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Witness: Todd Mooney  
Type of Exhibit: Direct Testimony  
Sponsoring Party: The Empire District Electric  
Company  
File No. EA-2019-0010  
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Direct Testimony

of

Todd Mooney

October 18, 2018



**Liberty Utilities**<sup>®</sup>  
EMPIRE DISTRICT

*Empire* Exhibit No. SP  
Date 4-8-19 Reporter TU  
File No. EA-2019-0010

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### LIST OF SCHEDULES IN SUPPORT OF DIRECT TESTIMONY

<b>TM-1A (Highly Confidential)</b>	Purchase and Sale Agreement for Kings Point Wind Project
<b>TM-1B (Highly Confidential)</b>	Purchase and Sale Agreement for North Fork Ridge Wind Project
<b>TM-2</b>	Organization Chart Depicting Post-Acquisition Corporate Structure of The Empire District Electric Company
<b>TM-3 (Highly Confidential)</b>	List of Bidders
<b>TM-4 (Highly Confidential)</b>	Summary of Purchase and Sale Agreements for Kings Point Wind Project and North Fork Ridge Wind Project
<b>TM-5 (Highly Confidential)</b>	Wells Fargo Letter of Interest
<b>TM-6A (Highly Confidential)</b>	Equity Capital Contribution Agreement
<b>TM-6B (Highly Confidential)</b>	LLC Agreement
<b>TM-7 (Highly Confidential)</b>	Summaries of Equity Capital Contribution Agreement and LLC Agreement
<b>TM-8</b>	Wells Fargo Portfolio of Renewable Projects

1 **I. INTRODUCTION AND BACKGROUND**

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

3 A. My name is Todd Mooney. I am Vice President, Finance & Administration at Liberty  
4 Utilities (Canada) Corp., a subsidiary of Algonquin Power & Utilities Corp. ("APUC"),  
5 which is the ultimate corporate parent of The Empire District Electric Company ("Empire"  
6 or "Company"). My business address is 354 Davis Road, Oakville, ON L6J 2X1.

7 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL**  
8 **BACKGROUND.**

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

20 **Q. HAVE YOU PROVIDED TESTIMONY BEFORE ANY REGULATORY**  
21 **JURISDICTIONS?**

22 A. Yes, I have testified before this Commission in Case No. EO-2018-0092, and before the  
23 California Public Utilities Commission.

1 **Q. PLEASE DESCRIBE THE PURPOSE AND PROVIDE A SUMMARY OF YOUR**  
2 **TESTIMONY.**

3 A. My testimony describes the process Empire undertook to select the two wind generation  
4 projects for which it seeks Certificates of Convenience and Public Necessity (“CCN”) in  
5 this docket, the material commercial terms of their acquisition, Empire’s plan to finance  
6 the acquisition of these projects through tax equity and intercompany financings, and why  
7 time is of the essence in regard to the CCN determination for the projects.

8 **Q. BEFORE GETTING INTO THE DETAILS OF THE PROJECTS, WOULD YOU**  
9 **DESCRIBE HOW THIS DOCKET AROSE?**

10 A. On October 31, 2017, Empire filed its Customer Savings Plan, docketed as Case EO-2018-  
11 0092. In that docket, Empire proposed to acquire up to 800 MW of wind generation  
12 strategically located in or near its service territory in conjunction with a tax equity partner  
13 and to retire its Asbury coal generation plant, all to deliver substantial savings to Empire’s  
14 customers for years to come. In that docket, Empire and other parties entered into a Non-  
15 Unanimous Stipulation in which Empire agreed to reduce its proposed acquisition of wind  
16 generation assets from 800 MW to 600 MW and to delay the retirement of Asbury. While  
17 the Commission did not adopt the Non-Unanimous Stipulation, in its July 11, 2018 Report  
18 and Order in Case No. EO-2018-0092, the Commission found that “Empire’s proposed  
19 acquisition of 600 MW of additional wind generation assets is clearly aligned with the  
20 public policy of the Commission and this state,” Rep. Ord. at p. 20, and that “Empire is  
21 authorized to record its capital investment to acquire wind generation assets as utility plant  
22 in service subject to audit in Empire’s next general rate case.” *Id.* at 24. It is on this basis  
23 that the Company subsequently concluded its negotiations to acquire the wind generation

1 assets and entered into the Purchase and Sale Agreements that we are presenting for the  
2 Commission's consideration in this docket.

3  
4 **II. THE MISSOURI WIND PROJECTS SELECTED FOR ACQUISITION**

5 **Q. PLEASE DESCRIBE EMPIRE'S PROPOSED ACQUISITION OF THE WIND**  
6 **PROJECTS.**

7 A. On October 12, 2018, Empire entered into two Purchase and Sale Agreements (the "PSAs")  
8 with Tenaska Missouri Matrix Wind Holdings, LLC ("Tenaska") and Steelhead Missouri  
9 Matrix Wind Holdings, LLC ("Steelhead" and collectively, "Tenaska/Steelhead").  
10 Pursuant to these PSAs, Empire will acquire ownership of two holding companies  
11 ("Holdcos") to be formed by Tenaska/Steelhead, each of which will own, through a project  
12 company (the "Wind Project Company"), an approximately 150 MW wind project in  
13 Missouri (each a "Wind Project" and collectively the "Wind Projects"). These projects are  
14 known as the Kings Point Wind project located in Jasper, Barton, Dade and Lawrence  
15 counties in Missouri, and the North Fork Ridge Wind project in Barton and Jasper counties  
16 in Missouri. Copies of the Purchase and Sale Agreements are attached to my testimony as  
17 **Schedule TM-1A (Highly Confidential) (Kings Point)** and **Schedule TM-1B (Highly**  
18 **Confidential) (North Fork)**. Once acquired by Empire, these Holdcos will be direct  
19 subsidiaries of Empire, and the Wind Project Companies will be indirect subsidiaries,  
20 which is depicted on **Schedule TM-2**. As described later in my testimony, Empire will be  
21 financing the acquisition of the Holdcos in conjunction with a tax equity partner, Wells

1 Fargo<sup>1</sup>, as well as through intercompany funds from Liberty Utilities Co. At the time of  
2 the closing when Empire acquires its ownership interest in the Holdcos, Wells Fargo will  
3 make a capital contribution to each of the Holdcos and thereby become a joint owner with  
4 Empire.

5 **Q. WHY IS A TAX EQUITY STRUCTURE BEING USED?**

6 A. A tax equity structure is being sought to maximize customer savings associated with these  
7 projects. As contemplated in the CSP case, through the use of a tax equity ownership  
8 structure in conjunction with approximately 600 MWs of wind generation, Empire has a  
9 time-limited opportunity to bring significant savings, which are approximately \$169  
10 million over the twenty year period used to assess integrated resource plans and up to \$295  
11 million in savings to customers over a thirty year period, which is closer to the life of these  
12 assets. These savings are occasioned based on unique market conditions, which allows for  
13 production tax credits and the availability of financing to support these tax credits. I  
14 described the benefits of tax equity partnerships in my testimony in Case No. EO-2018-  
15 0092, as well as below. In short, customers benefit from this ownership structure since the  
16 efficient monetization of tax attributes reduces the overall cost of energy procured on their  
17 behalf by Empire. In addition, direct utility ownership in the partnership provides strong  
18 benefits to the customer based on long-term ownership of the wind project and due to a  
19 regulated utility's lower cost of capital and prudent capital structure.

20

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<sup>1</sup> Wells Fargo will lead the tax equity financing of the Wind Projects, either solely or with another tax equity partner.

1       **III.    PROJECT SELECTION PROCESS**

2       **Q.    WHAT PROCESS DID EMPIRE FOLLOW IN THE SELECTION OF THESE**  
3       **TWO WIND PROJECTS FOR ACQUISITION?**

4       A.    As Empire witness Timothy Wilson explained in his Direct and Rebuttal Testimony filed  
5       in Case No. EO-2018-0092, Empire, with the assistance of Burns & McDonnell, developed  
6       a competitive Request for Proposals (“RFP”) for the complete engineering, procurement,  
7       construction, and transfer of ownership of up to 800 MW of fully functional and/or  
8       operational wind energy projects that are strategically located in or near the Empire service  
9       territory. The Notice of Intent for the RFP was issued on October 16, 2017, to 11 wind  
10      developers. The RFP provided two options to developers. The first option was for a  
11      developer to construct projects that they currently own and then sell the projects to Empire  
12      after they achieve commercial operation. The second option was for a developer to  
13      construct a wind project on the Kings Point and North Fork Ridge sites in Missouri that  
14      were being developed by Empire. Empire expressly sought projects within the Southwest  
15      Power Pool (“SPP”) footprint, with a preference for those projects strategically located in  
16      or near the Empire service territory in order to minimize costs associated with transmission  
17      congestion. Empire received bids from 10 developers representing 18 sites that were  
18      owned by the developers, with sites located in Missouri, Oklahoma and Kansas. Six of the  
19      bidders also bid on the Company’s sites in Missouri. A list of the 10 bidders is contained  
20      in **Schedule TM-3 (Highly Confidential)**. As Mr. Wilson explained in his testimony filed  
21      in Case EO-2018-0092, Burns & McDonnell evaluated each of the bids. This evaluation  
22      formed the basis for beginning negotiations with \*\*\* \_\_\_\_\_ \*\*\* bid finalists.

1 Q. ON WHAT BASIS DID EMPIRE DETERMINE THAT TENASKA/STEELHEAD'S  
2 CONSTRUCTION OF PROJECTS ON THE TWO MISSOURI SITES WAS THE  
3 BEST OPTION FOR CUSTOMERS?

4 A. Once Empire narrowed the list of bid finalists, Empire conducted extensive due diligence  
5 with the bid finalists in order to obtain more in-depth information on each developer's  
6 proposal than would have been provided in the RFP response. This due diligence included  
7 inquiry into key aspects of each project proposal, including permitting, qualification for  
8 Production Tax Credits ("PTCs"), project economics such as price, capacity factor, and  
9 transmission basis risk, and the ability to prudently complete the construction of the  
10 projects within the required timeframe. After completing its due diligence, Empire began  
11 negotiations with project developers on the potential terms of acquisition, including a  
12 refinement to project size to take into account Empire's agreement in Case EO-2018-0092  
13 to acquire no more than 600 MW of wind projects versus the 800 MW acquisition described  
14 in the RFP.

15 After lengthy negotiations with multiple wind developers, Empire determined that  
16 Tenaska/Steelhead had the best ability to develop economic wind projects on the Kings  
17 Point and North Fork Ridge sites. These sites proved to be the most beneficial for Empire  
18 given their location in or near Empire's service territory, low risk of transmission  
19 congestion, proximity to interconnection, proximity to Empire's existing operations  
20 (allowing for economies in operating costs), as well as their robust wind regime.  
21 Tenaska/Steelhead were chosen as the successful bidder for the Kings Point and North Fork  
22 Ridge sites because they:

- 23
- Provided an economical fixed price for the Wind Projects;



- 1 • Committed to a construction schedule that ensures the Wind Projects will be  
2 completed before the end of 2020 (in order to ensure they qualify for PTCs) with a  
3 significant price reduction for any portion of the Wind Project that is completed  
4 late;
- 5 • Offered a robust strategy for qualifying for PTCs, following IRS guidance for the  
6 Five Percent Safe Harbor<sup>2</sup>;
- 7 • Is a credit worthy entity able to provide the performance security required to  
8 insulate Empire's customers from risks, and;
- 9 • Has extensive experience in development and construction of power generation  
10 infrastructure.

11 **Q. PLEASE DESCRIBE TENASKA'S EXPERIENCE DEVELOPING WIND**  
12 **GENERATION.**

13 A. Tenaska, based in Omaha, Nebraska, is a leading independent power producer in the United  
14 States. Ranked by Forbes among the largest private U.S. companies, Tenaska has plant  
15 and office locations across the United States and in Canada. The company has developed  
16 more than 10,000 megawatts of fossil-fueled and renewables power generation projects,  
17 both in the United States and internationally, and has vast experience owning, operating  
18 and managing these types of assets.

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<sup>2</sup> IRS has provided guidance on the determination of the beginning of construction in Internal Revenue Notice 2016-31. The beginning of construction can be established either by beginning physical work of a significant nature (section 2) or by incurring at least 5% of a wind project's costs (the "Five Percent Safe Harbor" provided in Internal Revenue Notice 2013-29).

1           Currently, Tenaska has approximately 686 MW of wind projects in mid- to  
2 advanced-stage wind development in the United States and in excess of 430 MW of large-  
3 scale and distributed solar generation projects developed and in operation. Tenaska has  
4 successfully developed and now owns and manages operation of two utility-scale solar  
5 projects in Southern California – each of which was the largest commercially financed  
6 solar project in the United States at the time.

7           Tenaska's Strategic Development & Acquisitions Group ("SDA") brings the  
8 combined resources of Tenaska to bear when working with customers to meet their power  
9 generation needs. In addition to providing expertise in siting, transmission interconnection,  
10 permitting, financing and construction management, Tenaska can assist customers in fuel  
11 acquisition and transport, project operations and energy marketing. The SDA team offers  
12 extensive knowledge in structuring and evaluating agreements, including partnerships,  
13 revenue contracts and land leases; an in-house environmental and legislative team; and the  
14 financial stability that is driven by conservative utilization of debt and tax equity.  
15 Development team leaders have been directly responsible for more than 8 gigawatts of  
16 renewable power development and purchased power agreement origination, with  
17 substantial focus on wind generation.

18 **Q. WHAT IS STEELHEAD'S ROLE IN THE PSA COMPARED TO TENASKA?**

19 A. Steelhead is partnering with Tenaska to jointly develop and construct the Wind Projects.  
20 As a wind project developer that has incurred cost for wind turbine components in 2016,  
21 Steelhead's partnering with Tenaska allows the Wind Projects to qualify for 100% PTCs  
22 according to the IRS guidelines described in footnote 2, above.

1 Q. THE TENASKA/STEELHEAD PROJECTS ACCOUNT FOR APPROXIMATELY  
2 300 MW OF WIND GENERATION. DOES EMPIRE INTEND TO ACQUIRE AN  
3 ADDITIONAL 300 MW OF WIND GENERATION?

4 A. Yes. Empire has been negotiating with \*\*\* \_\_\_\_\_ \*\*\* simultaneous to its  
5 negotiations with Tenaska and Steelhead. Empire intends to file a second application for  
6 a CCN associated with an additional 300 MW of wind generation once those negotiations  
7 are memorialized in a signed contract.

8  
9 IV. COMMERCIAL TERMS OF PURCHASE AND SALE AGREEMENTS AND  
10 RELATED CUSTOMER PROTECTIONS

11 Q. PLEASE DESCRIBE THE COMMERCIAL TERMS AND CONDITIONS OF THE  
12 PURCHASE AND SALE AGREEMENTS WITH TENASKA/ STEELHEAD.

13 A. Attached to my testimony as Schedule TM-4 (Highly Confidential) is a summary of the  
14 material terms of the PSAs. The following is a high-level overview of the Wind Projects  
15 and their estimated costs:

\*\*\* \_\_\_\_\_ \*\*\* Denotes Highly Confidential

	<u>Kings Point</u>	<u>North Fork Ridge</u>
1		
2	*** _____	_____ ***
3		
4	*** _____	_____ ***
5		
6	*** _____	_____ ***
7	Other <sup>3</sup>	
8		
9	*** _____	_____ ***
10		
11		
12	Location of Project (Counties)	Jasper, Barton, Barton, Jasper
13		Dade and Lawrence
14		
15	Nameplate Capacity	149.4 MW 149.4 MW
16	Net Capacity Factor (P50)	*** _____ ***
17	Estimated Start Date of Construction:	*** _____ ***
18	Completion of Construction	December 31, 2020 December 31, 2020
19	Turbine Manufacturer	Vestas Vestas

20

21 **Q. WHAT CUSTOMER PROTECTIONS ARE INCLUDED IN THE PSA?**

22 A. The PSAs include the following key protections for Empire's customers:

- 23 • Fixed price – The vast majority of the contract price \*\*\* ( \_\_\_\_\_
- 24 \_\_\_\_\_) \*\*\* is fixed, insulating Empire's customers from development cost
- 25 overruns, commodity price risk, and construction cost overruns. The remaining \*\*\* \_\_\_\_\_
- 26 \_\_\_\_\_ \*\*\* of the projects include the cost of network upgrades,

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<sup>3</sup> This includes internal Empire labor and fees for independent engineers for monitoring and managing the Wind Projects, legal fees for negotiating tax equity financing, costs of issuing equity and debt financing to finance Empire's investment in the Wind Projects, costs of acquiring the land required for the projects and other costs.

1 interconnection facilities, gen-tie line and public road upgrades & restoration, which  
2 will be directly passed on to Empire.

- 3 • PTC qualification – If any part of the project is completed later than 2020, Empire will  
4 receive a price reduction under the PSAs to compensate it for the lost value of the PTCs.
- 5 • Performance security – The PSAs require Tenaska to post performance security of  
6 \*\*\* \_\_\_\_\_ \*\*\* per project during the development phase and \*\*\* \_\_\_\_\_ \*\*\*  
7 per project during the construction phase. If Tenaska fails to fulfill its contractual  
8 obligations, Empire will be able to draw on the performance security, thus protecting  
9 Empire’s customers.

10 **Q. WHEN WILL EMPIRE CLOSE ON THE PURCHASE OF THE WIND**  
11 **PROJECTS?**

12 A. Empire will purchase the Wind Projects on or around January 4, 2021.

13 **Q. WHAT ARE EMPIRE’S CONDITIONS TO CLOSING ON THE PURCHASE AND**  
14 **SALE AGREEMENTS?**

15 A. Section 9.1 of the Purchase and Sale Agreements contains the conditions that must be  
16 satisfied prior to Empire’s acquisition of the Holdcos. The Purchase and Sale Agreements  
17 include as conditions to close include certificates from Tenaska attesting that all required  
18 permits and land rights have been in obtained, that the In Service test for the wind turbines  
19 has been achieved, a release of all liens by contractors, that FERC approval has been  
20 granted to allow the transfer of the ownership of the Wind Project Companies to Empire  
21 and Wells Fargo, and other standard closing conditions relating to the good standing of the  
22 Holdcos and the Wind Project Companies.

1 Q. WHICH PARTY RECEIVES THE BENEFIT OF ANY POWER GENERATED  
2 PRIOR TO CLOSING?

3 A. Tenaska will receive the benefit of any power generated prior to closing. However, Empire  
4 will receive a reduction in the purchase price for the projects based on the quantity of power  
5 generated.

6 Q. WHAT ARE EMPIRE'S TERMINATION RIGHTS UNDER THE PSAS?

7 A. As described on Schedule TM-4, Empire's termination rights vary based on the timing of  
8 the termination. The following chart provides a high-level summary of those rights:

9 \*\*\*

Period	Termination Provision	Seller Performance Security
_____ _____	<ul style="list-style-type: none"> <li>• _____</li> <li>• _____</li> </ul>	<ul style="list-style-type: none"> <li>• _____</li> </ul>
_____ _____ _____	<ul style="list-style-type: none"> <li>• _____</li> <li>_____</li> <li>• _____</li> <li>_____</li> </ul>	<ul style="list-style-type: none"> <li>• _____</li> <li>_____</li> </ul>
_____ _____	<ul style="list-style-type: none"> <li>• _____</li> <li>_____</li> <li>• _____</li> </ul>	<ul style="list-style-type: none"> <li>• _____</li> <li>_____</li> </ul>

10

11 \*\*\*

12 Q. WHEN WILL EMPIRE SEEK COST RECOVERY FOR THE PROJECTS?

13 A. Empire anticipates seeking recovery in its first rate case after acquiring interests in the  
14 Holdcos.

15

1 **V. FINANCING OF WIND PROJECTS**

2 **Q. HOW DOES EMPIRE PLAN TO FINANCE THE WIND PROJECTS?**

3 **A.** Empire intends to use a mix of debt, equity, and tax equity to acquire the Wind Projects.

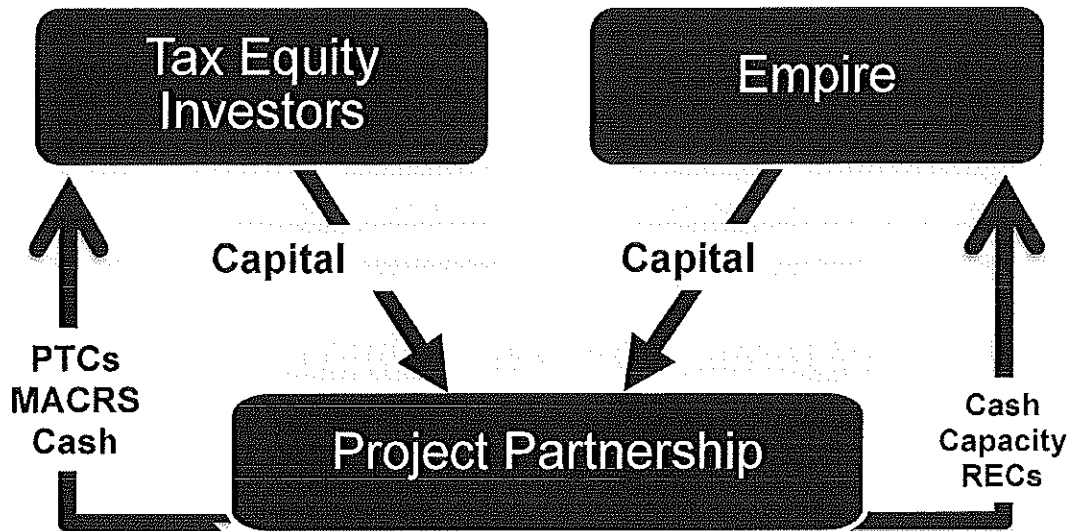
4 **Q. DOES EMPIRE PLAN TO USE TAX EQUITY FINANCING TO ACQUIRE THE**  
5 **WIND PROJECTS?**

6 **A.** Yes. Empire will be using financing from a tax equity partner to acquire the Wind Projects.  
7 This tax equity partnership will take the form described below and in my testimony from  
8 Case No. ER-2018-0092.

9 **Q. WHAT IS A TAX EQUITY STRUCTURE?**

10 **A.** A tax equity structure is a method of financing renewable energy projects (including wind  
11 projects and solar generation projects) to optimize the value in the near term of available  
12 tax incentives. In a tax equity structure, large, tax-paying corporations (typically large  
13 banks and insurance companies) become equity partners in a wind project ("Tax Equity  
14 Partners"). In exchange for providing a significant portion of the capital investment of the  
15 partnership, which is used to develop the wind generation facility, a Tax Equity Partner  
16 receives the tax incentives (PTCs and MACRS discussed earlier) generated from the wind  
17 project during the first 10 years of the project's life. In addition, the Tax Equity Partner  
18 receives cash distributions in the latter years of the project (typically in years 6 to 10) as  
19 part of its return on and recovery of the capital it invested. On or before the end of the first  
20 ten years when the Tax Equity Partner has received its return on and recovery of its  
21 investment, the ownership structure "flips" and the majority of the ongoing financial  
22 benefits of the wind project transfers over to the non-tax equity partner, with the Tax Equity  
23 Partner retaining a nominal residual stake in the partnership (typically 5%). At this point,

1 the non-tax equity investor also has an option to purchase the tax equity investor's interest  
 2 in the partnership. The following visual depicts a commonly used tax equity structure:



12 Tax equity structures have been used to finance over 62 GW of wind and solar projects in  
 13 the United States over the past decade.<sup>4</sup> These structures are accepted by the IRS as long  
 14 as they conform to certain well-established guidelines and jurisprudence, including  
 15 Revenue Procedure 2007-65.

16 **Q. ARE THERE ANY LIMITATIONS ON THE AVAILABILITY OR VALUE OF**  
 17 **PTCS?**

18 **A.** Yes. The United States federal government has legislated the phase-out of PTCs over the  
 19 next several years. In order to qualify for PTCs at their current value of \$24 per MW-hour,  
 20 a project must begin construction before January 1, 2017. The beginning of construction  
 21 is typically achieved by incurring at least 5% of a wind project's costs before the applicable

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<sup>4</sup> BNEF Tax Equity Update: 2017, Tax Equity Demand Forecast dataset.



1 date.<sup>5</sup> By working with wind equipment manufacturers and project developers who have  
 2 already met this test, Empire plans to qualify for PTCs at their maximum value of \$24 per  
 3 MW-hour. Note, however, that there is a four-year limit on the timeframe allowed for  
 4 construction.<sup>6</sup>

5 Any projects that begin construction after December 31, 2016 qualify for a reduced  
 6 amount of PTCs as follows:

Start of Construction	PTC%	PTC Value
		\$/MW-hour
Before 1/1/2017	100%	24.00
During 2017	80%	19.20
During 2018	60%	14.40
During 2019	40%	9.60
After 12/31 /2019	0%	0.00

7  
 8 Given that the percentage of the PTC that is available phases out completely for projects  
 9 that start construction after December 31, 2019, a limited window of time exists in which  
 10 to take advantage of this significant tax benefit.

11 **Q. PLEASE EXPLAIN THE ACCELERATED DEPRECIATION THAT IS**  
 12 **AVAILABLE TO WIND PROJECTS.**

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<sup>5</sup> IRS has provided guidance on the determination of the beginning of construction in Internal Revenue Notice 2016-31. The beginning of construction can be established either by beginning physical work of a significant nature (section 2) or by incurring at least 5% of a wind project's costs (the "Five Percent Safe Harbor" provided in Internal Revenue Notice 2013-29).

<sup>6</sup> In order to qualify for PTCs, a wind project must have completed construction and been placed in service within four years of the date that construction commenced. Internal Revenue Notice 2016-31, section 3

1 A. In addition to qualifying for the tax benefits associated with the PTCs, wind projects also  
 2 qualify for accelerated tax depreciation using the five-year Modified Accelerated Cost  
 3 Recovery System (“MACRS”) schedule.<sup>7</sup> Depreciation is a deductible expense that  
 4 reduces taxable income, decreasing income tax payable. Depreciating the assets of a wind  
 5 project over a five-year timeframe (compared to the approximately 30 year life of the  
 6 project) creates income tax losses for the wind project in its first five years. These losses  
 7 can also be used by its owner(s) to offset other sources of taxable income, realizing  
 8 significant income tax savings.

9 The combined value of PTCs and accelerated depreciation to a wind project is  
 10 reflected in the following table:

Tax Credits \$ for \$ reduction of tax liability	Accelerated Depreciation Shelter for otherwise currently taxable income	When Combined Est. NPV of tax incentives (as a % of project costs)
▶ Wind generates production tax credits* ▪ <u>Wind</u> : \$24 per MWh generated for 10 years	▶ All renewable energy generating equipment is depreciable ▶ Using 5-year MACRS (double declining balance)	▶ Wind = *** _____ *** ▪ <u>E.g.</u> for a \$100 M project, the incentives are worth ~*** _____ ***

17 When combined, the net present value of the federal tax benefits can be a significant portion  
 18 of the total capital cost of a wind project. For Kings Point and North Fork Ridge, Empire  
 19 anticipates tax equity funding of \*\*\* \_\_\_\_\_ .\*\*\*

20 Q. WHY IS EMPIRE PROPOSING A TAX EQUITY STRUCTURE INSTEAD OF A  
 21 MORE TRADITIONAL STRUCTURE IN WHICH EMPIRE IS THE SOLE

<sup>7</sup> See 26 U.S.C. § 168.

1           **OWNER OF THE WIND PROJECT FROM THE OUTSET AND FINANCES THE**  
2           **PROJECT'S COSTS WITH CONVENTIONAL UTILITY DEBT AND EQUITY**  
3           **FINANCING?**

4    A.    Empire is proposing a tax equity structure in order to maximize customer savings by  
5           utilizing the value of the available tax incentives. Such a structure enables Empire to  
6           reduce the capital investment it needs to construct the Wind Projects by an amount that  
7           reflects the ability of a Tax Equity Partner to utilize the tax savings provided by both PTCs  
8           and MACRS in the near term. This reduced capital investment allows customers to realize  
9           the benefits of the full 10 years of PTCs and MACRS from day 1 through a reduced rate  
10          base. Given the time value of money, using a tax equity structure (as compared with  
11          direct ownership of the Wind Projects by Empire without a partner) would result in  
12          between \$4 and \$7 per MW hour more savings for Empire customers.

13   **Q.    HAS EMPIRE ENTERED INTO ANY AGREEMENTS WITH TAX EQUITY**  
14           **PARTNERS ASSOCIATED WITH FINANCING OF THE WIND PROJECTS?**

15    A.    Yes. On October 10, 2018, Empire and Wells Fargo Central Pacific Holdings, Inc. ("Wells  
16           Fargo") entered into a letter of interest regarding Wells Fargo role as a tax equity provider  
17           for the Wind Projects. A copy of the letter of interest is attached as **TM Schedule-5**  
18           **(Highly Confidential)**. Wells Fargo and Empire will proceed to negotiate a binding term  
19           sheet for Wells Fargo's tax equity investment, and ultimately execute certain transaction  
20           documents, including an Equity Capital Contribution Agreement ("ECCA"), and an LLC  
21           Agreement governing it and Empire's membership interests in the Holdcos. Wells Fargo  
22           provided a form ECCA and LLC Agreement with the letter of interest which are attached  
23           as **Schedule TM-6A (Highly Confidential)** and **Schedule TM-6B (Highly Confidential)**.

1 Summaries of the material terms of the ECCA and LLC Agreement are attached as  
2 **Schedule TM-7 (Highly Confidential)**.

3 **Q. WHY DID EMPIRE SELECT WELLS FARGO AS ITS TAX EQUITY PARTNER?**

4 A. Wells Fargo has significant experience providing tax equity to renewable energy projects  
5 in the United States, financing approximately 11,000 MW of renewable generation,  
6 representing approximately \$6 billion of investment, since 2007. Attached to my testimony  
7 as **Schedule TM-8** is a summary of Wells Fargo's portfolio of renewable generation  
8 investments. Based on this experience, and Empire's evaluation of indicative pricing from  
9 three other tax equity providers, Empire determined that Wells Fargo offered the most  
10 economic value to the project. For example, the Flip Yield (which is a common metric of  
11 the relative cost of Tax Equity Partnership) offered by Wells Fargo was \*\*\* \_\_\_\_\_ \*\*\*.  
12 Other potential tax equity providers offered Flip Yields ranging from \*\*\* \_\_\_\_\_  
13 \_\_\_\_\_ \*\*\*. Similarly, other tax equity providers sought commitment fees in the range of  
14 \*\*\* \_\_\_\_\_ \*\*\*, while Wells Fargo required no commitment fee. Thus, on multiple  
15 metrics of comparison, Wells Fargo offered better terms, which translate into greater cost  
16 savings for our customers.

17 **Q. DID EMPIRE EVALUATE WELLS FARGO'S CREDITWORTHINESS TO BE A**  
18 **TAX EQUITY PARTNER?**

19 A. Yes. Wells Fargo Bank, NA has a long-term issuer credit rating from DBRS of AA; a  
20 rating of AA- from Fitch; a rating of Aa2 from Moody; and a rating of A+ from Standard  
21 and Poor's. These credit ratings demonstrate that Wells Fargo has an investment grade  
22 credit rating, meaning that Wells Fargo is judged to have low credit risk and a high  
23 likelihood of being able to meet its ongoing obligations. This is highly desirable in a tax

1 equity provider, as it means that the tax equity provider is highly likely to be able to meet  
2 its funding obligations under the tax equity partnership.

3 **Q. PLEASE EXPLAIN THE KEY TERMS OF THE ECCA.**

4 A. The purpose of the ECCA is to memorialize the terms of Wells Fargo's investment in the  
5 Wind Projects. The ECCA will specify the percentage of capital to be invested by Wells  
6 Fargo, the rate of return it will earn on that investment, and details surrounding the period  
7 of time of that investment. Schedule TM- 7 describes the material terms of the ECCA.

8 **Q. WILL THERE ALSO BE AGREEMENTS WITH THE PROJECT COMPANIES?**

9 A. Yes. There will be two Hedge and REC Agreements – one between Empire and Kings  
10 Point Wind, LLC and one between Empire and North Fork Ridge, LLC. Each of these  
11 agreements is effectively a contract for differences with respect to the price of electric  
12 energy generated and sold by the Wind Project Company into the Southwest Power Pool  
13 Integrated Marketplace, and an agreement by Empire to purchase from each of the two  
14 Wind Project Companies all renewable energy credits created by each of the Wind Projects.

15 It is expected that the Hedge and REC Agreement will be for a term of ten years.  
16 During the first five years of the agreement, any cash that is generated by the Wind Project  
17 Cos is paid entirely to Empire. In years six through ten, the IRS requires that the tax equity  
18 partner be paid a share of the cash from the Wind Project Cos, and that percentage will be  
19 specified in the ECCA. Empire would receive any remaining cash. A summary of the  
20 transactions is set forth in the table below:

Illustration of Transactions

Phase	Timing	Wind Project	Empire	Tax Equity Partners
0	Start		<ul style="list-style-type: none"> <li>Contributes *** _____ of capital</li> </ul>	<ul style="list-style-type: none"> <li>Contribute ~*** _____ of capital</li> </ul>
1	Years 1 – 5	<ul style="list-style-type: none"> <li>Sells energy to SPP</li> <li>Settles price hedge with Empire</li> <li>Pays O&amp;M, A&amp;G</li> <li>Distributes net cash</li> </ul>	<ul style="list-style-type: none"> <li>Buys energy from SPP</li> <li>Settles price hedge with Project</li> <li>Receives 100% of net cash</li> <li>Receives 1% of PTCs and tax losses</li> </ul>	<ul style="list-style-type: none"> <li>Receive 0% of net cash</li> <li>Receive 99% of PTCs and tax losses</li> </ul>
2	Years 6 – 10	<ul style="list-style-type: none"> <li>Sells energy to SPP</li> <li>Pays O&amp;M, A&amp;G</li> <li>Distributes net cash</li> </ul>	<ul style="list-style-type: none"> <li>Buys energy from SPP</li> <li>Receives 60% - 75% of cash</li> <li>Receives 1% of PTCs and tax losses/income</li> </ul>	<ul style="list-style-type: none"> <li>Receive 25% - 40% of net cash</li> <li>Receive 99% of PTCs and tax losses/income</li> </ul>
3	After	<ul style="list-style-type: none"> <li>Sells energy to SPP</li> <li>Pays O&amp;M, A&amp;G</li> <li>Distributes net cash</li> </ul>	<ul style="list-style-type: none"> <li>Buys energy from SPP</li> <li>Empire exercises option to purchase Tax Equity Partners' 5% stake at FMV</li> </ul>	<ul style="list-style-type: none"> <li>5% residual stake sold to Empire</li> </ul>

**Q. WHY IS A HEDGE AND REC AGREEMENT NECESSARY?**

A. In order to finance renewable projects, banks insist on these agreements to be in place to provide a certain price for the commodity. The Hedge and REC Agreement provide that price certainty. These agreements should have no rate making implications and should not impact customers in any way.

**Q. PLEASE EXPLAIN THE KEY TERMS OF THE LLC AGREEMENT.**

A. The LLC Agreement will govern the relationship between Empire and Wells Fargo as members of the Holdcos which each own a Wind Project Company. The material terms of the LLC Agreement are described in Schedule TM-7.

1 Q. DOES EMPIRE ANTICIPATE THAT IT WILL BE EXECUTING THE ECCA,  
2 LLC AGREEMENT IN SUBSTANTIALLY THE SAME FORM AS IN SCHEDULE  
3 TM-6?

4 A. Yes. Empire has been engaged in detailed discussions with Wells Fargo to define the terms  
5 of the ECCA, LLC Agreement and has made sufficient progress to anticipate that the final  
6 agreements will be in substantially similar form.

7 Q. HOW WILL EMPIRE FINANCE ITS SHARE OF THE COSTS TO ACQUIRE  
8 THE WIND PROJECTS?

9 A. Empire will use equity provided from its general corporate balance sheet. This will be  
10 financed by Empire's indirect parent, Liberty Utilities Co. Empire's franchise, works or  
11 system will not be encumbered in any way as a result of this equity provided by Liberty  
12 Utilities Co.

13  
14 VI. LEVELIZED COST OF ENERGY OF THE WIND PROJECTS

15 Q. WHAT IS EMPIRE'S ESTIMATE OF THE LEVELIZED COST OF ENERGY FOR  
16 THE KINGS POINT AND NORTH FORK RIDGE PROJECTS?

17 A. Empire estimates that the Kings Point project will cost \*\*\* \_\_\_\_\_ \*\*\* per MWh and that  
18 the North Fork Ridge project will cost \*\*\* \_\_\_\_\_ \*\*\* per MWh on a Levelized Cost of  
19 Energy ("LCOE") basis. The LCOE is calculated by adding the net present value of the

1 total capital and operating and maintenance costs over the life of the project and dividing  
2 this sum by the megawatts of energy generated.

3 **Q. HOW DOES THE LCOE OF THE WIND PROJECTS RELATE TO THE**  
4 **CUSTOMER SAVINGS ESTIMATED IN THE CUSTOMER SAVINGS PLAN**  
5 **DOCKET?**

6 A. In Case No. ER-20018-0092, Empire witness James McMahon estimated the customer  
7 savings associated with acquiring 600 MW of wind generation based on the bid provided  
8 in the RFP \*\*\* \_\_\_\_\_

9 \_\_\_\_\_ \*\*\* for the 600 MW portfolio and  
10 provides \$169 million in customer savings over 20 years. That analysis included an LCOE  
11 of \*\*\* \_\_\_\_\_

12 \_\_\_\_\_

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11

Q.

**DO YOU BELIEVE THAT ACQUISITION OF THE KINGS POINT AND NORTH FORK RIDGE PROJECTS FROM TENASKA/STEELHEAD ARE IN THE PUBLIC INTEREST?**

12

13

14

A.

Yes. Empire conducted a competitive solicitation to identify both projects and wind developers for its proposed acquisition of 800 MW of wind. The response to the RFP was robust both in terms of the number of projects bid in but also the number of experienced developers. Empire then undertook a rigorous analysis of those bids and conducted

15

16

17

1 extensive due diligence and negotiations with a small group of finalists which resulted in  
 2 its selection of Tenaska/Steelhead for the Kings Point and North Fork Ridge sites. The  
 3 economics of these projects are consistent with Empire’s modeling in the Customer  
 4 Savings Plan docket at this Commission, and as a result, these projects are poised to deliver  
 5 significant savings to Empire’s customers for many years to come. For these reasons, and  
 6 those identified in Empire witness Blake Mertens’ Direct Testimony, it is in the public  
 7 interest for Empire to acquire these projects.

8  
9 **VII. TIMING OF THE CCNS**

10 **Q. IS THERE A REASON FOR THE COMMISSION TO PROMPTLY CONSIDER**  
11 **THIS APPLICATION?**

12 A. Yes. Empire is seeking prompt consideration of its CCN application in order to minimize  
 13 any costs to Empire under the PSAs. Specifically, the date on which Empire receives a  
 14 ruling on the CCN could have a material impact on any potential termination fees due to  
 15 Tenaska/Steelhead. Under Section 10.1 of the PSA, if Empire were to terminate the PSAs

16 \*\*\* \_\_\_\_\_  
 17 \_\_\_\_\_\*\*\*, Empire would be obligated to pay Tenaska/Steelhead certain costs. The closer  
 18 any potential termination date is \*\*\* \_\_\_\_\_  
 19 \_\_\_\_\_

20 \_\_\_\_\_\*\*\* Thus, Empire seeks a prompt determination on its CCN  
 21 application in order to mitigate any termination fees it might incur should its request for a  
 22 CCN be denied. Further, a prompt ruling on the CCN will also maximize

1 Tenaska/Steelhead's ability to meet the December 31, 2020 in-service date in order to  
2 receive 100% PTC eligibility for the Wind Projects.

3 **VIII. CONCLUSION**

4 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

5 **A. Yes.**


AFFIDAVIT OF TODD MOONEY

PROVINCE  
STATE OF ONTARIO )  
TOWN ) ss  
COUNTY OF OAKVILLE )

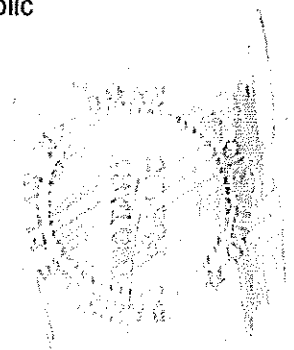
On the 16th day of October, 2018, before me appeared Todd Mooney, to me personally known, who, being by me first duly sworn, states that he is Vice President of Finance and Administration at Liberty Utilities (Canada) Corp, and acknowledged that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief.

  
Todd Mooney

Subscribed and sworn to before me this 16th day of October, 2018

  
Notary Public

My commission expires: Does not expire



SCHEDULE TM-1A

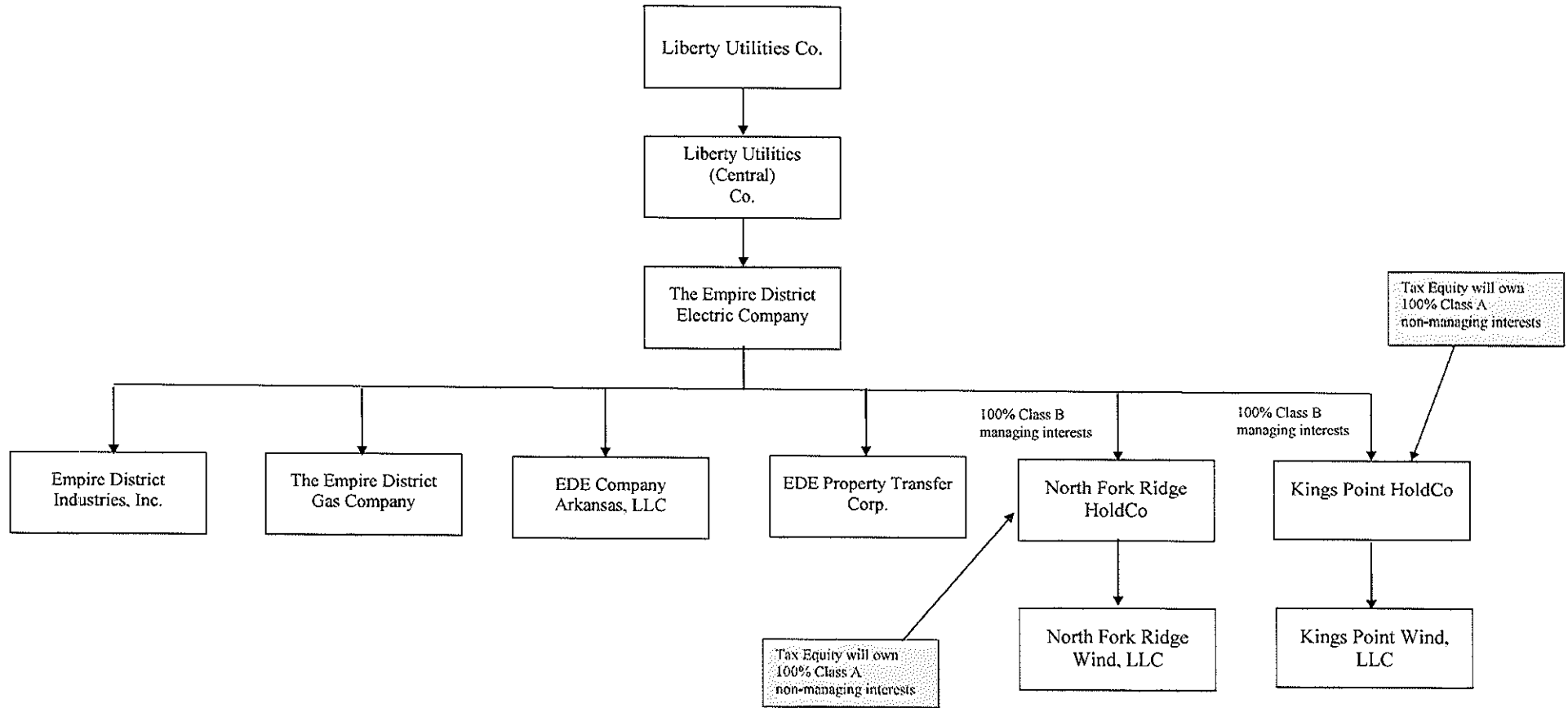
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SCHEDULE TM-1B

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IN ITS  
ENTIRETY

# Empire Organization Structure With Wind Projects

SCHEDULE TM-2



SCHEDULE TM-3

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HIGHLY CONFIDENTIAL  
IN ITS  
ENTIRETY



SCHEDULE TM-4

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SCHEDULE TM-5

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**SCHEDULE TM-6A**

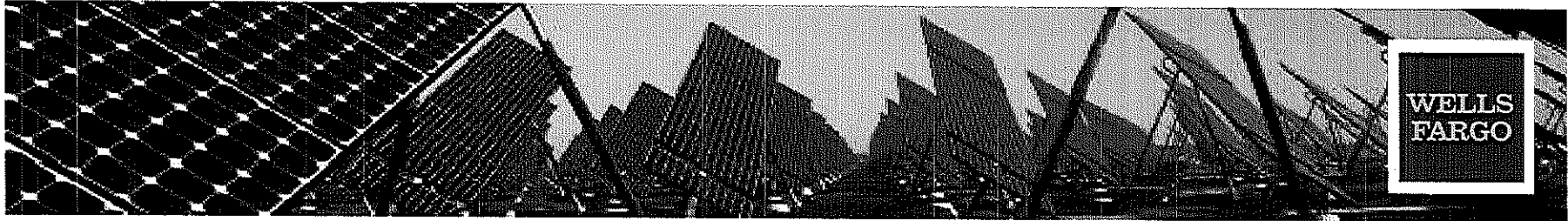
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SCHEDULE TM-6B

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SCHEDULE TM-7

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# Tax Equity Overview

## Wells Fargo Renewable Energy & Environmental Finance

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Confidential – Do Not Distribute

March 2018

Together we'll go far



*Privileged and Confidential*

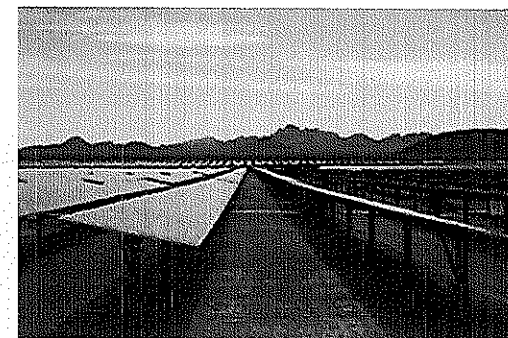
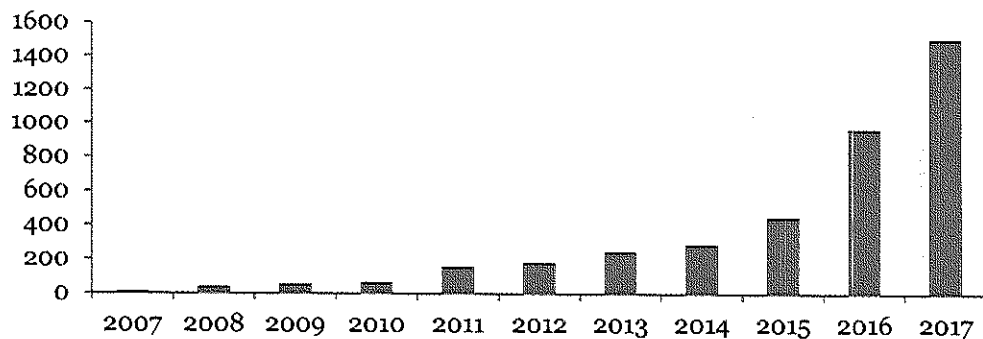
## REEF Overview

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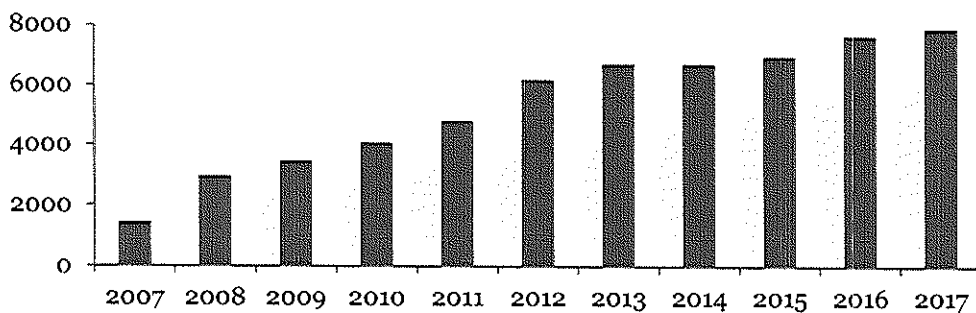
## Wells Fargo has provided tax equity to solar and wind developers since 2006

- Renewable Energy & Environmental Finance group was established in 2006 by Barry Neal and Philip Hopkins to **provide tax equity capital to the growing renewable energy industry**
- Today the group has grown to **28 professionals with decades of experience in the renewable energy industry**

**Cumulative Solar Projects Financed by Wells Fargo (MW<sub>DC</sub>)**

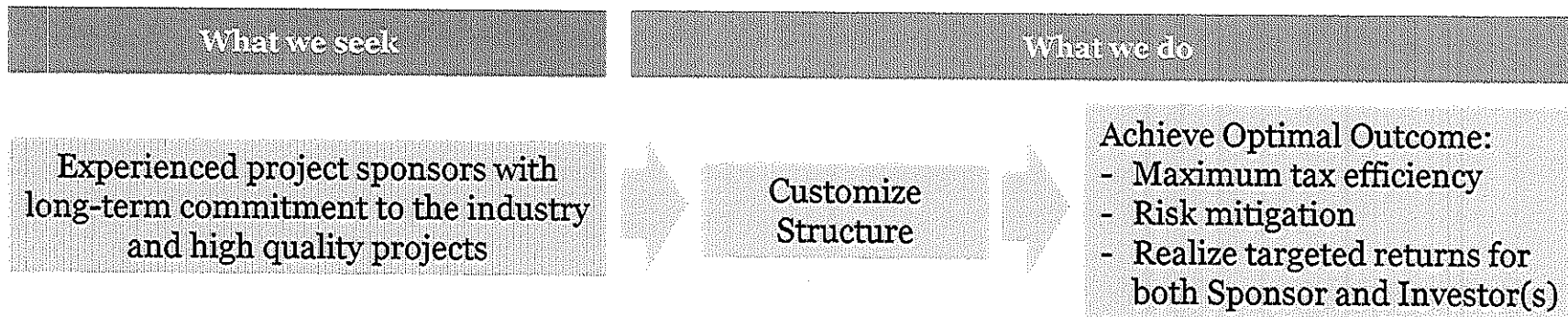


**Cumulative Wind Projects Financed by Wells Fargo (MW<sub>AC</sub>)**





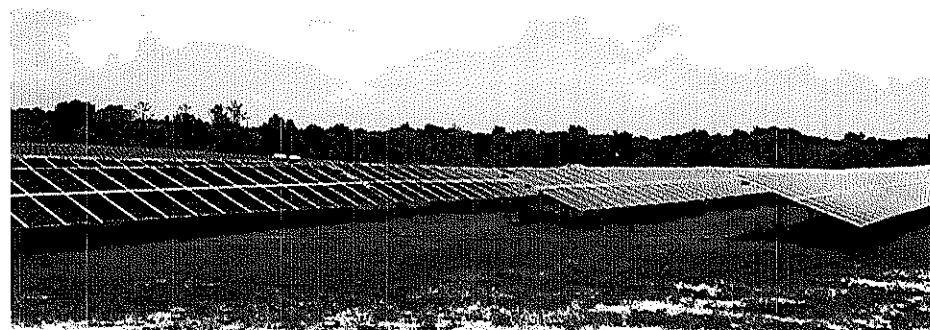
## Wells Fargo partners with experienced industry leaders on a variety of structures



Desired **project sponsors** have the following characteristics:

- Strategic **commitment to renewables**
  - Parent level stake; long-term interest
- Comprehensive and experienced project finance team
- Full-service **O&M and Asset Management** teams, either dedicated in-house or via high quality subcontractors
- **Proven execution and trusted technologies**
- Projects
  - **Robust pipeline**; balanced industry segment exposure
  - Long-term power sale contracts with **creditworthy** entities
- Corporate / financial strength

- **Solutions-oriented:** we work with partners to develop creative solutions to accommodate an evolving market and customer needs
- **Relationship-focused:** each aspect of a deal is developed with a long-term view and the intent to work together on multiple projects
- **Flexible:** we use our deep experience to employ a variety of structures, including:
  - Partnership Flip
  - Sale Leaseback
  - Co-Investment
  - Restructuring & Sale of Existing Assets



## Wells Fargo's integrated approach enables multiple product offerings to renewable energy clients

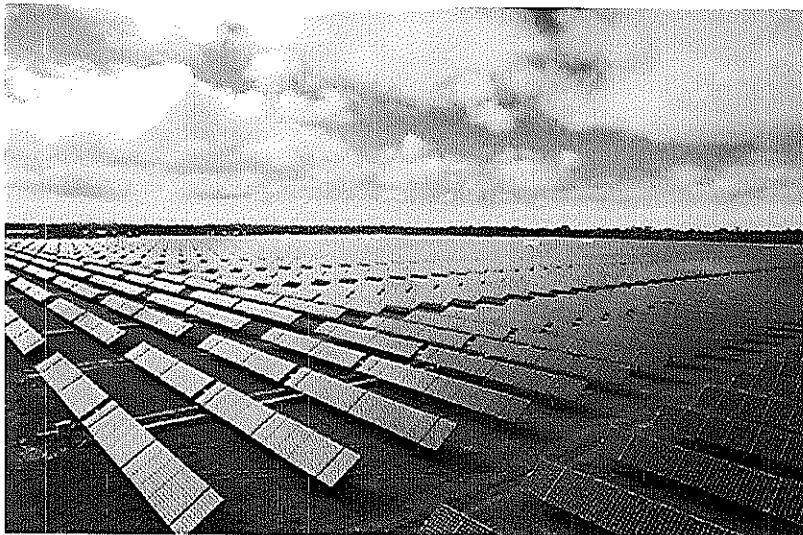
**In addition to Tax Equity, WF provides many other products and services to renewable energy, clean technology, and power sector clients**

### Products & Services

- Project Debt/Construction Loans
- Back Leverage
- Commercial Loans
- Treasury Management
- Letters of Credit
- Foreign Exchange
- Private Placement Debt
- Asset-Based Revolving Credit Lines

### Groups

- Cleantech Corporate Banking
- Independent Power and Infrastructure
- Power & Utilities Group
- Asset-Backed Finance
- Equipment Leasing
- Investment Banking



Wells Fargo has invested ~\$6bn of tax equity into more than 10GW of wind and solar projects across 31 states

