EXHIBIT

Exhibit No.:	204
Issue(s):	Request for Special Regulatory Treatment
Witness/Type of Exhibit:	Riley/Rebuttal
Sponsoring Party:	Public Counsel
Case No.:	EO-2018-0092

REBUTTAL TESTIMONY

OF

JOHN S. RILEY

Submitted on Behalf of the Office of the Public Counsel

EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. EO-2018-0092

February 7, 2018

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of The Empire District Electric Company for Approval of Its Customer Savings Plan	)))	Case No. EO-2018-0092

AFFIDAVIT OF JOHN S. RILEY

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

John S. Riley, of lawful age and being first duly sworn, deposes and states:

1. My name is John S. Riley. I am a Public Utility Accountant III for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

John S. Riley, C.P.A.
Public Utility Accountant III

Subscribed and sworn to me this 7th day of February 2018.

NOTARY PUBLIC SEAL
JERENE A. BUCKMAN
My Commission Expires
August 23, 2021
Cole County
Commission #13754037

Jerene A. Buckman
Notary Public

My Commission expires August 23, 2021.

REBUTTAL TESTIMONY
OF
JOHN S. RILEY
THE EMPIRE DISTRICT ELECTRIC COMPANY
CASE NO. EO-2018-0092

Q. What is your name and what is your business address?

A. John S. Riley, PO Box 2230, Jefferson City, Missouri 65102.

Q. By whom are you employed and in what capacity?

A. I am employed by the Missouri Office of the Public Counsel ("OPC") as a Public Utility Accountant III.

Q. What is your educational background?

A. I earned a B.S. in Business Administration with a major in Accounting from Missouri State University.

Q. What is your professional work experience?

A. I was employed by the OPC from 1987 to 1990 as a Public Utility Accountant. In this capacity I participated in rate cases and other regulatory proceedings before the Public Service Commission ("Commission"). From 1994 to 2000 I was employed as an auditor with the Missouri Department of Revenue. I was employed as an Accounting Specialist with the Office of the State Court Administrator until 2013. In 2013, I accepted a position as the Court Administrator for the 19th Judicial Circuit until April, 2016 when I joined the OPC.

Q. Are you a Certified Public Accountant ("CPA") licensed in the State of Missouri?

A. Yes. I am also a member of the Institute of Internal Auditors ("IIA")

Q. Have you previously filed testimony before the Missouri Public Service Commission ("Commission" or "PSC")?

A. Yes I have. A listing of my case filings is attached as JSR-R-1

Q. What is the purpose of your rebuttal testimony?

A. I respond to the Empire District Electric Company ("Empire") witnesses who testify on its request for special regulatory treatment for the construction of up to 800 MW of wind generation and the retirement of Empire's Asbury plant, and to include all of these costs in Empire's rate base used for setting electric rates for its Missouri retail customers.

Q. Would you summarize your testimony?

A. I reviewed Empire's request with a view to the purported economic benefits and costs of Empire's "Customer Savings Plan" and who is most likely to bear them, i.e., I "followed the money." Based on my review Empire's claimed $325 million of benefits to its retail customers over 20 years is uncertain, while those same customers will almost certainly guarantee that Empire and its tax equity partner(s) will reap not only the return of their $1.5 billion investment, but also a return on that investment of over 7.75% per year, likely substantially more than 7.75%.

Q. As you read through Empire's proposal and its witnesses' testimony, what did you conclude?

A. I concluded Empire is trying to convince this Commission that this plan will save Empire's retail customers money. Empire claims "**up to $325 million in savings for its customers over the next 20 years.**" (Emphasis added).[1] As I was reading the Empire witnesses' testimonies I couldn't help but think about the old joke about the spouse bringing home something that they bought on sale, but was not really needed, and exclaiming to their partner, "Honey, look how much money I saved us!"

[1] Empire witness David Swain used this quote and similar ones in his direct testimony at least seven times, as do several other Empire witnesses.

I'm not convinced that Empire's retail customers will realize any "savings." I also know that Empire's application, testimony and presentations do not adequately explain the costs of its plan to the Commission or anyone else. When all the costs are laid out on the table, it is uncertain as to whether or not Empire's customers will actually see any savings. It is likely that, while enriching Empire's shareholders and tax equity partner(s), Empire's plan will place unnecessary cost on Empire's customers since Empire's current resource plan does not call for the addition of any resources to meet its customers' needs until 2029, at the earliest.

Q. What costs should the Commission consider when reviewing this project?

A. It is important to keep in mind while reviewing this proposal that the only way a regulated utility can increase its net income and its return to its shareholders is either by increasing customer load or by increasing its rate base. Empire is forecasting very little growth in customer usage over the next twenty years so, in order to increase its net income and its return to its shareholders, Empire is asking the Commission permission both to increase its rate base by $700 million and retain in rate base the net value of its Asbury plant after it is retired, i.e., no longer used and useful.

The Commission should first consider Empire's plan to prematurely retire its Asbury plant. Empire purports that this retirement is needed to avoid environmental upgrades to the Asbury plant. The cost, according to Empire's filing, to make the Asbury plant compliant with environmental regulations is between $20 and $30 million. OPC witness John Robinett is filing testimony on Empire's increasing estimates of the cost to comply. Nowhere does Empire mention that its preliminary projection for the cost to demolish the Asbury plant is $24 million.[2]

Q. Empire's plan is that the Asbury plant be retired and the associated net book value be moved to a regulatory asset account that would allow Empire to recover through its

[2] Empire answer to OPC data request 1302.

retail rates both a return <u>on</u> and a return <u>of</u> that balance. What can ratepayers expect Empire to recover from them through retail rates if the Commission grants Empire's request for recovery of investment and costs related to the Asbury plant after it is retired?

A. In Mr. Sager's testimony, he illustrates that, if the Commission grants Empire its request, $204 million less about $34.2 million in deferred taxes would be moved to a regulatory asset account.[3] OPC witness John Robinett testifies in rebuttal that the amount is closer to $222 million in retired plant. Reduce that by the deferred tax and take into consideration that it may cost up to $24 million to demolish this plant, then we now have approximately $212 million in prematurely retired plant costs that Empire's retail customers would pay for, even though those customers receive little benefit from that plant being retired early.

Using the capital structure proposed in Empire's last rate case[4] and an annual amortization over the life of the project and Empire's retail customers are on the hook for $24.79 million in 2020 for retiring the Asbury plant in 2019, and will still be expected to cover a revenue shortfall of nearly $14.7 million for the Asbury plant ten years later. (Please review Schedule JSR-R-2 for the calculations).

Q. What is Empire's proposed investment in its "Customer Savings Plan"?

A. Empire has proposed to invest $700 million in the $1.5 billion project, with one or more tax equity partners investing the remaining amount.[5]

Q. How would this investment affect Empire's retail customers?

A. Empire has positioned this proposal to appear that its customers will "only" pay $700 million for a $1.5 billion investment when in actuality those customers are leveraged with $912

[3] Sager Direct, page 3, line 19 and exhibit RWS-2
[4] ER-2016-0023 Staff exhibits and Report and Order
[5] Swain Direct, page 11, line 10

million in rate base that requires them to pay both a return on and return of that $912 million for the next 30 years, even though Empire does not need this $1.5 billion of additional wind generation to meet its customers' energy needs.

I have included Schedule JSR-R-2 where calculations for the cost of the wind project and the cost of the Asbury regulatory asset are calculated for the first 11 years of Empire's plan. I developed these numbers from Empire's "Customer Savings Plan" presentation,[6] the direct testimony of Empire's witnesses, Empire's answers to Staff and OPC data requests, and by using the capital structure the Commission's Staff proposed for Empire in Empire's last Missouri general electric rate case.

Q. Would you please walk through Schedule JSR-R-2 and discuss your findings?

A. Starting with an initial investment of $700 million, I made calculations to separate Empire's return on equity, interest and tax payments, depreciation and the 1% portion of the Production Tax Credits ("PTC's") that flow to Empire as the plan's Sponsor partner. This results in an initial revenue requirement for Empire in the first year after the wind farms are built of $91.21 million. Now, using Empire's projections for its earnings[7] and the flow back to Empire of excess PTC's from the Tax Equity partner(s), Empire's first year revenue requirement shortfall is $37.61 million. Also, take into account that this shortfall is over and above the expected rate of return ("ROR") for this investment.

The second section of the schedule demonstrates the cost of the retired Asbury plant. Using a starting point of $212 million as the regulatory asset, the return on equity (ROE), tax requirement, interest, and amortization are broken out. As you can see in the first year of this project, Asbury, while not generating a single kilowatt-hour, would cost Empire's customers $24.79 million. Combined with the shortfall in the wind project revenue requirement

[6] Technical Session – November 2017.
[7] Sales to SPP less expenses from operating the turbines, referred to as EBITDA.

Empire's retail customers are "picking up the tab" for over $62 million in the first year after the wind farms begin operating.

Q. Is there anything else about Empire's plan that adversely impacts its retail customers?

A. Empire's retail customers do not receive any benefit from the plan's deferred tax position.

Q. Would you please explain how Empire's retail customers could benefit from deferred taxes?

A. Yes. When a company brings new plant online; the IRS allows accelerated depreciation for income tax purposes. In this wind farm project, the tax equity partner(s) receives the benefits of the accelerated depreciated, whereas, if Empire built and wholly-owned the wind farms it would reap the benefit. I will demonstrate why this is an Empire retail customer detriment.

Empire will have $700 million invested in these wind farms which will be depreciated over 30 years for ratemaking purposes. For income tax purposes, the $700 million could be depreciated over 5 years. To illustrate the benefit consider the following example. Depreciating $700 million over 30 years is $23.33 million a year. The federal income tax effect is $23.33 million multiplied by the tax rate of 21% or $4.9 million a year. $700 million depreciated over 5 years is $140 million a year. At a 21% tax rate, the tax benefit would be $29.4 million a year.

What this quick calculation shows is that absent the tax equity partner(s), the deferred tax on Empire's portion of these wind farms is $24.5 million a year for five years ($29.4 million – $4.9 million = $24.5 million) for a total over the five years of $122.5 million. For ratemaking purposes this deferred tax is normally applied to reduce a utility's rate base, which, in turn, reduces its revenue requirement. There is $122.5 million in deferred tax the tax equity partner enjoys at the expense of the approximate $9.2 million reduction in Empire's revenue requirement that would benefit Empire's retail customers.

Q. Who benefits if Empire's plan moves forward?

A. Empire and the unnamed tax equity partner(s) receive all the certain benefits from federal tax credits and inclusion of the costs they incur in Empire's revenue requirement, while Empire's retail customers shoulder all the risk of any potential shortfall through Empire's fuel adjustment clause.

Empire increases its rate base by $700 million while still garnering a return of and return on recent improvements to a prematurely retired plant. The tax equity partner is guaranteed[8] to receive a return on its investment of between 7.5 to 8.5% by way of a combination of PTC's, accelerated depreciation and collecting a portion of the revenue stream[9]starting in year six.

Empire's customers effectively would be trading a power plant that was going to require a small investment[10] to continue to produce 200 MW on demand, for an intermittent power source of approximately 120 MW that is unlikely to be fully available during times of peak need for Empire's customers. Empire has laid out rosy predictions of potential revenues and cost savings that, if proved to be insufficient, will require even more revenues from Empire's customers, while making Empire's shareholders and its tax equity partner whole.

Q. How do you view this proposal in a financial context?

A. I see it as an attempt for certain business entities to reward themselves by way of government subsidies and the regulatory process. One or more yet to be named tax equity partners will reap government hand-outs by way of production tax credits and accelerated depreciation and will be guaranteed a certain return on their investment by way of inclusion in the revenue stream, from year six through ten, obtained from sales of electricity created from the wind generation. Empire reaps the benefit of collecting a return on and a return of rate base that

[8] The tax equity partner begins to receive a portion of the revenue stream in year 6 of the project. The amount it receives is determined by how many PTC's have were produced in the first five years of the partnership.
[9] As mentioned in note 8 and line 18 of Schedule JSR-R-2
[10] As compared to the $1.5 billion Empire is estimating the wind project will cost

isn't needed. In fact, after extending the cost of the Asbury plant retirement out to 30 years in Schedule JSR-R-3; the accumulated cost to Empire's retail customers for the Asbury plant will be over $427.5 million dollars over 30 years. All of these benefits to Empire and its partner(s) are courtesy of the Empire District Electric Company's electric customers.

Q. Does this conclude your rebuttal testimony?

A. Yes.

John S. Riley, CPA
Summary of Case Participation

ST LOUIS COUNTY WATER COMPANY	CASE NO. WR-88-5
SOUTHWESTERN BELL TELEP9ONE COMPANY	CASE NO. TC-89-21
EMPIRE DISTRICT ELECTRIC COMAPANY	CASE NO. ER-2016-0023
KCP&L GREATER MISSOURI OPERATIONS COMPANY	CASE NO. ER-2016-0156
KANSAS CITY POWER & LIGHT COMPANY	CASE NO. ER-2016-0285
AMEREN MISSOURI	CASE NO. ER-2016-0179
EMPIRE DISTRICT ELECTRIC PRUDENCE REVIEW	CASE NO. EO-2017-0065
LACLEDE GAS COMPANY	CASE NO. GR-2017-0215
MISSOURI AMERICAN WATER COMPANY	CASE NO. WU-2017-0351
EMPIRE DISTRICT ELECTRIC COMPANY	CASE NO. EO-2018-0092
LIBERTY (MIDSTATE NATURAL GAS)	CASE NO. GR-2018-0013

			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
YEAR			1	2	3	4	5	6	7	8	9	10	11
WIND PROJECT INVESTMENT		700	$ 700	$ 700	$ 700	$ 700	$ 700	$ 700	$ 700	$ 700	$ 700	$ 700	$ 700
Accumulated Depreciation		5.825	29.125	52.425	75.725	99.025	122.325	145.625	168.925	192.225	215.525	238.825	262.125
Rate Base			$ 694	$ 642	$ 624	$ 601	$ 578	$ 554	$ 531	$ 508	$ 484	$ 461	$ 438
Equity %			51%	51%	51%	51%	51%	51%	51%	51%	51%	51%	51%
Equity			$ 354.03	$ 327.29	$ 318.38	$ 306.50	$ 294.61	$ 282.73	$ 270.85	$ 258.97	$ 247.08	$ 235.20	$ 223.32
ROE	9.75%		$ 34.52	$ 31.91	$ 31.04	$ 29.88	$ 28.72	$ 27.57	$ 26.41	$ 25.25	$ 24.09	$ 22.93	$ 21.77
Income tax			$ 16.16	$ 16.50	$ 16.83	$ 17.16	$ 17.51	$ 17.87	$ 18.22	$ 18.57	$ 18.94	$ 19.34	$ 19.34
Empire's PTC's			$ (0.90)	$ (0.90)	$ (1.00)	$ (1.00)	$ (1.00)	$ (1.00)	$ (1.00)	$ (1.00)	$ (1.10)	$ (23.60)	$ -
Interest	5.33%		$ 18.13	$ 16.76	$ 16.30	$ 15.70	$ 15.09	$ 14.48	$ 13.87	$ 13.26	$ 12.65	$ 12.04	$ 11.44
Depreciation			$ 23.30	$ 23.30	$ 23.30	$ 23.30	$ 23.30	$ 23.30	$ 23.30	$ 23.30	$ 23.30	$ 23.30	$ 23.30
Revenue Requirement			$ 91.21	$ 87.57	$ 86.48	$ 85.04	$ 83.62	$ 82.21	$ 80.80	$ 79.38	$ 77.88	$ 54.02	$ 75.85
Less EBITDA			$ (32.50)	$ (35.70)	$ (39.00)	$ (39.90)	$ (40.90)	$ (42.10)	$ (43.40)	$ (44.60)	$ (45.90)	$ (20.80)	$ (47.23)
Less Contributions from TE			$ (22.60)	$ (22.60)	$ (23.60)	$ (23.60)	$ (24.50)	$ (24.50)	$ (25.50)	$ (25.50)	$ (26.40)		$ -
Add back the Hedging costs			$ 1.50	$ 1.50	$ 1.60	$ 1.60	$ 1.60	$ 1.70	$ 1.70	$ 1.70	$ 1.80	$ 1.80	$ -
Add back Distribution to the TE							$ 1.00	$ 25.20	$ 25.90	$ 26.70	$ 27.40	$ 18.80	
Net Revenue Requirement			**$ 37.61**	**$ 30.77**	**$ 25.48**	**$ 23.14**	**$ 20.82**	**$ 42.51**	**$ 39.50**	**$ 37.68**	**$ 34.78**	**$ 53.82**	**$ 28.62**
ASBURY													
Asbury & Disposal	$	212	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00
Accumulated Depreciation		4.713	11.78	18.85	25.91	32.98	40.05	47.12	54.18	61.25	68.32	75.38	82.45
Rate Base	$	207	$ 200.22	$ 193.15	$ 186.09	$ 179.02	$ 171.95	$ 164.89	$ 157.82	$ 150.75	$ 143.68	$ 136.62	$ 129.55
Equity 51 %			$ 102.11	$ 98.51	$ 94.90	$ 91.30	$ 87.70	$ 84.09	$ 80.49	$ 76.88	$ 73.28	$ 69.67	$ 66.07
ROE	9.75%		$ 9.96	$ 9.60	$ 9.25	$ 8.90	$ 8.55	$ 8.20	$ 7.85	$ 7.50	$ 7.14	$ 6.79	$ 3.37
Tax Requirement			$ 2.53	$ 2.44	$ 2.35	$ 2.26	$ 2.18	$ 2.09	$ 2.00	$ 1.91	$ 1.82	$ 1.73	$ 0.86
Interest	5.33%		$ 5.23	$ 5.04	$ 4.86	$ 4.68	$ 4.49	$ 4.31	$ 4.12	$ 3.94	$ 3.75	$ 3.57	$ 3.38
Amortization		7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07
Asbury Revenue Requirement			**$ 24.79**	**$ 24.16**	**$ 23.53**	**$ 22.91**	**$ 22.28**	**$ 21.66**	**$ 21.03**	**$ 20.41**	**$ 19.78**	**$ 19.16**	**$ 14.68**
Revenue Shortfall			**$ 62.39**	**$ 54.93**	**$ 49.01**	**$ 46.05**	**$ 43.11**	**$ 64.17**	**$ 60.53**	**$ 58.09**	**$ 54.57**	**$ 72.97**	**$ 43.30**

Income tax figures on line 9 are derived from Empire presentations

Tax requirements for Asbury is ROE * .25442 (State and federal tax combined)

ABANDONED ASBURY'S TOTAL COST OVER THE 30 YEAR LIFE OF THE PROJECT

ASBURY				2020	2021	2022	2023	2024	2025	2026	2027	2028
Asbury & Disposal		$	212	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00
Accumulated Depreciation			4.713	11.78	18.85	25.91	32.98	40.05	47.12	54.18	61.25	68.32
Rate Base		$	207	$ 200.22	$ 193.15	$ 186.09	$ 179.02	$ 171.95	$ 164.89	$ 157.82	$ 150.75	$ 143.68
Equity 51 %				$ 102.11	$ 98.51	$ 94.90	$ 91.30	$ 87.70	$ 84.09	$ 80.49	$ 76.88	$ 73.28
ROE	9.75%			$ 9.96	$ 9.60	$ 9.25	$ 8.90	$ 8.55	$ 8.20	$ 7.85	$ 7.50	$ 7.14
Tax Requirement				$ 2.53	$ 2.44	$ 2.35	$ 2.26	$ 2.18	$ 2.09	$ 2.00	$ 1.91	$ 1.82
Interest	5.33%			$ 5.23	$ 5.04	$ 4.86	$ 4.68	$ 4.49	$ 4.31	$ 4.12	$ 3.94	$ 3.75
Amortization			7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07
Asbury Revenue Requirement				**$ 24.79**	**$ 24.16**	**$ 23.53**	**$ 22.91**	**$ 22.28**	**$ 21.66**	**$ 21.03**	**$ 20.41**	**$ 19.78**
Total cost to the Empire's ratepayers				$427.59								

2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00	$ 212.00
75.38	82.45	89.52	96.58	103.65	110.72	117.79	124.85	131.92	138.99	146.05	153.12	160.19
$ 136.62	$ 129.55	$ 122.48	$ 115.42	$ 108.35	$ 101.28	$ 94.21	$ 87.15	$ 80.08	$ 73.01	$ 65.95	$ 58.88	$ 51.81
$ 69.67	$ 66.07	$ 62.47	$ 58.86	$ 55.26	$ 51.65	$ 48.05	$ 44.45	$ 40.84	$ 37.24	$ 33.63	$ 30.03	$ 26.42
$ 6.79	$ 3.37	$ 3.19	$ 3.00	$ 2.82	$ 2.63	$ 2.45	$ 2.27	$ 2.08	$ 1.90	$ 1.72	$ 1.53	$ 1.35
$ 1.73	$ 0.86	$ 0.81	$ 0.76	$ 0.72	$ 0.67	$ 0.62	$ 0.58	$ 0.53	$ 0.48	$ 0.44	$ 0.39	$ 0.34
$ 3.57	$ 3.38	$ 3.20	$ 3.01	$ 2.83	$ 2.65	$ 2.46	$ 2.28	$ 2.09	$ 1.91	$ 1.72	$ 1.54	$ 1.35
$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07	$ 7.07
$ 19.16	**$ 14.68**	**$ 14.26**	**$ 13.85**	**$ 13.43**	**$ 13.02**	**$ 12.60**	**$ 12.19**	**$ 11.77**	**$ 11.36**	**$ 10.94**	**$ 10.53**	**$ 10.11**

	2042		2043		2044		2045		2046		2047		2048	
$	212.00	$	212.00	$	212.00	$	212.00	$	212.00	$	212.00	$	212.00	
	167.25		174.32		181.39		188.46		195.52		202.59		209.66	
$	44.75	$	37.68	$	30.61	$	23.54	$	16.48	$	9.41	$	2.34	
$	22.82	$	19.22	$	15.61	$	12.01	$	8.40	$	4.80	$	1.20	
$	1.16	$	0.98	$	0.80	$	0.61	$	0.43	$	0.24	$	0.06	
$	0.30	$	0.25	$	0.20	$	0.16	$	0.11	$	0.06	$	0.02	
$	1.17	$	0.98	$	0.80	$	0.61	$	0.43	$	0.25	$	0.06	
$	7.07	$	7.07	$	7.07	$	7.07	$	7.07	$	7.07	$	7.07	
$	**9.70**	**$**	**9.28**	**$**	**8.87**	**$**	**8.45**	**$**	**8.03**	**$**	**7.62**	**$**	**7.20**	**$ 427.59**