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Sponsoring Party:

Public Counsel

Case No.:

EO-2018-0092

REBUTTAL TESTIMONY

OF

GEOFF MARKE

Submitted on Behalf of the Office of the Public Counsel

EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. EO-2018-0092

February 7, 2018

OPC Exhibit No. 206
Date 5-11-18 Reporter A F
File No. EO-2018-0092

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

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

AFFIDAVIT OF GEOFF MARKE

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Geoff Marke, of lawful age and being first duly sworn, deposes and states:

1. My name is Geoff Marke. I am a Regulatory Economist 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.



Geoff Marke
Chief Economist

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



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



Jerene A. Buckman
Notary Public

My commission expires August 23, 2021.

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REBUTTAL TESTIMONY

OF

GEOFF MARKE

EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. EO-2018-0092

1 **I. INTRODUCTION**

2 **Q. Please state your name, title and business address.**

3 A. Geoffrey Marke, PhD, Chief Economist, Office of the Public Counsel (“OPC” or “Public
4 Counsel”), P.O. Box 2230, Jefferson City, Missouri 65102.

5 **Q. What are your qualifications and experience?**

6 A. I have been in my present position with OPC since April of 2014 where I am responsible for
7 economic analysis and policy research in electric, gas and water utility operations. Prior to
8 joining OPC, I was employed by the Missouri Public Service Commission and before that the
9 Missouri Department of Natural Resources (later transferred to the Department of Economic
10 Development). I have also worked in the private sector as the Lead Researcher for Funston
11 Advisory based out of Detroit, Michigan. My experience with Funston involved a variety of
12 specialized consulting engagements with both private and public entities. I have a PhD in
13 Public Policy Analysis and Administration from Saint Louis University.

14 **Q. Have you testified previously before the Missouri Public Service Commission?**

15 A. Yes. A listing of the cases in which I have previously filed testimony and/or comments
16 before the Commission is attached in GM-1.

17 **Q. What is the purpose of your rebuttal testimony?**

18 A. I respond to The Empire District Electric Company’s (“Empire” or “Company”) “Customer
19 Savings Plan” proposal, as well as to the direct testimonies of Empire witnesses: David R.
20 Swain, Christopher D. Krygier, Todd Mooney and James McMahon.

I provide a general overview of Empire's proposal as well as background regarding Empire's recent regulatory activity in Missouri (e.g., pre and post-acquisition by Liberty Utilities). I also provide contextual background on the macro-level changes that have occurred in the past two years at the federal level regarding policy related to energy reliability, environmental compliance, and corporate and renewable tax policy. Finally, I will discuss the ongoing market transformation of the Southwest Power Pool ("SPP") and outstanding ancillary concern OPC has with Empire's proposal.

Q. What is OPC's position on Empire's plan?

A. Based on our review of the Company's proposal, OPC recommends that the Commission reject the "Customer's Savings Plan" due to the heightened risk to ratepayers and the uncertainty regarding the terms of the transaction. The espoused benefits to ratepayers appear both overstated and are dependent on modeling assumptions that do not fully reflect the changing regulatory and market landscape even since the initial filing.

This is a complicated case with many moving pieces made all the more worrisome because of the limited amount of time that has been afforded regulatory review. As such, OPC reserves the right to provide additional information and amended analysis in surrebuttal testimony based on our on-going review of the Company's proposal and responses to OPC's outstanding discovery requests.

II. OVERVIEW OF EMPIRE'S PROPOSAL

Q. Would you please provide some context for Empire's proposal?

A. Today, The Empire District Electric Company can claim to be both the cleanest *and* most expensive investor-owned utility ("IOU") in Missouri. The economic and regulatory imperative for the "Greening of Empire" that made it an attractive asset for Liberty Utilities to pay a 21% premium back in early 2016 has diminished considerably due to a combination of variables largely outside of its control. Those variables include the rejection of the Clean Power

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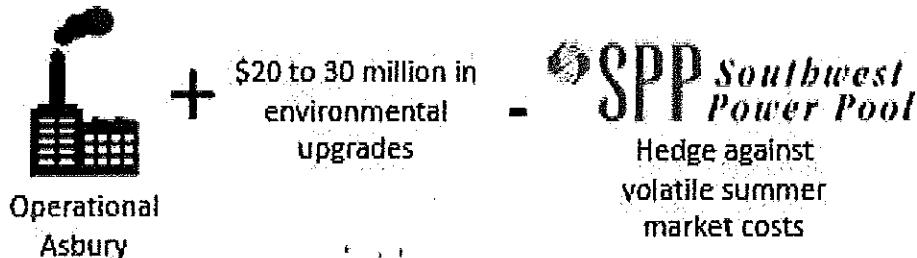
1 Plan, the approval of the Tax Cuts and Jobs Act of 2017, a market-run on wind generation in
2 the Southwest Power Pool (“SPP”), and flat load growth coupled with excessive sunk
3 environmental costs all of which reduce the window of opportunity that should otherwise exist
4 with the ability to acquire inexpensive intermittent wind generation due to the expiration of the
5 production and investment tax credits (“PTC” and “ITC”) and potential capital offset from a
6 tax equity partnership.

7 Make no mistake of it, what Empire is requesting here is unprecedented. The Commission
8 would be well advised to keep in mind the urgency (or scarcity) principle and have a healthy
9 degree of skepticism when it comes to regulatory requests that apply an “act now, limited time
10 only pressured sales pitch.”¹ Because of past managerial decisions, Empire cannot afford to
11 shift risk onto its ratepayers by locking them into a scenario where they would increasingly be
12 exposed to the uncertainty of excessive costs on the SPP market with an excessive amount of
13 generation capacity.

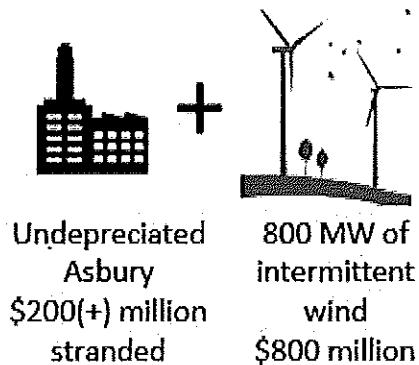
14 The decision in front of the Commission is not to build a coal *or* wind farm. The coal plant is
15 built. Nor does OPC believe this is merely a decision to retire Asbury and replace it with wind.
16 Instead, what is at stake is a complete departure from how Empire has operated to date—
17 namely, to provide safe and adequate service to meet its native load. Figures 1-3 provides a
18 breakdown of the stated and unstated investment and operational decisions for the
19 Commission’s consideration.

¹ See also Cialdini, R.B. (2006) *Influence: The Psychology of Persuasion*. Harvard Business.

1 Figure 1: Graphical illustration of Asbury generation to serve load (current state)



2 Figure 2: Graphical illustration of Company's proposed application



5 Figure 3: Graphical illustration of OPC's interpretation of Company's proposed application



The ratepayer "benefits" hoped to be obtained in this transaction are based on projecting assumptions far out into the future based on narrowly defined parameters. In contrast, the "benefits" to shareholders are guaranteed, at least in the short-term. OPC's greatest fear in this proposal is locking-in Empire's largely rural southwest Missouri ratepayers into volatile, excessive rates into the future.

1 There is also an opportunity cost in this proposal. Exposing Empire's ratepayers to volatile rate
2 increases based on speculative managerial decisions that are dependent, in part, on an SPP
3 market that is increasingly shedding its base load generation will make every future, necessary
4 regulatory cost required to provide safe and reliable service all the more difficult, which will
5 in turn, impact Empire's shareholders as well. The Commission should also consider the
6 regulatory credibility to Empire's customers that is on the line in relation to the magnitude of
7 the proposal compared to this fast-tracked procedural schedule.

8 Q. **Would you provide context for the magnitude of Empire's proposal?**

9 A. Empire proposes to spend, in conjunction with tax equity partner(s) (with the tax equity partner
10 typically covering 50 to 60 percent of the capital costs), \$1.5 billion to produce 800 MW of
11 nameplate capacity wind generation. Under the Company's Oct. 31, 2017 filing, the best-case
12 scenario (which includes annual rate cases) would yield up to \$325 million in cost savings to
13 Empire's retail customers over a 20-year period and \$607 million in savings on a 30-year
14 present-value revenue requirement ("PVRR") basis.² Empire is requesting to treat its capital
15 investment in wind in its rate base and recover the operating expenses related to it.

16 To accomplish the espoused savings, Empire requires the premature retirement of its Asbury
17 Generation facility. Empire is asking to recover the full undepreciated net book value of the
18 Asbury facility, or approximately \$200 million dollars. That excessive amount exists, in large
19 part, because Empire recently sought and was granted \$112.1 million in environmental retrofits
20 (excluding allowance for funds used during construction or "AFUDC") that would allow it to
21 remain operational for at least twenty more years. By retiring the Asbury facility prematurely,
22 Empire's retail customers would avoid having to pay expected environmental costs of up to

² Stated differently, Empire estimates that this will result in Missouri average residential customer savings of \$9.33 per month for the twenty year period. See Direct Testimony of Christopher D. Krygier p. 5, 1.

\$20 to \$30 million dollars related to proper disposal of residuals from coal combustion.³
However, recent US EPA draft rule proposals may temper these expected costs.⁴

Perhaps most importantly, Empire is seeking from the Commission a decisional prudence determination (or “pre-approval” in a non-pre-approval state) for the entirety of its application outside of rate case where all relevant factors can be considered and before the asset is proven to be used and useful. OPC sent DR-2007 to clarify Empire’s position on this matter. The question and subsequent response follows:

Question:

In his direct testimony Empire witness David. R. Swain, at p. 6, lines 18-22 states:

The Company is seeking approval of the fundamental concepts of the Customer Savings Plan given the magnitude of the investments involved. As the Commission and parties will understand, the Company would not embark on such a significant proposal without first obtaining approval of this blue print from its regulators.

- Is Empire seeking Missouri Public Service Commission pre-approval of its Plan? If not, what is Empire seeking?
- If Empire is not seeking Missouri Public Service Commission preapproval for its plan, then may stakeholders raise prudency issues regarding the plan in future Empire rate cases?

Response:

Empire is not requesting pre-approval of the Customer Savings Plan per se, but rather is seeking regulatory support and validation for its proposed framework.
(emphasis added) Specific authorizations from the Commission that the Company seeks are:

- a) Authorization to record its investment in, and the costs to operate, the Wind Projects as described in Empire Witness Mooney’s Direct Testimony, including a finding that Empire’s investment related to the Customer Savings Plan should not be excluded from Empire’s rate base on the ground that that the decision to proceed with the Plan was not prudent;

³ OPC witness John A. Robinett provides testimony regarding Empire’s varying estimates of the cost of meeting the disposal requirements.

⁴ US EPA (2018) Oklahoma: Approval of state coal combustion residuals state permit program. Proposed rule <https://www.federalregister.gov/documents/2018/01/16/2018-00474/oklahoma-approval-of-state-coal-combustion-residuals-state-permit-program>

- b) Authorization to create a regulatory asset for the undepreciated balance of the Asbury facility, as described in Empire Witness Sager's Direct Testimony, so that it may be considered for rate base treatment in subsequent rate cases;
 - c) Approval of depreciation rates as described in Empire Witness Watson's testimony, so that depreciation can begin as soon as the assets are placed in service;
 - d) Approval of the arrangements between Empire and affiliates necessary to implement the Customer Savings Plan, to the extent necessary;
 - e) Issuance of an order that is effective by June 30, 2018, so that Empire can take advantage of a limited window of opportunity to bring these savings to customers; and
 - f) For such other and further relief as may be appropriate.

In essence, these approvals will provide a framework against which Empire could be judged for prudence in a later case.

Responsible person(s): Christopher D. Krygier⁵ (emphasis added)

Missouri is not a pre-approval state and neither Empire nor this Commission can bind future Commissions on the prudence of Empire's past managerial decisions.

Masquerading this request as merely “regulatory support and validation” or a “framework” does not nullify what Empire is ultimately seeking from this Commission—pre-approval.

Q. How long has Empire given regulators and OPC to review and analyze its proposal before filing rebuttal testimony?

A. Empire filed its case in chief on October 31, 2017. Exactly ninety-nine days later, spanning two major holidays (Thanksgiving and Christmas) and in the middle of an unusually large volume of regulatory filings, regulators and advocates are charged with filing their

⁵ See also GM-2

recommendations on Empire's proposal to the Commission in their rebuttal testimony. The slashed regulatory procedural schedule coupled with the magnitude of costs at stake by itself should give the Commission pause. But it is also important to keep in mind that during that same approximate 3-month timespan a number of key assumptions to the initial proposal have become increasingly less certain. Most notably, the passage of the Tax Cuts and Jobs Act of 2017 which includes a corporate tax rate reduction from 35% to 21% and a base erosion anti-abuse tax ("BEAT") provision for multinational corporations, both of which will impact the terms and/or potential number of available tax equity partners with which to enter into a tax equity partnership agreement. This testimony will address these and other key variables the Commission should take into consideration when assessing Empire's proposal. In short, the proposal and espoused benefits have already been diminished in the brief time that has elapsed since Empire filed its proposal less than a hundred days ago which calls into question the validity of projected "benefit" assumptions twenty or thirty years out into the future.

III. RECENT REGULATORY ACTIONS: 2013 - PRESENT

Q. Were you involved in regulatory proceedings in Missouri surrounding Empire's environmental retrofits to the Asbury Power Plant?

A. Yes. I participated in Empire's triennial integrated resource planning ("IRP") filing in Case No. EO-2013-0547 as well as the Company's subsequent rate cases where those costs were recovered in rates, Case Nos. ER-2014-0351 and ER-2016-0023.

Q. Was Empire's decision to invest in the environmental retrofits at Asbury prudent?

A. I believe so. The environmental retrofits were a necessary addition to ensure Empire could provide safe and reliable energy for twenty or more years. For a variety of reasons, but mostly due to the cost impact to ratepayers, Empire did not select alternative plans that included renewable generation and/or demand-side management options.⁶

⁶ Empire's plan would also include the \$168 million dollar investment for the Unit 12 Combined Cycle project at its Riverton Power Plant. Both investments were made as part of Empire's least-cost resource plan to meet the Environmental Protection Agency ("EPA") mandates related to mercury, sulfur dioxide, and particulate matter.

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1 Q. When it was made would Empire's decision to invest in environmental retrofits been
2 prudent if Asbury was only going to be in service for another five years?

3 A. No.

4 Q. Did Empire's electric rates increase over the past decade before Liberty acquired it?

5 A. Yes. Ratepayers have experienced a compounded increase in rates of 62.23% over the past
6 ten years before Liberty acquired Empire in 2016 as shown in Table 1.

7 Table 1: Empire rate case history 2007-2016

Case Number	Dollar Value	Percent Increase
ER-2006-0315	\$29,300,000	9.96%
ER-2008-0093	\$22,040,395	6.70%
ER-2010-0130	\$46,800,000	13.90%
ER-2011-0004	\$18,685,000	4.70%
ER-2012-0345	\$27,500,000	6.85%
ER-2014-0351	\$17,125,000	3.88%
ER-2016-0023	\$20,400,000	4.46%
Total Dollars	\$181,850,395	
Total Compounded Increase		62.23%

8
9 Q. Were you involved in the Missouri case where Liberty sought Commission authority to
10 acquire Empire?

11 A. Yes. I filed rebuttal and surrebuttal testimony on behalf of Public Counsel in Case No. EM-
12 2016-0213.

13 Q. Did Liberty Utilities file testimony to support that the acquisition would not negatively
14 impact Empire's rates?

15 A. Yes. For example, regarding the impact on Empire's customer's rates, the following assertions
16 were made by the joint applicants in their direct testimony.

- 1 • President and Chief Executive Officer of Empire, Brad Beecher⁷
 - 2 ▪ *Empire's customers will see no change in their . . . rates.*⁸
- 3 • President of Liberty Utilities (Canada) Corp. David Pasieka
 - 4 ▪ *We are confident that . . . the current operations will continue as they exist*
5 *today and only the ownership of Empire's shares will change hands.*⁹
- 6 • Director of Regulatory and Government Affairs for Liberty Service Corp., Christopher
7 D. Krygier
 - 8 ▪ *The proposed transaction will not result in any change in the rates currently*
9 *charged to Empire's retail customers.*¹⁰

10 Q. Did Liberty Utilities make any claims about "greening" Empire's generation profile in
11 Case No. EM-2016-0213?

12 A. Neither Liberty nor Empire made any statements supporting that narrative in their filing.
13 However, certain interveners supported the acquisition, in part, because of Liberty's,
14 "experience" with renewables. For example, the Missouri Division of Energy ("DE") witness
15 Martin R. Hyman provided the following Q & A in his rebuttal testimony:

16 Q. What does DE recommend based on these observations?

17 A. DE agrees with Mr. Pasieka and Mr. Krygier that the Applicants appear well-
18 positioned to use Algonquin's renewable energy resource development expertise to the
19 benefit of EDE. To solidify these benefits, DE supports a commitment by the
20 Applicants to consider the development of renewable energy resources for EDE in
21 Missouri. (emphasis in original)¹¹

22 Q. What was OPC's response to DE's assertion in that case?

23 A. I responded to Mr. Hyman in my surrebuttal testimony as follows:

⁷ Mr. Beecher, along with many of Empire's pre-acquisition leadership, is no longer employed with Empire.

⁸ EM-2016-0213 Direct Testimony of Brad Beecher, p. 7, 4

⁹ EM-2016-0213 Direct Testimony of David Pasieka, p. 14, 16-18

¹⁰ EM-2016-0213 Direct Testimony of Christopher D. Krygier p. 9, 6-7.

¹¹ EM-2016-0213 Rebuttal Testimony of Martin R. Hyman p. 11, 3-6.

No. This observation is grossly misleading and entirely speculative at best. Mr. Hyman offers no definition of “renewable energy resource development expertise,” assumes renewable energy is a “benefit” to ratepayers, and makes no attempt to address the regulatory, market, and resource-constrained realities in which Empire currently operates. In short, Mr. Hyman’s proclamation is without context. For example, approval of the merger would not change the fact Empire has just added an additional 100MW in capacity in its Riverton 12 combined cycle unit. Moreover, according to Empire’s recently filed triennial IRP, there will be no need for a MEEIA^[12] and no need for future capacity until 2029^[13] . . . Even if Empire needed to build additional capacity (which they do not), there is no guarantee that renewable capacity would be the preferred generation, the prudent choice, or the least cost option. It is OPC’s position ratepayers should not have to pay for any additional capacity in the near future. This is especially true considering ratepayers have experienced a compounded increase in rates of 62.23% over the past ten years.^[14] (emphasis not in original cited testimony)

Q. Did Liberty Utilities parent, Algonquin, make any claims about “greening” Empire’s generation profile outside the context of Case No. EM-2016-0213?

A. Yes. Before this Commission approved acquisition, Algonquin/Liberty had clearly identified Empire as an opportunity for significant capital investment in renewable generation, driven in large part by pending federal regulatory compliance in the form of the Clean Power Plan (“CPP”). During Algonquin Power & Utilities Q1 2016 Results – Earnings Call, CEO Ian Robertson had the following exchanges with analysts on the investment opportunities present in Empire:

^[12] EO-2016-0223 The Empire District Electric Company Triennial Compliance Filing. Volume 7 Resource Acquisition Strategy Selection 7-8: “Empire’s decision makers have selected Plan 5 as the Preferred Plan. Plan 5 contains no Missouri DSM portfolio and supply-side resources are not added until the latter part of the study period.”

^[13] EO-2016-0223. The Empire District Electric Company Triennial Compliance Filing. Volume 7 Resource Acquisition Strategy Selection 7-9.

^[14] EM-2016-0213 Surrebuttal Testimony of Geoff Marke p. 4, 11-19 and p. 5, 3-8.

4 May 13th, 2016 10:00AM ET

5 **Rupert Merer [analyst]**

6 So with the IPP [independent power producer or non-utility generator] business, you
7 talked a little in your comments about potential for growth there. Do you see that
8 growing from 25% of the business to something bigger again? How do you view the
9 future opportunities, thinking maybe a little more long-term?

10 **Ian Robertson [Chief Executive Officer, Algonquin Power & Utilities Corp.]**

11 And as I've often articulated, one of the huge benefits of bringing Empire into the
12 Algonquin portfolio is that, we will call it the headroom. It's occasioned by that
13 in terms of being able to grow the IPP business. (emphasis added)

14 We obviously love the opportunity where our entrepreneurial spirit can be brought to
15 surface opportunities in the IPP business. So you should definitely expect us to be sort
16 of continually aggressive on finding IPP opportunities. As I mentioned earlier, I think
17 the tailwinds for the sector are quite strong, with the extension of the PTCs and the
18 ITCs.

19 I think the continued environmental pressures, and maybe most importantly, the
20 continued economic trends that make wind, certainly today, and solar, hopefully
21 tomorrow, just the economic choice for providing new energy.

22 So Rupert, the foot is not coming off the gas pedal at all on the IPP side of the business,
23 and we're certainly, you would expect to see that pendulum quite happily swing back
24 toward the 50/50, unless of course we can keep growing the utility business and keep
25 it there. But no way are we taking our foot off the gas on the IPP side. . . .

26 **Eric Tang [analyst]**

1 That answers it fair enough. Just going back to the Empire acquisition. What is your
2 long-term accretion, I guess target budget for beyond three years? Do you have a target
3 in mind at the moment?

1 **Ian Robertson**

2 From an accretion point of view, three years out, obviously we are hoping to bring
3 more to the investment opportunity that was clearly in the portfolio of CapEx that was
4 reflected in our acquisition numbers.

5 Those were numbers that were frankly cribbed from the existing Empire management
6 team. This gets back to the comment earlier where our real objective is to make sure
7 that one plus one equals more than two in terms of being able to find growth
8 opportunities. We've talked about them in the past, this idea of greening the
9 Empire portfolio. The idea of bringing more natural gas and renewables to the Empire
10 mix. Those are all part of the longer-term thesis associated with this opportunity.
11 (emphasis added)¹⁵

12 Q. Did Algonquin/Liberty express similar public sentiment after the Missouri Commission
13 approved the acquisition of Empire?

14 A. Yes. As shown in Figure 4 and Figure 5 from the Algonquin Power & Utilities Corp.
15 Investor Presentation on November 8, 2016 at the 51st EEI ("Edison Electric
16 Institute") Financial Conference in Phoenix, Arizona.

¹⁵ Seeking Alpha (2016) Algonquin Power & Utilities (AQUNF) CEO Ian Robertson on Q1 2016 Results—Earnings Call Transcript. <https://seekingalpha.com/article/3974966-algonquin-power-and-utilities-aqunf-ceo-ian-robertson-q1-2016-results-earnings-call>

1 Figure 4: Greening of Empire Portfolio (Nov. 8th, 2016)

Algonquin & Empire – Better Together



Strategic Rationale

- ✓ Accretive transaction for per share earnings and cash flows. Consistent with Algonquin's targeted 10% dividend CAGR
- ✓ Scale: Operational and financial efficacies of scale across regulated business
- ✓ Greening of EDE Portfolio: Pursuit of investment in coal replacement/ displacement with renewables and natural gas
- ✓ Draws on our renewables expertise for potential replacement of market sourced energy with development of rate based renewable generation
- ✓ Facilitation of Growth: Creates opportunities for further mid-west investment

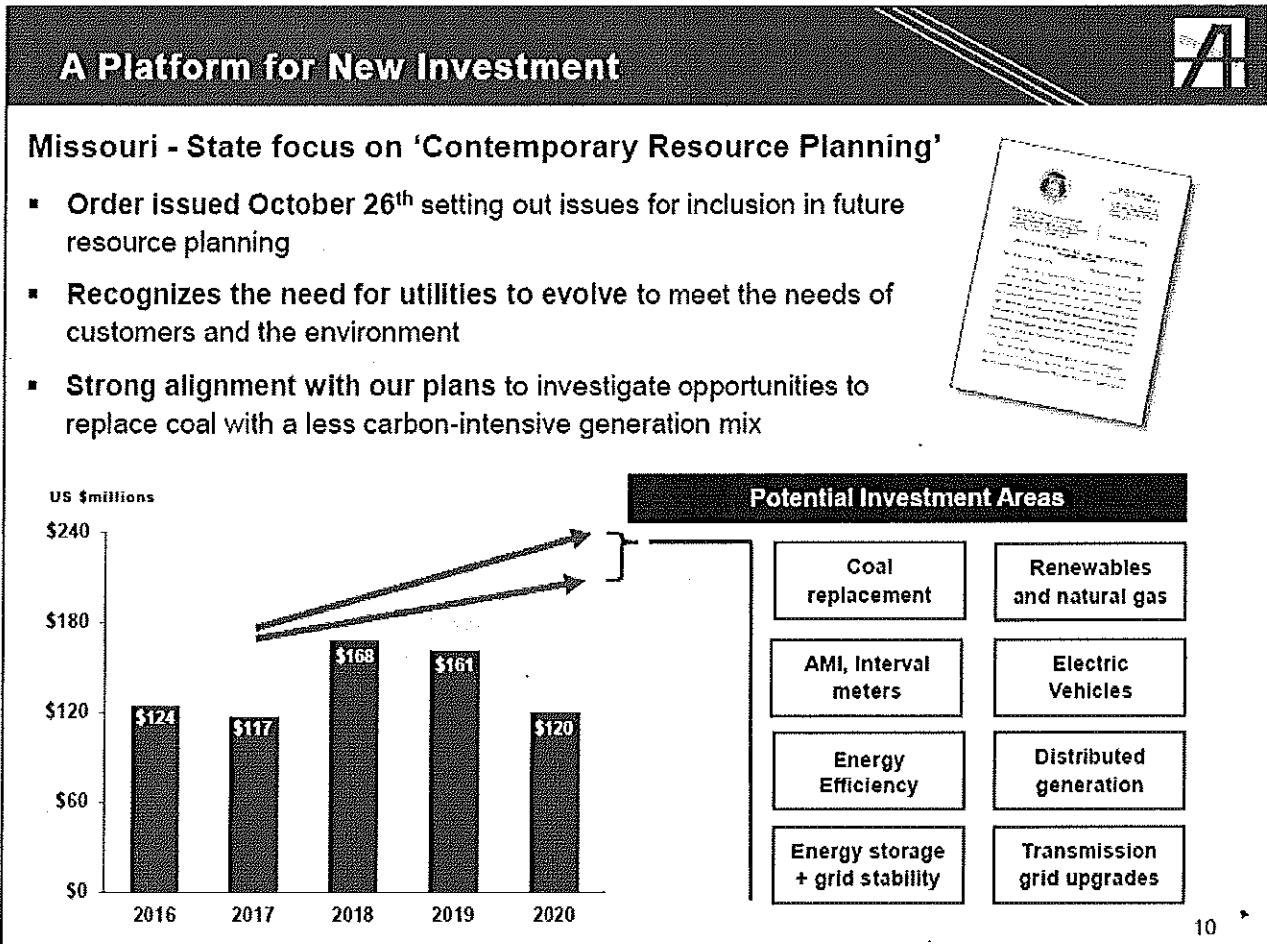
Feb 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017
Transaction Announced	Regulatory approval process		Transaction Close	
	<ul style="list-style-type: none">✓ FERC – Approval received✓ Oklahoma – Approval received✓ Empire Shareholders – Approval received (95.5% in favour)✓ Missouri – PSC approval received, Order effective Oct. 7✓ Arkansas – PUC Stipulation Agreement filed<input type="checkbox"/> Kansas – Final approval no later than January 10th, 2017			

**Kansas is our final
required approval**

2

9

1 Figure 5: A Platform for New Investment (Nov. 8th, 2016)



- 2
- 3 Q. Has Empire made any public statements regarding whether or not its Customer
4 Savings Plan is the result of Algonquin/Liberty acquiring it?
- 5 A. Yes. Empire's homepage contains a section titled "Local Wind Energy: A Path to Customer
6 Savings" and includes a link to a FAQ sheet.¹⁶ On the sheet appears the following:
7 **Is this project the result of the acquisition by Algonquin/Liberty Utilities?**
8 No. The Integrated Resource Plan prepared and filed by Empire prior to the acquisition
9 considered the addition of low-cost wind in the near term. This is an example of how

16 Empire District Electric (2018). Local Wind: A Path to Customer Savings. <https://www.empiredistrict.com/Wind>

1 we regularly evaluate opportunities to improve efficiency and proactively respond to
2 market and technology changes.¹⁷

3 **Q. Does OPC agree with this Empire FAQ sheet statement?**

4 A. No. Based on comments by Algonquin CEO Ian Robertson and shareholder presentations
5 pre- and post-acquisition it appears as though the Liberty/Algonquin acquisition of Empire
6 was always predicated on the ability to strand Empire's historical investments in reliable
7 generation to meet its native load and to build up Empire's rate base with intermittent
8 generation.

9 **Q. Please summarize OPC's concern as it relates to your summary of Empire's regulatory
10 activity and environment over the last few years.**

11 A. The Canadian utility Algonquin/Liberty paid a 21% premium to acquire a small investor-
12 owned electric utility in southwest Missouri whose customers were weathering frequent and
13 costly rate increases, but were assured that Empire would not need additional large capital
14 additions to meet their needs for a time. With that acquisition, Algonquin/Liberty obtained a
15 utility that was both long on capacity and already heavily invested in meeting future
16 environmental compliance regulations. In short, there was very little "headroom" for additional
17 investment or growth.

18 In early 2016, the Clean Power Plan seemed like a regulatory inevitability and made Empire
19 an attractive asset to obtain. By the end 2016, the federal government had all but abandoned
20 the sweeping regulatory reform. Today, Empire is still the cleanest *and* most expensive IOU
21 ("investor-owned utility") in Missouri, but the regulatory imperative to shift a greater cost
22 uncertainty onto its ratepayers in exchange for renewables has declined.

23 Empire is also the smallest electric IOU (with approximately 150,000 customers in Missouri)
24 and consequently the most susceptible to price volatility if managerial decisions prove to be
25 inaccurate. Cooler heads should prevail and recognize all of the variables at play here. Simply

¹⁷ Ibid.

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1 put; Empire's customers cannot afford a billion dollar mistake. More importantly, they should
2 not be forced to take on a billion dollar gamble when they have no need to.

3 Similar sentiment has been echoed in the public comments by former Empire employees, for
4 example:

5 Public Comment No. P201800823

6 Yesterday, it was made public knowledge that Empire District Electric Company, now
7 under the control of Algonquin Power & Utilities Corporation intends to shut down or
8 divest their interests in the Asbury Generating station in Asbury, MO. Having worked
9 for the utility, I have been aware of their desire to close this plant shortly after the deal
10 was announced to sell to Algonquin. Roughly two years ago, Empire spent
11 approximately \$110 million to perform an environmental retrofit of this facility to
12 add/expand an Air Quality Control System (AQCS). In shutting down this facility, this
13 constitutes gross misconduct on behalf of the utility in the rate making process. Empire,
14 due to two recent and costly capital projects enjoys the highest rates in Missouri.

15 Empire now desires, and has desired, to construct all renewable energy and move away
16 from a carbon footprint altogether which will likely result in future closures. It is
17 distressing to see a utility place such a high emphasis on unreliable and costly sources
18 of energy.

19 I strongly encourage the commission to file an involuntary rate case/intervene in this
20 matter against Empire and seek reduction to their previously awarded rate increase in
21 an effort to better serve the citizens and rate payers the commission is designed to
22 protect from such unethical business practices.

23 Spencer Harding, Joplin, MO.

IV. FEDERAL REGULATORY UNCERTAINTY AND EMPIRE'S PLAN

Environmental Regulation

Q. What has recently occurred with regard to federal environmental regulations that are relevant to this case?

A. There have been a number of federal environmental regulations relevant to Asbury that have either been withdrawn or are actively under review in the first year of the Trump administration, including (but not limited to):

- Lifting a freeze on new coal leases on public lands;¹⁸
- Withdraw guidance for federal agencies to include greenhouse gas emissions in environmental reviews;¹⁹
- Reversed a proposed rule that mines prove they can pay for cleanup;²⁰
- Proposed repeal of the Clean Power Plan;²¹
- Announced intent to withdraw the United States from the Paris climate agreement;²²
- Reviewing limits on toxic discharge from power plants into public waterways;²³
- Reviewing rules regulating coal ash waste from power plants;²⁴ and

¹⁸Henry, D. (2017) Trump administration ends Obama's coal-leasing freeze. *The Hill*

<http://thehill.com/policy/energy-environment/326375-interior-department-ends-obamas-coal-leasing-freeze>

¹⁹ Trump, D.J. (2017) Presidential executive order on promoting energy independence and economic growth.

<https://www.whitehouse.gov/presidential-actions/presidential-executive-order-promoting-energy-independence-economic-growth/>

²⁰ Brown, M. (2017) US officials drop mining cleanup rule after industry objects. *US News*

<https://www.usnews.com/news/best-states/montana/articles/2017-12-01/us-officials-drop-mining-cleanup-rule-after-industry-objects>

²¹ US EPA (2018) Electric utility generating units: Repealing the Clean Power Plan <https://www.epa.gov/stationary-sources-air-pollution/electric-utility-generating-units-repealing-clean-power-plan>

²² Reuters (2017) US submits formal notice of withdrawal from Paris climate pact.

<https://www.reuters.com/article/us-un-climate-usa-paris/u-s-submits-formal-notice-of-withdrawal-from-paris-climate-pact-idUSKBN1AK2FM>

²³ US EPA (2017) EPA finalizes rule to postpone steam electric power plant effluent guidelines rule.

<https://www.epa.gov/newsreleases/epa-finalizes-rule-postpone-steam-electric-power-plant-effluent-guidelines-rule>

²⁴ Dennis B. & J. Eilperin (2017) EPA will reconsider Obama-era safeguards on coal waste. *The Washington Post*

https://www.washingtonpost.com/news/energy-environment/wp/2017/09/14/epa-will-reconsider-obama-era-safeguards-on-coal-waste/?utm_term=.e0ac64874ca3

- 1 • Reviewing emissions standards for new, modified and reconstructed power plants.²⁵

2 Based on recent precedence, it would not be an unreasonable assumption that further repeal of
3 environmental regulations related to electric generating units in the future are likely. It should
4 be noted that *all* of the aforementioned actions have been undertaken since Liberty's
5 acquisition of Empire. More to the point, it is now, not entirely clear if Asbury's upcoming
6 \$20-30 million in coal ash waste costs should be adjusted in light of pending EPA rule
7 proposals.²⁶

8 **Corporate Tax Reform**

9 **Q. Generally, what is the Tax Cuts and Jobs Act of 2007 and how may it impact potential
10 tax equity partners?**

11 A. On December 22, 2017, President Trump signed the Tax Cuts and Jobs Act of 2017, the
12 first major reform of the United States tax code since 1986. Beginning in 2018, the federal
13 corporate income tax rate has been reduced from 35% to 21%. This rate reduction means that
14 US corporations will pay significantly less federal income tax; consequently, the supply of
15 viable tax equity partners "appetite" to enter into projects will decline. Importantly, the rate
16 reduction means sponsors of wind projects will be able to raise less tax equity as depreciation
17 deductions are worth only \$.21 per dollar of deduction rather than \$.35 per dollar.²⁷

18 Additionally, the Base Erosion Anti-Avoidance Tax ("BEAT") provision targets "earning
19 stripping deals" between US corporations and related parties in foreign jurisdictions. This is
20 relevant to the tax equity industry because some tax equity investors are banks or insurance
21 companies with foreign parents or significant foreign operations. In sum, the market for tax

²⁵ US EPA (2017) Review of the standards of performance for greenhouse gas emissions from new, modified, and reconstructed stationary sources: electric generating units.

<https://www.federalregister.gov/documents/2017/04/04/2017-06519/review-of-the-standards-of-performance-for-greenhouse-gas-emissions-from-new-modified-and>

²⁶ US EPA (2018) Oklahoma: Approval of state coal combustion residuals state permit program. Proposed rule
<https://www.federalregister.gov/documents/2018/01/16/2018-00474/oklahoma-approval-of-state-coal-combustion-residuals-state-permit-program>

²⁷ Nixon Peabody. (2018) Tax Cuts and Jobs Act of 2017: effect on tax equity transactions.
<https://www.nixonpeabody.com/-/media/Files/Alerts/2018-January/tax-reform-tax-equity-05jan18.ashx>

1 equity partners and projects has tightened as potential partners now have fewer liabilities and
2 therefore less need to find ways to reduce their tax bills.

3 OPC is concerned with the uncertainty of Empire's Customer Savings Plan, in part because
4 both Empire's assumptions for the plan and the discussions to date with potential partners
5 occurred pre-tax reform. A question the Commission should consider is not just whether or
6 not Empire can attract viable partners, *but* under what terms moving forward? At face value,
7 it would appear that Empire has lost some degree of negotiating leverage by a constricted
8 market which would have an impact on the purported benefits that could be achieved.²⁸

9 **V. SOUTHWEST POWER POOL MARKET ACTIVITY AND EMPIRE'S
10 MODELING**

11 Q. **Has SPP experienced an increase in negative price intervals?**

12 A. Yes. According to the State of the Market Fall 2017 (January 22, 2018) Special Issues
13 section:

14 **Negative Prices**

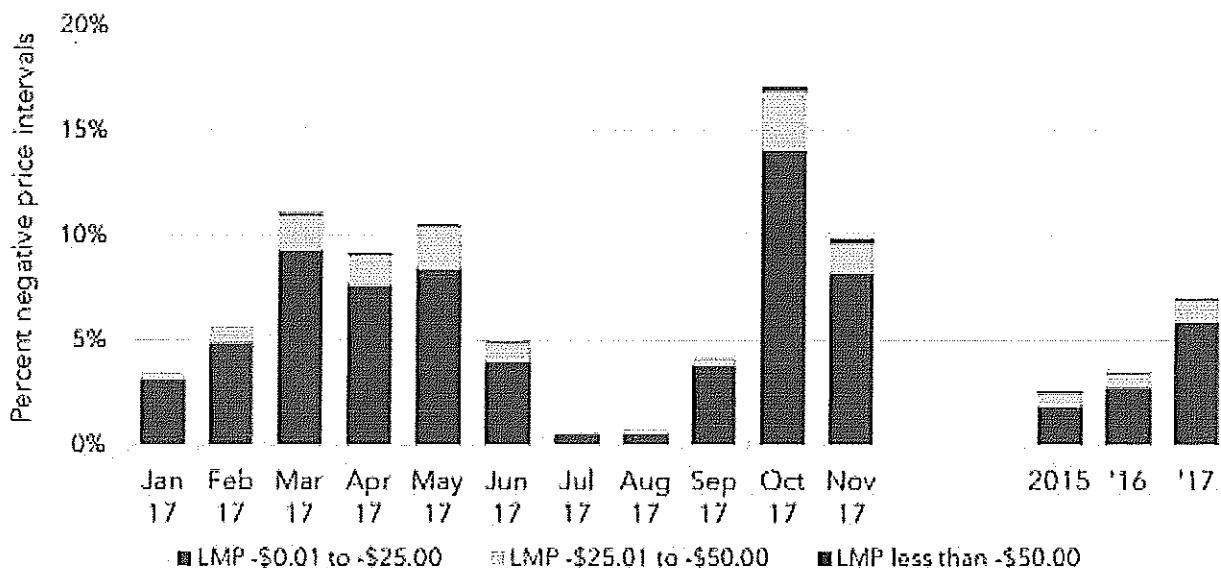
15 With the prolific growth of wind generation in the SPP market, the number of
16 intervals with negative prices continues to increase. In October 2017, 17 percent of all
17 market participants intervals in the real-time market had prices below zero, as shown
18 in Figure 6-1 below. On a year-to-year basis, the total percentage of negative
19 price intervals in the real time market has increased from 2.6 percent in 2015, to
20 3.5 percent in 2016, and to 7.0 percent in 2017 (through November).²⁹ (emphasis
21 added)

²⁸ OPC witness John Riley discusses tax equity concerns in greater detail in his testimony.

²⁹ Southwest Power Pool (2018) State of the Market: Fall 2017 P. 42.

https://www.spp.org/documents/56353/spp_mmu_quarterly_fall_2017_v2.pdf

Figure 6–1 Negative price intervals, real-time, monthly



Negative prices can occur when renewable resources need to be backed down in order for traditional resources to meet their scheduled generation. According to SPP's Market Monitor, unit commitment differences, the significant increase in the level of renewable generation, and the abundance of capacity will likely lead to changes in market rules to address self-committing of resources in the day-ahead market.³⁰ It is not clear how market rule changes would impact Empire's Customer Savings Plan assumptions.

Q. Is there reason to believe negative prices will continue in the near future?

- A. I believe so. And this underscores one of OPC's primary concerns with Empire's modeling efforts to date. Namely, that Empire has understated the amount of wind generation likely to come on line in SPP in the near future and failed to properly model for the influx (or virtually any) of negative prices accompanying that wind generation.

³⁰ Ibid. p. 45-46.

1 **Q Did Empire model a high wind, low coal scenario?**

2 A. Not in its initial re-analysis of its 2016 IRP or in what is reflected in its Customer Savings Plan
3 expected benefits results that it filed in this case. It did, however, model such a scenario based
4 on a request in discovery conferences with OPC since that filing.

5 **Q What were the results?**

6 A. OPC has only recently received the Charles Rivers and Associates (“CRA”) model in response
7 to our request, and we are still in the process of analyzing the results. That being said, we do
8 not believe the model’s “high wind” or “low coal” scenarios are unrealistically conservative
9 assumptions.

10 **Q. Please explain.**

11 A. The amount of wind coming on line or expected to come on line in SPP’s footprint is being
12 announced quicker than CRA’s modeling accounts for. To provide an illustrative example,
13 Kansas City Power and Light (“KCPL”) recently announced it had executed power purchase
14 agreements for 100% of the output from two new wind facilities totaling 444MW of nameplate
15 capacity including:

- 16 • Pratt Wind, 244 MW, located in Pratt County, KS, with an expected online date by
17 December 31, 2018; and
- 18 • Prairie Queen, 200 MW, located in Allen County, KS, with an expected online date by
19 June 1, 2019.³¹

20 Contrast this announcement with Empire’s modeling of “Wind Farm Probabilities” which lists
21 the following “potential” wind projects located in Kansas shown in Table 2 below.

³¹ See EO-2017-0230 and EO-2017-0229

1 Table 2: Expected, weighted wind projects in Kansas per Empire's modeling scenarios

Plant Name	State	Phase Status	Date	Nameplate capacity	Last reference date	Weighted probability
Cimarron Bend Wind	Kansas	Proposed	12/31/18	200 MW	8/30/2016	10%
Jayhawk Wind	Kansas	Proposed	12/31/18	300 MW	4/14/2017	30%
Neosho Ridge Wind	Kansas	Proposed	12/31/18	300 MW	7/1/2017	30%
Reading Wind Project	Kansas	Proposed	12/1/18	130.5MW	4/1/2017	30%
Ringneck Prairie Wind	Kansas	Permitted	12/31/20	70MW	4/14/2017	50%
Rush County	Kansas	Proposed	11/30/2018	99MW	6/7/2017	10%
Salt Springs	Kansas	Proposed	1/31/2020	200MW	3/24/2017	50%

2 The Commission should note several items from this list. First, the 444MW of expected wind
 3 generation for which KCPL has executed contracts on is not considered in Empire's modeling.
 4 Second, of the seven listed Kansas wind projects, only two of them are weighted with a 50%
 5 chance of actually being completed. Third, the last reference date to confirm the status of a
 6 Kansas wind project is July 1, 2017.

7 **Q. Can you provide additional illustrative examples?**

- 8 A. Yes. The two largest "potential" wind projects in Empire's modeling assumptions include the
 9 following shown in Table 3:

10 Table 3: Two largest wind projects listed in Empire's modeling scenarios

Plant Name	State	Phase Status	Date	Nameplate capacity	Last reference date	Weighted probability
Dakota Community Wind	South Dakota	Proposed	12/31/18	1000 MW	3/5/2015	10%
Wind Catcher Energy Connection	Oklahoma	App pending	10/30/20	2000 MW	10/16/2017	50%

11
 12 These two projects combine for potentially 3GW of wind energy in the SPP footprint.
 13 However, Empire's model assumes only 1.1GW of wind per its weighted probability.

1 **Q. Do you disagree with Empire's assumptions?**

2 A. Not necessarily. Instead I am merely presenting this to illustrate that the potential margin for
3 error in the range of wind generation addition assumptions is both quite large and not
4 particularly up-to-date. The second largest wind project in Empire's modeling assumption is
5 given a weighted probability of 10% and was last referenced on March 15, 2015.

6 **Q. Do you have any concerns with Empire's modeling inputs?**

7 A. Consider two additional inputs that are currently absent in Empire's modeling. Neither the
8 retirement of Asbury nor the expected 800 MW of wind associated with its Customer
9 Savings Plan are factored into the modeling. To understand why, consider that CRA is
10 relying on the best known announced coal retirements since September 15, 2017.³²
11 Empire did not publicly announce its plans to retire Asbury until October 31st. And, since
12 then other coal plants within the SPP footprint have made formal announcements to retire,
13 such as Centennial Hardin Generating Station in Big Horn Montana.³³

14 As the Renewable Electricity PTC and ITC phase down continues it is likely much more
15 wind generation will come on line in the near-term (assuming additional transmission
16 lines and upgrades to existing infrastructure are approved). The inundation of inexpensive
17 wind and SPP's lowering of its planning reserve margin, combined with flat load growth
18 have created a perfect storm of opportunity to strongly consider accelerating and
19 expanding the retirement of inexpensive, inefficient generating units. This is true not just
20 for Empire, but for every SPP member. OPC's concern regarding the Customer Savings
21 Plan and the dynamic SPP market centers on the likely reactions from other market
22 participants from these very same price signals.

23 In short, if Empire's modeling suggests retiring significant amounts of base load
24 generation prematurely is prudent, then other SPP members modeling will show similar

³² The last date in which they obtained data on coal and wind generating units in the SPP footprint.

³³ Hudson, M. (2017) Owners of Hardin coal-fired power plant announce exit in 2018. *Billings Gazette*.

http://billingsgazette.com/news/state-and-regional/montana/owners-of-hardin-coal-fired-power-plant-announce-exit-in/article_d7361054-cbfa-5d3b-81df-f9cff8e87a3c.html

1 results. Under these circumstances, a near-term future where excess SPP reserve margins
2 are erased entirely appears plausible, which would mean that during high demand hours
3 (in the summer when it is not windy) there will likely be significant residual effects—
4 namely higher cost generating units coming online than what would be predicted in a
5 modeling exercise that does not account for other market actors' reactions.

6 **Q. What would happen if the amount of wind on SPP's system doubled or even tripled?**

7 A. According to a recent Department of Energy report from Berkeley and Argonne National
8 Laboratories:

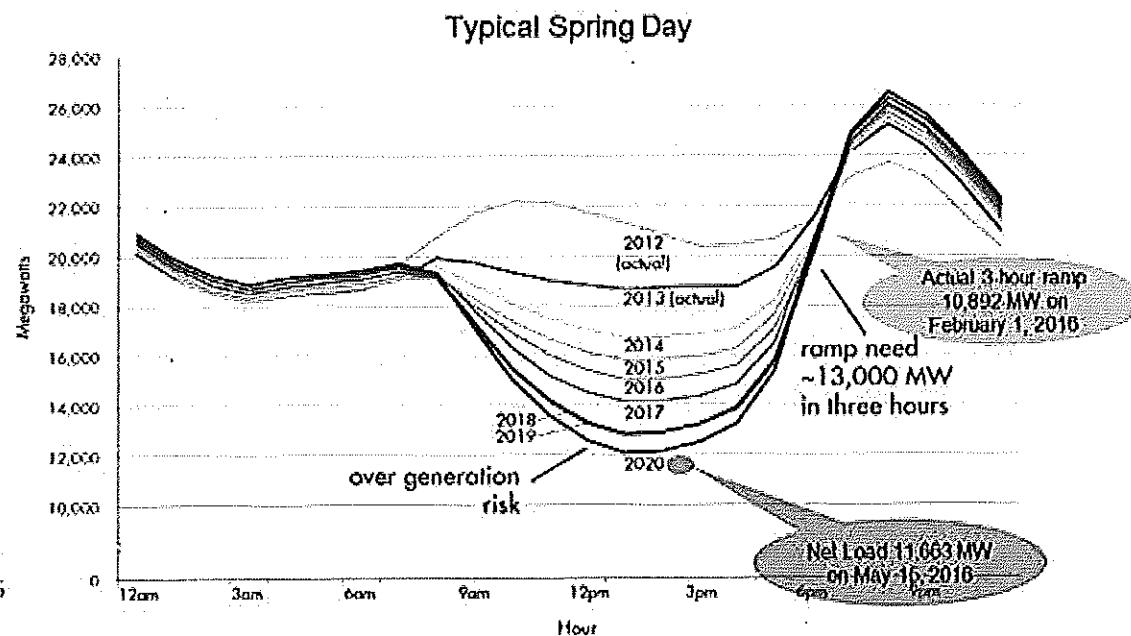
9 The system value of wind is lower than PV [photovoltaic or solar] at low
10 penetrations. The temporal patterns of wind production lead to system values that
11 tends to be relatively similar to, though often somewhat lower than that of, a flat
12 baseload block at low penetrations: a value factor of ~90% is not uncommon. This
13 system value is well below that for PV in summer-peaking energy systems.

14 As penetrations increase, the system value of wind declines, but at a relatively
15 slower rate than PV.³⁴ (emphasis in original)

16 Stated differently, absent strong interconnection, transmission and battery storage (amongst
17 other likely complementary investments), at a certain threshold, excessive wind generation
18 results in diminishing returns in terms of system value. One need look no further than
19 California to see what happens when there is excessive variable renewable energy online. The
20 intermittent nature of the non-dispatchable resource enhances prices volatility as seen after the
21 influx of solar was placed on California's grid and illustrated in the now infamous "duck curve"
22 as seen in Figure 7.

³⁴ Wiser, et al. (2017) Impacts of variable renewable energy on bulk power system assets, pricing, and costs. Electricity Markets & Policy Group. Berkeley Lab. p. 74 <https://emp.lbl.gov/publications/impacts-variable-renewable-energy>

1 Figure 7: California's "duck curve" shows steep ramping needs and over-generation risk³⁵



2
3 Q. Does OPC oppose wind generation?

4 A. Absolutely not. OPC supports an "all of the above" portfolio of generation to meet customers'
5 load and insulate ratepayers as much as possible from price volatility. Wind generation is an
6 essential component to that diverse portfolio, and will no doubt continue to play an increasingly
7 greater role for all of our utilities in the future.

8 V. ANCILLARY CONSIDERATIONS

9 Conservation Impact

10 Q. Does wind generation have a negative impact on the environment?

11 A. Not relative to fossil fuel power plants. That being said, wind generation has directly resulted
12 in millions of fatalities of bird and bat populations every year. The data behind these

³⁵California ISO (2016) Fast Facts: What the duck curve tells us about managing a green grid.
https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

estimates has become a source of some controversy.³⁶ In at least one case, wind developers sued to prevent the mortality data from being released to the public.³⁷

Q. Why are birds and bats important?

A. For many reasons that are beyond the scope of this testimony. OPC merely advances that both birds and bats play an integral part in Missouri's ecosystem and economy. Their role in this decision should also be considered in assessing the full range of impacts over the full life-cycle of this \$1.5 billion capital investment.³⁸

Q. Does OPC have a position on the bird and bat populations in relation to Empire's proposal?

A. Not at the moment. OPC just received responses to discovery from the Company regarding bird and bat prevailing wind studies, migratory impact surveys, feasibility in siting locations and mortality data disclosure. OPC is also actively seeking out feedback from experts in this field to better inform our position. We reserve the right to file recommendations in surrebuttal testimony if need be.

Customer Savings Plan Alternative

Q. Do you have any final comments?

A. Empire has chosen to title its proposal the "Customer Savings Plan" and requested expedited approval outside of a rate case. OPC has articulated our many concerns regarding this proposal and the equally relevant risks associated with its purported benefits. We are also wholly confident that shareholders will most certainly profit from this endeavor whether or not customer savings are ever realized. OPC would like to remind the Commission that a second opportunity for a "customer savings plan" has emerged since Empire's October 31st filing.

³⁶ Erickson, W.P. et al.(2014) A comprehensive analysis of small-passerine fatalities from collision with turbines at wind energy facilities *Plos One*. <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0107491>

³⁷ Jackson, T. (2016) Wind farm sues to block bird death data releases. *Sandusky Register* <http://www.sanduskyregister.com/story/201606240028>

³⁸ Amos, A.M. (2016) Bat killings by wind energy turbines continues. *Scientific American*. <https://www.scientificamerican.com/article/bat-killings-by-wind-energy-turbines-continue/>

1 Better yet, *this customer savings plan would guarantee customer savings immediately upon*
2 approval, OPC is speaking of course to the financial savings from the reduction in corporate
3 federal income tax from 35% to 21% in the Tax Cuts and Jobs Act of 2017 that should
4 rightfully be flowed back to ratepayers. As the Commission is well aware, with the passage of
5 the sweeping federal tax reform, Empire's rates can no longer be considered just and
6 reasonable.

7 OPC finds it both perplexing and disappointing that Empire's response to the Commission and
8 its customers in Case No. AW-2018-0174 is that they intend to keep these financial savings
9 until they are forced to give them back either through a rate case or a complaint case.³⁹

10 Q. Does this conclude your testimony?

11 A. Yes.

³⁹ If a rate case is initiated through the file and suspend method, rates can go into effect within 30 days if the Commission does not suspend the tariff filing or even sooner if the Commission finds good cause to order them into effect in less than thirty days.

**CASE PARTICPATION OF
GEOFF MARKE, PH.D.**

Company Name	Employed Agency	Case Number	Issues
Empire District Electric Company	Office of Public Counsel (OPC)	EO-2018-0092	Rebuttal: Overview of proposal/ MO PSC regulatory activity / Federal Regulatory Activity / SPP Activity and Modeling / Ancillary Considerations
Great Plains Energy Incorporated, Kansas City Power & Light Company, KCP&L Greater Missouri Operations Company, and Westar Energy, Inc.	OPC	EM-2018-0012	Rebuttal: Merger Commitments and Conditions / Outstanding Concerns
Missouri American Water	OPC	WR-2017-0285	Direct: Future Test Year/ Cost Allocation Manual and Affiliate Transaction Rules for Large Water Utilities / Lead Line Replacement Direct: Rate Design / Cost Allocation of Lead Line Replacement Rebuttal: Lead Line Replacement / Future Test Year/ Decoupling / Residential Usage / Public-Private Coordination Rebuttal: Rate Design
Missouri Gas Energy / Laclede Gas Company	OPC	GR-2017-0216 GR-2017-0215	Rebuttal: Decoupling / Rate Design / Customer Confidentiality / Line Extension in Unserved and Underserved Areas / Economic Development Rider & Special Contracts Surrebuttal: Pay for Performance / Alagasco & EnergySouth Savings / Decoupling / Rate Design / Energy Efficiency / Economic Development Rider: Combined Heat & Power
Indian Hills Utility	OPC	WR-2017-0259	Direct: Rate Design
Rule Making	OPC	EW-2018-0078	Comments on cogeneration and net metering
Empire District Electric Company	OPC	EO-2018-0048	Integrated Resource Planning: Special Contemporary Topics Comments
Kansas City Power & Light	OPC	EO-2018-0046	Integrated Resource Planning: Special Contemporary Topics Comments

KCP&L Greater Missouri Operations Company	OPC	EO-2018-0045	Integrated Resource Planning: Special Contemporary Topics Comments
Missouri American Water	OPC	WU-2017-0296	Direct: Lead line replacement pilot program Rebuttal: Lead line replacement pilot program Surrebuttal: Lead line replacement pilot program
KCP&L Greater Missouri Operations Company	OPC	EO-2017-0230	Comments on Integrated Resource Plan, preferred plan update
Working Case: Emerging Issues in Utility Regulation	OPC	EW-2017-0245	Comments on Emerging Issues in Utility Regulation / Presentation: Inclining Block Rate Design Considerations Presentation: Missouri Integrated Resource Planning: And the search for the "preferred plan."
Rule Making	OPC	EX-2016-0334	Comments on Missouri Energy Efficiency Investment Act Rule Revisions
Great Plains Energy Incorporated, Kansas City Power & Light Company, KCP&L Greater Missouri Operations Company, and Westar Energy, Inc.	OPC	EE-2017-0113 / EM-2017-0226	Direct: Employment within Missouri / Independent Third Party Management Audits / Corporate Social Responsibility
Union Electric Company d/b/a Ameren Missouri	OPC	ET-2016-0246	Rebuttal: EV Charging Station Policy Surrebuttal: EV Charging Station Policy
Kansas City Power & Light		ER-2016-0156	Direct: Consumer Disclaimer Direct: Response to Commission Directed Questions Rebuttal: Customer Experience / Greenwood Solar Facility / Dues and Donations / Electric Vehicle Charging Stations Rebuttal: Class Cost of Service / Rate Design Surrebuttal: Clean Charge Network / Economic Relief Pilot Program / EEI Dues / EPRI Dues

Union Electric Company d/b/a Ameren Missouri	OPC	ER-2016-0179	Direct: Consumer Disclaimer / Transparent Billing Practices / MEEIA Low-Income Exemption Direct: Rate Design Rebuttal: Low-Income Programs / Advertising / EEI Dues Rebuttal: Grid-Access Charge / Inclining Block Rates /Economic Development Riders
KCP&L Greater Missouri Operations Company	OPC	ER-2016-0156	Direct: Consumer Disclaimer Rebuttal: Regulatory Policy / Customer Experience / Historical & Projected Customer Usage / Rate Design / Low-Income Programs Surrebuttal: Rate Design / MEEIA Annualization / Customer Disclaimer / Greenwood Solar Facility / RESRAM / Low-Income Programs
Empire District Electric Company, Empire District Gas Company, Liberty Utilities (Central) Company, Liberty Sub-Corp.	OPC	EM-2016-0213	Rebuttal: Response to Merger Impact Surrebuttal: Resource Portfolio / Transition Plan
Working Case: Polices to Improve Electric Regulation	OPC	EW-2016-0313	Comments on Performance-Based and Formula Rate Design
Working Case: Electric Vehicle Charging Facilities	OPC	EW-2016-0123	Comments on Policy Considerations of EV stations in rate base
Empire District Electric Company	OPC	ER-2016-0023	Rebuttal: Rate Design, Demand-Side Management, Low-Income Weatherization Surrebuttal: Demand-Side Management, Low-Income Weatherization, Monthly Bill Average
Missouri American Water	OPC	WR-2015-0301	Direct: Consolidated Tariff Pricing / Rate Design Study Rebuttal: District Consolidation/Rate Design/Residential Usage/Decoupling Rebuttal: Demand-Side Management (DSM)/ Supply-Side Management (SSM) Surrebuttal: District Consolidation/Decoupling Mechanism/Residential Usage/SSM/DSM/Special Contracts

Working Case: Decoupling Mechanism	OPC	AW-2015-0282	Memorandum: Response to Comments
Rule Making	OPC	EW-2015-0105	Missouri Energy Efficiency Investment Act Rule Revisions, Comments
Union Electric Company d/b/a Ameren Missouri	OPC	EO-2015-0084	Triennial Integrated Resource Planning Comments
Union Electric Company d/b/a Ameren Missouri	OPC	EO-2015-0055	Rebuttal: Demand-Side Investment Mechanism / MEEIA Cycle II Application Surrebuttal: Potential Study / Overearnings / Program Design Supplemental Direct: Third-party mediator (Delphi Panel) / Performance Incentive Supplemental Rebuttal: Select Differences between Stipulations Rebuttal: Pre-Pay Billing
The Empire District Electric Company	OPC	EO-2015-0042	Integrated Resource Planning: Special Contemporary Topics Comments
KCP&L Greater Missouri Operations Company	OPC	EO-2015-0041	Integrated Resource Planning: Special Contemporary Topics Comments
Kansas City Power & Light	OPC	EO-2015-0040	Integrated Resource Planning: Special Contemporary Topics Comments
Union Electric Company d/b/a Ameren Missouri	OPC	EO-2015-0039	Integrated Resource Planning: Special Contemporary Topics Comments
Union Electric Company d/b/a Ameren Missouri	OPC	EO-2015-0029	Ameren MEEIA Cycle I Prudence Review Comments
Kansas City Power & Light	OPC	ER-2014-0370	Direct (Revenue Requirement): Solar Rebates Rebuttal: Rate Design / Low-Income Weatherization / Solar Rebates Surrebuttal: Economic Considerations / Rate Design / Cyber Security Tracker
Rule Making	OPC	EX-2014-0352	Net Metering and Renewable Energy Standard Rule Revisions, Comments
The Empire District Electric Company	OPC	ER-2014-0351	Rebuttal: Rate Design/Energy Efficiency and Low-Income Considerations
Rule Making	OPC	AW-2014-0329	Utility Pay Stations and Loan Companies, Rule Drafting, Comments

Union Electric Company d/b/a Ameren Missouri	OPC	ER-2014-0258	Direct: Rate Design/Cost of Service Study/Economic Development Rider Rebuttal: Rate Design/ Cost of Service/ Low Income Considerations Surrebuttal: Rate Design/ Cost-of-Service/ Economic Development Rider
KCP&L Greater Missouri Operations Company	OPC	EO-2014-0189	Rebuttal: Sufficiency of Filing Surrebuttal: Sufficiency of Filing
KCP&L Greater Missouri Operations Company	OPC	EO-2014-0151	Renewable Energy Standard Rate Adjustment Mechanism (RESRAM) Comments
Liberty Natural Gas	OPC	GR-2014-0152	Surrebuttal: Energy Efficiency
Summit Natural Gas	OPC	GR-2014-0086	Rebuttal: Energy Efficiency Surrebuttal: Energy Efficiency
Union Electric Company d/b/a Ameren Missouri	OPC	ER-2012-0142	Direct: PY2013 EM&V results / Rebound Effect Rebuttal: PY2013 EM&V results Surrebuttal: PY2013 EM&V results Direct: Cycle I Performance Incentive Rebuttal: Cycle I Performance Incentive
Kansas City Power & Light	Missouri Public Service Commission Staff	EO-2014-0095	Rebuttal: MEEIA Cycle I Application testimony adopted
KCP&L Greater Missouri Operations Company	Missouri Division of Energy (DE)	EO-2014-0065	Integrated Resource Planning: Special Contemporary Topics Comments
Kansas City Power & Light	DE	EO-2014-0064	Integrated Resource Planning: Special Contemporary Topics Comments
The Empire District Electric Company	DE	EO-2014-0063	Integrated Resource Planning: Special Contemporary Topics Comments
Union Electric Company d/b/a Ameren Missouri	DE	EO-2014-0062	Integrated Resource Planning: Special Contemporary Topics Comments
The Empire District Electric Company	DE	EO-2013-0547	Triennial Integrated Resource Planning Comments
Working Case: State-Wide Advisory Collaborative	OPC	EW-2013-0519	Presentation: Does Better Information Lead to Better Choices? Evidence from Energy-Efficiency Labels
Independence-Missouri	OPC	Indy Energy Forum 2014	Presentation: Energy Efficiency
Independence-Missouri	OPC	Indy Energy Forum 2015	Presentation: Rate Design

NARUC – 2017 Winter	OPC	Committee on Consumer Affairs	NARUC – 2017 Winter Presentation: PAYS Tariff On-Bill Financing
NASUCA – 2017 Summer	OPC	Committee on Water Regulation	NASUCA – 2017 Summer Presentation: Regulatory Issues Related to Lead-Line Replacement of Water Systems
NASUCA – 2017 winter	OPC	Committee on Utility Accounting	NASUCA – 2017 Winter Presentation: Lead Line Replacement Accounting and Cost Allocation

The Empire District Electric Company
Response to Office of Public Counsel's Data Requests 2001-2020
Case No. EO-2018-0092

Response provided by: Christopher D. Krygier

Title: Director, Rates and Regulatory Affairs

Company Response Number: 2007

Date of Response: January 5, 2018

Question:

In his direct testimony Empire witness David R. Swain, at p. 6, lines 18-22, states:

The Company is seeking approval of the fundamental concepts of the Customer Savings Plan given the magnitude of the investments involved. As the Commission and parties will understand, the Company would not embark on such a significant proposal without first obtaining approval of this blueprint from its regulators.

- Is Empire seeking Missouri Public Service Commission pre-approval of its Plan? If not, what is Empire seeking.
- If Empire is not seeking Missouri Public Service Commission preapproval for its plan, then may stakeholders can raise prudence issues regarding the plan in future Empire rate cases?

Response:

Empire is not requesting pre-approval of the Customer Savings Plan per se, but rather is seeking regulatory support and validation for its proposed framework. Specific authorizations from the Commission that the Company seeks are:

- a. Authorization to record its investment in, and the costs to operate, the Wind Projects as described in Empire Witness Mooney's Direct Testimony, including a finding that Empire's investment related to the Customer Savings Plan should not be excluded from Empire's rate base on the ground that that the decision to proceed with the Plan was not prudent;
- b. Authorization to create a regulatory asset for the undepreciated balance of the Asbury facility, as described in Empire Witness Sager's Direct Testimony, so that it may be considered for rate base treatment in subsequent rate cases;

- c. Approval of depreciation rates as described in Empire Witness Watson's testimony, so that depreciation can begin as soon as the assets are placed in service;
- d. Approval of the arrangements between Empire and affiliates necessary to implement the Customer Savings Plan, to the extent necessary;
- e. Issuance of an order that is effective by June 30, 2018, so that Empire can take advantage of a limited window of opportunity to bring these savings to customers; and
- f. For such other and further relief as may be appropriate.

In essence, these approvals will provide a framework against which Empire could be judged for prudence in a later case.

Responsible person(s): Christopher D. Krygier