



Control Number: 49737



Item Number: 246

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SOAH DOCKET NO. 473-19-6862
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APPLICATION OF SOUTHWESTERN § BEFORE THE STATE OFFICE
ELECTRIC POWER COMPANY FOR §
CERTIFICATE OF CONVENIENCE § OF
AND NECESSITY AUTHORIZATION §
AND RELATED RELIEF FOR THE §
ACQUISITION OF WIND § ADMINISTRATIVE HEARINGS
GENERATION FACILITIES §

**SOUTHWESTERN ELECTRIC POWER COMPANY'S CORRECTED RESPONSE TO
CITIES ADVOCATING REASONABLE DEREGULATION'S FIRST SET OF
REQUESTS FOR INFORMATION**

CORRECTED RESPONSE NOS. 1-6 AND 1-26

JANUARY 27, 2020

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Files provided electronically on the PUC Interchange

CARD_1-6_Attachment_1.pdf

2020

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**SOUTHWESTERN ELECTRIC POWER COMPANY'S CORRECTED RESPONSE TO
CITIES ADVOCATING REASONABLE DEREGULATION'S FIRST SET OF
REQUESTS FOR INFORMATION**

Question No. 1-6:

Provide PSO's and SWEPCO's most recent IRPs and identify the level of new wind energy evaluated and reflected in the five-year action plans of such studies.

Response No. 1-6:

See the Executive Summary and Sections 4.5.5.2 and 6.0 of CARD 1-6 Attachment 1 (provided electronically on the PUC Interchange) for the PSO information. See the same sections of the SWEPCO IRPs as provided in the response to TIEC 1-15 and the supplemental response to TIEC 1-16.

Corrected Response No. 1-6:

Attached is Card 1-6, Attachment 1, which was inadvertently omitted from the original filing.

Prepared By: Jon R. Maclean

Title: Resource Planning Mgr

Prepared By: James F. Martin

Title: Regulatory Case Mgr

Sponsored By: John F. Torpey

Title: Mng Dir Res Plnning&Op Anlysis

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**SOUTHWESTERN ELECTRIC POWER COMPANY'S CORRECTED RESPONSE TO
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Question No. 1-26:

Provide a comparison of the base case congestion costs for SWEPCO's share of the proposed wind energy facilities in this case to the congestion costs for SWEPCO's share of the previously proposed Wind Catcher project for each year of the base case analyses for these projects.

Response No. 1-26:

See the Company's response to CARD 1-22 for a discussion of the limited usefulness of using cost and benefit information about Wind Catcher for the purpose of evaluating the merits of the North Central Wind facilities proposed in this proceeding. The two projects are very different in size, location, scope and risk, and any comparison between the two must be made with that understanding.

A comparison of the estimated congestion costs (SWEPCO's share) the proposed Selected Wind Facilities and that of the Wind Catcher project, reflecting congestion between the wind facilities and AEP load, is shown in CARD 1-26 Attachment 1. The congestion costs shown for the Selected Wind Facilities are for the Company's "Base Gas Price with Carbon" case, consistent with the Company's most recent 2019 fundamental forecasts for market prices. For the Wind Catcher project, the shown congestion costs are for the "Base Gas Price/with Carbon" case, consistent with the Company's October 2016 (then current) fundamental forecasts.

Corrected Response No. 1-26:

Attached to this response is CARD 1-26, Attachment 1 which was mislabeled in the original filing.

Prepared By: Jon R. Maclean

Title: Resource Planning Mgr

Prepared By: James F. Martin

Title: Regulatory Case Mgr

Sponsored By: Karl R. Bletzacker

Title: Dir Fundamental Analysis

Sponsored By: John F. Torpey

Title: Mng Dir Res Plnning&Op Anlysis

Sponsored By: Akarsh Sheilendranath

Title: Senior Associate, The Brattle Group

**Congestion Costs from Selected Wind Facilities and Wind Catcher Project to AEP Load
(for 2019 and 2016 "Base Gas Price with Carbon" Cases)**

	Selected Wind Facilities			Wind Catcher		
	Annual Congestion Cost (\$M)	Output (GWh)	Average Congestion Cost (\$/MWh)	Annual Congestion Cost (\$M)	Output (GWh)	Average Congestion Cost (\$/MWh)
	[1]	[2]	[3]	[4]	[5]	[6]
2021	\$2.25	444	\$5.08	\$16.05	6,105	\$2.63
2022	\$15.26	3,139	\$4.86	\$16.16	6,105	\$2.65
2023	\$15.82	3,139	\$5.04	\$16.27	6,105	\$2.67
2024	\$16.49	3,147	\$5.24	\$16.39	6,123	\$2.68
2025	\$18.48	3,139	\$5.89	\$16.50	6,105	\$2.70
2026	\$20.47	3,139	\$6.52	\$17.89	6,105	\$2.93
2027	\$22.46	3,139	\$7.15	\$19.15	6,105	\$3.14
2028	\$24.44	3,147	\$7.77	\$20.59	6,123	\$3.36
2029	\$26.43	3,139	\$8.42	\$22.23	6,105	\$3.64
2030	\$26.43	3,139	\$8.42	\$23.72	6,105	\$3.89
2031	\$26.43	3,139	\$8.42	\$25.55	6,105	\$4.19
2032	\$26.43	3,147	\$8.40	\$26.94	6,123	\$4.40
2033	\$26.43	3,139	\$8.42	\$27.77	6,105	\$4.55
2034	\$26.43	3,139	\$8.42	\$28.53	6,105	\$4.67
2035	\$26.43	3,139	\$8.42	\$29.24	6,105	\$4.79
2036	\$26.43	3,147	\$8.40	\$29.65	6,123	\$4.84
2037	\$26.43	3,139	\$8.42	\$30.39	6,105	\$4.98
2038	\$26.43	3,139	\$8.42	\$31.15	6,105	\$5.10
2039	\$26.43	3,139	\$8.42	\$31.49	6,105	\$5.16
2040	\$26.43	3,147	\$8.40	\$31.91	6,123	\$5.21
2041	\$26.43	3,139	\$8.42	\$32.41	6,105	\$5.31
2042	\$26.43	3,139	\$8.42	\$32.98	6,105	\$5.40
2043	\$26.43	3,139	\$8.42	\$33.38	6,105	\$5.47
2044	\$26.43	3,147	\$8.40	\$33.93	6,123	\$5.54
2045	\$26.43	3,139	\$8.42	\$34.69	6,105	\$5.68
2046	\$26.43	3,139	\$8.42	n/a	n/a	n/a
2047	\$26.43	3,139	\$8.42	n/a	n/a	n/a
2048	\$26.43	3,147	\$8.40	n/a	n/a	n/a
2049	\$26.43	3,139	\$8.42	n/a	n/a	n/a
2050	\$26.43	3,139	\$8.42	n/a	n/a	n/a
2051	\$22.58	2,695	\$8.38	n/a	n/a	n/a

Sources and Notes:

[1]-[2]: Congestion costs and output from tab 'Figure 4' of workpaper 'Sheilendranath WP4 - Figures 4, 5, 6, 7, 8, 9, 10, 11, 12, 13.xlsx', scaled by SWEPCO share of 54.55%, then reduced by 25% assumed hedging. SWEPCO's share of output shown reflects 54.55% of the approximately 5,754 GWh of annual total energy production from the Selected Wind Facilities.

Output is higher in leap years to reflect additional day of output.

[3]: [1] / [2] x 1,000

[4]: Based on SWEPCO's share of New Wind congestion in Wind Catcher workpaper 'JPP-WP-2b.xlsx', computed according to Section B of 'Congestion Calculations.pdf'. JPP-WP-2b congestion costs are then scaled to include the company's Plexos modeling's addition of 61,903 MWh to annual output (62,081.84 MWh in leap years), as reflected in Pearce workpapers filed in Wind Catcher proceedings.

[6]: [4] / [5] x 1,000