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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

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PUBLIC UTILITY COMMISSION
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BEFORE THE STATE OFFICE
OF
ADMINISTRATIVE HEARINGS

CITIES ADVOCATING REASONABLE DEREGULATION'S

REPLY POST-HEARING CLOSING BRIEF

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REASONABLE DEREGULATION**

March 21, 2018

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CARD’S REPLY POST-HEARING CLOSING BRIEF

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CARD'S REPLY POST-HEARING CLOSING BRIEF

The Cities Advocating Reasonable Deregulation ("CARD") hereby submits their Reply Post-Hearing Closing Brief¹ and in support thereof, shows as follows:

I. INTRODUCTION

CARD continues to urge the Administrative Law Judges ("ALJs") to recommend denial of Southwestern Electric Power Company's ("SWEPCO") application to acquire the Wind Catcher Project.²

Notwithstanding the confidence SWEPCO expresses in the accuracy of its forecasts of the savings it attributes to the Wind Catcher Project, nowhere does SWEPCO suggest that one of its affiliates under the AEP umbrella will undertake the risk of constructing or acquiring the Wind Catcher Project as a merchant plant in which it sells the energy from the Wind Catcher

¹ CARD does not provide briefing under each heading in the outline agreed to by the parties. To the extent CARD does not provide briefing with regard to a particular heading, CARD reserves the right to reply issues under those topics in future pleadings as may be appropriate. Also, CARD's lack of comment under a particular heading is not and should not be read as agreement with or acquiescence to SWEPCO's contentions under such heading.

² Formally, the Wind Catcher Project is the "Wind Catcher Energy Connection Project" consisting of a 2,000 megaWatt (MW) wind facility and a dedicated 765 kiloVolt (KV) transmission tie-line ("Gen-Tie"). CARD refers to these facilities as the Wind Catcher Project and at times as the "Project."

Project in the energy markets. The most SWEPCO is willing to venture is that it is keeping all its options open.³

Nor is SWEPCO offering any commitment based on its forecasts to ensure ratepayers will actually experience the vast savings SWEPCO predicts will occur. The only commitment regarding the performance of the Wind Catcher Project that SWEPCO is willing to proffer is that it will achieve an average capacity factor of 42.2%, a level of performance SWEPCO forecasts it can achieve 99% of the time.⁴ But even that commitment, as well as all other “guarantees” SWEPCO tenders with regard to the savings it “expects,” are all subject to any changes in law and to very broad exclusions for force-majeure events that would excuse poor performance resulting from, e.g., severe weather or simply equipment failure, common events that affect all projects but that otherwise do not rise to force majeure.⁵

In the final analysis, SWEPCO’s proposal places too much risk on ratepayers guaranteeing only a return on capital ultimately provided by ratepayers in the form of carrying costs (that is, return on capital) and depreciation expenses (return of capital). CARD urges the ALJs to recommend denial of SWEPCO’s application to amend its certificate of convenience and necessity (“CCN”).

II. CERTIFICATE OF CONVENIENCE AND NECESSITY STANDARD OF REVIEW

SWEPCO posits that under PURA § 37.056(c), if a utility establishes that a particular generating plant for which it seeks a certificate will lead to the probable lowering of cost to consumers, it warrants a certificate and that the need for additional service does not mean only

³ See SWEPCO Initial Brief at 65.

⁴ See CARD Initial Brief at 34.

⁵ *Id.*

the need for generation capacity.⁶ But SWEPCO's reading of PURA § 36.056(c) ignores § 36.056(a).⁷

It is § 36.056(a) that establishes the standard SWEPCO must meet; and under that standard SWEPCO must establish that a *certificate is necessary* for SWEPCO to undertake the Wind Catcher Project. Irrespective of whether a generating plant is intended to provide added capacity or energy, fundamentally the Commission must find that it is needed. 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."⁸ SWEPCO concedes that it does not need the Wind Catcher Project for purposes of capacity or reliability, or to meet federal or state emission mandates. On that basis alone, the ALJs should deny SWEPCO's application.

Second, the Commission is to *consider*: (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) the probable improvement of service or lowering of cost to consumers in the area if the certificate is granted.⁹ Though none of these factors alone is necessarily dispositive in determining whether the Commission should grant or deny a certificate, *the Commission must consider each factor*, but may grant the certificate "only if the Commission finds that the certificate is necessary for the service, accommodation, convenience, or safety of the public."¹⁰ That is, even after considering the factors in § 36.056(c),

⁶ See SWEPCO Initial Brief at 4; 7 – 8; and 10 – 11.

⁷ Tex. Util. Code § 37.056(a) and (c). In CARD's brief CARD cites to the Utilities Code as the Public Utility Regulatory Act ("PURA").

⁸ PURA § 37.056(a) [emphasis added].

⁹ See PURA § 37.056(c)(1) – (4).

¹⁰ PURA § 37.056(a).

the Commission may grant the certificate only if a certificate is *necessary* for SWEPCO to construct the Wind Catcher Project.

Beyond not being necessary, there is nothing to prevent SWEPCO or one of its affiliates under the AEP umbrella of companies from underwriting the Wind Catcher Project. Yet, notwithstanding the confidence SWEPCO wants the ALJs to place on its predictions of key elements that will determine whether ratepayers will see savings, SWEPCO candidly states it is too large a risk for it to take on.¹¹ Thus on two factors, a certificate is not necessary: the Wind Catcher Project is not necessary to meet customer demand for service and one of SWEPCO's affiliates could construct the Project from which SWEPCO could then purchase energy, and a certificate is not necessary to enter into an agreement to purchase energy.

SWEPCO also contends that it is not in customers' interest to plan on a combination of "implausible circumstances" in determining whether a generating plant should be built; that if such a standard applied, utilities would make "virtually no investment in beneficial resources;" and that rejection of its plans means foregoing savings.¹² But again SWEPCO ignores the standard the Legislature established: To grant a certificate the Commission must find the certificate is necessary. SWEPCO can point the ALJs to no other CCN case in which a utility sought to obtain a certificate to construct a generating plant where the plant was not needed to provide reliable service, much less a \$4.5 billion project such as Wind Catcher Project. Nor can SWEPCO identify any CCN case in which the Commission did not undertake a two-step analysis

¹¹ CARD Initial Brief at 6.

¹² See SWEPCO Initial Brief at 4 and 7.

to evaluate the criteria of PURA § 37.056: Is the plant needed? And if so, is it the least-cost alternative?¹³

If construction of the Wind Catcher Project is such a sure bet, then one would expect market forces to undertake its construction as a merchant plant either through one of SWEPCO's non-regulated affiliates or through a third party. But that is not the case; it is only if the Project offers the assurance of recovery through rates – that is, by risking other peoples' money – that SWEPCO believes the Project is worth the risk.

There is nothing to preclude one of SWEPCO's affiliates or Invenergy from going forward with the Project, or to preclude SWEPCO, in keeping with its duty to provide service at the lowest reasonable cost, from purchasing wind power from that venture in the energy market; SWEPCO may enter into a purchase-power agreement with the builder/owner of the Wind Catcher Project and the prudence of its decision would be addressed in a rate proceeding in due course. Here, SWEPCO's reading of PURA § 37.056 conflates its duty to provide service at the lowest reasonable cost, with the need to obtain a certificate.

SWEPCO attempts to equate the economic need for a transmission-line CCN with a CCN for a generating plant, but the Commission's Substantive Rules mark a distinction between the two. For transmission lines inside and outside of ERCOT, the Commission's Substantive Rules expressly provide that the "need" factor for transmission-line CCNs may be met with a showing of an economic benefit or a "reliability" factor. In ERCOT, the "applicant must present an

¹³ Even in CCN cases for transmission lines the Commission first determines if construction of a transmission line is needed. The Commission made this clear in its decision in Docket No. 46429, *Application of Brazos Electric Power Cooperative, Inc. to Amend Its Certificate of Convenience and Necessity for a 138-kV Transmission Line in Collin County*, Final Order at 1 – 2; Findings of Fact 65A – 65K; 78 and 79; and Conclusions of Law 8A – 8E (Jan. 26, 2018), where it rejected Brazos Electric's application for an amendment to its certificate finding that SWEPCO had failed to establish the need for a transmission line ("Under PURA § 37.056, the Commission may not grant Brazos's requested certificate unless it finds that the certificate is necessary for the service, accommodation, convenience, or safety of the public.").

economic cost-benefit study that includes an analysis that shows that the levelized ERCOT-wide **annual production cost savings** attributable to the proposed project are equal to or greater than the first-year annual revenue requirement of the proposed project of which the transmission line is a part.”¹⁴ But, “[t]his requirement ... does not apply to an application for a transmission line that is **necessary to meet state or federal reliability standards**”¹⁵

Similarly, for transmission-line CCNs outside ERCOT, the Commission’s Substantive Rules likewise provide that the “need” factor may be met by considering “**among other factors**, the needs of the interconnected transmission systems to support a **reliable and adequate network** and to **facilitate robust wholesale competition**.”¹⁶

By contrast, to grant a CCN for a generating plant the Commission’s Substantive Rules provide that the Commission “may grant an application and issue a certificate **only if it finds that the certificate is necessary** for the service, accommodation, convenience, or safety of the public, and **complies with**” **[PURA] §37.056**; as noted above § 36.056 mandates a finding of need for a certificate.¹⁷

SWEPCO also contends that there is no debate that operations of the Wind Catcher Project will reduce fuel costs; that it will produce zero carbon emissions; and that the Project adds diversity to SWEPCO’s portfolio of generating plants.¹⁸ But the fuel-cost savings are based on uncertain predictions of prices for natural gas and energy over the next 25 years while, recovery through rates of the cost of the Project, would be a near certainty.¹⁹ SWEPCO admits it

¹⁴ 16 Tex. Admin. Code § 25.101(b)(3)(A)(i) [emphasis added].

¹⁵ *Id.*

¹⁶ 16 Tex. Admin. Code § 25.101(b)(3)(A)(ii) [emphasis added].

¹⁷ 16 Tex. Admin. Code § 25.101(b) [emphasis added].

¹⁸ See SWEPCO Initial Brief at 5 – 6.

¹⁹ See CARD Initial Brief at 7.

does not need the Project to meet either federal or state mandates regarding carbon-emissions standards.²⁰ Finally, as to fuel diversity, it is unclear how much diversity the Project truly offers; in terms of capacity value, SPP attributes at best a 15% capacity value to the Project.²¹ Further, the Project is not needed for purposes of fuel diversity, capacity, or reliability.²²

Ultimately, the risk of SWEPCO being wrong regarding the projected savings it attributes to the Wind Catcher Project is shouldered by its ratepayers. The only certain factor in SWEPCO's proposal is that, if approved, SWEPCO's Wind Catcher Project at an estimated cost of \$3.2 billion will be added to its rate base and ratepayers will pay a return on and of that capital cost.²³

III. ANALYSIS OF ECONOMICS OF WIND CATCHER (P.O. ISSUE NOS. 10, 12, 14, 25, 26)

A. Project Description and Cost

SWEPCO includes in its description of the Project the Membership Interests Purchase Agreement ("MIPA") and manufacturers guarantees regarding operations of the wind turbines.²⁴ All these warranties do is to warrant that the Project is capable of operating at a certain level. But neither the MIPA nor the manufacturer's warranties affect SWEPCO's projections of the cost of gas, the effect of weather on production by the wind turbines, or the actual capacity factors achieved by the Project.

²⁰ See *Id.* at 9.

²¹ CARD Exh. 1 – Norwood Direct at 3.

²² CARD Exh. 32 at pp. 1, 3, and 5; HOM Tr. at 309 – 311.

²³ CARD Exh. Nos. 4 and 47; CARD Exh. 1 – Norwood Dir. at 6.

²⁴ See SWEPCO Initial Brief at 15 – 17.

With regard to the Gen-Tie, SWEPCO states that the Gen-Tie enables the provision of dependable energy and reduced congestion costs.²⁵ But what SWEPCO completely discounts is that transmission of the energy from the Wind Catcher Project may be interrupted; SWEPCO assumes essentially 100% availability of the Gen-Tie.²⁶

Additionally, with regard to congestion costs, SWEPCO's own testimony establishes that the cost of the Gen-Tie is about one-and-two-thirds (1.67) SWEPCO's expectations for congestion costs. Mr. Pfeifenberger estimated the cost of congestion at \$9.54/MWh in 2025 under SWEPCO's Generic Wind Case.²⁷ SWEPCO's projected revenue requirement for the Gen-Tie is approximately \$16.00/MWh.²⁸

- 1. Wind Facilities**

- 2. Gen-Tie**

- B. Economic Evaluation Methodology and Assumptions**

- 1. Evaluation Methodology**

Regarding SWEPCO's evaluation of the economics of the Wind Catcher Project, SWEPCO compares its Base Line Case assuming no purchase of wind resources at all during the course of the next 25 years.²⁹ As Mr. Norwood testified, that is an unrealistic assumption.³⁰ A more realistic assumption is that the energy market would supply additional wind capacity.³¹

²⁵ See SWEPCO Initial Brief at 17.

²⁶ See SWEPCO Exh. 19 - Bradish Rebuttal at 2; HOM Tr. at 895 – 898.

²⁷ SWEPCO Exh. 24 – Pfeifenberger Rebuttal at 9.

²⁸ The \$16/MWh cost of the Gen-Tie line is derived by dividing the total revenue requirement of \$2.46 billion related to the Gen-Tie line by the forecasted total energy 152,737 GWh that SWEPCO projects the Wind Catcher Project will produce. See SWEPCO Exh. 7 – Pearce Dir. at Exhs. KDP-1 and KDP-4.

²⁹ See SWEPCO Initial Brief at 22.

³⁰ CARD Initial Brief at 7; 13 – 14; and 24 – 25.

³¹ *Id.*

2. Assumptions Impacting Locational Marginal Prices

a. Natural Gas Prices

b. Cost of Carbon

SWEPCO states that with regard to carbon costs, a long-term forecast must include the cost of carbon mitigation so as to reflect “reasonable expectations regarding future conditions that affect price.”³² While CARD does not disagree that an analysis of construction of generating assets should include “reasonable expectations” of carbon-mitigation costs, SWEPCO’s analysis is devoid of such an assessment. Instead SWEPCO did nothing more than to “deem reasonable” its regulatory team’s conclusion that SWEPCO would be subject to carbon-mitigation costs.³³

c. Other Assumptions

SWEPCO also compared the Wind Catcher Project to the results Generic Wind purchases assuming it would purchase wind-energy in the market but concluded that its Generic Wind Case showed congestion costs made the Wind Catcher Project the better alternative.³⁴ But again, SWEPCO’s analysis was unrealistic because it assumed congestions would endlessly trend upward. SWEPCO agreed, however, that congestion costs are locational and that as congestion costs become a limiting factor, SPP would issue notices to construct additional transmission capacity to mitigate congestion costs.³⁵

3. Net Capacity Factor

³² See SWEPCO Initial Brief at 35 – 36.

³³ CARD Initial Brief at 28.

³⁴ See SWEPCO Initial Brief at 23 and 37.

³⁵ SWEPCO Exh. 24 – Pfeifenberger Rebuttal at 13; HOM Tr. at 819 – 820.

C. Projected Benefits of Wind Catcher

1. Production Cost Savings

2. Production Tax Credits

SWEPCO contends that it is guaranteeing the value of PTCs.³⁶ More accurately stated, SWEPCO perhaps is guaranteeing that as of today, the PTCs are “valued” at about \$24.00 per MWh. But SWEPCO is not committing to \$1.87 billion aggregate present value of PTCs reflected in the Company’s Base-Case analysis, which assumes the current PTC value of \$24.00 per MWh and SWEPCO’s projected capacity factor of 51.1%³⁷ If the Wind Catcher Project operates below a 51.1% capacity factor, or if future changes in law or excused delays in the project reduce the PTC value to less than \$24.00 per MWh, then customers could receive far less than the “guaranteed benefits” claimed by SWEPCO.

Moreover, whatever assurances SWEPCO offers are all subject to force-majeure events and changes in law. Nowhere does SWEPCO state, “We guarantee an offset to the revenue requirement related to the Wind Catcher Project both in terms of fuel costs and receipt of PTCs, at a capacity factor of 51.1%.” All SWEPCO commits to is that it will be eligible to receive PTCs at \$24.00 per MWh.

3. Capacity Value

IV. PROPOSED CONDITIONS TO CCN (P.O. ISSUE NO. 13)

With regard to the conditions under which SWEPCO proposes approval of its application the long and short of it is that any and all “conditions” SWEPCO proposes are subject to force-majeure events and changes in law. There is no limit to what SWEPCO contends is or would be

³⁶ See SWEPCO Initial Brief at 41 – 42.

³⁷ See SWEPCO Exh. 7 – Pearce Dir. at Exhs. KDP-1.

covered by force-majeure events. Any event beyond SWEPCO's control is subject to force majeure and thus excluded from any "guarantees" it proposed first in its rebuttal testimony and then at the hearing³⁸

Moreover, the performance standard SWEPCO proposed of a 42% capacity factor is so low as to be no standard at all and is markedly below what SWEPCO contends it will achieve, a capacity factor of 51.1%.³⁹ SWEPCO's proposed capital cost cap of 109% on a Project that is already at a cost of over \$2,250/kilowatt, simply makes an untenable cost even higher. Plus, SWEPCO reserves its right to request cost increases above this cap in future rate cases; and even more, all this is subject to a force-majeure exception and changes in law.⁴⁰

Further, SWEPCO's contention that force-majeure events are the norm in terms of allowing a utility to recover costs incurred because of a cataclysmic event, is in apropos.⁴¹ Where the Commission allows a utility to recover such costs, it is for cost related to assets the utility needs and/or to recover expenses necessary to restore service.⁴² The Wind Catcher Project is not needed and the issue is not damages to customers because of the interruption of service due, e.g., to an act of God. Instead, SWEPCO touts the veracity of its projections, but then wants an exception to the very commitments it contends it is offering ratepayers.

³⁸ SWEPCO Exh. 14 – Chodak Rebuttal at 5; HOM Tr. at 1163; 1194 – 1195. See also CARD Exhs. 9 (SWEPCO's unwillingness to guarantee its 51.1% capacity factor) and 68 (SWEPCO's unwillingness to guarantee the savings it attributes to the Wind Catcher Project's performance).

³⁹ SWEPCO Exh. 14 – Chodak Rebuttal at 3-8; SWEPCO Exh. 25 – Pearce Rebuttal at Exhibit KDP-1R; HOM Tr. at 192 – 193. See also CARD Exhs. 50 and 69. A 42.2% capacity factor is a level of performance SWEPCO believes it could achieve 99% of the time. Yet, its estimate of savings is premised on a capacity factor of 51.1%, a level of performance it predicts it would meet about 50% of the time.

⁴⁰ CARD Exh. 68 at 3; TIEC Exh. 1 – Pollock Dir. at 39.

⁴¹ See SWEPCO Initial Brief at 49 – 52.

⁴² The examples SWEPCO cites from the Commission's Substantive Rules are not relevant to the force-majeure events that would allow SWEPCO an out from its commitments. The Commission's rules to which SWEPCO refers are for *damages* a customer may incur as a consequence of a force-majeure event that interrupts the utility's service.

SWEPCO also announces in its brief that it has reached a settlement in Oklahoma, and to an extent that is true; however, that settlement is with a single party seemingly not joined in by any other party or ratepayer.⁴³ Moreover, given SWEPCO's objection to the introduction of the proposal for decision from the Wind-Catcher proceeding in Oklahoma,⁴⁴ it is at best curious that SWEPCO in its brief refers to its settlement with WalMart in the Wind-Catcher proceeding in Oklahoma.⁴⁵ First, a settlement with a single party in a multi-party proceeding is of little consequence.

But more importantly, after weighing the evidence in the Oklahoma Wind-Catcher case, the administrative law judge in the Oklahoma proceeding recommended that the Oklahoma Commission deny PSO's application.⁴⁶ The ALJ in that proceeding summarized her findings as follows:

If Title 17 O.S. §286 requires that "need" be a need for capacity or meet a need as it relates to renewable energy requirements or other regulatory requirements then PSO has not proven that such a need exists. However, if "need" in Title 17 O.S. §286 can also be interpreted to include economic need or a need for low-cost energy then it must be determined if PSO has proven such in PSO's economic need analysis.

PSO failed to prove that this Project meets an economic need sufficient for preapproval of this Project. PSO's economic analysis used unreasonable data and utilized a flawed planning process. PSO's economic analysis contained assumptions regarding future gas prices, carbon costs, and wind additions that overstate the benefits of the Project. The Project presents risky elements, including the risk of cost overruns on, or complete failure of, the Gen-Tie line; failure of the Project to qualify for full Production Tax Credits, and risk of non-performance by other AEP companies, PSO's failure to utilize competitive

⁴³ See SWEPCO Initial Brief at 49.

⁴⁴ HOM Tr. at 1178 – 1179.

⁴⁵ See SWEPCO Initial Brief at 49.

⁴⁶ CARD Offer of Proof Exhibit No. 1 (TIEC Exh. 66) (provided as "Attachment A" to CARD's Reply Brief); HOM Tr. at 1226 – 1227.

bidding for two extremely large purchases is of utmost importance in any consideration of preapproval of the Wind Facility and the Gen-Tie line, This failure becomes even more of a concern without adequate explanation or justification. An excuse of "not enough time" for competitive bidding is not sufficient in light of the significant cost to be borne by PSO customers. A project at this price point must be done right. Given the facts of this Cause, the ALJ cannot recommend preapproval of the Project in light of PSO's failure to competitively bid both the Wind Facility and the Gen-Tie line and PSO's failure to adequately explain the lack of competitive bidding for such significant purchases.

It is the conclusion and recommendation of the ALJ that PSO has not met its burden of proof sufficient to prove this Project in whole, or the Wind Project and Gen-Tie Projects in part, meet a need as required by Title 17 O.S. §286.⁴⁷

Finding of Facts:

21. PSO's evidence in this case was that the Project was not proposed or needed to meet energy needs or for system reliability, (Fate Direct, p. 4). It is not needed to supply capacity for meeting future demands, renewable energy goals, or any future regulations of carbon emissions. (Fate Direct, p. 4). Other parties such as PUD, OIEC and the Attorney General also offered testimony that this Project was not needed for these reasons. (Norwood Responsive, p. 16; Bohrmann Responsive, p. 4; Mossburg Responsive, p. 6).

...

23. The goal of PSO's Project is almost entirely to lower costs to ratepayers, not to keep the lights on, The Project is therefore driven by an 'economic' need, not a 'reliability' need. (Mossburg Responsive, p.6).

24. The Commission is asked to determine that there "is a need for low-cost energy delivered into the Tulsa area that can be satisfied by the Project." (Chodak Direct, p. 10).

25. The costs of the Project are largely fixed and certain, (Tr. 1/8/18 AM, p. 112, 127; Tr, 1/9/18 AM, p. 55-56). However, the estimated energy savings for the

⁴⁷ CARD Offer of Proof Exh. 1 at 3.

Project are uncertain and are not guaranteed by PSO. (Tr. 1/8/18 AM, p. 94-95, 114; Tr. 1/9/18 PM, p. 4-7; Norwood Responsive, p. 16).

26. PSO has attempted to justify the Project by first creating a Baseline Case where no new wind generation is added to its portfolio. It then compares this case against a Project Case that includes the Wind Catcher Project. PSO projects changes in generation and purchased power costs over a twenty-five-year period from 2021 to 2045 via a two-step process, first creating an SPP-wide dispatch of resources for the years 2020 and 2025 in PROMOD. Based on these results, PSO extrapolates market prices for the other years in the study period. PSO then used these prices as inputs in its PLEXOS dispatch model to determine annual generation, as well as transmission congestion and loss costs for the entire study period. In direct testimony, PSO calculated that the Project will create total benefits of \$996 million dollars on a NPV basis. (Mossburg Responsive, p.11).

27. PSO's benefits estimate is significantly overstated due to unreasonable assumptions and flaws underlying PSO's analysis. (Norwood Responsive, p. 16). With relatively modest adjustments to PSO's analysis, the estimated savings for the Wind Catcher Project would be greatly reduced or even eliminated. (Norwood Responsive, pp. 8, 16-17),

28. PSO's analysis contained assumptions regarding future gas prices and wind additions that overstate the benefits of the Project. (Mossburg Responsive, p. 20). The Project presents risky elements, including the risk of cost overruns on, or complete failure of, the Gen-Tie line; failure of the Project to qualify for the full Production Tax Credit, and risk of non-performance by other AEP companies. (Mossburg Responsive, p. 6).

29. PSO's claimed economic benefit exists for the Project only when assuming future gas cost projections well in excess of current market forecasts and carbon cost projections that have no basis, (Stover Responsive, p. 4). When PSO's analysis is revised to properly reflect current market gas cost projections, carbon cost projections based on current carbon regulations, and adjustments to reflect errors in the capital cost estimate of the Gen-Tie component of the project and the treatment of firm capacity, the Project's economic analysis results in costs to ratepayers of \$320 million net present value (NPV) and not a benefit. (Stover Responsive, p. 6).

...

38. All of the Company's estimates of benefits of the Project assumed a tax on carbon emissions beginning in 2024. (Beling Responsive, p. 7; Tr. 1/11/18 PM, p. 21). However, there is no legislation or regulation that exists imposing such a tax. (Id.) PSO's forecast includes a cost of carbon which assumes that there will be regulations limiting CO2 emissions. The effect of including a cost of carbon in the fundamentals forecast will result in an increase to the operating cost of natural gas fired combined cycle plants which makes a renewable energy project like the Project look better. (Tr. 1/10/18 PM, p. SJ42, ln. 19 — p. SJ43, ln. 9). PSO did not include the impact of a no carbon scenario on the cost and benefits of the Project for ratepayers. (Tr. 1/11/18 PM, p. 21, ln. 23 — p. 22, ln. 1).

...

45. In direct testimony, PSO calculates that the Generic Wind Case would cost \$452 million more than the Project on a net present value ("NPV") basis. (Pearce Direct, Exhibit KDP-3, Mossburg Responsive, p. 32). The primary factor in this difference is the additional \$463 million of congestion and loss costs incurred by the Generic Wind projects. The Generic Wind Case does not reflect what would be expected from a competitive procurement. (Mossburg Responsive, p. 32).

46. Mr. Mossburg testified that the primary result of the assumption is that it overstates congestion, which is the primary driver of the Project Case's advantage over the Generic Wind Case. PSO compounds this by assuming that SPP will take no action regarding congestion cost beyond projects that have already been approved. (Mossburg Responsive, p.32-33).

The concerns raised by all parties in this proceeding with the Wind Catcher Project, save SWEPCO, are the very concerns upon which the administrative law judge in Oklahoma based her recommendations to deny the application:

It is not needed to supply capacity for meeting future demands, renewable energy goals, or any future regulations of carbon emissions.

The costs of the Project are largely fixed and certain, (Tr. 1/8/18 AM, p. 112, 127; Tr. 1/9/18 AM, p. 55-56). However, the estimated energy savings for the Project are uncertain and are not guaranteed by PSO.

PSO's benefits estimate is significantly overstated due to unreasonable assumptions and flaws underlying PSO's analysis.

PSO's analysis contained assumptions regarding future gas prices and wind additions that overstate the benefits of the Project.

The Project presents risky elements, including the risk of cost overruns on, or complete failure of, the Gen-Tie line; failure of the Project to qualify for the full Production Tax Credit, and risk of non-performance by other AEP companies.

PSO's claimed economic benefit exists for the Project only when assuming future gas cost projections well in excess of current market forecasts and carbon cost projections that have no basis,

All of the Company's estimates of benefits of the Project assumed a tax on carbon emissions beginning in 2024. (Beling Responsive, p, 7; Tr. 1/11/18 PM, p. 21). However, there is no legislation or regulation that exists imposing such a tax.

SWEPCO's assumptions regarding congestion costs in its Generic Wind Case overstate congestion, which is the primary driver of the Project Case's advantage over the Generic Wind Case. PSO compounds this by assuming that SPP will take no action regarding congestion cost beyond projects that have already been approved.

SWEPCO's "guarantees" in this proceeding do not allay those concerns.

A. SWEPCO Proposed Conditions

- 1. Capital Cost Cap**
- 2. Net Capacity Factor**
- 3. Production Tax Credit**
- 4. Off-System Energy Sales Margins**
- 5. Deferred Tax Asset Cap**
- 6. Ten-Year Lookback**

B. Staff or Intervenor Proposed Conditions

V. OTHER CCN ISSUES (P.O. ISSUE NOS. 9, 11, 14, 15, 16, 17)

In Preliminary Issue No. 17, the Commission asked, "whether the Commission should grant CCNs for generation proposed for economic purposes, or require utilities to acquire

additional generation through competitive affiliates.” CARD will not repeat its arguments set forth above on the requirements of PURA § 37.056. Suffice it to say that § 37.056(a) requires that the Commission first find a need to grant a certificate. Absent a need for a certificate, the utility should not be allowed to speculate with ratepayer money on a plant it does not need.

VI. Proposed Ratemaking Treatments (P.O. Issue Nos. 18, 19, 20, 21, 22, 23, 24, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36)

A. Request to Recover Revenue Requirement Through Fuel

CARD refers the ALJs to CARD’s Initial Post-Hearing Closing Brief with regard to the ratemaking treatment SWEPCO seeks. CARD urges the ALJs to reject SWEPCO’s proposed ratemaking treatment regarding recovery of the revenue requirement related to the Wind Catcher Project as well as its proposed treatment of PTCs.

B. Proposal to Flow PTCs Through Fuel

C. Deferred Tax Asset for PTCs

D. Proposal to Defer PTCs to “Shape” the Revenue Requirement

E. Jurisdictional and Class Allocation

F. Depreciation

G. Treatment of Renewable Energy Credits

VII. SALE, TRANSFER, MERGER ISSUES (P.O. ISSUE NOS. 1, 2, 3)

VIII. OTHER REGULATORY APPROVALS (P.O. ISSUE NOS. 4, 5, 6, 7, 8)

SWEPCO states, that, “The support of the Commission, other state regulators, and FERC for the recovery of the costs associated with this Project is necessary before the Companies can proceed with significant investments in the Project as proposed.” And that if it does not obtain the regulatory

approvals it wants, that it “will assess all options and potential solutions related to the Wind Facility and Gen-Tie.”⁴⁸

CARD suggests that SWEPCO should have assessed all options and potential solutions *before* it sought a certificate from the Commission. There should be no question that the Wind Catcher Project could be built by one of SWEPCO’s affiliates.⁴⁹ There should be no question that SWEPCO is not sufficiently confident in its forecasts regarding the future price of gas, the level of production from the Wind Facilities, the aggregate value of PTCs it may receive, or the capital cost of the Project, to put its or its affiliate’s money on the line. If SWEPCO lacks confidence in its projections, then too, the ALJs should be skeptical of SWEPCO’s proposal.

Second, if indeed SWEPCO is assured of its predictions, then one of its affiliates will undertake the Project.

But, when all is said and done, if in *SWEPCO’s* view that venture is too risky a proposition⁵⁰ absent the insurance that its captive ratepayers provide, it is too risky a venture to be borne by ratepayers.

IX. CONCLUSION & PRAYER

For these reasons, CARD urges as it did in its Initial Post-Hearing Closing Brief that the ALJs recommend denial of SWEPCO’s request for approval of the Wind Catcher Project.

SWEPCO’s proposal is a discretionary and risky bet made with ratepayer money and the only sure winner in this risky and expensive bet would be SWEPCO’s shareholders, who would earn millions of dollars of return regardless of the level of energy savings, if any, that customers

⁴⁸ See SWEPCO Initial Brief at 65.

⁴⁹ CARD Exh. 79; HOM Tr. at 96 – 97.

⁵⁰ SWEPCO Exh. 2 – McCellon-Allen Dir. at 5 – 6.

may realize.⁵¹ All ratepayer interests in this proceeding have uniformly stated that they oppose SWEPCO's discretionary and risky Wind Catcher proposal.

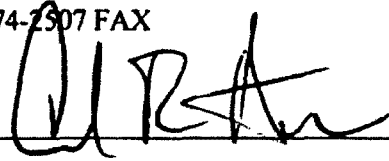
Lastly, CARD respectfully requests that the ALJs reconsider their ruling on the admissibility of CARD Offer of Proof 1 (TIEC Exh. 66) and that the ALJs admit into evidence CARD Offer of Proof 1 into evidence.⁵²

CARD further requests that it be granted all such relief to which it may itself entitled.

Respectfully submitted,

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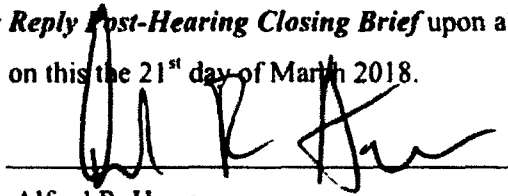
**ATTORNEYS FOR CITIES ADVOCATING
REASONABLE DEREGULATION**

⁵¹ CARD Exh. 1 – Norwood Dir. at 6.

⁵² CARD makes this request in light of SWEPCO's reference to the settlement it contends it reached in Oklahoma with WalMart. See SWEPCO Initial Brief at 49.

CERTIFICATE OF SERVICE

I certify that I have served a copy of *CARD's Reply Post-Hearing Closing Brief* upon all known parties of record by fax and/or first-class mail on this the 21st day of March 2018.



Alfred R. Herrera

**SOAH DOCKET NO. 473-17-5481
PUC DOCKET NO. 47461**

**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**

§
§
§
§
§
§
§

**BEFORE THE STATE OFFICE
OF
ADMINISTRATIVE HEARINGS**

CITIES ADVOCATING REASONABLE DEREGULATION'S

REPLY POST-HEARING CLOSING BRIEF

ATTACHMENT A

BEFORE THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA

MC
APPLICATION OF PUBLIC SERVICE COMPANY)
OF OKLAHOMA ("PSO") FOR APPROVAL OF)
THE COST RECOVERY OF THE WIND)
CATCHER ENERGY CONNECTION PROJECT; A)
DETERMINATION THERE IS A NEED FOR THE)
PROJECT; APPROVAL FOR FUTURE)
INCLUSION IN BASE RATES COST RECOVERY)
OF PRUDENT COSTS INCURRED BY PSO FOR)
THE PROJECT; APPROVAL OF A TEMPORARY)
COST RECOVERY RIDER; APPROVAL OF)
CERTAIN ACCOUNTING PROCEDURES)
REGARDING FEDERAL PRODUCTION TAX)
CREDITS; WAIVER OF OAC 165:35-38-5(e); AND)
SUCH OTHER RELIEF THE COMMISSION)
DEEMS PSO IS ENTITLED)

CAUSE NO. PUD 201700267

FILED
FEB 12 2018

COURT CLERK'S OFFICE - OKC
CORPORATION COMMISSION
OF OKLAHOMA

REPORT AND RECOMMENDATION OF THE ADMINISTRATIVE LAW JUDGE

HEARING: January 8, 2018, in Courtroom 301
2101 North Lincoln Boulevard, Oklahoma City, Oklahoma 73105
Before Mary Candler, Administrative Law Judge

APPEARANCES: Jack P. Fite, Joann S. Worthington, Kendall W. Parrish, Tom Ferguson and
George G. Hoyt, Attorneys representing Public Service Company of Oklahoma
Natasha M. Scott, Deputy General Counsel Michael L. Velez and
Lauren Hensley, Assistant General Counsels, representing Public Utility
Division, Oklahoma Corporation Commission
Dara M. Derryberry, Deputy Attorney General, Katy Evans Boren,
Jared B. Haines, and A. Chase Snodgrass, Assistant Attorneys General
representing Office of the Attorney General, State of Oklahoma
Thomas P. Schroedter and Michael S. Booze representing Oklahoma
Industrial Energy Consumers
James A. Roth, Marc Edwards and C. Eric Davis, Attorneys representing
Plains and Eastern Clean Line Oklahoma LLC
Cheryl A. Vaught, Scot A. Conner, and Jon W. Laasch, Attorneys
representing Oneta Power, LLC
Rick D. Chamberlain, Attorney representing Wal-Mart Stores East, LP, and
Sam's East, Inc.
Deborah R. Thompson, Attorney representing South Central MCN LLC
Randall Elliott, Attorney representing Oklahoma Municipal Power Authority
Kenneth Blakely and Robert D. Edinger, Attorneys representing Kiowa
Power Partners, LLC
J. Eric Turner, Attorney representing Golden Spread Electric Cooperative, Inc.
Patrice Douglas, Jordan Jackson, Michael D. Hockley and Ryan
Pulkrabek, Attorneys representing Novus Windpower, LLC
David E. Keglovits and Adam C. Doverspike, Attorneys representing
Windfall Coalition, LLC
James R. Fletcher and Marvin T. Griff, Attorneys representing Tri-County
Electric Cooperative, Inc.

SOAH Docket No. 473-17-5481

PUC Docket No. 47461

TIEC Exhibit No. **66**

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Attachment "A" – Testimony Summaries

Attachment "B" – Hearing Exhibits

This Cause comes before the Corporation Commission ("Commission") of the State of Oklahoma on the Application of Public Service Company of Oklahoma ("PSO" or "Company") seeking for approval of the cost recovery of the wind catcher energy connection project; a determination there is a need for the project; approval for future inclusion in base rates cost recovery of prudent costs incurred by PSO for the project; approval of a temporary cost recovery rider; approval of certain accounting procedures regarding federal production tax credits; waiver of OAC 165:35-38-5(e); and such other relief the Commission deems PSO is entitled.

I. SUMMARY OF RECOMMENDATION

PSO filed the Application in this Cause requesting preapproval for future inclusion in base rates cost recovery of costs incurred by PSO for two proposed projects. The first proposed project is the purchase of the largest wind farm in the United States which consists of 2,000 MW (Name Plate) of wind generation located in the panhandle of Oklahoma. The second proposed project is a 765 kV electric line that spans 350-380 miles to transmit energy from the Wind Facility to the PSO grid near Tulsa. Preapproval of these projects are sought pursuant to Title 17 O.S. §286. Additionally, PSO is requesting a waiver of specific language in OAC 165:35-38-5(e). The Administrative Law Judge ("ALJ") respectfully summarizes the key recommendations contained in this report as follows:

The ALJ recommends the request for waiver of specific language in OAC 165:35-38-5(e) be denied because "before construction starts" refers to instances when a utility is seeking preapproval of a self build generating facility. This Cause is PSO's request of preapproval of the purchase of (1) a wind facility and (2) a 765 kV line running from the wind facility to a PSO substation. The requested waiver is not necessary as this subsection is not applicable to the relief requested in this Cause.

If Title 17 O.S. §286 requires that "need" be a need for capacity or meet a need as it relates to renewable energy requirements or other regulatory requirements then PSO has not proven that such a need exists. However, if "need" in Title 17 O.S. §286 can also be interpreted to include economic need or a need for low-cost energy then it must be determined if PSO has proven such in PSO's economic need analysis.

PSO failed to prove that this Project meets an economic need sufficient for preapproval of this Project. PSO's economic analysis used unreasonable data and utilized a flawed planning process. PSO's economic analysis contained assumptions regarding future gas prices, carbon costs, and wind additions that overstate the benefits of the Project. The Project presents risky elements, including the risk of cost overruns on, or complete failure of, the Gen-Tie line; failure of the Project to qualify for full Production Tax Credits, and risk of non-performance by other AEP companies.

PSO's failure to utilize competitive bidding for two extremely large purchases is of utmost importance in any consideration of preapproval of the Wind Facility and the Gen-Tie line. This failure becomes even more of a concern without adequate explanation or justification. An excuse of "not enough time" for competitive bidding is not sufficient in light of the significant cost to be borne by PSO customers. A project at this price point must be done right. Given the facts of this Cause, the ALJ cannot recommend preapproval of the Project in light of PSO's failure to competitively bid both the Wind Facility and the Gen-Tie line and PSO's failure to adequately explain the lack of competitive bidding for such significant purchases.

It is the conclusion and recommendation of the ALJ that PSO has not met its burden of proof sufficient to prove this Project in whole, or the Wind Project and Gen-Tie Projects in part, meet a need as required by Title 17 O.S. §286.

It is the conclusion and recommendation of the ALJ that PSO has not met its burden of proof sufficient to prove there was consideration of reasonable alternatives as required by Title 17 O.S. §286(C).

II. JURISDICTION AND NOTICE

PSO is an Oklahoma corporation authorized to do business in the State of Oklahoma. PSO is a public utility with plant, property, and other assets dedicated to the generation, production, transmission, distribution, and sale of electricity at wholesale and retail levels within the State of Oklahoma. The Commission has jurisdiction over this Cause by virtue of the provisions of Article IX, Section 18 of the Constitution of the State of Oklahoma, 17 O.S. §§ 151 *et seq.*, and the Rules and Regulations of this Commission. Notice is proper in this Cause and complies with Order No. 670744 and the requirements of OAC 165:5-7-51.

III. PROCEDURAL HISTORY

1. On July 31, 2017, PSO filed its Application seeking approval of the cost recovery of the wind catcher energy connection project; a determination there is a need for the project; approval for future inclusion in base rates cost recovery of prudent costs incurred by PSO for the project; approval of a temporary cost recovery rider; approval of certain accounting procedures regarding federal production tax credits; waiver of OAC 165:35-38-5(e); and such other relief the Commission deems PSO is entitled.

2. Also on July 31, 2017, PSO filed a Motion for Procedural Order and a Notice of Hearing and a Motion for Protective Order and Notice of Hearing setting both the Motion for Procedural Order and the Motion for Protective Order for hearing on August 10, 2017.

3. Also on July 31, 2017, PSO filed the direct testimonies of: Brian D. Weber, Jay F. Godfrey, Johannes P. Pfeifenberger, John O. Aaron, Karl R. Bletzacker, Kelly D. Pearce, Michael L. Bright, Paul Chodak, Renee V. Hawkins, Robert W. Bradish and Steven L. Fate.

4. On August 1, 2017, the Office of the Attorney General ("Attorney General") filed an Entry of Appearance for Dara M. Derryberry, Katy Evans Boren and Jared B. Haines.

5. Also on August 1, 2017, Thomas P. Schroedter filed an Entry of Appearance on behalf of Oklahoma Industrial Energy Consumers ("OIEC").

6. On August 2, 2017, the Commission's Public Utility Division ("PUD") filed a Motion for Assessment of Costs with a Notice of Hearing setting the Motion for Assessment of Costs for hearing on August 10, 2017.

7. On August 9, 2017, Cheryl A. Vaught, Scot A. Conner and Jon W. Laasch filed an Entry of Appearance on behalf of Oneta Power, LLC ("Oneta").

8. On August 10, 2017, the Motion for Protective Order and the Motion for Assessment of Costs were recommended. The Motion for Procedural Order was continued by agreement of the parties to August 24, 2017.

9. On August 11, 2017, the Attorney General filed a Motion to Dismiss, or in the Alternative, Motion to Assess Costs along with a Notice of Hearing setting the Motion to Dismiss, or in the Alternative, Motion to Assess Costs for hearing on August 18, 2017.

10. On August 17, 2017, PSO filed its Response to the Attorney General's Motion to Dismiss, or in the Alternative, Motion to Assess Costs.

11. On August 18, 2017, the Attorney General's Motion to Dismiss, or in the Alternative, Motion to Assess Costs was heard and continued by agreement of the parties to August 24, 2017.

12. Also on August 18, 2017, James A. Roth, Marc Edwards and C. Eric Davis filed an Entry of Appearance on behalf of Plains and Eastern Clean Line, LLC ("Plains").

13. On August 21, 2017, Randall Elliott filed an Entry of Appearance on behalf of Oklahoma Municipal Power Authority ("OMPA").

14. On August 24, 2017, the Motion for Procedural Order was continued by agreement of the parties to August 29, 2017. Also on this date, the ALJ issued her report denying the Attorney General's Motion to Dismiss and recommending the Motion to Assess Costs.

15. On August 28, 2017, Rick D. Chamberlain filed an Entry of Appearance on behalf of Wal-Mart Stores East, LP, and Sam's East, Inc. ("Wal-Mart").

16. On August 29, 2017, the Motion for Procedural Order was continued by agreement of the parties to August 31, 2017, at which time the Motion for Procedural Order was heard and recommended.

17. On August 31, 2017, Deborah R. Thompson filed a Motion to Intervene of South Central MCN LLC ("South Central") along with a Notice of Hearing setting the Motion to Intervene of South Central MCN LLC for hearing on September 7, 2017.

18. On September 6, 2017, the Commission issued Order No. 667831, Order Granting Motion for Protective Order and Order No. 667832, Order Granting PUD's Motion for Assessment of Costs.

19. On September 7, 2017, South Central's Motion to Intervene was heard and recommended.

20. On September 12, 2017, the Commission issued Order No. 668057, Order Denying Attorney General's Motion to Dismiss and Granting Motion to Assess Costs.

21. On September 21, 2017, PSO filed Summaries of Direct Testimony of: John O. Aaron, Johannes P. Pfeifenberger, Karl R. Bletzacker, Renee V. Hawkins, Paul Chodak, Kelly D. Pearce, Brian D. Weber, Jay F. Godfrey, Michael L. Bright, Steven L. Fate and Robert W. Bradish.

22. On September 22, 2017, David E. Keglovits and Adam C. Doverspike filed an Entry of Appearance on behalf of Windfall Coalition, LLC ("Windfall").

23. On September 27, 2017, Patrice Douglas and Jordan Jackson filed an Entry of Appearance on behalf of Novus Windpower LLC ("Novus"). Also on this date, A. Chase Snodgrass filed an entry of appearance on behalf of the Attorney General.

24. On September 28, 2017, the Commission issued Order No. 668609, Order Granting Motion for Procedural Schedule. Also on this date, PSO filed Responses to OIEC's Third Set of Data Requests.

25. On September 29, 2017, James R. Fletcher and Marvin T. Griff filed an Entry of Appearance on behalf of Tri-County Electric Cooperative, Inc. ("TCEC") and Kenneth H. Blakely and Robert D. Edinger filed an Entry of Appearance on behalf of Kiowa Power Partners, LLC ("Kiowa").

26. On October 5, 2017, the Commission issued Order No. 668824, Order Granting South Central MCN LLC's Motion to Intervene.

27. On October 10, 2017, Novus filed a Motion to Associate Attorney Michael Dillon Hockley and a Motion to Associate Attorney Ryan Pulkrabek.

28. On October 11, 2017, PSO filed its Objection to Attorney General's Ninth Set of Data Requests, along with a Notice of Hearing setting the Objection to Attorney General's Ninth Set of Data Requests for hearing on October 19, 2017.

29. On October 12, 2017, J. Eric Turner filed an Entry of Appearance on behalf of Golden Spread Electric Cooperative, Inc. ("Golden Spread"). Also on this date, Golden Spread filed its Motion

to Intervene along with a Notice of Hearing setting the Motion to Intervene for hearing on October 19, 2017.

30. Also on October 12, 2017, Novus filed a Notice of Hearing for the Motions to Associate Attorneys (Michael Dillon Hockley and Ryan Pulkrabek) setting the Motions to Associate Attorneys for hearing on October 19, 2017.

31. On October 18, 2017, PSO filed its Response to Golden Spread's Motion to Intervene.

32. On October 19, 2017, the Motion to Intervene by Golden Spread was heard and recommended as were the Motions to Associate Attorneys Michael Dillon Hockley and Ryan Pulkrabek. PSO's Objections to the Attorney General's Ninth Set of Data Requests were resolved and the matter was stricken.

33. On October 20, 2017, TCEC filed a Motion to Associate Counsel (Marvin T. Griff).

34. On November 3, 2017, TCEC filed a Notice of Hearing setting the Motion to Associate Counsel for hearing on November 16, 2017.

35. On November 9, 2017, PSO filed its Motion to Determine Notice along with the Notice of Hearing setting the Motion to Determine Notice for hearing on November 16, 2017.

36. On November 16, 2017, the Motion to Associate Counsel Marvin T. Griff and the Motion to Determine Notice were heard and recommended.

37. Also on November 16, 2017, PSO filed its Supplemental Response to Plains and Eastern Clean Line LLC's 1st Data Requests Second Supplemental Response Number 4 and CL 1-4 Second Supplemental Attachment 4.

38. On November 21, 2017, the Commission issued Order No. 670276, Order Granting Motion to Associate Attorney Ryan Pulkrabek as well as Order No. 670277, Order Granting Motion to Associate Attorney Michael Dillon Hockley.

39. On December 4, 2017, Oneta filed Responsive Testimony for M. Ray Perryman, Ph.D.; Redacted and Unredacted Responsive Testimony of PUD witness Frank Mossburg, Responsive Testimony of Geoffrey M. Rush, Kathy Champion, David Melvin, Jason C. Chaplin; Responsive Testimony of Scott Norwood and Mark E. Garrett on behalf of OIEC; Redacted and Unredacted Responsive Testimony of Andrew Rawlins and Responsive Testimony of Mario Hurtado on behalf of Plains; Responsive Testimony of Steven W. Chriss on behalf of Wal-Mart; Responsive Testimony of Todd F. Bohrmann, Zhen Zhu, Ph.D., Bernard A. Cevera, Daniel V. Bauerkemper, P.E., Frank J. Beling and Carl N. Stover, Jr. on behalf of the Attorney General; Responsive Testimony of Thomas A. Petrie on behalf of Windfall.

40. On December 5, 2017, the Commission issued Order No. 670743, Order Granting Motion to Associate Counsel of Marvin D. Griff, Order No. 670744, Order Granting Motion to Determine Notice and Order No. 670745, Order Granting Motion to Intervene of Golden Spread.

41. Also on December 5, 2017, the Statement of Position of OMPA was filed.

42. On December 6, 2017, Kendall W. Parrish filed an entry of appearance on behalf of PSO. Also on this date, the Summaries of Responsive Testimony were filed: Mark E. Garrett and Scott Norwood on behalf of OIEC; Daniel V. Bauerkemper, P.E., Bernard A. Cevera, Zhen Zhu, Ph.D., Carl N. Stover, Jr., Frank J. Beling and Todd F. Bohrmann on behalf of the Attorney General.

43. On December 7, 2017, Summaries of Responsive Testimony of Geoffrey M. Rush, Jason C. Chaplin, David Melvin, Kathy Champion, and Frank Mossburg on behalf of PUD; Responsive Testimony Summary of Steve W. Chriss on behalf of Wal-Mart.

44. On December 8, 2017, South Central, Kiowa, Golden Spread, Novus (redacted and unredacted) and TCEC filed their respective Statements of Position.

45. On December 11, 2017, Larry Mitchell filed Public Comment.

46. Also on December 11, 2017, Summaries of the Responsive Testimonies of Andrew Rawlins and Mario Hurtado on behalf of Plains and Eastern Clean Line Oklahoma LLC were filed.

47. On December 12, 2017, M. Ray Perryman filed his Summary of Responsive Testimony on behalf of Oneta.

48. On December 13, 2017, Thomas A. Petrie filed his Summary of Responsive Testimony and Exhibits on behalf of Windfall.

49. On December 14, 2017, the Attorney General filed his Renewed Motion to Dismiss along with a Notice of Hearing setting the Renewed Motion to Dismiss before the Commission *en banc* on December 21, 2017.

50. On December 19, 2017, Novus filed its Response in Support of the Attorney General's Renewed Motion to Dismiss.

51. On December 20, 2017, PSO filed a Motion to Associate Counsel (George G. Hoyt) along with a Notice of Hearing setting the Motion to Associate Counsel for hearing on December 21, 2017.

52. Also on December 20, 2017, PSO filed Proof of Publication as well as its Response to the Attorney General's Renewed Motion to Dismiss.

53. On December 21, 2017, the Motion to Associate Counsel was heard and recommended.

54. On December 22, 2017, the following documents were filed:

- a. Rebuttal Testimony on behalf of PSO: Paul Chodak, Steven L. Fate, Jay F. Godfrey, Michael L. Bright, Robert W. Bradish, Brian D. Weber, C. Richard Ross, Timothy B. Gaul, Karl R. Bletzacker, Richard G. Smead, Johannes P. Pfeifenberger, Kelly Pearce, Renee V. Hawkins, Thomas A. Finn, David M. Roush;
- b. Rebuttal Testimony of Mark E. Garrett on behalf of OIEC.
- c. PSO's Response to OIEC's Sixth Data Requests; and

d. PSO's Response to the Attorney General's Data Request 5-9.

55. On December 28, 2017, the Commission issued Order No. 671470, Order Denying Attorney General's Renewed Motion to Dismiss.

56. On January 2, 2018, PSO filed an Errata to Rebuttal Testimony of Johannes P. Pfeifenberger and Errata to Rebuttal Testimony of Brian D. Weber.

57. On January 3, 2018, the following documents were filed:

- a. All Parties Issue List;
- b. South Central's Statement of Position Summary as well as an Exhibit and Witness List;
- c. PSO's Exhibit and Witness List;
- d. PSO's Summaries of Rebuttal Testimony of: Paul Chodak, Jay F. Godfrey, Michael L. Bright, Kelly Pearce, Johannes P. Pfeifenberger, C. Richard Ross, Renee V. Hawkins, David M. Roush, Timothy B. Gaul, Robert W. Bradish, Brian D. Weber, Richard G. Smead, Karl R. Bletzacker, Steven L. Fate, and Thomas A. Finn;
- e. OIEC's Surrebuttal Issues List as well as an Exhibit and Witness List;
- f. Oneta's Exhibit List as well as Surrebuttal Issues Outline;
- g. Wal-Mart's Exhibit List;
- h. Plains and Eastern Clean Line of Oklahoma LLC's Surrebuttal Issues as well as an Exhibit List;
- i. PUD's Surrebuttal Issues List and Exhibit List;
- j. Attorney General's Surrebuttal Issues List and Exhibit List; and
- k. Novus' Exhibit List.

58. On January 4, 2018, Public Comments were filed.

59. Also, on January 4, 2018, Windfall's Witness and Exhibit List was filed.

60. Also on January 4, 2018, the Prehearing Conference was held and continued by agreement of the parties to January 5, 2018. On January 5, 2018, the Prehearing Conference was heard and recommended.

61. On January 8, 2018, the following documents were filed:

- a. Attorney General filed an Amended Surrebuttal Issues List;
- b. PSO's Response to OIEC's Eighth Data Requests;
- c. Public Comments;
- d. PSO's Response to OIEC's Eighth Data Requests Exhibit;
- e. Public Comment Sign-in Sheet;
- f. OIEC's 8-13 (Amended) Attachment 1;
- g. Hearing Exhibits 1 through 6;

62. Also on January 8, 2018, the Hearing on the Merits was heard and continued each day through January 18, 2018, at which time the Administrative Law Judge ("ALJ") took the matter under advisement.

63. On January 9, 2018, the Commission issued Order No. 671908, Order Granting Motion to Associate Counsel; the Summary of Rebuttal Testimony of Mark E. Garrett; and Exhibits 8 through 11 were filed.

64. On January 10, 2018, the Corrected Entry of Appearance was filed by Clean Line.

65. On January 12, 2018, Public Comment on behalf of Infinity Power Partners and Exhibit 15 were filed.

66. On January 16, 2018, Exhibits 16 and 17 were filed.

67. On January 17, 2018, Public Comment and Exhibits 18 and 19 were filed.

68. On January 18, 2018, Public Comment, PSO's Supplemental Response to OIEC's Eighth Data Requests (Question No. 14) and PSO's Supplemental Response to OIEC's Eighth Data Requests (Question No. 4) were filed.

69. On January 19, 2018, the Amended Summary of the Rebuttal Testimony of Paul Chodak and the Amended Summary of the Rebuttal Testimony of Steven L. Fate were filed.

70. On January 22, 2018, the Affidavit of Mark E. Garrett and the Affidavit of Scott Norwood were filed.

71. On January 23, 2018, Public Comment and the Affidavit of Steve W. Chriss in Support of Prefiled Testimony were filed.

72. On January 29, 2018, Proposed Findings of Fact and Conclusions of Law were filed by Wal-Mart, Windfall Coalition, Novus, Oneta, AG, OIEC, PSO and PUD.

IV. SUMMARY OF THE EVIDENCE

Documents filed in this Cause are contained in the record kept by the Court Clerk of the Commission. Pre-filed testimony was filed of record and live testimony was offered at the Hearing on the Merits. The entirety of the live testimony offered is contained in the transcripts of these proceedings. Summary of the testimony is set forth in Attachment "A" attached hereto and incorporated herein.

Exhibits were admitted into evidence at the Hearings on the Merits and are filed of record in this Cause. The list of those Exhibits is set forth in Attachment "B" attached hereto and incorporated herein.

V. FINDINGS OF FACT AND CONCLUSIONS OF LAW

After consideration of all evidence in this Cause, the ALJ recommends the Commission adopt the following Findings of Fact and Conclusions of Law. Such findings and conclusions are numbered sequentially for clarity. Any subheadings used are also for clarity.

Jurisdiction and Notice

1. The Commission has jurisdiction over this Cause by virtue of the provisions of Article IX, Section 18 of the Constitution of the State of Oklahoma, 17 O.S. §§ 152, 153, 286, and the Rules and Regulations of this Commission. PSO is an Oklahoma corporation authorized to do business in the State of Oklahoma. PSO is a public utility with plant, property, and other assets dedicated to the

generation, production, transmission, distribution, and sale of electricity at wholesale and retail levels within the State of Oklahoma.

2. Notice was published in compliance with the form of notice required by Commission Order No. 670744. Proof of publication was filed of record in this Cause by PSO on December 20, 2017.

PSO's Proposed Projects

3. PSO filed the Application in this Cause on July 31, 2017. PSO is requesting preapproval for future inclusion in base rates cost recovery of costs incurred by PSO for two proposed projects. The first proposed project is the purchase of the largest wind farm in the United States, the Wind Catcher Facility ("Wind Facility"), which consists of 2,000 MW (Name Plate) of wind generation located in the panhandle of Oklahoma. In conjunction with the purchase of the Wind Facility, PSO also proposes a 350-380 mile interconnection generation tie-line ("Gen-Tie"). The Gen-Tie would be constructed to transmit energy from the Wind Facility to the PSO grid near Tulsa. The Gen-Tie is a 765 kV line that will transmit power from the Wind Facility to the PSO grid near Tulsa. This will be the only 765 kV line in the Southwest Power Pool ("SPP"). (Mossburg Responsive, p.5). The Wind Facility and Gen-Tie are collectively referred to by PSO as the Wind Catcher Energy Connection Project ("Project"). If constructed, PSO will own thirty percent of the Project, resulting in 570 MW (based upon the Name Plate production) being delivered into the Tulsa area for PSO customers. The Project is estimated to cost \$4.5 billion with PSO's share being \$1.36 billion. PSO has estimated net benefits to PSO customers to be \$1.006 billion (Tr. 1/8 PM, p. SD 44, ln. 20-22, Application, and Fate Direct, p. 2, ln. 23, p. 3, ln. 6, 9-12). [Southwestern Electric Power Company ("SWEPCO") would own the other 70% of the Project.]

4. The size and scope of the Project brings unique risks. (Mossburg Responsive, p. 5). Although the potential savings are unknown, the revenue requirement for the Wind Catcher Project is fixed and firm. The total Project cost is estimated to be \$4.5 billion. PSO's 30% share of the Project capital cost is estimated to be approximately \$1.36 billion, which would represent an increase of more than 150% of the total existing net book value of all other PSO's generating assets. If approved, PSO's proposal will increase PSO's rate base by 68.2%. (Mossburg Responsive, p.5). The Wind Facility revenue requirement for the Project is \$1.163 billion. The Gen-Tie Line revenue requirement is \$538 million. (Hearing Exhibit 16). This revenue requirement is fixed and, if the Project is approved, would be recovered from ratepayers over the life of the Project. (Tr. 1/11/18 PM, p. 12). According to PSO, the revenue requirement in year one of the Project would be approximately \$100 million. (Tr. 1/9/18 AM, p. 56).

5. PSO's shareholder return would be approximately \$75 million in the first year, although this figure was based on PSO's previous 9.5% ROE. (Tr. 1/11/18 PM, p. 14). Over the life of the Project, the shareholder return would be approximately \$900 million. (*Id.* at p. 15-16).

6. PSO testified that it needs timely orders from Oklahoma, Texas, Louisiana and Arkansas in order to go forward with the Project. (Tr. 1/8/18 AM, p. rdh53, lns. 9-14). PSO also testified, however, that PSO would not take any options off the table but that its "strong preference" is that it have approval from all four Commissions before it proceeds with the Project. (Tr. 1/8/18 PM, p. SJ22, ln. 23 - p. SJ23, ln. 4)

PSO's Requested Relief

7. PSO's specific requested relief, as stated in the Application, is as follows:

- approve a temporary rider to provide recovery of the depreciation, operating and maintenance expense, property taxes, and return on the investment, net of federal Production Tax Credits ("PTCs"). The temporary rider would begin when the Project goes into service and will terminate when the Project is included in base rates.
- provide a waiver to the "before construction starts" language in OAC 165:35-38-5(e);
- approve PSO's request to include any PTCs deferred for ratemaking purposes in a regulatory liability that is included in rate base, or earns interest at the Company's pre-tax Weighted Average Cost of Capital ("WACC") from the commercial operation date of the Project and thereafter;
- approve PSO's request to include any unrealized PTCs in a deferred tax asset included in rate base in the event the PTCs cannot be fully utilized in a given year(s);
- approve the requested depreciation rates for the Project;
- approve for future inclusion in base rates cost recovery of prudent costs incurred by PSO for the Project;
- determine there is a need for the Project to deliver low-cost energy into the Tulsa area;
- approve PSO's request to apply a production allocator for both the jurisdictional and class allocation of the cost; and
- issue a final order within 240 days of this Application no later than March 31, 2018, to enable the completion of the Project to meet the deadline for claiming 100 percent of the PTC value for customers. [The ALJ notes that after the filing of the Application, at the hearing on the Motion for Procedural Schedule, PSO stated on the record that an order of the Commission is needed by April 30, 2018. See transcript of hearing 8/29/17 and as memorialized in Commission Order No. 668609.]

Title 17 O.S. §286

8. PSO is seeking preapproval of this Project pursuant to Title 17 O.S. §286.
9. The Commission, in Order No. 647346, entered in Cause PUD 201400229 on December 2, 2015, provided an overview of 17 O.S. § 286 and the alternatives that remain available to a utility if its application for pre-approval is denied. The Commission's analysis is set forth in full as follows:

Title 17, Section 286 was enacted in 2005 and exists today as amended in 2008. This statutory section provides pre-approval of certain requests of electric utilities in particular circumstances. This section provides utility management with an alternate path to obtain a "used and useful" determination from the Commission for certain types of investments before making those investments. Such "pre-approval" is only available for certain types of utility investments and is subject to specific conditions. Notwithstanding Section 286, a utility remains free to construct or purchase electric generating facilities in the exercise of its management discretion and to seek approval after the fact in a general rate case, as was done prior to the enactment of Section 286. Those procedures remain available as does the Commission's ratemaking authority thereunder. It is important to understand that in enacting Section 286, the Legislature

did not repeal any of the constitutional or statutory provisions under which the Commission has regulated electric utilities for decades. Neither did Section 286 repeal the cost of service, rate of return ratemaking methodology that the Commission has used to regulate electric utilities for decades.

First and foremost, Section 286 must be understood and interpreted in the context of the Commission's historical ratemaking procedures. Utility management still has the discretion to build whatever it wants, whenever it wants, but in doing so assumes the risk and, when seeking a return on and return of the investment, bears the burden to subsequently prove the investment is used and useful in service to the public and that the costs were prudently incurred.

Order No. 647346 at 12-13 (emphasis added).

10. Upon review of Title 17 O.S. §286 and the facts of this Cause, the applicable subsection is subsection C.

11. Title 17 §286(C) states,

"An electric utility subject to rate regulation by the Corporation Commission may elect to file an application seeking approval by the Commission to construct a new electric generating facility, to purchase an existing electric generation facility or enter into a long-term contract for purchased power and capacity and/or energy, subject to the provisions of this subsection. If and to the extent, that the Commission determines there is a need for construction or purchase of the electric generating facility or long-term purchase power contract, the generating facility or contract shall be considered used and useful and its costs shall be subject to cost recovery rules promulgated by the Commission. The Commission shall enter an order on an application filed pursuant to this subsection within two hundred forty (240) days of the filing of the application, following notice and hearing and after consideration of reasonable alternatives."

12. The Commission, on page 14 of its Order No. 647346, entered in Cause PUD 201400229 on December 2, 2015, also provided an overview of 17 O.S. § 286(C) as follows: "Section 286(C) applies to requests by electric [utilities] for Commission approval to construct a new generation facility, to purchase an existing electric generation facility, or to enter into a long-term contract for purchased power. Additionally, the subsection requires the utility to show there is a need for the generation or contract and requires that reasonable alternatives be considered." The ALJ recommends PSO be required to meet the requirements of §286 if preapproval of the Project is granted. Various parties to this Cause have stated through testimony or statements of position that PSO has failed to meet the requirements for §286 preapproval but then go on to offer alternative recommendations should the Commission grant preapproval by some means other than meeting the requirements of §286. The ALJ makes no such alternative recommendations.

13. PSO requests preapproval of (1) the Wind Facility, an electric generating facility, and (2) the Gen-Tie line, not an electric generating facility. The Gen-Tie line is described by PSO as a 350-380 mile interconnection generation tie-line that would be constructed to transmit energy from the Wind Facility to the PSO grid near Tulsa. (see Finding 3 above). The Gen-Tie is a 765 kV power line that transmits electricity, not a generating facility.

14. PSO's Application, to the extent it seeks preapproval of the Gen-Tie line, does not fall within the express provisions of § 286(C). The fact that transmission facilities and other facilities similar to transmission facilities like the Gen-Tie line are not included in § 286(C) is further demonstrated by other subsections of § 286. Subsection A of § 286 explicitly applies to "transmission" upgrades in certain circumstances (not applicable here), and Subsection B of § 286 applies to plans for capital expenditures for equipment or facilities necessary to comply with environmental laws and regulations. However, subsection C applies specifically to electric generating facilities. The legislative intent must be given effect according to the language used, *Wylie v. Chesser*, 2007 OK 81, ¶ 19, 173 P.3d 64, and the Commission's power to regulate "must be exercised only within the confines of the Constitution and existing statutes." *Public Service Co. of Oklahoma v. State ex rel. Corporation Commission*, 1996 OK 43, ¶ 21, 918 P.2d 733, 738. Title 17 O.S. § 286(C) does not apply to the Gen-Tie Line. Therefore, PSO's application should be denied insofar as it seeks pre-approval relating to the Gen-Tie Line.

PSO's Request for Waiver of Rule

15. PSO has requested a waiver to the "before construction starts" language in OAC 165:35-38-5(e). This subsection states, "A Cause shall be opened by the utility for cost recovery if the competitive bidding RFP process established in [OAC] 165:35-34 is not utilized and the utility wishes to gain approval of cost before construction starts."

16. The phrase "before construction starts" is applicable when a utility seeks preapproval of a self-build generating facility. In this Cause PSO is not building the Wind Facility but is purchasing the Wind Facility from Invenergy.

17. PSO witness Fate testified in response to questions during cross-examination that PSO did not think a waiver of the rule was required, but requested such a waiver in an abundance of caution. (Tr. 1/9/18 PM, p. 27, lns. 3-6).

18. According to PSO witness Fate, the dollars that are being spent in development are shareholder dollars at risk and if the Commission denies PSO's Application, PSO is not going to request recovery of those expenditures. (Tr. 1/9/18 PM, p. 27, lns. 12-23).

19. PSO has offered testimony that construction had to begin prior to January 1, 2017, in order to preserve the possibility of PTCs. Furthermore, PSO offered testimony that even though agreements were signed with Invenergy prior to January 1, 2017, PSO was uncertain of this Project well into 2017. Therefore, PSO alleges it was not possible to open a cause prior to construction.

20. The ALJ recommends this request for waiver of specific language in OAC 165:35-38-5(e) be denied because "before construction starts" refers to instances when a utility is seeking preapproval of a self build generating facility. This Cause is PSO's request of preapproval of the purchase of (1) a wind facility and (2) a 765 kV line running from the wind facility to a PSO substation.

Determination of Need

21. PSO's evidence in this case was that the Project was not proposed or needed to meet energy needs or for system reliability. (Fate Direct, p. 4). It is not needed to supply capacity for meeting future demands, renewable energy goals, or any future regulations of carbon emissions. (Fate Direct, p. 4). Other parties such as PUD, OIEC and the Attorney General also offered testimony that

this Project was not needed for these reasons. (Norwood Responsive, p. 16; Bohrmann Responsive, p. 4; Mossburg Responsive, p. 6).

22. If §286 requires that need be a need for capacity or meet a need as it relates to renewable energy requirements or other regulatory requirements then PSO has not proven that such a need exists. However, if §286 can also be interpreted to include economic need or a need for low-cost energy then it must be determined if PSO has proven such in economic need analysis.

23. The goal of PSO's Project is almost entirely to lower costs to ratepayers, not to keep the lights on. The Project is therefore driven by an 'economic' need, not a 'reliability' need. (Mossburg Responsive, p.6).

24. The Commission is asked to determine that there "is a need for low-cost energy delivered into the Tulsa area that can be satisfied by the Project." (Chodak Direct, p. 10).

Examination of Economic Need Analysis

25. The costs of the Project are largely fixed and certain. (Tr. 1/8/18 AM, p. 112, 127; Tr. 1/9/18 AM, p. 55-56). However, the estimated energy savings for the Project are uncertain and are not guaranteed by PSO. (Tr. 1/8/18 AM, p. 94-95, 114; Tr. 1/9/18 PM, p. 4-7; Norwood Responsive, p. 16).

26. PSO has attempted to justify the Project by first creating a Baseline Case where no new wind generation is added to its portfolio. It then compares this case against a Project Case that includes the Wind Catcher Project. PSO projects changes in generation and purchased power costs over a twenty-five year period from 2021 to 2045 via a two-step process, first creating an SPP-wide dispatch of resources for the years 2020 and 2025 in PROMOD. Based on these results, PSO extrapolates market prices for the other years in the study period. PSO then used these prices as inputs in its PLEXOS dispatch model to determine annual generation, as well as transmission congestion and loss costs for the entire study period. In direct testimony, PSO calculated that the Project will create total benefits of \$996 million dollars on a NPV basis. (Mossburg Responsive, p.11).

27. PSO's benefits estimate is significantly overstated due to unreasonable assumptions and flaws underlying PSO's analysis. (Norwood Responsive, p. 16). With relatively modest adjustments to PSO's analysis, the estimated savings for the Wind Catcher Project would be greatly reduced or even eliminated. (Norwood Responsive, pp. 8, 16-17).

28. PSO's analysis contained assumptions regarding future gas prices and wind additions that overstate the benefits of the Project. (Mossburg Responsive, p. 20). The Project presents risky elements, including the risk of cost overruns on, or complete failure of, the Gen-Tie line; failure of the Project to qualify for the full Production Tax Credit, and risk of non-performance by other AEP companies. (Mossburg Responsive, p. 6).

29. PSO's claimed economic benefit exists for the Project only when assuming future gas cost projections well in excess of current market forecasts and carbon cost projections that have no basis. (Stover Responsive, p. 4). When PSO's analysis is revised to properly reflect current market gas cost projections, carbon cost projections based on current carbon regulations, and adjustments to reflect errors in the capital cost estimate of the Gen-Tie component of the project and the treatment of firm capacity, the Project's economic analysis results in costs to ratepayers of \$320 million net present value (NPV) and not a benefit. (Stover Responsive, p. 6).

30. PUD witness Mossburg testified that the Project relies on at least "four big bets" on the future:

- (i) That the wind farm can fully qualify for the expiring PTCs,
- (ii) That congestion and curtailment costs associated with third party wind projects will continue to grow and persist, making the hedge provided by the Gen-Tie line valuable,
- (iii) That market prices will be driven by increasing costs for natural gas and significant decreases in new renewable energy construction, resulting in savings to ratepayers from this Project, and
- (iv) That American Electric Power ("AEP") and their counterparties can deliver the entire Project with the price and performance promised. (Mossburg Responsive, p.6).

31. A key variable in PSO's Project in terms of the benefits PSO delivers to its customers is natural gas prices. (Tr. 1/9/18 AM, p. KA57, Ins. 16-24). PSO witness Smead testified that long-term predictions about fuel prices are very difficult. (Tr. 1/11/18 AM, p. KA35, Ins. 19-21).

32. Forecasted natural gas prices are a primary driver of the projected energy savings benefits of the Project because natural gas prices directly impact SPP market-energy prices and the avoided cost of energy that would be displaced by the Project. (Norwood Responsive, p. 25, Ins. 6-12) (Tr. 1/10/18 PM, p. SJ47, Ins. 10-13).

33. The Company's gas forecasts are not reasonable. Mr. Mossburg testified that natural gas prices are an important determinate of the value of new wind. PSO's own analysis shows that the value of the Project moves from \$784 million to \$1.215 billion depending solely on the path of gas prices used. (Mossburg Responsive, p.20). PSO uses gas price projections from AEP's market fundamentals group. The group creates a long-term, weather-normalized commodity market forecast which is available to all AEP operating companies. (Bletzacker Direct, p.3). The price projections used are generally higher than current market prices and current estimates from authoritative sources. (Mossburg Responsive, p. 21).

34. PSO claims that NYMEX prices are not a reliable forecast of future, weather-normalized, long-term energy market fundamentals. (Bletzacker Direct, p.7). Mr. Mossburg pointed out that while they are not forecasts, per se, NYMEX futures prices represent what people are actually paying for future natural gas price deliveries right now. (Mossburg Responsive, p. 23).

35. Mr. Mossburg testified that beyond NYMEX Futures prices, there are other forecasts of gas prices with which to compare to PSO's. Comparing prices from the World Bank and the IMF to NYMEX and PSO prices at Henry Hub, the World Bank and IMF forecasts are closer to the NYMEX prices and lower than PSO's low case. PSO provides no clear explanation as to why prices are expected to increase to its forecast levels. (Mossburg Responsive, p. 25).

36. Under a forecast consistent with current NYMEX gas futures prices, PSO's base case savings estimate would be reduced by approximately five (5) times the reduction forecasted in PSO's low gas price scenario, or by approximately \$1.06 billion (106%) if a gas price forecast consistent with current NYMEX gas futures prices had been used. (Norwood Responsive, p. 27, Ins. 7-11).

37. Forecasted natural gas prices are a primary driver of the projected energy savings benefits of the Wind Catcher Project. (Tr. 1/9/18 AM, p. 57; Tr. 1/11/18 Early PM, p. 47). Those

prices directly impact SPP market-energy prices and the avoided cost of energy that would be displaced by the Project. (Norwood Responsive, p. 25). Higher natural gas prices produce higher forecasted benefits for the Wind Catcher Project and lower prices produce less benefits. The base and low case natural gas price forecasts used by PSO for evaluating benefits of the Project are significantly higher than current NYMEX futures prices for natural gas and a recent gas price forecast presented by Southwestern Public Service Company ("SPS") in a pending rate proceeding in Texas involving approval of a similar wind project. (Norwood Responsive, p. 25-26, and Exhibit SN-2; Tr. 1/16/18 AM, p. 128-129).

38. All of the Company's estimates of benefits of the Project assumed a tax on carbon emissions beginning in 2024. (Beling Responsive, p. 7; Tr. 1/11/18 PM, p. 21). However, there is no legislation or regulation that exists imposing such a tax. (Id.) PSO's forecast includes a cost of carbon which assumes that there will be regulations limiting CO2 emissions. The effect of including a cost of carbon in the fundamentals forecast will result in an increase to the operating cost of natural gas fired combined cycle plants which makes a renewable energy project like the Project look better. (Tr. 1/10/18 PM, p. SJ42, ln. 19 - p. SJ43, ln. 9). PSO did not include the impact of a no carbon scenario on the cost and benefits of the Project for ratepayers. (Tr. 1/11/18 PM, p. 21, ln. 23 - p. 22, ln. 1).

39. A reduction in the federal corporate income tax to 20 percent would reduce the value of the Project to customers. (Tr. 1/9/18 AM, p. KA22, ln. 24 - p. KA23, ln. 5).

40. SPP's current interconnection queue shows considerably more wind is predicted to come online in the coming years. Focusing only on Interconnection Agreements for Pending projects, there is 5,794 MW of wind generation on schedule with full Interconnection Agreements and 1,333 MW of wind projects with Interconnection Agreements pending. At earlier levels of development, SPP's queue shows more than 10,000 MW at the facility study stage and more than 23,000 MW at the system impact study stage. In Oklahoma alone more than 2,200 MW is on-schedule with another nearly 12,000 MW at the facility or system impact study stage. (Mossburg Responsive, p. 27-29).

41. Even if just a portion of these projects in Oklahoma and other SPP states come online, the likely result is far more than 3,170 MW of new wind in 2025, as assumed by PSO. This is particularly true if other utilities are using analysis similar to PSO's and coming to the same conclusion that they must increase their purchases of wind-based power prior to PTC expiration. The resulting rush to lock-in low-priced wind deals would bring about a wave of new entry and, presumably, have the effect of depressing market prices and lowering the benefits of additional wind development. (Mossburg Responsive, p. 29).

No Competitive Bidding RFP Process

42. PSO did not conduct a competitive procurement for the Project. PSO witness Fate testified that due to the uniqueness of the Project, and the time constraints imposed by the need to proceed to maintain the Project's eligibility for full PTCs, an RFP would not result in any more favorable alternatives. (Fate Direct, p. 12, ln. 5-8 cited by F. Mossburg Responsive, p. 31).

43. Title 17 O.S. §286(C) provides that costs under this subsection "shall be subject to cost recovery rules promulgated by the Commission." The Commission's intent in adopting the competitive bidding rules is for "the protection of customers of a utility from imprudent financial obligations or costs." OAC 165:35-38-2(c)(2). The Commission's intent is further "to create an open, transparent, fair and nondiscriminatory competitive bidding process for the utility to meet its needs." OAC 165:35-34-1(b).

44. Mr. Mossburg testified that PSO attempted to provide evidence to support this claim by comparing the Project to what a competitive procurement would provide by creating a Generic Wind Case. In the Generic Wind Case, the Company purchases 1,900 MW of wind from a total of twenty-four projects scattered throughout the SPP, including locations in other states. PSO states that it used this method because SPP and its stakeholders had identified these points as being feasible and likely interconnection locations for such future wind. (Pfeifenberger p. 13, ln. 11-12 cited by Mossburg Responsive, p. 31).

45. In direct testimony, PSO calculates that the Generic Wind Case would cost \$452 million more than the Project on a net present value ("NPV") basis. (Pearce Direct, Exhibit KDP-3, Mossburg Responsive, p. 32). The primary factor in this difference is the additional \$463 million of congestion and loss costs incurred by the Generic Wind projects. The Generic Wind Case does not reflect what would be expected from a competitive procurement. (Mossburg Responsive, p. 32).

46. Mr. Mossburg testified that the primary result of the assumption is that it overstates congestion, which is the primary driver of the Project Case's advantage over the Generic Wind Case. PSO compounds this by assuming that SPP will take no action regarding congestion cost beyond projects that have already been approved. (Mossburg Responsive, p.32-33).

47. Mr. Mossburg testified that these assumptions are a poor comparison to the competitive market because they do not reflect the results and methods of PSO's actual, recent, competitive bidding process conducted in its 2016 wind RFP, which sought 100 to 300 MW of new wind resources. All projects were required to be located in Oklahoma, and all had to offer a twenty year PPA starting in 2019. (Mossburg Responsive, p.33).

48. PSO conducted PROMOD modeling to assess the cost of congestion for each offer in 2019, when the bids were to begin operation. However, instead of assuming a constant or growing level of congestion over the life of the contract, PSO assumed that SPP would take action to alleviate the cost of congestion over time. Therefore, in the analysis of offers, PSO decreased congestion cost to zero over the twenty year PPA term. This differs considerably from the PSO Wind Catcher Application, which assumes in the Generic Wind Case that congestion in SPP will persist throughout the life of the wind projects. (Mossburg Responsive, p. 34).

49. PSO asserted that it did not have sufficient time to conduct competitive bidding or competitive procurement and still qualify for the PTCs. However, PUD witness Mossburg testified that this was time available to conduct competitive bidding and still qualify for PTCs. (Mossburg Responsive, p. 38).

50. Mr. Mossburg explained that it is still possible to conduct a competitive procurement process and still receive offers that qualify for the full PTC. Current IRS guidance requires a project to be in service no later than the end of 2020 in order to qualify for the entire PTC. With the 2016 wind RFP, the Company has a document that is nearly ready to issue and can proceed relatively quickly. That RFP was issued September 28, 2016, and targeted award group identification by December 16, 2016. While having SPP evaluate the network integration costs of the offers will likely extend the timeline, the fact is that the process could still be completed in time for PTC qualification. For example, the RFP could be issued in March and resolved in the fall, leaving the winner about two years to finish the project. A typical wind project can comfortably make that timeline. Even the Wind Catcher Project will not start pouring foundations for its turbines until December of 2018. (Mossburg Responsive, p. 38).

51. At the hearing on the merits, Mr. Mossburg testified that he reviewed the 2013 wind RFP for which he was the independent evaluator. Mr. Mossburg testified that in the 2013 wind RFP, the RFP was issued in June or July of 2013, and he submitted testimony in December of 2013. The hearing was at the beginning of 2014 so the process was concluded in about six months. (Tr.1/17/18 AM, p.19, ln. 1-17).

52. Neither the Wind Facility nor the Gen-Tie line proposed purchases utilized a competitive bidding process. Quanta, a company that works for AEP on a number of projects, is the only company from which PSO requested pricing and design work. (Tr. 1/12/18 AM, p. SJ45, lns. 5-7).

Gen-Tie Issues

53. The need for the Gen-Tie is being driven by the overall size of the Project. PSO does not claim to need a generating facility with an overall capacity of 2000 MW. PSO ratepayers should not have to pay \$538 million for a Gen-Tie line that is only necessary due to the overall size of this Project. (Hearing Exhibit 16). The Gen-Tie is necessary not because PSO is adding 600 MW but because SWEPCO is adding 1400 MW of wind. PSO, in its 2013 RFP, chose to add 600 MW of wind and did not incur this type of transmission investment. Further, in PSO's recently cancelled wind RFP, the Company also did not reflect transmission costs of the magnitude contemplated in this Cause. (Chaplin Responsive, p.16-17).

54. Congestion charges are another factor considered by PSO in the decision to build the Gen-Tie line. However, PSO did not incur congestion charges in 2015 and its total congestion charges in 2016 were under \$30 million. (Tr. 1/11/18 AM, p. KA57, lns. 12-20).

55. PSO does not have an estimate as to how much of the Gen-Tie line route would need to be acquired by eminent domain. (Tr. 1/12/18 AM, p. SJ48, lns. 11-15). None of the right-of-way for the Gen Tie line has been acquired. Right-of-way efforts have just begun. (Tr. 1/16/18 AM, p. rdh85, lns. 18-22).

56. If the Gen-Tie line is not placed in service by December 31, 2020, as required for PSO to claim 100 percent of the PTCs, power can flow through an alternate point of connection so the Project can be considered placed in service by December 31, 2020. (Tr. 1/9/18 AM, p. KA20, ln. 16 – p. KA21, ln. 4) PSO's proposed alternate interconnection is about 50 MW of capacity. (Tr. 1/8/18 PM, p. SJ42, lns. 15-21).

57. The proposed alternate connection cannot accommodate the 2,000 MW contemplated by the Project. (Tr. 1/9/18 AM, p. KA21, lns. 5-12).

58. If the 765kV Gen-Tie line did not get built the alternate interconnection is capable of carrying 50 MW but the windfarm would need to be restricted to only 50 MW. PSO could not match up a 2,000 MW wind farm with a 50 MW tie for any length of time. (Tr. 1/16/18 AM, p. rdh48, lns. 7-18). If PSO uses the alternate connection, PSO and AEP can only apply for PTCs based on the 50 MW. (Tr. 1/9/18 AM, p. KA32, lns. 22-24).

59. The route for the Gen-Tie line through Osage County, Oklahoma has not been finalized. (Tr. 1/16/18 AM, p. rdh87, lns. 15-24). While it is possible to go around Osage County entirely, doing so would pose additional challenges. (Tr. 1/16/18 AM, p. rdh88, lns. 3-9).

60. Permits necessary for the Gen-Tie line construction have not been obtained from or filed with the U.S. Army Corp of Engineers. (Tr. 1/16/18 AM, p. rdh89, ln.18 – p. rdh90, ln. 3).

61. Necessary applications regarding the Gen-Tie line construction have not been filed with the Oklahoma Department of Environmental Quality. (Tr. 1/16/18 AM, p. rdh90, lns. 4-7).

62. No applications have been filed with the Bureau of Indian Affairs. (Tr. 1/16/18 AM, p. rdh90, ln. 23 – p. rdh91, ln. 2).

63. No applications have been filed with the Oklahoma State Historic Preservation Office. (Tr. 1/16/18 AM, p. rdh91, lns. 3-10).

64. The survey to determine whether or not the Gen Tie line route goes through an American burying beetle habitat has not yet been done. (Tr. 1/16/18 AM, p. rdh91, ln. 14 – p. rdh92, ln. 3).

65. A survey contractor has not been selected for the lesser prairie chicken. (Tr. 1/16/18 AM, p. rdh95, lns. 6-8). No survey for the lesser prairie chicken has been scheduled. (Tr. 1/16/18 AM, p. rdh96, lns. 7-9).

66. A survey contractor has not been selected for the northern long-eared bat. (Tr. 1/16/18 AM, p. rdh97, lns. 1-5).

67. The proposed route for the Gen Tie line encompasses tribal historic preservation sites. (Tr. 1/16/18 AM, p. rdh99, lns. 15-20). The presence of the tribal historic preservation sites requires consultations with and approval from each tribe's historical preservation officer. (Tr. 1/16/18 AM, p. rdh99, lns. 21-25).

68. If it becomes necessary to obtain a federal lease with respect to the Osage Nation, that would trigger a National Environmental Policy Act review. (Tr. 1/16/18 AM, p. rdh100, ln. 14 – p. rdh101, ln. 6).

Southwest Power Pool Concerns

69. PSO did not engage or involve SPP in the planning and/or analysis of the Project. (Chaplin Responsive, p. 13).

70. PUD witness Chaplin testified that PUD has concerns with PSO's decision to leave SPP out of the planning and analysis of the Project for three reasons: it ignores SPP's role as the Regional Transmission Organization ("RTO"), raises concerns about reliability and increased costs related to operating reserves, and unknown SPP upgrade costs in the future. (Chaplin Responsive, p. 13).

71. PUD Witness Rush also testified concerning PSO's failure to involve SPP in its planning and analysis of the Project, in particular with regard to the price of natural gas and congestion costs. Mr. Rush testified that without an analysis through SPP's Integrated Transmission Planning process, PUD could not determine whether PSO's projected congestion costs or natural gas forecasts are reasonable. (Rush Responsive, p. 11).

72. SPP can be expected to add transmission as it becomes economical to do so based upon average congestion. (Tr. 1/11/18 AM, p. KA62, lns. 2-6).

73. When there are areas of congestion, either parties or SPP will address those areas with new transmission to alleviate the congestion. (Tr. 1/16/18 PM, p. sd12, ln. 25 – p. sd13, ln. 14).

PSO's Suite of Guarantees

74. There is no guarantee that PSO's customers are going to realize a benefit from the Project. (Tr. 1/11/18 PM, p. 30, lns. 17-21).

75. PSO's baseline case analyses do not address many of the risks of the Project including the potential for higher capital investment, lower than forecasted wind energy production levels, and lower than forecasted congestion costs. (Tr. 1/11/18 PM, p. 34, ln. 22 – p. 35, ln. 2).

76. PSO proposed a suite of guarantees "to mitigate customer risk and secure the significant benefits for our customers." (Chodak Rebuttal, p. 1, lns. 22-23). This suite of guarantees are:

1. An investment cap equal to 110% of PSO's original filed capital estimates, excluding AFUDC;
2. A guarantee that the Project will qualify for 100% of the federal PTC;
3. A guarantee that the Project will produce a minimum annual production at the bus-bar of 2,220 GWh on a 5-year average;
4. A guarantee that 100% of off-system sales benefits associated with the Project will be allocated to customers;
5. PSO agreed to notify the PUD if terms more favorable to customers are agreed to by SWEPCO in any of the state utility commissions under which it is seeking approval of the Project and agreed to incorporate such terms into the guarantees for the benefit of PSO customers;
6. PSO agreed to file a base rate case no later than 180 days after the Project reaches Commercial Operation. ((guarantees #1-6)Chodak Rebuttal, p. 2, ln. 13 – p. 3, ln. 2).
7. During the hearing on the merits PSO added a seventh proposed guarantee. "As additional assurances to the customer," PSO proposed to credit customers in the event that gas prices are extremely low and at the same time the Project does not produce a specified amount of energy as expected during the Project's first ten (10) years. (Tr. 1/8/18 AM, p. rdh10, lns. 1-9).

77. PSO's guaranteed benefit to ratepayers of \$163 million is based on a gas price scenario that is higher than current NYMEX prices. (Tr. 1/11/18 PM, p. 29, ln. 14-25).

78. PSO admits that the guarantees do not result in a completely risk-free proposal. (Tr. 1/8/18 PM, p. SJ44, lns. 16-22; Tr. 1/11/18 PM, p. 30, lns. 17-21).

79. In his oral surrebuttal, PUD witness Mossburg testified that he had reviewed the suite of guarantees. Mr. Mossburg testified that in reviewing the guarantees to determine if they are really going to deliver value for ratepayers, he compared them to what he might see in a competitive bid for wind power. Mr. Mossburg testified that the guarantees do not provide meaningful protections for ratepayers. Mr. Mossburg testified that although there is some value in some of these guarantees, as an

overall package, the risk protections are not as strong as what one would see in a competitive bid. (Tr. 1/17/18 AM, p. 7, ln. 21-p. 8, ln. 20).

80. Mr. Mossburg testified that PSO's first guarantee, "an investment cap", does not provide rate payer protection because it is a soft cap. This "investment cap" is not a hard cap of costs or a guarantee that costs will not be more than this amount. This would simply provide PSO with a presumption of prudence of up to 110% of PSO's proposed costs for the Project. Mr. Mossburg testified that under a traditional recovery scenario, the Company would have to prove prudence for all costs incurred. With this guarantee, PSO would only have to prove prudence for costs above 110% of the current proposed costs. This is of some value to the Company, but little to ratepayers. Further, Mr. Mossburg stated that he doesn't think there is any real justification for the additional ten percent over PSO's current proposed costs. He testified that this is an expensive Project that would charge a premium over what would likely come from the competitive market and now PSO is asking for an allowance of an even greater premium above that.

81. Additionally, Mr. Mossburg testified that the 10% soft cap is concerning because PSO does not use the estimates used in the Company's analysis, calling into question the numbers that PSO is using. (Tr. 1/17/18 AM, p. 9-10).

82. Mr. Mossburg testified that a way to change this guarantee to deliver value to the ratepayers is to make it a hard cap at 100% of PSO's cost estimates with no exceptions, no change in the law, and no force majeure. This change would put it on line with a competitive bid. A bidder offers a price and has to stick by its price. Mr. Mossburg testified that the guarantee should cover both capital and O&M costs. (Tr. 1/17/18 AM, p. 10).

83. Regarding the second guarantee that the project will qualify for the full value of the PTCs, Mr. Mossburg testified that based on the filed testimony, it is unclear what this guarantee actually is. In Mr. Fate's testimony, he lists the reasons he is confident that the Company will qualify for one hundred percent of the PTC. However, he does not explain what happens if he is wrong about those things, so it is unclear if this is truly a guarantee. Mr. Mossburg testified that there is an exception for the guarantee for force majeure or change in law. Mr. Mossburg testified that even with the exceptions there is some value in the guarantee but not as strong as you would find in a competitive bid. Mr. Mossburg testified that going back to the Pro Forma PPA included in the 2016 RFP, it stated that the bidder cannot change the price if the bidder fails to qualify for the renewable incentives, things like PTCs. So the second guarantee is not as strong as if it were a full and unconditional guarantee. (Tr. 1/17/18 AM, p. 11-12).

84. Regarding the third guarantee, Mr. Mossburg testified that it has some value; however, he does have concerns. Mr. Mossburg testified that PSO was using one number, the P50 estimate, in its analysis and now for purposes of guaranteeing what the output will be, PSO is using the P99 estimate. Therefore, if the plant is built and there are no major disasters, there is a very small chance of this guarantee ever coming into play. (Tr. 1/17/18 AM, p. 12).

85. Mr. Mossburg testified that a competitive bid would have a pay for performance element meaning that you only get money if you actually generate and deliver energy, so a bidder absorbs that entire risk of underproduction. To deliver value to the ratepayers, the guarantee could be changed. First, the Company's revenue requirement estimate and output for each year could be a dollar per megawatt hour number to operate essentially as a virtual power purchase agreement. Therefore, PSO would recover that rate times the megawatt hours it generated. This would also address issues of overruns and PTC qualification. Second, the Company could commit to an availability guarantee. The

Company would pledge to have a certain percentage of the facility available to generate when the wind blows. If the Company fails to meet that mark, the Company would owe liquidated damages, which is similar to what a commercial contract would have. (Tr. 1/17/18 AM, p. 12-13).

86. Regarding the fourth guarantee to flow through incremental off system sales margins, based on the Company's own analysis, Mr. Mossburg testified that it has fairly limited value and is standard operating practice in other jurisdictions. (Tr. 1/17/18 AM, p. 13-14).

87. Regarding the fifth guarantee, Mr. Mossburg testified that this guarantee does not address the issues discussed in his testimony. Mr. Mossburg's concern was not so much that another jurisdiction would get a better deal than Oklahoma, but rather that actions in other jurisdictions would increase costs for Oklahoma ratepayers. Mr. Mossburg testified that he was concerned that Louisiana or Arkansas would pull out of the Project and that additional cost would be passed on to Oklahoma ratepayers. Mr. Mossburg testified that PSO should guarantee to hold Oklahoma ratepayers harmless for any cost increases as a result of actions in other jurisdictions. (Tr. 1/17/18 AM, p. 14-15).

88. Regarding the seventh guarantee, Mr. Mossburg testified that it is not really a savings guarantee. Mr. Mossburg testified that the formula that is put together only holds customers harmless in limited circumstances. Those limited circumstances are defined by PSO. This guarantee would come into play only if gas prices are at the PSO defined ultra-low level and output is at the PSO defined very low level, to P95 or P99. Mr. Mossburg testified that to deliver value to customers, the parameters of the guarantee, specifically, the heat rate used to calculate the energy savings, could be improved. (Tr. 1/17/18 AM, p. 15-16).

89. Mr. Mossburg testified that his opinions of the seven guarantees are not meant to supersede the other recommendations in his testimony. His opinions on the guarantees are offered in case the Commission agrees that 600 MW of new wind is appropriate and waives the competitive bidding requirement. Finally, Mr. Mossburg testified that if the Wind Catcher proposal is approved, it is important that hard guarantees be put in place to protect ratepayers from the risks presented by the Project. (Tr. 1/17/18 AM, p. 16-17).

90. It is the conclusion and recommendation of the ALJ that PSO has not met its burden of proof sufficient to prove this Project in whole or the Wind Project and Gen-Tie Projects in part meet a need as required by Title 17 O.S. §286. PSO has failed to prove that this Project meets an economic need sufficient for preapproval of this Project. PSO's economic analysis used unreasonable data and utilized a flawed planning process. PSO's economic analysis contained assumptions regarding future gas prices and wind additions that overstate the benefits of the Project. The Project presents risky elements, including the risk of cost overruns on, or complete failure of, the Gen-Tie line; failure of the Project to qualify for full Production Tax Credit, and risk of non-performance by other AEP companies.

91. PSO's failure to utilize competitive bidding for two extremely large purchases is of utmost importance in any consideration of preapproval of the Wind Facility and the Gen-Tie line. This failure becomes even more of a concern without adequate explanation or justification. An excuse of "not enough time" for competitive bidding is not sufficient in light of the significant cost to be borne by PSO customers. A project at this price point needs to be done right. The ALJ cannot recommend preapproval of the Project in light of PSO's failure to competitively bid both the Wind Facility and the Gen-Tie line and PSO's failure to adequately explain the lack of competitive bidding for such significant purchases.

Consideration of Reasonable Alternatives

92. An additional requirement of Title 17 O.S. §286 is consideration of reasonable alternatives.

93. PSO's analysis did not consider the larger planning environment. The analysis does not look very far beyond wind power and does not address other risks beyond a change in natural gas prices. This might be acceptable if PSO had conducted a strategic, collaborative IRP process prior to pursuing the Project, but in this context, it calls into question whether PSO considered any larger strategic issues regarding the Project. (Mossburg Responsive, p. 13). PSO should have considered potential alternatives to wind generation, changes in load, changes in law, tax reform legislation, scenarios or potential combinations of events, and alternative transmission investments. PSO did not consider these issues in detail in its 2017 IRP update.

94. PSO's 2017 IRP update was filed after the decision was made to proceed with the Project. PSO finished the Project analysis and chose to move forward with the Project then updated its IRP to match the timing of the Project's 600 MW wind addition in 2021. (Chaplin Responsive, p. 11).

95. While the 2017 IRP does consider the costs and use of a few generation resources (solar and reciprocating engines, for example) and test portfolio selection under a few commodity price scenarios, it does not consider alternative transmission investments or even attempt to measure congestion costs, the very costs that are apparently driving PSO to seek the Gen-Tie solution, nor does it carefully examine any more complicated scenarios regarding the future. (Mossburg Responsive, p. 18-19).

96. PSO issued a long-term energy and capacity RFP on December 13, 2016 ("2016 RFP") that was cancelled on the same day PSO announced the Project. (Tr. 1/8/18 PM, p. SJ30, lns. 13-25). PSO could have taken 600 MW of supply at better prices than the Project. PSO's own analysis of the final shortlist of bids shows that there were several offers superior to the Project available in the 2016 RFP. (Mossburg Responsive, p.34). Additionally, PSO's own analysis of bids in its 2016 RFP demonstrates that the Project would charge a considerable premium to avoid unknown congestion and curtailment costs. (Mossburg Responsive, p. 7; Norwood Responsive, p. 9).

97. The wind bids received in the 2016 RFP were pay for performance third-party PPAs, which are far less risky for PSO ratepayers than the Project since PSO would only pay a set rate and only when power is generated. Such PPAs would allow ratepayers to avoid a larger array of risks, including the risks of cost overruns and delays, failure to claim the PTC, risk in increases in operations and maintenance ("O&M") costs, risk associated with asset underperformance, and the potential risk to PSO's balance sheet. (Mossburg Responsive, p.36-37).

98. PSO's decision to proceed with the Project without seeking competitive bids means there is little or no evidence that the PSO's \$1.36 billion share of the proposed Project is the lowest reasonable cost alternative available at the time it was selected by PSO. (Norwood Responsive, pp. 17-19). PSO did not provide any analysis that directly compared the actual wind energy bids it received in its 2016 RFP to the Wind Catcher Project. (Norwood Responsive, p. 18). The base pricing of the 19 bids received by PSO in response to its 2016 RFP were all significantly lower than the \$26/MWh estimated levelized price of wind energy from the Wind Catcher Project. (Norwood Responsive, p. 19; Chodak Direct, p. 8). Almost all of the bids were from wind generation projects that were located in Oklahoma and not in the congested panhandle region and were assumed in PSO's bid analysis to have relatively low congestion costs. (Norwood Responsive, p. 19).

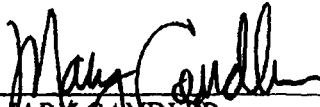
99. PSO's failure to evaluate competitive alternatives to the Wind Facility and the Gen-Tie line, through a formal RFP process was extraordinary, according to PSO's own testimony. (Fate Direct, p. 12). PSO's decision to reject all bids received in response to the 2016 RFP without directly comparing those offers to the Wind Catcher Project is highly questionable.

100. PSO provided a "generic wind" scenario; however, that analysis was based on faulty assumptions and overstated the estimated economic advantage of the Wind Catcher Project over generic wind alternatives. (Tr. 1/16/18 AM, p. 120-122, 125-126).

101. It is the conclusion and recommendation of the ALJ that PSO has not met its burden of proof sufficient to prove there was consideration of reasonable alternatives as required by Title 17 O.S. §286(C).

Any and all outstanding motions filed in this Cause can and should be deemed resolved by the Final Order issued in this Cause.

Respectfully submitted,



MARY CANDLER

Administrative Law Judge

C:

Commissioner Murphy

Commissioner Hiatt

Commissioner Anthony

Teryl Williams

Nicole King

Joseph Briley

Maribeth D. Snapp

James Myles

Elizabeth A.P. Cates

Matt Mullins

2/12/18

Date