

Exhibit No.: _____
Issues: Acquisition of Wind Projects, Tax
Equity Compliance, Capital Structure
Witness: Todd Mooney
Type of Exhibit: Direct Testimony
Sponsoring Party: The Empire District
Electric Company
Case No.: ER-2021-0312
Date Testimony Prepared: May 2021

**Before the Public Service Commission
of the State of Missouri**

Direct Testimony

of

Todd Mooney

on behalf of

The Empire District Electric Company

May 2021



****DENOTES CONFIDENTIAL****
20 CSR 4240-2.135(2)(A)8

HCDENOTES HIGHLY CONFIDENTIAL*****HC*****
20 CSR 4240-2.135(4)

PUBLIC VERSION

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THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION
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DIRECT TESTIMONY OF TODD MOONEY
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1 **I. INTRODUCTION**

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

3 A. My name is Todd Mooney. My business address is 354 Davis Road, Oakville, ON L6J
4 2X1.

5 **Q. By whom are you employed and in what capacity?**

6 A. I am Vice President, Finance & Administration at Liberty Utilities (Canada) Corp., a
7 subsidiary of Algonquin Power & Utilities Corp. (“APUC”), which is the ultimate
8 corporate parent of The Empire District Electric Company (“Empire” or the
9 “Company”).

10 **Q. On whose behalf are you testifying in this proceeding?**

11 A. I am testifying on behalf of Empire.

12 **Q. Please describe your educational and professional background.**

13 A. I hold a Master of Accounting from the University of Waterloo and am a Chartered
14 Accountant. I have worked for APUC since January 2012 in a variety of capacities,
15 including as Director of Finance and Administration and Vice President of Finance and
16 Administration for Algonquin Power Co., APUC’s non-regulated generation
17 subsidiary. In my current position as Vice President, Finance & Administration, I lead
18 the Financial Reporting, Accounting & Tax function for APUC, representing a team of
19 over 100 professionals responsible for external reporting under US GAAP,
20 consolidations, accounting standards, regulatory accounting, fixed asset accounting,
21 accounts payable, general accounting and income tax planning and compliance. Prior

1 to my work at APUC, I was employed as the Director of Corporate Finance at Psion
2 PLC where I led Psion's global accounting, tax, and treasury functions.

3 **Q. Have you previously testified before the Missouri Public Service Commission**
4 **("Commission") or any other regulatory agency?**

5 A. Yes. I testified before the Commission in File No. EO-2018-0092 (Application of The
6 Empire District Electric Company for Approval of its Customer Savings Plan) and File
7 No. EA-2019-0010 (Application of The Empire District Electric Company for
8 Certificates of Convenience and Necessity Related to Wind Generation Facilities). I
9 have also testified before the Arkansas Public Service Commission, the Kansas
10 Corporation Commission and the Oklahoma Corporation Commission in dockets
11 relating to Empire's wind generation facilities and before the California Public Utilities
12 Commission.

13 **Q. What is the purpose of your Direct Testimony in this proceeding?**

14 A. The purpose of my testimony is to describe Empire's acquisition of three wind holding
15 companies that own approximately 600 megawatts ("MW") of wind generation for
16 which Empire seeks cost recovery as a part of this general rate case. Specifically, my
17 testimony will: (a) describe Empire's acquisition, in conjunction with tax equity
18 financing, of the three holding companies (the "Wind Holding Companies") that,
19 through subsidiary project companies, own the 149.4 MW North Fork Ridge wind
20 project, the 149.4 MW Kings Point wind project, and the 301.0 MW Neosho Ridge
21 wind project (collectively, the "Wind Projects"); (b) demonstrate that the acquired
22 Wind Projects will deliver energy at an anticipated Levelized Cost of Energy ("LCOE")
23 that was shown to deliver substantial savings to Empire's customers, (c) demonstrate
24 how Empire's acquisition of the Wind Projects complies with the tax equity and other

1 requirements of the Commission’s Report and Order in File No. EA-2019-0010 (the
2 “CCN Order”), (d) describe Liberty Utilities Co.’s role in the development of the North
3 Fork Ridge and Kings Point Wind Projects, and; (e) provide details on Empire’s capital
4 structure and the overall weighted average rate of return recommendation for this case.
5 Details regarding each of the Wind Projects and how they are operating today are in
6 the Direct Testimony of Shaen T. Rooney, and the Direct Testimony of John J. Reed
7 discusses the Company’s proposed return on equity and the reasonableness of Empire’s
8 capital structure for ratemaking purposes.

9 **II. THE ACQUISITION OF THE WIND PROJECTS**

10 **Q. Was Empire previously authorized by the Commission to acquire the Wind**
11 **Holding Companies?**

12 **A.** Yes. In the June 19, 2019 Order in File No. EA-2019-0010 (the “CCN Order”), the
13 Commission ordered that:

- 14 1. The Empire District Electric Company is authorized to acquire an interest in the
15 holding companies that will own the project companies that will be constructing
16 and installing the Kings Point Wind Project, and is granted a certificate of
17 convenience and necessity to own, operate, maintain, and otherwise control and
18 manage the Kings Point Wind Project to be constructed in Barton, Dade, Jasper,
19 and Lawrence Counties in Missouri, including the infrastructure necessary for
20 the generators to operate as an integrated energy production facility and deliver
21 energy to the system.
22
- 23 2. The Empire District Electric Company is authorized to acquire an interest in
24 the holding companies that will own the project companies that will be
25 constructing and installing the North Fork Ridge Wind Project, and is granted
26 a certificate of convenience and necessity to own, operate, maintain, and
27 otherwise control and manage the North Fork Wind Project to be constructed
28 in Barton and Jasper Counties in Missouri, including the infrastructure
29 necessary for the generators to operate as an integrated energy production
30 facility and deliver energy to the system.

1 3. The Empire District Electric Company is authorized to acquire an interest in
2 the holding companies that will own the project companies that will be
3 constructing and installing the Neosho Ridge Wind Project, and is granted a
4 certificate of convenience and necessity to own, operate, maintain, and
5 otherwise control and manage the Neosho Ridge Wind Project to be
6 constructed in Neosho County, Kansas, including the infrastructure necessary
7 for the generators to operate as an integrated energy production facility and
8 deliver energy to the system.

9
10 CCN Order at 52-53.

11 **Q. When did Empire acquire the Wind Holding Companies?**

12 A. Empire, along with its tax equity partners Wells Fargo Central Pacific Holdings, Inc.
13 and JPM Capital Corporation (together, the “Tax Equity Partners”), acquired the
14 holding company for the North Fork Ridge Wind Project on January 27, 2021¹, the
15 holding company for the Neosho Ridge Wind Project on May 5, 2021, and the holding
16 company for the Kings Point Wind Project on May 5, 2021.

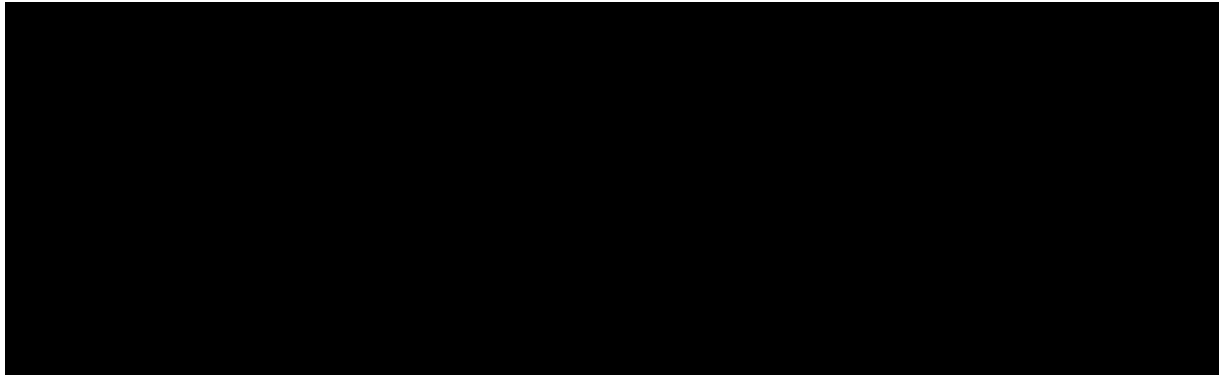
17 **III. SAVINGS TO EMPIRE’S CUSTOMERS FROM THE ACQUIRED WIND**
18 **PROJECTS**

19 **Q. What was the purchase price of the Wind Holding Companies and how does this**
20 **compare to the purchase price that was estimated in File No. Ea-2019-0010?**

21 A. The following table reflects the purchase price of the Wind Holding Companies as
22 compared to the projections from the CCN docket:

¹ The Tax Equity Partners made an initial 20% investment in the North Fork Ridge Wind Project on December 30, 2020, with the remaining 80% of their investment on January 27, 2021.

1 *HC* (entire table)



2

3 *HC*

4 The purchase price of the Wind Holding Companies was *HC*

5 [Redacted]

6 [Redacted]

7 [Redacted]

8 [Redacted]

9 [Redacted] *HC*

10 In File No. EA-2019-0010, the Company estimated that the purchase for the

11 Wind Holding Companies would be *HC*

12 [Redacted]

13 [Redacted]

14 [Redacted]

15 [Redacted]

16 [Redacted] *HC*

² Cost estimates as of March 30, 2021. Final costs will be provided as part of the update period, which is as of June 30, 2021.

1 **Q. With its acquisition of the Wind Holding Companies, will Empire deliver the**
2 **expected savings to customers?**

3 A. Yes. In 2018, Empire projected that the Wind Projects would have a Levelized Cost
4 of Energy (“LCOE”) of *HC* [REDACTED] *HC* and based on this, would deliver
5 approximately \$169 million in savings customers over twenty years. During the CCN
6 docket, Empire estimated that the LCOE would be *HC* [REDACTED] *HC*. The LCOE of
7 the Wind Projects is *HC* [REDACTED] *HC*, slightly lower than the originally forecasted
8 LCOE in 2019.

9 While the increase to the purchase price and the decrease to up-front tax equity
10 funding has increased LCOE, this increase has been offset by increased energy
11 production, a decrease to operating expenses and a decrease to the cost of debt. Given
12 this result and given the extensive economic analysis that was performed in File No.
13 EO-2018-0092, Empire is confident that it will deliver the anticipated savings to
14 customers. Furthermore, as part of the Report and Order in File No. EA-2019-0010,
15 Empire agreed to provide a Market Price Protection Mechanism (EA-2019-0010, page
16 59, paragraph 6(p),) to provide customers with further assurance of savings. As Tisha
17 Sanderson explains in her Direct Testimony, the Market Price Protection Mechanism
18 measures the final revenue requirement associated with the Wind Projects against the
19 revenues they generate through sales of power into the Southwest Power Pool
20 Integrated Marketplace. If the revenues generated from wind sales is not enough to
21 cover the revenue requirement over a ten year period, the MPP provides \$52.5 million
22 of protection to the Company’s customers. Ms. Sanderson’s Direct Testimony

³ Cost estimates as of March 30, 2021. Final costs will be provided as part of the update period, which is as of June 30, 2021.

1 provides more detail on how those calculations will be performed over the ten year
2 period, but effectively, this mechanism protects customers against any such change in
3 the purchase price or LCOE of the Wind Projects.

4 **Q. What was the final cost of the Wind Projects, and how does it compare to the**
5 **estimates previously shared with the Commission?**

6 A. The total cost of the Wind Projects was *HC* [REDACTED]
7 [REDACTED] *HC*

8 **Q. Is this price within the expected range of deviation between a project estimate and**
9 **its final amount in the capital construction industry?**

10 A. Yes. The expected variance between the estimate and actual project cost depends on
11 the stage of project development when an estimate is made. As the project nears
12 completion, the expected range of deviation progressively becomes narrower. The table
13 below provides a summary view of these expected ranges at various stages of project
14 development published by the Association for the Advancement in Cost Engineering
15 (AACE International). As the table indicates, in the most detailed (Class 1 Definitive)
16 stage of project classification, the expected deviation range between estimate and actual
17 is between -10% to +15%, which places our wind projects' final cost-to-estimate
18 difference of +5.2% firmly in the middle of the range of expected outcomes. Given the
19 magnitude of this project, and the fact that it was completed during a global pandemic,
20 with key parts such as turbines coming from across the world and subject to COVID-
21 related manufacturing and shipping delays, we are pleased that we are able to deliver
22 the project very close to the projected capital expenditures and at effectively the
23 identical LCOE that was projected.

1 **AACE International Cost Classifications and Expected Ranges of Accuracy¹¹**

AACE Class	ANSI Classification	Typical Use	Project Definition	Expected Range of Accuracy		Other Terms
				Low Expected Actual Cost	High Expected Actual Cost	
Class 5	Order-of-Magnitude	Strategic Planning; Concept Screening	0% to 2%	-50% to -20%	+30% to +100%	ROM; Ballpark; Blue Sky; Ratio
Class 4		Feasibility Study	1% to 15%	-30% to -15%	+20% to +50%	Feasibility; Top-down; Screening; Pre-design
Class 3	Budgetary	Budgeting	10% to 40%	-20% to -10%	+10% to +30%	Budget; Basic Engineering Phase; Semi-detailed
Class 2	Definitive	Bidding; Project Controls; Change Management	30% to 75%	-15% to -5%	+5% to +20%	Engineering; Bid; Detailed Control; Forced Detail
Class 1		Bidding; Project Controls; Change Management	65% to 100%	-10% to -3%	+3% to +15%	Bottoms Up; Full Detail; Firm Price

2

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¹¹ AACE International Recommended Practice No. 18R-97: *Cost Estimate Classification System – As Applied in Engineering, Procurement, and Construction for the Process Industries*. – as referenced in the U.S. Department of Energy Cost Estimating Guide, DOE G 413.3-21 (p. 15).

9

Q. How much of the increase in costs do you attribute to COVID-19?

10

A. We estimate that the COVID-19 pandemic caused approximately *HC* [REDACTED] *HC* for the three Wind Projects.

11

Q. Did the Company make any efforts to mitigate those cost increases?

12

A. Absolutely. The Wind Projects received a number of force majeure notices from Vestas, the manufacturer of the turbines, claiming that they could not deliver the turbines on time due to covid-19. ** [REDACTED]

15

16

17

18

19

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] **

1 **Q. How does the settlement that Empire was able to achieve compare to the**
2 **experience of similar projects over the same timeframe?**

3 A. ****** [REDACTED]
4 [REDACTED] ****** We are very pleased that we were able to
5 leverage Algonquin’s extensive knowledge and expertise in the development of wind
6 farms to benefit Empire’s customers in this regard.

7 **Q. Other than COVID impacts, were there other circumstances that impacted some**
8 **of Wind Projects cost increases?**

9 A. Yes. Unfortunately, the Southwest Power Pool (“SPP”) has experienced significant
10 delays in processing applications in the interconnection queue, making it difficult to
11 obtain interconnection cost estimates from SPP at the beginning of the project.
12 Although Empire proactively endeavored to advance the SPP review process, including
13 by obtaining SPP’s approval to engage, and engaging, a third party to complete parts
14 of the interconnection study required for approval, SPP was unable to complete the
15 work by the deadline in the PSAs. Empire’s efforts ultimately did lead to the execution
16 of interconnection agreements in early November 2019. Anticipated interconnection
17 costs⁴ for the Neosho Ridge project increased by approximately \$8 million based on
18 updated information from SPP, while estimated interconnection⁴ and gen-tie costs for
19 the North Fork Ridge project increased by approximately \$3 million. Interconnection⁴
20 and gen-tie costs decreased by approximately \$13 million for the Kings Point Wind
21 Project based on information from SPP and the final cost of the gen-tie line. Similarly,
22 because of significant delays by the U.S. Army Corps of Engineers issuance of Clean

⁴ Cost estimates as of March 30, 2021 and are subject to further change pending results of SPP’s DISIS studies. Final costs will be provided as part of the update period, which is as of June 30, 2021.

1 Water Act 404 permits, there were costs to accelerate the construction of the Kings
2 Point and North Fork Ridge projects to keep the projects on schedule in order to meet
3 deadlines for project completion to qualify for PTCs.⁵ In addition, there were other
4 factors such as expanded setback requirements imposed by Neosho County in the case
5 of the Neosho Ridge project and an increased presence of intact rock and groundwater
6 within excavation zones that were discovered during project construction. **Highly**
7 **Confidential Schedule TM-1** presents a detailed explanation of the changes in the
8 purchase price.

9 **Q. Was Empire able to negotiate any contract provisions to reduce the costs of the of**
10 **the Wind Projects?**

11 A. Yes. As provided in Section 2.3(d) of the Purchase and Sale Agreements, any
12 electricity production delivered to the Southwest Power Pool's Integrated Marketplace
13 prior to Empire's acquisition of the Wind Projects results in a reduction to the purchase
14 price, estimated at *HC* [REDACTED] *HC*

15 **IV. COMPLIANCE WITH THE CCN ORDER**

16
17 **Q. Did the CCN order condition the grant of the CCN?**

18 A. Yes. The CCN Order contained a number of conditions, some of which I address below
19 and others of which are addressed in the Direct Testimony of witnesses Shaen T.
20 Rooney and Tisha Sanderson. My testimony will address the conditions that relate to
21 the planned ownership structure of the Wind Projects as well as all tax equity
22 conditions.

⁵ Note that at the time those acceleration costs were incurred, the PTC deadline was December 31, 2020. On May 27, 2020, the IRS extended the PTC deadline by one year to December 31, 2021 (Notice 2020-41).

1 **Q. Has Empire complied with the requirements in the CCN order regarding the**
2 **planned ownership structure of the Wind Projects?**

3 A. Yes. The CCN Order required the following:

4 Planned Ownership Structure. The Kings Point, North Fork Ridge, and
5 Neosho Ridge wind projects shall be accomplished using federal tax
6 incentives in conjunction with a tax equity structure. To create the tax
7 equity structure, Empire and a tax equity partner will own a holding company
8 for each Wind Project, each of which will be a direct subsidiary of Empire
9 (the “Wind Holdco”). Empire, via the Wind Holdco, will acquire a wind
10 project company (“Wind Project Co.”) that owns a specific Wind Project.
11 After approximately ten years of tax equity participation and Empire joint
12 ownership of the Wind Project Co. (through the Wind Holdco), Empire will
13 have the right to purchase the tax equity partner’s ownership interest in the
14 Wind Holdco, at which point Empire would wholly own the Wind Project Co.

15
16 CCN Order at 54.

17 As part of the acquisition process, all three holding companies were consolidated into
18 Empire Wind Holdings, LLC which is a direct subsidiary of Empire.⁶ Empire now
19 owns the Class B membership interests in Empire Wind Holdings, LLC and the Tax
20 Equity Partners own the Class A membership interests. This two class structure is
21 necessary to implement the tax equity structure, including the provision of the differing
22 allocations of tax benefits and cash distributions to the Tax Equity Partners and to
23 Empire as outlined in in the confidential table found in Paragraph 12.g.i. of the Non-
24 Unanimous Stipulation and Agreement to File No. EA-2019-0010. The rights of each
25 class of the Class A and Class B members is spelled out in the Limited Liability
26 Agreement (“LLCA”) for Empire Wind Holdings, LLC which is attached to my
27 testimony as **Highly Confidential Schedule TM-2.**

⁶ I describe further below how this meets the “planned ownership structure” requirements of the CCN Order.

1 **Q. What are the tax equity requirements from the CCN order?**

2 A. The CCN Order requires the following:

3 The following conditions shall apply to the transactions with the Tax Equity
4 Partner(s):

- 5 i. Empire, through its ownership in Wind Holdco(s), shall contract
6 with tax equity partner(s) (“TEPs”) for financing of the Wind
7 Projects (a tax equity agreement), which contracts shall include
8 terms for the approximate initial capital contribution,
9 approximate expected return, partnership taxable income
10 allocations for Years 1 to 10 (flip date) and thereafter, contingent
11 contributions Years 1 to 10, purchase option, and
12 creditworthiness, consistent with the parameters set out in the
13 confidential table found in Paragraph 12.g.i. of the *Non-*
14 *Unanimous Stipulation and Agreement*.
- 15 ii. Empire, through its ownership in the Wind Holdcos, shall enter
16 into any such tax equity agreements with a TEP, as evidenced
17 by an executed Term Sheet with one or more TEPs before
18 issuing the Notice to Proceed with Construction of that project;
- 19 iii. Within 30 days of when it executes a tax equity agreement
20 Empire shall file in File No. EA-2019-0010 a notice it has
21 executed the agreement and provide to each of the other
22 signatories a copy of that tax equity agreement; and
- 23 iv. The tax equity agreement that Empire executes for a Wind
24 Project must satisfy each and every one of the parameters in the
25 table above.

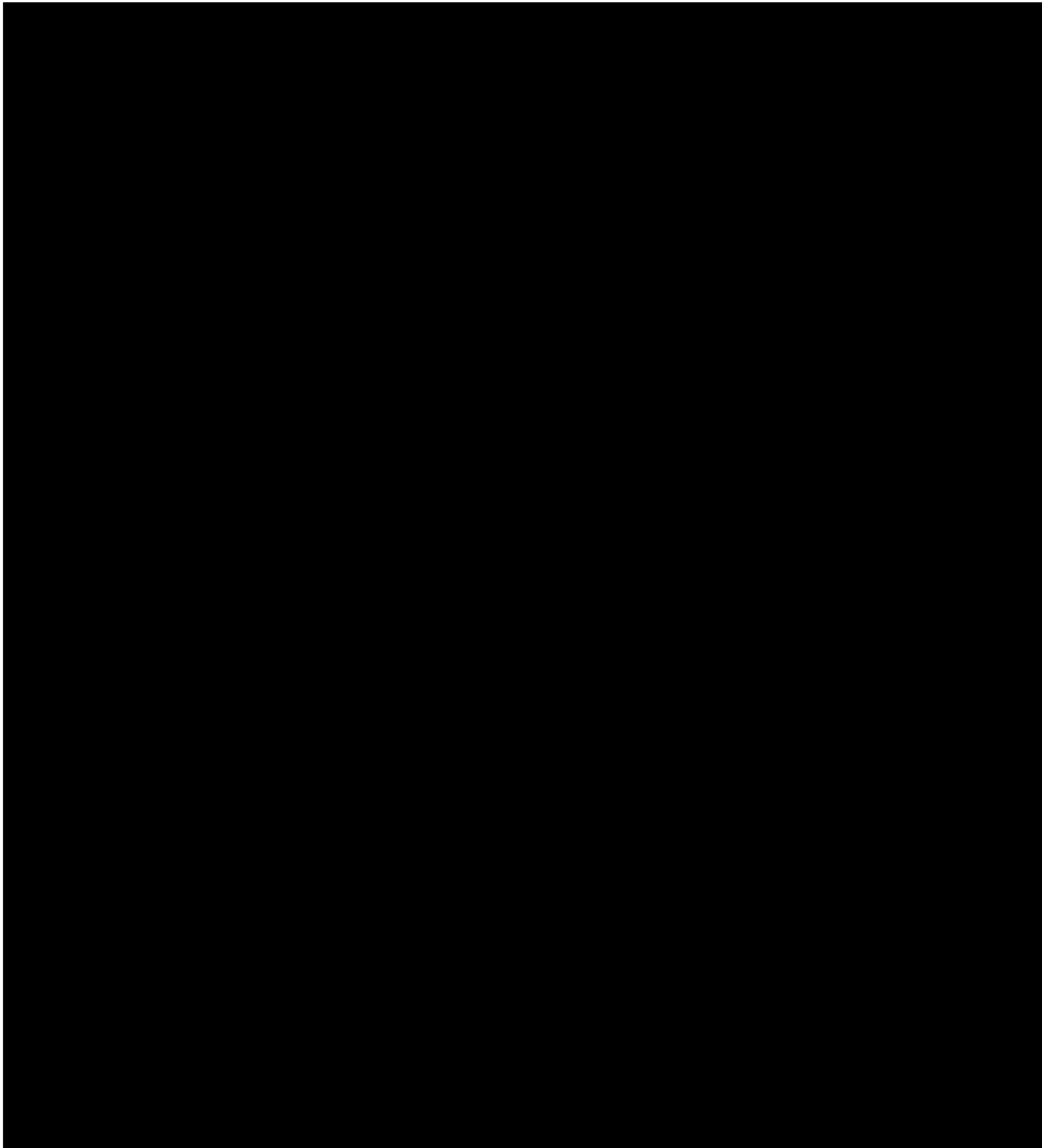
26
27 CCN Order at 56-57.

28 **Q. Has Empire satisfied these requirements?**

29 A. Yes. Empire entered into Equity Capital Contribution Agreements (“ECCAs”) with
30 the Tax Equity Partners for each of the Wind Projects⁷ and a LLCA (as described earlier
31 in my testimony) for the holding company of the Wind Projects, Empire Wind
32 Holdings, LLC. The ECCAs and LLCA set forth the terms and conditions of the Tax

⁷ Empire entered into the ECCA for the Neosho Ridge Wind Project on November 8, 2019 and which was filed with the Commission on November 13, 2019. The Neosho Ridge Wind ECCA was amended on December 30, 2020, the date on which Empire entered into the Kings Point and North Fork Ridge ECCAs so that all three agreements would have consistent terms and conditions. On January 25, 2021, Empire provided the requisite notice to the Commission of the North Fork Ridge and Kings Point ECCAs, and the First Amendment to the Neosho Ridge ECCA.

1 Equity Partners' investment in the Wind Projects. The following table identifies the
2 requirements from Paragraph 12.g.i and the final terms from the ECCAs and LLCA
3 and how each is met: *HC* (entire table)



HC

⁸ The “flip date” is the date at which the tax equity partner(s) has achieved its expected return, scheduled to be approximately 10 years from the commencement of commercial operations.

⁹ Contingent Contributions (referred to as “Paygo”) represent additional contributions of cash by the tax equity partners to Empire Wind Holdings, LLC based on actual production in excess of a threshold. Paygo contributions received by Empire Wind Holdings, LLC are distributed to Empire and hence reduce the cost of service to customers.

1 **V. PARTICIPATION OF LIBERTY UTILITIES CO. IN THE WIND PROJECTS**

2
3 **Q. Why did Liberty Utilities Co., Empire’s indirect parent company, assume a role**
4 **in the Wind Projects?**

5 A. On July 7, 2020, Liberty Utilities Co. (“LUCo”) stepped into the shoes of Tenaska
6 Missouri Matrix Wind Holdings, LLC (“Tenaska”) which was one of the two sellers of
7 the North Fork Ridge and Kings Point Wind Projects (the other seller being Steelhead
8 Missouri Matrix Wind Holdings, LLC). This resulted from Tenaska’s decision to
9 terminate its role in the projects when the Southwest Power Pool did not issue
10 interconnection agreements for the North Fork Ridge and Kings Point Wind Projects
11 in a timely manner, and because the U.S. Army Corps of Engineers did not timely issue
12 the 404 Permit. As the parent of Empire, LUCo desired that Empire’s customers have
13 the opportunity to benefit from the ownership of low-cost wind energy in the limited
14 remaining window for federal production tax credits that effectively boosted the
15 economics of wind power procurements. Empire and LUCo, as its designee to step
16 into the shoes of Tenaska, closely evaluated all available information and, based on
17 that information and expertise of their respective personnel, determined that adequate
18 time remained to complete the construction of the Kings Point and North Fork Ridge
19 Wind within acceptable cost and risk parameters that remained consistent with
20 Empire’s goals.

21 **Q. Why didn’t Empire step in and complete the Wind Projects rather than its parent**
22 **company?**

23 A. Empire did not itself elect to purchase Tenaska’s interest in the Wind Projects and
24 assume its obligations as a seller under the PSAs for two reasons. First, it was uncertain
25 whether Empire had received the necessary authorization from the MPSC to

1 consummate an immediate step-in at that stage of the Wind Projects. Second, while
2 Empire and LUCo had concluded that the Wind Projects could be continued within
3 acceptable cost and risk parameters, and setting aside any regulatory uncertainty,
4 having Empire step into Tenaska's shoes at that point would have resulted in Empire
5 assuming additional cost and timing risks as a developer. Therefore, LUCo stepped in,
6 assuming (along with Steelhead) the risks allocated to the sellers by the terms of the
7 PSAs. In doing so, LUCo preserved for Empire the protections afforded to Empire
8 under the PSAs with respect to remaining risks of construction and with respect to
9 satisfaction of other conditions to closing under the PSAs (all of which remain
10 unchanged in the amended and restated PSAs).

11 **Q. Will LUCo profit from the development of the North Fork Ridge and Kings Point**
12 **Wind Projects?**

13 A. No, it will not. To the extent that LUCo would be entitled to any development fee or
14 profits associated with the North Fork Ridge and Kings Point Wind Project, it will not
15 retain any such fees or profits. The amount of such profits, if any, that LUCo will
16 relinquish to Empire will be determined once final project costs are known in July,
17 2021.

18 **VI. CAPITAL STRUCTURE**

19
20 **Q. What is the purpose of this section of your testimony?**

21 A. This section of my testimony will present the proposed pro forma capital structure for
22 Empire and the overall weighted average rate of return recommendation for this case.
23 I will start by presenting Empire's, LUCo's, and Algonquin Power & Utilities Corp.'s
24 ("APUC") actual per books capital structures at September 30, 2020. Next, I show the
25 adjusted capital structure for these same three companies reflecting the pro forma

1 adjustments related to the acquisition of the three wind farms discussed earlier in my
2 testimony. I then make further adjustments to these adjusted capital structures
3 reflecting the results of the Commission's Order in Case No. ER-2019-0374. I will then
4 compare the resultant three adjusted capital structures to determine the most
5 economical for Empire in this case for purposes of complying with the financing
6 conditions in Case No. EM-2016-0213. Finally, I discuss the actual cost rate for
7 Empire's long-term debt including the pro formed long term debt changes. I then
8 combine the long term debt rate, witness Reed's cost of common equity
9 recommendation and my recommended capital structure ratios, resulting in the rate of
10 return of 7.03% proposed in this case. **Schedule TM-3** shows the weighted average
11 cost of capital calculations.

12 **Q. Why are you showing the capital structures for Empire, LUCo and APUC?**

13 A. Under the original Merger Order in Case No. EM-2016-0213, there were various
14 capital structure and financing conditions. Regarding capital structure, merger
15 stipulation provisions 4 and 5 from the 2016 Order essentially require a comparison of
16 Empire, LUCo and APUC's capital structures to determine the most economical for
17 purposes of determining a fair and reasonable allowed rate of return for Empire. Below
18 are the actual conditions:

19 4. Empire shall not seek an increase to the cost of capital as a result of this
20 Transaction or Empire's ongoing affiliation with Algonquin Power & Utilities
21 Corp. and its affiliates other than Empire after the Transaction. Any net
22 increase in the cost of capital Empire seeks shall be supported by documentation
23 that: (a) the increases are a result of factors not associated with the Transaction
24 or the post Transaction operations of Algonquin Power & Utilities Corp. or its
25 non-Empire affiliates; (b) the increases are not a result of changes in business,
26 market, economic or other conditions caused by the Transaction or the post-
27 Transaction operations of Algonquin Power & Utilities Corp. or its non-Empire
28 affiliates; and (c) the increases are not a result of changes in the risk profile of
29 Empire caused by the Transaction or the post-Transaction operations of

1 Algonquin Power & Utilities Corp. or its non-Empire affiliates. The provisions
2 of this section are intended to recognize the Commission's authority to
3 consider, in appropriate proceedings, whether this Transaction or the post
4 Transaction operations of Algonquin Power & Utilities Corp. or its non-Empire
5 affiliates has resulted in capital cost increases for Empire. Nothing in this
6 agreement shall restrict the Commission from disallowing such capital cost
7 increases from recovery in Empire's rates.
8

- 9 5. If Empire's per books capital structure is different from that of the entity or
10 entities in which Empire relies for its financing needs, Empire shall be required
11 to provide evidence in subsequent rate cases as to why Empire's per book capital
12 structure is the most economical for purposes of determining a fair and
13 reasonable allowed rate of return for purposes of determining Empire's revenue
14 requirement.
15

16 **Q. What capital structure do you recommend for Empire in this case?**

17 A. I recommend a capital structure of 52.44% common equity and 47.56% long-term debt.

18 This is based on Empire's consolidated actual capital structure at September 30, 2020,
19 pro formed for the wind farm financings and common equity changes through March
20 31, 2021. Empire's consolidated capital structure is comparable to its indirect parent
21 company, LUCo, and more economical than APUC's after pro forming the same wind
22 farm financing arrangements and any common equity changes to March 31, 2021 and
23 also the Case No. ER-2019-0374 case adjustments mentioned above. I will discuss
24 LUCo's and APUC's capital structures later in my testimony.

25 **Q. What was Empire's per books capital structure as of September 30, 2020?**

26 A. Schedule TM-3 attached to my testimony shows a common equity ratio of
27 approximately 59.35% and a long-term debt ratio of 40.65%.

28 **Q. What is Empire's consolidated capital structure after reflecting the pro forma**
29 **adjustments for the Wind Farm acquisitions?**

1 A. **Schedule TM-3** shows the pro forma consolidated capital structure for Empire is
2 52.44% common equity and 47.56% long-term debt based on the planned financings at
3 the Empire level to finance the rate base additions for the Wind Projects.

4 Q. **What were LUCo's and APUC's per books capital structures at September 30,**
5 **2020?**

6 A. **Schedule TM-4** shows LUCo's actual per books capital structure of 61.93% total
7 equity and 38.07% long-term debt, and **Schedule TM-5** shows APUC's actual per
8 books capital structure of 53.04% total equity, 1.94% preferred stock, 3.22%
9 redeemable non-controlling interest, held by related party and 41.80% long-term debt.

10 Q. **What are LUCo's and APUC's capital structure ratios after reflecting the pro**
11 **forma adjustments for the Wind Farm financing?**

12 A. **Schedules TM-4 and TM-5** show 62.38% total equity and 37.62% long-term debt for
13 LUCo and 52.74% total equity, 1.59% preferred stock, 2.64% redeemable non-
14 controlling interest, held by related party and 43.04% long-term debt for APUC.

15 Q. **Did you use these pro forma capital structures to determine the most economical**
16 **capital structure for Empire pursuant to financing conditions 4 and 5 from Case**
17 **No. EM-2016-0213 discussed previously?**

18 A. No, I did not. I started with these pro formed capital structures and then adjusted
19 LUCo's and APUC's based on the submitted testimony and exhibits of the OPC in
20 Case No. ER-2019-0374. In that Order the Commission appears to have adopted OPC's
21 recommended capital structure adjustments for LUCo and APUC to reach its final
22 capital structure decision for Empire. **Schedules TM-4 and TM-5** show LUCo and
23 APUC's resulting capital structures and ratios after reflecting similar OPC adjustments

1 to their adjusted capital structures at the end of the test period.¹⁰ **Schedule TM-4** shows
2 LUCO's total equity ratio at 52.79% and long-term debt at 47.21% **Schedule TM-5**
3 shows APUC's total equity ratio at 56.28%, 0.79% preferred stock, 2.64% redeemable
4 non-controlling interest, held by related party and 40.30% long-term debt after the
5 assumed adjustments from ER-2019-0374. equity ratio at 56.28%, 0.79% preferred
6 stock, 2.64% redeemable non-controlling interest, held by related party and 40.30%
7 long-term debt after the assumed adjustments from ER-2019-0374.

8 **Q. What is the proposed cost of debt included in the weighted average cost of capital?**

9 A. **Schedule TM-3** details Empire's outstanding long-term debt and costs including the
10 most recent notes payable issued to LUCo in 2018 and 2021. The initial Empire note
11 payable of \$90 million issued to LUCo in 2018 at an interest rate of 4.53% was
12 refinanced at 2.079% which reflects the cost of Liberty Utilities GP1 \$600 million
13 offering of Senior Notes in September 2020 (Green Bonds). Liberty Utilities GP1 is
14 the financing entity for LUCo. In addition, the proceeds from this note issuance were
15 used to pre-fund the acquisition of the three Wind Projects I discussed earlier. The
16 closing for these transactions occurred in 2021. The proceeds were initially used to
17 pay down short-term debt and for other corporate purposes by LUCo until the Wind
18 Project closings occurred and the funds were needed.

19 **Q. What is the weighted average cost of debt you are recommending in this case?**

20 A. As **Schedule TM-3** shows, the pro formed weighted average cost of debt is 3.76%
21 which reflects all outstanding consolidated Empire long term debt at September 30,

¹⁰ For purposes of this filing, Empire has included the same Office of Public Counsel capital structure adjustment methodology for LUCO and APUC as used in Case No. ER-2019-0234 but does take issue with the specific adjustment methodology for LUCO. An appeal of this issue is pending in the Missouri Court of Appeals, Western District.

1 2020, the Wind Project financings of \$425 million at 2.079% and the refinancing of the
2 \$90 million 4.53% 2018 note payable at 2.079%¹¹.

3 **Q. Mr. Mooney, what is your final recommendation on the weighted average cost of**
4 **capital in this case?**

5 A. Based on Schedule TM-3, I recommend 7.03%.

6 **Q. Does this conclude your Direct Testimony at this time?**

7 A. Yes.

¹¹ On March 3, 2021 the Federal Energy Regulatory Commission approved Empire's application for authorization to issue up to \$550 million of long term debt to its indirect parent LUCO.

VERIFICATION

I, Todd Mooney, under penalty of perjury, on this 28th day of May, 2021, declare that the foregoing is true and correct to the best of my knowledge and belief.

/s/ Todd Mooney