Exhibit No.: 4P Issues: Revenue Requirement, Merger Stipulations, MFRs, and Recovery Mechanisms Witness: Sheri Richard Type of Ex: Corrected Direct Testimony Sponsoring Party: The Empire District Electric Company Case No.: ER-2019-0374 Date Testimony Prepared: August 2019

Before the Public Service Commission of the State of Missouri

**Corrected Direct Testimony** 

of

Sheri Richard

on behalf of

The Empire District Electric Company A Liberty Utilities Company

August 2019



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#### CORRECTED DIRECT TESTIMONY OF SHERI RICHARD THE EMPIRE DISTRICT ELECTRIC COMPANY BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION CASE NO. ER-2019-0374

#### 1 I. INTRODUCTION

#### 2 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Sheri Richard. My business address is 602 South Joplin Avenue, Joplin,
MO, 64802.

#### 5 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Liberty Utilities Service Corp. as the Director of Rates and
Regulatory Affairs for Liberty Utilities Central Region, which includes The Empire
District Electric Company, a Liberty Utilities company ("Liberty-Empire" or
"Company"), as well as gas, water and wastewater utilities serving in the Central
Region.

#### 11 Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

12 A. I am testifying on behalf of Liberty-Empire.

### 13 Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL 14 BACKGROUND.

A. I have a Bachelor of Science degree in accounting and a Masters of Business
Administration degree. I am also a Certified Public Accountant licensed to practice in
Oklahoma. Prior to joining Liberty-Empire, I was employed for seven years by UICI,
a state regulated insurance company. I was then employed by Oklahoma Gas and
Electric Company ("OG&E") for over 15 years working in Financial and Regulatory
Accounting, managing the Costing and Pricing department, and finally serving as

Director of Revenue Requirements. In 2016, I became employed by Chesapeake
 Utilities Corporation where I served as Vice President of Rates and Regulatory Affairs.
 In 2019, I joined Liberty-Empire in my current position.

4

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE MISSOURI PUBLIC

#### 5 SERVICE COMMISSION OR ANY OTHER REGULATORY AGENCY?

A. While I have not provided testimony before the Missouri Public Service Commission
("Commission"), I have provided testimony before the Oklahoma Corporation
Commission in multiple proceedings including Cause Nos. PUD 201800133, PUD
200800059, PUD 200800398, PUD 201100087 and PUD 201400229. I have also
testified before the Arkansas Public Service Commission and provided testimony to the
Kansas Corporation Commission.

### 12 Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS 13 PROCEEDING?

14 A. My testimony serves multiple purposes. After providing some general information, I 15 address how the Company has satisfied the Commission's Minimum Filing 16 Requirements ("MFRs") and various other filing and reporting requirements pursuant to the Commission's rules. Next, I provide and explain the basis for the Company's 17 18 revenue requirement, including rate base, rate base adjustments, operating income and 19 operating income adjustments used to establish rates for the Company's retail electric 20 customers in Missouri. I also address the accounting treatment of certain tax related 21 regulatory liabilities, costs related to the retirement of the Asbury plant, expense and 22 revenue related to jurisdictional changes, and the Company's request to continue 23 certain trackers. In addition, my testimony addresses how the Company has satisfied 24 the Commission's Minimum Filing Requirements regarding the Company's request to

1		continue its Fuel Adjustment Clause ("FAC"), as well as compliance with stipulations
2		and agreements in Commission File Nos. ER-2016-0023 and EM-2016-0213.
3	Q.	ARE YOU SPONSORING ANY SCHEDULES WITH YOUR TESTIMONY?
4	А.	Yes. I am sponsoring the following schedules:
5		• Schedule SDR-1 – Revenue Requirement
6		• Schedule SDR-2 – Rate Base
7		• Schedule SDR-3 – Rate Base Adjustments
8		• Schedule SDR-4 – Operating Income
9		• Schedule SDR-5 – Operating Income Adjustments
10		• Schedule SDR-6 – Weighted Average Cost of Capital
11		• Schedule SDR-7 – Gross Revenue Conversion Factor
12		• Schedule SDR-8 – Income Taxes
13		• Schedule SDR-9 – MFRs
14		• Schedule SDR-10 – Stub Period Earnings Analysis
15		• Scheduled SDR-11 – Customer Notice
16		• Schedule SDR-12 – Sample Customer Bill
17		• Schedule SDR-13 – 2019 Short Term Borrowing Rate
18		• Schedule SDR-14 – List of Sub-Accounts Included and Excluded for FAC
19		• Schedule SDR-15 – Plant Efficiency Statistics
20		• Schedule SDR-16 – Emission Allowances
21		• Schedule SDR-17 – Five-Year Plant Availability Factors
22		I am also sponsoring the following adjustments:
23		• RB ADJ 1 – RB ADJ 10 – Rate Base ("RB") adjustments, except RB ADJ 3

1		• IS ADJ 1 – IS ADJ 36 – Operating Income ("IS") adjustments, except IS ADJs
2		13, 31 and 32
3		Company witness Tim Lyons sponsors RB ADJ 12, and Company witness Leigha
4		Palumbo sponsors RB ADJs 3, 11 and 13 as well as IS ADJs 13, 31 and 32.
5	Q.	WAS THE INFORMATION CONTAINED IN THE SCHEDULES OBTAINED
6		OR DERIVED FROM THE BOOKS AND RECORDS OF THE COMPANY?
7	A.	Yes. The information contained in the schedules I am sponsoring was obtained or
8		derived from the books and records of Liberty-Empire for the twelve months ended
9		March 31, 2019 and adjusted as appropriate to reflect known and measurable changes
10		through January 31, 2020.
11	Q.	DID LIBERTY-EMPIRE PROVIDE THE COMMISSION PROPER NOTICE
12		OF THE COMPANY'S INTENT TO FILE A GENERAL RATE CASE?
13	A.	Yes. Pursuant to Commission Rule 4 CSR 240-4.017, a utility is required to provide at
14		least 60 days' notice to the Commission of its intent to file a case. On May 29, 2019,
15		Liberty-Empire filed its Notice of Intended Case Filing, which was assigned Case No.
16		ER-2019-0374, satisfying the requirements of Commission Rule 240-4.017(1).
17	II.	GENERAL RATE CHANGE BACKGROUND
18	Q.	PLEASE DESCRIBE THE COMPANY'S RECENT HISTORY OF GENERAL
19		RATE CASE FILINGS?
20	A.	Prior to the acquisition by Liberty Utilities (Central) Co., the Company filed for a
21		general rate increase approximately every one to two years: October 2015, August
22		2014, July 2012, September 2010, October 2009 and October 2007. Tariffs which were
23		the result of Liberty-Empire's last general rate case took effect September 14, 2016.

#### 1 Q. DID LIBERTY-EMPIRE AGREE TO A STAY OUT PROVISION AS PART OF

#### 2 THE STIPULATIONS AND AGREEMENTS WITH THE PARTIES IN THE

#### 3 ACQUISITION CASE, CASE NO. EM-2016-0213?

- 4 A. Yes. The Company agreed to refrain from filing for a general rate increase for one year
- 5 post acquisition. Contrary to past Company history, however, Liberty-Empire has not
- 6 come in for a general rate increase for nearly four years.

#### 7 Q. WHAT IS THE AMOUNT OF THE REQUESTED GENERAL RATE CHANGE

#### 8 IN THIS CASE?

9 A. The Company is requesting that the Commission approve a \$26,516,638 base rate
10 increase.

### 11 Q. HOW WAS LIBERTY-EMPIRE'S REQUESTED GENERAL RATE CHANGE 12 DETERMINED?

A. The calculation of the Company's requested general rate increase is summarized inChart 1 and results in an overall revenue requirement increase of 4.93%.

#### 13

#### Chart 1

Line No.	Reference Schedule	General Rate Change	
1	SDR-2	Total Rate Base	\$ 1,457,360,469
2	SDR-6	Required Rate of Return	7.50%
3	SDR-1	Required Operating Income	109,237,911
4	SDR-1	Operating Income Deficiency	20,195,045
5	SDR-4	Federal and State Income Tax	<u>6,321,593</u>
6	SDR-1	Revenue Deficiency	\$ <u>26,516,638</u>

#### 1 III. FILING REQUIREMENTS

2	Q.	WHAT IS THE PURPOSE OF THIS PART OF YOUR TESTIMONY?
3	А.	This portion of my testimony details how the Company met the Commission's MFRs
4		as set forth in Commission Rule 4 CSR 240-3.030 and the filing and reporting
5		requirements as set forth in Commission Rules 4 CSR 240-3.160 and 4 CSR 240-
6		20.090(2).
7	Q.	WHAT IS REQUIRED BY COMMISSION RULE 4 CSR 240-3.030?
8	A.	Commission Rule 4 CSR 240-3.030, effective July 30, 2019, sets forth the MFRs for
9		all general rate increase requests. Counsel for Liberty-Empire is providing the tariff
10		transmittal letter. All other MFRs imposed by this rule, which are set forth below, are
11		included in Schedule SDR-9:
12		1. The amount of dollars of the aggregate annual increase and percentage of
13		increase over current revenues;
14		2. Names of counties and communities affected;
15		3. The number of customers to be affected in each general category of service
16		and for all rate classifications within each general category of service;
17		4. The average change requested in dollars and percentage change from current
18		rates for each general category of service and for all rate classifications;
19		5. The proposed annual aggregate change by general categories of service and
20		by rate classifications, including dollar amounts and percentage change in
21		revenues;
22		6. Any press releases relative to the filing; and
23		7. A summary of the reasons for the proposed changes.
24	Q.	WHAT IS REQUIRED BY COMMISSION RULE 4 CSR 240-3.160?

1	A.	Commission Rule 4 CSR 240-3.160 contains additional filing requirements for
2		electric utility general rate increase requests: the submission of a depreciation study,
3		database, and property unit catalog under certain circumstances.
4	Q.	IS A DEPRECIATION STUDY INCLUDED WITH THE COMPANY'S
5		DIRECT FILING?
6	A.	No. Liberty-Empire's latest depreciation study was filed in Case No. ER-2016-0023
7		on October 16, 2015. The Commission's rule does not require the submission of a
8		depreciation study, database, and property unit catalog in this case, as it has been less
9		than five years since the Commission's Staff last received these items from Liberty-
10		Empire.
11	Q.	IS THE COMPANY REQUESTING APPROVAL FOR A NEW
12		DEPRECIATION RATE ON ASSETS THAT DO NOT CURRENTLY HAVE
13		AN APPROVED RATE?
14	A.	Yes. The Company does not have an approved rate for Charging Stations and
15		requests approval to utilize a rate of 5% until the next depreciation study is completed
16		and a rate approved by the Commission.
17	Q.	WHEN WILL THE COMPANY COMPLETE AND FILE ITS NEXT
18		DEPRECIATION STUDY?
19	A.	The Company will prepare and file a depreciation study in 2020 and will request
20		approval of new rates in its rate case planned to be filed the 3 <sup>rd</sup> quarter of 2020.
21	Q.	WHAT IS REQUIRED BY COMMISSION RULE 4 CSR 240-20.090?
22	A.	Commission Rule 4 CSR 240-20.090 contains filing requirements for an electric
23		utility that seeks to establish, continue, or modify a Rate Adjustment Mechanism
24		("RAM") such as the Company's FAC tariff. As described by Company witness

7

1	Aaron Doll, the Company is seeking modifications to its FAC tariff. Please see
2	Schedules SDR 11-17 attached to this testimony and Schedule AJD-1 attached to Mr.
3	Doll's direct testimony for the information necessary to satisfy all of the FAC-related
4	filing requirements.

5 IV. REVENUE REQUIREMENT

#### 6 Q. WHAT IS MEANT BY THE TERM "REVENUE REQUIREMENT"?

- 7 A. A utility's "revenue requirement" is the sum of its Operation and Maintenance
- 8 ("O&M") expenses, depreciation expense, income and other taxes and a fair return on
- 9 the utility's rate base. The revenue requirement is determined based on a historical
- 10 test year with pro forma adjustments reflecting reasonably known and measurable
- 11 changes to revenue and expenses. When the revenue requirement exceeds the
- 12 utility's test year revenues, a revenue deficiency exists, and a rate increase is required.
- This calculation is made specific to the Company's jurisdictions which include four
  state jurisdictions and also the Federal jurisdiction.
- 15

#### Q. WHAT ARE THE GENERAL CATEGORIES OF PRO FORMA

#### 16 ADJUSTMENTS PROPOSED BY THE COMPANY?

- 17 A. *Pro forma* adjustments generally fall into one of the following categories:
- 18 1) Normalization Adjustments made to rate base and expenses to offset unusual
- 19 levels of operations recorded during the test year. An example of such an adjustment
- 20 would be the use of a 13 month average for materials and supplies to address the
- 21 variable nature of the expense.
- 22 2) Annualization Adjustments made to recognize a cost which occurred during the
- test year that will be ongoing and must be captured on a prospective basis. An
- 24 example of such an adjustment would be the adjustment to payroll to account for

1		salary increases during the pro forma period. This annualization is necessary to adjust
2		payroll costs to a level reflecting the pro forma salary for the entire year.
3		3) Out of Period Adjustments - which consider known and measurable changes that
4		occur outside the end of the test year. An example of such an adjustment would be
5		increases in Plant in Service based on Construction Work that is expected to be
6		complete, used and useful by the end of the pro forma period.
7		4) Costs that are not necessary to provide electric service - An example of such an
8		adjustment would be to remove common plant utilized by Liberty-Empire's gas or
9		water utilities.
10		5) Costs recovered elsewhere - made to adjust the test year to reflect any cost
11		recovery that occurs outside of base rates. An example of such an adjustment
12		is to remove franchise fees. This adjustment is necessary to ensure that customers are
13		not double charged for these costs recovered or passed through a separate mechanism
14		or tariff condition.
15	Q.	WHAT TEST YEAR IS THE COMPANY PROPOSING IN THIS CASE?
16	A.	The Company is proposing a historical test year based on twelve months ended March
17		31, 2019.
18	Q.	IS LIBERTY-EMPIRE REQUESTING THE TEST YEAR BE UPDATED?
19	A.	Yes. Liberty-Empire is requesting an update through September 30, 2019.
20	Q.	IS LIBERTY-EMPIRE REQUESTING A "TRUE-UP" PROCESS?
21	A.	Yes. Liberty-Empire is proposing a true-up through January 31, 2020. The impact of
22		the true-up process has been included in the Company's revenue requirement.
23	Q.	WHAT IS LIBERTY-EMPIRE'S CALCULATED OVERALL RATE OF
24		RETURN?

- A. Liberty-Empire's calculated overall rate of return at current rates is 6.11 percent. This
   rate of return earned under the current rates is calculated by dividing adjusted test year
   operating income by the adjusted test year rate base.
- 4 5

#### Q. PLEASE SUMMARIZE THE RATE RELIEF THE COMPANY IS SEEKING

- IN THIS PROCEEDING.
- A. Liberty-Empire is seeking to recover an annual revenue requirement of \$564.7 million
  7 and a current revenue deficiency of \$26.5 million.

#### 8 Q. PLEASE DESCRIBE SCHEDULES SDR-1 THROUGH SDR-8 OF THE

9

#### **REVENUE REQUIREMENT MODEL.**

- 10 Schedule SDR-1 presents Liberty-Empire's proposed revenue requirement and the A. 11 overall revenue requirement calculation. Schedule SDR-2 summarizes the Company's 12 test year rate base, including pro forma adjustments calculated through the proposed 13 true-up period and the resulting adjusted rate base. Schedule SDR-4 summarizes the 14 test year statement of operating income, including pro forma adjustments and the 15 resulting adjusted operating income. Schedule SDR-3 and Schedule SDR-5 summarize 16 adjustments to rate base and operating income, respectively. Schedule SDR-6 presents 17 the overall cost of capital used in the calculation of the revenue requirement, which will 18 be addressed in detail by Company Witness Robert B. Hevert. Schedule SDR-7 19 calculates the Gross Revenue Conversion Factor based on the effective state and federal 20 income tax rates, and Schedule SDR-8 calculates Liberty-Empire's income tax expense 21 based on its calculated net operating income or loss and the state and federal effective 22 tax rates presented on Schedule SDR-7.
- 23 V. <u>RATE BASE</u>

#### 24 Q. WHAT IS THE COMPANY'S PROPOSED RATE BASE IN THIS CASE?

- A. As shown on Schedule SDR-2, Liberty-Empire's adjusted rate base is approximately
   \$1.5B. It is comprised of the test year rate base of \$1.3B with pro forma adjustments
   totaling \$156.3M.
- 4 Q.

#### PLEASE EXPLAIN RB ADJ 1.

A. RB ADJ 1 increases plant in service and accumulated depreciation for projects
reasonably expected to be placed in service, used and useful by January 31, 2020. The
increase in Missouri jurisdictional plant in service is \$180,144,089, and the increase in
Missouri jurisdictional accumulated depreciation is \$1,379,466.

9 Q. PLEASE EXPLAIN RB ADJ 2.

10 A. A portion of certain common plant assets on Liberty-Empire's books are related to non-11 electric service and should be removed. RB ADJ 2 removes a percentage of the 12 common plant associated with the service provided to those business units. The 13 decrease in Missouri jurisdictional plant is \$4,001,090, and the associated accumulated 14 depreciation is \$2,615,671.

15 Q. DO YOU SPONSOR RB ADJ 3?

16 A. No. Company witness Leigha Palumbo sponsors RB ADJ 3 - Water Inventory.

- 17 Q. PLEASE EXPLAIN RB ADJ 4.
- 18 A. As reflected in Schedule SDR-3, RB ADJ 4 increases rate base by \$7,372,640 in
- 19 accordance with the pension and other post-employment benefits ("OPEB") trackers
- 20 established in Case No. ER-2016-0023. Please refer to the direct testimony of
- 21 Company witness James A. Fallert filed in this docket for additional information
- 22 regarding the adjustment for pension and OPEB expenses.
- 23 Q. PLEASE EXPLAIN RB ADJ 5.

11

1	A.	As reflected in Schedule SDR-3, RB ADJ 5 increases rate base by \$246,851. The
2		adjustment brings the Low Income Pilot Program balance to the amount the Company
3		expects to have incurred through the January 31, 2020 true-up period. The Company
4		is requesting the continuation of the tracking of customer charges in a regulatory asset.
5		Please refer to the direct testimony of Company witness Nathaniel W. Hackney filed
6		in this proceeding for additional information regarding Liberty-Empire's low income
7		pilot program including the Company's proposal to continue the program.

8 Q.

#### PLEASE EXPLAIN RB ADJ 6.

- 9 A. As reflected in Schedule SDR-3, RB ADJ 6 increases rate base by \$301,947 to reflect
  10 the discounts given to customers in accordance with the provisions of Senate Bill 564
  11 related to economic development (RSMo. 393.1640).
- 12 Q. PLEASE EXPLAIN RB ADJ 7.
- A. RB ADJ 7 increases the amount of accumulated deferred income taxes included in
  rate base by \$522,886 to reflect the expected balance at January 31, 2020.
- 15 Q. PLEASE EXPLAIN RB ADJ 8.

A. As reflected in Schedule SDR-3, RB ADJ 8 updates the accumulated depreciation
included in Liberty-Empire's rate base through the true-up period. RB ADJ 8 decreases
the Company's rate base by \$57,413,779.

19

#### Q. PLEASE EXPLAIN RB ADJ 9.

A. RB ADJ 9 reflects a net adjustment to increase rate base by \$19,117,166 comprised of
a net increase in regulatory assets of \$5,362,107 and a net decrease in regulatory
liabilities of \$13,755,059. This adjustment reflects the removal of various regulatory
assets and liabilities that will be fully amortized by the time rates go into effect as a
result of this case, the removal of certain pension liabilities as addressed by Company

witness James Fallert, and the removal of a Tax Cut and Jobs Act ("TCJA") tax
 regulatory liability.

Q. DID THE COMMISSION OPEN A DOCKET TO ADDRESS THE IMPACT

3

4

- OF THE TCJA ON LIBERTY-EMPIRE AND ITS CUSTOMERS?
- A. Yes. The Commission opened Case Nos. ER-2018-0228 and ER-2018-0366 to consider
  the impact of the TCJA and to adjust the Company's rates following the passage of
  RSMo. Section 393.137 (Senate Bill 564).

### 8 Q. DID THE COMMISSION TAKE ANY ACTION IN THAT DOCKET WITH 9 REGARD TO THE COMPANY?

10 A. Yes. As part of its Report and Order in Case No. ER-2018-0366 (the "Tax Order"), the 11 Commission directed Liberty-Empire to establish a regulatory liability to address the 12 impact of the TCJA on Empire's rates for the so-called "stub period" - January 1, 2018 13 (the date of the tax rate reduction) to August 30, 2018 (the effective date of lower base 14 rates for Liberty-Empire). In that order, the Commission noted that it was "not making 15 any ratemaking decision" regarding whether the stub period revenues "can, or should 16 be returned to the company's ratepayers." Tax Order, p. 22. The Commission continued 17 by stating "(t)hat decision will be made in Empire's next general rate case proceeding, 18 and a decision about the constitutionality of any ordered rate reduction also will be made at that time." Id. at 22. The Commission then ordered: "The Empire District 19 20 Electric Company shall record a regulatory liability for the financial impact of the Tax 21 Cut and Jobs Act of 2017 on the electrical corporation for the period of January 1, 2018, 22 through August 30, 2018. Recovery of the amounts deferred through the regulatory 23 liability shall be determined in Empire's next general rate proceeding." Id. at 25.

## Q. IS THIS LIBERTY-EMPIRE'S FIRST GENERAL RATE PROCEEDING SINCE THE ISSUANCE OF THE TAX ORDER REQUIRING THE ESTABLISHMENT OF THE REGULATORY LIABILITY?

4 A. Yes.

### 5 Q. HOW DOES LIBERTY-EMPIRE PROPOSE THAT THE REGULATORY 6 LIABILITY BE TREATED IN THIS RATE CASE?

- 7 A. The Company has reviewed its financial performance for the "Stub Period" and 8 determined the Company earned less than its allowed return during that period. 9 Schedule SDR-10 shows this analysis which is based on actual earnings without any 10 adjustments. As a result, the Company does not believe that it would be equitable to 11 credit this regulatory liability to customers given that it would experience significant 12 under-earnings during this period. The Company also has concerns with regard to 13 whether returning revenues which were lawfully collected pursuant to Liberty-14 Empire's filed and approved tariffs would constitute retroactive ratemaking or 15 otherwise be unlawful.
- 16 **Q.**

#### PLEASE EXPLAIN RB ADJ 10.

17 A. RB ADJ 10 increases rate base by \$10,217,935 for the amount of Asset Retirement
18 Obligations ("ARO") paid out as of the test year, as well as additional AROs expected
19 to be settled and paid out by January 31, 2020.

20 Q. PLEASE BRIEFLY DESCRIBE AN ARO.

A. AROs are legal obligations associated with a tangible long-lived asset that result from

22 the acquisition, construction, development, or normal operation of a long-lived asset

- 23 in which the timing or method of settlement is conditional on a future event. An
- ARO exists when the obligation to perform the asset retirement activity is

1		unconditional even though there may be uncertainty about whether and, if so, how
2		and when the obligation will ultimately be settled. The following are examples of
3		common AROs experienced by Liberty-Empire: (1) coal ash impoundments handling
4		and retirement and (2) abatement of asbestos-containing materials.
5	Q.	DO YOU SPONSOR RB ADJ 11?
6	A.	No. Company witness Leigha Palumbo sponsors ADJ 11 - Prepayments and
7		Materials.
8	Q.	PLEASE EXPLAIN RB ADJ 12?
9	A.	Company witness Timothy Lyons presents the lead lag study prepared for Liberty-
10		Empire and sponsors RB ADJ 12 which represents the level of CWC included in the
11		calculation of rate base.
12	Q.	PLEASE EXPLAIN RB ADJ 13.
13	A.	Company witness Leigha Palumbo sponsors ADJ 13 to Customer Advances and
14		Deposits.
15	VI.	INCOME STATEMENT ADJUSTMENTS
16	Q.	HAS THE COMPANY PROPOSED ANY ADJUSTMENTS TO ITS TEST
17		YEAR OPERATING INCOME?
18	A.	Yes. As reflected in Schedule SDR-5, Liberty-Empire has proposed several
19		adjustments to its test year operating income.
20	Q.	DO ANY OF THE PROPOSED ADJUSTMENTS RELATE TO REVENUE?
21	A.	Yes. The Company has proposed adjustments to operating revenues to normalize for
22		the effects of weather, to annualize customer growth, for Investment Tax Credit
23		("ITC") refund over collection as ordered in ER-2014-0351, to increase revenues for

24 expected load growth and the Economic Development Rider ("EDR") Revenues, and

1	to remove unbilled revenues. An adjustment was also made to increase revenues to
2	reflect only the revenue change for reduced taxes occurring during the test year
3	associated with the TCJA and as ordered in Case No. ER-2018-0366.

4 Q. DO ANY OF THE PROPOSED ADJUSTMENTS RELATE TO EXPENSE?

- A. Yes. The Company has made several adjustments such as the amortization of expenses
  deferred in trackers as well as the normalization or adjustment of expenses for out of
  period occurrences that impact expense.
- 8 Q. PLEASE EXPLAIN IS ADJ 1.
- 9 A. As reflected in Schedule SDR-5, IS ADJ 1 increases uncollectible expenses by \$34,183
  10 by normalizing uncollectible expense based on a 5-year historical uncollectible
  11 percentage.
- 12 Q. PLEASE EXPLAIN IS ADJ 2.
- A. As reflected in Schedule SDR-5, IS ADJ 2 decreases operating expenses by \$102,449
  to remove merger related transition and acquisition costs incurred during the test year
  from the revenue requirement as required in the stipulation and agreement in Case No.
  EM-2016-0213.
- 17 Q. PLEASE EXPLAIN IS ADJ 3.
- A. IS ADJ 3 increases operating expenses by \$1,409,581 to include additional labor costs
   associated with open positions that the Company reasonably anticipates to fill after the
   test year (out of period) but before the end of the true-up period.
- 21 Q. PLEASE EXPLAIN IS ADJ 4.
- A. As reflected in Schedule SDR-5, IS ADJ 4 increases operating expenses by \$498,742
   to reflect a normalized amount of labor costs associated with overtime based on a 5 year average overtime percentage.
  - 16

- 1 Q. PLEASE EXPLAIN IS ADJ 5.
- A. IS ADJ 5 annualizes payroll based on the last pay period of the test year, March 22,
  2019, and as a result increases operating expenses by \$621,653.

### 4 Q. PLEASE DESCRIBE ADDITIONAL PAYROLL INCENTIVES NOT 5 CAPTURED IN IS ADJ 5.

- A. As further described by Liberty-Empire witness Jeff Westfall, the Company will offer
  additional monthly pay to incentivize the Company's linemen, and other employees
  that qualify, to continue employment with Liberty-Empire. The Company also will
  offer incentives externally to attract linemen. The Company anticipates this increased
  O&M cost to be approximately \$718,200. While the Company did not make a pro
  forma adjustment for this, the increase in payroll costs will be captured when the
  Company updates and trues-up its revenue requirement.
- 13 **Q. PLEAS**

#### PLEASE EXPLAIN IS ADJ 6.

- A. As reflected in Schedule SDR-5, IS ADJ 6 decreases operating expenses by \$264,101
  to annualize and adjust for expected changes in claims expense for healthcare (medical,
  dental and vision) occurring after the test year.
- 17 Q. PLEASE EXPLAIN IS ADJ 7.
- 18 A. IS ADJ 7 increases operating expenses by \$7,915,095 to annualize depreciation
- 19 expense based on plant in service at the end of the true-up period including the plant
- 20 additions in RB ADJ 1. Liberty-Empire calculated depreciation expense based on
- 21 depreciation rates established in the Company's last general rate case, Case No. ER-
- 22 2016-0023, as reflected on Schedule A of the stipulation and agreement and as
- 23 requested above.
- 24 Q. PLEASE EXPLAIN IS ADJ 8.

17

- A. As reflected in Schedule SDR-5, IS ADJ 8 increases operating expenses by \$410,030
   to normalize expenses associated with maintenance of boiler plants based on a 5-year
   historical average.
- 4 Q. PLEASE EXPLAIN IS ADJ 9.
- 5 A. IS ADJ 9 increases operating revenues by \$1,109,211 to adjust for anticipated load 6 growth as a result of the anticipated expansion of two industrial customers.
- 7 Q. PLEASE EXPLAIN IS ADJ 10.
- 8 A. IS ADJ 10 increases operating revenues by \$462,805 to account for economic
  9 development discounts provided to customers in accordance with Liberty-Empire's
  10 Economic Development Rider (Schedule EDR).
- 11 Q. PLEASE EXPLAIN IS ADJ 11.
- 12 A. IS ADJ 11 increases operating expenses by \$6,073,947 in accordance with the
- 13 pension and other post-employment benefits ("OPEB") trackers established in Case
- 14 No. ER-2016-0023, as well as changes in FAS 87 and FAS 106 expense, settlement
- 15 charges and Supplemental Executive Retirement Plan ("SERP") expense as discussed
- 16 in the direct testimony of Company witness James A. Fallert.
- 17 Q. PLEASE EXPLAIN IS ADJ 12.
- A. IS ADJ 12 increases operating income by \$15,960,504 based on the Company's fuel
   production model used to set an appropriate level of fuel in Liberty-Empire's base rates.
   Company witness Todd Tarter further discusses the production model and base fuel
   calculations.
- 22 Q. PLEASE EXPLAIN IS ADJ 13.
- 23 A. Company Witness Palumbo sponsors IS ADJ 13.
- 24 Q. PLEASE EXPLAIN IS ADJ 14.

A. IS ADJ 14 annualizes the number of Liberty-Empire customers and their related usage
 at the end of the test year and results in an increase in operating revenues of \$2,089,780.

3

#### Q. PLEASE EXPLAIN IS ADJ 15.

4 A. IS ADJ 15 adjusts test year sales and revenues to account for the net impacts of 5 abnormal weather. The calculation of the normalized weather sales is presented in the direct testimony of Company witness Eric Fox. Normalized weather revenue is 6 7 calculated by multiplying the weather normalized sales by the current rates for each 8 pricing plan affected by weather. IS ADJ 15 adjusts revenues for abnormal 9 temperatures during the test year which resulted in higher than normal sales and 10 revenues. As such, the weather normalization adjustment, IS ADJ 15, results in a 11 decrease to Missouri jurisdictional base rate revenue by \$18,382,302. In his direct 12 testimony, Mr. Fox further discusses test-year sales and system load weather 13 normalization.

14

Q.

#### PLEASE EXPLAIN IS ADJ 16.

A. As reflected in Schedule SDR-5, IS ADJ 16 increases operating expenses by \$877,216
to reflect an out of test period anticipated increase in insurance premiums through the
update period.

18 Q. PLEASE EXPLAIN IS ADJ 17.

A. Schedule SDR-5 reflects the impact of the Company's adjustment, IS ADJ 17, to
 remove \$15,233 from operating expenses for costs recorded during the test year that
 the Company does not seek to recover from its Missouri retail customers.

22 Q. PLEASE EXPLAIN IS ADJ 18.

- A. As reflected in Schedule SDR-5, IS ADJ 18 increases operating expenses by
   \$6,335,625 to annualize increases in property taxes associated with increased plant in
   service expected to be in service after the test period.
- 4

#### Q. PLEASE EXPLAIN IS ADJ 19.

- 5 A. In accordance with the Stipulation and Agreement in Case No. ER-2016-0023,
- 6 Liberty-Empire tracked the program costs associated with the Low Income Pilot
- 7 Program in a regulatory asset for recovery consideration by the Commission in this
- 8 case, the Company's next general rate case. IS ADJ 19 proposes to amortize \$246,851
- 9 over a 5 year period and results in an increase in annual operating costs of \$49,370.
- 10 **Q.**

#### . PLEASE EXPLAIN IS ADJ 20.

- 11 A. IS ADJ 20 reflects the amortization of \$1,401,804 related to the regulatory asset
- 12 previously established by the Commission for Missouri solar initiatives, including the
- 13 Company's pro-forma adjustment to reflect the balance of the regulatory asset at the
- 14 end of the true-up period. As reflected in RB ADJ 9, Liberty-Empire's projected true-
- 15 up balance for the Missouri solar initiatives and included in rate base is \$14,018,041.
- 16 The Company proposes to amortize the regulatory asset over ten years.
- 17 Q. PLEASE EXPLAIN IS ADJ 21.
- A. IS ADJ 21 proposes an increase in annual operating revenues by \$160,218 to amortize
   revenues associated with investment tax credits and as directed in the Report and Order
   in ER-2014-0351.
- 21 Q. PLEASE EXPLAIN IS ADJ 22.
- A. IS ADJ 22 increases operating expenses \$217,736 to normalize and amortize the
   anticipated rate case expense associated with this proceeding over a 2-year amortization
   period.

- 1 Q. PLEASE EXPLAIN IS ADJ 23.
- A. IS ADJ 23 increases operating expenses by \$60,389 for the amortization, over five
   years, of projected economic development discounts to be provided to customers in
   accordance with Liberty-Empire's Limited Large Customer Economic Development
   Rider (Schedule SBEDR).
- 6 Q. PLEASE EXPLAIN IS ADJ 24.
- A. IS ADJ 24 reflects the annual amortization, \$8,540,550, of unprotected excess
  accumulated deferred income taxes ("ADIT") calculated based on the Average Rate
  Assumption Method or ARAM. The Company proposes to flow back to customers the
  balance of unprotected excess ADIT over a 3 year period.
- 11 Q. WHAT DID THE COMMISSION ORDER IN CASE NO. ER-2018-0366
  12 REGARDING EXCESS ACCUMULATED DEFERRED INCOME TAX
  13 ("ADIT")?
- A. As part of the Tax Order, the Commission directed Liberty-Empire to "record a
  regulatory liability for the difference between the excess ADIT balances included in
  current rates, which is calculated using the 35 percent federal corporate income tax rate,
  versus the now lower federal corporate income tax rate of 21 percent. The calculation
  of the regulatory liability of excess ADIT shall begin as of January 1, 2018. Recovery
  of the amounts deferred through the regulatory liability shall be determined in Empire's
  next general rate proceeding."

### Q. HOW DOES LIBERTY-EMPIRE PROPOSE THAT THE EXCESS ADIT REGULATORY LIABILITY BE TREATED IN THIS RATE CASE?

A. Excess ADIT is divided into two groups or buckets: unprotected and protected. As
 noted above, the Company's proposal is to return the unprotected portion back to

customers over 3 years, as opposed to a longer period of 10 or 15 years as some utilities
 in the industry have requested, in order to help minimize the rate increase impact on
 customers. Due to IRS rules, the Company cannot accelerate the return or amortization
 of the protected portion of the excess ADIT. As a result, the protected portion of excess
 ADIT will flow back to customers over the average remaining life of the related assets.

6

#### Q. PLEASE EXPLAIN IS ADJ 25.

A. In Case No. ER-2014-0351, Liberty-Empire agreed to continue its energy efficiency
programs, at established funding levels and with the established recovery mechanism,
until Liberty-Empire has an approved Missouri Energy Efficiency Investment Act
(MEEIA) or until the effective date of rates in Liberty-Empire's next general rate case.
IS ADJ 25 proposes to amortize the Company's projected regulatory asset balance of
\$136,211 at the end of the true-up period, over 2 years resulting in an increase to annual
operating expenses of \$68,106.

14

#### Q. PLEASE EXPLAIN IS ADJ 26.

A. IS ADJ 26 amortizes the costs collected in the Riverton 12 Tracker established in
Case No. ER-2014-0351 over a 5-year amortization period and results in an increase
to operating expenses of \$2,933,728.

18 Q. PLEASE EXPLAIN IS ADJ 27.

A. IS ADJ 27 reflects a net decrease in operating expenses of \$117,337, to remove
 annual amortization expense currently being collected in rates and set to be fully
 amortized during the true-up period in this rate case related to regulatory assets and
 liabilities.

23 Q. PLEASE EXPLAIN IS ADJ 28.

22

- A. IS ADJ 28 reflects the annual amortization of protected excess ADIT associated with
   the TCJA and returns \$2,263,671 to customers annually.
- 3 Q. PLEASE EXPLAIN IS ADJ 29.
- A. As reflected in Schedule SDR-5, IS ADJ 29 increases operating expenses by \$266,228
  for known and measurable changes occurring outside the test year associated with the
  contracted demand charge for Liberty-Empire's Plum Point generating unit. The new
  demand charge will become effective in September 2019.
- 8

#### Q. PLEASE EXPLAIN IS ADJ 30.

9 A. Please refer to the direct testimony of Company witness Brent Baker who addresses
10 Liberty-Empire's request to include fees associated with credit card and debit card
11 ("card") payments, currently incurred by its customers, in base rates. IS ADJ 30
12 proposes to increase operating expenses by \$1,250,222 which represents an estimated
13 annualized amount of fees paid by residential customers based on the number of card
14 payments received in the most recent ten month period and multiplied by the per
15 transaction fee of \$2.25.

- 16 Q. PLEASE EXPLAIN IS ADJs 31 and 32.
- 17 A. Company witness Palumbo sponsors ADJs 31 and 32.
- 18 Q. PLEASE EXPLAIN IS ADJ 33.

A. Schedule SDR-4 includes the impact of IS ADJ 33 which removes \$1,034,930 of
revenues from test year that were not billed to or received from customers during the
test year and which billing determinants were not reflected in the billing determinants
used to calculate a weather normalized level of revenue. Therefore, this adjustment is
required in order to avoid a double counting of revenue.

1 In addition, the Company recorded \$6,391,485 unbilled revenue in its books and 2 records during the test year. However, a significant portion of the unbilled revenue 3 reflected a change in timing of the recording of billed revenue that occurred during the 4 test year and resulted in a one month delay in the booking of customers' revenue for all 5 of billing cycle 21 beginning in October 2018. This change resulted in unbilled revenue 6 associated with the billing in the final month of the test year for these customers totaling 7 \$5,356,555. This portion of unbilled revenue was not removed to ensure that the test 8 year revenue reflected the full 12-months of revenue for the cycle 21 customers.

9 **Q**.

PLEASE EXPLAIN IS ADJ 34.

A. IS ADJ 34 increases Liberty-Empire's operating revenues by \$3,985,645, to reflect
 only the deferred revenues related to the change in the federal income tax rate as a
 result of the TCJA occurring during the test period.

13 Q. PLEASE EXPLAIN IS ADJ 35.

A. IS ADJ 35 increases operating expenses by \$2,619,326 for the annual amortization of
 various AROs that have been paid or expected to be paid by the end of the true-up
 period.

- 17 Q. PLEASE EXPLAIN IS ADJ 36.
- 18 A. IS ADJ 36 increases non-labor operating and maintenance expenses associated with
- Liberty-Empire's Riverton 12 generation unit by \$4,798,471, to normalize the level of
  expenses included in the calculation of base rates.
- 21 VII. <u>REBASED COSTS</u>
- 22 Q. DOES THE COMPANY PROPOSE TO REBASE COSTS CURRENTLY
- 23 BEING RECOVERED THROUGH OTHER RATE ADJUSTMENT
- 24 MECHANISMS OR TRACKER MECHANISMS?

- A. Yes. The Company is proposing to rebase the amount of Riverton 12 Operation and
   Maintenance ("O&M") expense included in its base rates to reflect a new base
   amount of \$8,731,672. Also, as discussed by Company witness Todd W. Tarter,
   Liberty-Empire is proposing to adjust the FAC base factor and update the amount of
   fuel and purchased power included in its base rates.
- 6

#### VIII. <u>RETIREMENT OF ASBURY</u>

# Q. AS DESCRIBED IN FILE EO-2018-0092, THE COMPANY HAS BEEN CONSIDERING THE RETIREMENT OF ITS ASBURY POWER PLANT. WHAT ARE THE COMPANY'S CURRENT PLANS FOR THE ASBURY PLANT?

11 Liberty-Empire recently submitted its triennial integrated resource plan ("IRP") to the A. 12 Commission which reflects a preferred plan to retire Asbury. As a result of this analysis 13 and as discussed in Company witness Tim Wilson's testimony, the Company plans to 14 retire the Asbury plant no later than June of 2020. Closing the Asbury plant by June 15 2020 enables the Company to avoid additional investment that would be required by 16 environmental regulations governing coal ash. Asbury would not be allowed to operate 17 beyond that date without making considerable investments or incurring significant 18 costs to dispose of the coal ash. Considering the age of the plant, the investments 19 needed to comply with the environmental rules, the ongoing operation and maintenance 20 costs that could be avoided or reduced, as well as how the plant has performed in recent 21 years in the Southwest Power Pool's Integrated Marketplace, the Company determined 22 the retirement of the Asbury plant by June of 2020 to be in the best interests of its 23 customers.

### Q. PLEASE DESCRIBE HOW O&M EXPENSES INCLUDED IN RATES ARE IMPACTED BY THE CLOSURE OF THE ASBURY PLANT.

A. Upon closure of the Asbury plant, there will be an impact on the Company's O&M
expenses. Examples of this include reduced expenses to maintain the plant such as
materials expense. In addition, labor costs associated with the plant may be reduced
due to redeployment elsewhere in the Company.

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7 Q. IS THE COMPANY OPPOSED TO THE ISSUANCE OF AN AAO TO
```

ADDRESS THE IMPACT ON O&M EXPENSE AS A RESULT OF THE

#### 8

9

#### **CLOSURE OF ASBURY?**

10 A. No. Because Asbury will be retired outside of the true-up period of this rate case and
11 the O&M changes will not yet be known and measurable, an AAO is an option that
12 could be used to address the out of period changes.

#### 13 Q. DID THE NON-UNANIMOUS STIPULATION IN CASE NO. EA-2019-0010

- 14 CONTEMPLATE THIS APPROACH?
- A. Yes. In EA-2019-0010 and the predecessor docket, EO-2018-0092, the NonUnanimous Stipulations contained a provision regarding the establishment of an AAO
  to address the change in operating expense associated with any retirement of the Asbury
  plant. However, the Commission did not adopt that provision in either of those dockets.

#### 19 IX. JURISDICTIONAL ALLOCATION CHANGES

#### 20 Q. IS THE COMPANY REQUESTING AN AAO OR OUT OF PERIOD

#### 21 ADJUSTMENT RELATED TO JURISDICTIONAL ALLOCATION

#### 22 CHANGES?

A. Yes. The company will experience a significant and unusual change in its native load
after the end of the true-up period but prior to the expected effective date of rates in

1 this proceeding. The native load reduction will be approximately six percent when this 2 change takes place. Since the Company's native load will be decreased, there will be 3 less kWh included in the calculation to allocate costs to the Company's jurisdictions which will result in additional costs allocated to Missouri's retail customers. 4 5 This change of load significantly affects the cost of service allocations among Liberty-Empire's jurisdictions. Therefore, Liberty-Empire is requesting either an AAO to 6 7 capture the changes in allocated costs and associated revenues for review in the next 8 rate case or a discrete out-of-period adjustment.

9

#### Q. WHEN WILL THIS CHANGE OCCUR?

A. The effective date of the change in load requirements is June of 2020, after the close of the true-up period in this case. Unless an out-of-period adjustment is made, any change in cost of service, including any revenue streams associated with this change, will not be included in the rates for Missouri customers until the effective date of rates resulting from Liberty-Empire's next rate case. If a discrete out-of-period adjustment is not made, the establishment of an AAO would at least allow these costs and revenues to be considered in the next rate case.

#### 17 Q. WHAT IS CAUSING THIS REDUCTION IN NATIVE LOAD?

A. In late 2017, three long term customers who are currently under a 10 year contract
decided not to extend their contracts as they had previously done. The customers
notified the Company and executed documents to stop receiving their load
requirements from Liberty-Empire. Since that time, the Company has worked
diligently to find other customers that have a need for energy and/or capacity.

### Q. DID THE COMPANY ENTER INTO AN AGREEMENT WITH ANOTHER CUSTOMER?

27

1 A. Yes. The Company has entered into an agreement and will sell capacity to a new 2 customer. The Company proposes to flow the revenues from this sale of capacity back 3 to its retail customers through the proposed AAO or with the discrete adjustment, 4 offsetting some of the costs associated with the jurisdictional allocation change. In 5 addition, the Company will sell generation related to this capacity on behalf of this new customer into the Southwest Power Pool ("SPP") Integrated Marketplace ("IM") and 6 7 receive revenue from the purchaser for this energy. The Company is also proposing to 8 flow back to its retail customers the net revenues associated with those sales - whether 9 through an AAO or as part of a discrete adjustment.

#### 10 X. <u>CONTINUATION AND IMPLEMENTATION REQUESTS FOR TRACKERS</u>

### 11 Q. DOES LIBERTY-EMPIRE REQUEST TO CONTINUE THE RIVERTON 12 12 TRACKER?

A. Yes. As discussed above, the operating expenses associated with the Riverton 12 long
term maintenance agreement have increased significantly since the tracker was
established in the Company's last rate case. Liberty-Empire believes the continuation
of the tracker for these costs provides benefits to both the Company and its customers
by avoiding any over or under collection of costs incurred for maintenance of the
Riverton 12 unit.

### 19 Q. DOES LIBERTY-EMPIRE REQUEST THE CONTINUATION OF THE 20 PENSION AND OPEB TRACKER?

A. Yes. As discussed and supported by Company witness James Fallert, pension and
 OPEB costs can fluctuate greatly due to a variety of circumstances. The Company
 respectfully requests the continuation of a tracker mechanism for pension and OPEB
 expenses.

#### Q. DOES THE COMPANY REQUEST TO REMOVE THE ADDENDUM TO THE

1

#### 2 TARIFFS FOR FEDERAL TAX RATE REDUCTION AND INCLUDE A 3 TRACKER FOR TAX AMORTIZATIONS INCLUDED IN BASE RATES?

- A. Yes. Liberty-Empire requests to remove the addendum to the tariffs which became
  effective August 30, 2018 to allow the Company to pass the benefits of the TCJA back
  to customers. The Company's proposed revenue requirement is calculated based on
  the reduced federal income tax rate and the addendum is no longer appropriate. The
  Company also requests a tracker for the over or under collection in rates due to changes
  in the annual amortization of the protected portion of excess ADIT amounts due to
  ARAM and due to usage changes for both the protected and unprotected excess ADIT.

#### 11 XI. <u>RIDER FAC MINIMUM FILING REQUIREMENTS</u>

### 12 Q. IS THE COMPANY'S REQUEST TO CONTINUE ITS RIDER FAC 13 DESIGNED TO COMPLY WITH THE COMMISSION'S RULES?

A. Yes. Liberty-Empire has designed its Rider FAC continuation request to comply with
Commission Rule 4 CSR 240-20.090(2)(A)1-19 which governs the fuel adjustment
process. The table below displays a list of the FAC-related minimum filing
requirements and a description of where this information can be found in supporting
schedules and testimony.

		4 C	4 CSR 240-20.090 Fuel and Purchased Power Rate Adjustment Mechanisms			
		Section (2)(A), Minimum Filing Requirements				
		#	Description	Reference		
		1.	Customer Notice	Schedule SDR-11		
		2.	Sample Customer Bills	Schedule SDR-12		
		3.	Proposed FAC Tariff	Schedule AJD-1		
		4.	Description and Operation	Richard Direct Testimony		
		5.	Equity Return	Richard Direct Testimony		
		6.	True-up	Richard Direct Testimony		
		7.	Short-term Borrowing Rate	Schedule SDR-13		
		8.	Prudence Reviews	Richard Direct Testimony		
		9.	Power Supply Costs/Rev.	Schedule SDR-14		
		10.	Fuel Costs/Rev.	Schedule SDR-14		
		11.	Incentive Features	Richard Direct Testimony		
		12.	Rate Volatility Mitigation	Richard Direct Testimony		
		13.	Cost Recovery Prudence	Richard Direct Testimony		
		14.	Business Risk	Richard Direct Testimony		
		15.	Plant Efficiency Stats	Schedule SDR-15		
		16.	IRP Schedule	EO-2013-0547 ("2019 IRP")		
		17.	Emission Allowances	Schedule SDR-16		
			Five-year Plant Availability	Schedule SDR-17		
1		19.	Authorization	Richard Direct Testimony		
2	Q.	WILI	LIBERTY-EMPIRE CU	STOMERS BE NOTIFIED OF THE RE	OUEST	
	C.				C	
3		TO C	ONTINUE THE FAC (4 (	CSR 240-20.090 (2) (A) 1)?		
4	A.	Yes.	In addition to the normal n	otice requirements for a general rate case f	iling, the	
5		Company has prepared a notice that describes the request to continue the existing FAC.				
6		Please see an exemplar copy of the notice attached as Schedule SDR-11.				
7	Q.	DOES	5 THE ACCOUNTING A	ND BILLING PROCESS IN THE PRO	POSED	
8		FAC	ENABLE LIBERTY-EN	IPIRE TO TRACK FAC REVENUES	S AS A	
9		DISC	RETE LINE ITEM ON C	CUSTOMERS' BILLS (4 CSR 240-20.09)	0 (2) (A)	
10		2)?				
11	A.	Yes. 1	FAC changes/credits have b	een, and will continue to be, shown as a sepa	arate line	
12		item o	on each customer's bill, and	the FAC revenue will continue to be segre	gated on	

the Company's books and records to facilitate the accounting and audit process. Please
 see Schedule SDR-12 for an example of a customer bill.

### 3 Q. ARE THE PROPOSED FAC TARIFF SHEETS PROVIDED (4 CSR 240-20.090 4 (2) (A) 3)?

5 A. Yes. Please see Company witness Doll's Schedule AJD-1.

### 6 Q. PLEASE DESCRIBE THE OPERATION OF LIBERTY-EMPIRE'S FAC (4 7 CSR 240-20.090 (2) (A) 4).

8 A. The application of the tariff involves the accumulation of actual Missouri jurisdictional 9 net energy costs over a six-month period and comparing that cost accumulation to the 10 base cost of energy recovery of net costs eligible for the FAC. Please also see the 11 testimony of Company witness Todd Tarter. Ninety-five percent of this over/under 12 recovery balance is then billed/credited to Liberty-Empire's Missouri retail customers 13 over a six-month billing period that immediately follows the six-month accumulation period. The first six-month accumulation period is September through February, and 14 15 the associated recovery or billing period is the following June through November. The 16 process in the FAC involves changing the energy cost recovery factor twice each year, 17 once in June and again in December. Liberty-Empire files for energy cost recovery 18 changes under the FAC in April and October of each year. Please also see Company 19 witness Doll's Schedule AJD-1.

#### 20

21

#### Q. WHAT IS THE TIMING OF THE SEMI-ANNUAL FAC FILINGS IN THE FAC TARIFF?

- A. The proposed tariff incorporates the following timing of actions, which are the same as
  those included in Liberty-Empire's existing FAC:
- Filing for a change in the fuel adjustment rate ("FAR") on April 1<sup>st</sup> and October 1<sup>st</sup>

1 each year;

- Staff recommendation on the filed FAR by May 1<sup>st</sup> and November 1<sup>st</sup> each year;
- Commission action on the FAR by June 1<sup>st</sup> and December 1<sup>st</sup> or FAR as filed is
   allowed to go into effect on June 1<sup>st</sup> and December 1<sup>st</sup> each year.

## 5 Q. DOES THE TIMING OF THESE ACTIONS COMPLY WITH THE 6 COMMISSION'S RULES GOVERNING THE FILING OF PERIODIC 7 ADJUSTMENTS TO THE FAC?

8 A. Yes. The Staff has thirty days from the date of a FAR filing to make its 9 recommendation, and the Commission has sixty days from the FAR filing date in which 10 it can render a decision concerning the cost recovery factor or allow it to go into effect 11 by operation of law.

## Q. DOES THE PROPOSED FAC TARIFF AND THE RECOVERY/REFUND MECHANISM PROVIDE LIBERTY-EMPIRE SUFFICIENT OPPORTUNITY TO EARN A FAIR RETURN ON EQUITY (4 CSR 240-20.090 (2) (A) 5)?

15 A. Yes and no. The proposed FAC mechanism is a significant improvement over the 16 recovery of these costs only through base rates. Additionally, the Company is 17 proposing some changes to its existing FAC as described by witness Doll. These 18 changes, such as the proposed inclusion of all RTO transmission expense, would 19 improve the Company's opportunity to earn a fair return as compared with base rate 20 recovery. The proposed FAC will recover 95 percent of the changes in energy costs, 21 which means that the Missouri retail customers will reimburse Liberty-Empire for a 22 significant portion of its actual, prudently incurred, fuel and energy costs when above 23 the base level. Although, overall, the FAC is a great improvement over the situation 24 that existed prior to the FAC, any negative adjustment to the 95% / 5% sharing

1		mechanism could deprive the Company of a sufficient opportunity to earn a fair
2		return on equity and thereby deny the Company one of the major benefits an FAC
3		was designed to provide. During periods when fuel and purchased power costs
4		increase between rate cases, the sharing mechanism requires Liberty-Empire to
5		absorb five percent of those cost increases - which directly reduces the Company's
6		earnings - even though all those costs were prudently incurred. If the percentage of
7		costs the Company is required to absorb under the FAC's sharing mechanism is
8		increased above the current level, the resulting effect on net income could deprive
9		Liberty-Empire of an opportunity to earn a fair return on equity. Likewise, if energy
10		costs would happen to fall below the FAC base, Liberty-Empire's customers could be
11		adversely impacted.
12	Q.	HOW DOES THE TRUE-UP OF ENERGY COST RECOVERY TAKE PLACE
12 13	Q.	HOW DOES THE TRUE-UP OF ENERGY COST RECOVERY TAKE PLACE (4 CSR 240-20.090 (2) (A) 6)?
	<b>Q.</b> A.	
13	-	(4 CSR 240-20.090 (2) (A) 6)?
13 14	-	(4 CSR 240-20.090 (2) (A) 6)? The true-up of recovered energy costs takes place every six months. Any refunds
13 14 15	-	(4 CSR 240-20.090 (2) (A) 6)? The true-up of recovered energy costs takes place every six months. Any refunds ordered by the Commission will include interest at the Company's short-term
13 14 15 16	A.	(4 CSR 240-20.090 (2) (A) 6)? The true-up of recovered energy costs takes place every six months. Any refunds ordered by the Commission will include interest at the Company's short-term borrowing rate.
13 14 15 16 17	A.	<pre>(4 CSR 240-20.090 (2) (A) 6)? The true-up of recovered energy costs takes place every six months. Any refunds ordered by the Commission will include interest at the Company's short-term borrowing rate. PLEASE DESCRIBE HOW THE FAC MONTHLY SHORT-TERM</pre>
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> </ol>	A.	(4 CSR 240-20.090 (2) (A) 6)? The true-up of recovered energy costs takes place every six months. Any refunds ordered by the Commission will include interest at the Company's short-term borrowing rate. PLEASE DESCRIBE HOW THE FAC MONTHLY SHORT-TERM BORROWING RATE IS DEFINED AND APPLIED TO OVER-UNDER
<ol> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> <li>18</li> <li>19</li> </ol>	A.	(4 CSR 240-20.090 (2) (A) 6)? The true-up of recovered energy costs takes place every six months. Any refunds ordered by the Commission will include interest at the Company's short-term borrowing rate. PLEASE DESCRIBE HOW THE FAC MONTHLY SHORT-TERM BORROWING RATE IS DEFINED AND APPLIED TO OVER-UNDER BILLED AMOUNTS AND DISALLOWANCES AS PRESCRIBED BY THE

24 the current accumulation period and all prior accumulation periods net of

23

to the average balance of the under or over recovery calculations for periods including

recoveries/refunds from/to customers. A sample calculation of the short-term rate is
 shown on Schedule SDR-13.

## Q. PLEASE DESCRIBE HOW THE FAC COMPLIES WITH THE PRUDENCE REVIEW PROCEDURES PRESCRIBED BY THE COMMISSION'S RULES (4 CSR 240-20.090 (2) (A) 8)?

6 Liberty-Empire's proposed FAC is flexible and allows the Commission to adjust the A. 7 amount of FAC recovery if any cost is disallowed as the result of a prudence review. 8 The accounting procedures used by Liberty-Empire will involve an audit trail that should 9 facilitate the audit process associated with those periodic prudence reviews. The exact 10 timing of the prudence review has not been explicitly set out in the tariff, but the tariff 11 specifies that prudence reviews will take place no less than every eighteen (18) months. 12 Liberty-Empire's operation of the FAC has been audited by the Commission Staff 13 through February 28, 2018, and no disallowances have been recommended by Staff.

#### 14 Q. PLEASE EXPLAIN ALL OF THE COSTS AND REVENUES THAT SHALL BE

**CONSIDERED FOR RECOVERY IN THE PROPOSED FAC (4 CSR 240-20.090** 

#### 15

16

(2) (A) 9 and 4 CSR 240-20.090 (2) (A) 10).

A. Liberty-Empire is proposing to continue with the same FAC components as Liberty-Empire's existing FAC as well as those requested by Mr. Doll. Liberty-Empire's current FAC consists of net FPP energy costs (including FPP costs associated with the SPP IM, fuel related costs such as unit train, undistributed and other, variable natural gas transportation expenses and Plum Point PPA O&M), plus the cost of the AQCS consumables, a portion of the Regional Transmission Operator ("RTO") transmission expense and net emissions cost, if any, less the net sales of RECs.

24 Liberty-Empire's proposed FAC includes the addition of net Auction Revenue Rights

1 and Transmission Congestion Rights, all of the RTO transmission expense and other 2 items including the revised definition of off-system sales revenue ("OSSR") as 3 proposed by Mr. Doll. 4 The FAC base is then calculated on a per unit basis utilizing net system input expressed 5 in kilowatt hours or megawatt hours. Please also see Company witness Todd Tarter's 6 Schedule TWT-3. 7 Finally, accounts, especially subaccounts, can change from time to time. They exist as a way to track and manage costs. Therefore, some flexibility should be retained to 8 9 handle changing business conditions. An example of specific accounts and definitions 10 from Liberty-Empire's existing and proposed FAC are attached as Schedule SDR-14. 11 **Q**. DO THE ENERGY COSTS ELIGIBLE FOR RECOVERY THROUGH THE 12 PROPOSED FAC INCLUDE THE COSTS AND/OR BENEFITS ASSOCIATED 13 WITH LIBERTY-EMPIRE'S FUEL RISK MANAGEMENT (HEDGING) 14 **PROGRAM?** 15 A. Yes. As indicated on Schedule SDR-14, the costs eligible for recovery through the 16 tariff include Liberty-Empire's fuel risk management costs, which are recorded in 17 FERC accounts 501, 547, and 555. 18 PLEASE DESCRIBE ANY INCENTIVE FEATURES IN THE PROPOSED FAC Q. (4 CSR 240-20.090 (2) (A) 11). 19 20 A. As with the existing FAC, Liberty-Empire is proposing to maintain the 95% / 5% 21 sharing mechanism, which operates as an incentive feature. It is my understanding 22 that when this sharing mechanism was initially instituted, it was designed to 23 incentivize the Company to maintain low energy costs. If prudently incurred FAC 24 eligible costs are higher than the FAC base factor, the Company would absorb five

percent of the costs higher than the FAC base. Alternately, if the prudently incurred
 FAC eligible costs are lower than the FAC base factor, the Company would retain
 five percent of the costs lower than the FAC base.

4

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# Q. ARE THERE BENEFITS ASSOCIATED WITH THE CONTINUED USE OF A FAC FOR LIBERTY-EMPIRE (4 CSR 240-20.090 (2) (A) 11)?

6 Yes. There are benefits for all of the Company's stakeholders. First, Liberty-Empire A. 7 benefits by being able to recover most of its actual fuel and energy costs through the 8 FAC. This strengthens Liberty-Empire's financial profile and enhances its ability to 9 attract the financing necessary to meet its customers' needs and to obtain that financing 10 at the best rates possible. In addition, the need to file general rate cases for the purpose 11 of recovering ongoing fuel and energy costs in base electric rates has essentially been 12 eliminated. Fewer general rate case filings lowers the Company's regulatory costs and, 13 as such, the cost to serve Liberty-Empire's Missouri customers.

# 14 Q. DOES THE FAC BENEFIT THE CUSTOMER (4 CSR 240-20.090 (2) (A) 11)?

15 A. Yes, the customer benefits from the implementation and continuation of a properly designed FAC. The customer will only reimburse Liberty-Empire for the actual cost 16 17 of fuel and energy, not an estimate of future energy costs. Thus, depending on the 18 sharing mechanism and the actual costs incurred, there may be no over or under 19 recovery of cost. Liberty-Empire could also have a stronger financial profile and an 20 enhanced ability to attract the capital necessary to operate its utility system at the best 21 rates possible. Ultimately, this should lower the cost of operations from what it would 22 have been without the FAC. In addition, the FAC conveys a more accurate cost of 23 electric energy to Liberty-Empire's customers. If energy costs increase, the customer 24 will know within six months and will be in a position to make an informed decision

1		concerning any energy efficiency measures that could be implemented in an effort to
2		lower consumption. The fixed energy pricing system that Missouri used prior to the
3		FAC tended to shield the customer from the true cost of electric energy, which may
4		hamper the customers' adoption of or participation in energy efficiency programs.
5	Q.	DOES THE PROPOSED FAC INCLUDE ANY RATE VOLATILITY
6		MITIGATION FEATURES (4 CSR 240-20.090 (2) (A) 12)?
7	A.	Yes. The energy cost changes that occur during the accumulation period will be spread
8		over six months. This feature will fix the FAC component of a customer's bill for six
9		months and will tend to smooth out energy price volatility.
10	Q.	DOES THE EMPIRE FAC TARIFF INCLUDE PROVISIONS THAT ARE
11		DESIGNED TO LIMIT EMPIRE'S FAC RECOVERIES TO PRUDENTLY
12		INCURRED COST OF ENERGY (4 CSR 240-20.090 (2) (A) 13)?
13	A.	Yes. The Liberty-Empire FAC and the Commission's rule governing FACs include
14		two safeguards that limit FAC recovery to actual, prudently-incurred energy costs. The
15		first safeguard is a true-up process that ensures that the FAC collections during the
16		Recovery Period do not exceed actual energy costs incurred during the Accumulation
17		Period. The second safeguard involves a requirement that Liberty-Empire's energy
18		costs be subjected to periodic Prudence Reviews, which ensure that only prudently-
19		incurred energy costs are passed through to customers.
20	Q.	DOES LIBERTY-EMPIRE HAVE PROCEDURES IN PLACE DESIGNED TO
21		ENSURE THAT ITS FUEL PURCHASING IS PRUDENT (4 CSR 240-20.090 (2)
22		(A) <b>13</b> )?
23	A.	Yes, it does. Liberty-Empire plans its fuel procurement activity using long-term

1		planning and maintains an active Risk Management Policy.
2	Q.	IN ITS DIRECT FILING, HAS THE COMPANY PROVIDED ANY
3		INFORMATION ABOUT THE CHANGE IN BUSINESS RISK RESULTING
4		FROM THE IMPLEMENTATION OF THE PROPOSED FAC (4 CSR 240-
5		20.090 (2) (A) 14)?
6	A.	Yes, please refer to the direct testimony of Company witness Robert B. Hevert starting
7		on page 29.
8	Q.	HAS LIBERTY-EMPIRE CONDUCTED ANY HEAT RATE TESTING ON ITS
9		GENERATION UNITS DURING THE PREVIOUS TWENTY-FOUR MONTHS
10		(4 CSR 240-20.090 (2) (A) 15)?
11	A.	Yes. The heat rate test results are included as Schedule SDR-15. Additionally, the
12		documentation of the test monitoring procedures are found in files contained in folder
13		FAC MFR #15 which will be provided to the parties in this case as part of the
14		workpapers it provides in connection with its direct case filing. Heat rate testing
15		information, as required by Rule subpart 20.090(2)(A)(15), is being providing for
16		twelve of Liberty-Empire's thirteen generating units. Heat rate testing, however, was
17		performed on Liberty-Empire's Riverton 11 generating unit just outside the 24-month
18		time period prescribed by the Rule, and, as such, a partial waiver is being requested.
19	Q.	PLEASE PROVIDE ANY INFORMATION THAT DEMONSTRATES THAT
20		EMPIRE HAS A LONG-TERM RESOURCE PLANNING PROCESS IN
21		PLACE (4 CSR 240-20.090 (2) (A) 16).
22	A.	Liberty-Empire filed its most recently completed IRP in Missouri on June 28, 2019, in
23		Case No. EO-2019-0049 ("2019 IRP").
24	Q.	PLEASE PROVIDE A DESCRIPTION OF THE COMPANY'S EMISSION

### SHERI RICHARD CORRECTED DIRECT TESTIMONY

# MANAGEMENT POLICY AND FORECASTED ENVIRONMENTAL INVESTMENTS AND ALLOWANCES PURCHASES AND SALES (4 CSR 240 20.090 (2) (A) 17).

4 A. Empire is currently subject to two sets of regulations which utilize emissions allowances. 5 They are the Acid Rain program and the Cross State Air Pollution Rule ("CSAPR"). 6 Under these programs, each year, a set number of emissions allowances are provided to 7 Empire for each of the affected plants. Empire anticipates being able to comply with 8 these regulations with the allowances provided. At this time, Empire has no plans to sell 9 any banked allowances, which are used to help ensure compliance with existing 10 regulations. Therefore, based on current market conditions, the Company expects little 11 to no costs or revenue over the next four years related to emissions allowances.

Q. PLEASE PROVIDE DATA AND ILLUSTRATIONS DETAILING
 GENERATING PLANT AVAILABILITY FOR THE PRECEDING FIVE YEARS
 FOR EACH PLANT LIBERTY-EMPIRE OWNS EITHER IN PART OR IN ITS
 ENTIRETY(4 CSR 240-20.090 (2) (A) 18).

16 A. The plant availability data is included as Schedule SDR-17.

17 **Q**. DOES LIBERTY-EMPIRE GRANT **AUTHORIZATION** FOR THE 18 COMMISSION TO RELEASE TO ALL PARTIES TO THE GENERAL RATE CASE THE PREVIOUS FIVE YEARS OF HISTORICAL SURVEILLANCE 19 20 MONITORING REPORTS LIBERTY-EMPIRE HAS SUBMITTED THROUGH 21 THE ELECTRONIC FILING INFORMATION SYSTEM? (4 CSR 240-20.090 (2) 22 (A) **19**).

23 A. Yes.

24

### SHERI RICHARD CORRECTED DIRECT TESTIMONY

### 1 XII. <u>COMPLIANCE WITH STIPULATIONS AND AGREEMENTS</u>

# 2 Q. HAS THE COMPANY COMPLIED WITH THE STIPULATIONS AND 3 AGREEMENTS AS ORDERED BY THE COMMISSION IN FILE NO. ER-4 2016-0023?

- A. Yes, the Company is in compliance with the Stipulation and Agreement approved by
  the Commission by Order dated August 10, 2016, as well as the DSM Stipulation and
  Agreement approved by Order dated May 17, 2017 ("DSM"). Among the major areas
  are the following:
- 9 **DSM Regulatory Asset**
- 10The Signatories agreed that the Company will continue amortization of the DSM11regulatory asset for costs incurred during the Regulatory Plan, File No. EO-2005-0263,
- 12 for a total term of ten (10) years.

## 13 DSM Program Cost

- 14 The Signatories agreed that the Company will continue amortization for the DSM 15 program costs incurred after the end of the Regulatory Plan and prior to any program 16 implementation under MEEIA for a total term of six (6) years.
- 17 Low Income Weatherization

18 Please see the direct testimony of Company witness Nathaniel W. Hackney who will

- 19 address the stipulations and agreements regarding Low Income Weatherization.
- 20 Volumetric Rate Design / Block Rates
- Staff, OPC, DE, and the Company agreed to work together to develop an analysis regarding responsible energy use as related to residential block rates, with said analysis to be filed by the Company in its next general rate case. Please refer to the direct testimony of Company witness Timothy S. Lyons for this analysis.

# 1 **Reporting**

2		The Company agreed to and has continued to provide monthly quality of service
3		reporting, submit monthly revenue and usage reports to Staff, and provide the following
4		information as part of its monthly FAC reports (as agreed to in the Non-Unanimous
5		Stipulation and Agreement filed May 12, 2010, in File No. ER-2010-0130):
6		a. Monthly SPP market settlements and revenue neutrality uplift charges;
7		b. Notify Staff within 30 days of entering a new long-term contract for
8		transportation, coal, natural gas or other fuel; natural gas spot transactions are
9		specifically excluded;
10		c. Provide Staff with a monthly natural gas fuel report that includes all
11		transactions, spot and longer term; the report will include term, volumes, price
12		and analysis of number of bids;
13		d. Notify Staff within 30 days of any material change in the Company's fuel
14		hedging policy, and provide the Staff with access to new written policy;
15		e. Provide Staff its Missouri Fuel Adjustment Interest calculation work papers
16		in electronic format with all formulas intact when the Company files for a
17		change in the cost adjustment factor;
18		f. Notify Staff within 30 days of any change in Liberty-Empire's internal
19		policies for participating in the SPP; and
20		g. Continue to provide Staff access to all contracts and policies upon Staff's
21		request, at the Company's corporate office in Joplin, Missouri.
22	XIII.	MERGER STIPULATIONS – CASE NO. EM-2016-0213
23	Q.	HAS LIBERTY-EMPIRE COMPLIED WITH THE CONDITIONS SET
24		FORTH IN THE STIPULATIONS AND AGREEMENTS WITH THE STAFF

# AND OFFICE OF THE PUBLIC COUNSEL ("OPC") REGARDING FINANCING?

3 A. Yes. Liberty-Empire has complied with the following conditions regarding financing:

- The Company agreed to provide notice to the Commission, including a filing
  with required information, in the event The Empire District Electric Company
  ("Empire"), and/or the affiliate on which it relies on for its debt financing
  ("Financing Affiliate"), should have its Standard & Poor's ("S&P") Corporate
  Credit Rating downgraded to below BBB-. *The Company has not been downgraded below a BBB-*.
- 10 The Company agreed in the event Empire's affiliation with Algonquin Power 11 & Utilities Corp. and its companies should cause Empire's and/or the Financing 12 Affiliate's S&P Corporate Credit Rating to be downgraded to below BBB-, 13 Empire, or the Financing Affiliate, shall pursue additional legal and structural 14 separation, if necessary, from the affiliate(s) causing the downgrade, to ensure 15 Empire continues to have access to capital at the least cost. Empire shall not 16 pay a dividend to its upstream parent companies until there is sufficient 17 evidence that Empire's S&P Corporate Credit Rating has been restored to the 18 rating Empire had before the event. The Company has not been downgraded 19 below a BBB-.
- The Company agreed if Empire's S&P Corporate Credit Rating declines, and/or
   the credit rating of the Financing Affiliate declines, Empire shall file with the
   Commission a comprehensive risk management plan that assures Empire's
   access to and cost of capital will not be further impaired. The plan shall include

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1 2 a non-consolidation opinion if required by S&P. *The S&P Corporate Credit Rating has not declined.* 

3 The Company agreed that Empire shall not seek an increase to the cost of capital 4 as a result of this Transaction or Empire's ongoing affiliation with Algonquin 5 Power & Utilities Corp. and its affiliates other than Empire after the 6 Transaction. Any net increase in the cost of capital Empire seeks shall be 7 supported by documentation that: (a) the increases are a result of factors not 8 associated with the Transaction or the post Transaction operations of Algonquin 9 Power & Utilities Corp. or its non-Empire affiliates; (b) the increases are not a 10 result of changes in business, market, economic or other conditions caused by 11 the Transaction or the post Transaction operations of Algonquin Power & 12 Utilities Corp. or its non-Empire affiliates; and (c) the increases are not a result 13 of changes in the risk profile of Empire caused by the Transaction or the post 14 Transaction operations of Algonquin Power & Utilities Corp. or its non-Empire 15 affiliates. The provisions of this section are intended to recognize the 16 Commission's authority to consider, in appropriate proceedings, whether this 17 Transaction or the post Transaction operations of Algonquin Power & Utilities 18 Corp. or its non-Empire affiliates has resulted in capital cost increases for 19 Empire. Nothing in this agreement shall restrict the Commission from 20 disallowing such capital cost increases from recovery in Empire's rates. The 21 Company has not attempted to seek an increase to the cost of capital as a result 22 of the Transaction. Please refer to the testimony of Company witness Robert 23 Hevert.

The Company agreed if Empire's per books capital structure is different from
 that of the entity or entities in which Empire relies for its financing needs,
 Empire shall be required to provide evidence in subsequent rate cases as to why
 Empire's per book capital structure is the most economical for purposes of
 determining a fair and reasonable allowed rate of return for purposes of
 determining Empire's revenue requirement. *Please refer to the testimony of Company witness Robert Hevert*.

- The Company agreed the Joint Applicants will not obtain Empire financing
   services from an affiliate, unless such services comply with Missouri's Affiliate
   Transaction Rules. *Any financing provided to Empire from an affiliate has been in compliance with Missouri's Affiliate Transaction Rules.*
- The Company agreed to the extent the goodwill arising from the Transaction
   which is assigned to LU Central becomes impaired and such impairment
   negatively effects Empire's cost of capital, all net costs associated with the
   decline in Empire's credit quality specifically attributed to the goodwill
   impairment, considering all other capital cost effects of the Transaction and the
   impairment, shall be excluded from the determination of its rates. *The goodwill impairment analysis was completed on January 26, 2018.*
- The Company agreed for the first five years after closing of the Transaction, LU
   Central shall provide Staff and OPC, its annual goodwill impairment analysis in
   a format that includes spreadsheets in their original format with formulas and
   links to other spreadsheets intact and any printed materials within 30 days after
   it is performed. Thereafter, this analysis will be made available to Staff and OPC

- 1 upon request. The Company filed the annual goodwill impairment analysis for 2 2017 on April 2, 2018 and for 2018 on May 7, 2019. HAS LIBERTY-EMPIRE COMPLIED WITH THE CONDITIONS SET 3 Q. FORTH IN THE STIPULATIONS AND AGREEMENTS WITH THE STAFF 4 5 AND OPC REGARDING DEPRECIATION? 6 Liberty-Empire has complied with the following conditions regarding A. Yes. 7 depreciation of electric assets: The Company agreed that for purposes of accruing depreciation expense, 8 9 Liberty-Empire shall use the ordered depreciation rates from File No. ER-2016-10 0023 until they are changed in a subsequent rate proceeding. The Company is 11 accruing depreciation expense at rates ordered in Docket ER-2016-0023. 12 Liberty-Empire agreed to continue to book all plant and depreciation reserve 13 records in compliance with the format set forth in Title 18: Conservation of 14 Power and Water Resources, Part 101-Uniform System Of Accounts 15 Prescribed For Public Utilities and Licensees Subject To The Provisions Of The 16 Federal Power Act (FERC USOA). Liberty-Empire's plant and depreciation 17 reserve are recorded in the format set forth in Title 18: Conservation of Power 18 and Water Resources, Part 101—Uniform System Of Accounts Prescribed For 19 Public Utilities and Licensees Subject To The Provisions Of The Federal Power 20 Act (FERC USOA). 21 Liberty-Empire agreed to continue to prepare and maintain its books in 22 accordance with the FERC Uniform System of Accounts (USOA). Liberty-23 Empire continues to prepare and maintain its books in accordance with the
- 24 FERC Uniform System of Accounts (USOA).

1 The Company agreed to submit the following information in accordance with 4 2 CSR 240-3.175 - Submission Requirements for Electric Utility Depreciation 3 Studies. While Liberty-Empire has not included a depreciation study as part of this filing, once completed it will be submitted in accordance with 4 CSR 240-4 5 3.175 - Submission Requirements for Electric Utility Depreciation Studies. 6 Q. HAS LIBERTY-EMPIRE COMPLIED WITH THE CONDITIONS SET 7 FORTH IN THE STIPULATIONS AND AGREEMENTS WITH THE STAFF 8 OPC REGARDING RATEMAKING AND AND ACCOUNTING 9 **CONDITIONS?** 10 A. Yes. Liberty-Empire has met the following conditions relating to ratemaking: 11 The Company agreed Goodwill associated with the premium over book value of the assets paid for the shares of Empire stock (referred to for purposes of this 12 13 stipulation as "Acquisition Premium") will be maintained on the books of LU 14 Central and the amount of any acquisition premium paid will not be recovered 15 in retail rates. Liberty-Empire agreed it would not seek direct or indirect 16 recovery or recognition of any acquisition premium through any purported 17 acquisition savings "sharing" adjustment (or similar adjustment) in future rate 18 cases. The Acquisition Premium has been recorded on the books of LU Central 19 and Empire did not include for recovery any acquisition premium either directly 20 or indirectly in this case. 21 The Company agreed it would not seek either direct or indirect rate recovery or • 22 recognition of any transaction costs through any purported acquisition savings "sharing" adjustment (or similar adjustment) in any future rate cases. Liberty-23

- Empire's filing does not include any merger-related transactions costs to be recovered by Missouri customers.
- 3 The Company agreed transition costs are those costs incurred to integrate 4 Empire under the ownership of LU Central and includes integration planning 5 and execution, and "costs to achieve." Transition costs include capital and non-6 capital costs. Non-capital transition costs can be ongoing costs or one- time 7 costs. Non-capital transition costs were allowed to be deferred on the books of 8 the Company to be considered for recovery in future rate cases. If the Company 9 seeks to recover these costs in subsequent rate recovery it will have the burden 10 of proving that the recoveries of any transition costs are just and reasonable and 11 the costs provide benefits to its customers. Liberty-Empire is not seeking to 12 recover transition costs in this rate case.

# Q. HAS LIBERTY-EMPIRE COMPLIED WITH THE CONDITIONS SET FORTH IN THE STIPULATIONS AND AGREEMENTS WITH THE STAFF AND OPC REGARDING AFFILIATE TRANSACTIONS?

16 A. Yes. Liberty-Empire has met the following conditions:

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- The parties agreed that the Company is to be operated after the purchase in
   compliance with the affiliate transaction rule, or will obtain any necessary
   variances from the MoPSC's affiliate transaction rule as defined in 4 CSR 240 20 20-015(10) and 4 CSR 240-40-015(10). *Empire is operating in compliance with the affiliate transaction rule*.
- The parties agreed Algonquin Power & Utilities Corp. and its subsidiaries will
   commit that all information related to an affiliate transaction consistent with 4
   CSR 240-20.015(5)(A)(1)-(2) and 4 CSR 240-40.015(5)(A)(1)-(2) charged to

1		Liberty-Empire will be treated in the same manner as if that information is
2		under the control of Liberty-Empire. The Company continues to treat
3		information related to affiliate transactions as if that information is under the
4		control of Liberty-Empire.
5		• The parties agreed that Liberty-Empire will provide no preferential service,
6		information, or treatment to an affiliated entity over another party at any other
7		time, consistent with 4 CSR 240-20.015(2) and 4 CSR 240-40.015(2). Liberty-
8		Empire continues to provide no preferential service, information, or treatment
9		to an affiliated entity over another party.
10	Q.	HAS THE COMPANY COMPLIED WITH THE CONDITIONS REGARDING
11		ACCESS TO RECORDS?
12	A.	Yes. Liberty-Empire has complied with the following conditions:
13		• The Company agrees to provide Staff and OPC with access, upon reasonable
14		written notice during working hours and subject to appropriate confidentiality
15		and discovery procedures, to all written information provided to common stock,
16		bond or bond rating analysts which directly or indirectly pertains to Liberty-
17		Empire or any affiliate that exercises influence or control over Liberty-Empire
18		or has affiliate transactions with Liberty-Empire. The Company will make
19		available any information related to common stock, bond, or bond rating
20		analysts which directly or indirectly pertains to Empire or any affiliate that
21		exercises influence or control over Empire or has affiliate transactions with
22		Empire.
23		• Empire agrees to make available to Staff and OPC, upon written notice during

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normal working hours and subject to appropriate confidentiality and discovery

1procedures, all books, records and employees as may be reasonably required to2verify compliance with Liberty-Empire's cost allocation manual ("CAM").3Liberty-Empire also agreed to provide Staff and OPC any other such4information (including access to employees) relevant to the Commission's5ratemaking, financing, safety, quality of service and other regulatory authority6over Liberty-Empire. The Company will make available all such relevant7records and related documents required to verify compliance.

8 The Company agrees to provide Staff and OPC access to and copies of, if 9 requested by Staff or OPC, the complete Liberty Utilities Co, LU Central and 10 Empire Board of Directors' meeting minutes, including all agendas and related 11 information distributed in advance of the meeting, presentations and handouts, 12 provided that privileged information shall continue to be subject to protection 13 from disclosure and Liberty-Empire shall continue to have the right to object to 14 the provision of such information on relevancy grounds. Empire agrees to 15 provide access to and copies of the relevant, non-privileged documents.

- The Company agrees to maintain records supporting its affiliated transactions
   for at least five years. *Empire has and will continue to maintain records supporting its affiliated transactions for at least five years.*
- The Joint Parties agreed that should it be deemed necessary for Staff employees
   to travel to locations outside of the State of Missouri to examine any records
   deemed relevant to the subject matter at hand Liberty-Empire shall bear all
   reasonable expense incurred by the employees, provided, however, that before
   any such expense shall be incurred by Staff, the Company shall be given
   reasonable notice to produce the records requested for inspection and

1		examination at the office of the Commission at Jefferson City, Missouri or at
2		Empire's offices in Joplin, Missouri, or at such other point in Missouri, as may
3		be mutually agreed, in which case Liberty-Empire shall make available at that
4		place, at that time, a person(s) who is acquainted with the records. Empire will
5		continue to comply with this agreement if it is deemed necessary for Staff
6		employees to travel to locations outside of the State of Missouri to examine any
7		records deemed relevant to the subject matter at hand.
8	Q.	HAS EMPIRE COMPLIED WITH ADDITIONAL CONDITIONS
9		CONTAINED IN THE OPC STIPULATION?
10	A.	Yes. Liberty-Empire has complied with the following additional conditions:
11		• In ensuring that the transaction is rate-neutral, the Joint Parties commit that
12		there will be no establishment of regulatory assets as part of the merger, unless
13		approved by the Commission. Liberty-Empire has not established a regulatory
14		asset as part of the merger.
15		• The Company agrees that Liberty-Empire's parent company will indemnify
16		Liberty-Empire for any federal or local income tax liability in excess of Liberty-
17		Empire's standalone liability for any period in which Liberty-Empire is
18		included in a consolidated income tax filing. Although it has been included in
19		consolidated income tax filings, Liberty-Empire has not incurred any federal
20		or local income tax liability in excess of its standalone liability as a result. If
21		this circumstance occurs, Liberty-Empire's parent company will indemnify
22		Liberty-Empire for any federal or local income tax liability in excess of Liberty-
23		Empire's standalone liability for any period in which Liberty-Empire is
24		included in a consolidated income tax filing.

- The Company agreed to record on its books all deferred taxes related to income tax deductions or credits created by Liberty-Empire's operations. *Liberty-Empire has recorded on its books all deferred taxes related to income tax deductions or credits created by Liberty-Empire's operations.* The Company agrees to not assume liability for the debts assumed by
- Ine Company agrees to not assume hability for the debts assumed by
   Algonquin, Liberty Utilities, or any of their subsidiaries or affiliates. *Liberty- Empire has not assumed liability for the debts issued by Algonquin, Liberty* Utilities or any other subsidiary or affiliate.
- 9 The Company agrees to maintain corporate officers who have a fiduciary duty
  10 to Empire. *Liberty-Empire has maintained corporate officers which have a*11 *fiduciary duty to the Company.*
- The Company agrees to maintain separate books and records, and make them
   available for review by Staff and OPC. *Liberty-Empire continues to maintain separate books and records, which are available for review.*
- The Company agrees it would not pay a dividend if its equity to total capitalization ratio, based on a 12-month rolling average, falls below 40%, or if payment of dividends would cause Liberty-Empire's equity to total capitalization ratio to fall below that threshold. *Liberty-Empire's equity level has not fallen below 40 percent*.
- The Company agrees to provide copies to Staff and OPC of the portions of any
   external audit reports performed for Algonquin Power & Utilities Corp. and
   Liberty Utilities Co.'s shared services pertaining directly or indirectly to
   determinations of direct billings and cost allocations to Empire. *There have not been any such determinations and therefore nothing has been provided*.

- The Company agrees to provide upon request a list of proceedings, if any, where
  Liberty Utilities Co.'s cost allocation practices have been audited in any other
  jurisdictions. Liberty-Empire will also make any such audit reports available to
  the Commission, its Staff, and the OPC upon request. *There have not been any such audits and therefore nothing has been provided*.
- The Company agreed to notify the Commission Staff and OPC within thirty days anytime there is 1.) an addition or deletion of an affiliated entity that provides services to, or receives services from, Liberty-Empire; 2.) an addition or deletion of an unregulated service provided by Liberty-Empire ; or 3.) an addition or deletion of a regulated service by Liberty-Empire for which a tariff has not been approved. *These events have not occurred, so no such notifications have been made.*
- The Company agrees to provide an independent attestation engagement of the
   CAM related to non-regulated affiliates and activities if requested by Staff or
   OPC. If approved by the Commission, the costs of any independent attestation
   engagement related to the CAM shall be shared by the regulated and non regulated operations consistent with the allocation of similar costs. *There have not been any such engagements and therefore nothing has been provided*.
- The Company agrees to not file a rate case until at least one full year of financial
   and operational information was available following the close of the
   Transaction on January 1, 2017. *Liberty-Empire did not file a rate case within one year following the close of the merger.*

# Q. HAS EMPIRE COMPLIED WITH THE CONDITIONS IN THE AGREEMENT WITH THE EMPIRE DISTRICT ELECTRIC SERP RETIREES?

- 1 A. Yes. Empire has complied with the following conditions:
- 2 The Company agrees to engage within one year after the Transaction closes, an 3 actuarial analysis with the intention of determining whether a SERP funded via 4 a Rabbi trust according to the SERP plan is less expensive to ratepayers than 5 benefits paid from Empire's general funds for the life of the plan (the "Study"). 6 The current SERP recipients shall be included in the development of all 7 assumptions and allowed review and analysis of the Study. If the Study 8 concludes the annual costs and expenses of funds contributed by Empire using 9 a Rabbi trust (including contributions to the trust) to provide benefits are 10 essentially the same or less than the costs and expenses to ratepayers of 11 providing the alternate of SERP benefits from Empire's general funds, Empire 12 will discuss the results of the Study with Staff and OPC, and to the extent 13 neither party oppose the rate recovery of the Rabbi trust in place of the SERP 14 funded from general funds, Empire will fund a Rabbi trust according to the plan. 15 Any trust documents shall be subject to review by the SERP recipients' counsel. 16 On June 13, 2017, the Company engaged Towers Watson to perform an 17 actuarial analysis with the intention of determining whether a Supplemental 18 *Executive Retirement Plan ("SERP") funded via a Rabbi trust according to the* 19 SERP plan is less expensive to customers than benefits paid from Empire's 20 general funds for the life of the plan. Liberty-Empire and the current SERP 21 recipients continue to work together to review the assumptions and the analysis 22 of the study. On November 28, 2018, and again on February 25, 2019, Liberty-23 Empire met with Staff, OPC and the retirees. Prior to implementing any

changes in funding of the SERP or seeking recovery in rates, the Company will
 discuss the proposed changes with Staff and OPC.

# 3 Q. HAS EMPIRE COMPLIED WITH THE CONDITIONS IN THE AGREEMENT 4 WITH THE MISSOURI DIVISION OF ENERGY ("DE") AND RENEW 5 MISSOURI?

6 A. Yes. Empire has complied with the following conditions:

7 The Company agrees that within six (6) months following the completion of the • 8 Transaction and the publication of best practices recommendations for microgrid 9 interconnection by the Missouri University of Science and Technology's Microgrid 10 Industrial Consortium, Empire will meet with DE to consider a microgrid 11 interconnection strategy consistent with the best practices recommendations of the 12 Microgrid Industrial Consortium. On June 29, 2017 following the completion of 13 the acquisition and the publication of best practices recommendations for microgrid interconnection by the Missouri University of Science and Technology's 14 15 Microgrid Industrial Consortium, the Company met with DE to consider a 16 microgrid interconnection strategy consistent with the best practices 17 recommendations of the Microgrid Industrial Consortium. The Company has 18 reviewed the viability of offering a community solar or solar subscription program 19 that provides its customers with the option of purchasing blocks of electricity 20 generated from solar installations constructed and/or owned by Empire within the 21 state of Missouri. On June 11, 2019 Liberty-Empire met with stakeholders to solicit 22 input and feedback on its proposal. The Company is in the process of finalizing 23 and submitting a formal proposal to the Commission.

# SHERI RICHARD CORRECTED DIRECT TESTIMONY

# 1 XIV. <u>CONCLUSION</u>

# 2 Q. DOES THIS CONCLUDE YOUR CORRECTED DIRECT TESTIMONY?

3 A. Yes.

## **AFFIDAVIT OF SHERI RICHARD**

STATE OF MISSOURI ) ) ss COUNTY OF JASPER )

On the <u>22</u> day of August, 2019, before me appeared Sheri Richard, to me personally known, who, being by me first duly sworn, states that she the Director of Rates and Regulatory Affairs of The Empire District Electric Company – Liberty Utilities Central and acknowledges that she has read the above and foregoing document and believes that the statements therein are true and correct to the best of her information, knowledge and belief.

Sheri Richard

Subscribed and sworn to before me this <u>22</u> day of August, 2019.

ANGELA M. CLOVEN Notary Public - Notary Seal State of Missouri Commissioned for Jasper County My Commission Expires: November 01, 2019 Commission Number: 15262659

an **Notary Public** 

My commission expires:



The Empire District Electric Company Missouri Jurisdiction Docket No. ER-2019-0374 Schedule SDR-1 Revenue Requirement

Line			3/31/2019	Pro Forma	Adjusted
No.	Description	Reference	Test Year End	Adjustments	Test Year End
	(a)	(b)	(c)	(d)	(e) = (c) + (d)
1	Rate Base	Schedules 2 & 3	1,301,068,347	156,292,122	1,457,360,469
2	Revenues	Schedules 4 & 5	538,554,855	(409,586)	538,145,269
3	Expenses	Schedules 4 & 5	395,553,192	50,492,361	446,045,553
4	Operating Income (Loss) Before Taxes	(Line 2 - Line 3)	143,001,663	(50,901,947)	92,099,716
5	Income Taxes	Schedule 4	9,911,046	(6,854,196)	3,056,850
6	Operating Income (Loss) After Taxes	(Line 4 - Line 5)	133,090,617	(44,047,751)	89,042,866
7	Current Rate of Return	(Line 6 / Line 1)	10.23%		6.11%
8	Rate of Return Requested	Schedule 6	7.50%	7.50%	7.50%
9	Required Net Operating Income	(Line 1 x Line 8)	97,522,879	11,715,032	109,237,911
10	Income Deficiency	(Line 9 - Line 6)	(35,567,738)	55,762,783	20,195,045
11	Gross Revenue Conversion factor	Schedule 7	1.313027	1.313027	1.313027
12	Revenue Deficiency	(Line 10 x Line 11)	(46,701,398)	73,218,036	26,516,638
13	Revenue Deficiency %	(Line 12 / Line 2)	-8.67%		4.93%
14	Revenue Requirement	(Line 2 + Line 12)	491,853,457	72,808,450	564,661,907



The Empire District Electric Company Missouri Jurisdiction Docket No. ER-2019-0374 Schedule SDR-2 Rate Base

Line	Description	Defenses	3/31/2019	Pro Forma	Adjusted
No.	Description	Reference	Test Year End	Adjustments	Test Year End
	(a)	(b)	(c)	(d)	(e) = (c) + (d)
1	Plant in Service:				
2	Plant in Service	WP 2.1	2,450,631,524	176,143,000	2,626,774,524
3	Accumulated Depreciation/Amortization	WP 2.2	(871,165,685)	(56,177,574)	(927,343,259)
4	Net Plant in Service		1,579,465,839	119,965,426	1,699,431,265
5	Working Capital:				
6	Cash Working Capital	WP 2.10	-	(1,060,829)	(1,060,829)
7	Prepayments (13-Month Average)	WP 2.4	7,478,372	174,360	7,652,732
8	Materials, Supplies, and Fuel Inventories (13-Month Average)	WP 2.3	46,853,981	27,388	46,881,369
9	Additions and Deductions:				
10	Customer Deposits	WP 2.8	(13,427,551)	189,103	(13,238,448)
11	Customer Advances	WP 2.9	(4,103,516)	263,021	(3,840,495)
12	Regulatory Assets	WP 2.6	63,409,608	26,919,655	90,329,263
13	Regulatory Liabilities	WP 2.7	(153,525,684)	10,336,884	(143,188,799)
14	Accumulated Deferred Income Taxes	WP 2.5	(225,082,702)	(522,886)	(225,605,588)
15	Total Rate Base		1,301,068,347	156,292,122	1,457,360,469



Docket No. ER-2019-0374

Line			3/31/2019	Plant Additions	Common Plant
No.	Description	Reference	Test Year End	RB ADJ 1	RB ADJ 2
	(a)	(b)	(c)	(d)	(e )
1	Plant in Service:				
2	Plant in Service	WP 2.1	2,450,631,524	180,144,089	(4,001,090)
3	Accumulated Depreciation/Amortization	WP 2.2	(871,165,685)	(1,379,466)	2,615,671
4	Net Plant in Service	-	1,579,465,839	178,764,623	(1,385,418)
5	Working Capital:				
6	Cash Working Capital	WP 2.10	-	-	-
7	Prepayments	WP 2.4	7,478,372	-	-
8	Materials, Supplies, and Fuel Inventories	WP 2.3	46,853,981	-	-
9	Additions and Deductions:				
10	Customer Deposits	WP 2.8	(13,427,551)	-	-
11	Customer Advances	WP 2.9	(4,103,516)	-	-
12	Regulatory Assets	WP 2.6	63,409,608	-	-
13	Regulatory Liabilities	WP 2.7	(153,525,684)	-	-
14	Accumulated Deferred Income Taxes	WP 2.5	(225,082,702)	-	-
15	Total	-	1,301,068,347	178,764,623	(1,385,418)



# Docket No. ER-2019-0374

				Water		Low Income	
Line			3/31/2019	Inventory	Pension/OPEB	Pilot Program	EDR
No.	Description	Reference	Test Year End	RB ADJ 3	RB ADJ 4	RB ADJ 5	RB ADJ 6
	(a)	(b)	(c)	(f)	(g )	(h)	(i)
1	Plant in Service:						
2	Plant in Service	WP 2.1	2,450,631,524	-	-	-	-
3	Accumulated Depreciation/Amortization	WP 2.2	(871,165,685)	-	-	-	-
4	Net Plant in Service	-	1,579,465,839		_	-	-
5	Working Capital:						
6	Cash Working Capital	WP 2.10	-	-	-	-	-
7	Prepayments	WP 2.4	7,478,372	-	-	-	-
8	Materials, Supplies, and Fuel Inventories	WP 2.3	46,853,981	(55,635)	-	-	-
9	Additions and Deductions:						
10	Customer Deposits	WP 2.8	(13,427,551)	-	-	-	-
11	Customer Advances	WP 2.9	(4,103,516)	-	-	-	-
12	Regulatory Assets	WP 2.6	63,409,608	-	10,790,815	246,851	301,947
13	Regulatory Liabilities	WP 2.7	(153,525,684)	-	(3,418,175)	-	-
14	Accumulated Deferred Income Taxes	WP 2.5	(225,082,702)	-	-	-	-
15	Total	-	1,301,068,347	(55,635)	7,372,640	246,851	301,947



Docket No. ER-2019-0374

Line No.	Description (a)	Reference (b)	3/31/2019 Test Year End (c)	ADIT Frue-Up <mark>RB ADJ 7</mark> (j)	A/D True-up <u>RB ADJ 8</u> (k)	Assets/ Tru RB	llatory Liabilities e-Up ADJ 9 (I)
1	Plant in Service:						
2	Plant in Service	WP 2.1	2,450,631,524	\$ -	\$-	\$	-
3	Accumulated Depreciation/Amortization	WP 2.2	(871,165,685)	-	(57,413,779)		
4	Net Plant in Service	-	1,579,465,839	 -	(57,413,779)		-
5	Working Capital:						
6	Cash Working Capital	WP 2.10	-	-	-		-
7	Prepayments	WP 2.4	7,478,372	-	-		-
8	Materials, Supplies, and Fuel Inventories	WP 2.3	46,853,981	-	-		-
9	Additions and Deductions:						
10	Customer Deposits	WP 2.8	(13,427,551)	-	-		-
11	Customer Advances	WP 2.9	(4,103,516)	-	-		-
12	Regulatory Assets	WP 2.6	63,409,608	-	-	ŗ	5,362,107
13	Regulatory Liabilities	WP 2.7	(153,525,684)	-	-	13	3,755,059
14	Accumulated Deferred Income Taxes	WP 2.5	(225,082,702)	(522,886)	-		-
15	Total	-	1,301,068,347	\$ (522,886)	\$ (57,413,779)	\$ 19	9,117,166



Docket No. ER-2019-0374

Line			3/31/2019	(	et Retirement Obligations	&	payments Materials	CWC
No.	Description	Reference	Test Year End		RB ADJ 10	R	3 ADJ 11	 RB ADJ 12
	(a)	(b)	(c)		(m)			
1	Plant in Service:							
2	Plant in Service	WP 2.1	2,450,631,524	\$	-	\$	-	\$ -
3	Accumulated Depreciation/Amortization	WP 2.2	(871,165,685)		-		-	-
4	Net Plant in Service	-	1,579,465,839		-		-	 -
5	Working Capital:							
6	Cash Working Capital	WP 2.10	-		-		-	(1,060,829)
7	Prepayments	WP 2.4	7,478,372		-		174,360	-
8	Materials, Supplies, and Fuel Inventories	WP 2.3	46,853,981		-		83,023	-
9	Additions and Deductions:							
10	Customer Deposits	WP 2.8	(13,427,551)		-		-	-
11	Customer Advances	WP 2.9	(4,103,516)		-		-	-
12	Regulatory Assets	WP 2.6	63,409,608		10,217,935		-	-
13	Regulatory Liabilities	WP 2.7	(153,525,684)		-		-	-
14	Accumulated Deferred Income Taxes	WP 2.5	(225,082,702)		-		-	-
15	Total	-	1,301,068,347	\$	10,217,935	\$	257,383	\$ (1,060,829)



Docket No. ER-2019-0374

Line No.	Description	Reference	3/31/2019 Test Year End	Customer Advances & Deposits RB ADJ 13	Total Pro Forma Adjustments	Adjusted Test Year End
	(a)	(b)	(c)		(n) = (d) thru (m)	(o) = (c) + (n)
1	Plant in Service:					
2	Plant in Service	WP 2.1	2,450,631,524		176,143,000	2,626,774,524
3	Accumulated Depreciation/Amortization	WP 2.2	(871,165,685)		(56,177,574)	(927,343,259
4	Net Plant in Service	-	1,579,465,839	-	119,965,426	1,699,431,265
5	Working Capital:					
6	Cash Working Capital	WP 2.10	-		(1,060,829)	(1,060,829
7	Prepayments	WP 2.4	7,478,372		174,360	7,652,732
8	Materials, Supplies, and Fuel Inventories	WP 2.3	46,853,981		27,388	46,881,369
9	Additions and Deductions:				-	-
10	Customer Deposits	WP 2.8	(13,427,551)	189,103	189,103	(13,238,44
11	Customer Advances	WP 2.9	(4,103,516)	263,021	263,021	(3,840,49
12	Regulatory Assets	WP 2.6	63,409,608		26,919,655	90,329,26
13	Regulatory Liabilities	WP 2.7	(153,525,684)		10,336,884	(143,188,79
14	Accumulated Deferred Income Taxes	WP 2.5	(225,082,702)		(522,886)	(225,605,58
15	Total	-	1,301,068,347	\$ 452,124	156,292,122	1,457,360,469



#### The Empire District Electric Company Missouri Jurisdiction Docket No. ER-2019-0374 Schedule 4 Operating Income

Line No.	Description	Reference		3/31/2019 est Year End	Pro Forma Adjustments	Adjusted Fest Year End Current Rates	I	Rate Increase Requested	Adjusted est Year End oposed Rates
	(a)	(b)		(c)	 (d)	 (e) = (c) + (d)		(f)	(g) = (e) + (f)
	REVENUES								
1	Residential	Schedule 5	\$	247,334,429	(24,815,988)	\$ 222,518,442			
2	Commercial	Schedule 5		171,333,658	(11,503,458)	159,830,200			
3	Industrial	Schedule 5		81,413,350	(1,841,705)	79,571,645			
4	Public Street & Hwy Lighting	Schedule 5		3,864,366	(24,987)	3,839,379			
5	Other Public Authorities	Schedule 5		10,991,502	(382,921)	10,608,582			
6	Resale - Municipalities	Schedule 5		-	-	-			
7	Interdepartmental	Schedule 5		329,179	(11,072)	318,107			
8	Other Revenues	Schedule 5		(1,500,536)	30,795	(1,469,741)			
9	Total On-System Revenues:			513,765,949	(38,549,335)	 475,216,614			
10	Resale - SPP Integrated Market	Schedule 5		24,788,906	38,139,748	62,928,655			
11	Total Electric Operating Revenues		\$	538,554,855	 (409,586)	\$ 538,145,269	\$	26,516,638	\$ 564,661,90
	OPERATION AND MAINTENANCE EXPENSES								
12	Production Expenses	Schedule 5		185,955,973	32,746,343	218,702,316		-	218,702,31
13	Transmission Expenses	Schedule 5		22,316,120	(1,489,781)	20,826,339		-	20,826,33
14	Distribution Expenses	Schedule 5		22,641,086	483,082	23,124,168		-	23,124,16
15	Customer Accounts Expenses	Schedule 5		8,414,222	1,559,052	9,973,274		-	9,973,27
16	Customer Assistance Expenses	Schedule 5		4,253,278	1,774,556	6,027,833		-	6,027,83
17	Sales Expenses	Schedule 5		141,448	5,425	146,873		-	146,87
18	Administrative and General Expenses	Schedule 5		866,381	217,736	1,084,117		-	1,084,11
19	Other Administrative and General Expenses	Schedule 5		47,859,335	7,216,361	55,075,697		-	55,075,69
20	Depreciation Expense	Schedule 5		68,165,979	7,875,008	76,040,987		-	76,040,98
21	Amortization Expense	Schedule 5		3,598,034	2,659,413	6,257,447		-	6,257,44
22	Taxes other than Income Taxes	Schedule 5		31,341,337	(3,418,516)	27,922,821		-	27,922,82
23	Interest on Customer Deposits			-	863,681	863,681		-	863,68
24	Total Operation and Maintenance Expenses		\$	395,553,192	 50,492,361	\$ 446,045,553	\$	-	\$ 446,045,55
	Operating Income/(Loss) Before Taxes		\$	143,001,663	\$ (50,901,947)	\$ 92,099,716	\$	26,516,638	\$ 118,616,35
	Income Taxes			9,911,046	(6,854,196)	3,056,850		6,321,601	9,378,45
	Operating Income/(Loss) After Taxes		Ś	133,090,617	\$ (44,047,751)	\$ 89,042,866	\$	20,195,038	\$ 109,237,904



Docket No. ER-2019-0374

Line No.	Description	Reference		3/31/2019 est Year End		FAC Revenues WP 4.1	E	ollectible xpense P IS ADJ 1	cquisition Costs P IS ADJ 2		Open Positions WP IS ADJ 3	Overtime /P IS ADJ 4	Payroll /P IS ADJ 5	ical, Dental, Vision P IS ADJ 6
	(a)	(b)		(c)		(d)		(e)	(f)		(g)	(h)	(i)	(j)
	REVENUES													
1	Residential	WP 4.1	\$	247,334,429		(6,673,969)								
2	Commercial	WP 4.1		171,333,658		(6,101,463)								
3	Industrial	WP 4.1		81,413,350		(3,794,537)								
4	Public Street & Hwy Lighting	WP 4.1		3,864,366		(79,718)								
5	Other Public Authorities	WP 4.1		10,991,502		(386,449)								
6	Resale - Municipalities	WP 4.1		-										
7	Interdepartmental	WP 4.1		329,179		(11,072)								
8	Other Revenues	WP 4.1		(1,500,536)										
9	Total On-System Revenues			513,765,949		(17,047,207)		-	 -		-	-	 -	 -
10	Resale - SPP Integrated Market	WP 4.1		24,788,906										
10	Total Electric Operating Revenues	VVF 4.1	ć	538,554,855		(17,047,207)	\$		\$ 	\$		\$ 	\$ 	\$ 
	OPERATION AND MAINTENANCE EXPENSES													
12	Production Expenses	WP 4.2		185,955,973							373,895	163,968	206,165	
13	Transmission Expenses	WP 4.2		22,316,120							59,418	26,112	32,832	
14	Distribution Expenses	WP 4.2		22,641,086							236,741	109,128	137,213	
15	Customer Accounts Expenses	WP 4.2		8,414,222				34,183			133,828	62,383	78,437	
16	Customer Assistance Expenses	WP 4.2		4,253,278							44,090	19,408	24,403	
17	Sales Expenses	WP 4.2		141,448							2,624	1,241	1,560	
18	Administrative and General Expenses	WP 4.2		866,381										
19	Other Administrative and General Expenses	WP 4.2		47,859,335					(102,449)		482,524	66,585	97,872	(264,101)
20	Depreciation Expense	WP 4.3		68,165,979										
21	Amortization Expense	WP 4.4		3,598,034										
22	Taxes other than Income Taxes	WP 4.5		31,341,337							76,460	49,917	43,171	
23	Interest on Customer Deposits			-								 	 	 
24	Total Operation and Maintenance Expenses		\$	395,553,192			\$	34,183	\$ (102,449)	\$	1,409,581	\$ 498,742	\$ 621,653	\$ (264,101)
25	Operating Income/(Loss) Before Taxes		\$	143,001,663	\$	(17,047,207)	\$	(34,183)	\$ 102,449	\$	(1,409,581)	\$ (498,742)	\$ (621,653)	\$ 264,101
26	Income Taxes			9,911,046					 				 	 
27	Operating Income/(Loss) AfterTaxes		\$	133,090,617	\$	(17,047,207)	\$	(34,183)	\$ 102,449	Ś	(1,409,581)	\$ (498,742)	\$ (621,653)	\$ 264,101



Docket No. ER-2019-0374

Line No.	Description	Reference		31/2019 Year End	Annualize Depreciation Expense WP IS ADJ 7		alize Maintenance of Boiler Plant WP IS ADJ 8	Lo	Customer ad Growth /P IS ADJ 9	EDR evenues P IS ADJ 10		ension and OPEB /P IS ADJ 11		Fuel & chased Power /P IS ADJ 12
	(a)	(b)		(c)	(k)		(I)		(m)	 (n)		(o)		(p)
	<u>REVENUES</u>													
1	Residential	WP 4.1	\$2	247,334,429										
2	Commercial	WP 4.1	1	L71,333,658										
3	Industrial	WP 4.1		81,413,350					1,109,211	462,805				
4	Public Street & Hwy Lighting	WP 4.1		3,864,366										
5	Other Public Authorities	WP 4.1		10,991,502										
6	Resale - Municipalities	WP 4.1		-										
7	Interdepartmental	WP 4.1		329,179										
8	Other Revenues	WP 4.1		(1,500,536)						 				30,795
9	Total On-System Revenues		5	513,765,949	-		-		1,109,211	 462,805		-		30,795
10	Resale - SPP Integrated Market	WP 4.1		24,788,906									\$	38,139,748
11	Total Electric Operating Revenues			538,554,855	\$-	\$	-	\$	1,109,211	\$ 462,805	\$	-	\$	38,170,543
12	OPERATION AND MAINTENANCE EXPENSES Production Expenses	WP 4.2	1	185,955,973			410,030							23,818,181
13	Transmission Expenses	WP 4.2		22,316,120			410,030							(1,608,142)
13	Distribution Expenses	WP 4.2 WP 4.2		22,641,086										(1,008,142)
14	Customer Accounts Expenses	WP 4.2 WP 4.2		8,414,222										
15	Customer Assistance Expenses	WP 4.2 WP 4.2		4,253,278										
10	Sales Expenses	WP 4.2 WP 4.2		4,233,278										
18	Administrative and General Expenses	WP 4.2		866,381										
10	Other Administrative and General Expenses	WP 4.2		47,859,335								6,073,947		
20	Depreciation Expense				3 035 000							0,070,0,01		
		WP43		68 165 979	/ 8/5 008									
		WP 4.3 WP 4.4		68,165,979 3,598,034	7,875,008 40.087									
21	Amortization Expense Taxes other than Income Taxes	WP 4.4		3,598,034	7,875,008 40,087									
	Amortization Expense													
21 22	Amortization Expense Taxes other than Income Taxes Interest on Customer Deposits	WP 4.4		3,598,034	40,087	\$	410,030	Ś		\$ 	\$	6,073,947	\$	22,210,039
21 22 23	Amortization Expense Taxes other than Income Taxes Interest on Customer Deposits Total Operation and Maintenance Expenses	WP 4.4	\$ 3	3,598,034 31,341,337 - 395,553,192	40,087 \$ 7,915,095	\$ \$	,	\$ \$		\$ 462,805	\$ \$	6,073,947	\$ \$	22,210,039
21 22 23 24	Amortization Expense Taxes other than Income Taxes Interest on Customer Deposits	WP 4.4	\$ 3	3,598,034 31,341,337 -	40,087 \$ 7,915,095		410,030 (410,030)			 - 462,805		6,073,947 (6,073,947)		22,210,039 15,960,504



Docket No. ER-2019-0374

Line No.	Description	Reference	3/31/2019 Test Year End	Interest on Customer Deposits WP IS ADJ 13	Ar	Customer nnualization /P IS ADJ 14		Weather nalized Revenue WP IS ADJ 15	Pi	isurance remiums PIS ADJ 16		Deductible IS ADJ 17	Property Tax /P IS ADJ 18	Pilot A	w Income Amortization IS ADJ 19
	(a)	(b)	(c)	(q)		(r)		(s)		(t)		(u)	 (v)		(w)
	REVENUES														
1	Residential	WP 4.1	\$ 247,334,429		\$	1,229,663	\$	(13,576,167)							
2	Commercial	WP 4.1	171,333,658			860,116		(4,806,135)							
3	Industrial	WP 4.1	81,413,350			-		-							
4	Public Street & Hwy Lighting	WP 4.1	3,864,366												
5	Other Public Authorities	WP 4.1	10,991,502												
6	Resale - Municipalities	WP 4.1	-												
7	Interdepartmental	WP 4.1	329,179												
8	Other Revenues	WP 4.1	(1,500,536)												
9	Total On-System Revenues		513,765,949	-		2,089,780		(18,382,302)		-		-	 -		
10	Resale - SPP Integrated Market	WP 4.1	24,788,906												
11	Total Electric Operating Revenues		\$ 538,554,855	\$ -	Ś	2,089,780	Ś	(18,382,302)	\$	-	\$	-	\$ -	\$	
12	OPERATION AND MAINTENANCE EXPENSES Production Expenses	WP 4.2	185,955,973												
12	Transmission Expenses	WP 4.2 WP 4.2	22,316,120												
13	Distribution Expenses	WP 4.2	22,641,086												
15	Customer Accounts Expenses	WP 4.2	8,414,222												
15	Customer Assistance Expenses	WP 4.2	4,253,278												49,370
10	Sales Expenses	WP 4.2	4,255,278												45,570
18	Administrative and General Expenses	WP 4.2	866,381												
19	Other Administrative and General Expenses	WP 4.2	47,859,335							877,216		(15,233)			
20	Depreciation Expense	WP 4.3	68,165,979							0777210		(10)200)			
21	Amortization Expense	WP 4.4	3,598,034												
22	Taxes other than Income Taxes	WP 4.5	31,341,337										6,335,625		
23	Interest on Customer Deposits			\$ 863,681									-,,		
24	Total Operation and Maintenance Expenses		\$ 395,553,192		\$		\$	-	\$	877,216	\$	(15,233)	\$ 6,335,625	\$	49,370
25	Operating Income/(Loss) Before Taxes		\$ 143,001,663		\$	2,089,780	\$	(18,382,302)	\$	(877,216)	\$	15,233	\$ (6,335,625)	\$	(49,370)
26	Income Taxes		9,911,046	. , , , , , ,				. , , , , , ,			•			·	
			, , , , , , , , , , , , , , , , , , , ,	\$ (863,681)											



Docket No. ER-2019-0374

Line No.	Description	Reference		1/2019 Year End	Amortiz	Solar Initiative ation Expense /P IS ADJ 20		MO ITC Revenues VP IS ADJ 21	Rate Case Expense WP IS ADJ 22	Amo	EDR tization ADJ 23	E>	protected ccess ADIT P IS ADJ 24	Am	MEEIA ortization IS ADJ 25	Ar	Reg. Asset mortization IP IS ADJ 26
	(a)	(b)		(c)		(x)	-	(y)	 (z)	(	aa)		(ab)		(ac)		(ad)
	REVENUES																
1	Residential	WP 4.1	\$ 24	47,334,429			\$	62,897									
2	Commercial	WP 4.1	17	71,333,658				57,811									
3	Industrial	WP 4.1	8	81,413,350				35,148									
4	Public Street & Hwy Lighting	WP 4.1		3,864,366				835									
5	Other Public Authorities	WP 4.1	1	10,991,502				3,528									
6	Resale - Municipalities	WP 4.1		-													
7	Interdepartmental	WP 4.1		329,179													
8	Other Revenues	WP 4.1		(1,500,536)													
9	Total On-System Revenues		51	13,765,949		-		160,218	 -		-		-				-
10	Resale - SPP Integrated Market	WP 4.1	2	24,788,906													
11	Total Electric Operating Revenues			38,554,855	\$	-	\$	160,218	\$ -	\$	-	\$	-			\$	-
	OPERATION AND MAINTENANCE EXPENSES																
12	Production Expenses	WP 4.2		85,955,973													2,933,728
13	Transmission Expenses	WP 4.2		22,316,120													
14	Distribution Expenses	WP 4.2		22,641,086													
15	Customer Accounts Expenses	WP 4.2		8,414,222													
16	Customer Assistance Expenses	WP 4.2		4,253,278		1,401,804					60,389				68,106		
17	Sales Expenses	WP 4.2		141,448													
18	Administrative and General Expenses	WP 4.2		866,381					217,736		-						
19	Other Administrative and General Expenses	WP 4.2		47,859,335													
20	Depreciation Expense	WP 4.3		68,165,979													
21	Amortization Expense	WP 4.4		3,598,034													
22	Taxes other than Income Taxes	WP 4.5	3	31,341,337													
23	Interest on Customer Deposits			-					 								
24	Total Operation and Maintenance Expenses			95,553,192	\$	1,401,804	\$	-	\$ 217,736	\$	60,389	\$	-	\$	68,106	\$	2,933,728
25	Operating Income/(Loss) Before Taxes			43,001,663	\$	(1,401,804)	\$	160,218	\$ (217,736)	\$	(60,389)	\$	-	\$	(68,106)	\$	(2,933,728)
26	Income Taxes			9,911,046									(8,540,550)				
27	Operating Income/(Loss) AfterTaxes		\$ 13	33,090,617	\$	(1,401,804)	\$	160,218	\$ (217,736)	\$	(60,389)	\$	8,540,550	\$	(68,106)	\$	(2,933,728)



Docket No. ER-2019-0374

Line No.	Description	Reference		3/31/2019 est Year End	An	M Trackers nortization P IS ADJ 27	E	Protected Excess ADIT /P IS ADJ 28	'lum Point Contract P IS ADJ 29	Credit Card Fees (P IS ADJ 30	Franchise Fees /P IS ADJ 31	Franchise Taxes /P IS ADJ 32	Unbilled Revenue IP IS ADJ 33
	(a)	(b)		(c)		(ae)		(af)	 (ag)	 (ah)	 (ai)	 (aj)	 (ak)
	REVENUES												
1	Residential	WP 4.1	\$	247,334,429							(6,942,826)		(1,116,929)
2	Commercial	WP 4.1		171,333,658							(2,792,987)		39,196
3	Industrial	WP 4.1		81,413,350							(187,537)		42,803
4	Public Street & Hwy Lighting	WP 4.1		3,864,366									-
5	Other Public Authorities	WP 4.1		10,991,502									
6	Resale - Municipalities	WP 4.1		-									
7	Interdepartmental	WP 4.1		329,179									
8	Other Revenues	WP 4.1		(1,500,536)									 
9	Total On-System Revenues			513,765,949		-		-	 -	 -	 (9,923,350)	 -	 (1,034,930)
10	Resale - SPP Integrated Market	WP 4.1		24,788,906									
11	Total Electric Operating Revenues		\$	538,554,855	\$	-	\$	-	\$ -	\$ -	\$ (9,923,350)	\$ -	\$ (1,034,930)
	OPERATION AND MAINTENANCE EXPENSES												
12	Production Expenses	WP 4.2		185,955,973		(224,322)			266,228				
13	Transmission Expenses	WP 4.2		22,316,120									
14	Distribution Expenses	WP 4.2		22,641,086									
15	Customer Accounts Expenses	WP 4.2		8,414,222						1,250,222			
16	Customer Assistance Expenses	WP 4.2		4,253,278		106,985			-				
17	Sales Expenses	WP 4.2		141,448									
18	Administrative and General Expenses	WP 4.2		866,381									
19	Other Administrative and General Expenses	WP 4.2		47,859,335									
20	Depreciation Expense	WP 4.3		68,165,979									
21	Amortization Expense	WP 4.4		3,598,034									
22	Taxes other than Income Taxes	WP 4.5		31,341,337								(9,923,690)	
23	Interest on Customer Deposits			-									
24	Total Operation and Maintenance Expenses		\$	395,553,192	\$	(117,337)	\$	-	\$ 266,228	\$ 1,250,222	\$ -	\$ (9,923,690)	\$ -
25	Operating Income/(Loss) Before Taxes		\$	143,001,663	\$	117,337	\$	-	\$ (266,228)	\$ (1,250,222)	\$ (9,923,350)	\$ 9,923,690	\$ (1,034,930)
26	Income Taxes		•	9,911,046		•		(2,263,671)					
27	Operating Income/(Loss) AfterTaxes		\$	133,090,617	\$	117,337	\$	2,263,671	\$ (266,228)	\$ (1,250,222)	\$ (9,923,350)	\$ 9,923,690	\$ (1,034,930)



Docket No. ER-2019-0374

Line No.	Description	Reference	3/31/2019 Test Year End	Tax Rate Change Jan-Mar WP IS ADJ 34	Asset Retirement Obligations WP IS ADJ 35	A	verton O&M djustment IP IS ADJ 36	A	ncome Tax djustment /P IS ADJ 37	A	otal Missouri Pro Forma djustments	Tes	Adjusted st Year End
	(a)	(b)	(c)	(al)	(am)		(an)		(ao)	(ap)	= (d) thru (ao)	(aq)	) = (c) + (ap)
	REVENUES												
1	Residential	WP 4.1	\$ 247,334,429	2,201,343							(24,815,988)	\$	222,518,442
2	Commercial	WP 4.1	171,333,658	1,240,004							(11,503,458)	\$	159,830,200
3	Industrial	WP 4.1	81,413,350	490,402							(1,841,705)	\$	79,571,645
4	Public Street & Hwy Lighting	WP 4.1	3,864,366	53,896							(24,987)	\$	3,839,379
5	Other Public Authorities	WP 4.1	10,991,502								(382,921)	\$	10,608,582
6	Resale - Municipalities	WP 4.1	-								-	\$	-
7	Interdepartmental	WP 4.1	329,179								(11,072)	\$	318,107
8	Other Revenues	WP 4.1	 (1,500,536)								30,795	\$	(1,469,741)
9	Total On-System Revenues		 513,765,949	3,985,645							(38,549,335)		475,216,614
10	Resale - SPP Integrated Market	WP 4.1	24,788,906							\$	38,139,748	\$	62,928,655
11	Total Electric Operating Revenues		\$ 538,554,855	\$ 3,985,645	\$ -	\$	-	\$	-	\$	(409,586)		538,145,269
12	OPERATION AND MAINTENANCE EXPENSES Production Expenses	WP 4.2	405 055 070										
	FIGUICION Expenses										22 746 242	ć	219 702 216
13	Transmission Expenses		185,955,973 22 316 120				4,798,471				32,746,343 (1,489,781)	•	218,702,316
13 14	Transmission Expenses	WP 4.2	22,316,120				4,798,471				(1,489,781)	\$	20,826,339
14	Distribution Expenses	WP 4.2 WP 4.2	22,316,120 22,641,086				4,798,471				(1,489,781) 483,082	\$ \$	20,826,339 23,124,168
14 15	Distribution Expenses Customer Accounts Expenses	WP 4.2 WP 4.2 WP 4.2	22,316,120 22,641,086 8,414,222				4,798,471				(1,489,781) 483,082 1,559,052	\$ \$ \$	20,826,339 23,124,168 9,973,274
14 15 16	Distribution Expenses Customer Accounts Expenses Customer Assistance Expenses	WP 4.2 WP 4.2 WP 4.2 WP 4.2	22,316,120 22,641,086 8,414,222 4,253,278				4,798,471				(1,489,781) 483,082 1,559,052 1,774,556	\$ \$ \$ \$	20,826,339 23,124,168 9,973,274 6,027,833
14 15 16 17	Distribution Expenses Customer Accounts Expenses Customer Assistance Expenses Sales Expenses	WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2	22,316,120 22,641,086 8,414,222 4,253,278 141,448				4,798,471				(1,489,781) 483,082 1,559,052 1,774,556 5,425	\$ \$ \$ \$ \$	20,826,339 23,124,168 9,973,274 6,027,833 146,873
14 15 16 17 18	Distribution Expenses Customer Accounts Expenses Customer Assistance Expenses Sales Expenses Administrative and General Expenses	WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2	22,316,120 22,641,086 8,414,222 4,253,278 141,448 866,381				4,798,471				(1,489,781) 483,082 1,559,052 1,774,556 5,425 217,736	\$ \$ \$ \$ \$ \$	20,826,339 23,124,168 9,973,274 6,027,833 146,873 1,084,117
14 15 16 17 18 19	Distribution Expenses Customer Accounts Expenses Customer Assistance Expenses Sales Expenses	WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2	22,316,120 22,641,086 8,414,222 4,253,278 141,448 866,381 47,859,335				4,798,471				(1,489,781) 483,082 1,559,052 1,774,556 5,425 217,736 7,216,361	\$ \$ \$ \$ \$ \$ \$ \$ \$	20,826,339 23,124,168 9,973,274 6,027,833 146,873 1,084,117 55,075,697
14 15 16 17 18	Distribution Expenses Customer Accounts Expenses Customer Assistance Expenses Sales Expenses Administrative and General Expenses Other Administrative and General Expenses	WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2	22,316,120 22,641,086 8,414,222 4,253,278 141,448 866,381		2,619,326		4,798,471				(1,489,781) 483,082 1,559,052 1,774,556 5,425 217,736	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20,826,339 23,124,168 9,973,274 6,027,833 146,873 1,084,117
14 15 16 17 18 19 20	Distribution Expenses Customer Accounts Expenses Customer Assistance Expenses Sales Expenses Administrative and General Expenses Other Administrative and General Expenses Depreciation Expense	WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.3	22,316,120 22,641,086 8,414,222 4,253,278 141,448 866,381 47,859,335 68,165,979 3,598,034		2,619,326		4,798,471				(1,489,781) 483,082 1,559,052 1,774,556 5,425 217,736 7,216,361 7,875,008 2,659,413	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20,826,339 23,124,168 9,973,274 6,027,833 146,873 1,084,117 55,075,697 76,040,987 6,257,447
14 15 16 17 18 19 20 21	Distribution Expenses Customer Accounts Expenses Customer Assistance Expenses Sales Expenses Administrative and General Expenses Other Administrative and General Expenses Depreciation Expense Amortization Expense	WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.3 WP 4.4	22,316,120 22,641,086 8,414,222 4,253,278 141,448 866,381 47,859,335 68,165,979		2,619,326		4,798,471				(1,489,781) 483,082 1,559,052 1,774,556 5,425 217,736 7,216,361 7,875,008	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20,826,339 23,124,168 9,973,274 6,027,833 146,873 1,084,117 55,075,697 76,040,987
14 15 16 17 18 19 20 21 22	Distribution Expenses Customer Accounts Expenses Customer Assistance Expenses Sales Expenses Administrative and General Expenses Other Administrative and General Expenses Depreciation Expense Amortization Expense Taxes other than Income Taxes	WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.3 WP 4.4	\$ 22,316,120 22,641,086 8,414,222 4,253,278 141,448 866,381 47,859,335 68,165,979 3,598,034	\$ -	2,619,326	\$	4,798,471	\$	-	\$	(1,489,781) 483,082 1,559,052 1,774,556 5,425 217,736 7,216,361 7,875,008 2,659,413 (3,418,516)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20,826,339 23,124,168 9,973,274 6,027,833 146,873 1,084,117 55,075,697 76,040,987 6,257,447 27,922,821
14 15 16 17 18 19 20 21 22 23	Distribution Expenses Customer Accounts Expenses Customer Assistance Expenses Sales Expenses Administrative and General Expenses Other Administrative and General Expenses Depreciation Expense Amortization Expense Taxes other than Income Taxes Interest on Customer Deposits	WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.3 WP 4.4	\$ 22,316,120 22,641,086 8,414,222 4,253,278 141,448 866,335 68,165,979 3,598,034 31,341,337			\$		\$		<u>\$</u> \$	(1,489,781) 483,082 1,559,052 1,774,556 5,425 217,736 7,216,361 7,875,008 2,659,413 (3,418,516) 863,681	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20,826,339 23,124,168 9,973,274 6,027,833 146,873 1,084,117 55,075,697 76,040,987 6,257,447 27,922,821 863,681
14 15 16 17 18 19 20 21 22 23 24	Distribution Expenses Customer Accounts Expenses Customer Assistance Expenses Sales Expenses Administrative and General Expenses Other Administrative and General Expenses Depreciation Expense Amortization Expense Taxes other than Income Taxes Interest on Customer Deposits Total Operation and Maintenance Expenses	WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.2 WP 4.3 WP 4.4	\$ 22,316,120 22,641,086 8,414,222 4,253,278 141,448 866,381 47,859,335 68,165,979 3,598,034 31,341,337		\$ 2,619,326	_	4,798,471		3,950,024	\$ \$	(1,489,781) 483,082 1,559,052 1,774,556 5,425 217,736 7,216,361 7,875,008 2,659,413 (3,418,516) 863,681 50,492,361	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20,826,339 23,124,168 9,973,274 6,027,833 146,873 1,084,117 55,075,697 76,040,987 6,257,447 27,922,821 863,681 446,045,553



The Empire District Electric Company Missouri Jurisdiction Docket No. ER-2019-0374 Schedule SDR-6 Weighted Average Cost of Capital

Line No.	Description	Capital Per Books 3/31/2019	Pro Forma Adjustments	Adjusted Capital 3/31/2019	Capital Ratio	Cost Rate	Rate of Return
	(a)	(b)	(c)	(d) = (b) + (c)	(e)	(f)	$(g) = (e) \times (f)$
1	Long Term Debt	\$ 780,000,000	\$ -	\$ 780,000,000	48.09%	4.85%	2.33%
2	Trust Preferred Stock	-	-	-	0.00%	0.00%	0.00%
3	Common Equity	842,107,842	-	842,107,842	51.91%	9.95%	5.17%
4	Total Capital	\$ 1,622,107,842	\$-	\$ 1,622,107,842	100.00%		7.50%



The Empire District Electric Company Missouri Jurisdiction Docket No. ER-2019-0374 Schedule SDR-7 Gross Revenue Conversion Factor

Line				
No.	Description	Reference	Rate	Factor
	(a)	(b)	(c)	(d)
1	Effective State Income Tax	WP 7.1	3.60%	3.60%
2	Federal Taxable Income	1 - Line 1		96.40%
3	Effective Federal Income Tax	WP 7.1	20.25%	20.25%
4	Operating Income	Line 2 - Line 3		76.16%
5	Gross Revenue Conversion Factor	1 / Line 4		1.3130



The Empire District Electric Company Missouri Jurisdiction Docket No. ER-2019-0374 Schedule SDR-8 Income Tax Calculation

Line			Adjusted	Adjusted	Total
No.	Description	Reference	Federal	State	Taxes
	(a)	(b)	 (c)	 (d)	(e) = (c) + (d)
1	Net Operating Income/(Loss) Before Tax		\$ 92,099,716	\$ 92,099,716	
2	Effective Tax Rates		 20.25%	 3.60%	
3	Tax - Subtotal	Line 1 x Line 2	18,645,614	3,311,076	
4	Interest Synchronization - Tax Impact	WP 8.1	 (6,874,798)	 (1,220,822)	
5	Taxes - Total	Line 5 + Line 6	\$ 11,770,816	\$ 2,090,254	\$ 13,861,070
6	Deferred Taxes	Schedule 2	225,605,588	-	225,605,588
7	Current Taxes	Line 5 - Line 6	 (213,834,772)	 2,090,254	(211,744,518)
8	Taxes - Total	Line 6 + Line 7	\$ 11,770,816	\$ 2,090,254	13,861,070
9	Excess ADIT Amortization	Schedule 5	\$ (10,804,220)	\$ -	(10,804,220)
10	Adjusted Taxes - Total		\$ 966,596	\$ 2,090,254	3,056,850

# **MINIMUM FILING REQUIREMENTS**

The Empire District Electric Company

ER-2019-0374

#### The Empire District Electric Company ER-2019-0374

#### Statement of Missouri Revenue Increase Request

The amount of annual revenue, from Missouri electric customers, which would result from the application of the proposed rates in this case, would be \$26,516,638 more than the annual revenue under existing rates. This would represent an overall increase of 4.93% for Missouri unsdictional revenues.

4 CSR-240-3,030 (3)(8)(1)

#### Explanation of Why Rate Relief is Needed

In accordance with RSMo. 386.266.4(3), the Company is required to file a general rate case with the effective date of new rates to be no later than four years after the effective date of the Commission's order for the continuation of the Company's Fuel Adjustment Clause. The last order for the FAC continuance was effective September 9th, 2016 so new general rates need to be effective no later than September 9th, 2020.

To recover the capital improvements the Company has made since the last rate case. As a result of the increased additional capital investments, the Company has also seen increased costs for property taxes and depreciation expense, as well as, normal and inflationary increases to operating costs. There has also been a significant increase in the Riverton Unit 12's Long Term Service Agreement "LTSA" costs.

4 CSR-240-3.030 (3)(B)(7)

#### **Missouri Counties and Communities Affected**

Barry County	Greene County (cont.)	Lawrence County (cont.)	Newton County (cont.)
Butterfield	Willard	Hoberg	Stella
Purdy		Marionville	Wentworth
	Hickory County	Miller	
Barton County	Cross Timbers	Pheips *	Polk County
Golden City	Hermitage	Pierce City	Aldrich
Kenoma *	Preston	Stotts City	Bolívar
	Weaubleau	Verona	Brighton*
Cedar County	Wheatland		Dunnegan*
Caplinger Mills *		McDonald County	Fair Piay
Stockton	Jasper County	Anderson	Flemington
	Airport Drive	Ginger Blue	Halfway
Christlan County	Alba	Goodman	Humansville
Billings	Asbury	Lanagan	Morrisville
Clever	Avilla	Noel	Pleasant Hope
Fremont Hills	Brooklyn Heights	Pineville	
Nixa	Carl Junction	Southwest City	St Clair County
Ozark	Carterville		Collins
Sparta	Carthage	Newton County	Gerster
	Carytown	Cliff Village	Vista
Dade County	Duneweg	Dennis Acres	
Arcola	Duquesne	Diamond	Stone County
Everton	Fidelity	Fairview	Branson West
Greenfield	Jasper	Fort Crowder *	Galena
South Greenfield	Joplin	Granby	Hurley
	LaRussell	Grand Falls Plaza	Reeds Spring
Dallas County	Neck City	Leawood	
Buffalo	Oronogo	Loma Linda	Taney County
Louisburg	Purcell	Neosho	Branson
Urbana	Reeds	Newtonia	Bull Creek
	Sarcoxie	Redings Mill	Forsyth
Greene County	Waco	Rilchey	Forsyth Sub*
Ash Grove	Webb City	Saginaw	Hollister
Bois D'Arc *		Seneca	Kirbyville
Fair Grove	Lawrence County	Shoal Creek Drive	Mount Branson*
Republic	Aurora	Shoal Creek Estates	Powersite *
Strafford	Freistatt	Silver Creek	
Walnut Grove	Halltown	Stark City	

\* Not Incorporated

4 CSR-240-3.030 (3)(B)(2)

	Average	 Average Annual Cus		 Aggregate Annual Change	[1] Aggregate Annual % Change
<u>Class</u>	Customer <u>Count</u>	Bill <u>Change \$</u>	Bill <u>Change %</u>		
RG-Residential	130,887	\$ 96.24	5.8%	\$ 12,596,881	5.8%
CB-Commercial	18,072	\$ 125.82	5.2%	\$ 2,273,755	5.2%
SH-Small Heating	3,028	\$ 164.22	5.0%	\$ 497,260	5.0%
GP-General Power	1,793	\$ 1,476.02	3.1%	\$ 2,646,498	3.1%
SC-P PRAXAIR Transmission	1	\$ 212,414.31	5.1%	\$ 212,414	5.1%
TEB-Total Electric Bldg	946	\$ 1,172.45	3.0%	\$ 1,109,335	3.0%
PFM-Feed Mill/Grain Elev	10	\$ 115.67	1.6%	\$ 1,157	1.6%
LP-Large Power	40	\$ 81,320.65	5.2%	\$ 3,246,049	5.2%
MS-Miscellaneous	3	\$ 282.94	5.8%	\$ 849	5.8%
SPL-Municipal St Lighting	7	\$ 29,358.47	9.4%	\$ 205,509	9.4%
PL-Private Lighting	252	\$ 553.88	3.4%	\$ 139,347	3.4%
LS-Special Lighting	126	\$ 72.13	6.9%	\$ 9,076	6.9%
Total Customers	155,165			\$ 22,938,132	4.9%

The proposed annual bill reflects a Fuel Adjustment Charge of \$0.00259 per kWh; and EECR charge of \$0.00039 per kWh The current annual bill reflects a Tax Reform Credit of \$0.00516 per kWh; a Fuel Adjustment Charge of \$0.00351 per kWh; and a EECR of \$0.00039 per kWh

RG-Residential (Monthly) \$ 8.02 5.8%

SCHEDULE SDR-9



**MEDIA RELEASE** 

FOR IMMEDIATE RELEASE

# LIBERTY UTILITIES FILES FOR MISSOURI ELECTRIC RATE UPDATES

JOPLIN, MO – August 14, 2019 – On Wednesday, August 14, 2019, Liberty Utilities - The Empire District Electric Company (Liberty-Empire) submitted a request to the Missouri Public Service Commission (MPSC) for updated Missouri electric rates. If approved by the MPSC, residential customers with an average monthly usage of 1,000 kWh will see an approximate increase of \$7.85 per month, a change of 5.9 percent.

Customers qualifying for the Low Income Pilot Program will see an approximate increase of \$1.85 per month.

It has been nearly four years since Liberty-Empire filed its last general rate case for Missouri electric customers. The MPSC will have up to 11 months to review this request. If approved, updated rates will go into effect by summer 2020.

## Investments in Infrastructure and Reliability (Project Toughen Up)

Since April 2016, Liberty-Empire has invested approximately \$338 million in upgrades to its Missouri electric transmission and distribution system. This investment includes the replacement of over 6,400 poles and the installation of over 11,000 sectionalizing devices, which has improved reliability of the system and helped significantly decrease the number of customers impacted during outages.

# Other Components of Filing

- Tax Cuts and Jobs Act A portion of this filing proposes to return \$11 million tax dollars to customers.
- Savings Opportunities for Customers Liberty-Empire has requested a continuation of the Low Income Pilot Program, which provides a credit for the customer charge for qualifying Missouri customers. Liberty-Empire has also proposed to continue its current energy efficiency programs, including rebate opportunities for Missouri electric customers.
- Environmental Benefits Liberty-Empire will continue to offer its Solar Rebate Program, which has provided over \$16 million to qualifying Missouri electric customers since its inception in 2015.

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High Bill Protection During Harsh Temperatures – Liberty-Empire is requesting the inplusion of a Weather Normalization Rider (WNR) to the bills of Missouri electric customers. The purpose of the WNR is to adjust customer bills to reflect normal weather conditions. For weather periods that are milder than normal, a WNR charge will be applied to the bill. For weather periods that are harsher than normal, a credit will be applied to the bill. This rider would prevent over or under-collection by the Company during abnormal weather conditions.

## A Quote from Our President

"These investments are a necessary part of delivering the safe and reliable power that our Missouri electric customers expect. As a utility, the way we deliver power is changing at a rapid pace. It's important for us to innovate to ensure we're meeting our customers' needs now and in the future," says David Swain, President, Liberty Utilities-Central Region.

## **About Liberty Utilities**

Liberty Utilities Co. owns and operates regulated water, wastewater, natural gas and electric transmission and distribution utilities in 12 states, delivering responsive and reliable essential services to nearly 780,000 customers across the United States. With a local approach to management, service and support, we deliver efficient, dependable services to meet the needs of our customers. Liberty Utilities provides a superior customer experience through walk-in customer centers, locally focused conservation and energy efficiency initiatives, and programs for businesses and residential customers. We measure our performance in terms of service reliability, an enjoyable customer experience, and an unwavering dedication to public and workplace safety. Liberty Utilities currently operates in Arizona, Arkansas, California, Georgia, Illinois, Iowa, Kansas, Massachusetts, Missouri, New Hampshire, Oklahoma and Texas. For more information, please visit www.LibertyUtilities.com.

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## Contact:

Jillian Curtis Central Region Marketing & Communications 417-625-5180 Jillian.Curtis@libertyutilities.com

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Liberty Utilities Missouri: Rate case at a glance



# over 150,000 customers served

- Total request of \$26.5
   million
- Approximate monthly increase of \$7.85 for an average customer using 1,000 kwh per month
- Serving Barton, Jasper, Newton, McDonald, St. Clair, Cedar, Dade, Lawrence, Barry, Hickory, Polk, Greene, Christian, Stone, Taney, and Dallas Counties



On August 14, 2019, Liberty Utilities - Empire District submitted a request to the Missouri Public Service Commission (MPSC) to update the company's electric rates. If approved, an average residential customer using 1,000 kWh per month would see an approximate increase of \$7.85 on their monthly bill. Qualifying low income customers would see an approximate increase of \$1.85.

# **Components of Filing:**

# **Providing Savings Opportunities for our Customers**

In order to provide savings opportunities for customers, we have requested the continuation of our Low Income Pilot Program, which provides a credit for the customer charge for qualifying Missouri electric customers. In addition, we plan to continue offering energy efficiency rebate opportunities, as well as solar rebate opportunities, to our Missouri electric customers.

# Making Power More Reliable for our Customers

At Liberty Utilities, we are committed to providing our customers with the safe and reliable power they expect. This means investing in our infrastructure and hardening our system against extreme weather and other causes of outages. Since 2016, we have invested approximately \$338 million in our Missouri electric transmission and distribution system to help increase safety and reliability.

## Normalizing Bills for Customers During Irregular Weather

Missouri weather can be unpredictable and this can affect customer bills. In this filing, we are requesting the inclusion of a Weather Normalization Rider (WNR) which will appear on bills as a credit during harsh weather periods and as a charge during mild weather periods. If approved, this would prevent over or under collection by the company during irregular weather. Credits would also benefit the customer during harsher than normal weather.

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# What is a rate case?

A rate case is a public regulatory review process in which a utility must demonstrate to its state public service commission why a proposed change in rates is needed. This independent public process helps ensure transparency and fair rates based on the costs to serve customers.

# Who sets the rates customers pay for electricity?

Liberty Utilities is required to provide every customer in our service area with reliable electricity at rates approved by the public service commission of each state. In exchange, the utility is allowed the opportunity (not a guarantee) to earn a fair return for investors. Even though our regulators will ultimately determine any changes to customer rates, we pledge to do our part to keep rates as reasonable as possible.

## What is the process? Will customers have a chance to share input?

First, Liberty Utilities must demonstrate to state utility regulators why a rate change is needed. The Missouri Public Service Commission and other interested stakeholders review our filings and vet the company's request. The commission then thoroughly reviews our request and holds public hearings to allow customers to comment. This process will take up to 11 months.

# What is Liberty Utilities doing to help their customers reduce energy and manage their bills?

Liberty Utilities has implemented a variety of payment options to help customers manage their monthly bills. One option, the Average Payment Plan, creates an average based on the customer's previous year of energy usage, making their bill the same each month, despite fluctuations in temperatures. This allows customers to budget more easily. Liberty Utilities has also launched an Energy Analysis program that notifies customers when their bill is \$30 higher or lower than the previous month and provides them tips through email to reduce their energy use.



For more information visit: liberty utilities.com/rates



Stub Period Earnings Anaylsis

Tax Reform Revenue Requirement Impact Calculation Page 1 of 1

	Description	Missouri
Line		21% Federal Income Tax
No.	Revenue Requirement Component	Rate
1	Operating Expense	265,408,206
2	Rate Base	1,362,690,378
3	ROR	7.33%
4	Return on Rate Base	99,925,874
5	Interest Sync:	
6	Rate Base	1,362,690,378
7	Weighted Cost of Debt	2.72%
8	Interest Deduct	37,119,686
9	Return on Rate Base	99,925,874
10	Interest Deduct	(37,119,686)
11	Net Income (Equity Portion of Return)	62,806,188
12	Composite Tax Rate	25.12%
13	Equity x Tax Rate	15,775,972
14	GRCF	1.3354
15	Taxes	21,067,917
16	Total Revenue Requirement	386,401,997
17	Total Revenue YTD August 31, 2018	386,269,192
18	Deficiency	132,805
19	Stub Period Regulatory Liability	11,728,453
20	Total Deficiency	11,861,258

# EXEMPLARY NOTICE

On August XX, 2019 The Empire District Electric Company, a Liberty Utilities Company, filed revised electric service tariff sheets with the Missouri Public Service Commission (PSC) which would increase the Company's Missouri jurisdictional annual gross revenues by \$26.5 million or approximately 4.93 percent. For a residential customer using 1,000 kilowatt-hours of electricity a month, the proposed increase would be approximately \$7.85 each month.

The Company is also asking to continue the use of the Fuel Adjustment Clause (FAC) with an updated base cost of energy. The difference between actually incurred fuel costs and base cost will be billed or credited to each customer based on the customer's monthly energy usage. The continuation of the FAC will allow the Company to adjust customers' bills twice each year, on June 1<sup>st</sup> and December 1<sup>st</sup>, based on the varying costs of fuel used to generate electricity at the Company's generating units and electric energy the Company purchases on behalf of its customers.

Local public hearings have been set before the PSC as follows:

\*dates, times, locations\*

Each public hearing will begin with a question-and-answer session.

If you wish to comment or secure information, you may contact the Office of the Public Counsel, P.O. Box 2230, Jefferson City, Missouri 65102, telephone (866) 922-2959, email <u>opcservice@ded.mo.gov</u> or the Missouri Public Service Commission, Post Office Box 360 Jefferson City, Missouri 65102, telephone 800-392-4211,email <u>pscinfo@psc.mo.gov</u>.

The Commission will also conduct an evidentiary hearing at its offices in Jefferson City during the weeks of (month) (day) through (month) (day), and (month) (day) through (month) (day), beginning at 8:30 a.m.

The hearings and local public hearings will be held in buildings that meet accessibility standards required by the Americans with Disabilities Act. If a customer needs additional accommodations to participate in these hearings, please call the Public Service Commission's Hotline at 1-800-392-4211 (voice) or Relay Missouri at 711 prior to the hearing.

Libert 🎱	Date Mailed: 02/09/18			SCHEDULE S	DR-12
		After 2/27/18,	er 2/27/18, add late fee	of \$	<b>\$135.00</b> \$0.73 \$135.73
	2 JOHN A. CUSTOMER 101 MAIN STREET ANYWHERE, MO 11111		Remit to: LIBERTY UTILITIES - EI PO BOX 650689 DALLAS, TX 75265-068		
			12948203940	0000880000	00008844
					00008844
	For account questions, call 800-206-2	2300. То рау у	our bill by phone, call 8	388-631-8973.	
PO BOX 65	ities - Empire District (www.empiredistrict.com)	2300. То рау у	our bill by phone, call 8		
PO BOX 65 Dallas, TX	ities - Empire District (www.empiredistrict.com) 0689 75265-0689 <b>ry as of 02/08/18:</b>		our bill by phone, call 8	388-631-8973. ount Number: 00	0011-11-0
PO BOX 65 Dallas, TX	ities - Empire District (www.empiredistrict.com) 0689 75265-0689 <b>ry as of 02/08/18:</b> Previous Bill Payment Received Balance Forward	01/08/18 01/24/18	our bill by phone, call 8 Acco Check	388-631-8973. ount Number: 00 \$135.00 (\$135.00 \$0.00	0 <b>011-11-0</b> ) ) Thank you )
PO BOX 65 Dallas, TX Summa	ities - Empire District (www.empiredistrict.com) 0689 75265-0689 <b>ry as of 02/08/18:</b> Previous Bill Payment Received	01/08/18 01/24/18	our bill by phone, call 8 Acco	388-631-8973. ount Number: 00 \$135.00 (\$135.00	0 <b>011-11-0</b> ) )) Thank you )) ***

You may pay your bill by credit or debit card by calling 888-631-8973 or online at www.empiredistrict.com. Select the Customer Service tab and Payment Information. There is a convenience fee for this service.

- 1) Nine-digit account number needed to make a payment.
- 2) Customer and billing location information.
- 3) Liberty Utilities Empire's District's mailing address to remit payment. Information on additional payment methods can

be found on the company's Web site, www.empiredistrict.com.

- 4) Customer account number.
- 5) Previous balance, recent payments, and remaining balance.
- 6) Total amount due for current month detailed explanation on customer charges can be found on the back of the bill.
- 7) This area has important messages from the company.

Account Detail

(P APP installment	20 Billed Charges:		\$135.00
	18 Current Months Charges:	\$141.40	\$135.00
Anywhere County Tax	111.18 x .00875	\$0.97	
Fuel Adjust Charge	1000кwн х .00758	\$7.58	
Franchise Fee	111.18 x .02	\$2.22	
Tax Cuts and Jobs Act	600kwh x .00516	CR \$3.10	
Energy Efficiency Program Cost	1000кwн х .00039	\$0.39	
Usage Charge	400кwн х .10574	\$42.30	
Usage Charge	600кwн х .13006	\$78.04	
Customer Charge	1 x 13.00	\$13.00	
	8237 From 01/05/18 to 01/30/18 (25 Days), C Customer Charge Usage Charge Usage Charge Energy Efficiency Program Cost Tax Cuts and Jobs Act Franchise Fee Fuel Adjust Charge	Customer Charge1 x 13.00Usage Charge600kwH x .13006Usage Charge400kwH x .10574Energy Efficiency Program Cost1000kwH x .00039Tax Cuts and Jobs Act600kwh x .00516Franchise Fee111.18 x .02Fuel Adjust Charge1000kwH x .00758Anywhere County Tax111.18 x .00875Image: Current Months Charges:	8237 From 01/05/18 to 01/30/18 (25 Days), Curr Read - 13701 Prev Read - 12701. Totaling 1,000 KwH       \$13.00         Customer Charge       1 x 13.00       \$13.00         Usage Charge       600kwH x .13006       \$78.04         Usage Charge       400kwH x .10574       \$42.30         Energy Efficiency Program Cost       1000kwH x .0039       \$0.39         Tax Cuts and Jobs Act       600kwh x .00516       CR \$3.10         Franchise Fee       111.18 x .02       \$2.22         Fuel Adjust Charge       1000kwH x .00758       \$7.58         Anywhere County Tax       111.18 x .00875       \$0.97         OUTRIENT Months Charges:

- 8) 11-digit location number to report outages or to use automated account information by phone.
- 9) Service address this is important for customers who have multiple accounts with the company.
- 10) Meter number, previous meter read, current meter read, and usage information.
- 11) The company service includes a fixed monthly customer charge, no matter how much electricity is used.
- 12) The usage charge is for the kilowatt hours (KWH) used by a customer. The charge for each KWH used by a customer from June 16 through September 16 is \$0.13006 per KWH. The charge for electricity for the other eight months of each year is \$0.13006 per KWH for the first 600KWH and \$0.10574 for each KWH thereafter.
- 13) The cost to provide programs for customers to improve the energy efficiency of their homes and businesses.
- 14) This credit is the result of a Missouri rate decrease stemming from the Tax Cuts and Jobs Act of 2017.
- 15) A contractual fee required for the company to use the city public right-of-ways.
- 16) The charge for the difference between fuel and purchased power costs established in the current rate structure and the actual fuel and purchased power costs incurred by the company. This rate changes twice a year. If fuel costs are less than what is established by the current rates, customers will see a credit in the Fuel Charge line. The cost includes no mark-up or profit for the company.
- 17) Taxes, fees, and other assessments.
- **18)** Total charges for the billing period.
- 19) APP, average payment plan, is a payment contract that calculates a customer's expected annual usage and divides it into 12 equal payments. Each month one payment installment is due from the customer. At the end of 12 months the actual usage is reviewed and a customer's contract and installments are adjusted for the next 12 months.
- 20) The amount due from the customer by the due date.
- **21)** Important information about a customer's payment contract.

					MOD	-1 +			-	
		ACTU			MODI		VARIA			H PD OUT
	End of Period	Average	Interest Expense	Effective Cost	End of Month Balance	Interest Cost	End of Month Balance	Interest Cost	Margin Account	Derivative OTC Settlements
JANUARY	18,750,000	13,362,903	32,366	2.81%	15,382,000	27,000	3,368,000	5,366	(75,000)	0
FEBRUARY	5,500,000	9,196,429	19,846	2.77%	23,972,000	49,000	(18,472,000)	(29,154)	0	0
MARCH	0	830,645	1,947	2.72%	5,691,000	14,000	(5,691,000)	(12,053)	0	0
1ST QTR	0	7,750,000	54,159	2.83%	15,015,000	90,000	(15,015,000)	(35,841)	(75,000)	0
APRIL	0	0	0	0.00%	31,139,000	0	(31,139,000)	0	(225,300)	(6,040)
MAY	4,000,000	1,838,710	4,266	2.69%	9,500,000	12,000	(5,500,000)	(7,734)	0	(34,840)
JUNE	1,250,000	4,806,667	10,658	2.66%	11,200,000	19,000	(9,950,000)	(8,342)	(1,123,875)	(29,240)
2ND QTR	1,250,000	2,210,989	14,924	2.67%	17,279,667	31,000	(16,029,667)	(16,076)	(1,349,175)	(70,120)
YTD	1,250,000	·	69,083		16,147,333	121,000	(14,897,333)	(51,917)	(1,424,175)	(70,120)
JULY							0 _	0		
AUGUST							0	0		
SEPTEMBER							0	0		
3RD QTR	0		0		0	0	0	0	0	0
YTD	0	·	69,083		10,764,889	121,000	(10,764,889)	(51,917)	(1,424,175)	(70,120)
OCTOBER		···					0	0		
NOVEMBER DECEMBER							0 0	0 0		
4TH QTR	0	·	0		0	0	0	0	0	0
YTD			69,083		8,073,667	121,000	(8,073,667)	(51,917)	(1,424,175)	(70,120)
						,		(01,017)	(.,,	

# CORRECTED SCHEDULE SDR-14

#### Proposed List of Sub-Accounts Included and Excluded for FAC

GL	Descriptions	GL	Descriptions	GL	Descriptions
<u>501</u>	Included:	<u>506</u>	Included:	<u>555</u>	Included:
501042	Fuel -Coal	506127	Limestone Expense -latan	555430	Direct Purchases
501045	Fuel -Oil	506128	Powdered Activated Carbon	555431	Purchase Power Tolling Fees
501054	Fuel -Natural Gas	506129	Ammonia Expense	555432	Energy Imbalance
501183	Sales Of Ash	506201	Limestone Expense	555437	Interrupt Svc Compensation
501211	Ineffect (Gain)Loss Deri Steam	506202	Ammonia Expense	555 800	DA Asset Energy
501212	Effective (Gn)Lss Deriv Steam	506203	Powdered Activated Carbon	555810	DA Non-Asset Energy
501216	NonFAS133Deriv(Gain)/LossSteam	506204	Lime Expense	555820	DA Virtual Energy
501300	Fuel -Tires		·	555840	DA Reg -Up
501401	Ops Mtls-Fuel Handling	548	Included:	555850	DA Reg -Down
501607	Fuel Adm E Trader Commission	548202	Ammonia Expense	555860	DA Spinning
				555870	DA Supplemental
501	Excluded:	447	Included:	555880	DA Other
501011	Conv & Seminar-Fuel	447113	Gen Ark Off-Sys Sale-Resale	555900	RT Asset Energy
501400	Ops Labor-Fuel Handling	447124	Gen Ks Off-System Sale-Resale	555910	RT Non-Asset Energy
501601	Fuel Administration -Asbury	447133	Gen Mo Off -Sys Sale -Resale	555920	RT Virtual Energy
501604	Fuel Administration -Riverton	447143	Gen Ok Off -Sys Sales-Resale	555940	RT Reg-Up
501605	Fuel Administration Plum Point	447810	SPP IM Revenue -AR	555950	RT Reg-Down
		447820	SPP IM Revenue -KS	555960	RT Spinning
547	Included:	447830	SPP IM Revenue -MO	555970	RT Supplemental
547205	Natural Gas SLCC Tolling	447840	SPP IM Revenue -OK	555980	RT Other
547206	Nat Gas-Toling SLCC In effectiv	447850	SPP IM Revenue	555990	TCR Activity
547207	Nat Gas-Tolling SLCC Effective	447860	Bilateral/ Off Line Aux Revenue	555995	ARR Activity
547208	Comb Turb Fuel Sales -Nat Gas				
547210	Combust Turb Fuel Natural Gas	447	Excluded:		
547211	Ineffect (Gain)Loss Deriv Gas	447430	Aec -Off-Sys-Missouri		
547212	Effective (Gain)Loss Deriv Gas	447540	Oklahoma GRDA Off-System	<u>565</u>	Included:
547213	Fuel -No 2 Oil Fuel	447610	Energy Imbalance -Arkansas	565413	Trans Of Electricity By Others
547301	NonFAS133 Deriv (Gain)/Loss	447620	Energy Imbalance -Kansas	565414	SPP Fixed Chg -Native Load
547607	Fuel Adm E Traders Commission	447630	Energy Imbalance -Missouri	565415	SPP Var Chg Schedule 12
		447640	Energy Imbalance -Oklahoma	565416	Non SPP Fixed Chg -Native Load
547	Excluded:			565417	PP Non SPP Var -Native Load
547605	Fuel Adm State Line	457	Excluded:	565418	Gen Non SPP Var -Native Load
547606	Fuel Adm Energy Center	457137	Ot EI RvOffSys LTFSTF PTP Trns	565419	Off Sys Sales Trans Costs
547210	Natural gas fix ed transportation &	457138	Ot EI RvOffSys NnFrm PTP Trns		
047210	fixed storage only	457139	Ot EI RvOffSys NITS Rev	<u>456</u>	Included:
		457140	0th El Rev-Off-Sys Losses	456071	Misc Elec Rev-Green Credits-AR
		457141	Sch 11 NITS	456072	Misc Elec Rev-Green Credits-KS
<u>411</u>	Included:	457142	Sch 11 PTP	456073	Misc Elec Rev-Green Credits-MO
411800	Gains-Disposition Emmi ss Allow	457160	Sch 1 PTP	456074	Misc Elec Rev-Green Credits-OK
411000	Gano Disposition Emitir as Allow	-01100		456075	REC Revenue
<u>509</u> 509052	Included: Emission Allowance Exp				

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\*\* Confidential In Its Entirety \*\*

## **Environmental Matters**

We are subject to various federal, state, and local laws and regulations with respect to air and water quality and with respect to hazardous and toxic materials and hazardous and other wastes, including their identification, transportation, disposal, record-keeping and reporting, as well as remediation of contaminated sites and other environmental matters. We believe that our operations are in material compliance with present environmental laws and regulations. While we are not in a position to accurately estimate compliance costs for any new requirements, we expect these costs to be material, although recoverable in rates.

### Electric Segment

The federal Clean Air Act (CAA) and comparable state laws regulate air emissions from stationary sources such as electric power plants through permitting and/or emission control and related requirements. These requirements include maximum emission limits on our facilities for sulfur dioxide (SO<sub>2</sub>), particulate matter, nitrogen oxides (NO<sub>x</sub>), and hazardous air pollutants including mercury. In the future the requirements will include limitations on greenhouse gases (GHG) such as carbon dioxide (CO<sub>2</sub>) from our coal-fired plant.

Liberty-Empire also operates under the Kansas and Missouri Water Pollution Plans that were implemented in response to the Federal Clean Water Act ("CWA"). Liberty-Empire operates its generation facilities in compliance with applicable regulations, and all facilities have received necessary discharge permits.

Liberty-Empire operates under the Missouri Public Service Commission's renewable energy standards (RES) rule, 4 CSR 240-20.100(8). Liberty-Empire complies with the non-solar portion of the RES through purchased power contracts with Elk River Windfarm, LLC and generation from the Ozark Beach Hydroelectric facility. For the solar portion of the RES, Liberty-Empire expects to obtain solar renewable energy credits transferred from qualified customer-generator's operational solar electric systems as a condition of receiving the solar rebate.

#### Compliance Plan

In order to comply with current and forthcoming environmental regulations, we will implement our Integrated Resource Plan (IRP) filed with the MPSC in 2019. The Air Emissions, Water Related Impacts, and Renewable Energy sections below describe the regulations and actions of the EPA and states with anticipated responses. Compliance costs we have incurred associated with the regulations are being recovered in our rates and we anticipate any future costs to continue to be recoverable in our rates.

### Air Emissions

#### National Ambient Air Quality Standards

The Clean Air Act ("CAA") requires the EPA to set National Ambient Air Quality Standards ("NAAQS") for four air pollutants associated with fossil-fuel generation, including particulate matter, ground-level ozone, sulfur dioxide (SO<sub>2</sub>), and nitrogen dioxides (NO<sub>X</sub>). These air pollutants are regulated by setting human health-based or environmentally-based criteria for permissible levels. The EPA is reviewing the current 2015 ozone NAAQS to evaluate whether to reconsider, modify or maintain the standards by the required five-year deadline (October 2020).

#### Particulate Matter

In 2013, the EPA strengthened the PM standard. The Jasper County area is currently in attainment of the 2013 PM NAAQS. No additional emission control equipment is currently needed to comply with this standard. It is not known whether the Jasper County area will remain in attainment of a future revision of the standard. Future non-attainment of revised standards could require additional reduction technologies, emission limits, or both on fossil-fueled units.

#### Ozone

In 2015, the EPA strengthened the NAAQS for ground-level ozone. The Jasper County area is currently in attainment of the 2015 Ozone NAAQS. No additional emission control equipment is currently needed to comply with this standard.

Future non-attainment of revised standards could result in regulations requiring additional NO<sub>X</sub> reduction technologies, emission limits, or both on fossil-fueled units.

## Sulfur Dioxide

In 2010, the EPA strengthened the NAAQS for SO<sub>2</sub>. The Jasper County area is currently in attainment of the 2010 SO<sub>2</sub> NAAQS. No additional emission control equipment is currently needed to comply with this standard. Future nonattainment of revised standards could result in regulations requiring additional SO<sub>2</sub> reduction technologies, emission limits or both on fossil-fueled units.

## Nitrogen Dioxides

In 2010, the EPA strengthened the NAAQS for  $NO_X$ . The Jasper County area is currently in attainment of the 2010  $NO_X$  NAAQS. No additional emission control equipment is currently needed to comply with this standard. Future non-attainment of revised standards could result in regulations requiring additional  $NO_X$  reduction technologies, emission limits or both on fossil-fueled units.

#### Cross-State Air Pollution Rule

In 2011, the EPA finalized the Cross-State Air Pollution Rule ("CSAPR"), requiring eastern and central states to significantly reduce power plant emissions that cross state lines and contribute to ground-level ozone and fine particle pollution in other states. The CSAPR Update Rule took effect in 2017 with more stringent ozone-season NO<sub>X</sub> emission budgets for electric generating units ("EGUs") in many states to address significant contribution and maintenance issues with respect to the ozone NAAQS established in 2008. No additional emission control equipment is currently needed to comply with this rule. The Company complies through a combination of trading allowances within or outside its system in addition to changes in operations as necessary. Future, strengthened ozone, NO<sub>X</sub>, or SO<sub>2</sub> standards could result in additional cross-state rule updates requiring additional trading of allowances, emission reduction technologies or reduced generation on fossil-fueled units.

#### Regional Haze

In June 2005, the EPA finalized amendments to the July 1999 Regional Haze Rule. These amendments apply to the provisions of the Regional Haze Rule that require emission controls known as best available retrofit technology ("BART") for industrial facilities emitting air pollutants that reduce visibility by causing or contributing to regional haze.

The pollutants that reduce visibility include  $PM_{2.5}$  and compounds which contribute to  $PM_{2.5}$  formation, such as  $NO_X$ ,  $SO_2$ , and under certain conditions, volatile organic compounds and ammonia. Under the 1999 Regional Haze Rule, states are required to set periodic goals for improving visibility in natural areas. As states work to reach these goals, they must develop regional haze implementation plans that contain enforceable measures and strategies for reducing visibility-impairing pollution.

The Regional Haze Rule directs state air quality agencies to identify whether visibility-reducing emissions from sources subject to BART are below limits set by the state or whether retrofit measures are needed to reduce emissions. It also directs these agencies to file Regional Haze plans with the EPA for approval.

Future visibility progress goals could result in additional SO<sub>2</sub>, NO<sub>X</sub>, and PM controls or reduction technologies on fossilfired units.

#### Affordable Clean Energy Rule

On Wednesday, June 19, 2019, EPA issued the Affordable Clean Energy rule (ACE), an effort to provide existing coalfired electric utility generating units, or EGUs, with achievable and realistic standards for reducing greenhouse gas (GHG) emissions. This action was finalized in conjunction with related rulemakings including the repeal of the Clean Power Plan (CPP), the revised implementing regulations for ACE, ongoing emission guidelines, and all future emission guidelines for existing sources issued under the authority of Clean Air Act (CAA) section 111(d). ACE provides states with new emission guidelines that will inform the state's development of standards of performance to reduce carbon dioxide (CO<sub>2</sub>) emissions from existing coal-fired EGUs.

#### Mercury and Air Toxics Standards

In 2011, the EPA finalized a rule to reduce emissions of toxic air pollutants from power plants. These MATS for power plants reduced emissions from new and existing coal and oil-fired electric EGUs. Control equipment was installed at Liberty-Empire facilities to comply with this rule. No additional emission control equipment is currently needed to comply with this standard. It is not known whether the rule will be strengthened in the future. Future strengthening of the rule could require additional reduction technologies, emission limits, or both on coal and oil-fired units.

#### Water Related Impacts

Clean Water Act Section 316(b)

On September 17, 2018, the Kansas Department of Health and Environment ("KDHE") issued a Certificate of Determination stating that the Riverton Generating Station cooling water intake structure ("CWIS") is in compliance with Section 316(b) of the CWA. The location, design, construction and capacity of the CWIS reflects the best technology available ("BTA") for minimizing adverse environmental impacts. Additionally, latan 2 and Plum Point Unit 1 also meet the BTA standard. Future modifications at the latan 1 facility could range from flow velocity reductions, traveling screen modifications, or the installation of a closed cycle cooling tower retrofit.

#### Surface Impoundments

Liberty-Empire owns and maintains a coal ash impoundment at the Asbury Power Plant. Additionally, Liberty-Empire owns a 12 percent interest in a coal ash impoundment at the latan Generating Station and a 7.52 percent interest in a coal ash impoundment at Plum Point. Future closure of all surface impoundments is anticipated.

Effluent Limitation Guidelines ("ELGs") for Steam Electrical Power Generating Point Sources are currently incorporated into all facilities' wastewater discharge permits. The EPA rule defines bottom ash transport water, fly ash transport water, and scrubber wastes as wastewaters which cannot be discharged after December 21, 2023.

#### Coal Combustion Residuals

In compliance with the EPA published final rule to regulate the disposal of coal combustion residuals ("CCRs") as a non-hazardous solid waste under subtitle D of the Resource Conservation and Recovery Act, Liberty-Empire has published a Closure Plan for the Asbury Plant CCR Impoundment. The plan schedule assumes Closure Initiation in November 2020 with completion of closure by October 2025. Liberty-Empire will need to construct at least one cell of a new landfill and complete the conversion of the existing bottom ash handling from a wet to a dry system at a potential cost of up to \$3 million and \$17 million, respectively, if Asbury continues to operate. The closure cost of the existing impoundment is estimated at \$15 million.

Liberty-Empire has posted a \$5.5 million asset retirement obligation ("ARO") for the Asbury pond closure costs. Liberty-Empire expects resulting costs to be recoverable in rates. Final closure of the other existing ash impoundment, for which an asset retirement obligation of \$4.4 million has been recorded for Liberty-Empire's interest in the coal ash impoundment at the latan Generating Station, has been accounted for in Liberty-Empire's ARO. In December 2016, The Missouri Department of Natural Resources ("MDNR") granted Liberty-Empire a Utility Waste Disposal Area Construction Permit that can be used for CCR waste disposal. Construction of the landfill is not expected in the immediate future, as Liberty-Empire anticipates that the existing Asbury impoundment will be closed by leaving all accumulated CCR in place.

In 2014, the former Riverton Plant impoundment was closed as a CCR landfill in accordance with Kansas Department of Health and Environment regulations.

Water Discharges

We operate under the Kansas and Missouri Water Pollution Plans pursuant to the Federal Clean Water Act (CWA). Our plants are in material compliance with applicable regulations and have received all necessary discharge permits. On September 17, 2018 KDHE issued a Certificate of Determination stating the Riverton Generating Station cooling water intake structure (CWIS) is in compliance with the EPA final rule under the CWA Section 316(b) for existing CWIS, which became effective on October 14, 2014, to meet new regulatory requirements for aquatic life protections. An industry coalition has filed an appeal of the rule and additional court challenges are expected. Impacts at latan 1 could range from flow velocity reductions, traveling screen modifications or the installation of a closed cycle cooling tower retrofit. Iatan Unit 2 and Plum Point Unit 1 are covered by the regulation, but were constructed with cooling towers, the proposed Best Technology Available. We expect them to be unaffected or minimally affected by the final rule.

## **Renewable Energy**

#### Missouri

On November 4, 2008, Missouri voters approved the Clean Energy Initiative (Proposition C) which currently requires Liberty-Empire and other investor-owned utilities in Missouri to generate or purchase electricity from renewable energy sources, such as solar, wind, biomass and hydro power, or purchase Renewable Energy Credits (RECs), in amounts equal to at least 5 percent of retail sales in 2014, increasing to at least 15 percent by 2021. Liberty-Empire is currently in compliance with this regulatory requirement as a result of generation from the Ozark Beach Hydroelectric Project and purchased power agreements with Elk River Windfarm, LLC. Proposition C also requires that 2 percent of the energy from renewable energy sources must be solar. Liberty-Empire complies with this requirement utilizing customergenerated Solar Renewable Energy Credits (SRECs) which Liberty-Empire retains as a requirement of the rebate agreement. By the end of 2018, a total of 1,829 Missouri solar net metering customers have been connected to the Liberty-Empire system. In addition, rebate applications resulting in solar rebate-related costs totaled approximately \$15.9 million under the tariff. The law provides a number of methods that may be utilized to recover the associated expenses. Liberty-Empire expects any costs to be recoverable in rates.

Missouri passed SB 564 in 2018 which impacts renewable energy development and energy efficiency programming for Missouri's investor owned utilities including Liberty-Empire. Additional solar rebates are mandated for new or expanded solar systems for residential and non-residential customers. Liberty-Empire will also be required to invest in utility scale solar facilities. It is anticipated a portion of the solar renewable energy credits from these additions can be used for compliance with the RES. The bill also changes the rate-making policy for Liberty-Empire, allowing decoupling revenue from electric sales. It is anticipated that costs for these initiatives will be recoverable in rates

For future compliance, Liberty-Empire's Customer Savings Plan will add additional wind energy resources which will generate RECs. A portion of these credits can be used for compliance with the RES in the future.

#### Kansas

Legislation was adopted that altered the Kansas renewable portfolio standard (RPS), ending all mandatory requirements in 2015. The mandate, which required 20 percent of Liberty-Empire's Kansas retail customer peak capacity requirements to be sourced from renewables by 2020, has been changed to a voluntary goal. One of the reasons for the change is that Kansas utilities have certified that they are already meeting the 20 percent target. Liberty-Empire is currently in compliance as a result of purchased power agreements with Cloud County Windfarm, LLC and Elk River Windfarm, LLC.

#### Projected Position for Allowances 2019-2022

SO<sub>2</sub> Acid Rain

	2019	2020	2021	2022
Allowances allocated	11,741	11,741	11,741	11,741
Estimated allowances needed for emissions	1,230	1,020	1,095	1,085
Allowances allocated less allowances needed for emissions	10,511	10,721	10,646	10,656

# SO<sub>2</sub> CSAPR Group 1

	2019	2020	2021	2022
Allowances allocated	4,688	4,574	4,574	4,574
Estimated allowances needed for emissions	1,227	1,017	1,092	1,082
Allowances allocated less allowances needed for emissions	3,461	3,557	3,482	3,492

# SO<sub>2</sub> CSAPR Group 2

	2019	2020	2021	2022
Allowances allocated	1,079	678	1	1
Estimated allowances needed for emissions	3	3	3	3
Allowances allocated less allowances needed for emissions	1,076	675	-2	-2

## NO<sub>x</sub> Annual CSAPR

	2019	2020	2021	2022
Allowances allocated	2,077	1,818	1,416	1,416
Estimated allowances needed for emissions	1,594	1,584	1,639	1,617
Allowances allocated less allowances needed for emissions	483	234	-179	-201

## NO<sub>x</sub> Ozone Season CSAPR

	2019	2020	2021	2022
Allowances allocated	674	674	674	627
Estimated allowances needed for emissions	577	619	647	625
Allowances allocated less allowances needed for emissions	97	55	27	2

SO<sub>2</sub> Acid Rain, all units included

SO<sub>2</sub> CSAPR group 1 includes all MO units SO<sub>2</sub> CSAPR group 2, Riverton only Plum Point is not included in this summary

## Unit: Asbury

Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	97.5%	98.3%	92.6%	63.0%	99.9%	98.5%	100.0%	89.6%	38.8%	0.0%	67.1%	78.0%	76.9%
2015	69.5%	99.4%	100.0%	68.0%	80.8%	93.2%	99.9%	79.1%	73.3%	41.1%	94.6%	96.0%	82.8%
2016	96.3%	75.2%	88.3%	11.2%	74.4%	95.6%	94.2%	99.1%	42.5%	48.2%	94.8%	54.2%	73.0%
2017	89.0%	81.0%	76.0%		84.0%	100.0%	100.0%	99.0%	67.0%	94.0%	96.0%	100.0%	82.3%
2018	94.0%	81.0%	44.0%	98.0%	89.0%	97.0%	89.0%	95.0%	100.0%	59.0%	16.0%		71.8%
2019	76.0%	85.0%	90.0%	57.0%	43.0%	98.0%							

#### Unit: Asbury

#### Data: Equivalent Forced Outage Rate (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	2.5%	1.7%		2.7%							20.8%	25.7%	6.0%
2015	30.0%				19.0%	7.0%		21.0%	22.0%		6.0%	4.0%	9.9%
2016		32.2%	6.9%		25.1%		1.6%		46.7%	29.1%		35.7%	15.7%
2017	11.2%	24.9%		100.0%	13.2%			0.6%		2.7%			9.4%
2018	1.6%	13.0%	7.6%	1.3%	5.6%	3.8%	11.1%	4.8%		35.7%	89.1%	100.0%	26.1%
2019	16.0%	7.0%	8.0%	9.0%	12.0%	2.0%							

#### Unit: Asbury

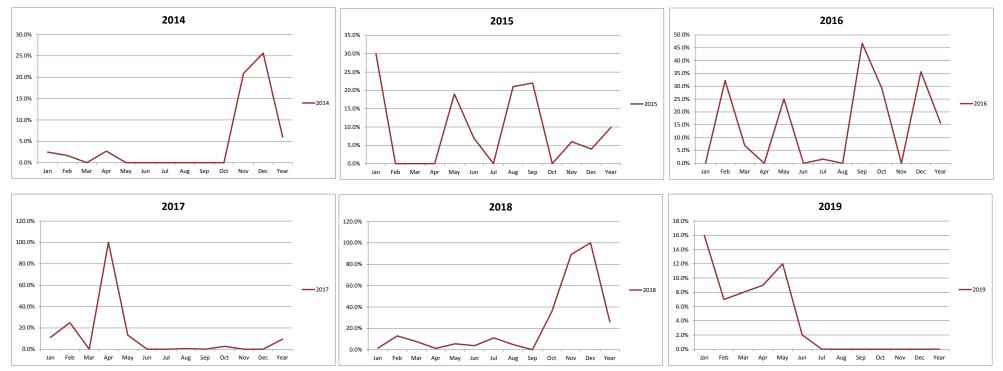
Data: Length and timing of planned outages - Scheduled Outage Hours

	Jan	Feb	Mar	Apr	May	Jun	J	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	260	-	-	-		61	432	744	110	-	1,607
2015	-	-	-	227	-	-	-	-		40	438	-	-	705
2016	-	-	-	640	-	-	-	-		-	216	-	-	856
2017	-	-	169	552	-	-	-	-		192	24	-	-	937
2018	37	65	399	-	48	-	-	-		-	91	-	-	640
2019	99	60	-	263	398	-								

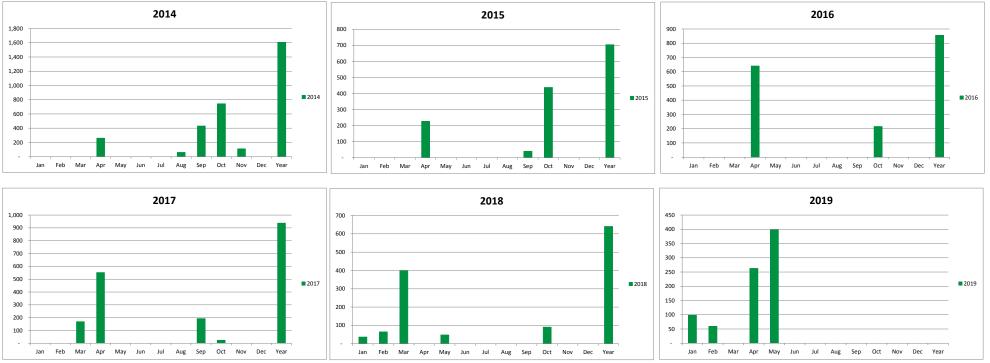
#### Unit: Asbury Data: Equivalent Availability Factor (%)



#### Unit: Asbury Data: Equivalent Forced Outage Rate (%)



#### Unit: Asbury Data: Length and timing of planned outages - Scheduled Outage Hours



### Unit: Energy Center 1 Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	100.0%	29.9%	91.4%	99.1%	100.0%	100.0%	10.6%	45.4%	97.2%	7.8%	50.3%	69.1%
2015	97.8%	100.0%	100.0%	76.7%	98.8%	99.7%	90.2%	100.0%	100.0%	100.0%	95.1%	100.0%	96.5%
2016	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	98.7%	100.0%	100.0%	100.0%	99.9%
2017	100.0%	100.0%	100.0%	89.0%	100.0%	71.0%	100.0%	100.0%	58.0%	-	-	-	68.0%
2018	5.0%	14.0%	99.0%	100.0%	67.0%	100.0%	100.0%	100.0%	93.0%	100.0%	100.0%	100.0%	81.9%
2019	100.0%	100.0%	99.0%	100.0%	48.0%	11.0%							

#### Unit: Energy Center 1

## Data: Equivalent Forced Outage Rate (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014									50.5%	100.0%			34.4%
2015	68.0%					4.0%	55.0%						27.9%
2016		32.2%	6.9%		25.1%		1.6%		46.7%	29.1%		35.7%	1.3%
2017										100.0%	100.0%	100.0%	83.7%
2018		97.0%											82.5%
2019				8.0%	97.0%								

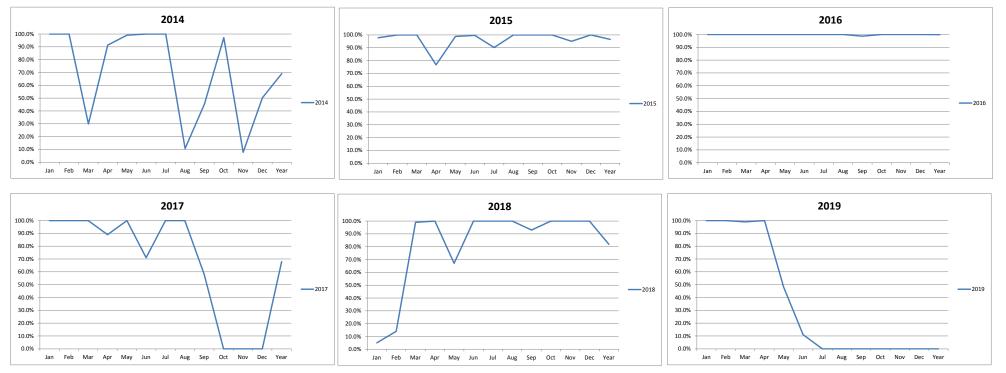
#### Unit: Energy Center 1

#### Data: Length and timing of planned outages - Scheduled Outage Hours

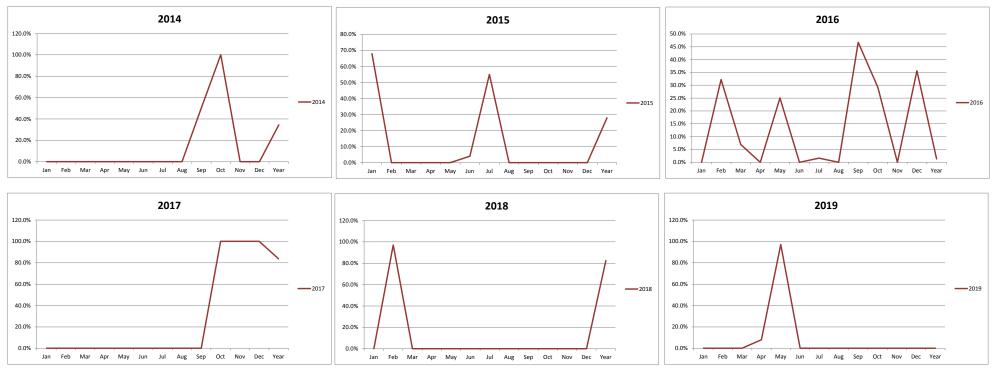
	Jan		Feb	Mar	Apr	May		Jun	Jul		Aug	Sep	C	Oct	Nov	D	ec Year
2014	-		-	521	62	7		-	-	6	665	377	-		665	37	2,666
2015	6	-	-		168	9	-	-		-		-	-		36	-	219
2016	-	-	-		-	-	-	-		-		6	-	-		-	6
2017	-	-	-		83	-		207 -			3	306	64	48 -		-	1,247
2018	709	-		8	3	243	-	-		-		52	-	-		-	1,014
2019	-	-		4	-	-		638									

# SCHEDULE SDR-17

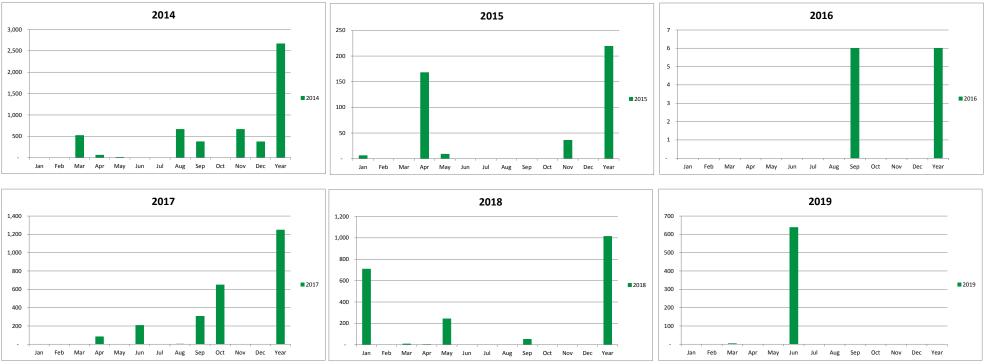
#### Unit: Energy Center 1 Data: Equivalent Availability Factor (%)



#### Unit: Energy Center 1 Data: Equivalent Forced Outage Rate (%)



#### Unit: Energy Center 1 Data: Length and timing of planned outages - Scheduled Outage Hours



#### Unit: Energy Center 2 Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	97.5%	99.8%	29.9%	98.9%	96.3%	12.2%	8.6%	93.7%	100.0%	96.1%	100.0%	95.4%	77.2%
2015	96.3%	95.2%	100.0%	100.0%	98.8%	100.0%	100.0%	95.7%	99.8%	89.1%	100.0%	100.0%	97.9%
2016	100.0%	100.0%	100.0%	100.0%	100.0%	95.3%	68.8%	68.8%	68.8%	64.4%	92.2%	100.0%	88.1%
2017	100.0%	99.0%	92.0%	98.0%	100.0%	70.0%	69.0%	100.0%	82.0%	78.0%	68.0%	99.0%	87.9%
2018	76.0%	94.0%	100.0%	100.0%	68.0%	100.0%	100.0%	100.0%	89.0%	100.0%	100.0%	96.0%	93.5%
2019	100.0%	97.0%	32.0%										

## Unit: Energy Center 2

## Data: Equivalent Forced Outage Rate (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	97.2%					100.0%	99.3%	74.4%				79.5%	91.4%
2015	30.0%	71.0%							100.0%				27.5%
2016						36.4%							20.6%
2017			1.0%						74.8%	58.7%	67.3%		35.0%
2018	4.5%												2.7%
2019		58.0%											

#### Unit: Energy Center 2

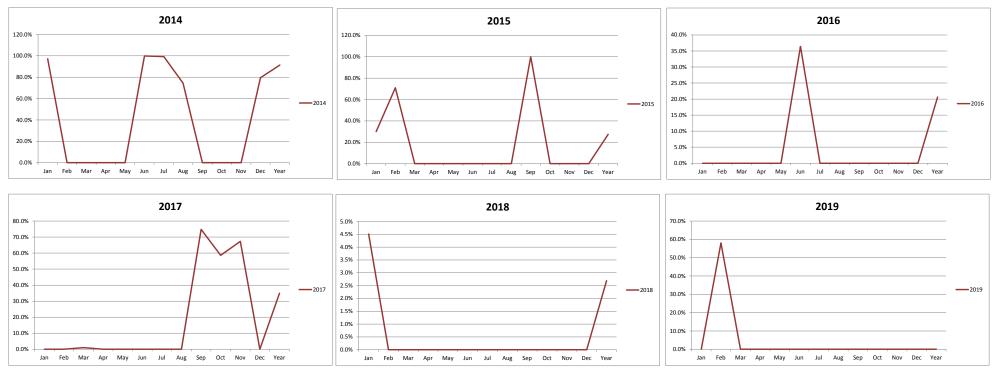
#### Data: Length and timing of planned outages - Scheduled Outage Hours

	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	Year
2014	2		1		521		8		27		-		-		-		-		29		-		-	588
2015	24	-		-		-			9	-		-			32	-			81	-		-		146
2016	-	-		-		-		-		-		-		-		-			33		9	-		42
2017	-		5		56		12	-			216		232		3		86	-		-			11	621
2018	168		39	-		-			241	-		-		-			82	-		-			30	560
2019	-	-			504		720		744		720													

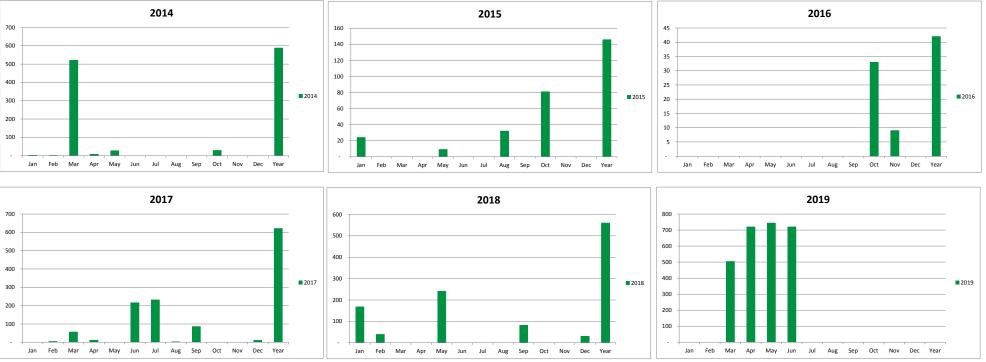
#### Unit: Energy Center 2 Data: Equivalent Availability Factor (%)



#### Unit: Energy Center 2 Data: Equivalent Forced Outage Rate (%)



#### Unit: Energy Center 2 Data: Length and timing of planned outages - Scheduled Outage Hours



### Unit: Energy Center 3 Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	98.5%	97.4%	88.6%	97.4%	99.8%	99.9%	99.3%	99.0%	95.1%	99.0%	100.0%	97.8%
2015	100.0%	93.2%	76.2%	99.3%	98.8%	95.1%	92.8%	99.0%	99.6%	89.1%	99.1%	100.0%	95.2%
2016	99.5%	98.4%	100.0%	99.4%	20.8%	100.0%	100.0%	98.4%	90.7%	77.6%	50.1%	50.0%	82.0%
2017	91.0%	100.0%	100.0%	100.0%	93.0%	99.0%	100.0%	99.0%	100.0%	15.0%	20.0%	20.0%	77.9%
2018	76.0%	78.0%	27.0%	62.0%	86.0%	87.0%	87.0%	87.0%	87.0%	79.0%	91.0%	90.0%	78.1%
2019	37.0%	72.0%	90.0%	91.0%	91.0%	91.0%							

#### Unit: Energy Center 3 Data: Equivalent Forced Outage Rate (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014			2.3%		1.2%					2.8%			0.6%
2015		26.0%				15.0%	22.0%	1.0%			5.0%		6.2%
2016								3.3%		34.3%			6.7%
2017	40.6%							0.5%					43.4%
2018	40.4%	56.2%	90.8%	77.4%	42.9%	29.3%	31.0%	36.9%	44.7%	37.5%	20.9%	41.6%	46.4%
2019	44.0%	45.0%	27.0%	18.0%	13.0%	22.0%							

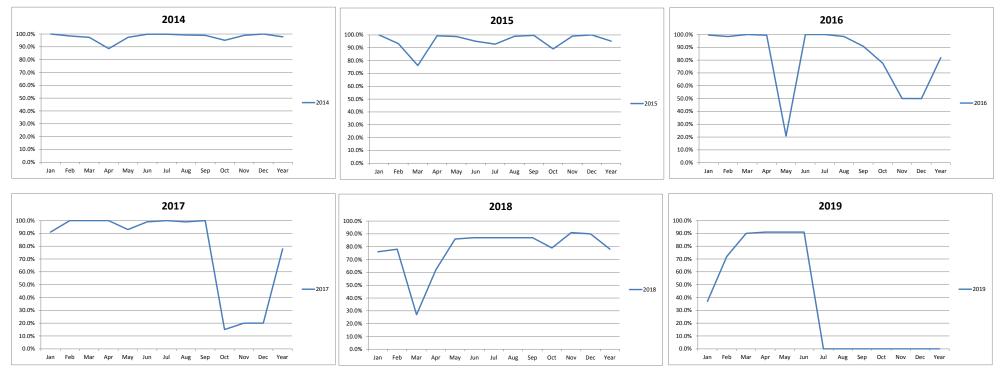
#### Unit: Energy Center 3

Data: Length and timing of planned outages - Scheduled Outage Hours

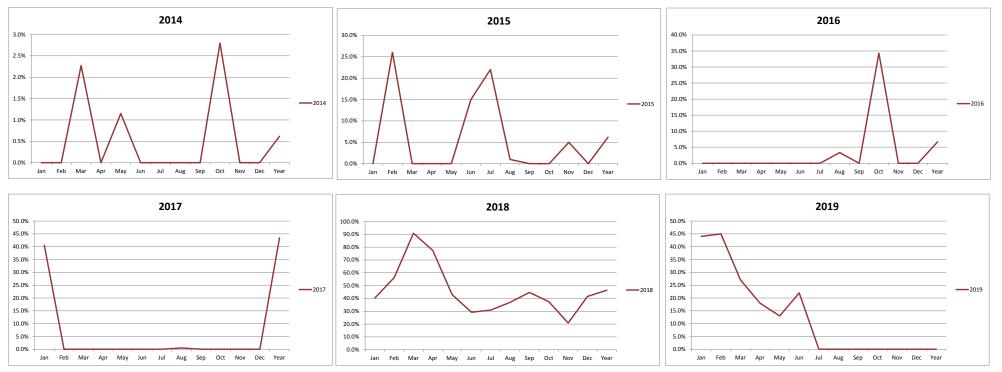
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	10	17	82	18	1	-	6	8	33	8	-	182
2015	-	3	177	5	9	-	-	7	-	81	5	-	286
2016	-	7	-	4	589	-	-	9	-	18	-	-	627
2017	-	-	-	-	48	7	-	10	-	40	3	-	108
2018	1	5	254	31	7	-	-	-	-	84	-	12	394
2019	444	111	4	-	-	-							

## Unit: Energy Center 3

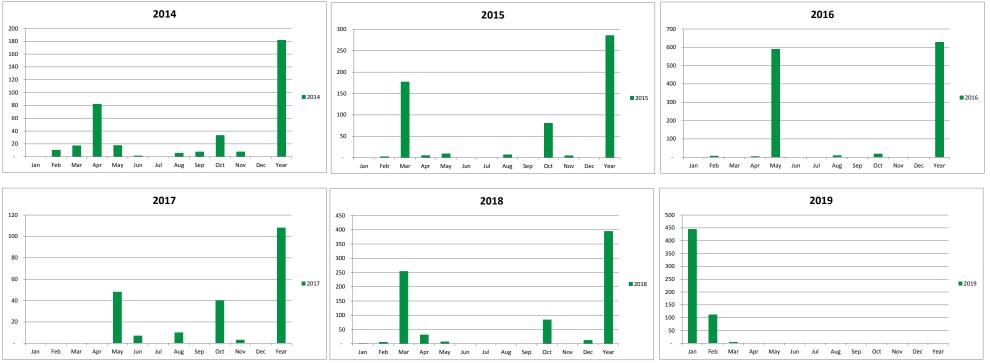
Data: Equivalent Availability Factor (%)



#### Unit: Energy Center 3 Data: Equivalent Forced Outage Rate (%)



#### Unit: Energy Center 3 Data: Length and timing of planned outages - Scheduled Outage Hours



# Unit: Energy Center 4 Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	98.9%	100.0%	95.4%	98.5%	100.0%	100.0%	99.5%	99.2%	94.9%	99.3%	100.0%	98.8%
2015	100.0%	98.2%	99.5%	64.4%	45.2%	49.7%	45.5%	51.1%	60.1%	90.9%	98.6%	100.0%	75.2%
2016	99.5%	99.0%	98.9%	99.7%	68.6%	100.0%	100.0%	99.1%	99.0%	89.9%	100.0%	100.0%	96.1%
2017	100.0%	98.0%	94.0%	100.0%	96.0%	99.0%	100.0%	99.0%	100.0%	4.0%	89.0%	28.0%	83.6%
2018	80.0%	82.0%	73.0%	64.0%	41.0%	41.0%	70.0%	83.0%	83.0%	77.0%	72.0%	86.0%	70.9%
2019	87.0%	31.0%	9.0%			53.0%							

# Unit: Energy Center 4

# Data: Equivalent Forced Outage Rate (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014													0.3%
2015		11.0%			83.0%	73.0%	80.0%	87.0%	78.0%				1.0%
2016										34.0%			5.3%
2017								3.8%			0.8%	1.9%	34.6%
2018	34.4%	49.7%	46.3%	78.3%	87.1%	80.2%	49.6%	45.2%	54.9%	37.6%	48.3%	52.6%	58.0%
2019	51.0%	38.0%	35.0%			58.0%							

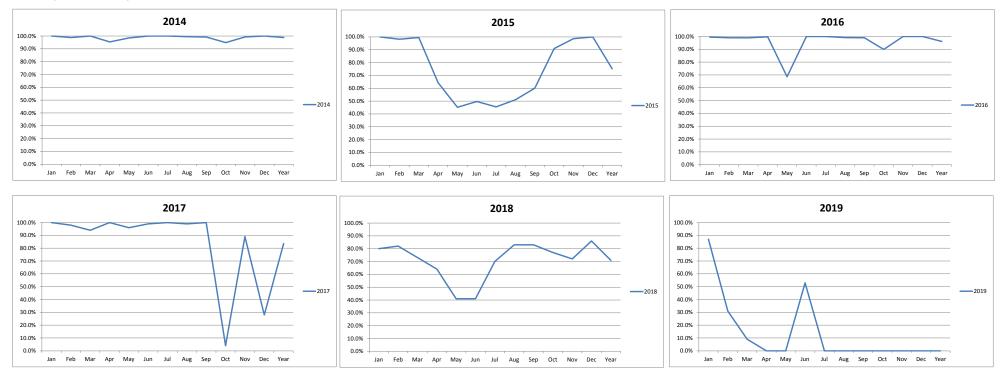
# Unit: Energy Center 4

# Data: Length and timing of planned outages - Scheduled Outage Hours

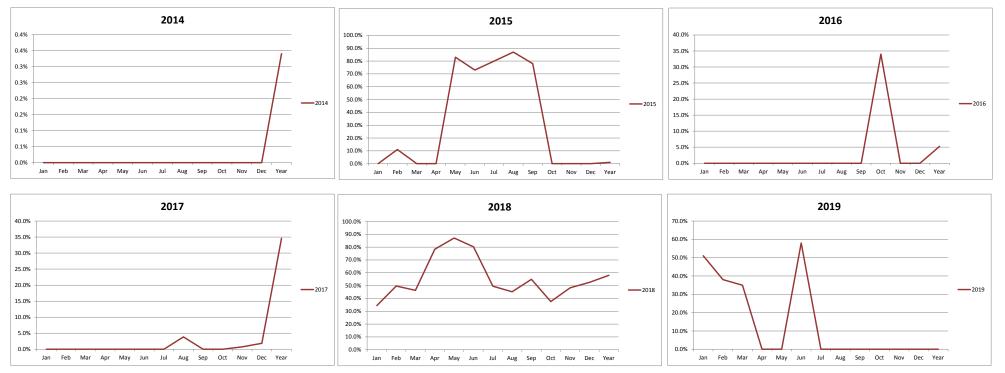
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	8	-	33	11	-	-	4	6	33	5	-	100
2015	-	3	3	257	92	3	-	4	33	68	10	-	473
2016	-	-	8	2	234	-	-	7	4	9	-	-	264
2017	-	-	12	-	30	6	-	6	-	94	3	5	156
2018	-	4	87	10	4	-	20	-	-	83	14	5	227
2019	-	436	668	720	744	270							

#### Unit: Energy Center 4

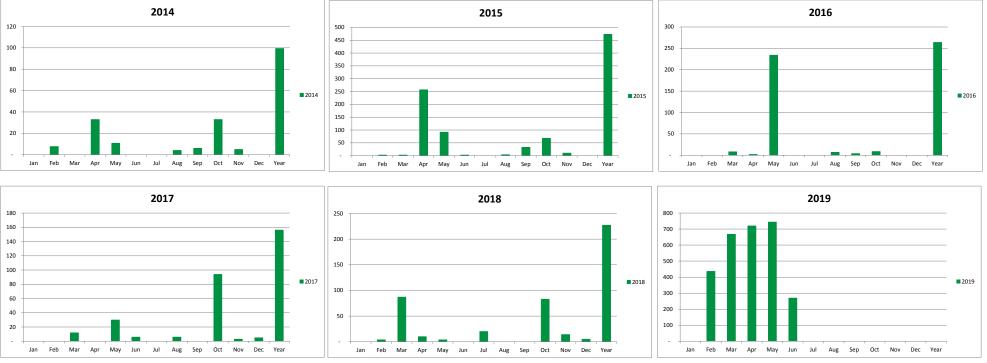
Data: Equivalent Availability Factor (%)



#### Unit: Energy Center 4 Data: Equivalent Forced Outage Rate (%)



#### Unit: Energy Center 4 Data: Length and timing of planned outages - Scheduled Outage Hours



# Unit: latan 1 Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	48.5%	54.4%	76.6%	99.3%	98.3%	77.9%	94.1%	98.6%	92.4%	69.4%	77.9%	97.2%	82.3%
2015	92.9%	85.6%			55.3%	96.1%	92.5%	82.3%	99.7%	72.6%	53.3%	70.8%	66.7%
2016	88.2%	99.8%	99.6%	68.1%	94.2%	99.9%	99.9%	74.2%	98.9%	92.2%	100.0%	98.2%	92.8%
2017	98.0%	86.0%	99.0%	99.0%	93.0%	99.0%	99.0%	100.0%	84.0%	14.0%	1.0%	72.0%	78.8%
2018	72.0%	99.0%	98.0%	100.0%	100.0%	100.0%	96.0%	97.0%	69.0%	33.0%	68.0%	2.0%	77.6%
2019	74.0%	79.0%	68.0%	70.0%	89.0%	99.0%							

#### Unit: latan 1

# Data: Equivalent Forced Outage Rate (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	50.1%	43.6%	23.6%	0.0%	1.7%	21.1%	0.0%	1.2%	5.0%	1.2%	17.7%	2.0%	15.3%
2015	7.0%	10.0%			43.0%	4.0%	6.0%	17.0%		15.0%	47.0%	25.0%	14.2%
2016	6.2%				1.4%			25.8%					2.9%
2017		12.0%			4.1%				15.2%	27.9%	88.6%	3.2%	8.0%
2018	19.5%	0.7%	1.6%				3.6%	3.2%	20.8%	67.6%	25.9%	97.4%	20.3%
2019	22.0%	21.0%	32.0%	30.0%	11.0%	2.0%							

### Unit: latan 1

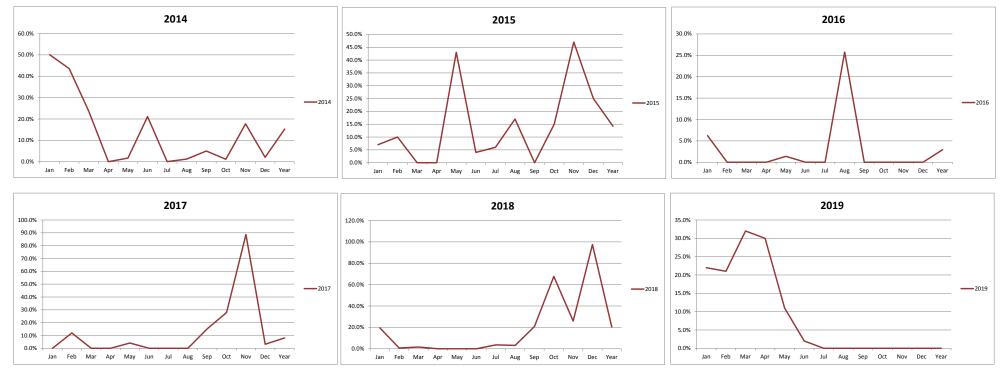
# Data: Length and timing of planned outages - Scheduled Outage Hours

		Jan		Feb	1	Mar	Apr		May	Ju	ın	Jul		Aug	Sep		Oct		Nov		Dec	Year
2014		-		1		-	-		-	-		-		-	-		200		-		-	202
2015	-			24	7	743	720		-	-	-		-		-		111	-		-		1,598
2016	-		-		-		227	-		-	-		-		-	-		-		-		227
2017	-		-		-		-	-		-	-		-		-		599		629	-		1,228
2018		42	-		-		-	-		-	-		-		89	-		-		-		131
2019	-		-		-		-	-		-												

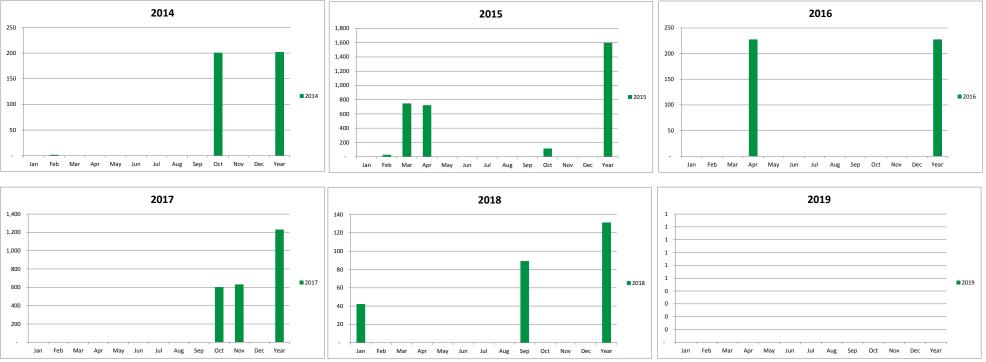
#### Unit: latan 1 Data: Equivalent Availability Factor (%)



Unit: latan 1 Data: Equivalent Forced Outage Rate (%)



#### Unit: latan 1 Data: Length and timing of planned outages - Scheduled Outage Hours



# Unit: latan 2

# Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	99.5%	99.6%	99.8%	57.3%	49.8%	83.8%	70.4%	98.5%	63.6%		10.1%	70.0%	66.7%
2015	74.7%	85.8%	100.0%	99.7%	47.0%	83.6%	41.6%	96.5%	96.5%	96.3%	59.6%	100.0%	81.7%
2016	81.2%	29.2%	99.6%	84.8%	82.7%	100.0%	100.0%	100.0%	85.9%		1.9%	41.0%	67.4%
2017	100.0%	86.0%	98.0%	99.0%	99.0%	100.0%	99.0%	100.0%	100.0%	99.0%	100.0%	75.0%	96.4%
2018	90.0%	79.0%	6.0%			4.0%	68.0%	100.0%	100.0%	100.0%	51.0%	100.0%	58.2%
2019	98.0%	95.0%	91.0%	39.0%		74.0%							

#### Unit: latan 2

# Data: Equivalent Forced Outage Rate (%)

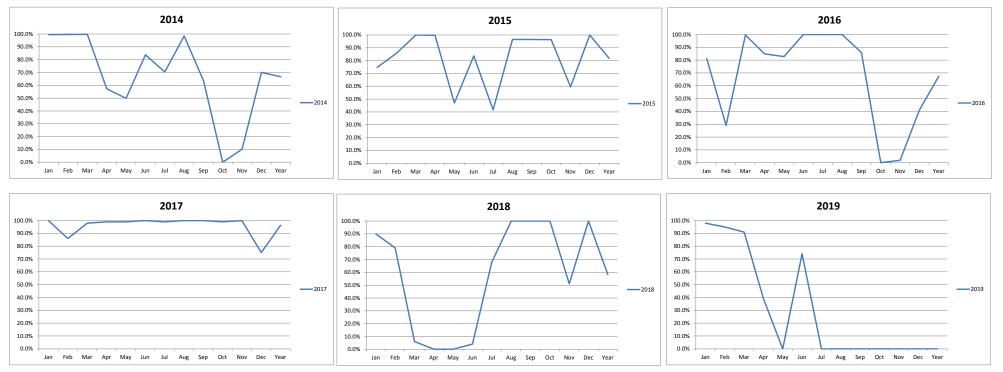
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	0.5%				43.3%	11.9%	10.9%	1.5%			82.4%	29.3%	16.1%
2015	25.0%	14.0%			43.0%	16.0%	57.0%	3.0%	3.0%	4.0%	40.0%		15.6%
2016	18.8%	69.0%		14.9%	16.5%				14.1%	100.0%	96.0%	57.0%	24.1%
2017		13.8%	1.5%							0.7%		23.6%	3.6%
2018	9.6%	20.5%				89.2%	31.6%				13.7%		15.8%
2019	2.0%	5.0%	8.0%	21.0%		28.0%							

### Unit: latan 2

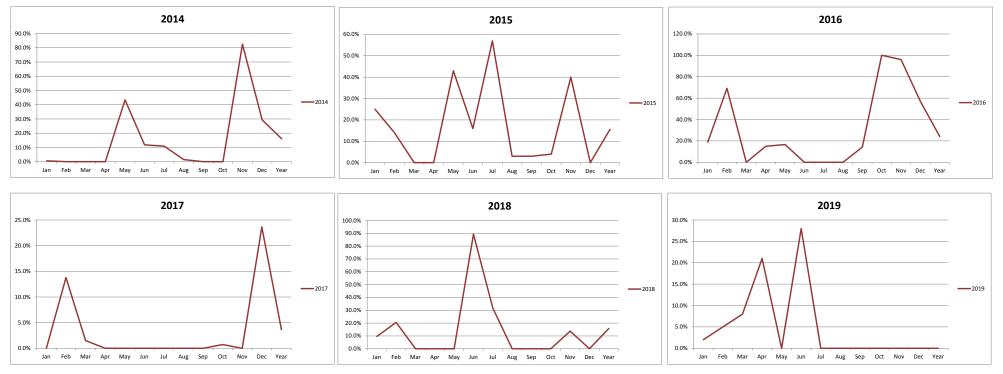
# Data: Length and timing of planned outages - Scheduled Outage Hours

	Jan	Fe	b	Mar	Apr		May	J	Jun	Jul	Au	g	Sep	Oct	Nov	Dec	Year
2014	-	-		-	308		106	-		96	-		262	744	252	-	1,768
2015	-	-	-		-		132	-	-		-	-		-	-	-	132
2016	-	-	-		-	-		-	-		-	-		696	232	-	928
2017	-	-	-		-	-		-	-		-	-		-	-	-	-
2018	-	-		700	720		744	2	34 -		-	-		-	296	-	2,694
2019	-	-	-		353	-		-									

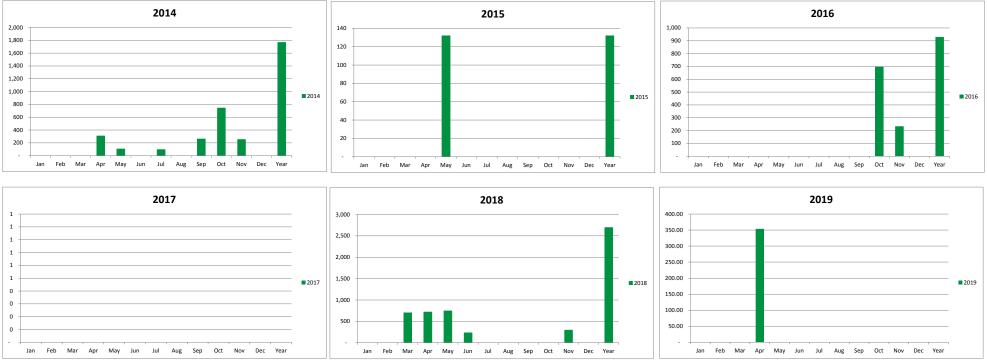
#### Unit: latan 2 Data: Equivalent Availability Factor (%)



#### Unit: latan 2 Data: Equivalent Forced Outage Rate (%)



#### Unit: latan 2 Data: Length and timing of planned outages - Scheduled Outage Hours



# Unit: Ozark Beach

Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	88.3%	75.0%	75.0%	75.0%	75.0%	75.0%	100.0%	100.0%	100.0%	100.0%	75.0%	100.0%	88.7%
2015	100.0%	100.0%	99.8%	100.0%	99.4%	65.7%	0.0%	0.0%	39.5%	99.6%	99.8%	84.8%	73.8%
2016	100.0%	100.0%	83.8%	87.7%	94.7%	99.7%	99.8%	100.0%	98.4%	100.0%	70.0%	100.0%	92.1%
2017	99.2%	100.0%	36.7%	100.0%	4.7%	0.0%	0.0%	47.4%	75.0%	74.6%	99.9%	99.7%	61.1%
2018	74.0%	75.0%	75.0%	74.0%	63.0%	77.0%	95.0%	81.0%	100.0%	98.0%	100.0%	100.0%	84.4%
2019	100.0%	100.0%	100.0%	96.0%	50.2%	0.0%							

#### Unit: Ozark Beach

# Data: Equivalent Forced Outage Rate (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	11.8%	30.0%	0.0%	0.0%	32.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.0%
2015	0.0%	0.0%	0.0%	0.0%	1.0%	38.0%	100.0%	100.0%	65.0%	1.0%	0.0%	16.0%	34.6%
2016	91.4%	1.4%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.3%	0.3%	0.3%	0.0%	10.8%
2017	3.1%	0.0%	0.0%	0.0%	95.3%	100.0%	100.0%	49.3%	30.1%	40.7%	0.0%	0.4%	47.4%
2018	30.3%	29.8%	0.0%	0.1%	13.8%	28.9%	10.4%	39.0%	0.0%	6.6%	0.0%	0.0%	14.0%
2019	0.0%	0.0%	0.0%	4.0%	48.2%	100.0%							

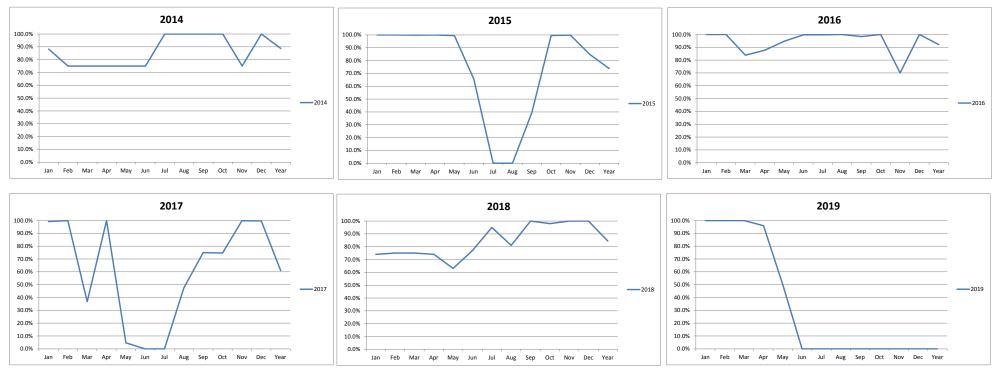
# Unit: Ozark Beach

Data: Length and timing of planned outages - Scheduled Outage Hours

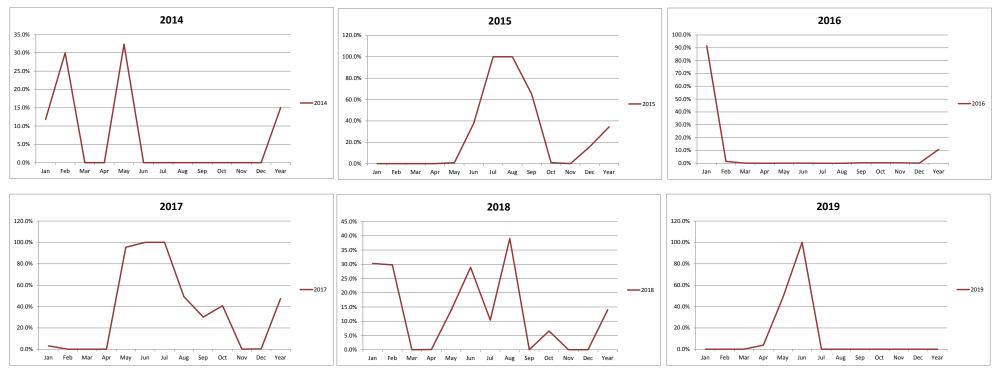
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	288	90	-	-	-	6	-	-	35	418
2015	-	-	-	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	3	-	-	3
2018	-	-	-	8	-	-	-	-	-	-	-	-	8
2019	-	-	-	-	2	-							

# Unit: Ozark Beach

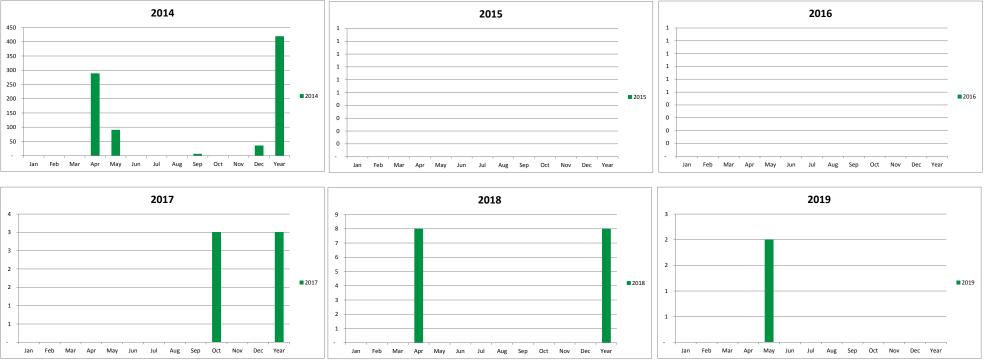
Data: Equivalent Availability Factor (%)



### Unit: Ozark Beach Data: Equivalent Forced Outage Rate (%)



#### Unit: Ozark Beach Data: Length and timing of planned outages - Scheduled Outage Hours



# Unit: Plum Point

Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	96.8%	97.6%	98.0%	96.9%	32.9%			78.6%	99.9%	99.3%	79.9%		64.9%
2015	13.1%	100.0%	99.9%	74.7%	81.1%	100.0%	100.0%	100.0%	89.2%	48.1%	70.8%	67.3%	78.5%
2016	99.8%	100.0%	99.9%	73.1%	48.7%	74.8%	100.0%	97.5%	99.1%	99.4%	99.8%	97.7%	90.8%
2017	60.0%	69.0%	4.0%	-	23.0%	89.0%	84.0%	97.0%	100.0%	73.0%	100.0%	100.0%	66.3%
2018	99.0%	100.0%	99.0%	39.0%	99.0%	99.0%	99.0%	83.0%	100.0%	100.0%	100.0%	99.0%	93.1%
2019	53.0%	100.0%	70.0%	5.0%	65.0%	100.0%							

#### Unit: Plum Point

# Data: Equivalent Forced Outage Rate (%)

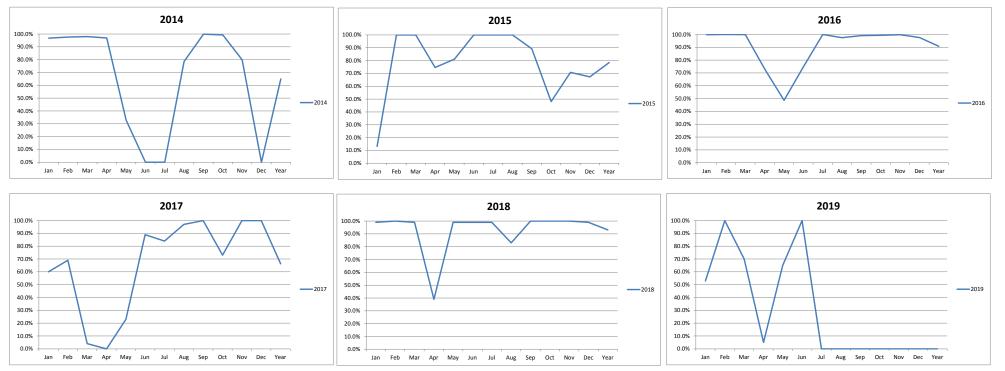
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	3.1%	2.3%			65.4%	100.0%	100.0%	20.8%			14.6%	100.0%	32.0%
2015	87.0%			1.0%	19.0%				11.0%	7.0%		32.0%	13.5%
2016					26.5%	19.5%							3.5%
2017	38.8%				74.6%	5.9%	14.5%						14.5%
2018	0.8%		0.7%	0.9%		1.2%	1.3%	17.2%				0.6%	2.0%
2019	44.0%		1.0%		4.0%								

### Unit: Plum Point

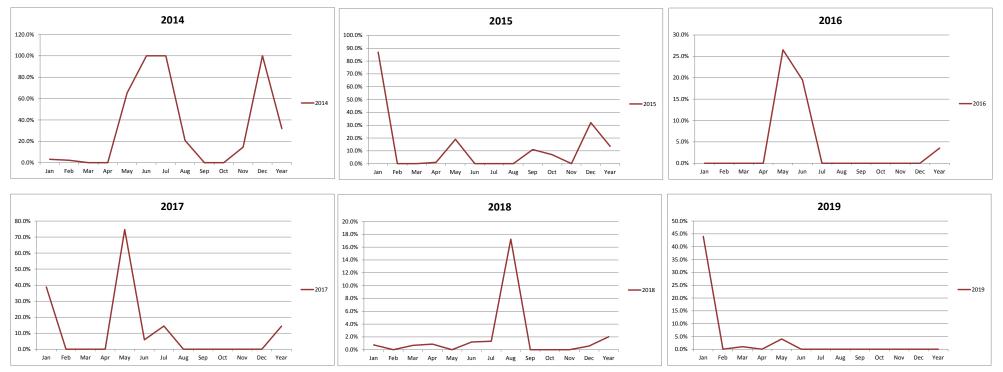
Data: Length and timing of planned outages - Scheduled Outage Hours

	Jan		Feb M	ar Apı	. May		Jun	Jul	Aug	Sep	C	Oct	Nov	Dec	Year
2014	-			-	-		-	-	-	-	-		46	314	360
2015	-	-	-	177	-	-	-		-	-	35	59	210	-	746
2016	-	-	-	192	68	-	-		-	-	-	-		-	260
2017	-	-	67	1 720	-	-	-		-	-	15	55 -		-	1,546
2018	-	-	-	435	-	-	-		-	-	-	-		-	435
2019	-	-	118.0	0 648.00	239.00	-									

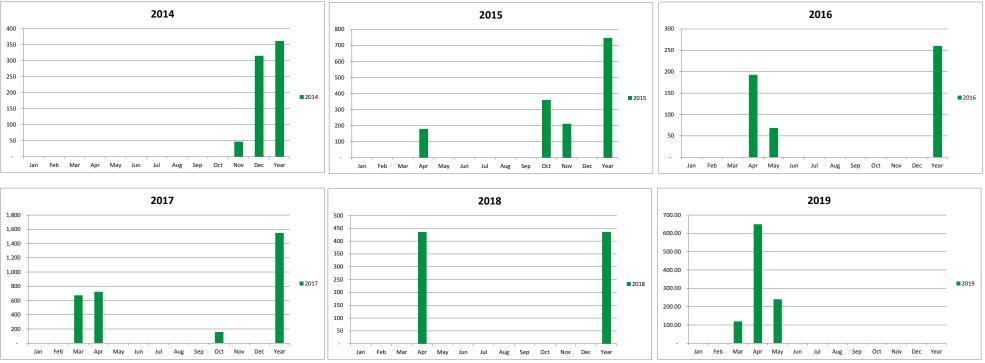
### Unit: Plum Point Data: Equivalent Availability Factor (%)



### Unit: Plum Point Data: Equivalent Forced Outage Rate (%)



#### Unit: Plum Point Data: Length and timing of planned outages - Scheduled Outage Hours



# Unit: Riverton 7

### Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	92.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%					0.0%
2015													0.0%
2016													0.0%
2017													0.0%
2018													0.0%
2019													

### Unit: Riverton 7 Data: Equivalent Forced Outage Rate (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014		100.0%	100.0%	100.0%	100.0%	100.0%							0.0%
2015													0.0%
2016													0.0%
2017													0.0%
2018													0.0%
2019													

### Unit: Riverton 7

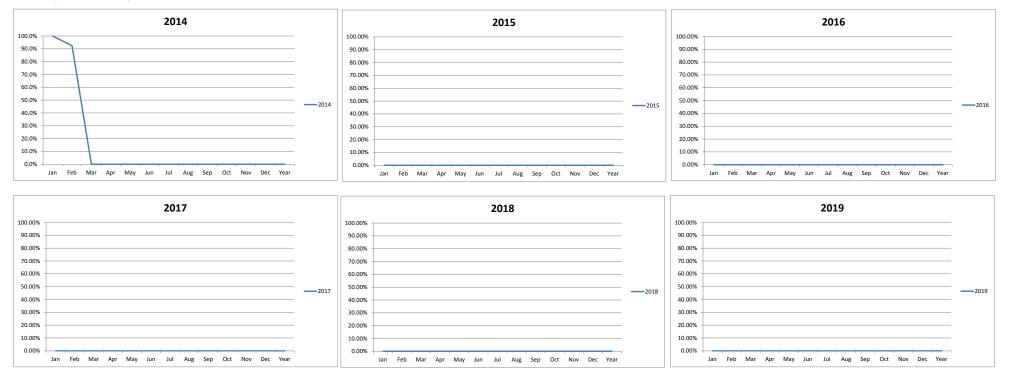
Data: Length and timing of planned outages - Scheduled Outage Hours

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	-	-	-	-	-					-
2015													-
2016													-
2017													-
2018													-
2019													

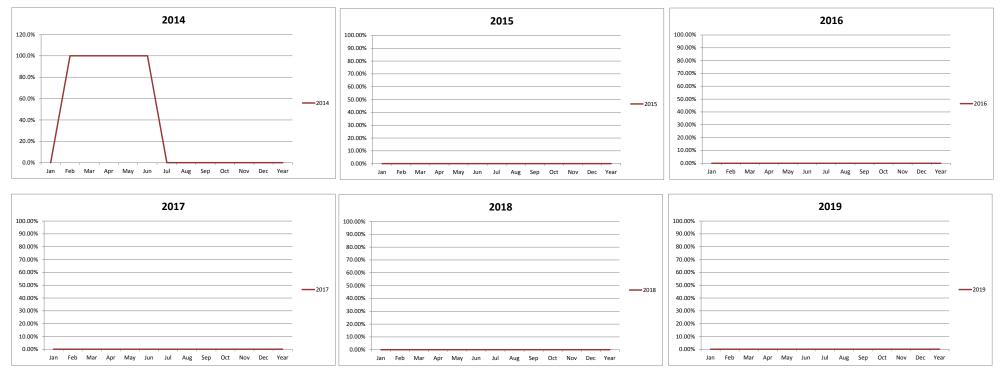
Riverton Unit 7 retired on June 30, 2014 following its transition to natural gas only operation in September, 2012

#### Unit: Riverton 7

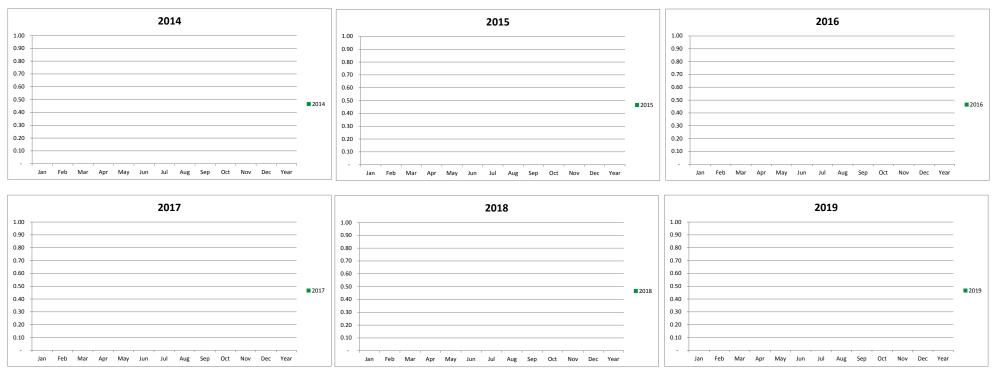
Data: Equivalent Availability Factor (%)



#### Unit: Riverton 7 Data: Equivalent Forced Outage Rate (%)



#### Unit: Riverton 7 Data: Length and timing of planned outages - Scheduled Outage Hours



Riverton Unit 7 retired on June 30, 2014 following its transition to natural gas only operation in September, 2012

# Unit: Riverton 8

### Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	79.7%	100.0%	100.0%	100.0%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	98.0%	98.3%
2015	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
2016													0.0%
2017													0.0%
2018													0.0%
2019													

# Unit: Riverton 8

# Data: Equivalent Forced Outage Rate (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014		100.0%				100.0%	0.0%		0.0%			100.0%	89.4%
2015	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%							100.0%
2016													0.0%
2017													0.0%
2018													0.0%
2019													

### Unit: Riverton 8

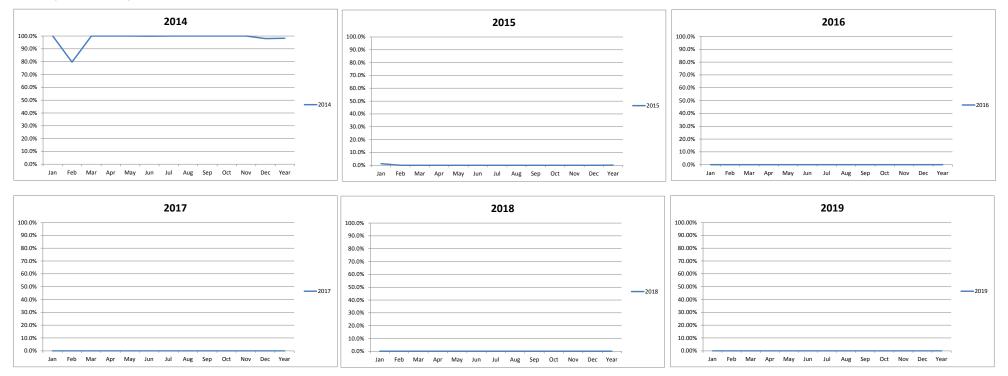
Data: Length and timing of planned outages - Scheduled Outage Hours

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-	-	-
2016													-
2017													-
2018													-
2019													

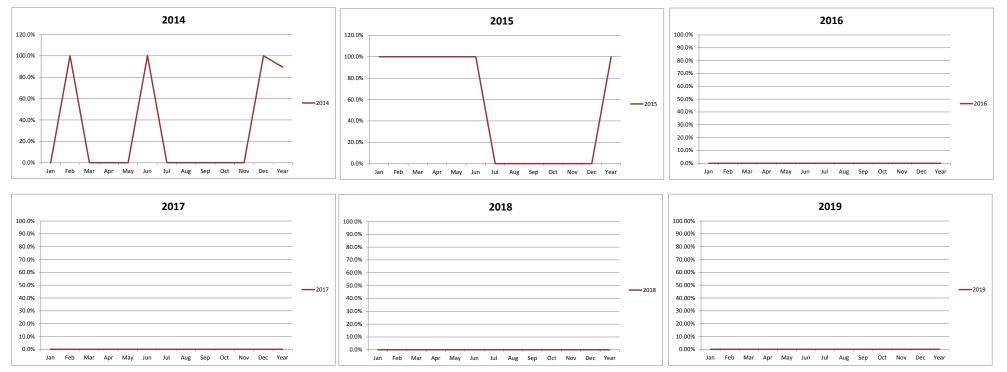
Riverton Units 8 and 9 retired on June 30, 2015. Unit 8 transitioned to natural gas only operation in September, 2012

#### Unit: Riverton 8

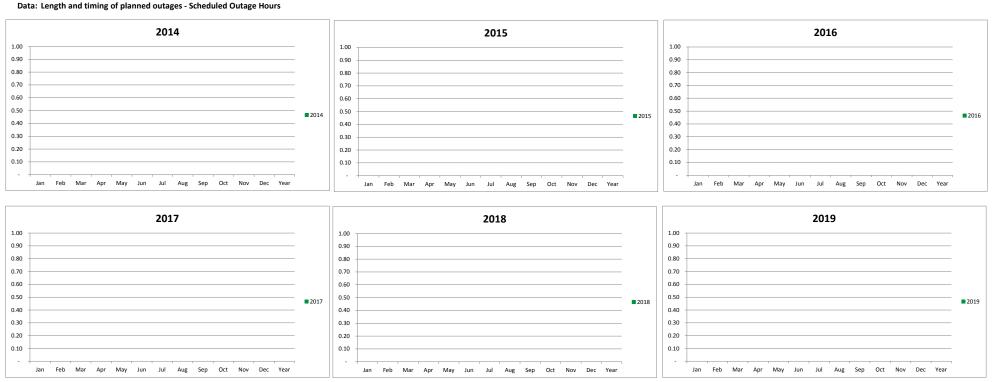
Data: Equivalent Availability Factor (%)



#### Unit: Riverton 8 Data: Equivalent Forced Outage Rate (%)



# Unit: Riverton 8



Riverton Units 8 and 9 retired on June 30, 2015. Unit 8 transitioned to natural gas only operation in September, 2012

Dec

100.0%

Year

89.4%

100.0%

0.0%

0.0%

0.0%

### Unit: Riverton 9

### Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	79.7%	100.0%	100.0%	100.0%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	98.0%	98.3%
2015	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
2016													0.0%
2017													0.0%
2018													0.0%
2019													

### Unit: Riverton 9 Data: Equivalent Forced Outage Rate (%)

#### Jan Feb Mar May Jun Jul Aug Oct Nov Apr Sep 2014 100.0% 100.0% 0.0% 0.0% 2015 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 2016 2017 2018 2019

### Unit: Riverton 9

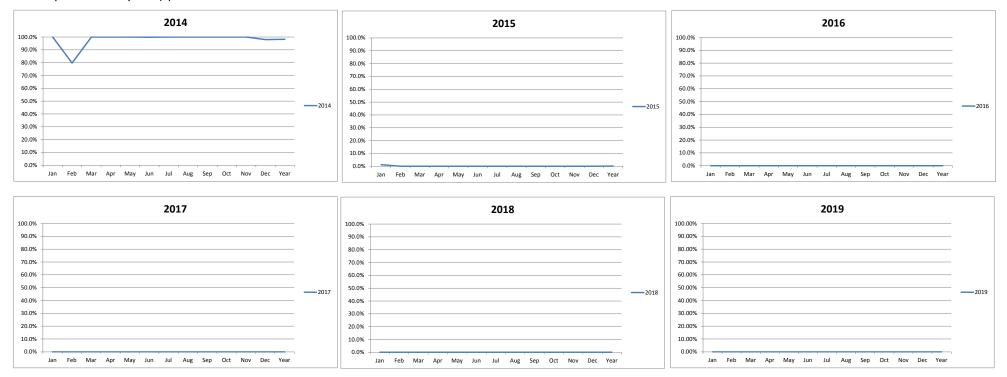
Data: Length and timing of planned outages - Scheduled Outage Hours

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-	-	-
2017													-
2018													-
2019													

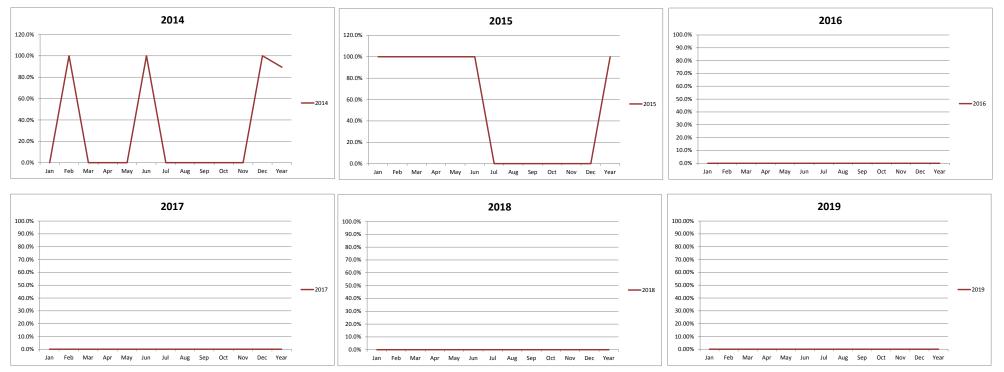
Riverton Units 8 and 9 retired on June 30, 2015. Unit 8 transitioned to natural gas only operation in September, 2012

#### Unit: Riverton 9

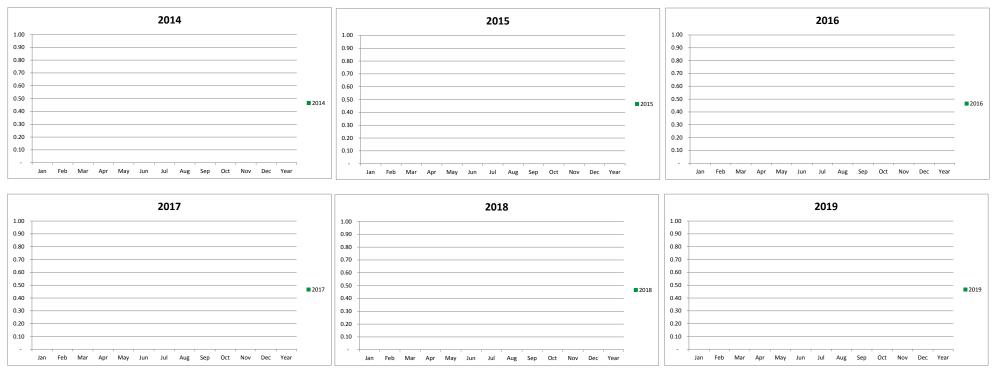
Data: Equivalent Availability Factor (%)



#### Unit: Riverton 9 Data: Equivalent Forced Outage Rate (%)



#### Unit: Riverton 9 Data: Length and timing of planned outages - Scheduled Outage Hours



Riverton Units 8 and 9 retired on June 30, 2015. Unit 8 transitioned to natural gas only operation in September, 2012

# Unit: Riverton 10

Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	100.0%	100.0%	99.4%	100.0%	100.0%	100.0%	100.0%	36.0%	99.3%	100.0%	100.0%	94.6%
2015	100.0%	0.0%	94.9%	0.0%	0.0%	0.0%	0.0%	98.7%	11.9%	59.8%	100.0%	93.5%	47.2%
2016	42.5%	100.0%	100.0%	100.0%	100.0%	97.3%	100.0%	99.5%	100.0%	93.1%	4.7%	100.0%	86.5%
2017	79.0%	45.3%	97.9%	99.7%	100.0%	84.1%	100.0%	97.4%	88.6%	93.5%	73.9%	97.6%	88.5%
2018	98.8%	99.0%	100.0%	99.9%	54.2%	0.0%	14.2%	56.1%	100.0%	100.0%	92.1%	99.6%	76.0%
2019	99.7%	100.0%	82.2%	100.0%	100.0%	100.0%							

# Unit: Riverton 10

# Data: Equivalent Forced Outage Rate (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014				0.0%	0.0%				99.1%			0.0%	97.2%
2015				100.0%	100.0%	100.0%	100.0%	100.0%	99.5%	100.0%		100.0%	99.9%
2016	100.0%	0.0%				90.5%			0.0%	100.0%			96.4%
2017	99.5%	99.8%		0.0%	0.0%			98.8%	88.3%	0.0%		88.8%	92.8%
2018	28.6%		0.0%		0.0%			0.0%	0.0%	0.0%			9.0%
2019			94.8%	0.0%	0.0%								

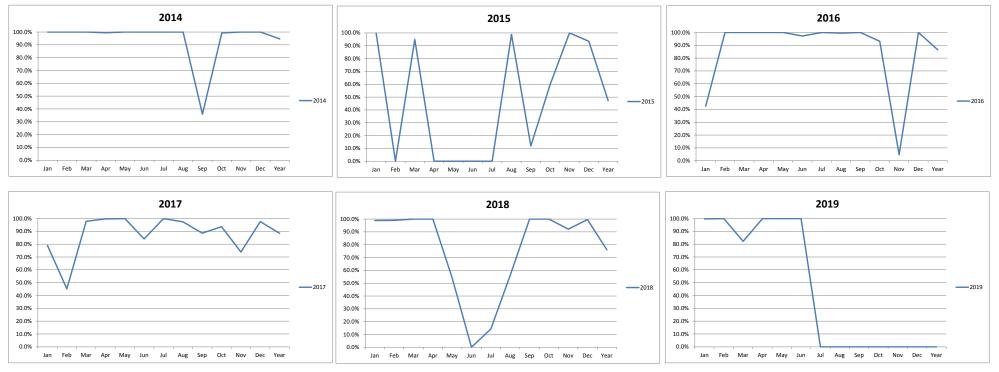
### Unit: Riverton 10

Data: Length and timing of planned outages - Scheduled Outage Hours

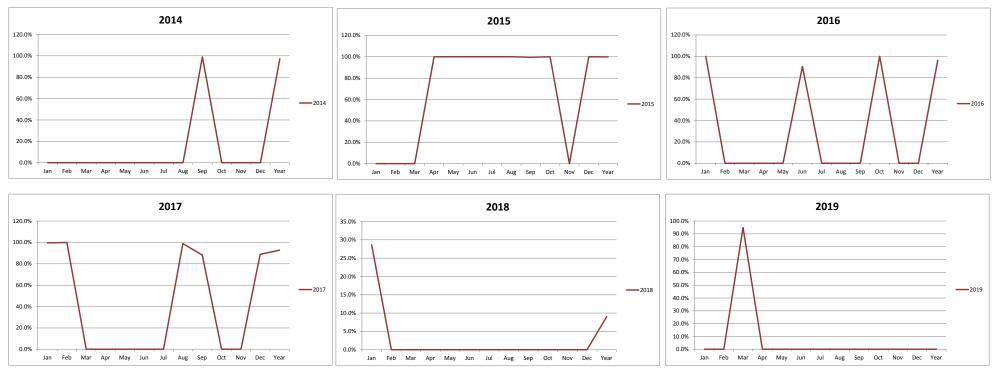
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	-	-	-	-	-	-	5.50	-	-	5.50
2015	-	-	38.00	199.50	-	-	-	-	-	27.83	-	-	265.33
2016	-	-	-	-	-	-	-	3.92	-	28.25	686.91	-	719.08
2017	-	-	15.83	2.05	-	114.25	-	-	6.00	48.00	188.00	-	374.13
2018	-	7.00	-	0.67	340.83	720.00	638.22	326.60	-	-	57.30	3.00	2,093.62
2019	2.00	-	-	-	-								

#### Unit: Riverton 10 Data: Equivalent Availability Fact

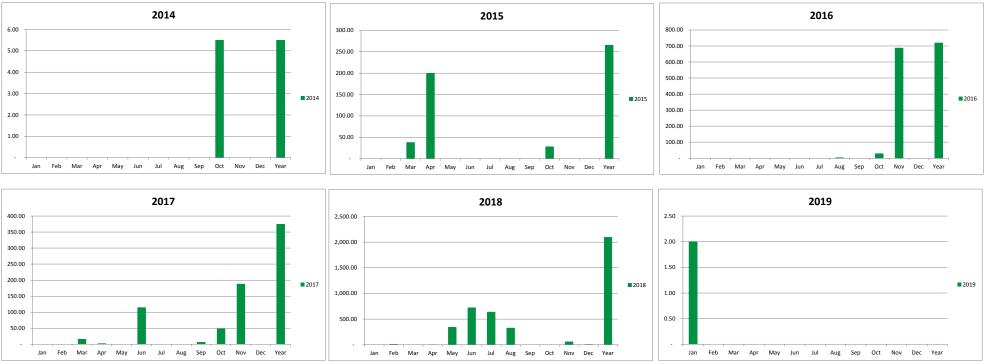




### Unit: Riverton 10 Data: Equivalent Forced Outage Rate (%)



#### Unit: Riverton 10 Data: Length and timing of planned outages - Scheduled Outage Hours



# Unit: Riverton 11

Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.1%	99.3%	100.0%	95.5%	99.5%
2015	100.0%	0.0%	94.9%	69.9%	35.3%	73.3%	37.7%	0.0%	4.5%	59.8%	100.0%	93.5%	56.1%
2016	100.0%	100.0%	100.0%	100.0%	100.0%	97.3%	100.0%	99.5%	100.0%	93.1%	4.7%	0.3%	82.9%
2017	17.0%	62.9%	75.5%	99.7%	100.0%	84.1%	100.0%	100.0%	88.6%	97.4%	100.0%	65.8%	82.6%
2018	0.0%	0.0%	18.9%	100.0%	54.2%	0.0%	14.0%	94.2%	0.0%	0.0%	0.0%	0.0%	23.6%
2019	0.0%	0.0%	0.0%	0.0%	0.0%	75.3%							

### Unit: Riverton 11

## Data: Equivalent Forced Outage Rate (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014									61.3%	0.0%		97.6%	82.8%
2015							100.0%	100.0%	99.7%	100.0%		100.0%	99.9%
2016	0.0%	0.0%				90.7%			0.0%	100.0%		99.7%	97.1%
2017	100.0%	99.5%	99.8%	0.0%	0.0%			0.0%	100.0%	47.7%		99.0%	97.2%
2018	100.0%	100.0%	99.7%		0.0%		0.0%	80.5%	100.0%	100.0%	100.0%	100.0%	99.7%
2019		100.0%	100.0%	100.0%	100.0%	100.0%							

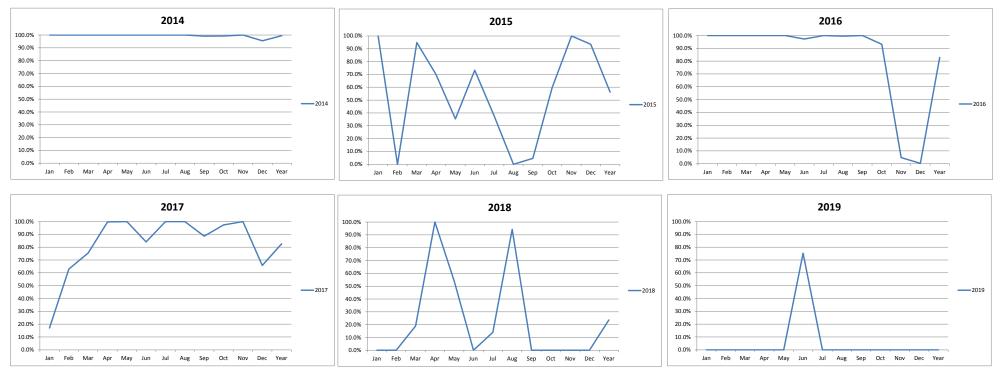
### Unit: Riverton 11

Data: Length and timing of planned outages - Scheduled Outage Hours

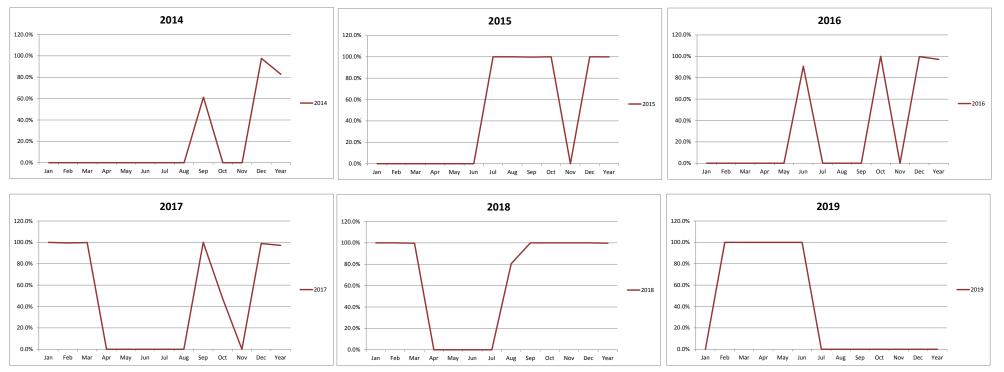
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	-	-	-	-	-	-	6	-	-	6
2015	-	-	38	217	481	192	-	-	-	28	-	-	956
2016	-	-	-	-	-	-	-	4	-	28	687	14	733
2017	-	-	16	2	-	114	-	-	6	2	-	-	140
2018	-	-	-	-	341	720	640	15	-	-	-	-	1,715
2019	744	-	-	-	-	-							

### Unit: Riverton 11

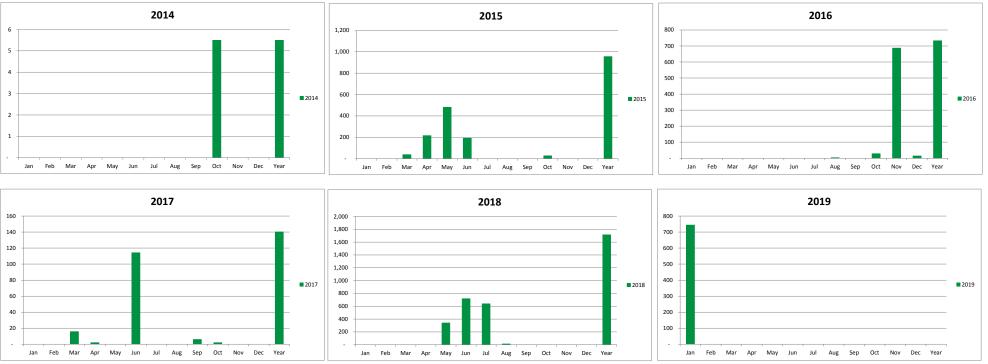
Data: Equivalent Availability Factor (%)



### Unit: Riverton 11 Data: Equivalent Forced Outage Rate (%)



#### Unit: Riverton 11 Data: Length and timing of planned outages - Scheduled Outage Hours



# Unit: Riverton 12

Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	99.9%	100.0%	95.6%	96.3%	89.6%	99.8%	98.2%	100.0%	100.0%	66.5%	48.4%	86.1%	90.0%
2015	100.0%	100.0%	82.5%	67.1%	76.5%	96.8%	90.9%	100.0%	46.7%	0.0%	0.0%	0.0%	63.2%
2016	0.0%	0.0%	0.0%	0.0%	90.1%	91.2%	75.4%	96.9%	53.3%	29.2%	45.6%	66.8%	68.6%
2017	94.5%	79.1%	69.2%	100.0%	85.8%	89.4%	99.9%	100.0%	65.0%	83.9%	100.0%	100.0%	60.8%
2018	93.4%	81.0%	97.4%	100.0%	62.4%	100.0%	100.0%	92.5%	93.0%	70.1%	96.6%	100.0%	90.5%
2019	100.0%	93.7%	47.8%	0.0%	84.3%	93.2%							

#### Unit: Riverton 12

## Data: Equivalent Forced Outage Rate (%)

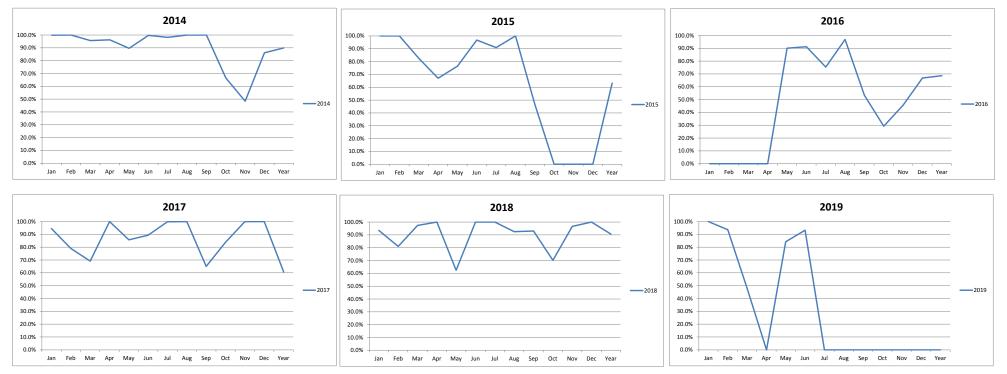
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	0.0%	0.0%	0.0%	0.0%	49.3%	0.0%	0.0%	0.0%	0.0%	93.0%	0.0%	48.4%	26.5%
2015	0.0%	0.0%	25.0%	8.0%	0.0%	12.1%	0.0%	0.0%	0.0%	0.0%			5.1%
2016					0.0%	0.0%	27.3%	4.0%	0.0%	50.5%	64.1%	43.0%	23.2%
2017	8.1%	0.0%	0.2%	0.0%	21.2%	0.0%	0.2%	0.0%	16.9%	0.2%	0.0%	0.0%	4.4%
2018	4.5%	1.5%	0.5%	0.0%	0.3%	0.0%	0.0%	11.2%	10.7%	0.0%	0.0%	0.0%	2.2%
2019	0.0%	7.8%	1.3%		1.2%	7.5%							

### Unit: Riverton 12

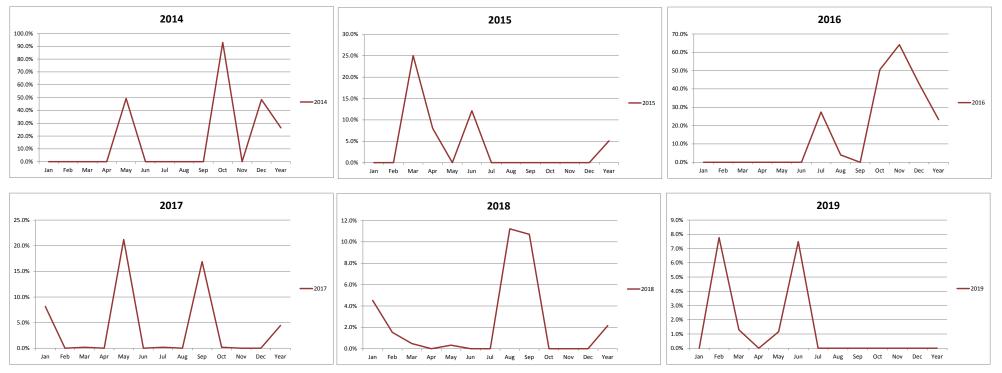
Data: Length and timing of planned outages - Scheduled Outage Hours

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	-	-	-	-	-	-	6	372	13	391
2015	-	-	107	231	175	-	68	-	384	744	721	744	3,174
2016	744	696	743	720	74	63	-	-	336	449	-	-	3,825
2017	-	141	228	-	-	76	-	-	193	120	-	-	757
2018	23	120	16	-	278	-	-	-	-	222	24	-	684
2019	-	-	383	720	112								

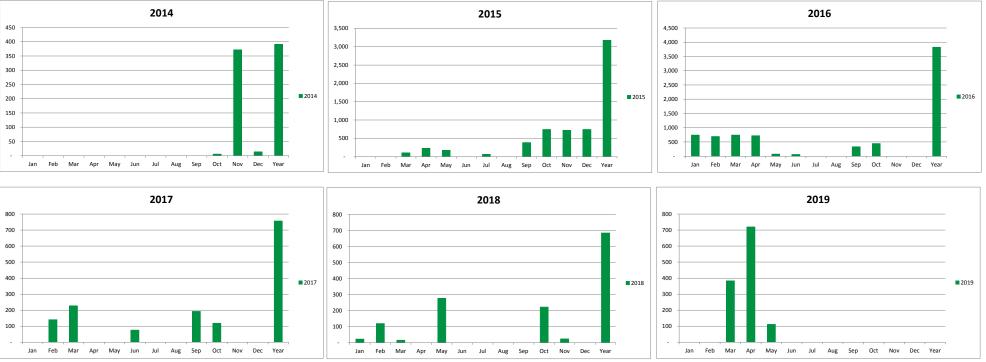
#### Unit: Riverton 12 Data: Equivalent Availability Factor (%)



### Unit: Riverton 12 Data: Equivalent Forced Outage Rate (%)



#### Unit: Riverton 12 Data: Length and timing of planned outages - Scheduled Outage Hours



## Unit: Stateline Unit 1

# Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	94.1%	100.0%	100.0%	100.0%	100.0%	100.0%	99.2%	100.0%	100.0%	100.0%	100.0%	100.0%	99.4%
2015	93.5%	99.9%	100.0%	78.1%	99.0%	100.0%	100.0%	100.0%	77.3%	92.8%	100.0%	100.0%	95.1%
2016	100.0%	100.0%	100.0%	100.0%	100.0%	97.2%	100.0%	100.0%	100.0%	100.0%	88.6%	77.4%	96.9%
2017	100.0%	100.0%	98.8%	70.0%	87.9%	99.6%	100.0%	100.0%	43.3%	49.8%	18.4%	0.0%	72.2%
2018	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	90.6%	100.0%	100.0%	94.4%	91.7%	100.0%	48.5%
2019	91.5%	100.0%	96.0%	100.0%	100.0%	95.2%							
Unit: Sta	iteline Unit 1												
Data: Eq	uivalent Forc	ed Outage Ra	ite (%)										
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.4%	0.0%	0.0%	0.0%		0.0%	21.4%
2015		3.5%	0.0%	0.0%	14.1%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%		18.1%
2016	0.0%	0.0%		0.0%		70.1%	0.0%	0.0%	0.0%	0.0%			13.1%

0.0%

41.5%

0.0%

0.0%

0.0%

0.0%

74.6%

84.7%

0.0%

100.0%

0.0%

71.0%

90.5%

0.0%

 100.0%
 100.0%
 100.0%

 0.0%
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 29.7%
 0.0%
 0.0%
 0.0%

0.0%

0.0%

41.7%

## Unit: Stateline Unit 1

0.0%

2017

2018

2019

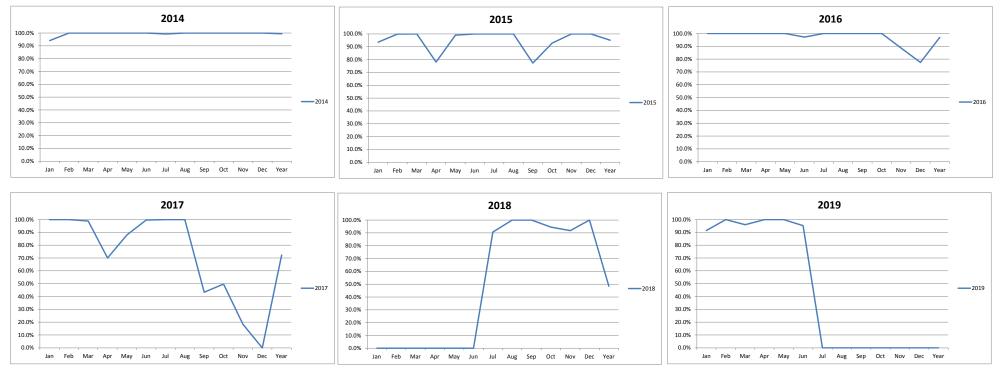
## Data: Length and timing of planned outages - Scheduled Outage Hours

0.0%

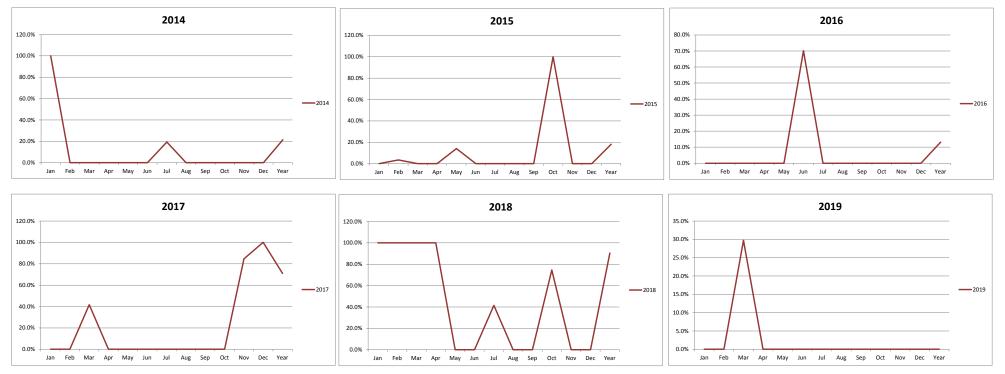
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	16	-	-	-	-	-	-	-	-	-	16
2015	48	-	-	157	-	-	-	-	163	-	-	-	369
2016	-	-	-	-	-	-	-	-	-	-	82	168	250
2017	-	-	-	216	90	3	-	-	408	374	101	-	1,192
2018	-	-	-	-	744	720	30	-	-	-	59	-	1,553
2019	63	-	-	-	-	-							

# Unit: Stateline Unit 1

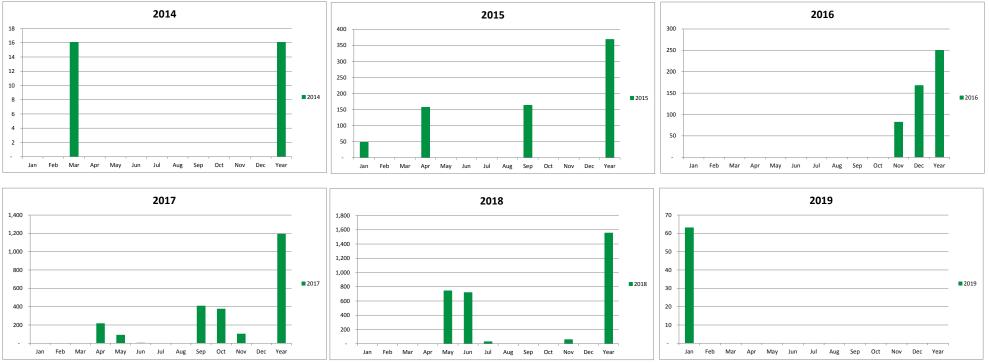
Data: Equivalent Availability Factor (%)



#### Unit: Stateline Unit 1 Data: Equivalent Forced Outage Rate (%)



#### Unit: Stateline Unit 1 Data: Length and timing of planned outages - Scheduled Outage Hours



# Unit: Stateline CC

Data: Equivalent Availability Factor (%)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	99.8%	99.9%	100.0%	58.3%	61.3%	100.0%	100.0%	97.1%	99.2%	99.5%	96.3%	95.3%	92.4%
2015	100.0%	100.0%	81.2%	0.0%	12.9%	98.3%	93.4%	99.9%	100.0%	81.5%	99.6%	99.6%	80.4%
2016	100.0%	100.0%	83.8%	87.7%	94.7%	99.7%	99.8%	100.0%	98.4%	100.0%	70.0%	100.0%	94.5%
2017	95.6%	100.0%	88.5%	38.0%	99.6%	99.6%	100.0%	-8.9%	94.1%	50.1%	79.4%	98.9%	77.3%
2018	100.0%	98.2%	88.4%	0.0%	88.0%	99.2%	86.4%	100.0%	98.0%	84.0%	73.6%	99.9%	84.7%
2019	91.5%	100.0%	96.0%	100.0%	68.7%	95.6%							

### Unit: Stateline CC

## Data: Equivalent Forced Outage Rate (%)

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	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.5%	0.0%	0.5%
2015	0.0%	0.0%	0.0%		9.1%	2.2%	0.0%	0.0%	0.0%	0.0%	0.4%	0.7%	3.1%
2016	0.1%	0.0%	0.0%	0.0%	3.6%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%
2017	4.9%	0.0%	0.0%	3.6%	0.5%	0.4%	0.0%	8.1%	0.9%	0.0%	4.7%	1.1%	2.0%
2018	0.0%	1.8%	0.1%		0.5%	0.1%	2.1%	0.0%	2.0%	0.1%	5.7%	0.1%	1.0%
2019	0.0%	0.0%	2.0%	0.6%	4.6%	4.5%							

### Unit: Stateline CC

Data: Length and timing of planned outages - Scheduled Outage Hours

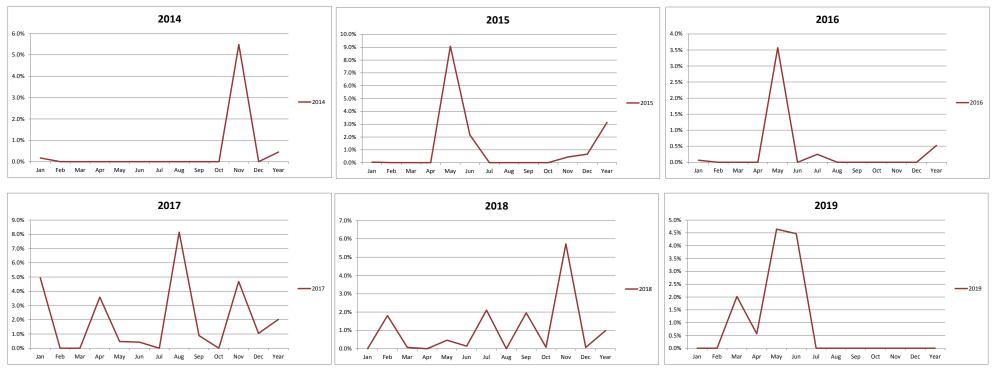
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
2014	-	-	-	288	90	-	-	-	6	-	-	35	418
2015	-	-	96	720	638	-	48	-	-	-	-	-	1,502
2016	-	-	96	89	21	-	-	-	-	-	216	-	421
2017	-	-	-	322	-	-	-	-	-	263	85	-	670
2018	-	-	86	720	71	-	74	-	-	119	103	-	1,172
2019	-	-	-	-	221								

## Unit: Stateline CC

Data: Equivalent Availability Factor (%)



### Unit: Stateline CC Data: Equivalent Forced Outage Rate (%)



#### Unit: Stateline CC Data: Length and timing of planned outages - Scheduled Outage Hours

