne by the ratepayers. The net benefits to customers are uncertain and based on a number of assumptions. As shown below, it is likely that customers are at real risk of experiencing net costs due to the SWFs but would probably only see minimal, if any, net benefits from the SWFs. Therefore, it is essential that SWEPCO's application only be approved with additional conditions or guarantees, including, at a minimum, a net benefits guarantee.

II. CERTIFICATE OF CONVENIENCE AND NECESSITY STANDARD OF REVIEW (P.O. ISSUE NO. 2)

Public Utility Regulatory Act, Texas Utilities Code (PURA) § 37.056 governs the granting or denying of a CCN, which requires the Commission to weigh the following factors:

(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 PURA.[1]

The Commission is not required to give equal weight to any of the statutory factors. For example, if the addition of a new generation facility is necessary to provide reliable service, it may not be as important that the project lower costs to consumers. However, where the generation facility is not necessary for reliability purposes, as is the case with the SWFs, whether or not the proposed CCN would lower costs to ratepayers is of the utmost concern.

III. ANALYSIS OF ECONOMICS OF SELECTED WIND FACILITIES (P.O. ISSUE NOS. 2, 3, 5, 6, 19, 23)

B. Project Description and Cost

SWEPCO and the Public Service Company of Oklahoma (PSO) have contracted in a Purchase and Sale Agreement (PSA) to acquire the SWFs for $1.860 billion, or approximately $1,253/kW.[2] Under the terms of the PSA, SWEPCO and PSO will acquire three wind facilities: Traverse (999 MW); Maverick (287 MW); and Sundance (199 MW), for a total of 1,485 MW.[3] SWEPCO will acquire 54.5% of each facility, for a total of 810 MW, and PSO will acquire 45.5% of each facility, for a total of 675 MW.[4] Invenergy Wind Development North America, LLC is responsible for the development and construction of the SWFs.[5] The estimated total capital costs for the project is $1.996 billion, which includes each wind project's purchase price, PSA price adjustments, and owner's costs.[6]

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[1] Public Utility Regulatory Act, Tex. Util. Code Ann. § 37.056(c) (PURA).

[2] Direct Testimony of Jay F. Godfrey, SWEPCO Exhibit 3 at 100-01, 123.

[3] Direct Testimony of A. Malcolm Smoak, SWEPCO Exhibit 1 at 57.

[4] *Id.*

[5] Direct Testimony of Joseph G. DeRuntz, SWEPCO Exhibit 4 at 383.

[6] *Id.* at 392.

SWEPCO has not proposed a dedicated generation tie line (gen-tie) in this application, but has analyzed the benefits of building out such a gen-tie, in the event that it is necessary in the future.[7] SWEPCO has instead, in this application, stated that they will continue to use the Southwestern Power Pool (SPP) for transmission.[8] However, SWEPCO will monitor the congestion costs of using SPP and build a dedicated gen-tie if congestion costs with SPP become too great.[9] This monitoring process of SPP congestion costs will be continuous for every year of the project, to analyze whether SWEPCO should continue to use SPP for transmission.[10] Only, once congestion costs would exceed the cost of building a dedicated gen-tie would SWEPCO begin such a build out of the dedicated gen-tie line.[11]

Lastly, SWEPCO has offered multiple alternatives as to costs and guarantees based upon a set of assumptions.[12] These factors include gas prices, carbon tax costs, and whether SWEPCO will build a dedicated gen-tie line or not.[13] All of these assumptions affect the overall price of the project and the purported overall savings to customers.[14]

C. Economic Modeling

Economic evaluation compares the project costs to the net benefits of the SWFs. While the minimum project costs are relatively certain, SWEPCO's estimate of net benefits are uncertain and rely on a variety of assumptions.

1. Modeling Methodology

For its evaluation of net benefits, SWEPCO developed a case with the SWFs (Project Case) and a case without the SWFs (Baseline Case).[15] Then, SWEPCO compared the difference between these two cases for a period of 30 years, from 2021 to 2051. The net benefits also included the SWFs' capacity value, which was determined using the PLEXOS model, and the

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[7] Tr. at 20:23-25 to 21:1-3 (Smoak Direct) (Feb. 24, 2020).

[8] Direct Testimony of Kamran Ali, SWEPCO Exhibit 7 at 462, 465.

[9] *Id.* at 462, 465; Tr. at 28:1-12 (Smoak Direct) (Feb. 24, 2020).

[10] Tr. at 387:12-21 (Ali Direct) (Feb. 25, 2020).

[11] Tr. at 381:10-21 (Ali Direct) (Feb. 25, 2020).

[12] Errata to Direct Testimony of John F. Torpey, SWEPCO Exhibit 8 at JFT-3.

[13] *Id.*

[14] *Id.*

[15] Direct Testimony of Thomas P. Brice, SWEPCO Exhibit 2 at 75.

adjusted production cost savings were added to avoided capacity value and the value of production tax credits (PTCs), grossed up and net of the deferred tax asset (DTA), to arrive at the total consumer benefit. Project Costs, including the SWFs' project revenue requirements and congestion and line loss costs, were then subtracted from the total benefit to arrive at an annual net benefit and the present value of all costs and benefits were then calculated.[16] SWEPCO's projection of the expected net benefits for the SWFs is $567 million net present value (NPV) over its 30-year projected useful life.[17]

Overall, SWEPCO employed three different models to perform its economic evaluation. SWEPCO used the AURORA model to forecast long-term natural gas or energy prices. The PROMOD model was used to model congestion and losses, since that is not accounted for by AURORA, and the PLEXOS model to determine the net benefits.[18] However, as outlined below, the assumptions used by SWEPCO as inputs to these models lead to an overstatement of purported production cost savings.

2. Projected Production Cost Savings

The projected production cost savings of the SWFs are overstated due to assumptions made by SWEPCO relating to the price of natural gas, the cost of carbon, the useful life of the project, the amount of congestion and losses, and the capacity factor at which the SWFs operate.

a. Natural Gas Prices

SWEPCO's estimate of natural gas prices, including its low-gas case, is overstated, directly affecting the calculation of SWEPCO's estimate of benefits to be realized by ratepayers, which depends on the market price of energy, or the locational marginal price (LMP) of energy. The higher the LMPs, the greater the production cost savings.

For its prediction of natural gas prices, SWEPCO relied on its in-house Fundamentals Forecast, which has consistently overstated natural gas prices.[19] In fact, SWEPCO admits that, over the last 10 years, the Fundamentals Forecast has been overstating natural gas prices that

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[16] SWEPCO Exhibit 8 at 485.

[17] SWEPCO Exhibit 2 at 38.

[18] Tr. at 330: 5-25 to 331: 1-22 (Sheilendranath Diract) (Feb. 25, 2020).

[19] Direct Testimony of Jeffry C. Pollock, TIEC Ex. 1 at 17.

have occurred.[20] Despite that, SWEPCO also admits that it did not make any changes to its forecasting methodology in calculating natural gas prices since the 2016 Fundamentals Forecast used to evaluate the Wind Catcher project, the application for which the Commission denied.[21]

The Energy Information Administration (EIA), a unit of the Department of Energy, also releases its own natural gas forecasts on an annual basis.[22] SWEPCO notes that the EIA is impartial source of energy information and the authority on historic or actual energy prices.[23] The EIA has already released its Annual Energy Outlook (AEO) for 2020.[24] SWEPCO's fundamentals forecast for its base case and low case are higher than the 2020 EIA Reference Case and the 2020 EIA High Oil and Gas Resource Technology Case as shown below.[25]

Year	**SWEPCO Base ($/MMBtu)**	**SWEPCO Low-No CO2 ($/MMBtu)**	**EIA AEO 2020 Reference ($/MMBtu)**	**EIA AEO 2020 High Oil & Gas Supply ($/MMBtu)**
2021	3.54	3.01	2.62	2.50
2026	4.40	3.74	3.64	3.08
2031	5.30	4.37	4.29	3.50
2036	6.14	5.07	4.96	4.00
2041	7.32	6.05	5.68	4.52
2046	8.81	7.30	6.58	4.93
2050	9.80	8.14	7.54	5.34

[20] Tr. at 225: 9-13 (Bletzacker Direct) (Feb. 24, 2020).

[21] TIEC Ex. 31 at 5.

[22] Tr. at 224: 16-18 (Bletzacker Direct) (Feb. 24, 2020).

[23] Tr. at 224: 20-23 (Bletzacker Direct) (Feb. 24, 2020).

[24] TIEC Ex. 1 at 18.

[25] Excerpt from Bletzacker's Rebuttal Workpapers, TIEC Ex. 3.

The EIA High Oil and Technology Case is the lowest EIA case, and, in its final order in the Wind Catcher case, the Commission stated that the "lowest Energy Information Administration (EIA) case has been the most accurate in recent years."[26]

Additionally, New York Mercantile Exchange (NYMEX) gas futures prices represent "actual transactions between buyers and sellers who put real money at risk in their day-to-day operations."[27] Because NYMEX prices represent actual transactions, they are a much better indicator of future natural gas prices than SWEPCO's Fundamentals Forecast.[28] SWEPCO's base and low gas case is also higher than NYMEX gas futures prices, which are similar to the EIA AEO 2020 High Oil and Gas Supply Case natural gas price predictions, as shown below:[29]

Year	**SWEPCO Base ($/MMBtu)**	**SWEPCO Low-No CO2 ($/MMBtu)**	**HIS NYMEX Gas Scenario 7/2019**	**EIA AEO 2020 High Oil & Gas Supply ($/MMBtu)**
2021	3.54	3.01	2.63	2.50
2026	4.40	3.74	3.04	3.08
2031	5.30	4.37	3.58	3.50
2036	6.14	5.07	4.01	4.00
2041	7.32	6.05	4.49	4.52
2046	8.81	7.30	5.04	4.93
2050	9.80	8.14	5.53	5.34

Overall, SWEPCO's prediction of natural gas prices in its base case and its low case are overstated, which leads to inflated LMPs.[30] Therefore, purported net benefits to ratepayers are overstated, even for SWEPCO's low gas models.

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[26] *Application of Southwestern Electric Power Company for Certificate of Convenience and Necessity Authorization and Related Relief for the Wind Catcher Energy Connection Project* (Docket No. 47461) Order at 18 (Aug 13, 2018).

[27] *Id.* at 18.

[28] TIEC Ex. 1 at 4.

[29] HS Workpapers to the Rebuttal Testimony of Karl Bletzäcker, SWEPCO Ex. 17C.

[30] TIEC Ex. 1 at 32.

b. Other Assumptions Affecting Locational Marginal Prices

The other major assumption by SWEPCO that inflates the value of projected LMPs is SWEPCO's assumption of the existence of a carbon emission's burden or carbon tax during the relevant timeframe. SWEPCO's 2019 Fundamentals Forecast employed the presumption of a carbon emissions burden beginning in 2028 at $15 per ton and escalating by 3.5% a year.[31] Although it is possible that a carbon tax could be imposed in the future, it is unlikely. Recently, policy makers have encouraged development of renewable resources through tax credits.[32] Therefore, as explained by Texas Industrial Energy Consumer's (TIEC) witness Jeffry Pollock, it is important to look at not just whether or not a tax burden could be imposed, but also the probability of whether there could be extensions to tax credits.[33] By assuming the existence of a carbon tax, SWEPCO inflates the value of projected LMPs, and thus, its projection of net benefits. The reduction in benefits for eliminating a CO2 burden at different production levels and natural gas projections is shown below (assuming no gen-tie line):[34]

	With CO2 Tax	W/o CO2 Tax	Reduction in Benefits (NPV)
P50 Base Gas	$567	$396	$171
P50 Low Gas	$396	$236	$160
P95 Base Gas	$330	$181	$149
P95 Low Gas	$183	$43	$140

c. Capacity Factor

The economic modeling for this project should assume a production level at the P95, or 38.1% capacity factor,[35] since SWEPCO's minimum production guarantee is based on that capacity factor. SWEPCO states that it expects the SWFs to produce at the P50 level, or 44.01%

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[31] Direct Testimony of Karl R. Bletzacker, SWEPCO Ex. 5 at 419.

[32] Tr. at 638: 20-25 to 639: 1-24 (Pollock Direct) (Feb. 26, 2020).

[33] Tr. at 623: 7-15 (Pollock Direct) (Feb. 26, 2020).

[34] Errata to Direct Testimony of John F. Torpey, SWEPCO Ex. 8 at Exhibit JFT-3.

[35] Tr. 35: 9-10 (Smoak Direct) (Feb. 24, 2020).

capacity factor[36]; however, admits that the actual output is unknown.[37] Furthermore, in the calculations leading to the net capacity factor for the SWFs, SWEPCO did not account for curtailments.[38] The minimum production guarantee currently proposed by SWEPCO has an exception for curtailments even at the P95 production level.[39]

d. Useful Life of Wind Facilities

The economic modeling for this project should assume a useful life for the SWFs of 25 years, rather than 30 years. SWEPCO states that the proposed SWFs are engineered to have a useful life of 30 years and the SWFs' ongoing operations and maintenance (O&M) and capital forecast are based on maintaining the availability and performance of the turbines for 30 years.[40] However, for the previously proposed Wind Catcher project, SWEPCO assumed a useful life of 25 years.[41] By adding five more years of useful life for the wind facilities, SWEPCO improves the economic calculation of net benefits for this project because the production cost savings are the highest in the last five years.[42] Additionally, while SWEPCO admits that with a 30-year design life high O&M costs are expected in the later years, the ongoing capital and O&M costs projections are flat in real terms for years 11 through 30, assuming an inflation rate of two percent.[43]

SWEPCO stated that the reason the useful life of the SWFs is 30 years, as opposed to a 25-year useful life of the facilities in Wind Catcher, relates to the fact that a 30-year design life was a requirement to bid projects into the Requests for Proposal.[44] However, in general, the

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[36] Direct Testimony of Karl Nalepa, OPUC Ex. 1 at 8.

[37] Rebuttal Testimony of Thomas P. Brice, SWEPCO Ex. 14 at 7; Tr. 152: 1-12 (Brice Direct) (Feb. 24, 2020).

[38] Tr. 189: 7-9 (Godfrey Direct) (Feb. 24, 2020).

[39] Errata to Direct Testimony of Thomas P. Brice, SWEPCO Ex. 2 at 54.

[40] SWEPCO Ex. 4 at 397.

[41] *Application of Southwestern Electric Power Company for Certificate of Convenience and Necessity Authorization and Related Relief for the Wind Catcher Energy Connection Project* (Docket No. 47461) Direct Testimony of Paul Chadok at 55 (July 31, 2017).

[42] Errata to Direct Testimony of John F. Torpey, SWEPCO Ex. 8 at Exhibit JFT-3; Tr 727: 18-19 (DeRuntz Rebuttal) (Feb. 26, 2020).

[43] Tr. at 725: 6-14; Tr. at 727: 3-19 (DeRuntz Rebuttal) (Feb. 26, 2020).

[44] Rebuttal Testimony of Joseph G. DeRuntz, SWEPCO Ex. 16 at 46.

project life of wind projects has been "historically assumed at 20 years in many cases."[45] Also, SWEPCO witness Joseph DeRuntz admits that he is not aware of any wind farms that have achieved useful lives of 30 years.[46]

e. Congestion and Losses (including Gen-Tie)

Introduction

Unlike its previous application with the Wind Catcher project,[47] the instant application does not include a request for a generation tie-line (gen-tie).[48] However, because there is a potential need for a gen-tie in the future,[49] SWEPCO analyzed the net benefits of the project with and without a gen-tie line in service in 2026.[50]

SWEPCO offered two alternatives for transmission from the project facilities The first alternative involves a connection directly to the American Electric Power (AEP) West Load Zone in Tulsa through the SPP transmission line, as long as SPP creates new transmission lines and/or upgrades its existing infrastructure to provide transmission for increased congestion that makes use of SPP transmission lines less costly than building a gen-tie. The second alternative consists of a connection directly to the AEP West Load Zone through SPP transmission lines in Tulsa, as long as congestion costs are less expensive than the cost of constructing a gen-tie. However, if SPP has not upgraded existing infrastructure and congestion is too high, SWEPCO will construct a gen-tie that will provide transmission from the project facilities directly to the AEP West Load Zone in Tulsa.[51]

Congestion and Losses under SPP

SWEPCO analyzed congestion and losses for the life of the project from 2024 through 2051 using SPP's PROMOD models to determine the cost of congestion and losses and whether

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[45] TIEC Ex. 74 at 13.

[46] Tr. at 726: 12-18 (DeRuntz Rebuttal) (Feb. 26, 2020).

[47] *Application of Southwestern Electric Power Company for Certificate of Convenience and Necessity Authorization and Related Relief for the Wind Cather Energy Connection Project in Oklahoma*, Docket No. 47461, Direct Testimony of Robert W. Bradish at 430 (Jul. 31, 2017).

[48] SWEPCO Exhibit 2 at 80, 86-87.

[49] Direct Testimony of Johannes P. Pfeifenberger, SWEPCO Exhibit 9 at 546.

[50] Errata to Direct Testimony of John F. Torpey, SWEPCO Exhibit 8 at Exhibit JFT-3.

[51] SWEPCO Exhibit 7 at 462, 465.

a dedicated gen-tie was necessary.[52] Further, to determine congestion and losses for 2022 and 2023, the PROMOD model analyzed congestion and losses in those years by "linearly extrapolating backward the 2024 congestion and loss costs... calculated based upon the 2024 PROMOD results".[53] SWEPCO, through the use of the PROMOD models, estimated that the costs per year for congestion and losses would remain constant from 2029 onward.[54]

TIEC witness Mr. Pollock criticized this approach, stating that "[c]ongestion and loss costs were derived from just two years of PROMOD model runs and ignore the build-out of the Southwest Power Pool (SPP) transmission system to further alleviate congestion after 2029."[55] SWEPCO witness Akarsh Sheilendranath stated during cross examination that "no one knows what it's going to be" regarding congestion costs but that "it's a conservative assumption to assume that it will not go higher than 2029, and it would stay at 2029."[56] This assertion directly contradicts SWEPCO witness Thomas P. Brice, who agreed with the characterization that "SWEPCO is offering no guarantees about congestion costs."[57]

The assumptions made by SWEPCO that congestion costs will stay flat from 2029 through 2051 is based upon the assumption that SPP will advance all transmission solutions necessary.[58] SWEPCO admits that SPP has not approved all of these transmission solutions, but still holds firm in its belief that SPP will advance all transmission solutions proposed because their models require such action.[59]

To further add to the uncertainty of congestion costs associated with transmission, SWEPCO proposed a soft cap for the amount of congestion costs they will pay before building a dedicated gen-tie line.[60] The maximum costs that SWEPCO will pay per kWh, including

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[52] Direct Testimony of Akarsh Sheilendranath, SWEPCO Exhibit 6 at 427.

[53] *Id.* at 427-28.

[54] *Id.*; Tr: at 315:11-16 (Sheilendranath Direct) (Feb. 25, 2020).

[55] TIEC Exhibit 1 at 4.

[56] Tr. at 315:11-16 (Sheilendranath Direct) (Feb. 25, 2020).

[57] Tr. at 96:10-14 (Brice Direct) (Feb. 24, 2020).

[58] Tr. at 312:14-25 to 313:1-6 (Sheilendranath Direct) (Feb. 25, 2020).

[59] Tr. at 351:3-25 to 352:1 (Sheilendranath Direct) (Feb. 25, 2020).

[60] Tr. at 321:8-22 (Sheilendranath Direct) (Feb. 25, 2020).

congestion and losses, is $9-10.[61] If the costs exceed this threshold of $9-10 per kWh, SWEPCO would then initiate the build out of a dedicated gen-tie line, because the cost, according to SWEPCO, would be lower at that point to build a dedicated gen-tie line.[62]

SWEPCO argues they do not anticipate congestion costs reaching $9-10 per kWh, because SWEPCO believes SPP will build the necessary infrastructure to reduce congestion costs in the future.[63] Further, SWEPCO witness Sheilendranath admitted that, though the model predicts "flat" costs for congestion and losses from 2029 to 2051, that costs will not actually be flat but that costs will increase and decrease over the period as transmission solutions are identified and implemented.[64] This will be done through SPP's Integrated Transmission Planning (ITP) process which will address economic needs and propose solutions to address high levels of congestion.[65]

The issues with SWEPCO's analysis of congestion and losses is that it makes assumptions that are relatively uncertain and uses them as the basis for all of its analyses regarding congestion costs. This problem is shown in their use of the ITP process. SWEPCO witness Sheilendranath admitted that ITP does not actually provide transmission solutions, but instead addresses future needs of the transmission system, so that transmission solutions can be developed in the future.[66] This issue is further exacerbated by the fact that SWEPCO's own witness Karman Ali admitted that wind resources add more congestion than other types of generation.[67] SWEPCO's own plan will add congestion to an already congested transmission network, a network which has not implemented many of the solutions necessary to reduce congestion.

Additionally, though SWEPCO stated that it wants to promote certainty regarding congestion costs, it is clear that congestion costs are uncertain.[68] Even though SWEPCO argues

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[61] Tr. at 321:8-22 (Sheilendranath Direct) (Feb. 25, 2020).

[62] Tr. at 321:8-22 (Sheilendranath Direct) (Feb. 25, 2020).

[63] Tr. at 312:14-25 to 313:1-6 (Sheilendranath Direct) (Feb. 25, 2020).

[64] Tr. at 312:14-25 to 313:1-6 (Sheilendranath Direct) (Feb. 25, 2020).

[65] Tr. at 311:1-25; 312:1-9 (Sheilendranath Direct) (Feb. 25, 2020).

[66] Tr. at 349:17-22 (Sheilendranath Direct) (Feb. 25, 2020).

[67] Tr. at 375:14-21 (Ali Direct) (Feb. 25, 2020).

[68] Tr. at 96:10-14 (Brice Direct) (Feb. 24, 2020).

that congestion costs will be flat from 2029 through 2051, they still analyzed the build out of a dedicated gen-tie line, even though it is not the official transmission solution offered in SWEPCO's application.[69] This is clear evidence of SWEPCO's uncertainty over congestion costs.[70] SWEPCO displayed their own uncertainty in congestion costs remaining flat by developing an alternative to implement, if transmission costs are not in fact constant, as they have predicted. Thus, Staff takes the position that SWEPCO's reliance on uncertain congestion costs in their application, under the assumption SWEPCO continues to use SPP transmission lines, are not in the best interest of the public. Further, Staff will next address SWEPCO's proposed gen-tie line and analyze why it is also not in the public interest.

Gen-Tie

SWEPCO's alternative to using SPP for transmission to the AEP West Load Zone in Tulsa is to build a dedicated gen-tie line.[71] SWEPCO argues that they would only build a dedicated gen-tie line if the cost of congestion with SPP got too high.[72] SWEPCO estimates that the cost of building a dedicated gen-tie line would be approximately $444 million if it were built in 2021.[73] That amount would increase to about $480 million if it is built in 2026.[74]

Staff identifies four areas of concern in analyzing the gen-tie: (1) the uncertainty of routing options from the facilities to the AEP West Load Zone in Tulsa; (2) the uncertainty of when the gen-tie would actually be built; (3) the uncertainty in the cost of building the gen-tie line; and (4) the role that the Commission will play in the application of for approval of a gen-tie line, if SWEPCO determines that it is necessary for it to be built.

First, the routing options from the facilities to the AEP West Load Zone in Tulsa are uncertain. SWEPCO witnesses A. Malcomb Smoak and Kamran Ali stated that SWEPCO has not identified any routing options for a dedicated gen-tie line from the SWFs to the AEP West

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[69] Tr. at 20:23-25 to 21:1-3 (Smoak Direct) (Feb. 24, 2020).

[70] Tr. at 20:23-25 to 21:1-3 (Smoak Direct) (Feb. 24, 2020).

[71] Tr. at 20:23-25 to 21:1-3 (Smoak Direct) (Feb. 24, 2020).

[72] Tr. at 21:4-9; 28:1-12 (Smoak Direct) (Feb. 24, 2020).

[73] Workpapers of Kamran Ali, SWEPCO Exhibit 7A (PSO/SWEPCO RFP-Gen Tie Cost Estimate).

[74] Tr. at 178: 18-21(Brice Direct) (Feb. 24, 2020).

Load Zone in Tulsa.[75] SWEPCO president Smoak admitted, that in the Wind Catcher case, routing options had been an issue and that the suggested route for a gen-tie had increased by 30 miles from 350 to 380 miles.[76] The length of the gen-tie changed substantially in the Windcatcher case, even when a route had been planned out. SWEPCO has proposed multiple cost estimates for the project with a gen-tie, the costs for which vastly differ, yet has said that they have not planned a route for the gen-tie.[77] Additionally, SWEPCO's witnesses on this particular issue contradict each other, as these cost estimates provided by SWEPCO witness John F. Torpey for the project with a gen-tie are based upon the cost estimates of a gen-tie route, but other SWEPCO witnesses have said does not exist.[78] Since there is no actual route proposed by SWEPCO, there is no way for the Commission to evaluate possible routes or the costs of those routes in this application.

Second, Staff is concerned with the uncertainty of when the gen-tie would actually be built. SWEPCO states that they will annually monitor congestion costs for SPP to determine if and when a dedicated gen-tie would be required.[79] In fact, there is no concrete plan to build a gen-tie line, and SWEPCO does not plan to build a gen-tie if it is not required.[80] Further, there is no project time line for a gen-tie, routing plans, or options for the gen-tie whatsoever.[81] If a dedicated gen-tie was a serious option, that SWEPCO would have offered a concrete plan for how to build and implement it in the event that congestion on SPP becomes too high. Yet, SWEPCO has not planned accordingly and only has offered the idea of a gen-tie as an option, and not given a concrete plan for when, where, or how to build a gen-tie in their application.

Third, the cost of building the gen-tie line is uncertain. SWEPCO provided two estimates of the cost of building a dedicated gen-tie line, approximately $444 million if it were built in

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[75] Tr. at 24:9-11 (Smoak Direct) (Feb. 24, 2020); 391:12-14 (Ali Direct) (Feb. 25, 2020); TIEC Exhibit 58; TIEC Exhibit 59.

[76] Tr. at 24:4-11 (Smoak Direct) (Feb. 24, 2020).

[77] Errata to Direct Testimony of John F. Torpey, SWEPCO Exhibit 8 at (JFT-3); Tr. at 395:6-10 (Ali Direct) (Feb. 25, 2020).

[78] Errata to Direct Testimony of John F. Torpey, SWEPCO Exhibit 8 at (JFT-3); Tr. at 395:6-10 (Ali Direct) (Feb. 25, 2020).

[79] Tr. at 387:12-21 (Ali Direct) (Feb. 25, 2020).

[80] Tr. at 20:23-25 to 21:1-3 (Smoak Direct) (Feb. 25, 2020).

[81] SWEPCO Response to ETEC/NTEC 1-32, TIEC Exhibit 59.

2021,[82] but that amount would increase to about $480 million if it were postponed to 2026.[83] Further, for every year after 2026 that a gen-tie could be built, the cost could potentially would go up further.[84] Additionally, all of these cost estimates are based upon a potential gen-tie route upon which the Commission has not actually been decided, increasing the uncertainty of the cost estimates provided by SWEPCO.[85] Office of Public Utility Counsel (OPUC) witness Karl Nalepa argues that, even if we take SWEPCO's cost estimates as true, the gen-tie's "additional cost [will] further reduces any customer benefit of the wind generation facilities.[86] Moreover, SWEPCO admitted that there are potential transmission solutions besides continued use of SPP or a dedicated gen-tie line that they have not disclosed in their application.[87] Further, they have not provided cost estimates or details for these alternative solutions, which prevents those solutions from being weighed as potential cost saving alternatives to SPP or a dedicated gen-tie line.[88]

SWEPCO could not give more concrete cost estimates for a dedicated gen-tie line or alternative transmission solutions. More thorough transmission solutions in the application would have given more certainty to the application, which SWEPCO did not provide.

Lastly, Staff would like clear and unequivocal statements from SWEPCO regarding the role the Commission would play in approving a potential dedicated gen-tie line in Oklahoma. SWEPCO witness Thomas P. Brice stated that SWEPCO would come to the Commission for approval for a dedicated gen-tie line, if one was needed for the project.[89] If the Commission approves the instant application , Staff recommends that the Commission require Commission approval for any dedicated gen-tie line, as the costs for which would affect Texas ratepayers. .

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[82] SWEPCO Exhibit 7A.

[83] Tr. at 178: 18-21 (Brice Direct) (Feb. 24, 2020).

[84] Tr. at 394:22-25 to 395:1-5 (Ali Direct) (Feb. 25, 2020).

[85] Tr. at 393:18-25 to 394:1-5 (Ali Direct) (Feb. 25, 2020).

[86] OPUC Exhibit 1 at 20.

[87] Tr. 772:2-25 to 773:1-16 (Ali Rebuttal) (Feb. 26, 2020).

[88] Tr. 772:2-25 to 773:1-16 (Ali Rebuttal) (Feb. 26, 2020).

[89] Tr. at 96:15-20 (Brice Direct) (Feb. 24, 2020).

Staff's Position on Congestion Costs and Gen-Tie.

SWEPCO has provided a lot of "ifs" and alternatives to address congestion cost. These include continuing to use SPP, building a dedicated gen-tie line, or using another transmission solution. SWEPCO relies heavily on the idea that SPP will make every change SPP has proposed in its ITP study to address congestion.[90] Yet, if SPP does not do this, SWEPCO will build their own gen-tie line to address congestion. This gen-tie line has no route, no build date, no actual cost to build, just the potential for being built in the future. The lack of clarity on the costs of potential congestion and transmission solutions leads to the potential for a large variance in cost to Texas ratepayers. Thus, Staff recommends the imposition of a requirement that SWEPCO submit an application for a CCN in the event that it determines that a gen-tie is necessary.

3. Capacity Value

SWEPCO's assumptions regarding the capacity value of the SWFs should not be included in the calculation used to determine the economic benefits the SWFs will provide to customers. SWEPCO is not acquiring the SWFs to meet a current capacity need, and SWEPCO's modeling estimates that the SWFs will not generate capacity savings until 2037[91]—about halfway into the claimed 30-year life of these facilities. Nevertheless, SWEPCO attributes a 15% capacity value to the SWFs[92] and estimates that the project will produce cost savings of $70 million NPV in the form of deferred capacity additions.[93] Weighing the distant nature of these alleged benefits against the immediate impact of the $1.996 billion in total project capital costs, it is unrealistic to include deferred capacity additions in the calculation of the net benefits the SWFs will provide to customers.

4. Production Tax Credits

The PTCs account for the second largest amount of the projected net benefits the SWFs will provide to customers; however, the savings SWEPCO attributes to the PTCs are subject to risks, such as possible changes in federal tax law.[94] The SWFs will be eligible for PTCs during

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[90] Tr. at 351:3-25 to 352:1 (Sheilendranath Direct) (Feb. 25, 2020).

[91] Rebuttal Testimony of John O. Aaron, SWEPCO Exhibit 23 at 368.

[92] SWEPCO Exhibit 8 at 486.

[93] *Id.* at 483.

[94] *See* SWEPCO Exhibit 2 at 83.

the first ten years of operation.[95] SWEPCO estimates the PTCs will generate $507 million NPV in savings grossed up and net of the DTA.[96] This estimate depends on the SWFs operating at the P50 level, which equates to a net capacity factor of 44.1%.[97] Because this level of output is not guaranteed, the amount of PTCs earned by the SWFs could be lower if the output of the facilities is lower. In contrast to the risks associated with changes in law and the output of the SWFs is the certainty that, regardless of the savings generated by PTCs, SWEPCO will be able to recover its investment in the SWFs from ratepayers, in addition to earning a return on that investment.

5. Deferred Tax Asset

SWEPCO proposes to record the PTCs it cannot utilize at the time they are earned as a DTA,[98] which will offset any tax savings generated by the PTCs. As explained in detail in Section VII.C., the exact balance of the DTA is difficult to estimate, and if SWEPCO's request to include the DTA in rate base is approved, the length of time the DTA will remain in rate base is also unknown. Further, SWEPCO's weighted average cost of capital, which is used to calculate the carrying costs on the DTA, could change in the future. SWEPCO estimates that the DTA carrying charges will reduce the benefits provided by the PTCs by $123 million NPV.[99]

6. Wind Facility Revenue Requirement

SWEPCO estimates the revenue requirement for the SWFs at $1,348 million NPV.[100] The revenue requirement includes a return of and on the investment in the facilities' assets, taxes on those assets, a return (carrying charges) on the DTA, depreciation expense, and the operations and maintenance expenses associated with the SWFs.[101] This cost remains constant in all of the scenarios modeled by SWEPCO, while the benefits to customers fluctuate.[102]

D. Economic Evaluation and Summary

SWEPCO's estimated net benefits of $567 million NPV to ratepayers is overstated

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[95] Errata to Direct Testimony of John O. Aaron, SWEPCO Exhibit 12 at 10.

[96] SWEPCO Exhibit 8 at 483.

[97] *Id.*; OPUC Exhibit 1 at 8.

[98] Direct Testimony of Joel J. Multer, SWEPCO Exhibit 10 at 588.

[99] Errata to Direct Testimony of John F. Torpey, SWEPCO Exhibit 8 at Exhibit JFT-3.

[100] SWEPCO Exhibit 2 at 74.

[101] Direct Testimony of John O. Aaron, SWEPCO Exhibit 12 at 662.

[102] Errata to Direct Testimony of John F. Torpey, SWEPCO Exhibit 8 at Exhibit JFT-3.

because the assumptions made by SWEPCO in calculating its estimate of net benefits to customers are not plausible.

SWEPCO states that the SWFs are "forecasted to provide SWEPCO's customers a savings over the 30-year expected facilities life of approximately $567 million on a net present value (NPV) basis or more than $2.03 billion on a nominal basis."[103] In reality, customers would probably see very little net benefits from the SWFs and are at real risk of experiencing economic costs due to the SWFs. As shown above, even SWEPCO's low gas case likely overstates future natural gas prices and the assumption of a carbon tax beginning in 2028 is an unlikely event. Therefore, the only SWEPCO models that are appropriate to consider are SWEPCO's low gas and no carbon tax models. SWEPCO's projected net benefits for models assuming low gas and no carbon tax are shown below.[104]

	Projected Net Benefits (NPV)
P50 Low Gas, No CO2	$236 million
P95 Low Gas, No CO2	$43 million

The above models produced by SWEPCO still do not take into account other concerns with assumptions made by SWEPCO. First, the natural gas projections in SWEPCO's low gas case are likely overstated, while congestion costs are understated. Additionally, the SWFs should be modeled using a 25-year useful life, rather than a 30-year useful life, and SWEPCO's assumptions regarding capacity value should not be included a net benefits calculation since SWEPCO is not acquiring the SWFs to meet a current capacity need. Addressing these additional concerns results in a $314 million NPV cost to ratepayers.[105]

IV. PROPOSED CONDITIONS (P.O. ISSUE NO. 10, 19, 20, 24)

A. SWEPCO Proposed Conditions

The guarantees offered by SWEPCO in this application as well as in the settlements in Oklahoma and Arkansas are not sufficient to protect ratepayers from the risks of the project.

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[103] Errata to Direct Testimony of Thomas P. Brice, SWEPCO Ex. 2 at 38.

[104] Errata to Direct Testimony of John F. Torpey, SWEPCO Ex. 8 at Exhibit JFT-3; SWEPCO Ex. 14 at Exhibit TBP-1R.

SWEPCO offers three guarantees to ratepayers: the capital cost cap guarantee, the production tax credit eligibility guarantee, and the minimum production guarantee.[106] SWEPCO has provided additional guarantees to ratepayers in Oklahoma and Arkansas through settlements filed in those jurisdictions.[107] To protect ratepayers from the risks associated with the SWFs, there must be additional guarantees including an improved minimum production guarantee and a net benefits guarantee. Furthermore, approval of SWEPCO's application should be conditioned on a CCN application being filed with the Commission if a gen-tie is necessary to mitigate congestion costs associated with energy supplied by the SWFs. Additionally, including the cost of building a gen-tie line in a net-benefits calculation should be considered as a condition for approval of the application. Staff has attached a chart to its initial brief, labeled Staff Exhibit 1, showing the proposed conditions of approval proposed by intervenors as well as the conditions included in the Arkansas and Oklahoma settlements.

1. Capital Cost Cap

In its application, SWEPCO proposes a cost cap equal to 100% of the aggregate filed capital costs of approximately $1.996 billion.[108] As noted by SWEPCO, this capital cost cap has no exceptions, including no exception for *force majeure*.[109] The $1.996 billion is the estimated total of installed capital cost for the SWFs and includes each wind project's purchase price, PSA price adjustments, and owner's costs.[110] As SWEPCO witness Smoak admits, the SWFs are "turnkey projects" and SWEPCO does not have to be involved with the risk of contingencies or additional costs associated with construction of the SWFs; rather Invenergy (the Sellers) have the obligation to deliver the SWFs at the purchase price guaranteed by the PSAs.[111]

Furthermore, SWEPCO has not provided a guarantee on the amount of future capital expenditures and O&M expenses for the SWFs.[112] While SWEPCO provides a forecast for future

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[105] Direct Testimony of Charles S. Griffey, TIEC Ex. 2 at 45.

[106] SWEPCO Ex. 2 at 82-83.

[107] Tr. at 105: 9-12 (Brice Direct) (Feb. 24, 2020)

[108] SWEPCO Ex. 2 at 82.

[109] *Id.*

[110] SWEPCO Ex. 4 at 392.

[111] Tr. at 20: 2-14 (Smoak Direct) (Feb. 24, 2020).

[112] Staff Ex. 3 at 17.

O&M and capital costs, SWEPCO admits that, with a 30-year design life, high O&M costs are expected in the later years. However, the ongoing capital and O&M costs projections made by SWEPCO are held flat in real terms for years 11 through 30, assuming an inflation rate of two percent.[113]

Additionally, SWEPCO also considers the possible need of a gen-tie line to mitigate congestion but does not formally include it for consideration in the application. In fact, SWEPCO's RFP process calculated the cost of transmission congestion by assigning a 50% weight to the cost of congestion and a 50% weight to the cost of a potential gen-tie line.[114] However, the capital cost cap guarantee proposed by SWEPCO does not apply to the estimated $480 million cost of a gen-tie line.[115]

2. Production Tax Credit Eligibility Guarantee

SWEPCO also includes a PTC eligibility guarantee as part of its application. The PTC guarantee states that "if PTCs are not received at the 100% level for Sundance and the 80% level for the other two Facilities because a Selected Wind Facility is determined to be ineligible, customers will be made whole for the value of the lost PTC based upon actual production."[116] SWEPCO does not assume the risk of a change in law for its PTC guarantee.[117] Thus, if a change in law resulted in the SWFs failing to generate qualified PTCs, there would be a reduction in the economic benefits received by the ratepayers.[118] As shown by the models produced by SWEPCO, if there was a change in law that made Traverse, Maverick, or Sundance not qualify for PTCs, then, for SWEPCO's base case, the reduction in economic benefits would be approximately $507 million NPV for the life of the project.[119]

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[113] Tr 725: 6-14, 727: 3-19 (DeRuntz Rebuttal) (Feb. 26, 2020).

[114] Tr. at 20: 23-25 to 22: 1-17 (Smoak Direct) (Feb. 24, 2020).

[115] Tr. at 25: 1-7 (Smoak Direct) (Feb. 24, 2020).

[116] SWEPCO Ex. 2 at 82.

[117] Tr. at 31: 13-25 to 32: 1-8 (Smoak Direct) (Feb. 24, 2020).

[118] Tr. at 32: 9-15 to 33: 1-11 (Smoak Direct) (Feb. 24, 2020).

[119] Errata to Direct Testimony of John F. Torpey, SWEPCO Ex. 8 at Exhibit JFT-3.

3. Minimum Production Guarantee

SWEPCO also provides a minimum production guarantee for the SWFs. With this guarantee, SWEPCO guarantees a minimum production level at the P95 production level (or 38.1% capacity factor) in the aggregate for the SWFs over each five-year period for 10 years average across all facilities.[120] According to SWEPCO, "if the minimum production level is not achieved, customers will be made whole on an energy and PTC (if applicable) basis."[121] While SWEPCO only guarantees production at the P95 level, SWEPCO expects the SWFs to produce at a P50 or 44.1% capacity factor.[122] Therefore, according to SWEPCO witness Smoak, SWEPCO does not expect the minimum production guarantee to be invoked during the 30-year life of the project.[123]

Additionally, with the proposed minimum production guarantee, SWEPCO would not calculate whether ratepayers were due a credit on an annual basis; rather, ratepayers would have to wait until the end of the five-year period (2026 and 2032) to determine if there was any credit associated with the minimum production guarantee.[124] The minimum production guarantee is not calculated on a year by year basis, but rather averaged over a five-year period so that even if the capacity factor of the SWFs was less than 38.1% on any one-year ratepayers would not receive a benefit if the average of the five year period was 38.1% or greater.[125]

The minimum production guarantee also has exceptions for *force majeure* and SPP curtailments.[126] This includes both economic and environmental curtailments.[127] Examples of an exceptions to the minimum production for *force majeure* include tornados, ice storms, or if the SWFs were closed due to whooping crane migration.[128]

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[120] SWEPCO Ex. 2 at 83.

[121] *Id.*

[122] SWEPCO Ex. 14 at 16.

[123] Tr. at 45: 16-23 (Smoak Direct) (Feb. 24, 2020).

[124] SWEPCO Ex. 2 at 83; Tr. at 43: 16-25 to 44: 1-17 (Smoak Direct) (Feb. 24, 2020).

[125] Tr. at 44: 18-25 to 45: 1-3 (Smoak Direct) (Feb. 24, 2020).

[126] SWEPCO Ex. 2 at 83.

[127] *Id.*; Tr. at 39: 16-25 to 40: 1-8 (Smoak Direct) (Feb. 24, 2020).

[128] Tr. at 39: 3-10 (Smoak Direct) (Feb. 24, 2020).

Overall, SWEPCO assumes little to no risk in providing these three guarantees to ratepayers. The purchase price of the SWFs is a "turnkey" purchase price and SWEPCO and the capital cost guarantee does not apply to future O&M or capital costs, and any cost for a future gen-tie line is not covered by the capital cost cap. Additionally, SWEPCO expects that the minimum production guarantee to not be invoked during the 30-year life of the SWFs, and the ratepayers take on the risk of not receiving PTCs due to a change in law.

B. Conditions Contained in Settlements Filed in Other Jurisdictions

SWEPCO added additional protections to the minimum production guarantee, as proposed in its original application, in settlements filed with the Arkansas Public Service Commission and the Corporation Commission of the State of Oklahoma.[129] SWEPCO made no changes to the capital cost guarantee and the production tax credit eligibility guarantee made in its initial application. For the minimum production guarantee, SWEPCO guaranteed a minimum production level at the P95 level (or 38.1% capacity factor) for the 30-year useful life of the project.[130] Additionally, while the minimum production guarantee in SWEPCO's application included an exception for *force majeure,* the Arkansas and Oklahoma settlements do not include this exception.[131] In the Arkansas settlement, the minimum production guarantee also contains no exception for economic curtailments of the SWFs by SPP.[132]

SWEPCO also included additional guarantees not provided in its initial application in the Arkansas and Oklahoma settlements. Specifically, rather than receiving only 90% of the benefits of off-system sales, ratepayers retain 100% of the benefit of off-system sales.[133] Under 16 Tex. Admin. Code (TAC) § 25.236(a)(9), the Commission allows SWEPCO to retain 10% of its off-system sales.[134]

While the additional protections to the minimum production guarantee and the off-system sales guarantee included in the Arkansas and Oklahoma settlement are beneficial to ratepayers,

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[129] SWEPCO Ex. 14 at Arkansas Settlement Agreement; SWEPCO Ex. 14 at Oklahoma Settlement Agreement.

[130] *Id.*

[131] *Id.*

[132] SWEPCO Ex. 14 at Arkansas Settlement Agreement.

[133] *Id.*; SWEPCO Ex. 14 at Oklahoma Settlement Agreement.

[134] SWEPCO Ex. 14 at 24.

even if SWEPCO provided these conditions to Texas ratepayers, the guarantees would not be sufficient to protect ratepayers from the risks of this project without additional guarantees including a net benefits guarantee.

SWEPCO also proposed additional conditions regarding the DTA balance. For the Arkansas settlement agreement, SWEPCO will use the DTA balance resulting from unused PTCs to reduce the accumulated deferred income tax (ADIT) component of SWEPCO's cost of capital in any subsequent rate case in Arkansas.[135] For the Oklahoma settlement agreement, SWEPCO will earn a return on the DTA balance resulting from the unused PTCs over the first 20 years of operation of the SWFs using its then applicable cost of long-term debt (currently 4.72%) on any DTA balance.[136]

As discussed earlier, Staff recommends that there should be no pre-approval to recover the DTA in rate base, rather ratemaking treatment should be determined in the next base rate case.[137]

Although these issues were not discussed in SWEPCO's direct testimony, the Arkansas and Oklahoma settlements also had conditions relating to jurisdictional and class allocation. Regarding jurisdictional allocation, SWEPCO had a condition in the Arkansas settlement that "all the costs of the SWFs to SWEPCO will be allocated among the Company's jurisdictions on behalf of which SWEPCO acquires a share of the SWFs based on energy using the Company's jurisdictional energy allocator in effect at the time of the allocation."[138] Jurisdictional allocation was not addressed in the Oklahoma settlement.[139]

Regarding class allocation, the Arkansas settlement contained a provision stating that, for the purposes of the Wind Facility Asset Rider, the Arkansas jurisdictional share of the revenue requirement of the SWFs, net of the PTCs, will be allocated among SWEPCO's Arkansas customer classes 85% on energy and 15% on demand using an average and excess 4 coincident peak allocation factor.[140] SWEPCO's settlement in Oklahoma also contains a condition where

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[135] SWEPCO Ex. 14 at Arkansas Settlement Agreement.

[136] SWEPCO Ex. 14 at Oklahoma Settlement Agreement.

[137] Staff Ex. 1 at 0000007.

[138] SWEPCO Ex. 14 at Arkansas Settlement Agreement.

[139] SWEPCO Ex. 14 at Oklahoma Settlement Agreement.

[140] SWEPCO Ex. 14 at Arkansas Settlement Agreement.

the revenue requirement associated with the filed capital cost of the SWFs will be allocated in the Wind Facility Asset Rider to the customer classes based on a blended demand/energy allocator so that the revenue distribution resulting from the allocation will not result in a cost increase for residential customer classes for the year following the addition of each wind facility into the Wind Facility Asset Rider.[141]

Because jurisdictional allocation and class allocation were not conditions presented in SWEPCO's direct testimony, it is not appropriate to include jurisdictional and class allocation issues as a condition to this project.

C. Staff/Intervenor Proposed Conditions

Both Cities Advocating for Reasonable Deregulation (CARD) and OPUC recommend approval of the application only with additional conditions including a net benefits guarantee, an off-system sales and renewable energy credits guarantee, and improved minimum production guarantees and PTC guarantees.[142] OPUC and CARD condition approval of the application on an improved production guarantee of 44.01% or 39.6% net capacity factor, respectively.[143] Both intervenors state that production guarantee should not include exceptions for *force majeure* or SPP curtailments and should be in place for the entire 30-year life span of the SWFs.[144] Furthermore, OPUC states that the PTC guarantee should not have an exception for change in law.[145] CARD states that SWEPCO should guarantee full PTC eligibility for the actual output of the SWFs with an exception for a change in federal law pertaining to PTCs to the extent not covered by a net benefits guarantee as SWEPCO proposed in the Wind Catcher case.[146]

Staff recommends that, if the Commission approves SWEPCO's application, it should include an improved minimum production guarantee and a net benefits guarantee. Because the cost of possibly building a gen-tie line in order to mitigate congestion costs associated with energy supplied by the SWFs would be borne by the ratepayers, any calculation of net benefits

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[141] SWEPCO Ex. 14 at Oklahoma Settlement Agreement.

[142] OPUC Ex. 1 at 8; CARD Ex. 1 at 5, 22-26.

[143] *Id.*

[144] *Id.*

[145] OPUC Ex. 1 at 8.

[146] CARD Ex. 1 at 00073.

for a net benefits guarantee should include the cost of building the gen-tie line. CARD and OPUC recommend conditioning approval of the application with a requirement that SWEPCO credit ratepayers with 100% of off-system sales margins.[147] CARD also recommends that SWEPCO should be required to provided ratepayers with 100% of the benefits attributable to renewable energy credit sales.[148]

Additionally, both CARD and Staff recommend that approval of the application should be conditioned on SWEPCO filing a CCN application with the Public Utility Commission in the event that SWEPCO determines that constructing a gen-tie line is necessary to mitigate congestion costs associated with energy supplied by the SWFs.[149]

V. REGULATORY APPROVALS IN OTHER JURISDICTIONS (P.O. ISSUE NOS. 7, 8, 9, 10)

B. Scalability of Acquisition

SWEPCO does not require Commission approval to move forward with the acquisition of the SWFs. Contemporaneous with the filing of its Texas application, SWEPCO submitted applications in Arkansas and Louisiana, while its affiliate PSO filed an application in Oklahoma.[150] In the event that regulatory approval cannot be obtained in all four jurisdictions, the acquisition of the SWFs is scalable.[151] As part of its application, SWEPCO is requesting that the Commission approve the conditions that will that preserve the scalability of the project.[152]

By the completion of the hearing on the merits, settlements had been filed in Oklahoma and Arkansas, and if those settlements are approved, SWEPCO will have sufficient regulatory authority to acquire a portion of the SWFs.[153] If the Commission also approves the application, and Louisiana denies it, then SWEPCO requests that its CCN be amended to allow it to:

> i) acquire only the originally-proposed jurisdictional shares of Texas and the other approving SWEPCO jurisdiction (including the wholesale share),

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147 OPUC Ex. 1 at 8; CARD Ex. 1 at 00075.

148 CARD Ex. 1 at 00075.

149 CARD Ex. 1 at 00077.

150 SWEPCO Exhibit 2 at 88.

151 *Id.*

152 *Id.* at 88-89.

153 SWEPCO Exhibit 14 at 6.

> instead of 810 MW, of the Selected Wind Facilities; or ii) acquire 810 MW of the Selected Wind Facilities and allocate the costs and benefits of that acquisition proportionately to Texas and the other approving SWEPCO jurisdiction. These options are dependent on both approving jurisdictions having accepted the same option.[154]

SWEPCO's application does not quantify the impact of modifying its CCN application under either option. Therefore, SWEPCO has not shown that this aspect of the application preserves the purported economic benefits of the SWFs.

VII. RATE ISSUES (P.O. ISSUE NOS. 21, 22, 25, 26, 27, 28, 29, 30, 31)

A. Proposal to Recover Revenue Requirement Through Generation Rider

SWEPCO's proposal to recover its investment in the SWFs through the rider authorized in PURA § 36.213 should not be addressed in this case.

SWEPCO witness John Aaron testified that SWEPCO intends to apply for a Generation Investment Recovery Rider to recover the Texas jurisdictional share of the SWFs (309 MW).[155] If approved by the Commission, the rider would take effect on the date the SWFs begin providing service to customers and the amounts recovered through the rider would be subject to reconciliation in SWEPCO's next base rate case.[156]

As discussed in Section VII.C., the Commission has not yet adopted the rule that will implement PURA § 36.213.[157] Consequently, Staff does not take a position on the rider in this proceeding and reserves the right to address the issue once the rule is adopted and SWEPCO's application requesting the rider is filed.

B. Production Tax Credits

The ratemaking issues related to the PTCs generated by the SWFs are discussed in Section VII.C.

C. Deferred Tax Asset Carrying Costs

The Commission should deny SWEPCO's request for pre-approval of the ratemaking treatment to be applied to the DTA related to the unrealized PTCs generated by the SWFs. Specifically, SWEPCO requests to recover the DTA in rate base, thereby ensuring its rates will

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[154] SWEPCO Exhibit 2 at 89.

[155] SWEPCO Exhibit 12 at 666.

[156] *Id.*

[157] *Rulemaking Related to Generation Cost Recovery Rider (GCRR)*, Project No. 50031 (pending).

be set to recover carrying charges on the DTA at SWEPCO's Commission-approved weighted average cost of capital.[158] SWEPCO witness Thomas Brice characterized this request as "consistent with standard ratemaking."[159]

Despite this claim, SWEPCO has not provided a compelling reason why it is necessary to force a Commission decision on the issue now rather than wait until a future proceeding where all of the interrelated components of SWEPCO's proposed wind facilities can be addressed concurrently.[160] Moreover, such a request is not ripe for consideration in a CCN proceeding—a fact that is compounded by the uncertainties regarding the balance of the DTA, the length of time it will remain in rate base, any future changes to federal tax law or PURA, and the method by which SWEPCO will credit the PTC benefits to customers.

The balance of the DTA will depend in large part on SWEPCO's tax appetite in each year the SWFs are eligible to earn PTCs.[161] Section 38(c) of the Internal Revenue Code generally limits the use of General Business Credits (which include PTCs) to 75% of regular tax liability prior to application of credits.[162] General Business Credits that cannot be used (realized) to offset regular tax in a particular year can be carried forward for 20 subsequent years and used to reduce tax liability in the future.[163] SWEPCO plans to record the balance of these potentially unused PTCs as a DTA and seeks Commission approval to include the DTA in the rate base that will be used to set rates in future base rate proceedings.[164]

SWEPCO's request with respect to the DTA should be rejected for five reasons. First, with the exception of cost caps imposed in certain cases, the Commission's general practice does not include approving future ratemaking treatment in CCN proceedings.[165] While a CCN application relies on estimates of future construction costs as a matter of necessity, with very few

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158 Tr. at 53:6-19 (Smoak Direct) (Feb. 24, 2020).

159 SWEPCO Exhibit 14 at 21.

160 Direct Testimony of Ruth Stark, Staff Exhibit 1 at 0000007.

161 Tr. at 49:6-10 (Smoak Direct) (Feb. 24, 2020).

162 Staff Exhibit 1 at 0000006.

163 Staff Exhibit 1 at 0000006.

164 Direct Testimony of John O. Aaron, SWEPCO Exhibit 12 at 664.

165 *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 9 (Aug. 12, 2008) ("[t]he Commission's approval of the CCN for the Turk Plant does not constitute authority for rate recovery for any of the costs of the Turk Plant").

exceptions the Commission's rate filing package, relies on historical costs adjusted for known and measurable changes.[166]

Second, the prudence of the costs incurred to construct the SWFs will not be determined by the Commission until these facilities are complete and actually in service.[167] Any prudence disallowance by the Commission could impact the amount of the DTA that should appropriately be included in rates, and a blanket pre-approval of the DTA ratemaking treatment in this proceeding could compromise the Commission's ability to properly include or exclude an amount in future rate proceedings.[168]

Third, SWEPCO's inclusion in the American Electric Power Company (AEP) consolidated tax group could prevent SWEPCO from utilizing the PTCs as predicted resulting in higher rates for Texas customers.[169] Subsidiaries of AEP, including SWEPCO and its affiliates, are included in the consolidated federal tax return for the AEP group, and the amount of the General Business Credits (including PTCs) that are able to be used in a given tax year are determined at the consolidated group level.[170] Consequently, SWEPCO's ability to use the PTCs depends on the taxable income of the consolidated group.[171] It is possible that a member of the AEP consolidated group other than SWEPCO could incur unexpected or unplanned taxable losses that would preclude the utilization of the PTCs at the rate anticipated by SWEPCO.[172]

Because the DTA is equal to the balance of unrealized PTCs, any impediment to SWEPCO's ability to utilize the PTCs in the amount and timeframe predicted could cause the DTA to remain in rate base at a much higher balance and for a much longer period of time than currently estimated.[173] Although it is not possible to quantify the potential dollar impact of any deviation from SWEPCO's estimates related to the timing of the PTC utilization or the balance of the DTA, it is certain that any increase in either the DTA balance or the amount of time it

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166 Staff Exhibit 1 at 0000009.

167 *Id.*

168 *Id.*

169 *Id.* at 0000011.

170 *Id.* at 0000006-7.

171 *Id.* at 0000010.

172 *Id.* at 0000011.

173 *Id.* at 0000011.

remains in rate base will also increase the amount of carrying charges recovered by SWEPCO.[174] And any increase in the carrying charges, would have the effect of reducing the economic benefits of the SWFs.[175]

Fourth, waiting until SWEPCO's next base rate case to approve the ratemaking treatment applied to the DTA will allow the Commission to consider any changes to the federal income tax code, PURA, or any other relevant laws that are enacted between now and the time the proposed wind facilities are completed and placed in service.[176] The magnitude of the effect a change in law can have on a project that relies in part on earning PTCs to generate costs savings to customers was apparent in Docket No. 47461, which involved a previous request by SWEPCO for approval to acquire wind facilities.[177] In that case, SWEPCO filed its application in July of 2017, and stated in response to discovery that it would have sufficient tax liability to fully offset the PTCs.[178] The Tax Cuts and Jobs Act of 2017 (TCJA) was subsequently enacted in December of 2017,[179] and caused SWEPCO to supplement its discovery response to acknowledge the likelihood that the company might not have adequate taxable income in each year to utilize the PTCs as they were earned.[180]

As a result of this change in law, SWEPCO proposed measures to mitigate the impact of the DTA it was requesting on rates.[181] In this proceeding, SWEPCO is not proposing any measures whatsoever to mitigate the impact of the DTA carrying charges on rates.[182] In addition, the PTC guarantee proposed by SWEPCO excludes any changes in law that would affect the 100% PTC eligibility guaranteed for the Sundance facility and 80% eligibility

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[174] *Id.* at 0000011.

[175] *Id.* at 0000011.

[176] *Id.* at 0000014.

[177] *Application of Southwestern Electric Power Company for Certificate of Convenience and Necessity Authorization and Related Relief for the Wind Catcher Energy Connection Project in Oklahoma,* Docket No. 47461 (Aug. 13, 2018).

[178] Staff Exhibit 1 at 0000014-15 and Attachment RS-8.

[179] Act to Provide for Reconciliation Pursuant to Titles II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018, Pub. L. No. 115-97, 113 Stat. 2054 (Dec. 22, 2017).

[180] Staff Exhibit 1 at 0000012-13, Attachment RS-10.

[181] Staff Exhibit 1 at 0000015.

[182] *Id.* at 0000013.

guaranteed for the Traverse and Maverick facilities.[183] Thus, the Commission's determination of the ratemaking treatment applied to the DTA resulting from unrealized PTCs should be made with the benefit of all pertinent information available at the time the SWFs are completed, placed in service, and added to rate base and within the parameters of the relevant statutes that exist at that point in time.[184]

Finally, the Commission should not approve recovery of the DTA in rate base until SWEPCO has determined how the benefit of the associated PTCs will be flowed through to ratepayers. In response to discovery, SWEPCO stated:

> *The exact method by which PTCs will be credited to customers will be determined in a future proceeding*, such as a request for a Generation Cost Recovery Factor (GCRF) or base rate case. However, as noted in the Company's application, SWEPCO intends to credit these wind facilities' PTC benefits to customers through the GCRF, in effect reducing the facilities' revenue requirements. *There are a number of options by which to credit the PTC benefits to SWEPCO's customers.* For example, the PTCs could be credited through Fuel, or a regulatory liability could be established for the difference between the amount of PTCs in base rates and the actual amount realized.[185]

The GCRF rule has yet to be adopted by the Commission so it is unknown how (or even if) the rule would permit the PTCs to be reflected therein.[186] If the PTC benefits are credited to customers through fuel, the carrying charge applied to the PTCs would be set at the current effective interest rate for fuel over/under recoveries, which is only 2.35%.[187] However, SWEPCO's requested ratemaking treatment for the DTA would allow it to recover carrying charges at its significantly higher Commission-approved rate of return (currently 7.18%).[188] Thus, approving the inclusion of the DTA in rate base in this proceeding may preclude the use of the fuel mechanism to flow the PTCs to ratepayers if the Commission concludes in the future

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[183] Direct Testimony of Thomas P. Brice, SWEPCO Exhibit 2 at 82.

[184] Staff Exhibit 1 at 0000016.

[185] SWEPCO's Response to Staff's Third Request for Information at Staff 3-7, SWEPCO Exhibit 32 (emphasis added).

[186] *Rulemaking Related to Generation Cost Recovery Rider (GCRR)*, Project No. 50031 (pending).

[187] *Interest Rates Set Under Texas Utilities Code § 183.003 and Set for Overcharges and Undercharges Under 16 Texas Administrative Code §§25.28, 25.480, and 26.27*, Project No. 45319, Order Setting Interest Rates for Calendar Year 2020 (Nov. 15, 2019).

[188] *Application of Southwestern Electric Power Company for Authority to Change Rates,* Docket No. 46449, Finding of Fact No. 162 (Mar. 19, 2018); Tr. at 53:6-19 (Smoak Direct) (Feb. 24, 2020).

that the benefits to SWEPCO (DTAs) and benefits to ratepayers (PTCs) should receive equal rate treatment.

SWEPCO estimates that the PTCs net of DTA carrying charges will contribute $750 million ($507 million NPV) to the claimed economic benefits of the SWFs.[189] Because the PTCs are offset by the DTA, the balance of the DTA is critical to determining the actual savings generated by PTCs.[190] However, projecting taxable income is difficult,[191] making it hard to predict not only the balance of the DTA—which is dependent on the amount of unrealized PTCs—but also the length of time the DTA will remain in rate base—which is dependent on how quickly the tax appetite of SWEPCO and its affiliates allow it to utilize the PTCs comprising the DTA. SWEPCO has not proposed any guarantees that would limit or otherwise mitigate the impact of the DTA on rates. Nor has it addressed why it is appropriate to divorce the decision regarding the regulatory treatment for the DTA from the final decision regarding the regulatory treatment of the associated PTCs thereby precluding simultaneous evaluation of the interests of both the ratepayers and SWEPCO. Therefore, the Commission should reject SWEPCO's request for approval of the ratemaking treatment to be applied to the DTA resulting from unrealized PTCs earned by the SWFs.

D. Jurisdictional Allocation

The jurisdictional allocation of the SWFs should not be addressed in this case. SWEPCO has not proposed a jurisdictional allocation for the SWFs as part of the application. As explained by SWEPCO witness John Aaron, the analysis in the application used an estimated energy allocator to determine the jurisdictional allocation.[192] Because SWEPCO has not proposed an actual jurisdictional allocation factor in this docket, Staff does not take a position on whether an energy allocator is appropriate at this time and reserves the right to address the issue in SWEPCO's next base rate case.

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[189] SWEPCO Exhibit 8 at 483.

[190] SWEPCO's weighted average cost of capital will be applied to the balance of the DTA to determine the amount of carrying charges SWEPCO will earn.

[191] Staff Exhibit 1 at 0000010 and Attachment RS-5.

[192] SWEPCO Exhibit 12 at 664.

E. Treatment of Renewable Energy Credits

The treatment of the renewable energy credits (RECs) generated by the SWFs should not be addressed in this case. SWEPCO cites the creation of RECs as a benefit of the SWFs,[193] but only announces an "intention" to propose a new tariff schedule through which customers could purchase the RECs created by the SWFs.[194]

VIII. SALE, TRANSFER, MERGER ISSUES (P.O. ISSUE NOS. 13, 14, 15, 16, 17, 18)

Staff recommends that PURA § 14.101 applies to this application and that the SWFs are not in the public interest.

PURA § 14.101(a) requires that public utilities must report a transaction to the Commission within a reasonable time if they "(1) sell, acquire, or lease a plant as an operating unit or system in this state for a total consideration of more than $10 million; or (2) merge or consolidate with another public utility operating in this state."[195] Further, under PURA § 14.101(b), "[a] public utility shall report to the commission within a reasonable time each transaction that involves the sale of at least 50 percent of the stock of the utility."[196] Once a public utility has filed the required report, the Commission will investigate the transaction and determine among other things "whether the transaction is consistent with the public interest."[197]

SWEPCO holds the position that because the SWFs are not physically within the State of Texas that PURA § 14.101 does not apply to this application.[198] SWEPCO further argues that, even if PURA § 14.101 does apply, the SWFs are in the public interest because they "will produce significant and immediate cost savings for SWEPCO customers by locking in long-term, low-cost power supply."[199] Staff disagrees with SWEPCO on both points.

First, Staff argues that PURA § 14.101 applies, because SWEPCO is acquiring the SWFs to operate as a part of a system that produces electricity for ratepayers in Texas and substantially effects ratepayers in Texas. Though the wind facilities are not physically in Texas, Staff argues

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[193] SWEPCO Exhibit 2 at 70.

[194] *Id.* at 79.

[195] PURA § 14.101(a).

[196] PURA § 14.101(b).

[197] PURA § 14.101(b)(4).

[198] SWEPCO Exhibit 2 at 92-93; Tr. at 101:15-25 to 102:1-7 (Brice Direct) (Feb. 24, 2020).

[199] SWEPCO Exhibit 2 at 93; Tr. at 102:8-20 (Brice Direct) (Feb. 24, 2020).

that the statute covers more than just physical presence in the state through the use of the language "system in the state".[200] This language would cover facilities that operated as a part of a system that directly affected ratepayers in the state and not just facilities actually located in the state. Thus, Staff argues that PURA § 14.101 applies to the SWFs in this application.

Second, as is outlined throughout this brief, Staff does not believe the application, as presented, is in the public interest under PURA § 14.101(b)(4). Staff argues that, without additional guarantees to protect Texas ratepayers, this CCN application has a high potential to negatively impact Texas ratepayers.

IX. CONCLUSION

Overall, Texas ratepayers would likely only see, minimal, if any, net benefits from the SWFs and Texas ratepayers are at a real risk of experiencing net costs due to the SWFs. Therefore, without additional guarantees, including at minimum at net benefits guarantee to protect Texas ratepayers, Staff recommends denial of the application.

[200] PURA § 14.101(a)(1).

Respectfully Submitted,

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CERTIFICATE OF SERVICE

I certify that a copy of this document will be served on all parties of record on March 9, 2020, in accordance with 16 TAC § 22.74.

Rashmin J. Asher

GUARANTEED CUSTOMER PROTECTIONS

	Capital Cost Cap	Production Guarantee	Production Tax Credits	Net Benefits Guarantee	Off System Sales & Renewable Energy Credits	Most Favored Nations
SWEPCO Direct	$1.996 billion (100% of purchase price and associated costs like AFUDC); no exceptions for change in law or force majeure	P95 or 38.1% NCF first 10 years the SWFs are in service exceptions for force majeure and SPP curtailments	100% for Sundance and 80% for Traverse and Maverick regardless of whether the SWFs qualify for PTCs at this level; exception for changes in law	None	None	None
Nalepa (OPUC)	same as SWEPCO	P50 or 44.01% NCF full 30-year life of the SWFs no exception for force majeure (does not mention SPP curtailments)	same as SWEPCO	Net benefits shown in Base Case regardless of actual natural gas prices	Not addressed	Not addressed
Norwood (CARD)	same as SWEPCO	39.6% NCF full 30-year life of the SWFs no exception for force majeure or SPP curtailments	Full PTC eligibility for the actual output of the SWFs with an exception for a change in federal law to the extent not covered by a net benefits guarantee – same as in Wind Catcher	Net benefits guaranteed for first 10 years the SWFs are in service	customers receive 100% of the benefits of off system sales attributable to the SWFs as an offset to fuel costs (rather than 90%) and 100% of attributable REC sales	Yes

GUARANTEED CUSTOMER PROTECTIONS

Oklahoma Settlement	same as SWEPCO's filed case; costs subject to prudence review	P95 or 38.1% NCF full 30-year life of the SWFs no exception for force majeure	same as SWEPCO's filed case	None	customers receive the benefit of 100% of all off-system sales margins; margins from REC sales associated with SWFs provided to customers through Fuel Cost Adjustment rider	Yes
Arkansas Settlement	same as SWEPCO's filed case; costs subject to prudence review	P95 or 38.1% NCF full 30-year life of the SWFs no exception for force majeure no exception for economic SPP curtailments	same as SWEPCO's filed case	None	Same as OK settlement except REC margins provided through Energy Cost Recovery Rider	Yes

Deferred Tax Asset:

Staff: No pre-approval to recover DTA in rate base – ratemaking treatment should be determined in the next base rate case
Oklahoma Settlement: return on DTA over the first 20 years SWFs are in operation using actual cost of long term debt at the time or recovery
Arkansas Settlement: DTA used to reduce ADIT, which is included in a utility's cost of capital in this jurisdiction.

Gen-Tie:

CARD: require Commission pre-approval of any new transmission lines SWEPCO seeks to construct in the future to mitigate congestion costs associated with energy supplied from the SWFs.
Oklahoma and Arkansas Settlement: Nothing in this settlement should be interpreted as providing pre-approval for any gen-tie line built in the future