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Exhibit No. 7

Exhibit No.:	
Issues: Revenue Requirement	Securitized

Issues: Revenue Requirement, Securitized

Energy Transition Charge, True-up Adjustment and Reconciliation Process

Witness: Charlotte T. Emery Type of Exhibit: Direct Testimony Sponsoring Party: The Empire District

Electric Company

Case No.: EO-2022-0193

Date Testimony Prepared: March 2022

Before the Public Service Commission of the State of Missouri

Direct Testimony

of

Charlotte T. Emery

on behalf of

The Empire District Electric Company d/b/a Liberty

March 2022



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FOR THE DIRECT TESTIMONY OF CHARLOTTE T. EMERY THE EMPIRE DISTRICT ELECTRIC COMPANY BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION CASE NO. EO-2022-0193

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DIRECT TESTIMONY OF CHARLOTTE T. EMERY THE EMPIRE DISTRICT ELECTRIC COMPANY BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION CASE NO. EO-2022-0193

1	I.	INTRODUCTION
2	Q.	Please state your name and business address.
3	A.	My name is Charlotte T. Emery, and my business address is 602 South Joplin Avenue
4		in Joplin, Missouri.
5	Q.	By whom are you employed and in what capacity?
6	A.	I am employed by Liberty Utilities Service Corp. as Director, Rates and Regulatory
7		Affairs, for the Liberty Central Region, which includes The Empire District Electric
8		Company d/b/a Liberty ("Liberty" or "Company").
9	Q.	Please describe your educational and professional background.
10	A.	I graduated from College of the Ozarks, Point Lookout, Missouri, in 2000 with a
11		Bachelor of Science degree with a major in Accounting. I have been a Certified Public
12		Accountant ("CPA") in the State of Missouri since 2006. I was hired by Liberty in July
13		2016 as a Rates Analyst and promoted to my current position as Director in the Rates
14		and Regulatory Affairs Department in 2021. Prior to joining Liberty, I worked for six
15		years in the regulated insurance industry in Springfield, Missouri as a Director of
16		Accounting. In addition, I have nine years of public accounting experience working for
17		both a national and "Big Four" accounting firm. My primary roles at these
18		organizations included serving as a supervisor for financial statement audits and a tax
10		consultant

Q. Have you previously testified before the Missouri Public Service Commission or any other regulatory agency?

- 1 A. Yes. I have testified on behalf of Liberty before the Missouri Public Service
- 2 Commission ("Commission"), the Kansas Corporation Commission, the Arkansas
- 3 Public Service Commission and the Oklahoma Corporation Commission
- 4 Q. What is the purpose of your testimony in this proceeding?
- My testimony supports the Company's request to securitize the energy transition costs¹
 and associated financing costs² the Company incurred related to the retirement of the
 Asbury generating plant. Specifically, my testimony describes the calculation of
 revenues Liberty seeks to recover through the utilization of securitized utility tariff

bonds. I also explain how the Company has complied with the petition filing

requirements as specified by RSMo §393.1700 (the "Securitization Statute").

I also support the Company's new rate schedule proposal, the Securitized Energy Transition Charge ("SETC"), that will allow Liberty to recover securitized energy transition costs and associated financing costs from customers. I explain how the SETC will be trued-up to actual revenues and costs at least annually to account for uncertainties in the Company's electric sales. In addition, I demonstrate that securitization of the energy transition costs creates benefits for customers when compared to recovery of the costs through traditional ratemaking treatment, as required in the Securitization Statute. Lastly, I conclude by introducing the other witnesses providing Direct Testimony on behalf of Liberty and in support of the Company's Verified Petition for Financing Order.

Q. Has the Company filed any other securitization petitions?

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¹ As defined by RSMo §393.1700.

² As defined by RSMo §393.1700.

1	A.	Yes, on January 19, 2022, the Company filed a petition to securitize the extraordinary
2		costs incurred as a result of Winter Storm Uri ("Storm Uri") in Commission Case No.
3		ER-2022-0040. That petition is currently pending before the Commission. The
4		Company intends to file a motion to consolidate this Asbury securitization petition with
5		the Storm Uri securitization docket so that the Commission can consider both dockets
6		together and to allow the Company to minimize costs of securitization in a single
7		proceeding. Such consolidation would be contingent on maintaining the statutory time
8		frame based on the date of filing for the Storm Uri petition, which requires issuance of
9		an order within 215 days from filing on January 19, 2022.
10	Q.	Are you sponsoring any schedules with your testimony?
11	A.	Yes. I am sponsoring the following schedules:
12		• Direct Schedule CTE-1 (Estimated Upfront and Ongoing Costs)
13		• Direct Schedule CTE-2 (Total Retail Revenue Requirement for Securitized
14		Energy Transition Charge)
15		• Direct Schedule CTE-3 (Benefits Comparison)
16		• Direct Schedule CTE-4 (Allocation of Securitized Energy Transition Charge)
17		• Direct Schedule CTE-5 (Proposed Securitized Energy Transition Charge)
18	Q.	How is the remainder of your testimony organized?
19	A.	I begin by describing the benefits of securitization to Liberty's customers and further
20		describe how the Company's petition meets all the requirements of the Securitization
21		Statute. I explain how Liberty proposes to issue securitized utility tariff bonds to
22		recover its energy transition costs and associated financing costs related to Asbury and
23		how the Company will recover these respective costs through a new volumetric rate.
24		From there I discuss the calculation of the revenue requirement for the energy transition

securitization bonds. I summarize the estimated costs, including upfront and ongoing financing costs associated with the bonds that will be passed along to customers. I provide an analysis of the net present value of securitization to customers compared to traditional ratemaking treatment, and I demonstrate that securitization results in quantifiable savings to customers. I discuss how the securitized costs will be recovered from customers, and I introduce Liberty proposed SETC and discuss the Company's proposal to true-up this rate at least annually and a proposed reconciliation process. Furthermore, my testimony demonstrates why securitization of the Asbury costs complies with the Securitization Statute and benefits customers, the Company, and other stakeholders. Finally, I conclude by introducing the other witnesses providing Direct Testimony on behalf of Liberty.

II. <u>SECURITIZATION</u>

A.

13 Q. How does the Company seek to recover its remaining investment in Asbury?

Liberty originally sought "traditional" rate case recovery through its current general electric rate case (ER-2021-0312). Subsequent to the filing of the rate case, the Securitization Statute was enacted into law, and, after reviewing rebuttal testimony of certain rate case parties urging securitization, Liberty recognized the potential rate impacts that the Asbury costs could have on customers through "traditional" rate case recovery, and, seeking a means to create additional customer long term savings, the Company made a business decision to elect the alternative option allowed by the Securitization Statute.

With the filing of surrebuttal testimony in the general rate case, the Company's rate request was revised to reflect the Company's election to securitize all components of the revenue requirement related to Asbury in lieu of pursuing traditional rate

recovery. With its Verified Petition in this proceeding, Liberty seeks the issuance of securitized tariff bonds for \$145,019,637 and the imposition of securitized utility tariff charges, representing the Company's undepreciated investment and other energy transition costs related to Asbury.

Q. What is the purpose of the remaining portion of this section of your testimony?

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In the remaining portion of this section of my testimony, I explain that securitization creates benefits for Liberty's customers because it allows for the recovery of "energy transition costs" under the Securitization Statute the Company incurred related to the retirement of the Asbury generating plant, which reduces customer rate impacts, and does so at a lower rate than if the Company were to amortize the costs itself through traditional general rate case treatment. I also summarize the requirements of the Securitization Statute for Liberty's securitization petition and detail how each requirement is met.

Q. What was Liberty's basis for its decision to retire and replace Asbury?

Asbury is a coal-power plant constructed in 1970. As recently as 2014, the plant underwent significant emission control upgrades, to comply with environmental policy requirements, which the Commission approved. As it continued operating, its operating economics continued to erode as detailed in testimony provided by the Company in prior dockets. The Company analyzed retiring Asbury as part of its Generation Fleet Savings Analysis presented to the Commission in 2017 as well as in its 2019 Integrated Resource Plan ("IRP"). Most recently in the 2019 IRP, Liberty determined that retirement of Asbury in 2019 would yield the benefits of \$93 million over 20 years for its customers when compared to its continued operation until its end of useful life. Pursuant to this analysis, Asbury was retired on March 1, 2020.

1	The accompanying Direct Testimony of Company witnesses Aaron J. Doll,
2	Drew W. Landoll, Shaen T. Rooney, and consultant Frank Graves explain and support
3	the Company's prudent decision to retire Asbury.

4 Q. Was the Company directed to track the costs related to the impact of retiring5 Asbury?

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Yes. In Case No. ER-2019-0374, the Commission issued an Amended Report and Order on July 23, 2020 requiring the Company to establish an Accounting Authority Order ("AAO") with regard to the retirement of Asbury. The AAO directed the Company to establish regulatory asset or liability accounts, beginning January 1, 2020, to reflect the impact of the closure of Asbury and required the Company to separately track and quantify the changes from the base amounts, reflected in Appendix D of the Global Stipulation and Agreement submitted in that case, for the following categories of rate base and expense components reflected in the Commission's Order: Rate of return on Asbury Plant, Accumulated Depreciation, Accumulated and Excess Deferred Income Tax, Fuel inventories assigned to the Asbury Plant, Depreciation expense, All Non-fuel/ non-labor operating and maintenance expenses, All labor charges for maintaining and operating the Asbury Plant, Property taxes assigned to the Asbury Plant, and any costs associated with the retirement of the Asbury Plant, including dismantlement and decommissioning - Non-Empire labor excluded. In addition to the items stated above, the Commission also ordered the Company to include the following items which were proposed by OPC's witness: Cash working capital and income tax gross up associated with Asbury, any fuel or SPP revenues or expenses associated with Asbury that do not flow through the FAC, and revenue from scrap value or value of items sold.

1	Q.	Did the Comp	any comply	with the	Commission ⁹	's AAO	directions?
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2 A. Yes. The Company established the regulatory liability account to track the costs as of 3 January 1, 2020 to comply with the Commission's Amended Report and Order which 4 was issued on July 23, 2020 and had an effective date of August 2, 2020. In addition, 5 the Company established regulatory asset accounts for items such as the remaining 6 undepreciated plant balance at retirement, along with other costs associated with the 7 retirement of Asbury.

8 Q. How are energy transition costs like the Asbury retirement costs traditionally 9

recovered?

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In a general rate case proceeding, the Company traditionally would include the various AAO components related to the Asbury retirement costs as regulatory asset and liability balances in its respective rate base total. Furthermore, the Company would include the associated amortization expense of those components in the Company's proposed revenue requirement. As such, the Company proposed this specific rate making treatment for the Asbury retirement costs in the Company's 2021 rate case proceeding (ER-2021-0312).

17 Q. Is securitization an alternative to this traditional rate making approach?

Yes. Instead of carrying the costs on its own books and amortizing them over time, Liberty will work with its legal and financial advisors to create a new special purpose entity that will issue bonds whose proceeds will allow the Company to immediately recover its energy transition costs and associated financing costs, including the carrying costs the Company has incurred since the generating unit's retirement date. The bonds will be serviced via a new charge, the SETC, that will be in effect during the term of the bonds scheduled to be 13 years, which aligns with the Company's Storm Uri

Securitization proceeding.³

Q. How does this benefit customers?

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In short, securitization will save customers money. When Liberty filed its rate case in May 2021, the Securitization Statute was not yet law, so the Company's case included a proposal requesting base rate treatment for the Asbury AAO components. The Company proposed a recovery period of 26 years for all the AAO components, except the AAO Liability balance, in which the Company proposed a two-year amortization to minimize the overall rate case impact on customers. When the Securitization Statute was signed into law by Governor Parsons in July 2021, it created a new alternative that costs less. On February 4, 2022, the Company entered into a stipulation and agreement in its rate case with the Missouri Public Service Commission ("Staff") and the Office of the Public Counsel ("OPC") wherein the parties agreed to remove Asbury from the Issues List in the rate case with the understanding that all components of Asbury would be addressed in securitization proceedings. That stipulation was approved by the Commission on March 9, 2022. In turn, the Company is filing this petition for securitization of the Asbury costs.

Q. How does securitizing these costs create savings for customers?

A. Savings for customers are created primarily due to the carrying charge associated with the securitized utility tariff bonds are lower than the traditional ratemaking treatment, in large part because the carrying charge (i.e., coupon rate) on the bonds that will be issued will be much lower than Liberty's authorized carrying charge which is equal to its Weighted Average Cost of Capital ("WACC").

³ Commission Case No. EO-2022-0040.

1 Q. How much will customers save through securitization?

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2 A. Roughly \$48.3 million. As I will explain later in testimony, customers will pay about 3 \$165 million over the 13 year life of the bonds that will be issued, compared to 4 approximately \$213 million they would pay if Liberty were to recover the costs over 5 the same period and apply a carrying charge equal to its WACC. Put simply, 6 securitization of the Asbury costs is much more economical for both the Company and 7 its customers as compared to traditional rate making treatment.

8 Q. Does the Securitization Statute allow Liberty to recover the energy transition costs it incurred related to the retirement of Asbury via securitization?

Yes. The Securitization Statute allows for Missouri utilities to seek a financing order to recover "energy transition costs," which include the following:

"(a) Pretax costs with respect to a retired or abandoned or to be retired or abandoned electric generating facility that is the subject of a petition for a financing order filed under this section where such early retirement or abandonment is deemed reasonable and prudent by the commission through a final order issued by the commission, include, but are not limited to, the undepreciated investment in the retired or abandoned or to be retired or abandoned electric generating facility and any facilities ancillary thereto or used in conjunction therewith, costs of decommissioning and restoring the site of the electric generating facility, other applicable capital and operating costs, accrued carrying charges, and deferred expenses, with the foregoing to be reduced by applicable tax benefits of accumulated and excess deferred income taxes, insurance, scrap and salvage proceeds, and may include the cost of retiring any existing indebtedness, fees, costs, and expenses to modify existing debt agreements or for waivers or consents related to existing debt agreements;

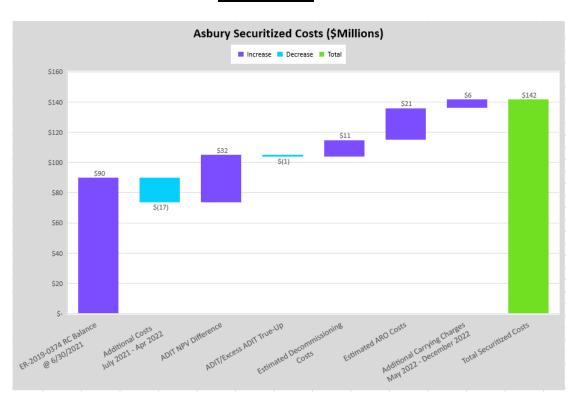
1		(b) Pretax costs that an electrical corporation has previously incurred related to
2		the retirement or abandonment of such an electric generating facility occurring before
3		August 28, 2021;"
4		The costs the Company is seeking to finance using the Securitization Statute
5		clearly meet these criteria.
6	Q.	Does the Company's petition include evidence demonstrating these costs were
7		prudently incurred?
8	Α.	Yes. Witnesses Doll, Landoll, Rooney, and Graves describe in detail the events and
9		the Company's actions that led to the Company's incurrence of these energy transition
10		costs and demonstrate that the Company's actions were reasonable and necessary, and
11		that the energy transition costs were prudently incurred.
12	Q.	What is the total amount of the energy transition costs that the Company is
13		seeking to recover via the Securitization Statute relating to Asbury?
14	A.	The Company is seeking to recover energy transition costs including the cost to fully
15		decommission and comply with environmental regulations of approximately \$141.7
16		million. In addition, the Company seeks to include approximately \$3.3 million of
17		upfront financing costs.
18	Q.	How did you determine the total energy transition costs?
19	A.	As agreed, to by the parties in the 4 th Partial Stipulation Agreement in Case Number
20		ER-2021-0312 and as explained in my surrebuttal testimony filed in the same case, all
21		components of Asbury's cost of service will be addressed in the securitization
22		proceeding. Therefore, the Company proposes all the respective balances of the
23		previously mentioned AAO ordered by the Commission pertaining to Asbury be
24		included as energy transition costs. In addition, the Company proposes the costs to

dismantle/decommission the plant and environmental compliance costs also be included.

Q. Has the Company further updated the Asbury cost of service amounts since Case Number ER-2021-0312?

Yes. As included in Company witness Tisha Sanderson's Direct Testimony filed in ER-2021-0312 the net rate base balance of the respective Missouri AAO was approximately \$90 million⁴. The Company utilized this amount as our starting balance and has further estimated the balance through April 2022. In addition, the Company also proposes the inclusion of estimated costs associated with demolition/decommissioning and environmental costs. As such the proposed balance to be securitized is approximately \$142. See Figure CTE-1 below for further specifics.

Figure CTE-1



⁴ Company Witness Tisha Sanderson ER-2021-0312 p. 24, Figure 6.

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1	Q.	Is the Company seeking to utilize securitized utility tariff bonds for the entire
2		amount of Asbury's energy transition costs.
3	A.	Yes. The Company is requesting a financing order for the total amount of its energy
4		transition costs estimated to be \$141,732,514, including carrying charges through the
5		issuance date of the securitized utility tariff bonds, along with another \$3,287,122 in
6		upfront financing costs. For further discussion on the respective energy transition costs
7		related to Asbury refer to the direct testimony of witnesses Doll, Landoll, Rooney, and
8		Graves.
9	Q.	Does the Securitization Statute indicate what a utility must include in a petition to
10		the Commission for a financing order that would facilitate securitization of energy
11		transition costs?
12	A.	Yes, the Securitization Statute specifies eight requirements, each of which are met by
13		the Company's petition.
14	Q.	What is the first requirement and how is it met?
15	A.	Section 2.(1)(a) of the Statute requires a description of the electric generating facility
16		or facilities that the electrical corporation has retired or abandon. Detailed descriptions
17		are provided by witnesses Rooney, Landoll and Graves.
18	Q.	What is the second requirement?
19	A.	Section 2.(1)(b) requires the Company include the energy transition costs in its petition,
20		which the Company clearly has provided within its petition here
21	Q.	What is the third requirement and how is it met?
22	A.	Section 2.(1)(c) requires that the utility indicate whether it will finance all or a portion
23		of its energy transition costs The Company is seeking to recover all of its energy
24		transition costs via securitization.

1 Q. What is the fourth requirement of the statute and how is it met?

- 2 A. Section 2.(1)(d) requires an estimate of the financing costs that will be incurred. I
- discuss those costs throughout my testimony, which satisfies the statutory requirement.

4 Q. What is the fifth requirement of the statute and how is it met?

- 5 A. Section 2.(1)(e) requires an estimate of the rates the Company will charge and an
- 6 indication of the period over which those rates will be in effect, and I provide that later
- 7 in my testimony. The bonds issued will have a scheduled 13-year life (which aligns
- 8 with the Company's Storm Uri securitization filing) which also represents the
- 9 approximate time the charges to recover their costs will be in effect.

10 Q. What is the sixth requirement of the statute and how is it met?

- 11 A. Section 2.(1)(f) requires a comparison of the Net Present Value ("NPV") of the costs
- to customers from using securitization to recover the energy transition costs to the NPV
- of the costs that customers would bear if the same costs were recovered using the
- traditional method of financing. Section 2.(2)(f) additionally requires that the
- 15 comparison demonstrate that securitization benefits retail customers. My testimony
- includes that comparison and demonstrates that securitization will create
- approximately \$32 million in customer savings, expressed on an NPV basis.

Q. What is the seventh requirement of the statute and how is it met?

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- 19 A. Section 2.(1)(g) requires that the Company describe the method by which the costs of
- securitization and the amounts that it recovers through rates will be reconciled, and I
- address this item later in my testimony within my true up and reconciliation discussion.

- 1 Q. What is the eighth requirement of the statute and how is it met?
- 2 A. Section 2.(1)(g) requires that Liberty file direct testimony supporting its petition.
- 3 Including myself, five other witnesses have filed direct testimony in support of this
- 4 petition. Later in my testimony I introduce these respective witnesses.

5 III. <u>REVENUE REQUIREMENT</u>

- 6 Q. What is the purpose of this section of your testimony?
- 7 A. Next, I discuss the calculation of the revenue requirement for the securitization bonds,
- 8 which is the amount of revenue that Liberty must recover from its customers to pay the
- bonds, financing costs, and other requirement amounts and charges payable under the
- bonds.
- 11 Q. What is included in the revenue requirement?
- 12 A. The revenue requirement is the sum of categories of cost that must be recovered to
- service the bonds, the first being the payment that will be made on the bonds and the
- second being ongoing costs to administer the bonds. I calculated the monthly revenue
- requirement required to cover the bonds until the first true-up, which will occur on at
- least an annual basis which is intended to correct any overcollections or under-
- 17 collections, and more frequently, if needed, to correct for any forecasted
- undercollection. The true-up process is to ensure the expected recovery of amounts are
- sufficient to timely provide all payments of debt service and other required amounts
- and charges in connection with the securitized utility tariff bonds⁵.
- 21 Q. What determines the total value of the bonds that will be issued?
- 22 A. Proceeds from the bonds must be large enough to offset the energy transition costs the
- Company incurred related to the retirement of the Asbury generating plant as well as

⁵ See RSMo §393.1700-1.(2)(g).

the costs of issuing the bonds themselves. Therefore, the total issuance is equal to the sum of the two categories of costs, the energy transition costs, including carrying charges through the issuance date of the securitization bonds, and deferred legal costs, plus the upfront financing costs to issue the bonds.

5 Q. Please describe the energy transition costs and carrying charges.

A.

A.

The Company has included energy transition costs, including carrying charges through the issuance date of the Securitization Bonds of approximately \$142 million in energy transition costs related to the retirement of the Asbury generating plant on behalf of its customers. The costs and the circumstances around the energy transition are further described in the Direct Testimony of Company witnesses Doll, Landoll, Rooney, and Graves. Since Liberty has incurred or anticipates incurring these costs, the Company has applied a carrying charge based on its Weighted Average Cost of Capital ("WACC"), which the Commission set at 6.77% in Case No. ER-2019-0374.

Q. What is included in the upfront financing costs?

The upfront financing costs total approximately \$3.3 million and include estimated fees to the Company's legal and structuring advisors, consultants, underwriting fees, auditing fees, and other fees as well as rating and filing fees necessary to secure the bonds. Additional discussion regarding the upfront costs are provided in the Direct Testimony of witness Katrina Niehaus. An itemization of the estimated upfront financing costs is also included in **Direct Schedule CTE-1**, attached hereto.

Liberty has not included an estimate for the Commission's advisor and legal counsel fees since these can vary widely depending on the third parties hired. I have been advised there are a wide range in estimates, including \$50,000 for the Commission's costs in Texas for an AEP Texas securitization in September 2019 to

\$2.95 million by the Florida Commission for a Duke Florida securitization in June 2016.

Q. Will the Commission review the final amount of the upfront financing costs?

Yes, through the issuance advice letter process discussed by Witness Niehaus. Furthermore, if the actual upfront financing costs are less than the upfront costs included in the principal amount securitized, the periodic billing requirement, defined below, for the first annual true-up adjustment must be reduced by the amount of such unused funds (together with interest, if any, earned on the investment of such funds). If the actual upfront financing costs are more than the upfront financing costs included in the principal amount securitized, Liberty may request recovery of the remaining upfront financing costs via a regulatory tracking account with recovery in a future proceeding

It is anticipated the bonds will be issued in a single issuance or series, but Liberty is requesting authority to be able to issue the bonds in one or more series subject to market conditions in order to ensure the issuance of the bonds results in the lowest securitized utility tariff charges consistent with market conditions at the time the bonds are priced and the conditions of a financing order issued by this Commission.

Q. Please summarize the total issuance of the bonds.

19 A. The sum of these categories is about \$145 million as shown in Table CTE-1:

Table CTE-1. Bond Issuance Amounts

Energy transition costs, including Carrying Charges	\$141,732,514
Upfront costs	\$3,287,122
Total	\$145,019,637

A.

1 Q. What is the interest rate and term of the bonds?

A. While the final interest rate will depend upon market conditions at the time of the bond offering, witness Niehaus explains in her direct testimony that she has structured the Asbury retirement costs to match the final legal maturity of the deal referenced in the previous testimony filed in January 2022 relating to Winter Storm Uri, which is a weighted average coupon rate of 2.47% and a term of 13 years. ⁶

7 Q. What will be the monthly payment on the bonds?

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A. The final monthly payment on the bonds will depend on market conditions at the time of issuance, the actual upfront financing costs and the Commission's advisor and legal costs. However, based on current estimates, the monthly payment would be approximately \$1.1 million. My calculations are shown in **Direct Schedule CTE-2**.

Q. Please explain the estimated ongoing costs.

13 The ongoing costs include fees associated with the U.S. Securities and Exchange A. 14 Commission ("SEC") review process, indenture trustee fees, and rating agency 15 surveillance fees and any applicable taxes. Additionally, Liberty has estimated ongoing 16 fees for auditing/accounting, legal, printing and others. Liberty also estimates an 17 ongoing return on the Capital Account discussed by Witness Niehaus at its average 18 WACC. An itemization of these estimated fees is shown in **Direct Schedule CTE-1**, 19 and the combined amount of these estimated fees is expected be \$346,599 per year, or 20 \$28,883 per month.

21 Q. Please summarize the revenue requirement.

A. The estimated monthly revenue requirement for securitization of Asbury energy transition cost is approximately \$1.1 million per month, which is the sum of the

⁶ EO-2022-0040 Direct Testimony of Katrina T. Niehaus, Schedule KN-3.

- 1 estimated bond repayment, estimated ongoing costs, each of which are shown in Table
- 2 CTE-2 and described in **Direct Schedule CTE-2**:

Table CTE-2. Estimated Revenue Requirement (\$/month)

Bond payment	\$1,087,784
Ongoing costs	\$28,883
Revenue requirement	\$1,116,668

- This is the amount Liberty will need to recover from its customers, in the aggregate,
- 5 each month over the life of the bonds.

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6 Q. Will Liberty update these costs prior to the issuance of the bonds?

- 7 A. Yes. As discussed by witnesses Landoll and Graves, the energy transition costs the
- 8 Company incurred to date are known with certainty, but other costs, such as the
- 9 decommissioning costs, environmental compliance costs, additional carrying charges
- until bond issuance and some of the upfront financing costs, are estimates. Liberty will
- therefore update the costs immediately before the bonds are issued.

12 IV. <u>BENEFITS OF SECURITIZATION</u>

13 Q. What is the purpose of this section of your testimony?

- 14 A. In this section, I compare the costs to customers of securitizing the energy transition
- 15 costs related to the retirement of the Asbury generating plant to those the customers
- would customarily bear if these costs were recovered without securitization through
- traditional ratemaking treatment. My analysis shows that securitization creates
- significant quantifiable savings for customers.

19 Q. Why have you conducted this comparison?

- 20 A. Section 2.1(f) of the Securitization Statute requires a comparison of costs customers
- 21 would pay if securitized utility tariff bonds were issued, and the costs customers would
- 22 pay if the transition energy costs were recovered using the traditional method of

1		financing. My comparison demonstrates that the Company's proposal to use
2		securitization to finance the energy transition costs fulfill this requirement.
3	Q.	If the costs in question were not securitized, how would the Company recover
4		them?
5	A.	As mentioned earlier in my testimony, if the energy transition costs were not securitized,
6		the Company would seek recovery in a general rate case proceeding.
7	Q.	If the Company can recover the transition energy costs over time, why is it
8		proposing to securitize them?
9	A.	As previously discussed, securitization results in a lower overall cost to customers and
10		the Company and other stakeholder agreed to securitization of these costs in the 4 th
11		Stipulation Agreement in Case Number ER-2021-0312.
12	Q.	How does securitization result in lower overall cost to customers?
13	A.	Securitization affords access to financing at much lower rates for the Company and its
14		customers. As I explained previously, the Company currently estimates that the interest
15		rate on the securitized utility tariff bonds that will be issued is 2.47%. If the Company
16		were to carry the cost and amortize it over time, the Company would carry the balance
17		as a regulatory asset and apply a carrying charge equal to its WACC. Using the
18		Company's approved WACC of 6.77%, customers' costs would be much higher, even
19		when out-of-pocket financing costs are considered.
20	Q.	Have you estimated how much Liberty's customers will save from securitizing the
21		costs?
22	A.	Yes. As I explain above and as detailed in Direct Schedule CTE-2 , the revenue
23		requirement for the securitized bonds and the associated estimated costs is about \$1.1
24		million per month. Over the course of the scheduled thirteen-year period, customers

would pay a total of about \$165 million. For comparison, I calculated the monthly cost that would accrue to customers if the Company amortized its energy transition costs (the actual costs plus carrying charges) over a period of equal length with a carrying charge equal to the WACC. Note that for the comparison I eliminated the upfront financing costs and the ongoing financing costs. Under this scenario, the Company would need to recover approximately \$1.4 million per month from customers, with such payments totaling approximately \$213 million over the thirteen-year period. Thus, the benefits to customers is approximately \$48.3 million. My calculations are included in **Direct Schedule CTE-3**.

Table CTE-3 Summary of Securitization Benefits

	Securitization	Amortization 13 Years
Total payments	\$165,188,564	\$213,461,593
Securitization benefit		\$48,273,938

11 Q. Have you developed any other comparisons?

A.

Yes. The Securitization Statute requires a comparison of costs on a Net Present Value ("NPV") basis. To meet this requirement, I have included a comparison of the total value of the payments made by customers to securitize the energy transition costs, expressed on an NPV basis using Liberty's WACC as a discount rate, to the total value of payments they would make, expressed on the same basis, if Liberty amortized the costs itself. My results are included in **Direct Schedule CTE-3** and are shown in Table CTE-4 below.

Table CTE-4 Summary of Securitization Benefits on an NPV Basis

	Securitization	Amortization 13 Years
NPV of total payments discounted at		
WACC	\$109,680,576	\$141,732,514
NPV Securitized Benefit		\$32,051,938

1 Q. What does this comparison show?

A. This comparison demonstrates that the total amount Liberty's customers will need to pay to offset the energy transition costs the Company incurred will be lower, on a nominal and NPV basis, if the costs are securitized as compared to traditional ratemaking treatment.

6 V. SECURITIZED METHOD OF ENERGY TRANSITION COST RECOVERY

- 7 Q. How would the energy transition costs be recovered from customers once costs
- 8 have been securitized ("Securitized Cost Recovery")?
- 9 A. As explained more fully in the Direct Testimony of witness Niehaus, in a Securitized 10 Cost Recovery, the utility seeks to accelerate the recovery of energy transition costs 11 and associated financing costs by issuing bonds and receiving one lump sum of cash 12 upon issuance. The Company is requesting Commission approval to securitize energy 13 transition costs arising out of the retirement of the Asbury generating plant with bonds 14 and recover these costs from customers via a non-bypassable SETC. This charge will 15 ensure the recovery of revenues is sufficient to provide for the payment of the bond 16 principal, interest, financing costs, and other fees, costs, and charges related to the 17 securitized utility tariff bonds. A Commission-approved SETC would be assessed to 18 all current and future retail customers of Liberty.

19 Q. Please explain a non-bypassable SETC.

20 A. Pursuant to the Securitization Statute, a non-bypassable charge shall be paid by all
21 existing or future retail customers receiving electrical service from an electrical
22 corporation or its successors or assignees under Commission-approved rate schedules
23 (except for customers receiving electrical service under special contracts as of August
24 28, 2021), even if a customer elects to purchase electricity from an alternative

- 1 electricity supplier following a fundamental change in regulation of public utilities in
- 2 Missouri.
- 3 Q. Will Liberty collect the SETC?
- 4 A. Yes. Liberty, as servicer, will collect the SETC and remit the funds to a collection
- 5 account. This is more fully described in the testimony of Witness Niehaus.⁷
- 6 VI. <u>SECURITIZED UTILITY TARIFF CHARGE</u>
- 7 Q. What is the purpose of this section of your testimony?
- 8 A. In this section of my testimony, I explain the SETC that the Company proposes to use
- 9 to recover the costs of the securitization bonds.
- 10 Q. Please summarize the calculation of the SETC.
- 11 A. To calculate the SETC, I allocated the revenue requirement to each of the Company's
- rate classes based on the updated results of the Class Cost of Service ("CCOS") study
- presented by Company witness Timothy Lyons in his surrebuttal testimony in Liberty's
- recent rate case (ER-2021-0312). I then used the billing determinants as agreed to by
- the parties in the Non-Unanimous Partial Stipulation and Agreement dated January 28,
- 16 2022 to calculate Liberty's proposed SETC rates for each class.
- 17 Q. How much is the proposed SETC designed to recover?
- 18 A. As I explain above, the revenue requirement for the bonds is about \$1.1 million per
- month; however, I have calculated the SETC on an annual basis. Thus, they are
- designed to recover twelve times the monthly revenue requirement, or about \$13
- 21 million.
- 22 Q. How did you determine how much revenue will be recovered from customer
- classes?

⁷ Direct Testimony of Katrina T. Niehaus, p. 9 at line 23.

A. Based on the class revenue targets from Lyons' rate design which, as he explains in his

Surrebuttal Testimony filed in Case No. ER-2021-0312, was established by the updated

Class Cost of Service Study. Specifically, I calculated the percentage of the Company's

total revenue requirement that would be contributed by each of Liberty's rate classes

and used the result to determine how much of the cost of the securitization bonds should

be recovered from each class.

Q. What was the next step in your calculation?

A. Using the determinants as agreed on in the Non-unanimous partial stipulation and agreement filed on January 28, 2022 in Case Number ER-2021-0312, I calculated the SETC for each class. The results are shown in Table CTE-4 and detailed in **Direct Schedule CTE-4**.

Table CTE-5. Calculation of SETCs by Class

Class	Allocation %	Revenue Target \$	Class Usage kWh	SETC \$/kWh
Residential	45.02%	\$6,032,078	1,726,927,308	\$0.00349
Commercial	9.05%	\$1,212,593	319,949,719	\$0.00379
Small Heating	2.02%	\$271,145	79,799,575	\$0.00340
General Power	18.01%	\$2,412,684	812,169,431	\$0.00297
Transmission	1.08%	\$144,662	70,481,082	\$0.00205
Total Electric Building	7.62%	\$1,021,703	319,940,627	\$0.00319
Feed Mill	0.02%	\$2,127	477,498	\$0.00445
Large Power	15.83%	\$2,121,560	875,159,495	\$0.00242
Misc. Service	0.00%	\$402	135,540	\$0.00297
Street Lighting	0.63%	\$84,364	287,677	\$0.29326
Private Lighting	0.70%	\$94,073	193,109	\$0.48715
Special Lighting	0.02%	\$2,618	601,937	\$0.00435
Total/Average	100.00%	\$13,400,011	4,206,122,998	\$0.00319

13

7

8

9

10

11

12

1	Q.	Is the Company seeking approval of a tariff at this time?
2	A.	No. If the Commission approves the Company's request to securitize the energy
3		transition costs, the Company will update its calculation for costs immediately before
4		the bonds are issued, and it will seek approval of the final tariff at that time. However,
5		I've attached the current draft tariff, based on the estimated costs, as Direct Schedule
6		<u>CTE-5</u> .
7	Q.	If approved, how will SETC appear on customer bills?
8	A.	The SETC will appear as a separate line item on a customer's bill and it will include
9		both the rate and the amount charged on each bill.
10	VII.	SETC TRUE-UP ADJUSTMENT AND RECONCILIATION PROCESS
11	Q.	What is the purpose of this section of your testimony?
12	A.	In this section of my testimony I summarize the true-up of the SETC that the Company
13		will conduct at least annually during the life of the securitization bonds. In addition, I
14		discuss the Company's proposal regarding a future ratemaking process pertaining to
15		the reconciliation process.
16	Q.	Please summarize the formula based true-up mechanism.
17	A.	The true-up adjustment will, at least annually, adjust the SETC for any overcollections
18		or under-collections to ensure the expected recovery of amounts are sufficient to timely
19		provide all payments of debt service and other required amounts and charges in
20		connection with the securitized utility tariff bonds.
21	Q.	Will Liberty complete any other reviews of the SETC?
22	A.	Yes. In addition to the reviews at least annually, Liberty may request a true-up at any
23		time during the term of the securitized utility tariff bonds to correct any under-

24

collection. Further, Liberty must be able to make a mandatory interim true-up

23		financing costs have been repaid in full.
22	Q.	Please explain what happens to the SETC once the bonds and any related
21		reconciliation process has been completed.
20		included in the Company's rate base in a future rate proceeding once the final
19		within this proceeding and actual costs. The balance of the regulatory account will be
18		regulatory account to account for any differences between the estimates provided
17		a component of the total amount of costs to be securitized the Company requests a
16		dismantlement/decommissioning costs, along with environmental compliance costs as
15		Because the Company is proposing to include the estimated amounts for
14		customers.
13		utility tariff bonds or the associated securitized utility tariff charges paid by
12		provided that any such reconciliation shall not affect the amount of securitized
11		final securitized costs incurred by the electrical corporation or assignee
10		securitized utility tariff costs financed by securitized utility tariff bonds and the
9		A proposed future ratemaking process to reconcile any differences between
8	A.	Section 393.1700.2(1)(g) states the following:
7		Liberty?
6		between securitized utility tariff bonds and final securitized costs incurred by
5	Q.	Please describe the reconciliation process as required by RSMo 393.1700-2.(1)(g)
4		the Commission.
3		ensure that the amount of the SETC matches any funding requirements approved by
2		scheduled payment date of the last tranche of the securitized utility tariff bonds) to
1		adjustment semi-annually (or quarterly beginning 12 months prior to the final
- 1		adjustment semi-annually (or quarterly beginning 12 months prior to the final

- 1 A. Once the bonds and financing costs have been repaid Liberty will no longer bill
- 2 customers for the SETC.

3 VIII. <u>INTRODUCTION OF WITNESSES</u>

- 4 Q. Please introduce the other witnesses who will be providing testimony in this
- 5 proceeding on behalf of Liberty.
- 6 A. At this time, the following additional witnesses are providing direct testimony in
- 7 support of Liberty's request for a Financing Order for authorization of the issuance of
- 8 securitized utility tariff bonds regarding Asbury:

Witness	Topics
Drew W. Landoll	Provides a history of Asbury; details the decommissioning
	plan and costs for Asbury.
Shaen T. Rooney	Provides technical background on the changes in operations and maintenance practices previously implemented at
	Asbury to help the plant better compete in the SPP IM ahead
	of the eventual decision to retire the plant, in support of the
	prudency of the Company's decision to retire Asbury.
Aaron J. Doll	Provides Asbury's operating characteristics, the manner in
	which it participated in the SPP generation market and how
	it became uncompetitive in the years leading up to its
	retirement.
Frank C. Graves	Addresses the economic and regulatory policies supporting
	recovery and appropriate carrying charges through
	securitization of the remaining investment in Asbury and
	the prudence of retiring Asbury.
Katrina Niehaus	Provides an overview of the securitization process and an
	estimate of the financing costs related to the securitized
	utility tariff bonds.

- 9 Q. Does this conclude your testimony?
- 10 A. Yes.

VERIFICATION

I, Charlotte T. Emery, under penalty of perjury, on this 21st day of March, 2022, declare that the foregoing is true and correct to the best of my knowledge and belief.

/s/ Charlotte T. Emery

	Direct Testimony of Charlotte T. Emery The Empire District Electric Company Before the Missouri Public Service Commission Case. No. ER-2022-0193	DIREC	T SCHEDULE CTE-1
Line No.			
1	Energy Transition Costs (incl. carrying costs)	\$	141,732,514
	Summary of Estimated Upfront Costs for Securitization		
2	Legal fees	\$	1,900,000
3	Underwriting (estimated at 40 bps)	\$ \$	566,930
4	Auditor fee	\$	200,000
5	Structuring advisor (incl. discount)	\$	255,000
6	Misc	\$ \$ \$	50,000
7	Consultant fees	\$	135,200
8	Commission advisor		Unknown
9	Fixed fees	\$	3,107,130
10	SEC Filing Fee		0.00927%
11	Bond rating fees (incl. S&P and Moody's @ 0.0575% each)		0.1150%
12	Filing fees total percentage		0.1243%
13	Total rating and filing fees	\$	179,992
14	Total upfront costs	\$	3,287,122
15	Estimated bond issuance amount	\$	145,019,637
	Summary of Estimated Ongoing Costs per year		
16	Servicing Fee	\$	72,510
17	Administration	\$	50,000
18	Trustee fee	\$	5,000
19	Auditing/accounting fees	\$ \$ \$	75,000
20	Legal fees	\$	35,000
21	Rating agency surveillance fees	\$	40,000
	Return on Capital Account for Credit enhancement		
22	(calculated at proposed WACC from ER-2019-0374)	\$ \$ \$	49,089
23	Printing fees	\$	10,000
24	Miscellaneous	\$	10,000
25	Ongoing Costs Per Year	\$	346,599
26	Ongoing Costs Per Month	\$	28,883

The Empire District Electric Company EO-2022-0193

Missouri Asbury Securitization Asbury (Retired Portion) Revenue Requirement

		Total		Missouri		Total Missouri
Line			ry (Retired Plant)	Jurisdictional		oury (Retired Plant)
No.	Description	Propo	sed ER-2022-0193	Allocation	Prop	osed ER-2022-0193
	(a)					
1	Net Retired Asbury Plant	\$	159,414,474	100.00%	\$	159,414,474
2	Asbury Environmental Regulatory Assets		1,494,657	100.00%		1,494,657
3	Asbury Fuel Inventories		1,532,832	100.00%		1,532,832
4	Asbury ADIT (NPV Value utilizing 13 Years)		(4,747,535)	100.00%		(4,747,535)
5	Asbury Excess ADIT		(12,177,195)	100.00%		(12,177,195)
6	Asbury AAO Liability		(41,677,324)	100.00%		(41,677,324)
7	Additional Asbury Decommissioning Costs (Phase 2) (1)		4,000,000	88.53%		3,541,054
8	Additional Asbury Decommissioning Costs (Phase 3) (1)		8,400,000	88.53%		7,436,214
9	Additional Asbury Asset Retirement Obligation Costs - Asbestos		3,171,417	88.53%		2,807,540
10	Additional Asbury Asset Retirement Obligation Costs - CCR Impoundment		20,867,831	88.53%		18,473,530
11	Total Asbury Energy Transition Costs to Securitize: (2)	\$	140,279,157		\$	136,098,247
12						
	Carrying costs from May 2022 Through Bond Issuance Date Estimated to occur December					
13	2022 @ 6.77% WACC from ER-2019-0374		5,634,267	100.00%	\$	5,634,267
14						
15	Upfront Financing Costs	\$	3,287,122			
16	Total Cost to be Financed with Securitized Utility Tariff Bonds	\$	145,019,637			
17						
18	Interest rate		2.47%			
19	Term (years)		13			
20	Monthly bond payment	\$	1,087,784			
21						
22	Ongoing costs (annual)	\$	346,599			
23	Ongoing costs (monthly)	\$	28,883			
24		•	,			
25	Monthly Revenue Requirement	\$	1,116,668			

Footnote:

^{(1) -} From Black and Veatch Demo Cost Estimate - November 2021 Memo.

^{(2) -} All costs represent the Missouri jurisdictional actuals as of 1/31/2022 and projections through April 2022 except for the additional projected decommissioning & ARO costs which represent the total projections of the respective items.

Direct Testimony of Charlotte T. Emery The Empire District Electric Company Before the Missouri Public Service Commission Case. No. ER-2022-0193

Line

		Amortization:
1	Securitization	13 Years
2 Energy Transition Costs(incl. carrying)	\$141,732,514	\$141,732,514
3 Upfront financing costs	\$3,287,122	0
4 Total	\$145,019,637	\$141,732,514
5		
6 Carrying cost	2.47%	6.77%
7 Term (years)	13	13
8 Monthly payment	(\$1,087,784)	(\$1,368,344)
9		
10 Ongoing costs (monthly)	\$28,883	0
11		
12 Monthly revenue requirement	(\$1,058,901)	(\$1,368,344)
13		
14 Total payments	(\$165,188,564)	(\$213,461,593)
15 Securitization benefit		\$48,273,029
16		
17 WACC (proposed in ER-2019-0314)	6.77%	6.77%
18 NPV payments discounted @ WACC	(\$109,680,576)	(\$141,732,514)
19 NPV securitization benefit	•	\$32,051,938
20		

DIRECT SCHEDULE CTE-4

Direct Testimony of Charlotte T. Emery The Empire District Electric Company Before the Missouri Public Service Commission

Case. No. ER-2022-0193

Allocation and Customer Rates Under Securitization

\$1,116,668 Monthly revenue requirement \$13,400,011 Annual revenue requirement

	Residential	Commercial	Small Heating	General Power	Transmission	Total Electric Building	Feed Mill	Large Power	Misc. Service	Street Lighting	Private Lighting	Special Lighting	
	RG	CB	SH	GP	TS	TEB	PFM	LP	MS	SPL	PL	LS	Total
Rate design revenue target	\$325,939,381	\$65,521,678	\$14,651,148	\$130,367,806	\$7,816,705	\$55,207,067	\$114,932	\$114,637,122	\$21,739	\$4,558,536	\$5,083,146	\$141,479	\$724,060,739
Allocation	45.02%	9.05%	2.02%	18.01%	1.08%	7.62%	0.02%	15.83%	0.00%	0.63%	0.70%	0.02%	100.00%
Annual Bond revenue targets	\$6,032,078	\$1,212,593	\$271,145	\$2,412,684	\$144,662	\$1,021,703	\$2,127	\$2,121,560	\$402	\$84,364	\$94,073	\$2,618	\$13,400,011
Annual Usage SAR	1,726,927,308 \$0.00349	319,949,719 \$0.00379	79,799,575 \$0.00340	812,169,431 \$0.00297	70,481,082 \$0.00205	319,940,627 \$0.00319	477,498 \$0.00445	875,159,495 \$0.00242	135,540 \$0.00297	287,677 \$0.29326	193,109 \$0.48715	601,937 \$0.00435	4,206,122,998

Annual Bill Impact 1000 KWH \$3.49

Note: Revenue target and determinants data from Lyons Updated CCOS Study Surrebuttal Testimony, ER-2021-0312

	A	nnual Revenue		
Class	Allocation	Target	Usage	SAR
	%	\$	kWh	\$/kWh
Residential	45.02%	\$6,032,078	1,726,927,308	\$0.0034
Commercial	9.05%	\$1,212,593	319,949,719	\$0.0037
Small Heating	2.02%	\$271,145	79,799,575	\$0.0034
General Power	18.01%	\$2,412,684	812,169,431	\$0.0029
Transmission	1.08%	\$144,662	70,481,082	\$0.0020
Total Electric Building	7.62%	\$1,021,703	319,940,627	\$0.0031
Feed Mill	0.02%	\$2,127	477,498	\$0.0044
Large Power	15.83%	\$2,121,560	875,159,495	\$0.0024
Misc. Service	0.00%	\$402	135,540	\$0.0029
Street Lighting	0.63%	\$84,364	287,677	\$0.2932
Private Lighting	0.70%	\$94,073	193,109	\$0.4871
Special Lighting	0.02%	\$2,618	601,937	\$0.0043
Total/Average	100.00%	\$13.400.011	4.206.122.998	\$0.0031

DIRECT SCHEDULE CTE-5
Page 1 of 6

THE EMPIRE DISTRICT ELECTRIC COMP	Page	1 01 0					
P.S.C. Mo. No	Sec.			Original Sheet No.	28		
Canceling P.S.C. Mo. No.	Sec.			Original Sheet No.			
For ALL TERRITORY							
SECURITIZED ENERGY TRANSITION CHARGE RIDER SETC							

DEFINITIONS:

For the purposes of this schedule the following terms shall have the following meanings:

COMPANY - Liberty and its successors and assigns that provide retail electric service directly to customers taking service at facilities, premises, or loads located within its Service Area.

FINANCING ORDER - the Financing Order issued by the Missouri Public Service Commission (Commission) in Case No. ER-2022-0193 under the Missouri Electricity Bill Reduction Act, RSMo Section 393.1700 of providing for the issuance by the Special Purpose Entity (SPE) of Securitized Utility Tariff Bonds to securitize the amount of Securitized Energy Tariff Costs and financing costs (Financing Costs) determined by the Commission in such order.

SERVICE AREA - the Company's [service area, the service area previously served by Liberty Central Company, as it existed on the date of approval of the Financing Order in Case No. ER-2022-0193.

SERVICER - on the effective date of this tariff, the Company shall act as Servicer. However, the SPE may select another party to function as Servicer or the Company may resign as Servicer in accordance with terms of the Servicing Agreement and Financing Order issued in Case No. ER-2022-0193. A Servicer selected under these conditions shall assume the obligations of the Company as Servicer under this schedule. As used in this schedule, the term Servicer includes any successor Servicer.

SPECIAL PURPOSE ENTITY (SPE) - the owner of Securitized Energy Transition Charge Property, on behalf of whom the SETCs are collected.

SECURITIZED ENERGY TRANSITION CHARGE (SETC) - a non-bypassable charge computed on a per kWh basis except for customers receiving electrical service under special contracts as of August 28, 2021, even if a retail customer elects to purchase electricity from an alternative electricity supplier following a fundamental change in regulation of public utilities in Missouri.

APPLICABILITY:

This schedule, along with Rider SETC, sets out the rates, terms and conditions under which SETCs shall be billed and collected by the Company, any successor Servicer(s), and other entity on behalf of the owner of Securitized Energy Transition Charge Property pursuant to the terms of the Financing Order. This schedule is applicable to all retail customers receiving electrical service except for customer receiving electrical service under special contracts as of August 28 2021, even if a retail customer elects to purchase electricity from an alternative electricity supplier following a fundamental change in regulation of public utilities in Missouri.

Individual end-use customers are responsible for paying SETCs billed to them in accordance with the terms of this schedule. Payment is to be made to the entity that bills the customer in accordance with the terms of the Servicing Agreement and the Financing Order, which entity may be the Company, a successor Servicer or other entity which, under the terms of the Financing Order or the Securitization Statute, may be obligated to pay or collect the SETCs. Another entity which, under the terms of the Financing Order or the Securitization Statute, is obligated to pay or collect the SETCs will pay the SETCs to the Servicer. The Servicer will remit collections to the SPE in accordance with the terms of the Servicing Agreement.

DIRECT SCHEDULE CTE-5
Page 2 of 6

P.S.C. Mo. No	Sec.			Original Sheet No.	<u>28a</u>			
Canceling P.S.C. Mo. No.	Sec.			Original Sheet No.				
For ALL TERRITORY								
SECURITIZED ENERGY TRANSITION CHARGE RIDER SETC								

TERM:

This schedule shall remain in effect until SETCs have been collected and remitted to the SPE which are sufficient in amount to satisfy all obligations of the SPE in regard to paying principal and interest on the Securitized Energy Transition Charge Bonds together with all other financing costs as provided in the Securitization Statute. However, in no event shall the SETCs provided for in this schedule be collected for service rendered after 15 years from issuance of the Securitized Energy Transition Charge Bonds. SETCs for service rendered during the 15-year period following issuance of the Securitized Energy Transition Charge Bonds pursuant to the Financing Order, but not collected during that 15-year period, may be collected after the 15-year period. This schedule is irrevocable and non-bypassable for the full term during which it applies.

RATE CLASSES:

For the purposes of billing SETCs, each retail customer shall be designated as a customer in one of the following 12 customer classes. A new customer shall be assigned to the appropriate customer class based on anticipated usage characteristics.

Residential
Commercial
Small Heating
General Power
Transmission
Total Electric Building
Feed Mill
Large Power
Misc. Service
Street Lighting
Private Lighting
Special Lighting

THE EMPIRE DISTRICT ELECTRIC COMPANY d.b.a. LIBERTY

PERIODIC BILLING REQUIREMENT ALLOCATION FACTORS:

The following Periodic Billing Requirement Allocation Factors (PBRAF) to be used in the calculation of the SETC Rates are calculated using the methods approved by the Commission in the Financing Order. The PBRAFs shall be the percentage of cost responsibility for each Securitized Energy Transition Charge customer class.

DIRECT SCHEDULE CTE-5 Page 3 of 6

THE EMPIRE DISTRICT ELECTRIC COMPANY d.b.a. LIBERTY

P.S.C. Mo. No	Sec			Original Sheet No.	<u>28b</u>
Canceling P.S.C. Mo. No.	Sec			Original Sheet No.	
For ALL TERRITORY					
SECURITIZED ENERGY TRANSITION CHARGE RIDER SETC					

Securitized Energy Transition Charge Class	<u>PBRAF</u>
Residential	45.02%
Commercial	9.05%
Small Heating	2.02%
General Power	18.01%
Transmission	1.08%
Total Electric Building	7.62%
Feed Mill	0.02%
Large Power	15.83%
Misc. Service	0.00%
Street Lighting	0.63%
Private Lighting	0.70%
Special Lighting	0.02%

DETERMINATION OF SECURITIZED ENERGY TRANSITION CHARGE (SETC) RATES:

SETC Rates will be adjusted no less frequently than annually in order to ensure that the expected collection of SETCs is adequate to pay when due, pursuant to the expected amortization schedule, principal and interest on the Securitized Utility Tariff Bonds and pay on a timely basis other Financing Costs. The SETC Rates shall be computed by multiplying the PBRAFs times the Periodic Billing Requirement (PBR) for the projected period in which the adjusted SETC Rates are expected to be in effect (SETC Period), and dividing such amount by the billing units of the SETC customer class, as shown in the following formula:

SETC _c	=	[(PBR * PBRAFc)+ Pc]/ FBUc
where,		
SETC _c	=	Securitized Energy Transition Charge Rate applicable to a SETC rate class during the SRC Period;
PBR	=	Periodic Billing Requirement for the SETC Period;
PBRAF _c	=	The Periodic Billing Requirement Allocation Factor for such class in effect at such time;
Pc	=	Prior period over-funder-recovery for such class;
FBUc	=	Forecasted Billing Units (i.e., class-specific energy or demand billing units) currently forecast for a class for the SETC period.

DIRECT SCHEDULE CTE-5
Page 4 of 6

P.S.C. Mo. No	Sec	Original Sheet No.	<u>28c</u>		
Canceling P.S.C. Mo. No.	Sec	Original Sheet No.			
For ALL TERRITORY					
SECURITIZED ENERGY TRANSITION CHARGE RIDER SETC					

TRUE-UP ADJUSTMENT PROCEDURE:

THE EMPIRE DISTRICT ELECTRIC COMPANY d.b.a. LIBERTY

Not less than 60 days prior to the first billing cycle for the Company's [month] billing month, and no less frequently than annually, the Servicer shall file a revised Rider SETC setting forth the upcoming SETC period's SETC Rates, complete with all supporting materials. The adjusted SETC Rates will become effective on the first billing cycle of the Company's [month] billing month. The Commission will have 30 days after the date of the true-up filing in which to confirm the accuracy of the of the Servicer's adjustment. Any necessary corrections to the adjusted SETC Rates, due to mathematical errors in the calculation of such rates shall be refiled.

In addition, optional interim true-up adjustments may be made more frequently by the Servicer at any time during the term of the Securitized Energy Transition Charge Bonds to correct any undercollection or overcollection, as provided for in the Financing Order, in order to assure timely payment of the Securitized Energy Transition Charge Bonds based on rating agency and bondholder considerations. Further, the Servicer must make mandatory interim true-up adjustments semi-annually (or quarterly beginning 12 months prior to the final scheduled payment date of the last tranche of the Securitized Energy Transition Charge Bonds) if the Servicer forecasts that Securitized Energy Transition Charge collections will be insufficient to make all scheduled payments of principal, interest and other amounts in respect of the Securitized Energy Transition Charge Bonds on a timely basis during the current or next succeeding payment period and/or or to replenish any draws upon the capital subaccount. In the event an interim true-up (whether mandatory or optional) is necessary, the interim true-up adjustment must use the methodology utilized in the most recent annual true-up and be filed not less than 60 days prior to the following month's first billing cycle for implementation. Filing with and review by the Commission will be accomplished for the interim true-up adjustment in the manner as for the annual true-up adjustment set forth above. In no event will a mandatory interim true-up adjustment occur more frequently than every six months provided, however, that mandatory interim true-up adjustments beginning 12 months prior to the final scheduled payment date of the last tranche of the Securitized Energy Transition Charge Bonds shall occur quarterly.

The true-up shall be conducted in the following manner. The Servicer shall:

- (a) allocate the upcoming period's Periodic Billing Requirement based on the PBRAFs approved in the Financing Order;
- (b) calculate undercollections or overcollections from the preceding period in each class by subtracting the previous period's Securitized Energy Transition Charge revenues collected from each class from the Periodic Billing Requirement determined for that class for the same period;
- (c) sum the amounts allocated to each customer class in steps (a) and (b) above to determine an adjusted Periodic Billing Requirement for each customer class;
- (d) divide the Periodic Billing Requirement for each customer class by the maximum of the forecasted billing units or the threshold billing units for that class, to determine the threshold rate;
- (e) multiply the threshold rate by the forecasted billing units for each class to determine the expected collections under the threshold rate:
- (f) allocate the difference in the adjusted Periodic Billing Requirement and the expected collections calculated in step (e) among the Securitized Energy Transition Charge customer classes using the PBRAFs approved in this Financing Order;

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For ALL TERRITORY				

- (g) add the amount allocated to each class in step (f) above to the expected collection amount by class calculated in step (e) above to determine the final Periodic Billing Requirement for each class; and
- (h) divide the final Periodic Billing Requirement for each class by the forecasted billing units to determine the Securitized Energy Transition Charge rate by class for the upcoming period. The final Periodic Billing Requirement class percentage of the total Periodic Billing Requirement equals the adjusted PBRAFs.

OTHER TERMS AND CONDITIONS:

If the customer or other entity which, under the terms of the Financing Order or the Act, may be obligated to pay or collect the SETCs, pays only a portion of its bill, a pro-rata share amount of Securitized Energy Transition Charge revenues shall be deemed to be collected. In the event of any such shortfall, the amount paid will be allocated to the Securitized Energy Transition Charges in the same proportion that such charges bear to the total bill. The first dollars collected would be attributed to past due balances, if any. If cash collections are not sufficient to pay a customer's current bill once those balances are paid in full then the cash would be prorated between the different components of the bill.

The Company shall cause to be prepared and included on each electric bill a statement stating, in effect, that the Securitized Utility Tariff Property and the Securitized Energy Transition Charges are owned by the SPE and not the Company. On each customer's bill, the securitized Energy Transition Charge shall be a separate line item and include both the rate and the amount of the charge.

AVAILABILITY:

This schedule is applicable to billed energy consumption and demands of retail customers taking service from the Company during the term that this schedule is in effect, and to the facilities, premises, and loads of all other retail customers obligated to pay Rider SETC Charges as provided in Schedule SETC, Section 6.1.1.6.3. Terms defined in Schedule SETC that are used herein shall have the same meaning as set forth in Schedule SETC.

RATE CLASSES:

For purposes of billing Securitized Energy Transition Charge Rates (SETC Rates), each retail customer will be designated as a customer belonging to one of 12 classes as identified by Schedule SETC.

PROPOSED SECURITIZED ENERGY TRANSITION CHARGE RATES:

Securitized Energy Transition Charge Customer Class	SETC Rates	
Residential	\$0.00349	per kWh
Commercial	\$0.00379	per kWh
Small Heating	\$0.00340	per kWh
General Power	\$0.00297	per kWh
Transmission	\$0.00205	per kWh
Total Electric Building	\$0.00319	per kWh
Feed Mill	\$0.00445	per kWh

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For ALL TERRITORY						
SECURITIZED ENERGY TRANSITION CHARGE RIDER SETC						
Large Power		\$0.00242	per kWh			
Misc. Service		\$0.00297	per kWh			
Street Lighting		\$0.29326	per kWh			
Private Lighting		\$0.48715	per kWh			
Special Lighting		\$0.00435	per kWh			

The SETC Rates are multiplied by the kWh or kW, as applicable, read, estimated or determined during the billing month and will be applied to bills rendered on and after the effective date.

SECURITIZED ENERGY TRANSITION CHARGE TRUE-UP:1

The Securitized Energy Transition Charge Rates shall be determined in accordance with and are subject to the provisions set forth in the Financing Order and Schedule SETC. Not less than 30 days prior to the first billing cycle for the Company's [month] billing month and no less frequently than annually thereafter, the Company or successor Servicer will file a revision to Rider SETC setting forth the adjusted SETC Rates to be effective for the upcoming period. If made as a result of the annual true-up adjustment in Schedule SETC, the adjusted SETC Rates will become effective on the first billing cycle of the Company's [month] billing month. In accordance with Schedule SETC, an interim true-up is mandatory semi-annually (or quarterly beginning 12 months prior the final scheduled payment date of the last tranche of the Securitized Energy Transition Charge Bonds) if the Servicer forecasts that Securitized Energy Transition Charge collections will be insufficient to make all scheduled payments of principal, interest and other amounts in respect of the Securitized Energy Transition Charge Bonds on a timely basis during the current or next succeeding payment period and/or or to replenish any draws upon the capital subaccount. Additional interim true-ups may also be made at any time as described in Schedule SETC. If an interim true-up adjustment is made pursuant to Schedule SETC, the Adjusted SETC Rates will be become effective on the first billing cycle of the Company's billing month that is not less than 30 days following the making of the interim true-up adjustment filling.

The servicer may also submit for approval a non-standard true-up adjustment to propose revisions to the methodology in this Securitized Energy Transition Charge Rider SETC. The Commission will have 60 days to review any non-standard true-up adjustment. Absent a resolution that modifies or rejects the non-standard true-up adjustment, the servicer may implement the adjustments 60 days after the date of its submission.

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¹ NTD: To be updated as necessary.