

Exhibit No.
Issue: Annual ECA-ACA Filing
Witness: Todd W. Tarter
Type of Exhibit: Direct Testimony
Sponsoring Party: The Empire District
Electric Company
Docket No. 24-EPDE-471-ACA
Date Testimony Prepared: January 2024

Before the Kansas Corporation Commission

Direct Testimony

of

Todd W. Tarter

**In Support of the
Annual Energy Cost Adjustment ACA Filing**

January 2024



****Denotes Confidential****

TABLE OF CONTENTS
OF
TODD W TARTER
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
KANSAS CORPORATION COMMISSION
DOCKET NO. 24-EPDE-471-ACA

<u>SUBJECT</u>	<u>PAGE</u>
I. INTRODUCTION.....	1
II. FUEL AND PURCHASED POWER PROCUREMENT PRACTICE SUMMARY.....	6
III. EXISTING SUPPLY-SIDE RESOURCES.....	10

**DIRECT TESTIMONY
OF
TODD W. TARTER
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
KANSAS CORPORATION COMMISSION
DOCKET NO. 24-EPDE-471-ACA**

1 **I. INTRODUCTION**

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

3 A. My name is Todd W. Tarter, and my business address is 602 South Joplin Avenue, Joplin,
4 Missouri, 64801.

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

6 A. I am employed by Liberty Utilities Service Corp. as the Senior Manager, Strategic Planning
7 for Liberty Utilities' Central Region, which includes The Empire District Electric
8 Company ("Liberty-Empire" or "Company").

9 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL**
10 **BACKGROUND.**

11 A. I graduated from Pittsburg State University in 1986, with a Bachelor of Science Degree in
12 Computer Science. After graduation, I received a mathematics education certification. I
13 began my employment with Liberty-Empire in May 1989. During my tenure with the
14 Company, I have worked in the Corporate Planning, Strategic Planning, Information
15 Technology ("IT"), Planning and Regulatory, Electrical Procurement and Energy Supply
16 Services departments. My primary responsibilities during the early parts of my career
17 included work with the Company's construction budget, load forecasts, sales and revenue
18 budgets, financial forecasts, fuel and purchased power projections, and IT projects among
19 others. In 2004, I was promoted to Manager of Strategic Planning where I primarily

1 worked with fuel and purchased power projections, energy efficiency and integrated
2 resource planning (“IRP”). In October 2016, I assumed the position Manager of Systems
3 and Settlements where I was primarily responsible for market settlements; the computer
4 systems used by the Electrical Procurement department; load forecasting; load research;
5 transmission congestion hedging; and fuel and purchased power projections. I was
6 promoted to Senior Manager, Strategic Planning in December 2019 where I continue to
7 work with load forecasting, transmission congestion hedging, fuel and purchased power
8 projections, and integrated resource planning. I have worked for the Company for over 34
9 years.

10 **Q. HAVE YOU PREVIOUSLY PRESENTED TESTIMONY BEFORE THE KANSAS**
11 **CORPORATION COMMISSION (“COMMISSION”) OR ANY OTHER STATE**
12 **COMMISSION?**

13 A. Yes, I have presented testimony in Kansas under the following dockets: 05-EPDE-980-
14 RTS, 12-EPDE-392-ACA, 13-EPDE-385-ACA, 14-EPDE-270-ACA, 15-EPDE-228-
15 ACA, 16-EPDE-260-ACA, 17-EPDE-101-RTS, 20-EPDE-242-ACA, 21-EPDE-198-
16 ACA, 22-EPDE-261-ACA and 23-EPDE-547-ACA. I have also presented testimony
17 before the Arkansas Public Service Commission, the Missouri Public Service Commission
18 (“MoPSC”), and the Oklahoma Corporation Commission.

19 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS CASE?**

20 A. My testimony will support Liberty-Empire’s request to the Commission for an order
21 approving the Annual Cost Adjustment (“ACA”) factor submitted to the Commission as
22 part of Liberty-Empire’s approved Energy Cost Adjustment (“ECA”) tariff. In addition,
23 my testimony supports and describes the costs and revenues that flow through the ECA.

1 **Q. PLEASE DESCRIBE HOW THE SOUTHWEST POWER POOL (“SPP”)**
2 **INTEGRATED MARKETPLACE (“IM”) IMPACTS LIBERTY-EMPIRE’S**
3 **OPERATIONS.**

4 A. Since March 1, 2014, Liberty-Empire submits its generation into the SPP market on a daily
5 basis, and the SPP market determines the most economical and reliable solution for
6 providing energy to customers. When the SPP IM went live, it created one consolidated
7 balancing authority in SPP. Prior to the SPP IM, there were several balancing authorities
8 within SPP. In the past, Liberty-Empire functioned as a balancing authority and dispatched
9 its generators to serve its native load, while buying and selling energy when it was
10 economical to do so, mostly through bilateral contracts. Since the SPP IM began, Liberty-
11 Empire purchases energy from the market to serve native load, sells generation into the
12 market, and receives revenue from selling its generation into the market.

13 **Q. PLEASE GENERALLY DESCRIBE LIBERTY-EMPIRE’S ELECTRIC SYSTEM**
14 **OPERATING CHARACTERISTICS.**

15 A. Liberty-Empire generally has dual (winter/summer) system peaks almost equal to each
16 other. The system peak in the twelve-month ending period October 2023 was 1,249
17 megawatts (“MW”), which occurred in December, 2022. This was an all-time winter peak
18 and occurred during Winter Storm Elliott when the temperature fell to minus 6°F. For
19 comparison, the all-time summer peak occurred in August 2011 at 1,198 MW. The
20 following table shows that the summer peak during the ACA period was nearly 90% of the
21 extreme winter peak. In the period 2010 through 2023, Liberty-Empire recorded its annual
22 peak during the winter season nine times and during the summer season five times. The
23 following table displays the actual Liberty-Empire peak demands by month for the twelve-

1 months ending (“TME”) October 2023 along with the native load in megawatt-hours
2 (“MWh”) for each month.

Month	Peak (MW)	Percent of Annual Peak	Native Load (MWh)
Nov-22	840	67%	404,172
Dec-22	1,249	100%	490,387
Jan-23	941	75%	465,100
Feb-23	935	75%	398,740
Mar-23	858	69%	408,274
Apr-23	629	50%	334,366
May-23	765	61%	380,223
Jun-23	1,064	85%	446,429
Jul-23	1,064	85%	517,597
Aug-23	1,120	90%	526,747
Sep-23	980	78%	410,865
Oct-23	792	63%	365,060
Total			5,147,960

4 This summer/winter relationship can affect fuel procurement and power plant operation
5 because Liberty-Empire must have sufficient fuel procured to cover the resources offered
6 into the SPP IM.

7 **Q. PLEASE DESCRIBE THE MAKEUP OF LIBERTY-EMPIRE’S SUPPLY-SIDE**
8 **RESOURCES.**

9 A With the advent of the SPP IM, Liberty-Empire purchases energy from the market to serve
10 native load, sells generation into the market, and receives revenue from selling its
11 generation into the market. Liberty-Empire’s supply-side resources for the ACA true-up
12 period ending October 2023 are illustrated in the table below. This table includes total
13 Company values and the operations of about 600 MW of new wind resources that began
14 commercial operation in early to mid-2021. However, these new wind facilities have been

TODD W. TARTER
DIRECT TESTIMONY

1 excluded from the 2024 Kansas ECA/ACA calculation of rates in accordance with the
2 Company’s Motion to Withdraw its Request to Recover Acquisition and Operating Costs
3 of Wind Projects in Rates filed in Docket No. 21-EPDE-444-RTS.

Unit/Purchase	Summer 2023 Rated Capacity ^A (MW)	Actual Generation (MWh)	Energy Cost TME Oct-2023 (\$000) ^B	Average Cost (\$/MWh)	Primary Fuel Type
Iatan 1-2	189.3	624,247	15,036	24.09	Coal
Plum Point (own)	50	245,838	4,323	17.58	Coal
Riverton 10-12	259.7	1,189,476	37,727	31.72	Natural Gas
Energy Center 1-4	244	265,407	13,525	50.96	Natural Gas
State Line	404.1	1,438,144	39,218	27.27	Natural Gas
Ozark Beach	16	56,879	0	0.00	Hydro
Plum Point PPA	50	266,197	8,886	33.38	Coal
North Fork Ridge	39	497,589	0	0.00	Wind
Kings Point	34	519,640	0	0.00	Wind
Neosho Ridge	39.7	969,383	0	0.00	Wind
Wind PPA ^C	50	470,688	26,627	56.57	Wind
Load Adjustment ^D	N/A	-1,337	0	0.00	N/A
Total	1,376	6,542,151	145,342	22.22	

^A Rated Capacity based on summer ratings submitted to SPP in the 2023 Resource Adequacy submission. This chart does not recognize a capacity sale of 78 MW that began in June 2020.

^B This is the cost of Liberty-Empire’s resource generation for November 2022 through October 2023 and excludes: the cost of fixed gas transportation, resettlements and adjustments, purchased power agreement (“PPA”) demand charges, environmental costs, the cost of consumables, SPP IM costs and revenues and generation plant O&M (except the PPA’s)

^C Wind PPA Rated Capacity based on the month of July.

^D Meter adjustment at former Asbury site to match reported load. Includes maintenance shop, office buildings, fire pump for ash pond closure project, and other auxiliaries at the former Asbury Power Station. The Asbury unit was de-designated in the SPP market as of the end of March 1, 2020.

4 **Q. PLEASE DESCRIBE THE RATE BASIS LIBERTY-EMPIRE OPERATES UNDER**
5 **IN ARKANSAS, OKLAHOMA AND MISSOURI.**

1 A. All three states use historical test years to establish electric base rates in a manner similar
2 to the process used in Kansas. In addition, Arkansas, Oklahoma, and Missouri also use
3 adjustment mechanisms to pass on changes in fuel and energy costs to retail customers.

4 **Q. WHAT IS THE RELATIONSHIP OF THE SALES LEVELS WITHIN EACH OF**
5 **THE JURISDICTIONS?**

6 A. Missouri is by far the largest jurisdiction with 88.2 percent of total sales made by Liberty-
7 Empire during the twelve months ended October 31, 2023. The following table displays
8 the actual sales levels in each of the jurisdictions.

9

Jurisdiction	MWh Sales	Ratio
Wholesale	10,674	0.2%
Kansas	226,706	4.7%
Arkansas	173,732	3.6%
Oklahoma	154,856	3.2%
Missouri	4,220,117	88.2%
Total	4,786,084	100%

10
11 Based on TME October 2023 calendar sales
12

13 **II. FUEL AND PURCHASED POWER PROCUREMENT PRACTICE SUMMARY**

14 **Q. HOW DOES LIBERTY-EMPIRE ACQUIRE THE FUEL AND PURCHASED**
15 **POWER USED TO SUPPLY ELECTRICITY TO ITS CUSTOMERS?**

16 A. Liberty-Empire's fuel and purchased power acquisition planning is performed using a
17 three-step process. The steps in this process are:

- 18
- Long-term Integrated Resource Plan ("IRP")

- 1 • An annual and six-year business plan
- 2 • Updates to the annual and six-year business plans as conditions change

3 **Q. PLEASE DESCRIBE THE IRP PROCESS.**

4 A. Liberty-Empire utilizes the IRP process to develop a long-term strategy to reliably serve
5 its customers at the lowest reasonable cost while considering other relevant factors. This
6 planning process uses Liberty-Empire's entire load in all five of its jurisdictions. This
7 formal IRP process has been in place since the early 1990's when the MoPSC implemented
8 a formal IRP rule. Since that time Oklahoma and Arkansas have implemented IRP rules.
9 Liberty-Empire filed its most recent triennial IRP in Missouri on April 1, 2022, submitted
10 it in Arkansas on July 1, 2022 and in Oklahoma in June 2023, all based on a three-year
11 cycle. Liberty-Empire plans its resources on a system-wide basis. The IRP process
12 Liberty-Empire uses results in a target list of future resources designed to serve Liberty-
13 Empire's projected customer needs in all jurisdictions. The fundamental objective of the
14 IRP process requires the utility to consider demand-side, traditional supply-side and
15 renewable resources on an equivalent basis and utilize the minimization of long-run utility
16 costs as a primary criterion while also considering other factors such as risk mitigation,
17 reliability, environmental sustainability, legal mandates, energy policy, safety and rate
18 impacts.

19 **Q. PLEASE DESCRIBE ANY RECENT CAPACITY ADDITIONS TO LIBERTY-
20 EMPIRE'S GENERATING FLEET.**

21 A. The most recent additions were a total of approximately 600 megawatts of wind resources
22 from three wind farm sites. These wind farms are known as North Fork Ridge (located in
23 southwest Missouri and nominally rated at 149.4 MW), Kings Point (located in southwest

1 Missouri and nominally rated at 149.4 MW) and Neosho Ridge (located in Southeast
2 Kansas and nominally rated at 301 MW). These wind resources became commercially
3 operational during the first and second quarters of 2021. However, as previously
4 mentioned, these resources were not included in the model run that calculated the 2024
5 Kansas ECA rates. This approach is consistent with the Company's Motion to Withdraw
6 its Request to Recover Acquisition and Operating Costs of Wind Projects in Rates filed in
7 Docket No. 21-EPDE-444-RTS.

8 **Q. DID LIBERTY-EMPIRE HAVE ANY RECENT CAPACITY RETIREMENTS?**

9 A. No, there have not been any recent retirements since the last Kansas ACA filing. The most
10 recent unit to retire was the Asbury coal-fired generation plant ("Asbury"). Asbury was
11 de-designated in the SPP market as of the end of March 1, 2020.

12 **Q. HAS THE COMPANY MADE ANY RECENT CAPACITY SALES?**

13 A. Yes. Consistent with what was reported in last year's Kansas ACA filing, following the
14 loss of some on-system wholesale load, Liberty-Empire entered into a five-year power
15 purchase agreement with the Missouri Joint Municipal Utility Commission ("MJMEUC")
16 on behalf of the Southwest Missouri Power Electric Pool ("SWMPEP") for a capacity and
17 energy sale beginning June 1, 2020 and ending May 31, 2025 for two Missouri municipals
18 (the cities of Monett and Mount Vernon). The capacity sale is based on a "slice of Liberty-
19 Empire system" approach, with a total capacity sale of 78 MW during the agreement
20 period. The MJMEUC agreement also enables MJMEUC to receive payment from SPP for
21 energy sold into the market from Liberty-Empire resources that are allocated to MJMEUC
22 by this agreement. MJMEUC will pay Liberty-Empire for the capacity and for their
23 allocated portion of the fuel costs, startup costs, an additional amount per unit of energy

1 and some transmission costs as described by the agreement. The net energy benefits from
2 this sale have been included in the model run used to calculate the 2024 Kansas ECA rates.

3 **Q. HOW DOES THE SECOND STEP OF THE PLANNING PROCESS WORK?**

4 A. In addition to the long-range planning, Liberty-Empire conducts annual financial and
5 operational planning, which is used to develop a six-year business forecast. This planning
6 process includes a detailed load forecast, detailed generation unit modeling, detailed O&M
7 and capital budget planning, and a revenue forecast. The detailed generation unit modeling
8 developed in this phase of the planning process is used as the primary source of information
9 for the development of the fuel and purchased power procurement plan.

10 **Q. ARE THE ANNUAL AND SIX-YEAR BUSINESS PLANS ADJUSTED TO**
11 **REFLECT CHANGES IN THE BUSINESS ENVIRONMENT?**

12 A. Yes. The annual and six-year business plans are periodically refined to consider changes
13 since the plans were initially developed. Liberty-Empire considers changes in such things
14 as weather, number of customers, fuel prices, purchased power prices, plant outages, and
15 fuel availability. As these refinements are made to the near-term forecasts, Liberty-Empire
16 adjusts its fuel procurement plans as necessary.

17 **Q. HOW ARE THE NEAR TERM, ONE AND SIX-YEAR FUEL REQUIREMENTS**
18 **DETERMINED?**

19 A. Liberty-Empire utilizes a chronological dispatch model known as EnCompass to develop
20 an hourly dispatch of its units in the SPP market. Liberty-Empire uses this model under a
21 license agreement it has with the model's owner, Anchor Power Solutions. The EnCompass
22 model considers fuel prices, market prices, wind profiles, generating plant efficiencies,
23 generating plant outages and many of the other characteristics of Liberty-Empire's

1 generation resources and develops a dispatch versus a market price curve to determine sales
2 into the market. Liberty-Empire's native load cost is based on projected market prices and
3 a weather normal forecast of Liberty-Empire's native load. The model output includes the
4 projected MWh generation from each generation unit, projected fuel usage, hours of
5 operation, number of unit starts, unit margin and native load costs. Monthly reports are
6 generated from this output and are used to develop plans for the acquisition of the fuel
7 required to operate the generating units.

8
9 **III. EXISTING SUPPLY-SIDE RESOURCES**

10 **Q. PLEASE DESCRIBE LIBERTY-EMPIRE'S SUPPLY-SIDE RESOURCES IN**
11 **GREATER DETAIL.**

12 **BASE LOAD FACILITIES**

13 A. The Company is currently a joint owner at two coal-fired generation facilities. This
14 includes Iatan (12% ownership of Units 1 and 2) and Plum Point (7.52% ownership). Iatan
15 Unit 1 is approximately a 700 MW coal-fired unit operated by Evergy Metro, Inc.
16 ("Evergy"), formerly Kansas City Power & Light ("KCPL"). Liberty-Empire owns 12%
17 or about 84 MW of this unit. Iatan Unit 2, which went into service in late 2010, is
18 approximately an 877 MW unit. Liberty-Empire owns 12% or around 105 MW of this
19 unit. Like Unit 1, Iatan Unit 2 is a base load resource and Liberty-Empire is not directly
20 responsible for fuel procurement at the Iatan facility. Plum Point is approximately a 665
21 MW base load coal-fired unit located in Northeastern Arkansas. Liberty-Empire owns
22 7.52% or approximately 50 MW of Plum Point. In addition, Liberty-Empire has entered
23 into a long-term purchased power agreement ("PPA") contract for approximately 50 MW

1 from this unit. This unit went into commercial operation in August 2010. As with the
2 Iatan facility, Liberty-Empire is not directly responsible for the coal procurement at Plum
3 Point.

4 **INTERMEDIATE AND PEAKING RESOURCES**

5 Liberty-Empire owns natural gas-fired resources at three locations: the Riverton, Energy
6 Center and State Line generation facilities. The Riverton facility consists of a combined
7 cycle unit and two small simple cycle natural gas-fired units. Riverton Unit 12 is the
8 newest unit at this location. It is a natural gas-fired combined cycle unit that is currently
9 rated at 246 MW for the summer season. The original simple cycle combustion turbine
10 was installed in 2007 and the unit was converted to a combined cycle in 2016. As
11 mentioned, the Riverton site also has two relatively small simple cycle natural gas units
12 (Riverton Units 10¹ and 11) that are rated a combined 29 MW. Liberty-Empire has four
13 natural gas-fired turbines at the Energy Center generation facility. Two of these units
14 (Energy Center Units 1 and 2) have combined summer capacity rating of approximately
15 162 MW. They went into service in 1978 and 1981. They tend to operate for reliability
16 purposes. Due to their ability to burn fuel oil as a back-up fuel, they can also operate for
17 economic or natural gas transportation curtailment reasons. Energy Center Units 1 and 2
18 were modeled to be offered into the SPP market on a natural gas with fuel oil backup for
19 this ECA filing. Liberty-Empire also has two FT8 Twin Pac aero-derivative units known
20 as Energy Center Units 3 and 4 at the Energy Center facility, with a combined summer
21 rating of about 82 MW. These units have quick start capability and are typically on-line at
22 full load in less than 10 minutes. With their quick start characteristics, these units can be

¹ Riverton Unit 10 was on outage from February 8, 2021 throughout the period twelve months ending October 31, 2023 (the period described in this testimony)

1 utilized for reliability, economics, and for load balancing. The State Line facility consists
2 of State Line Unit 1 and the jointly owned State Line combined cycle. State Line Unit 1 is
3 a 93 MW 1995 vintage combustion turbine. Liberty-Empire operates a combined cycle
4 unit at its State Line facility (Liberty-Empire's 60% share is about 311 MW). This unit is
5 jointly owned with Westar Generation Inc. ("Westar")², which holds a 40% ownership
6 share. It is a 2X1 (two by one) unit consisting of two gas turbines and one steam turbine.
7 The unit has the ability to operate in 1X1 (one by one) mode or 2X1 mode.

OTHER RESOURCES

8
9 Liberty-Empire also owns and operates the Ozark Beach hydro facility located near
10 Forsyth, Missouri. It has a capacity of about 16 MW. The output of this unit is limited by
11 the water released upstream from Table Rock Lake by the Corp of Engineers and the level
12 of water maintained by the Corp of Engineers on Bull Shoals Lake, which is downstream
13 from the Ozark Beach facility.

14 At the end of 2005, Liberty-Empire began receiving output from the 150 MW Elk River
15 Wind Project located in Butler County, Kansas via a purchased power agreement ("PPA").
16 Liberty-Empire has a contractual commitment to purchase 100 percent of the output from
17 this project for 20 years. Near the end of 2008, Liberty-Empire began receiving output
18 from 105 MWs of the Meridian Way Wind Project located in Cloud County, Kansas. This
19 is also a 20-year PPA. The energy from both of these wind farms are purchased at a cost
20 per MWh established by contract.

21 Finally, as introduced earlier in this testimony, the Company has three new wind resources
22 that began commercial operation in 2021. The Company purchased the North Fork Ridge

² Westar Energy, Inc. merged with Kansas City Power & Light to form Evergy, Inc.

1 wind project on January 27, 2021, and purchased the Kings Point and Neosho Ridge
2 projects on May 5, 2021. The North Fork Ridge Wind Project, which was constructed by
3 Mortenson Construction, has a capacity of approximately 149.4 MW and interconnects at
4 Liberty-Empire's substation at Asbury. This wind project consists of sixty-nine wind
5 turbine generators. The Kings Point Wind Project was also constructed by Mortenson
6 Construction and also has a capacity of approximately 149.4 MW. It interconnects at the
7 substation at Liberty-Empire's La Russell Energy Center and it consists of sixty-nine wind
8 turbine generators. Neosho Ridge, the largest of the three new wind projects, was
9 constructed by IEA Constructors, LLC. It has a capacity of approximately 301 MW and
10 interconnects to a new substation on Evergy Kansas Central, Inc.'s Neosho-to-Caney River
11 345 kV transmission line. Neosho Ridge consists of 139 wind turbine generators. Again,
12 these new wind resources were not included in the model run that calculated the 2024
13 Kansas ECA rates, in accord with the Company's Motion to Withdraw its Request to
14 Recover Acquisition and Operating Costs of Wind Projects in Rates filed in Docket No.
15 21-EPDE-444-RTS.

16 **COAL AND FREIGHT**

17 **Q. WHAT APPROACH DOES LIBERTY-EMPIRE USE TO PURCHASE ITS COAL**
18 **REQUIREMENTS?**

19 A. As previously mentioned, Liberty-Empire is not directly responsible for the coal
20 procurement at the jointly owned Iatan and Plum Point facilities.

21 **NATURAL GAS AND RELATED TRANSPORTATION**

22 **Q. PLEASE DESCRIBE HOW LIBERTY-EMPIRE ACQUIRES ITS NATURAL GAS**
23 **REQUIREMENTS.**

1 A. All of Liberty-Empire’s natural gas-fired generation resources are located on the Southern
2 Star Central Gas Pipeline (“SSCGP”). Liberty-Empire currently has approximately 75,000
3 MMBtu/day firm production zone capacity and more than 110,000 MMBtu/day firm
4 market zone capacity. This firm market zone capacity includes a recent contract with
5 Southern Star Central Pipeline for 25,000 dekatherms (“Dth”) of firm natural gas
6 transportation that became effective June 1, 2020. The primary delivery location for this
7 recent capacity is at the Energy Center generating facility which did not have any firm
8 natural gas transport capacity prior to this contract. However, the recent natural gas
9 transport contract can also be used to supplement the firm transportation to the State Line
10 and Riverton Combined Cycle plants. If natural gas transportation is not available, most
11 of Liberty-Empire’s simple cycle natural gas turbines have the ability to operate on fuel
12 oil. Liberty-Empire acquires physical natural gas on a long-term, monthly, and daily basis.
13 Typically, these physical purchases are competitively bid when possible.

14 **MANAGING PRICE VOLATILITY OF NATURAL GAS**

15 **Q. HOW HAS LIBERTY-EMPIRE’S MANAGEMENT CHOSEN TO MANAGE**
16 **NATURAL GAS PRICE VOLATILITY?**

17 A. Liberty-Empire works diligently to mitigate the price volatility associated with changes in
18 natural gas pricing. From an historical perspective, Liberty-Empire developed and
19 implemented a Risk Management Policy (“RMP”) in 2001 to help manage fuel price
20 volatility. The RMP outlines the instruments that may be used to help manage volatility.
21 The current RMP was revised and formally adopted on July 19, 2019 by the Company’s
22 Risk Management Oversight Committee (“RMOC”). Under the current policy, the only
23 fixed price instruments used are forward contracts unless the Energy Supply Services

1 department petitions for and receives a waiver from the RMOC. However, some financial
2 hedges may be in place as a result of the legacy natural gas hedging policy. Under the new
3 policy, allowable advance procurement vehicles include Forward Physical Index Contracts
4 and Forward Physical Fixed Contracts triggered by historical pricing levels. The natural
5 gas hedging policy also addresses how far in the future advanced procurement may take
6 place and for which months the hedging is required. This approach is intended to protect
7 customers from volatility in the marketplace and provide the ability to procure natural gas
8 in advance when pricing indicates economic value as defined by the price matrices
9 described in the RMP. In addition, the approach protects against volatility in local natural
10 gas supply, ensuring the supply management group will have the required natural gas
11 available to meet budgeted native load targets.

12 **2022 PROCUREMENT PLAN FOR 2023**

13 **Q. PLEASE DESCRIBE THE STATUS OF THE NATURAL GAS PROCUREMENT**
14 **PROCESS AT THE BEGINNING OF CALENDAR YEAR 2023.**

15 A. As of December 31, 2022, Liberty-Empire had **[REDACTED]** MMBtu of its estimated
16 2023 calendar year natural gas requirements for native load either physically purchased at
17 a fixed price or financially hedged out of a total expected natural gas requirement for native
18 load customers of **[REDACTED]** MMBtu. The **[REDACTED]** MMBtu represented
19 about 19% of Liberty-Empire's anticipated 2023 natural gas requirement for native load
20 and carried an average cost of \$**[REDACTED]**/MMBtu. All of the **[REDACTED]** MMBtu
21 were physical hedges. As previously mentioned, in 2019 Liberty-Empire, with stakeholder
22 input, updated the Company's hedging policy to continue to protect customers from
23 volatility in the natural gas market while providing the ability to procure fuel supply in

1 advance to mitigate risk associated with local natural gas supply volatility. The updated
2 policy focuses on the utilization of a historical price matrix to trigger fixed physical
3 forward purchases, rather than requiring a timely hedge percentage consisting of financial
4 instruments. Additional physical gas requirements are purchased daily or weekly on a
5 competitive basis to balance the system natural gas requirements.

6 **Q. PLEASE DESCRIBE HOW THE UPDATED NATURAL GAS ADVANCED**
7 **PROCUREMENT PROCESS CHANGES THE DISCUSSION OF THE STATUS**
8 **OF AMOUNT OF NATURAL GAS HEDGED AT THE BEGINNING OF A**
9 **REVIEW PERIOD.**

10 A. In the past, the Company discussed the percentage of natural gas hedged at the beginning
11 of a review period since that value was relevant to the legacy hedging policy. For example,
12 the legacy policy required a specific amount of the expected annual natural gas requirement
13 hedged at the beginning of the calendar year. That is no longer the case. Additionally, the
14 new policy only requires hedging for the summer (June-August) and winter (December-
15 February) months. As mentioned, the Company had about 19% of its 2023 calendar year
16 natural gas requirements hedged at the beginning of 2023. However, this would be about
17 38.1% of its 2023 summer and winter season requirements hedged at the beginning of 2023
18 (the months the new policy allows natural gas hedging). While these beginning of the
19 calendar year values are informative, they no longer translate to how well the advanced
20 procurement policy is being met. The RMP sets forth an Advanced Procurement Plan,
21 which outlines the timing and volume for purchases associated with the expected natural
22 gas burn. The summer and winter months subject to the Advanced Procurement Plan, must
23 have 50% of the expected natural gas burn procured for the next month via forward

1 monthly index and/or fixed physical pricing. Therefore, the percentage of natural gas
2 hedged at the beginning of the year is not as pertinent as it once was. While the target
3 hedge amount is 50% for the required summer and winter months, the timeframe to meet
4 the target is any time prior to the operating month. Because the Company is using an
5 historical pricing matrix to determine fixed price hedging triggers, requiring a fixed
6 percentage of hedged volumes more than a month in advance of the operating month would
7 shrink the window of time for natural gas forward prices to fall within the price matrix.

8 **Q. ARE THE BENEFITS AND COSTS OF LIBERTY-EMPIRE'S ENERGY RISK**
9 **MANAGEMENT POLICY RECORDED ON THE GENERAL LEDGER?**

10 A. Yes. The results of Liberty-Empire's risk management policies, including the settlement
11 of financial hedges, are reflected in the fuel expense accounts on the general ledger, namely
12 accounts 501 and 547 in accordance with Generally Accepted Accounting Principles
13 ("GAAP"). The gains/losses arising from the periodic settlement of the financial
14 instruments have been eliminated from the Kansas ECA filing as have the gains/losses that
15 arose from the periodic sale of financial instruments related to excess natural gas during
16 the ACA period. This is in accordance with an agreement reached with the Staff and
17 approved by the Commission in Docket No. 07-EPDE-712-ACA ("712 Docket"). The
18 Company continues to discuss the possibility of inclusion of these financial instruments
19 with Stakeholders.

20 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

21 A. Yes.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the above and foregoing was electronic mail this 18th day of January, 2024, addressed to:

JOSEPH R. ASTRAB
j.astrab@curb.kansas.gov

TODD E. LOVE
t.love@curb.kansas.gov

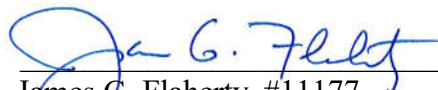
DAVID W. NICKEL
d.nickel@curb.kansas.gov

SHONDA RABB
s.rabb@curb.kansas.gov

DELLA SMITH
d.smith@curb.kansas.gov

REGULATORY INFORMATION
Regulatory.Information@libertyutilities.com

BRETT W. BERRY
b.berry@kcc.ks.gov



James G. Flaherty, #11177
ANDERSON & BYRD, LLP
216 S. Hickory ~ P.O. Box 17
Ottawa, Kansas 66067
(785) 242-1234, telephone
(785) 242-1279, facsimile
jflaherty@andersonbyrd.com

Attorneys for The Empire District Electric Company