Attachment A

Joint Affidavit of Richard D. Homich and Dennis Moritz on Behalf of the New England Power Generators Association, Inc.

Docket No. ER21-1637-000

Filed April 28, 2021

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

ISO New England, Inc.	)	
New England Power Pool	)	Docket No. ER21-1637-000
Participants Committee	)	
	)	

JOINT AFFIDAVIT OF RICHARD D. HOMICH AND DENNIS MORITZ
ON BEHALF OF THE NEW ENGLAND POWER GENERATORS ASSOCIATION, INC.

I. Introduction

1. Richard D. Homich states: My name is Richard D. Homich, and I am the Chief Executive Officer of Advantage for Analysts, Inc. ("Advantage"). My business address is 100B Shoreline Highway, Suite B280, Mill Valley, CA 94941. I have been in my current position since December 2007. Advantage provides structured finance solutions, primarily to the U.S. renewable energy market. Advantage became an independent advisory firm in 2008 after a management buyout ("MBO") of the proprietary technology by key members of the structured finance group at Babcock and Brown, LLC, an early innovator that introduced the primary structure for financing renewable energy projects with institutional sources of capital.

2. I contribute market and management expertise to the work of Advantage. I have over a decade of experience advising institutional investors on financing and financing strategies based on available financing structures, commercial terms, and sources of capital. Prior to leading the Advantage MBO, I had nearly three decades of experience in management, management consulting, and the development of enterprise software systems. Among other things, I have overseen more than $7 billion in closed renewable energy transactions and the development and support of financial asset management systems for approximately $25 billion of renewable energy assets. Our work supports relationships across a wide range of industry participants, including: developers, sponsors, tax equity investors, utilities, private equity investors, and government officials. My full curriculum vitae is attached hereto as Attachment B.

3. Dennis Moritz states: My name is Dennis Moritz, and I am a Principal and the Lead Analyst of Advantage. My business address is 100B Shoreline Highway, Suite B280, Mill Valley, CA 94941. I have been in my current position since May 2004. At Advantage, I manage the modeling and analysis and supporting tools for market relevance, tax code compliance of supported financial structures, and accounting compliance. I also provide education and training for our clients. Prior to joining Advantage, I was a Partner and Senior Analyst at Babcock & Brown, where I played a key role in developing the Pre-Tax After-Tax Preferred Structure that was subsequently widely adopted in the market and is generally referred to today as the Partnership Flip Structure. I have over 30 years of professional experience in structuring, modeling, and

analyzing partnerships, leases, and hybrid financial structures for renewable energy, and asset finance in general. Following the significant changes in the market after the passage of the American Recovery and Reinvestment Act, I participated in conference panels and presented our results and findings comparing the relative value of partnerships and leases. My full curriculum vitae is attached hereto as Attachment C.

II. Purpose and Summary

4. We have been asked by the New England Power Generators Association, Inc. ("NEPGA") to review whether the Offer Review Trigger Price ("ORTP") proposed by the New England Power Pool Participants Committee ("NEPOOL") for the off-shore wind resource technology effective beginning in ISO New England Inc.'s ("ISO-NE") FCA 16 is reasonable given the complexity of financing the represented project with its large nameplate capacity and tax benefits.

5. Below, we conclude that there is a fundamental flaw in the approach to calculating the off-shore wind ORTP in the model we reviewed. At the highest level, the Discounted Cash Flow ("DCF") model that NEPOOL uses is not commercially plausible. We are not aware of <u>any</u> utility scale renewable projects with similar nameplate capacity that were able to benefit from investment tax credits ("ITC") using an equity / first mortgage capital structure, as NEPOOL's model assumes. Sponsors almost certainly do not have sufficient tax liabilities needed to utilize the tax benefits in the timely manner assumed. Rather, the project sponsor will need to partner with tax equity investors to monetize the tax benefits, which invokes the Internal Revenue Code ("IRC") rules for partnerships not addressed in the NEPOOL model. Thus, NEPOOL's DCF model for offshore wind is premised entirely on an implausible assumption.

6. In addition, we show how NEPOOL's model overstates the anticipated tax benefits, which in turn, incorrectly lowers the ORTP for offshore wind. Our analysis attempts to apply assumptions consistent with a partnership flip structure to estimate how much higher the ORTP for offshore wind would be with plausible financing, including proper assumptions about inflation adjustment of the cost of capital.

III. NEPOOL's Calculation of ORTP for Offshore Wind

7. Under ISO-NE Transmission, Markets and Services Tariff ("Tariff"), "[f]or each new technology type, the Internal Market Monitor shall establish an Offer Review Trigger Price" as a threshold, above which offers in the FCA will not be subject to further review by ISO-NE's Internal Market Monitor ("IMM"). Tariff, Appx. A § III.A.21.1.1. ORTP values represent "the break-even contribution required from the Forward Capacity Market to yield a discounted cash flow with a net present value of zero for the project." *Id.* § III.A.21.1.2(b). The Tariff requires that the DCF model take into account "[c]apital costs, expected non-capacity revenues and operating costs, assumptions regarding depreciation, taxes and discount rate." *Id.* As currently drafted, the Tariff directs the model to "look[] at 20 years of real-dollar cash flows discounted at a rate

(Weighted Average Cost of Capital) consistent with that expected of a project whose output is under contract (i.e., a contract negotiated at arm's length between two unrelated parties)." *Id*. We understand that ORTP values do not apply to existing resources, but they represent benchmarks for the applicability of mitigation review for new resource offers.

8. NEPOOL's DCF model, developed by Concentric Economic Advisors ("CEA"), consists of a capital structure of project sponsor equity coupled with a first mortgage on the project held by the lender—a financing structure typically used for conventional, fossil-fired generation.[1] There are key differences between this typical assumption and the offshore wind case. The conventional, fossil-fired generation case lacks tax credits (specifically ITC) and has a longer term for depreciation. This produces a less significant reliance on tax benefits for the economic return which, as we will demonstrate, matters to the calculation of ORTP.

9. NEPOOL's DCF model derives a depreciation schedule based on five years Modified Accelerated Cost Recovery System ("MACRS") and 40% bonus depreciation. Together, these depreciation assumptions are used to reduce the project's income before tax for purposes of calculating its tax liability. NEPOOL's model contains an assumption that a project equity investor can monetize the scheduled tax benefit immediately. In addition to the tax benefit of depreciation, NEPOOL assumes that an offshore wind project developer would fully monetize the ITC benefit in its first year of operation. Finally, NEPOOL utilizes simplifying shortcuts in its analysis that collapse the impact of taxes versus pre-tax cash, financial debt leveraging, and inflation into a weighted average cost of capital ("WACC") used to discount an after-tax cash flow that does not explicitly reflect inflation or leveraging with debt.

IV. The DCF Financing Structure Used by NEPOOL is Not Commercially Plausible

10. We are not aware of any utility scale renewable projects with similar nameplate capacity that were able to benefit from ITC that have used an equity / first mortgage capital structure. This is based on our substantial experience, noted above, with renewable energy transactions and the development and support of financial asset management systems for renewable energy assets.

11. CEA, the model developer, states that the large balance sheets of project sponsors enable them to realize the tax benefits as soon as the benefits were available. CEA opines this is because "[s]uch corporations have large balance sheets representing a variety of investments that could allow them to monetize such tax benefits." Powers Aff. at 19:18-20.

12. The size of a project sponsor's balance sheet, however, is irrelevant. This is because the economic value of tax benefits is based on the *U.S. federal tax liabilities* of the project sponsor

[1] While we recognize that ISO-NE is the proponent of the CEA DCF model, NEPOOL has adopted it to calculate the ORTP using its capital cost inputs from the Daymark analysis. For that reason, we reference the DCF model as NEPOOL's model and/or analysis.

at the time the tax benefits are available. Project sponsors domiciled outside the U.S., like Copenhagen Infrastructure Partners ("CIP"), cited by CEA (*id.* at 19:17-18), have large balance sheets, but little to no U.S. federal tax liabilities. The tax benefits of an offshore wind project of the size studied by NEPOOL would exceed $1 billion in the first year. Outside of New England, utilities have owned and operated renewable energy projects and used their tax liabilities to efficiently monetize the tax benefits. For the purposes of the project studied by NEPOOL, however, the table in Attachment D illustrates that more times than not, the largest utilities in the U.S. (based on market capitalization) lack the tax liabilities to utilize the tax benefits in the project efficiently. This data is based on the 10-K filings for the largest utilities based on market capitalization for the past five years.

13. For the reasons above, CIP and other renewable developers employ partnership flip financing structures to monetize renewable energy tax benefits more efficiently. When financing projects with these structures, project sponsors typically partner with an investment entity ("Tax Equity Partner") with the capacity to utilize the tax benefits and contribute a significant portion of the capital needed to finance a project. This capital is provided at a pre-tax cost significantly less that the cost of debt. The Tax Equity Partner plays a role like a lender in that it has a priority return and less risk exposure than the sponsor. Most of the return for the Tax Equity Partner comes from a disproportionate allocation of tax benefits and cash such that the priority return is mostly satisfied from timely use of the tax benefits. After the priority return period, which is generally tied to achievement of a flip yield, the Tax Equity Partner typically retains a small ownership interest or is bought out. The renewable energy industry generally refers to these partnerships as partnership flip structures. The "flip" refers to the fact that the tax equity ownership share steps down to a minority interest (e.g., 5%) after reaching some specified target (e.g., flip yield).

14. Additionally, institutional sources of capital tend to avoid concentrating risk in one project. To manage this investment risk (for projects much smaller in practice than the offshore wind project described in the NEPOOL model), the industry practice would be to form a club or syndicate of tax equity investors that contribute capital in a partnership flip financing structure. This practice also mitigates the risk that any one tax investor lacks sufficient tax liabilities for the more than $1 billion in tax credits in the first year of a project. For the above reasons, the U.S. renewable energy industry relies on third-party sources of institutional capital and partnership flip financing structures as it is otherwise unable to realize the ITC and tax depreciation benefits as soon as the benefits are available and to manage project development risk adequately.

15. In recent years, tax equity investment entities have collectively contributed approximately $15 billion of capital annually to finance approximately $50 billion of renewable energy projects with partnership flip financing structures each year. For example, in July 2020, CIP employed the partnership flip financing structure with Bank of America for a 347 MW direct current solar project in Pecos County, Texas—a project less than half the size (by nameplate capacity) of the hypothetical offshore wind farm proposed by NEPOOL.

16. CEA states that "that the project sponsor could monetize this new ITC benefit in developing the project, based on an assumption that the developers of new offshore wind projects in New England are large, national or international corporations." Powers Aff. at 19:15-17. The nameplate capacity of the project depicted in the NEPOOL DCF model would be unprecedented for the U.S. renewable energy industry. Based on the limited tax liabilities of potential project sponsors, the risk diversification principles described above, and current industry practices, it would be unlikely for a single sponsor to finance such a project with the structure described in the NEPOOL DCF model.

V. NEPOOL's Analysis Overstates the Tax Benefits Which in Turn Understates the Offshore Wind ORTP

17. NEPOOL's analysis inflates the expected tax benefits of offshore wind, which results in a lower ORTP. As discussed below, this is because NEPOOL (1) uses an inflation adjustment that overstates the tax benefits; and (2) does not use a financing structure capable of producing the expected tax benefits under the IRC. By using a proper inflation adjustment, the ORTP would increase by $1.58/kW-month. Taking the NEPOOL installed capital cost estimate at face value, and using a more representative financing structure, we estimate the ORTP for offshore wind would increase by between $4.19/kW-month and $9.95/kW-month. In total, the NEPOOL model underestimates the offshore wind ORTP by between $5.77/kW-month to $11.53/kW-month.[2] Correspondingly, the corrected ORTP is in the range of $2.15/kW-month to $7.92/kW-month. This difference increases with a higher installed capital cost estimate.

18. To understand the how the ORTP calculated by our model would be impacted by different assumptions of capital costs, we analyzed three capital cost assumptions – the ISO-NE cost assumption, the NEPOOL cost assumption and a cost midway between the two using the same financing structure. Based on this analysis, we find a linear relationship between capital cost and ORTP. For each $69.35 million increase (2.53%) in capital costs the ORTP increases by $1.00/kW-month.

V.A. NEPOOL's Inflation Adjustment of the Cost of Capital Overstates the Tax Benefits and Understates the ORTP Values Calculated by the Tax Equity Partnership Model for a Range of Capital Costs

19. The NEPOOL approach of using an inflation adjustment of the WACC, rather than explicitly modeling inflation, incorrectly implies that all items of revenue and expense are inflated similarly. Capital asset tax depreciation is a key item of expense presented in the NEPOOL model. This tax depreciation is not subject to inflation as it depends solely on the project cost assumption.

[2] The increases are relative to the NEPOOL 20-year model rather than NEPOOL's proposed 25-year time horizon. With that correction, the ORTP is a negative $3.625. Krich Aff. at 18:16.

NEPOOL's inflation adjusted WACC implicitly inflates this depreciation which overstates the benefit of the tax depreciation.

20. These overstated tax benefits provide another reason that NEPOOL's proposed ORTP are inaccurate and understated. We corrected this error by explicitly inflating revenue and expenses other than tax depreciation and removing the WACC inflation adjustment in the NEPOOL model. This results in an increase of the offshore wind ORTP by an estimated $1.58/kW-month

V.B. The Proposed Project Financing Structure Does Not Reflect a Tax Equity Partnership Legally Able to Monetize Tax Benefits Consistent with the IRC

21. The IRC is extensive in its rules regarding partnerships and places significant limitations on the how the partners share in the cash and tax attributes of the project partnership. Failure to comply with these IRC rules risks having the IRS disallow the allocation of tax benefits per the partnership agreement.

22. A keystone requirement of the IRC is that partner allocations of income or loss have "substantial economic effect," meaning that such allocations have a material impact on the partners' share of cash. To support this requirement, the IRC provides for the maintenance of "Capital Accounts" and "Tax Basis."[3] These accounts track the net cumulative position of each partner's share of cash and items of taxable income. Capital Accounts start at fair market value of the asset whereas Tax Basis starts with the tax basis of the asset.

23. Capital Accounts can go negative, that is, when a partner's share of tax losses exceeds the partner's net cash (investment less distributions). A partner would be liable for the negative balance in the event a negative Capital Account is outstanding in a liquidation.[4] For this reason, tax investors put limits in how much risk in the form of negative Capital Accounts they are willing to bear. This can mean forgoing some tax losses (e.g., depreciation) that might otherwise be available to the tax investor.

24. Tax Basis, on the other hand, is not allowed to go negative. IRC Sections 704(d) and 731(a) gives rise to tax consequences if either cash received, or tax losses taken would otherwise drive the Tax Basis negative. These IRC rules are a key source of loss of efficiency in

[3] While maintenance of Capital Accounts is not technically required by the IRC, the lack thereof places a much higher burden of proof on the partners. We know of no partnership flip structures that do not comply with this.

[4] For simplicity, we ignore the impact of "Minimum Gain" which distinguishes a "negative" capital account from a "deficit" capital account. As explained, the partnership flip herein does not utilize project level debt which makes the minimum gain distinction of a deficit not significant.

utilizing tax benefits. The result is that excess cash receipts trigger taxable income (beyond the project income being shared) and excess losses are deferred.

25. A partnership (or LLC) between a sponsor and tax equity must comply with the IRC. In a traditional partnership that is not focused on monetizing tax benefits and where multiple partners simply take pro rata shares of the partnership, the IRC partnership rules on Capital Accounts and Tax Basis can reasonably be ignored. By comparison, close attention must be paid to the IRC partnership rules when the partnership is a Variable Interest Entity (or "VIE"). VIEs are partnership structures, including the partnership flip structure, in which partners share differently in different aspects of the project's investment, returns, and tax attributes.

26. VIEs (in which the partnership is disproportional as is typical of tax equity partnerships) must carefully follow the rules to avoid running afoul of the IRS acceptance of the structure as legitimate. The disproportionate aspect gives rise to a counterintuitive situation where the cash from the project and the associated taxable income are allowed to be shared independent of one another under the IRC rules. For example, $100 of Renewable Energy Credit ("REC") cash could be distributed to the sponsor at the same time that the associated $100 of REC taxable income is allocated to the tax investor. More important, the capital asset depreciation can be allocated without regard to the equity split of capital costs between the partners. This feature of the partnership flip structure drives tax equity returns from tax benefits as opposed to cash for the sponsor, creating a preferred structure for use of the tax benefits.

27. The NEPOOL model ignores any partnership structure, much less the IRC rules invoked by a partnership, and is thus not a viable representation of how tax benefits would be realized. Ignoring the tax efficiency impact of the IRC rules for partnerships means that the NEPOOL model overstates the value of tax benefits that the partners can ultimately realize for an asset.

28. A commercially plausible financing structure that comports with the IRC yields a materially higher ORTP. We estimated the effect of a commercially plausible financing structure on the ORTP. Applying a type of structure used in renewable project financings, and NEPOOL's capital costs, the ORTP for offshore wind would be *increased* by between about $4/kW-month and $10/kW-month. We utilized the following methodology to reach this estimate:

a. For the financing via a tax equity partnership, we assumed two sources of capital for the sponsor. First, there is the investment of the tax equity. Second, we added "back leverage," which is sponsor-only debt financing based solely on the anticipated cash distributions of the partnership to the sponsor partner (i.e., with no direct claim on project assets). Back-leverage, as opposed to debt at the project level, is used because the Tax Equity Partner is normally unwilling to take a subordinate position to a lender. In both scenarios described below, the capacity

payments were scaled to just meet the minimum target returns for both tax equity and the sponsor interests. This sets the floor on viable ORTP results.

b. The partnership structure as modeled produces tax equity investment capital equal to 36-37% of project cost, which is in the typical range for tax equity capital. At the partnership level, the sponsor provides the other 63-64% of equity. However, this sponsor equity is offset by the back-leverage received outside of the partnership.

c. Our range of results is based on two different scenarios for the back-leverage. For the first, we limited the back-leverage to 23% of project cost so that the sponsor equity is 40%, to be consistent with the NEPOOL model assumption. For the second, we allowed up to 45% back-leverage, reducing the sponsor equity to just 19%. The 19% assumption provides the bookend result (for lowest ORTP) by pushing the structure near the limit of commercial reasonableness. This allows us to determine a meaningful range of possible ORTP outcomes for a partnership flip financing with back leverage.

d. We assumed the same 4.5% debt rate as the NEPOOL model to maintain as much consistency as possible. We use a debt term of 15 years rather than NEPOOL's debt term of the full 20 years because, in our experience, a 15-year term is more consistent with commercial reasonableness. This is not limiting as we were able to reduce sponsor equity to just 19% (well below the 40% assumption of the NEPOOL model).

e. Beyond the split of partnership equity described above, we assumed a VIE partnership flip structure that is consistent with a vast majority of the partnership flip deals in the industry, as follows:

    i. A tax investor flip yield target of 7%, meaning that the post-flip phase is triggered when the tax investor achieves the 7% yield to end the pre-flip period.

    ii. A post-flip share of 5% for the tax investor, which is applied to both cash and tax attributes. In both scenarios, the flip is attained at the end of the seventh year.

    iii. In the pre-flip period, the tax investor receives 20% of the distributable cash with 80% to the sponsor.

    iv. The pre-flip income is allocated 99% to the tax investor in year 1, then 67% for 4 years, then 99% before the flip at the end of the seventh year. The reduction from 99% to 67% is to limit the negative balance risk of the tax

investor and is consistent with our experience in structuring these financings. Even with this limitation, over $700 million of losses (depreciation) is delayed by IRS Section 704(d) limitations and delayed through 2034.

v. We retained the 40% bonus depreciation for consistency. This is an aggressive assumption because in our view, it is possible (if not probable) that tax equity would require that the project decline the option for bonus depreciation as it negatively impacts the tax equity capital account, increasing tax equity financial risk.

vi. We use an assumption that RECs are shared. Specifically, in the pre-flip period, all cash from RECs is allocated to the sponsor and only 5% of the taxable income from RECs goes to the Tax Equity Partner. This is because the Tax Equity Partner normally does not want exposure to the volatility of RECs. This REC assumption is consistent with common practice for partnership flips.

VI. The Cumulative Result of More Representative Assumptions Shows a Significant Increase in the Off-shore Wind ORTP

29. The cumulative result of these adjustments is an increase in the total NEPOOL offshore wind ORTP to between $2.15/kW-month to $7.92/kW-month based on the book-end scenarios described above. This is a relative increase of $5.77/kW-month to 11.53/kW-month above the NEPOOL ORTP of negative $3.62/kW-month. [5]

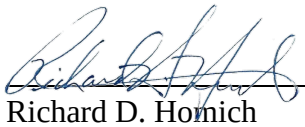
[5] Krich Aff. at 18:16. This reflects that the 20-year model was corrected, prior to the "jump ball" filing, for failure to reduce depreciable basis by half of the amount of ITC as per IRC requirements.

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

ISO New England, Inc.	)	
New England Power Pool	)	Docket No. ER21-1637-000
Participants Committee	)	
	)	

JOINT AFFIDAVIT OF RICHARD D. HOMICH AND DENNIS MORITZ
ON BEHALF OF THE NEW ENGLAND POWER GENERATORS ASSOCIATION

I, Richard D. Homich, under penalty of perjury, state that the contents of the foregoing Affidavit on behalf of the New England Power Generators Association are true, correct, accurate and complete to the best of my knowledge, information and belief.



Richard D. Homich

I, Dennis Moritz, under penalty of perjury, state that the contents of the foregoing Affidavit on behalf of the New England Power Generators Association are true, correct, accurate and complete to the best of my knowledge, information and belief.

Dennis Moritz