

Issue(s):	Non-Unanimous Stipulation and Agreement
Witness/Type of Exhibit:	Riley/Affidavit
Sponsoring Party:	Public Counsel
Case No.:	EO-2018-0092

**AFFIDAVIT OF JOHN S. RILEY
IN OPPOSITION OF THE
NON-UNANIMOUS STIPULATION AND AGREEMENT**

Submitted on Behalf of the Office of the Public Counsel

EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. EO-2018-0092

May 9, 2018

**STATEMENT IN OPPOSITION OF THE
NON-UNANIMOUS STIPULATION AND AGREEMENT**

1. I am the same John S. Riley that previously submitted Rebuttal and Surrebuttal testimony in this docket on behalf of the Office of the Public Counsel.
2. This docket was initiated by The Empire District Electric Company (“Empire”) in October, 2017. The original request was seeking approval to build up to 800 MW of wind generation and retire Empire’s Asbury coal-fired generation facility.
3. Since the filing of Surrebuttal testimony Empire, Midwest Energy Consumers Group (“MECG”), the Staff of the Commission (“Staff”), Renew Missouri Advocates (“Renew Missouri”) and the Division of Energy (DE”) of the Missouri Department of Economic Development executed and filed a non-unanimous stipulation and agreement (“S&A”) with the Commission.
4. Empire, MECG, and Staff each filed affidavits supporting the S&A.
5. This affidavit is submitted in opposition to the S&A.

ACQUISITION AND OPERATION OF THE WIND PROJECT

6. **Detrimental to EDE’s customers**

Page 4, section 14, a. states: “Furthermore, EDE agrees that the Wind Projects(s) shall be operated in accordance with applicable Southwest Power Pool Integrated Marketplace (“SPP IM’) rules and in a manner that is not detrimental to EDE’s customers.” (Emphasis added)

7. As provided in OPC witness Lena M. Mantle’s rebuttal testimony, there is potential for SPP to make these wind projects curtailable (dispatchable), i.e., SPP would not take energy from the wind projects due to economic and reliability concerns even if weather conditions permitted the generation of electricity. In this type of circumstance, there is the lost opportunity cost of the production tax credit. The impact of this situation on tax equity

partners is described in a recent ruling from the United States Court of Appeals for the Eighth Circuit as follows:

The Smoky II wind project was only possible with the involvement of tax equity investors. Tax investors are by nature very concerned about minimizing risk and were heavily involved in the negotiation of the REPA. Frank Costanza, the executive vice president of TradeWind Energy, the primary start-up developer of the Smoky II project before it was bought by Enel, testified that his focus “was to make sure that in that contract that the terms and conditions that we agreed on with our counterpart, the utility, would be found acceptable to the tax equity financiers.” Costanza stressed that the investors made it plain that they were not interested in absorbing the risk of curtailment, stating “we need to get paid” and “we need to get paid for curtailments.”

The parties anticipated curtailment and included provisions in the REPA that govern the allocation of costs associated with curtailment. Under the REPA, curtailments fall into two categories: (1) Economic Curtailments, and (2) Emergency Curtailments.

Specifically, section 7.3(B) provides: “SPP, Interconnection Provider, or Transmission Owner may curtail all or a portion of the delivery of Test Energy or Renewable Energy to Buyer from the Facility. If such curtailment is not an emergency, then such curtailment shall be considered an Economic Curtailment.” Section 7.3(C) provides that Independence is “obligated to pay for Renewable Energy or Test Energy not delivered due to an Economic Curtailment at the rate set forth in Section 8.2.”¹

8. To OPC’s knowledge the terms of the contract of Empire and the TE partner have yet to be finalized. It may not contain a provision that Empire is obligated to pay for energy not delivered due to an economic curtailment. But even absent this provision, there will be circumstances in which it is difficult to determine what action would be detrimental to the customers. As described below, the relationship between the tax equity partner and the customers is complex. A negative price i.e. paying someone to take the electricity generated, is definitely a detriment. However, the tax equity partner is counting on the production tax credits to provide a return on and of its investment. Prolonging the involvement of the tax equity partner in the arrangement would delay the point at which

¹ *Smoky Hills Wind Project II, LLC v. City of Independence, Missouri*, No. 17-1171, slip op. at 4-5 (8th Cir. May 2, 2018).

customers would see revenues above the cost-of-service increase due to the wind investments.

TAX EQUITY PARTNER PROTECTION

9. **Tax Equity partner made whole**

Section 18 of the S&A provides several provisions to protect the Tax Equity (“TE”) partner’s² recovery of its investment in this project and return on that investment. Not yet having a TE partner, parameters in the S&A spell out the *expected* investment of the TE partner and the *expected* return on the TE partner’s investment (“ROR”). This *expected* return will be the driving force for both the cash payment amounts and the length of time that the TE partner will continue to be a project owner. Footnote 4 on page 10 of the S&A leaves open the length of time that the TE partner will remain in the project by referencing the “flip date” as the date that the *expected* return will be achieved. This is an open-ended proposition where the TE partner can continue to be a project owner for as long as it takes to insure that it receives its predetermined ROR, thereby insuring that the TE partner bears little real financial risk in this project. In fact, there is so little risk to the TE partner that it will receive an expected \$19.5 million payout for its remaining interest once the predetermined ROR is achieved.³

10. **Fixed price “hedging” to protect the project’s revenues**

The S&A authorizes Empire to “enter into fixed price hedging agreement(s) with Wind Project Co(s)”⁴. If the MWh price paid by the Southwest Power Pool (“SPP”), referred to in the S&A as the “market price,” is more or less than a predetermined price set in the contract with the TE partner, Empire will pay or receive, respectively, from Wind Project Co(s) the difference between that price and the market price. This is not a “hedge.” This is a ratepayer guarantee that Wind Project Co(s) will receive the expected price per MWh for the first 10 years of this agreement. The TE partner is allowed to receive cash payments from Wind Project co(s) in years six through 10. The amounts of those payments are dependent on the number of Production Tax Credits (“PTC”) the TE partner has received

² There may be more than one tax equity partner. For simplicity the singular form is used in this affidavit.

³ Answer to OPC data request 1317.

⁴ S&A, page 11, lines 4&5.

prior to year six. There is nothing Empire, the TE partner or anyone else can do about the quantity of the wind that blows; however, the S&A props up the price (\$/MWh) that the Wind Project Co(s) collects for the MWhs the project generates in the first five years.

This TE partner price protection is not insignificant. What amount Empire's ratepayers are guaranteeing is dependent on the price the Wind Project Co(s) receive for each MWh sold into the SPP market. As described in other OPC witnesses' testimony, negative sale prices are occurring with much greater frequency, and are likely to only increase in frequency as more wind generation comes online in the SPP footprint. Empire has indicated that it expects the fixed price ("hedge") will be somewhere around \$20.51/MWh in year one and \$24.51/MWh in year 10⁵. If the actual sale prices in the SPP market are lower than the fixed price, then Empire intends for its ratepayers to cover the shortfall in their rates. If the actual sale prices are higher than the fixed price then Empire will receive the sales proceeds, offset Empire's purchased power costs, and only then flow any remaining amount to its ratepayers through its FAC. Empire's ratepayers are bearing all the risk, which could be substantial. Using a simple example: 200,000 MWh is sold into SPP at \$19/MWh. The Wind Project Co. receives \$3,800,000 from SPP, but Empire will have to supplement the \$19/MWh with another \$300,000 (200,000 MWh X (\$20.50-\$19)/MWh) of which Empire plans for its ratepayers to pay through their Cost of Service ("COS") based rates. What happens if OPC's predictions are correct and Empire's wind generated energy is sold into the SPP market at prices substantially lower than the fixed price? The ratepayers will be the backstop for possibly a \$3 or \$4 MWh shortfall when this project could produce 2,845,500 MWh annually. This shortfall that the ratepayers would be safeguarding could be millions of dollars each year. This is over and above the other financial losses that I discuss later.

⁵ Answer to Staff Data Request 0023

INCOME TAX REDUCTION

11. Holding the ratepayer hostage

Empire is in this S&A holding tax reform relief for its customers hostage. If Empire had truly wanted to save its customers' money, it should have introduced a "customer savings plan" in January 2018 with tariff sheets that reduced its rates immediately to address the reduction in federal corporate income tax rates. The tax reduction act and this wind project are independent. Empire and the other signatories to the S&A have tied them together.

Empire witness Charlotte North points out that with the S&A Empire will *voluntarily* reduce its tariffed rate schedules to account for the amount of the income tax rate change. Empire will also *voluntarily* set up a regulatory liability account to accrue its excess Accumulated Deferred Income Tax (ADIT) until it can be considered in the rates set in its next general rate case. The S&A signatories present as if the Commission does not award what the signatories request in this S&A, then Empire would not implement federal income tax rate reduction provisions.

However, there is nothing which prevents Empire from voluntarily filing new tariff sheets now to reduce its tariffed rate schedules for federal income tax rate reductions. Empire should already have filed new tariff sheets to reflect in its customers' rates the benefits of the reduction in the federal corporate income tax rate from 35% to 21%, just like it would have quickly filed tariff sheets with the Commission to request an adjustment up in its customers' rates had the tax rate changed from 21% to 35%.

Absent Commission approval of this agreement, ratepayers will pay \$17 million in excess rates annually due to Empire's reluctance to flow the changes in its tax liability to its customers. With the agreement, ratepayers will pay an extra \$20-35 million a year for ratebase that is not needed.

Empire's willingness to reduce rates in this case signifies that Empire's customers' rates are no longer just and reasonable. The Commission should order Empire to record in regulatory liability accounts its excess ADIT and its overearnings from January 1, 2018,

due to this income tax rate change. Those balances can be addressed in the expected Empire April, 2019 general rate case.

CUSTOMER PROTECTION MECHANISM

12. Market price limits

The signatories to the S&A have included a provision that they claim will protect Empire's ratepayers from revenue shortfalls from the wind projects, better known as a "net loss from operations." To quote the S&A, "In general terms, that mechanism seeks to provide for the sharing of risk between customers and shareholders associated with the possibility of reduced market prices and wind production." As stated in Appendix A of the S&A, Empire will share in Wind Project losses over the first 10 years up to \$35 million dollars. This is construed as a powerful concession that the parties to this S&A have negotiated from Empire. Yet my analysis is that this wind project will lose money every year. In fact, my projections show the Wind Project Co(s). will lose nearly \$61 million in the first 1.25 years. (JSR-1) What is truly disappointing is that the S&A allows a limited amount of loss sharing between Empire's ratepayers and Empire, but permits Empire to enter a "fixed price hedging agreement(s) with the Wind Project Co(s)"⁶ that insures the TE partner will be made whole and earn a return. In essence, the price protection that was mentioned earlier will supplement the revenue received from the SPP market. In effect, reducing the loss. If the ratepayer is reducing the loss then Empire is required to share less of the shortfall. The loss would have been greater but for the "fixed hedge price".

13. Net operating loss of the Wind Project Co(s)

Attachment-JSR-1 display of projected revenues and expenses for each of the first 11 years does not show a profit in any year. The values used were obtained from Empire. Two lines of information in this calculation that I had no way of verifying were the "Contributions from TE" and the "Distributions to TE". These two inputs have never really been explained to me and I do not completely understand how they were calculated.

⁶ Page 11, section c

From my understanding, the Contributions from the TE are payments, from the TE partner back into the Wind Project Co(s), that represent monetary value of the PTCs in excess of the predetermined threshold. The way it was explained to me is that this would be considered a capital infusion from the TE partner in order to prevent the premature execution of the TE partner's required return on investment. I don't know what that threshold is so my input is based solely on what is included in the S&A's Appendix A, page 6.

The Distribution to the TE is another vague entry that will be determined by the amount of return the TE partner has collected in the first five years of the wind generation. The S&A states that the distribution will be between 25%-50%. As I see this scenario, these two entries are intertwined. If the TE partner is not receiving the expected PTC for reasons such as lower wind production than estimated or curtailment of the wind projects, then the contributions will be less or nonexistent. If there are no excess PTC then one would expect that the distributions would be on the higher end of the 25%-50% range.

Based on my calculations, this S&A will cost the ratepayers of Empire District Electric Company approximately \$380 million in the first 11 years less the \$35 million that the S&A "Market Price Protection" requires Empire to share.

In Millions \$												
YEAR		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
		1	2	3	4	5	6	7	8	9	10	11
WIND PROJECT INVESTMENT	510	\$ 510.00	\$ 510.00	\$ 510.00	\$ 510.00	\$ 510.00	\$ 510.00	\$ 510.00	\$ 510.00	\$ 510.00	\$ 510.00	\$ 510.00
Accumulated Depreciation		\$ -	\$ 4.25	\$ 21.25	\$ 38.25	\$ 55.25	\$ 72.25	\$ 89.25	\$ 106.25	\$ 123.25	\$ 140.25	\$ 157.25
Rate Base		\$ 510.00	\$ 505.75	\$ 488.75	\$ 471.75	\$ 454.75	\$ 437.75	\$ 420.75	\$ 403.75	\$ 386.75	\$ 369.75	\$ 355.00
Equity %		\$ 0.51	\$ 0.51	\$ 0.51	\$ 0.51	\$ 0.51	\$ 0.51	\$ 0.51	\$ 0.51	\$ 0.51	\$ 0.51	\$ 0.51
Equity		\$ 260.10	\$ 257.93	\$ 249.26	\$ 240.59	\$ 231.92	\$ 223.25	\$ 214.58	\$ 205.91	\$ 197.24	\$ 188.57	\$ 181.05
ROE	9.75%	\$ 6.34	\$ 25.15	\$ 24.30	\$ 23.46	\$ 22.61	\$ 21.77	\$ 20.92	\$ 20.08	\$ 19.23	\$ 18.39	\$ 17.65
Income tax	0.33245	\$ 0.53	\$ 8.36	\$ 8.08	\$ 7.80	\$ 7.52	\$ 7.24	\$ 6.96	\$ 6.67	\$ 6.39	\$ 6.11	\$ 5.87
Empire's PTC's		\$ (0.23)	\$ (0.90)	\$ (1.00)	\$ (1.00)	\$ (1.00)	\$ (1.00)	\$ (1.00)	\$ (1.00)	\$ (1.10)	\$ (1.10)	\$ (1.10)
Interest	5.33%	\$ 3.33	\$ 13.21	\$ 12.76	\$ 12.32	\$ 11.88	\$ 11.43	\$ 10.99	\$ 10.54	\$ 10.10	\$ 9.66	\$ 9.27
Depreciation	30 Yr	\$ 4.25	\$ 17.00	\$ 17.00	\$ 17.00	\$ 17.00	\$ 17.00	\$ 17.00	\$ 17.00	\$ 17.00	\$ 17.00	\$ 17.00
Property tax	0.86%	\$ 6.70	\$ 8.75	\$ 8.46	\$ 8.17	\$ 7.88	\$ 7.58	\$ 7.29	\$ 7.00	\$ 6.71	\$ 6.41	\$ 6.14
Revenue Requirement		\$ 20.92	\$ 71.57	\$ 69.61	\$ 67.74	\$ 65.88	\$ 64.02	\$ 62.16	\$ 60.29	\$ 58.33	\$ 56.47	\$ 54.83
Projected Revenues		\$ (13.18)	\$ (56.00)	\$ (58.10)	\$ (60.54)	\$ (62.42)	\$ (64.52)	\$ (66.70)	\$ (69.04)	\$ (70.58)	\$ (73.52)	\$ (76.00)
Operating Costs		\$ 7.48	\$ 29.10	\$ 28.20	\$ 28.80	\$ 29.55	\$ 30.15	\$ 30.83	\$ 31.35	\$ 31.95	\$ 52.35	\$ 35.43
Less Contributions from TE		\$ -	\$ (2.00)	\$ (13.00)	\$ (13.00)	\$ (13.00)	\$ (12.00)	\$ (7.00)	\$ (8.00)	\$ (8.00)	\$ (8.00)	\$ (10.00) \$ (94.00)
Add back the Price guarantee (hedge)		\$ 0.71	\$ 2.85	\$ 2.85	\$ 2.85	\$ 2.85	\$ 2.85	\$ 2.85	\$ 2.85	\$ 2.85	\$ 2.85	\$ 2.85
Add back Distribution to the TE						\$ 1.00	\$ 18.90	\$ 19.43	\$ 20.03	\$ 20.55	\$ 14.10	\$ 15.00
Shortfall in Revenue Req		\$ 15.94	\$ 45.52	\$ 29.55	\$ 25.85	\$ 23.86	\$ 39.39	\$ 41.56	\$ 37.48	\$ 35.10	\$ 44.24	\$ 22.11 \$ 380.10
Buy-out of TE												\$ 19.50
												<u>\$ 41.61</u>

Based on 1/4 yr

Year 2020 represents the expected 25% of a full year

Empire's \$510 share of the project derived from McMahon Affidavit Page 4

Revenues obtained from S&A Appendix A P75 wind Production with Low Market Prices

Operating Costs were obtained from Empire presentation with a 25% reduction to reflect reduced MW production

Contribution from TE was obtained from S&A