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**BEFORE THE**  
**LOUISIANA PUBLIC SERVICE COMMISSION**

LA Public Service Commission

**APPLICATION OF ENTERGY )  
LOUISIANA, LLC FOR APPROVAL OF )  
REGULATORY BLUEPRINT )  
NECESSARY FOR COMPANY TO )  
STRENGTHEN THE ELECTRIC GRID )  
FOR STATE OF LOUISIANA )**

**DOCKET NO. U-\_\_\_\_\_**

**DIRECT TESTIMONY**

**OF**

**ADRIEN M. MCKENZIE, CFA**

**ON BEHALF OF**

**ENTERGY LOUISIANA, LLC**

**PUBLIC REDACTED VERSION**

**AUGUST 2023**

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1 **I. INTRODUCTION**

2 Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3 A1. My name is Adrien M. McKenzie, and my business address is 3907 Red River, Austin,  
4 Texas, 78751.

5  
6 Q2. IN WHAT CAPACITY ARE YOU EMPLOYED?

7 A2. I am President of FINCAP, Inc., a firm providing financial, economic, and policy  
8 consulting services to business and government.

9  
10 Q3. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND  
11 QUALIFICATIONS.

12 A3. A description of my background and qualifications, including a resume containing the  
13 details of my experience, is attached as Exhibit AMM-1.

14  
15 **A. Overview**

16 Q4. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS CASE?

17 A4. The purpose of my direct testimony is to present to the Louisiana Public Service  
18 ("LPSC" or the "Commission") my independent assessment of the fair and reasonable  
19 rate of return on equity ("ROE") for the jurisdictional electric utility operations of  
20 Entergy Louisiana, LLC ("ELL" or the "Company"). In addition, I also examined the  
21 reasonableness of the Company's capital structure, considering both the specific risks  
22 faced by the Company, as well as other industry guidelines.

1 Q5. PLEASE SUMMARIZE THE INFORMATION AND MATERIALS YOU RELY ON  
2 TO SUPPORT THE OPINIONS AND CONCLUSIONS CONTAINED IN YOUR  
3 TESTIMONY.

4 A5. To prepare my testimony, I use information from a variety of sources that would  
5 normally be relied upon by a person in my capacity. In connection with this filing, I  
6 consider and rely upon corporate disclosures, publicly available financial reports, prior  
7 regulatory filings, and other published information relating to ELL. I also review  
8 information relating generally to current capital market conditions and specifically to  
9 investor perceptions, requirements, and expectations for utilities. These sources,  
10 coupled with my experience in the fields of finance and utility regulation, have given  
11 me a working knowledge of the issues relevant to investors' required return for ELL,  
12 and they form the basis of my analyses and conclusions.

13

14 Q6. HOW IS YOUR TESTIMONY ORGANIZED?

15 A6. First, I summarize my conclusions and recommendations, giving special attention to  
16 the importance of financial strength and the implications of regulatory mechanisms and  
17 other risk factors. I also comment on the reasonableness of the Company's proposed  
18 capital structure.

19 Next, I briefly review ELL's operations and finances. I then discuss current  
20 conditions in the capital markets and their implications in evaluating a just and  
21 reasonable return for the Company. I then explain the development of the proxy group  
22 of electric utilities used as the basis for my quantitative analyses. With this as a  
23 background, I discuss well-accepted quantitative analyses to estimate the current cost

1 of equity for the proxy group of utilities. These include the discounted cash flow  
2 (“DCF”) model, the Capital Asset Pricing Model (“CAPM”) and the empirical CAPM  
3 (“ECAPM”), an equity risk premium approach based on allowed equity returns, and  
4 reference to expected earned rates of return for utilities, which are all methods that are  
5 commonly relied on in regulatory proceedings. Additionally, I discuss the issue of  
6 stock flotation expenses and the implications of these legitimate costs on the estimation  
7 of a reasonable ROE for the Company.

8 Based on the results of my analyses, I evaluate a fair ROE for ELL. My  
9 evaluation takes into account the specific risks for the Company’s utility operations in  
10 Louisiana and ELL’s requirements for financial strength. Finally, consistent with the  
11 fact that utilities must compete for capital with firms outside their own industry, I  
12 corroborate my utility quantitative analyses by applying the DCF model to a group of  
13 low-risk non-utility firms.

14  
15 **B. Summary and Conclusions**

16 Q7. WHAT IS YOUR RECOMMENDED ROE FOR ELL?

17 A7. I apply the DCF, CAPM, ECAPM, risk premium, and expected earnings analyses to a  
18 proxy group of electric utilities, with the results being summarized on Exhibit AMM-  
19 2. As shown there, I recommend a cost of equity range for the Company’s electric  
20 operations of 10.1% to 11.1%, or 10.2% to 11.2% after adjusting for the impact of  
21 common equity flotation costs. It is my conclusion that the 10.7% midpoint of this  
22 range represents a just and reasonable ROE that is adequate to compensate ELL’s

1 investors, while maintaining the Company's financial integrity and ability to attract  
2 capital on reasonable terms.

3

4 Q8. IS ELL REQUESTING AN ROE THAT IS LOWER THAN YOUR  
5 RECOMMENDATION?

6 A8. Yes. As reflected in the testimony of Company witness Phillip R. May, ELL's class  
7 cost of service study incorporates an ROE of 10.5%. The evidence presented in my  
8 testimony provides substantial support to conclude that a 10.5% ROE for the Company  
9 is both reasonable and conservative.

10

11 **II. RETURN ON EQUITY FOR ELL**

12 Q9. WHAT IS THE PURPOSE OF SECTION II OF YOUR DIRECT TESTIMONY?

13 A9. Section II of my Direct Testimony presents my conclusions regarding the fair ROE  
14 applicable to ELL's jurisdictional electric utility operations. I also describe the  
15 relationship between ROE and preservation of a utility's financial integrity and the  
16 ability to attract capital. Finally, I discuss the reasonableness of the Company's capital  
17 structure request in this case.

18

19 **A. Importance of Financial Strength**

20 Q10. WHAT IS THE ROLE OF THE ROE IN SETTING A UTILITY'S RATES?

21 A10. The ROE is the cost of attracting and retaining common equity investment in the  
22 utility's physical plant and assets. This investment is necessary to finance the asset  
23 base needed to provide utility service. Investors commit capital only if they expect to

1           earn a return on their investment commensurate with returns available from alternative  
2           investments with comparable risks. Moreover, a just and reasonable ROE is integral  
3           in meeting sound regulatory economics and the standards established by the U.S.  
4           Supreme Court. The *Bluefield* case set the standard against which just and reasonable  
5           rates are measured:

6                     A public utility is entitled to such rates as will permit it to earn a return  
7                     on the value of the property which it employs for the convenience of the  
8                     public equal to that generally being made at the same time and in the  
9                     same general part of the country on investments in other business  
10                    undertakings which are attended by corresponding risks and  
11                    uncertainties. . . . The return should be reasonable, sufficient to assure  
12                    confidence in the financial soundness of the utility, and should be  
13                    adequate, under efficient and economical management, to maintain and  
14                    support its credit and enable it to raise money necessary for the proper  
15                    discharge of its public duties.<sup>1</sup>

16           The *Hope* case expanded on the guidelines for a reasonable ROE, reemphasizing the  
17           findings in *Bluefield* and establishing that the rate-setting process must produce an end-  
18           result that allows the utility a reasonable opportunity to cover its capital costs. The  
19           Court stated:

20                    From the investor or company point of view it is important that there be  
21                    enough revenue not only for operating expenses but also for the capital  
22                    costs of the business. These include service on the debt and dividends  
23                    on the stock. . . . By that standard, the return to the equity owner should  
24                    be commensurate with returns on investments in other enterprises  
25                    having corresponding risks. That return, moreover, should be sufficient  
26                    to assure confidence in the financial integrity of the enterprise, so as to  
27                    maintain credit and attract capital.<sup>2</sup>

---

<sup>1</sup> *Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n*, 262 U.S. 679 (1923) (*Bluefield*).

<sup>2</sup> *Fed. Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) (*Hope*).

1           In summary, the Supreme Court's findings in *Hope* and *Bluefield* established  
2           that a just and reasonable ROE must be sufficient to 1) fairly compensate the utility's  
3           investors, 2) enable the utility to offer a return adequate to attract new capital on  
4           reasonable terms, and 3) maintain the utility's financial integrity. These standards  
5           should allow the utility to fulfill its obligation to provide reliable service while meeting  
6           the needs of customers through necessary system replacement and expansion, but the  
7           Supreme Court's requirements can only be met if the utility has a reasonable  
8           opportunity to actually earn its allowed ROE.

9           While the *Hope* and *Bluefield* decisions did not establish a particular method to  
10          be followed in fixing rates (or in determining the allowed ROE),<sup>3</sup> these and subsequent  
11          cases enshrined the importance of an end result that meets the opportunity cost standard  
12          of finance. Under this doctrine, the required return is established by investors in the  
13          capital markets based on expected returns available from comparable risk investments.  
14          Coupled with modern financial theory, which has led to the development of formal risk-  
15          return models (e.g., DCF and CAPM), practical application of the *Bluefield* and *Hope*  
16          standards involves the independent, case-by-case consideration of capital market data  
17          in order to evaluate an ROE that will produce a balanced and fair end result for investors  
18          and customers.

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<sup>3</sup> *Id.* at 602, finding, "the Commission was not bound to the use of any single formula or combination of formulae in determining rates." and, "[I]t is not theory but the impact of the rate order which counts."



1 Q11. THROUGHOUT YOUR TESTIMONY YOU REFER REPEATEDLY TO THE  
2 CONCEPTS OF “FINANCIAL STRENGTH,” “FINANCIAL INTEGRITY,” AND  
3 “FINANCIAL FLEXIBILITY.” WOULD YOU BRIEFLY DESCRIBE WHAT YOU  
4 MEAN BY THESE TERMS?

5 A11. These terms are generally synonymous and refer to the utility’s ability to attract and  
6 retain the capital that is necessary to provide service at reasonable cost, consistent with  
7 the Supreme Court standards. ELL’s plans call for a continuation of capital investments  
8 to preserve and enhance service reliability and meet the needs of the Company’s  
9 customers. The Company must generate adequate cash flow from operations to fund  
10 these requirements and maintain access to capital from external sources.

11 Rating agencies and potential debt investors tend to place significant emphasis  
12 on maintaining strong financial metrics and credit ratings that support access to debt  
13 capital markets under reasonable terms. Company witness Todd A. Shipman discusses  
14 these topics in depth in his direct testimony. This emphasis on financial metrics and  
15 credit ratings is shared by equity investors who also focus on cash flows, capital  
16 structure, and liquidity, much like debt investors.

17

18 Q12. WHAT PART DOES REGULATION PLAY IN ENSURING THAT ELL HAS  
19 ACCESS TO CAPITAL UNDER REASONABLE TERMS AND ON A  
20 SUSTAINABLE BASIS?

21 A12. Regulatory signals are a major driver of investors’ risk assessment for utilities.  
22 Investors recognize that constructive regulation is a key ingredient in supporting utility  
23 credit ratings and financial integrity. Security analysts study commission orders and

1 regulatory policy statements to advise investors about where to put their money. As  
2 Moody's Investors Service ("Moody's") noted, "the regulatory environment is the most  
3 important driver of our outlook because it sets the pace for cost recovery."<sup>4</sup> Similarly,  
4 S&P Global Ratings ("S&P") observed that, "Regulatory advantage is the most heavily  
5 weighted factor when S&P Global Ratings analyzes a regulated utility's business risk  
6 profile."<sup>5</sup> The Value Line Investment Survey ("Value Line") summarizes these  
7 sentiments:

8 As we often point out, the most important factor in any utility's success,  
9 whether it provides electricity, gas, or water, is the regulatory climate in  
10 which it operates. Harsh regulatory conditions can make it nearly  
11 impossible for the best run utilities to earn a reasonable return on their  
12 investment.<sup>6</sup>

13 In addition, the ROE set by regulators impacts investor confidence in not only the  
14 jurisdictional utility, but also in the ultimate parent company that is the entity that  
15 actually issues common stock.

16  
17 Q13. DO CUSTOMERS BENEFIT BY ENHANCING THE UTILITY'S FINANCIAL  
18 FLEXIBILITY?

19 A13. Yes. Providing an ROE that is sufficient to maintain the Company's ability to attract  
20 capital under reasonable terms, even in times of financial and market stress, is not only  
21 consistent with the economic requirements embodied in the U.S. Supreme Court's

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<sup>4</sup> Moody's Investors Service, *Regulation Will Keep Cash Flow Stable as Major Tax Break Ends* (February 19, 2014), Industry Outlook.

<sup>5</sup> S&P Global Ratings, *Assessing U.S. Investors-Owned Utility Regulatory Environments* (August 10, 2016), RatingsExpress.

<sup>6</sup> Value Line Investment Survey, *Water Utility Industry* (January 13, 2017), *Id.* at p. 1780.

1        *Hope* and *Bluefield* decisions, but it is also in customers' best interests. -Customers  
2        enjoy the benefits that come from ensuring that the utility has the financial wherewithal  
3        to take whatever actions are required to ensure safe and reliable service at a favorable  
4        cost.

5  
6                                    **B. Conclusions and Recommendations**

7        Q14. WHAT ARE YOUR FINDINGS REGARDING A FAIR ROE FOR ELL?

8        A14. Considering the economic requirements necessary to support continuous access to  
9        capital under reasonable terms and the results of my analysis, I recommend a 10.7%  
10       ROE for ELL's utility operations, which is consistent with the case-specific evidence  
11       presented in my testimony. The bases for my conclusion are summarized below:

- 12                    • In order to reflect the risks and prospects associated with ELL's  
13                    electric utility business, my analyses focused on a proxy group of  
14                    twenty-nine electric utility firms.
- 15                    • Because investors' required return on equity is unobservable and no  
16                    single method should be viewed in isolation, I applied the DCF,  
17                    CAPM, ECAPM, and risk premium methods to estimate a just and  
18                    reasonable ROE for ELL, as well as referencing the expected  
19                    earnings approach.
- 20                    • As summarized on Exhibit AMM-2, considering the average values  
21                    resulting from these analyses, and giving less weight to extremes at  
22                    the high and low ends of the range, I conclude that the cost of equity  
23                    falls in the 10.1% to 11.1% range.
- 24                    • My evaluation of a fair ROE also incorporates an upward adjustment  
25                    of 10 basis points to account for flotation costs, which are a  
26                    legitimate cost incurred to raise equity capital supporting ELL's  
27                    investment in utility infrastructure. Incorporating this flotation cost  
28                    adjustment results in my recommended ROE range of 10.2% to  
29                    11.2%.
- 30                    • My ROE recommendation for ELL's electric operations is the  
31                    midpoint of this range, or 10.7%.

1 Q15. WHAT OTHER EVIDENCE DO YOU CONSIDER IN EVALUATING A FAIR ROE  
2 FOR ELL?

3 A15. My conclusion that an ROE of 10.7% is fair and reasonable and should be approved is  
4 reinforced by the need to consider the following exposures faced by investors:

- 5 • ELL's electric operations are subject to risk factors associated with  
6 the Company's ownership of nuclear-powered generating facilities.
- 7 • The Company's service area is located in a storm-prone region,  
8 which implies a higher risk operating environment and exposes ELL  
9 to the additional financial pressures associated with repairing the  
10 damage caused by catastrophic weather events.
- 11 • ELL's customer base contains a relatively high concentration of  
12 industrial customers, which exposes the Company to greater cash  
13 flow volatility.
- 14 • ELL is in the midst of a major capital expenditure program to meet  
15 customer demand, expand access to renewable resources, and  
16 increase resiliency against future storm events. As Company  
17 witness Ryan E. O'Malley discusses, ELL will require significant  
18 investor-supplied capital to meet these goals, which heightens the  
19 need for supportive regulatory actions.
- 20 • ELL must have sufficient financial strength to meet these challenges  
21 effectively. Continued support for ELL's financial integrity,  
22 including the opportunity to earn a reasonable ROE, is imperative to  
23 ensure that the Company has the capability to buttress its credit  
24 standing while funding the major investment in utility infrastructure  
25 that is necessary to meet the needs of its customers and confront the  
26 ongoing risks posed by catastrophic weather events.

27 These findings indicate that a 10.7% ROE for ELL is fair and reasonable.

28

29 Q16. WHAT DID THE DCF RESULTS FOR YOUR SELECT GROUP OF NON-UTILITY  
30 FIRMS INDICATE WITH RESPECT TO YOUR EVALUATION?

31 A16. As shown on page 3 of Exhibit AMM-12, average DCF estimates for a low-risk group  
32 of firms in the competitive sector of the economy ranged from 10.5% to 11.1% before

1 consideration of flotation costs. While I did not base my recommendations on these  
2 results, they confirm that an ROE for ELL of 10.7% falls in a reasonable range to  
3 maintain the Company's financial integrity, provide a return commensurate with  
4 investments of comparable risk, and support the ability to attract capital.

5

6 Q17. WHAT IS YOUR CONCLUSION REGARDING THE 10.5% ROE USED IN ELL'S  
7 CLASS COST OF SERVICE STUDY?

8 A17. The 10.5% ROE incorporated in the Company's class cost of service study falls below  
9 the 10.7% midpoint of my recommended range. Considering capital market  
10 expectations, the need to maintain financial integrity and support additional capital, and  
11 the Company's specific risk exposures, it is my opinion that 10.5% understates  
12 investors' required return for ELL. The 10.5% ROE used in ELL's class cost of service  
13 study represents a reasonable compromise between balancing the impact of higher rates  
14 on customers and the need to provide the Company with a return that is adequate to  
15 compensate investors.

16

17 **III. FUNDAMENTAL ANALYSES**

18 Q18. WHAT IS THE PURPOSE OF SECTION III OF YOUR DIRECT TESTIMONY?

19 A18. This section briefly reviews the operations and finances of ELL. As a predicate to my  
20 quantitative analyses, I also examine conditions impacting today's capital markets and  
21 the general economy. An understanding of the fundamental factors driving the risks  
22 and prospects of utilities is essential in developing an informed opinion of investors'  
23 expectations and requirements that are the basis of a fair ROE.

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A19. ELL is one of five regulated utility subsidiaries of Entergy Corporation (“Entergy”).<sup>7</sup> The Company is a vertically-integrated electric utility encompassing the electric generation, transmission, distribution, and customer service functions. ELL is comprised of two legacy Entergy utilities: the former Entergy Louisiana, LLC, and Entergy Gulf States Louisiana, which were combined on October 1, 2015, to form the Company<sup>8</sup>. ELL provides service to approximately 1.1 million retail electric customers consisting of residential, commercial, industrial, and government entities.<sup>9</sup> The Company’s service territory covers 58 parishes in the northeastern and southern portions of Louisiana.

In 2022, ELL’s total electric retail operating revenues consisted of 33% residential, 24% commercial, 42% industrial, and 2% governmental.<sup>10</sup> At year-end 2022, the company had 10,829 megawatts (“MW”) of owned and leased generating capacity, consisting of 8,361 MW of gas and oil-fired capacity, 2,129 MW of nuclear capacity, and 339 MW of coal capacity.<sup>11</sup>

<sup>8</sup> On September 14, 2015, the LPSC issued Order No. U-33244-A formally approving the business combination of Legacy EGSL and Legacy ELL, through which those companies combined substantially all of their respective assets and liabilities into a single operating company, Entergy Louisiana Power, LLC, which subsequently changed its name to Entergy Louisiana, LLC (“ELL”). Upon consummation of the business combination, ELL became the public utility that is subject to LPSC regulation and is the successor of Legacy EGSL and Legacy ELL.

<sup>10</sup> For 2022, ELL's total kilowatt hour retail sales consisted of 24% residential, 19% commercial, 55% industrial, and 1% governmental. These figures in the testimony and footnote are based on FERC Form 1 data.

<sup>11</sup> Entergy Corporation, 2022 Form 10-K *Id.* at 259.

1                   During 2022, ELL's operating revenues totaled approximately \$6.3 billion,  
2                   which accounted for approximately 46% of Entergy's total revenues.<sup>12</sup> At year-end  
3                   2022, ELL's total assets were \$28.1 billion.<sup>13</sup>

4

5   Q20. WHERE DOES ELL OBTAIN THE CAPITAL USED TO FINANCE ITS  
6   INVESTMENT IN UTILITY PLANT?

7   A20. As a wholly-owned subsidiary, ELL's common equity capital is provided by Entergy,  
8       whose common stock is publicly traded on the New York Stock Exchange under the  
9       ticker symbol "ETR". In addition to capital supplied by Entergy, ELL also issues long-  
10      term debt securities under its own name and has been assigned an issuer credit rating  
11      of "BBB+" by S&P and a long-term rating of "Baa1" by Moody's.

12

13   Q21. DOES ELL ANTICIPATE THE NEED FOR CAPITAL GOING FORWARD?

14   A21. Yes. The Company must continue to undertake the investments to maintain and  
15      improve the electric system and to meet customer expectations, including providing  
16      safe and reliable service. In addition, investments are needed to meet growing  
17      industrial demand needs and expand access to renewable generating resources, as well  
18      as to harden ELL's infrastructure against future storm events. As discussed in the  
19      testimony of Mr. O'Malley, planned utility capital expenditures are expected to exceed  
20      [REDACTED] from 2023 to 2027, including billions of dollars of storm hardening capital

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<sup>12</sup> *Id.* at 46, 370.

<sup>13</sup> *Id.* at 374.

1 expenditures. This represents a substantial investment given ELL's current rate base of  
2 approximately \$15.7 billion.<sup>14</sup> These planned capital expenditures could increase if  
3 ELL receives certain Commission approvals. S&P indicated that "we expect ELL's  
4 financial measures will remain at the lower end of the range for its financial risk profile  
5 category, primarily reflecting the company's robust capital spending."<sup>15</sup> Continued  
6 support for ELL's financial integrity and flexibility will be instrumental in attracting  
7 the capital necessary to fund these projects in an effective manner.

8  
9 **B. Outlook for Capital Costs**

10 Q22. PLEASE SUMMARIZE CURRENT ECONOMIC CONDITIONS.

11 A22. U.S. real GDP contracted 3.4% during 2020, but with the easing of COVID-19  
12 lockdowns, the economic outlook improved significantly in 2021, with GDP growing  
13 at a pace of 5.7%. Real GDP in the US expanded by 2.1% in 2022 and 2.0% in the first  
14 quarter of 2023.<sup>16</sup> Meanwhile, indicators of employment remained stable, with the  
15 national unemployment rate falling slightly to 3.4% in April 2023.<sup>17</sup>

16 The underlying risk and price pressures associated with the COVID-19  
17 pandemic were overshadowed by a dramatic increase in geopolitical risks

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<sup>14</sup> This rate base amount is reflected in ELL's most recent formula rate plan filing.

<sup>15</sup> S&P Global Ratings, *Entergy Louisiana LLC* (August 25, 2022), Ratings Direct.

<sup>16</sup> Bureau of Economic Analysis, *Gross Domestic Product*, BEA (August 8, 2023), available at <https://www.bea.gov/data/gdp/gross-domestic-product>.

Bureau of Economic Analysis, *Gross Domestic Product, Fourth Quarter and Year 2022 (Third Estimate), GDP by Industry, and Corporate Profits*, BEA (April 10, 2023), available at <https://www.bea.gov/news/2023/gross-domestic-product-fourth-quarter-and-year-2022-third-estimate-gdp-industry-and/>.

<sup>17</sup> Bureau of Labor Statistics, *The Employment Situation – July 2023*, U.S. Department of Labor (August 4, 2023), available at <https://www.bls.gov/news.release/pdf/empst.pdf>



1 accompanying Russia's invasion of Ukraine in early 2022. These events have also been  
2 accompanied by heightened economic uncertainties as inflationary pressures due to  
3 supply chain disruptions were further stoked by sharp increases in global commodity  
4 prices. The substantial disruption in the energy economy and dramatic rise in inflation  
5 led to sharp declines in global equity markets as investors reacted to the related  
6 exposures. S&P concluded that:

7 The balance of risks is firmly on the downside—with rapid monetary  
8 tightening potentially pushing major economies into recession; growing  
9 geopolitical tensions exacerbating Europe's energy crisis; lingering  
10 high prices pressuring costs and eroding households' purchasing power;  
11 and China grappling with structural factors that are undermining its  
12 economic growth.<sup>18</sup>

13 Stimulative monetary and fiscal policies, coupled with economic ramifications  
14 stemming from supply-chain disruptions and rapid price rises in the energy and  
15 commodities markets, have led to increasing concern that inflation may remain  
16 significantly above the Federal Reserve's longer-run benchmark of 2%. In June 2022,  
17 CPI inflation peaked at its highest level since November 1981. Since then, CPI  
18 inflation has gradually moderated to 5.0% in March 2023.<sup>19</sup> The so-called "core" price  
19 index, which excludes more volatile energy and food costs, rose at an annual rate of  
20 5.6% in March 2023. Similarly, PCE inflation rose 5.7% in March 2023, or 4.8% after

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<sup>18</sup> S&P Global Ratings, *Global Credit Conditions Q4 2022: Darkening Horizons*, (September 29, 2022) Comments.

<sup>19</sup> U.S. Bureau of Labor Statistics, *Economic News Release*, BLS (May 9, 2023) available at <https://www.bls.gov/news.release/cpi.nr0.htm>.

1 excluding more volatile food and energy costs.<sup>20</sup> As Federal Reserve Chair Powell has  
2 noted:

3 Although inflation has moderated recently, it remains too high. The  
4 longer the current bout of high inflation continues, the greater the  
5 chance that expectations of higher inflation will become entrenched.<sup>21</sup>

6 More recently, turmoil in the banking sector has shaken investor confidence and  
7 increased volatility in bond and equity markets. The Federal Reserve and U.S. Treasury  
8 took quick and dramatic action to shore up banks' liquidity needs and strengthen public  
9 confidence in the banking system, but as Moody's noted, "bank stress has added  
10 uncertainty to the outlook."<sup>22</sup>

11  
12 Q23. HOW HAVE THESE DEVELOPMENTS IMPACTED THE FEDERAL RESERVE'S  
13 MONETARY POLICIES?

14 A23. As of its policy meeting in May 2023, the Federal Open Market Committee ("FOMC")  
15 has responded to concerns over accelerating inflation by raising the benchmark range  
16 for the federal funds rate by a total of 5.00% since March 2022.<sup>23</sup> In addition to these  
17 increases, Chair Powell has surmised that the significant draw-down of its balance sheet  
18 holdings that began in June 2022 could be the equivalent of another one quarter percent

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<sup>20</sup> Bureau of Economic Analysis, *Personal Income and Outlays, March 2023* (April 28, 2023), BEA, available at <https://www.bea.gov/news/2023/personal-income-and-outlays-march-2023>.

<sup>21</sup> Federal Reserve, *Transcript of Chair Powell's Press Conference* (February 1, 2023), available at <https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20230201.pdf>.

<sup>22</sup> Moody's Investors Service, *Baseline US macro forecasts unchanged but outlook more uncertain* (April 12, 2023), Sector Comment.

<sup>23</sup> The FOMC is a committee composed of twelve members that serves as the monetary policymaking body of the Federal Reserve System.

1 rate hike over the course of a year.<sup>24</sup> In March 2023, Chair Powell noted that, “The  
2 process of getting inflation back down to 2 percent has a long way to go and is likely  
3 to be bumpy,”<sup>25</sup> with the recent banking crisis amply demonstrating these latent risks.  
4 More recently, Chair Powell confirmed that “we are continuing the process of  
5 significantly reducing our securities holdings,” but added that “It will take time ... for  
6 the full effects of monetary restraint to be realized, especially on inflation.”<sup>26</sup>

7  
8 Q24. WHAT IMPACT DO INFLATION EXPECTATIONS HAVE ON THE RETURN  
9 THAT EQUITY INVESTORS REQUIRE FROM ELL?

10 A24. Implicit in the required rate of return for long-term capital—whether debt or common  
11 equity—is compensation for expected inflation. This is highlighted in the textbook,  
12 *Financial Management, Theory and Practice*:

13 The four most fundamental factors affecting the cost of money are (1)  
14 production opportunities, (2) time preferences for consumption, (3) risk,  
15 and (4) inflation.<sup>27</sup>

16 In other words, a part of investors’ required return is intended to compensate for the  
17 erosion of purchasing power due to rising price levels. This inflation premium is added  
18 to the real rate of return (pure risk-free rate plus risk premium) to determine the nominal

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<sup>24</sup> Federal Reserve, *Transcript of Chair Powell’s Press Conference* (May 4, 2022), available at <https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20220504.pdf>.

<sup>25</sup> Federal Reserve, *Transcript of Chair Powell’s Press Conference* (March 22, 2023), available at <https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20230322.pdf>.

<sup>26</sup> Federal Reserve, *Transcript of Chair Powell’s Press Conference* (May 3, 2023), available at <https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20230503.pdf>.

<sup>27</sup> Eugene F. Brigham, Louis C. Gapenski, and Michael C. Ehrhardt, *Financial Management, Theory and Practice*, 126 (1999).

1 required return. As a result, higher inflation expectations lead to an increase in the cost  
2 of equity capital.

3  
4 Q25. HAVE THESE DEVELOPMENTS IMPACTED THE RISKS FACED BY UTILITIES  
5 AND THEIR INVESTORS?

6 A25. Yes. Moody's has assigned a "negative" outlook to the regulated utilities sector, citing  
7 "increasingly challenging business and financial conditions stemming from higher  
8 natural gas prices, inflation and rising interest rates."<sup>28</sup> Fitch Ratings, Inc. noted that  
9 its deteriorating outlook for utilities "reflects mounting cost pressures for electric and  
10 gas utilities due to elevated commodity prices, inflationary headwinds and rising  
11 interest costs."<sup>29</sup>

12 Meanwhile, S&P reported that since 2020 credit ratings downgrades in the  
13 utility sector have outpaced upgrades by more than 3 to 1, with the median rating falling  
14 to the triple-B category for the first time.<sup>30</sup> S&P noted that, while inflation has  
15 moderated, it will continue to pressure credit quality in the utility industry, along with  
16 rising interest rates and higher capital spending.<sup>31</sup> Value Line echoed these sentiments  
17 for electric utilities, concluding that:

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<sup>28</sup> Moody's Investors Service, *Regulated Gas Utilities--US, 2023 Outlook Negative Due to Higher Natural Gas Prices, Inflation and Rising Interest Rates*(November 10, 2022) Outlook.

<sup>29</sup> Fitch Ratings, Inc., *North American Utilities, Power & Gas Outlook 2023* (December 7, 2022).

<sup>30</sup> S&P Global Ratings, *The Outlook for North American Regulated Utilities Turns Stable*, (May 18, 2023) RatingsDirect.

<sup>31</sup> *Id.*

1           The current macroeconomic environment is a challenging period for this  
2           group. The main difficulties are wage inflation, higher interest rates,  
3           and high commodity prices for raw materials and purchased power.<sup>32</sup>

4

5    Q26. DO CHANGES IN UTILITY COMPANY BETA VALUES CORROBORATE AN  
6           INCREASE IN INDUSTRY RISK?

7    A26. Yes. Beta measures a stock's price volatility relative to the market as a whole and  
8           reflects the tendency of a stock's price to follow changes in the market. A stock that  
9           tends to respond less to market movements has a beta less than 1.00, while stocks that  
10          tend to move more than the market have betas greater than 1.00. Beta is the only  
11          relevant measure of investment risk under modern capital market theory and is widely  
12          cited in academics and in the investment industry as a guide to investors' risk  
13          perceptions.

14               As shown subsequently in Table 2, the average beta for the Utility Group is  
15               0.90.<sup>33</sup> Prior to the pandemic, the average beta for this same group of electric utilities  
16               was 0.56.<sup>34</sup> The significant shift in pre- and post-pandemic beta values for the Utility  
17               Group is further exemplified in Figure 1 below: As illustrated there, average beta value  
18               for the Utility Group increased significantly with the beginning of the pandemic in  
19               March 2020, continued to increase during 2021, and has remained elevated. This  
20               dramatic increase in a primary gauge of investors' risk perceptions is further proof of  
21               the rise in the risk of utility common stocks.

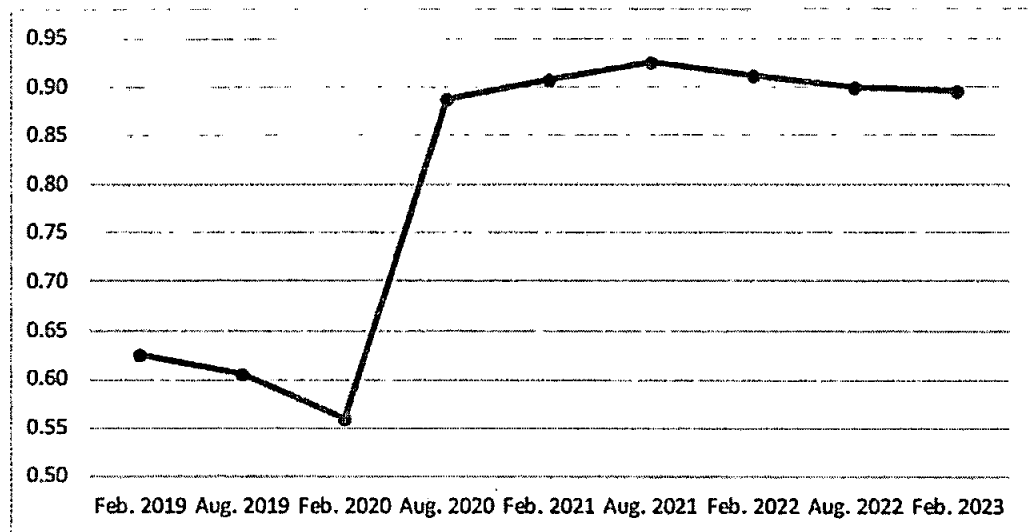
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<sup>32</sup> The Value Line Investment Survey, *Electric Utility (West) Industry* (April 21, 2023).

<sup>33</sup> As indicated on Exhibit AMM-7, this is based on data as of May 5, 2023.

<sup>34</sup> The Value Line Investment Survey, *Summary & Index* (February 14, 2020).

**FIGURE 1**  
**UTILITY GROUP BETA VALUES**



Q27. HAVE INCREASED RISKS AND HIGHER INFLATION RESULTED IN HIGHER CAPITAL COSTS?

A27. Yes. While the cost of equity is unobservable, yields on long-term bonds provide a widely referenced benchmark for the direction of capital costs, including required returns on common stocks. Table 1 below compares the average yields on Treasury securities and Baa-rated public utility bonds during March 2023 with those prevailing in May 2021, when ELL's Formula Rate Plan ("FRP") was last extended with a midpoint ROE of 9.5%.<sup>35</sup>

<sup>35</sup> See, Order No. U-35565 (May 19, 2021), *In re: Application for Extension and Modification of Formula Rate Plan*, Docket No. U-35565 Order.

**TABLE 1**  
**BOND YIELD TRENDS**

<b>Series</b>	<b>April 2023</b>	<b>May 2021</b>	<b>Change (bps)</b>
10-Year Treasury Bonds	3.46%	1.62%	184
30-Year Treasury Bonds	3.69%	2.32%	137
Baa Utility Bonds	5.47%	3.58%	189

Source: <https://fred.stlouisfed.org/series/GS30>; Moody's Credit Trends.

As shown above, trends in bond yields document a substantial increase in the returns on long-term capital demanded by investors. With respect to utility bond yields—which are the most relevant indicator in gauging the implications for the Company's common equity investors—average yields are now almost 190 basis points above the level prevailing at the time the Commission approved the extension and modification of ELL's FRP.

Q28. WHAT IMPLICATIONS DO THESE TRENDS HAVE IN EVALUATING A FAIR ROE FOR ELL?

A28. The upward move in interest rates demonstrates that long-term capital costs—including the cost of equity—have increased significantly. Exposure to rising interest rates, inflation, and capital expenditure requirements also reinforce the importance of buttressing ELL's credit standing. Considering the potential for financial market instability, competition with other investment alternatives, and investors' sensitivity to risk exposures in the utility industry, maintaining credit strength is a key ingredient in maintaining access to capital at reasonable cost.

1 Q29. WOULD IT BE REASONABLE TO DISREGARD THE IMPLICATIONS OF  
2 CURRENT CAPITAL MARKET CONDITIONS IN ESTABLISHING A FAIR ROE  
3 FOR ELL?

4 A29. No. They reflect the reality in which ELL must attract and retain capital. The standards  
5 underlying a fair rate of return require an authorized ROE for the Company that is  
6 competitive with other investments of comparable risk and sufficient to preserve its  
7 ability to maintain access to capital on reasonable terms. These standards can only be  
8 met by considering the requirements of investors over the time period when the rates  
9 established in this proceeding will be in effect. If the upward shift in investors' risk  
10 perceptions and required rates of return for long-term capital is not incorporated in the  
11 allowed ROE, the results will fail to meet the comparable earnings standard that is  
12 fundamental in determining the cost of capital. From a more practical perspective,  
13 failing to provide investors with the opportunity to earn a rate of return commensurate  
14 with ELL's risks will weaken its financial integrity and hamper the Company's ability  
15 to attract the capital necessary to provide safe and reliable service at the lowest  
16 reasonable cost.

17  
18 **IV. COMPARABLE RISK PROXY GROUP**

19 Q30. WHAT IS THE PURPOSE OF SECTION IV OF YOUR DIRECT TESTIMONY?

20 A30. Section IV of my direct testimony explains the basis for the proxy group I used to  
21 estimate the cost of equity, examines alternative objective indicators of investment risk  
22 for these firms, and compares the investment risks applicable to ELL with my reference  
23 group.



1 Q31. WHAT KEY PRINCIPLES UNDERPIN THE EVALUATION OF A PROXY  
2 GROUP?

3 A31. The United States Supreme Court's *Hope* and *Bluefield* decisions establish a standard  
4 of comparison between a subject utility and other companies of comparable risk in  
5 determining a just and reasonable ROE. The generally accepted approach is to select  
6 a group of companies that are of similar risk to the subject utility (the "proxy group"),  
7 and then to perform various quantitative analyses based on the proxy group to estimate  
8 investors' required returns. The results of these analyses, in turn, are used to evaluate  
9 a range of reasonableness and a final recommendation for the ROE attributable to the  
10 subject utility.

11

12 **A. Determination of the Proxy Group**

13 Q32. HOW DO YOU IMPLEMENT QUANTITATIVE METHODS TO ESTIMATE THE  
14 COST OF COMMON EQUITY FOR ELL?

15 A32. Application of quantitative methods to estimate the cost of common equity requires  
16 observable capital market data, such as stock prices and beta values. Moreover, even  
17 for a firm with publicly traded stock, the cost of common equity can only be estimated.  
18 As a result, applying quantitative models using observable market data only produces  
19 an estimate that inherently includes some degree of observation error. Thus, the  
20 accepted approach to increase confidence in the results is to apply quantitative methods  
21 to a proxy group of publicly traded companies that investors regard as risk comparable.  
22 The results of the analysis on the sample of companies are relied upon to establish a  
23 range of reasonableness for the cost of equity for the specific company at issue.

1 Q33. HOW DO YOU IDENTIFY THE PROXY GROUP OF UTILITIES RELIED ON FOR  
2 YOUR ANALYSES?

3 A33. To reflect the risks and prospects associated with ELL's jurisdictional utility operations,  
4 I began with the following criteria to identify a proxy group of utilities:

- 5 1. Included in the Electric Utility Industry groups compiled by Value Line.
- 6 2. Corporate credit ratings from Moody's and S&P that fall within one notch  
7 of the Company's current ratings. For Moody's, this resulted in a ratings  
8 range of Baa2, Baa1, and A3; for S&P the range is BBB, BBB+, and A-.
- 9 3. Paid common dividends over the last six months and have not announced  
10 a dividend cut since that time.
- 11 4. No ongoing involvement in a major merger or acquisition that would  
12 distort quantitative results.

13 These criteria result in a proxy group of twenty-nine companies, which I refer  
14 to as the "Utility Group."<sup>36</sup>

15

16 **B. Relative Risks of the Utility Group and ELL**

17 Q34. HOW DO YOU EVALUATE INVESTORS' RISK PERCEPTIONS FOR THE  
18 UTILITY GROUP?

19 A34. My evaluation of relative risk considers five published benchmarks that are widely  
20 relied on by investors; namely, credit ratings from Moody's and S&P, along with Value  
21 Line's Safety Rank, Financial Strength Rating, and beta values. Credit ratings are  
22 assigned by independent rating agencies for the purpose of providing investors with a  
23 broad assessment of the creditworthiness of a firm. Ratings generally extend from  
24 triple-A (the highest) to D (in default). Other symbols (e.g., "+" or "-") are used to

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<sup>36</sup> Of these twenty-nine companies, twenty are combination electric/natural gas utilities, while nine are electric utilities.

1 show relative standing within a category. Because the rating agencies' evaluation  
2 includes all of the factors normally considered important in assessing a firm's relative  
3 credit standing, corporate credit ratings provide broad, objective measures of overall  
4 investment risk that are readily available to investors. Widely cited in the investment  
5 community and referenced by investors, credit ratings are also frequently used as a  
6 primary risk indicator in establishing proxy groups to estimate the cost of common  
7 equity.

8 While credit ratings provide the most widely referenced benchmark for  
9 investment risks, other quality rankings published by investment advisory services also  
10 provide relative assessments of risks that are considered by investors in forming their  
11 expectations for common stocks. Value Line's primary risk indicator is its Safety Rank,  
12 which ranges from "1" (Safest) to "5" (Riskiest). This overall risk measure is intended  
13 to capture the total risk of a stock and incorporates elements of stock price stability and  
14 financial strength. Given that Value Line is perhaps the most widely available source  
15 of investment advisory information, its Safety Rank provides useful guidance regarding  
16 the risk perceptions of investors.

17 The Financial Strength Rating is designed as a guide to overall financial  
18 strength and creditworthiness, with the key inputs including financial leverage,  
19 business volatility measures, and company size. Value Line's Financial Strength  
20 Ratings range from "A++" (strongest) down to "C" (weakest) in nine steps. These  
21 objectives, published indicators incorporate consideration of a broad spectrum of risks,  
22 including financial and business position, relative size, and exposure to firm-specific  
23 factors.

As discussed previously, beta measures a utility's stock price volatility relative to the market, with higher betas indicating greater risk.

Q35. HOW DOES THE OVERALL RISK OF YOUR PROXY GROUP COMPARE TO ELL?

A35. Table 2 compares the Utility Group with the Company across the five key indices of investment risk discussed above. Because ELL has no publicly traded common stock, the Value Line risk measures shown reflect those published for its parent, Entergy.

**TABLE 2**  
**COMPARISON OF RISK INDICATORS**

	S&P	Moody's	Value Line		
			Safety Rank	Financial Strength	Beta
Utility Group	BBB+	Baa2	2	A	0.90
ELL	BBB+	Baa1	2	B++	0.95

Q36. WHAT DOES THIS COMPARISON INDICATE REGARDING INVESTORS' ASSESSMENT OF THE RELATIVE RISKS ASSOCIATED WITH YOUR UTILITY GROUP?

A36. ELL's S&P rating is identical to the average for the Utility Group, while the average Moody's credit rating corresponding to the Utility Group is one notch lower than the Baa1 rating assigned to the Company. The Value Line Safety Rank corresponding to ELL is identical to that of the Utility Group, while the average Financial Strength rating and beta value for the Utility Group indicate slightly lower risk than the Company. Considered together, a comparison of these objective risk measures indicates that

1 investors would likely conclude that the overall investment risks for the firms in the  
2 Utility Group are comparable to those of ELL.  
3

4 Q37. IN EVALUATING A FAIR ROE, IS IT APPROPRIATE TO CONSIDER THE  
5 SPECIFIC RISK EXPOSURES FACED BY ELL?

6 A37. Yes. Besides risks that all utilities in the industry face, ELL is confronted by several  
7 other risk factors that distinguish the Company from the comparable group. These  
8 factors include risks associated with ownership of nuclear-powered generating  
9 facilities, a service area located in a hurricane-prone region, and a customer base with  
10 a high concentration of industrial users. It is imperative that ELL possess sufficient  
11 financial strength so that it can respond effectively to the challenges that these attributes  
12 of its business profile may present, as described in the direct testimony of Company  
13 witnesses O'Malley and Shipman.  
14

15 Q38. HOW DOES ELL'S OWNERSHIP OF NUCLEAR-POWERED GENERATION  
16 INFLUENCE INVESTORS' RISK PERCEPTIONS?

17 A38. While nuclear generation confers significant advantages to customers and electricity  
18 markets through fuel cost savings, fuel diversity, and reduced emissions impacts,  
19 investors also associate nuclear power plants with risks that are not encountered with  
20 other sources of generation. As Moody's has previously noted:

1           We think nuclear generating plants are different, and should not be  
2           viewed through the same lenses as other generation supplies, such as  
3           base-load coal, natural gas or renewable generation.<sup>37</sup>

4           Nuclear power, while saving customers significant fuel and/or emissions costs and  
5           addressing reliability concerns, entails a level of complexity that is not typically seen  
6           in traditional forms of generation, which in turn can necessitate significant unexpected  
7           expenditures. S&P also recognized these additional risks and exposures posed by  
8           nuclear facilities:

9           Meanwhile, we continue to view nuclear plants as a comparatively risky  
10          source of electricity because unexpected things happen despite the  
11          NRC's oversight – in fact, plant shutdowns sometimes occur  
12          specifically because of that oversight. When things do go wrong, the  
13          NRC is required to delay startup until both operating procedures and  
14          repaired or replaced equipment meet its increasingly higher standards.<sup>38</sup>

15          Moody's has also confirmed that "ownership of nuclear generating facilities brings a  
16          higher level of complexity associated with operating and maintaining the units."<sup>39</sup>

17          These concerns were exacerbated by the events at the Fukushima Daiichi  
18          nuclear complex in Japan, as S&P noted:

19          Standard & Poor's Ratings Service believes that the failure of the back-  
20          up safety systems will heighten scrutiny of the systematic risks for U.S.  
21          nuclear power generators. We aren't taking any rating actions at this  
22          time. Still, the failures and their consequences raise the likelihood of  
23          greater costs and enhanced regulatory oversight for existing U.S.  
24          facilities. A renewed public focus on the inherent risks of nuclear power  
25          will demand as much. This could result in delays in license-extension  
26          approvals and deteriorating economics for new plant construction. At

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<sup>37</sup> Moody's Investors Service, *Credit Opinion: Exelon Generation Company LLC*, (February 12, 2014) Global Credit Research.

<sup>38</sup> Standard & Poor's Ratings Services, *U.S. Utilities' Slow Approach Delays Nuclear Development, But Will Likely Help Their Credit Quality*, (May 1, 2013) RatingsDirect.

<sup>39</sup> Moody's Investors Service, *New Nuclear Generation in the United States: Keeping Options Open vs. Addressing an Inevitable Necessity*, (October 2007) Special Comment.

1           the same time, closure of nuclear power plants, either due to increased  
2           costs or regulatory action, might significantly affect U.S. electricity  
3           supply and have substantial capital spending implications for utilities.<sup>40</sup>

4           In addition, longer-term uncertainties regarding the disposal of spent fuel and the  
5           ultimate costs of decommissioning continue to accompany any investment in nuclear  
6           generating facilities. In order to mitigate these potential exposures, Moody's cited the  
7           importance of a constructive regulatory relationship and "a need to establish financial  
8           policies over the near-term aimed at producing very strong financial credit ratios in  
9           order to maintain a given rating."<sup>41</sup> These exposures, unique to nuclear generators,  
10          highlight the need for an ROE that accommodates these uncertainties and supports the  
11          Company's financial strength and ability to attract capital.

12  
13       Q39.   HAVE THE RATING AGENCIES RECOGNIZED THE IMPLICATIONS OF THE  
14           COMPANY'S NUCLEAR EXPOSURE?

15       A39.   Yes.   Moody's recently noted that, "The company also operates nuclear-fueled  
16           generation, which includes operational risks around spent fuel waste and pollution  
17           management of radioactive uranium."<sup>42</sup> S&P recently echoed these concerns, stating  
18           that, "We believe nuclear generation has a higher operating risk than other forms of  
19           power generation."<sup>43</sup>

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<sup>40</sup> Standard & Poor's Corporation, *The U.S. Nuclear Power Industry Looks at Japan and Awaits More Scrutiny* (March 16, 2011), Global Credit Research.

<sup>41</sup> Moody's Investors Service, *New Nuclear Generation in the United States: Keeping Options Open vs. Addressing an Inevitable Necessity* (October 2007), Special Comment.

<sup>42</sup> Moody's Investors Service, *Entergy Louisiana, LLC: Update following outlook change to stable* (July 19, 2023), Credit Opinion.

<sup>43</sup> S&P Global Ratings, *Entergy Louisiana LLC* (August 25, 2022), RatingsDirect.

1 Q40. DOES ELL ALSO ENCOUNTER SPECIFIC WEATHER-RELATED EXPOSURES?

2 A40. Yes. Because of its location, ELL must regularly contend with the consequences of  
3 destructive weather events, most notably, damaging hurricanes. Moody's recently  
4 noted that the Company operates in a "storm-prone service territory,"<sup>44</sup> adding:

5 While we have long cited the company's geographical footprint as a risk  
6 for ongoing storm activity, the frequency and severity of these storms  
7 was the most on record, and reflects a higher operating risk environment  
8 for ELL, compared to most utilities in the US. Due to the physical  
9 effects of climate change and the capital required to bolster  
10 infrastructure and recover from damaging events, we require ELL's  
11 financial profile to be more robust than the average utility, in order to  
12 maintain a given rating.<sup>45</sup>

13 Moody's has noted that, "If significant storm costs are not recovered on a timely basis"  
14 and "[a]nother major storm ... adds materially to unrecovered costs," these factors  
15 could lead to a downgrade.<sup>46</sup> S&P also recognized the Company's weather-related  
16 exposure, citing, "Exposure to severe hurricanes and storms within its service territory"  
17 as one of ELL's key risks, adding that, "Lack of sufficient system hardening limits the  
18 company's ability to protect against severe storms and increases its business risk  
19 relative to peers."<sup>47</sup>

20 In only the last two decades, ELL has felt the effects of Hurricanes Katrina and  
21 Rita in 2005; Hurricanes Gustav and Ike in 2008; Hurricane Isaac in 2012; Hurricanes  
22 Laura, Delta and Zeta in 2020; and Hurricane Ida in 2021, which S&P noted "was the

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<sup>44</sup> Moody's Investors Service, *Entergy Louisiana, LLC: Update Following Outlook Change to Stable* (July 19, 2023), Credit Opinion.

<sup>45</sup> *Id.*

<sup>46</sup> Moody's Investors Service, *Entergy Louisiana, LLC: Update to Credit Analysis* (October 4, 2022), Credit Opinion.

<sup>47</sup> S&P Global Ratings, *Entergy Louisiana LLC* (August 25, 2022), RatingsDirect.



1 most destructive hurricane in Louisiana since the 2005 Hurricane Katrina.”<sup>48</sup> Moody’s  
2 cited the extraordinary costs associated with ELL’s hurricane exposure in just the past  
3 several years, noting that, “The combination of Hurricanes Laura, Delta, Zeta and Ida  
4 over a two-year period was unprecedented in Louisiana and the nearly \$5.0 billion of  
5 storm damage they cause to ELL’s asset base, represented over 35% of ELL’s  
6 approximately \$14 billion in total rate base at the time.”<sup>49</sup>

7 As noted above, recovery from these unpredictable events can accumulate to  
8 billions of dollars in damages and repairs and requires ELL to mount large scale and  
9 costly recovery efforts. While the LPSC’s regulatory provisions relating to prudently  
10 incurred storm costs are generally viewed as supportive,<sup>50</sup> investors are still exposed to  
11 loss of revenues and other impacts during adverse weather conditions, including  
12 sometimes prolonged flooding, and restoration periods. This is a risk that is  
13 unmitigated by any mechanism for storm cost recovery. As S&P recently noted:

14 Without the appropriate regulatory compact and other risk mitigation,  
15 the financial aftermath of these events could be devastating to any  
16 individual utility, adding another layer of unpredictability that utilities  
17 must effectively manage.<sup>51</sup>

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<sup>48</sup> *Id.*

<sup>49</sup> Moody’s Investors Service, *Entergy Louisiana, LLC: Update Following Outlook Change to Stable* (July 19, 2023), Credit Opinion.

<sup>50</sup> ELL’s FRP helped to mitigate the impact of storm-related costs on rates and include proactive rate setting for the remediation of future costs (*i.e.*, storm reserves). Also, the LPSC issues financing orders allowing securitization and recovery of storm costs.

<sup>51</sup> S&P Global Ratings, *Can U.S. Utilities Weather the Storm?* (November 8, 2018).

1 Q41. IS WEATHER EXPOSURE FOR UTILITIES SUCH AS ELL INTENSIFYING?

2 A41. Yes. As Moody's recently noted in their review of the utility sector:

3 [O]ver the next 10 to 20 years, the risk of severe weather events, such  
4 as hurricanes and wildfires, will likely worsen in certain US regions,  
5 according to data from Moody's ESG Solutions. Meanwhile, the coastal  
6 regions in the Southeast and along the Gulf of Mexico are at the greatest  
7 risk of severe hurricanes. Stronger hurricanes, fueled by climate change,  
8 pose an ever-greater threat to coastal states' electric grids.<sup>52</sup>

9 S&P also recently noted that, "Physical risks such as exposure to wildfires, storms,  
10 extreme temperature events, and hurricanes, remains a considerable risk for the  
11 industry, and concluded that "over the past three years the U.S. experienced its highest  
12 level of damages ever from physical risks."."<sup>53</sup> As S&P summarized with respect to  
13 weather-related risk:

14 Not only do the frequency of these disasters appear to be increasing, but  
15 their costs are rising. The natural disasters that have occurred over the  
16 past decade have wiped out billions of dollars of assets over a relatively  
17 short period. Without the appropriate regulatory compact and other risk  
18 mitigation, the financial aftermath of these events could be devastating  
19 to any individual utility, adding another layer of unpredictability that  
20 utilities must effectively manage.<sup>54</sup>

21

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<sup>52</sup> Moody's Investors Service, *as Extreme Weather Events and Net-Zero Efforts Rise, ABS will Lower Utility Credit Risk*(November 9, 2022), Sector In-Depth.

<sup>53</sup> S&P Global Ratings, *The Outlook for North American Regulated Utilities Turns Stable*(May 18, 2023) RatingsDirect.

<sup>54</sup> S&P Global Ratings, *Can U.S. Utilities Weather the Storm?* (November 8, 2018), Comments.

1 Q42. WHAT IS "SECURITIZATION" IN THE CONTEXT OF STORM COST  
2 RECOVERY?

3 A42. "Securitization" refers to specific legislation and financing orders that allow utilities to  
4 fund storm related infrastructure investment and recovery costs through the issuance of  
5 securitized bonds, which generally have significantly lower interest rates as compared  
6 to a more traditional utility financing process. Following a major weather event, ELL  
7 incurs the costs to restore power and then files for recovery with the LPSC, which  
8 initiates a regulatory process that includes a review of expenditures. Once the LPSC  
9 issues a decision on the filing, securitization bonds are marketed and issued, with the  
10 proceeds being used to refund the Company for the deferred storm recovery costs.  
11 Meanwhile, the related financing costs associated with the securitized bonds are added  
12 as a line item on customers' bills.

13

14 Q43. IS SECURITIZATION A TYPE OF STORM COST RIDER?

15 A43. No. Securitization allows access to lower interest rates on debt incurred in order to  
16 finance storm recovery costs, but there are significant delays and regulatory hurdles in  
17 place that distinguish cost recovery under securitization from storm recovery riders. In  
18 discussing the management of regulatory risk in the context of storm recovery, S&P  
19 was careful to note the difference between securitization, storm recovery riders and  
20 reserve accounts, and to emphasize that ELL had access to securitization, but not rider  
21 recovery.<sup>55</sup> And while ELL has deposited \$290 million in a restricted escrow account

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<sup>55</sup> *Id.*

1 as a storm damage reserve for future storms, this balance is significantly less than the  
2 restoration costs experienced with recent hurricanes.

3

4 Q44. IS STORM COST RECOVERY POTENTIALLY INHIBITED BY CUSTOMER  
5 AFFORDABILITY?

6 A44. Yes. S&P recently noted that the financial solutions to intensifying natural disasters  
7 come with their own risks, such as customer affordability pressures:

8 While regulators generally allow utilities to recover prudently incurred  
9 costs from ratepayers, utilities are always cognizant of the effect rising  
10 costs have on customers' bills. As these bills increase, customers find it  
11 incrementally more difficult to pay, which often hampers a utility's  
12 ability to effectively manage regulatory risk. This predicament is a  
13 drawback in many of the financial solutions used to reduce weather-  
14 related risks, and if not well managed, may lead to unintended  
15 consequences.<sup>56</sup>

16

17 Q45. IS CUSTOMER AFFORDABILITY RELATED TO STORM COST RECOVERY AN  
18 ISSUE FOR ELL?

19 A45. Yes. While the LPSC's regulatory framework and the precedent for storm cost  
20 securitization in Louisiana are generally viewed as supportive by ratings agencies, the  
21 practical realities of increasing customer bills and related customer affordability could  
22 weaken the Company's financial position. Moody's summarized these dynamic issues:

23 While Louisiana has been supportive of the recovery of these exogenous  
24 costs to date, customer affordability issues will remain an ongoing  
25 challenge for ELL, since management is looking to accelerate storm  
26 hardening efforts of its transmission and distribution assets. These rising  
27 capital costs, on top of inflation, high interest rates and other economic

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<sup>56</sup> *Id.*

1 pressures, could result in challenged customer relations and the prospect  
2 of political intervention into rate making, which would make ELL's  
3 financial improvement more difficult.<sup>57</sup>

4 S&P also took note of the practical complexities of storm cost recovery in Louisiana:

5 Although the state has a well-established law that enables utilities to  
6 seek securitization to recover such costs, increasing commodity prices,  
7 interest rates, inflationary pressures, and the company's robust capital  
8 spending could all pressure the customer bill, potentially weakening the  
9 company's consistent ability to effectively manage regulatory risk.

10 These statements illustrate that even though the LPSC allows for the financing of storm  
11 costs through securitization, such cost recovery in practice is not a simple matter. The  
12 hard reality of unpredictable and costly storms in ELL's service territory increases  
13 ELL's risk profile, even within a supportive regulatory environment.

14  
15 Q46. WHAT DOES THE EVIDENCE SUGGEST WITH REGARD TO ELL'S ABILITY  
16 TO RECOVER RECENT STORM COSTS ON A TIMELY BASIS?

17 A46. ELL lacks access to storm rider recovery, and the process of securitization necessarily  
18 involves a degree of uncertainty and regulatory lag. In ELL's case, the regulatory lag  
19 associated with securitization has been significant in recent years. For example,  
20 Hurricanes Laura, Delta and Zeta impacted ELL's service area in August and October  
21 of 2020. Winter Storm Uri caused extensive damage to ELL's transmission and  
22 distribution system in February 2021 and Hurricane Ida caused yet more destruction in  
23 September 2021. But it wasn't until May 2022 that a \$3.2 billion securitization closed

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<sup>57</sup> Moody's Investors Service, *Entergy Louisiana, LLC: Update to Credit Analysis* (October 4, 2022), Credit Opinion.

1 to finance the costs of the 2020 hurricanes, February 2021 winter storms, and a portion  
2 of Hurricane Ida. Another \$1.5 billion securitization closed in March 2023 to address  
3 the remaining costs associated with Hurricane Ida from 2021. These recent examples  
4 highlight the fact that despite the Company's constructive collaboration with the LPSC  
5 to ameliorate the financial impacts of extreme weather events, ELL's investors remain  
6 exposed to significant regulatory lag and risk in the context of cost recovery, even with  
7 ELL's access to the securitization process.

8 Moreover, at the rate that ELL has been accumulating securitized debt in recent  
9 years and considering the potential impact on affordability, investors are likely to  
10 question ELL's continuing ability to securitize recovery costs of future storms. As S&P  
11 summarized for investors, "While we view securitization as a good backstop for storm  
12 restoration costs, securitization takes time to receive the ultimate funds and takes up  
13 headroom in the customer bill, potentially increasing the risk of the company  
14 consistently managing regulatory risk."<sup>58</sup>

15  
16 Q47. DO THESE WEATHER-RELATED RISKS HAVE IMPLICATIONS FOR ELL'S  
17 FINANCIAL POSITION?

18 A47. Yes. In addition to increasing ELL's overall risk profile (which in turn has a direct  
19 impact on requirements for financial strength), the service territory's exposure to  
20 adverse weather impacts has a direct impact on the Company's need for financial  
21 strength. ELL must maintain ready access to larger reserves of credit and liquidity than

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<sup>58</sup> S&P Global Ratings, *Entergy Louisiana LLC* (August 25, 2022), RatingsDirect.

1 most other utilities. Given the high value that ELL and its customers place on service  
2 availability and reliability, rapid restoration of service after a weather-induced outage  
3 is the Company's highest priority. ELL must be able to marshal both internal and  
4 external resources on a massive scale very quickly, and this leads to an extraordinary  
5 need for credit and liquidity. Restoration efforts must be funded long before the  
6 recovery of prudently incurred costs can be expected. A financially strong utility will  
7 be better prepared to deal with these situations when they inevitably arise, ultimately  
8 benefiting impacted customers.

9  
10 Q48. HAS ELL'S FINANCIAL STRENGTH RECENTLY BEEN IMPACTED BY  
11 WEATHER EXPOSURE?

12 A48. Yes. ELL was downgraded to BBB+ by S&P in September 2021 due to weakened  
13 financial metrics in the wake of Hurricane Ida and the associated storm damage earlier  
14 that year. S&P explained the downgrade:

15 [W]e downgraded ELL to 'BBB+' from 'A-' due to the large restoration  
16 costs for its transmission and distribution (T&D) infrastructure  
17 following Ida, increasing near-term capital spending, and operating  
18 expenses. We revised the comparable ratings analysis (CRA) modifier  
19 to negative, reflecting ELL's position at the lower end of the excellent  
20 business risk profile compared with peers, in part due to the limited  
21 ability for the utility to protect against severe storms.<sup>59</sup>

22  

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<sup>59</sup> S&P Global Ratings, *Credit FAQ: Entergy Corp.'s Energy Transition and Ongoing Storm Costs Stress Financial Measures* (January 13, 2022).

1 Q49. WHAT CONCLUSIONS SHOULD THE LPSC DRAW FROM YOUR REVIEW OF  
2 ELL'S WEATHER EXPOSURE?

3 A49. ELL's service area faces extreme exposure to the catastrophic damage of tropical  
4 storms and hurricanes. In addition to emphasizing the importance of the basic principle  
5 that prudently incurred restoration costs are recoverable as part of the cost of providing  
6 service, my evaluation also shows why it is in customers' interests for a utility to  
7 maintain adequate financial strength to deal with the kind of extreme weather events  
8 that may affect its service territory. ELL's overall risk profile is increased by the nature  
9 of its service area and its requirements for financial strength are greater than most other  
10 utilities for the same reason.

11 While the investment community recognizes that the LPSC has been generally  
12 supportive in permitting recovery of the costs of storm damage, the Company  
13 nonetheless must maintain the financial strength and liquidity necessary to mounting a  
14 rapid and far-reaching response in the likely event of a future hurricane strike. This  
15 requirement for financial strength should be considered in evaluating a fair ROE for  
16 ELL.

17

18 Q50. PLEASE DESCRIBE THE CONCEPT OF ATTRITION AS IT RELATES TO  
19 RATEMAKING.

20 A50. Attrition is the deterioration of the actual return below the allowed return that occurs  
21 when the relationships between revenues, costs, and rate base used to establish rates do  
22 not reflect the actual costs incurred to serve customers during the period that rates are  
23 in effect. For example, if external factors are driving costs to increase more than



1 revenues, then the rate of return will fall short of the allowed return even if the utility  
2 is operating efficiently. Similarly, when growth in the utility's investment outstrips the  
3 rate base used for ratemaking, the earned rate of return will fall below the allowed  
4 return through no fault of the utility's management. These imbalances can be  
5 exacerbated due to regulatory lag between the time when the data used to establish rates  
6 is measured and the date when the rates go into effect.

7

8 Q51. APART FROM STORM COST DEFERRALS, ARE ELL'S INVESTORS  
9 CONCERNED WITH THE IMPACT OF ATTRITION MORE GENERALLY?

10 A51. Yes. Investors are most concerned with the return they can reasonably expect to earn  
11 in the future, not simply the allowed ROE or what they might expect in theory if a  
12 historical test year were to repeat. To be fair to investors and to benefit customers, a  
13 regulated utility must have an *opportunity to actually earn a reasonable return* that  
14 will maintain financial integrity, facilitate capital attraction, and compensate for risk.  
15 In other words, it is the end result in the future that determines whether or not the *Hope*  
16 and *Bluefield* standards are met. S&P observed that its analysis "centers on the utility's  
17 ability to consistently earn the authorized ROE,"<sup>60</sup> and noted that, "The regulatory  
18 framework/regime's influence is of critical importance when assessing regulated  
19 utilities' credit risk because it defines the environment in which a utility operates and

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<sup>60</sup> Standard & Poor's Corporation, *Key Credit Factors for The Regulated Utilities Industry* (November 19, 2013), RatingsDirect, *Id.* at 12 (emphasis added). See also, Standard & Poor's Corporation, *Assessing U.S. Utility Regulatory Environments* (November 7, 2008), RatingsDirect (concluding that, "Notably, the analysis does not revolve around "authorized" returns, but rather on actual earned returns. We note the many examples of utilities with healthy authorized returns that, we believe, have no meaningful expectation of actually earning that return because of rate case lag, expense disallowances, etc.").