

STATE OF NEW HAMPSHIRE
BEFORE THE SITE EVALUATION COMMITTEE
Docket No. SEC 2015 - 02

APPLICATION OF ANTRIM WIND ENERGY, LLC
FOR A CERTIFICATE OF SITE AND FACILITY

PREFILED DIRECT TESTIMONY OF HENRY D. WEITZNER AND ERIC SHAW
IN SUPPORT OF ANTRIM WIND ENERGY, LLC

March 3, 2016

1 **Qualifications of Henry Weitzner**

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

3 A. My name is Henry Weitzner. My business address is 40 Worth Street, 10th Floor,
4 New York, NY.

5 **Q. Who is your current employer and what position do you hold?**

6 A. I am the co-founder, along with Sarah Valdovinos and George Manahilov, of
7 Walden Green Energy, LLC (“Walden”), a privately held global developer, owner and operator
8 of renewable energy projects. Walden has significant experience in the financing of energy
9 projects, from large utility-scale projects to smaller-scale distributed generation projects. Walden
10 has developed, financed, constructed and either currently operates, or sold upon completion, over
11 10 MW of renewable generation assets in Massachusetts and Vermont, and is currently
12 developing over 200 MW of wind, solar and hydro generation assets, including Antrim Wind, in
13 the United States, Latin America and Central Eastern Europe.

14 **Q. Please briefly summarize your educational background, work experience,**
15 **and qualifications.**

16 A. I have more than 25 years of experience in, and as such have a deep familiarity
17 with, the energy and commodities business. Prior to founding Walden, I founded and was the
18 sole proprietor of Walden Renewables LLC, a company that invested in renewable energy
19 projects in the Northeast. From 2011 to 2013, Walden Renewables LLC developed, constructed,
20 owned and/or sold six projects with a combined capacity of approximately 10MW and total
21 capital expenditures of approximately \$25 million. In the decade before I founded Walden

1 Renewables LLC, from 2001 to 2011, I held various positions of increasing leadership at
2 Barclays Capital Commodities, a division of Barclays Bank PLC, in New York. From 1993 to
3 2001, I was a Vice President in JP Morgan's options business and before that I held positions of
4 increasing responsibility in Societe Generale's foreign exchange options business.

5 In the course of my professional career, I have managed a team of thirty traders and
6 structurers across a diverse range of commodity products, including power, renewable energy
7 certificates, natural gas, coal, emissions, and forest products, with full responsibility for all
8 related risks. I have negotiated and risk-managed numerous power purchase agreements, energy
9 off-take agreements, and supply management contracts with wind farms, gas-fired power plants
10 and LNG facilities. I also collaborated (with George Manahilov) in structuring and hedging the
11 largest volumetric production payment facility to date with a premier US natural gas producer,
12 generating valuation of over \$1 billion, and have provided capital through inventory
13 monetization of natural gas storage facilities across the US totaling over \$1 billion.

14 I hold a Bachelor of Arts Degree from Columbia University in New York.

15 **Q. Please describe the relevant experience of Walden.**

16 A. The Walden management team has a combined 45 years of experience in
17 structuring power purchase agreements and hedging strategies for energy clients globally, and
18 has successfully financed more than \$5 billion of power generation and oil and gas energy
19 infrastructure assets. Its founders worked together for many years at leading financial institutions
20 including Barclays, Goldman Sachs, and JP Morgan, and members of the Walden management
21 team have structured, led and executed a number of prominent hedging, off-take and financing

1 transactions for utilities, independent power generators, and energy producers. The Walden team
2 has raised many billions of dollars in debt, equity, and inventory monetizations, covering
3 numerous commodity and energy related markets. Walden's founders are intimately familiar
4 with the requirements for a successful financing of a wind project such as Antrim Wind.
5 Examples of relevant energy-related transactions led and executed by the Walden management
6 team are described in the Application of Antrim Wind Energy, LLC ("AWE").

7 **Qualifications of Eric Shaw**

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

9 A. My name is Eric Shaw. My principal business address is 1095 Avenue of the
10 Americas, Floor 32, New York, NY 10036.

11 **Q. Who is your current employer and what position do you hold?**

12 A. I am currently Global Head of Principal Investments for RWE Supply & Trading
13 ("RWEST"), as well as Chief Executive Officer of RWE Trading Americas Inc. RWEST is a
14 wholly owned subsidiary of RWE AG, one of Europe's top electric and gas companies and
15 Germany's second largest utility (collectively with RWEST referred to in this testimony as
16 "RWE"). RWEST's Principal Investments group invests the capital of RWE in assets and
17 companies where RWEST can leverage its physical and financial commodity trading capabilities
18 to identify attractive opportunities and manage embedded commodity risks , and generate strong
19 investment returns for RWE. RWEST is a leading European energy trading house and acts as the
20 link between RWE's operating companies and global wholesale markets for energy and energy-
21 related raw materials in both their physical and/or derivative forms. RWEST's traded products

1 include power, gas, coal, freight, oil, weather derivatives, biomass, emissions certificates and
2 output from renewable energy projects. RWEST's headquarters in Germany is home to Europe's
3 largest energy trading floor, complementing a network of additional trading floors and
4 subsidiary, affiliate and branch offices in the United States, Europe, and Asia.

5 **Q. Please briefly summarize your educational background, work experience,**
6 **and qualifications.**

7 A. I have over 25 years experience in the energy sector, with extensive experience
8 developing, investing in, owning and selling energy projects on a global scale. Prior to joining
9 RWEST I held positions as Head of Commodity Principal Strategies at Citigroup, leading
10 Citigroup Commodities' principal investment efforts and structuring commodity-linked
11 structured deals and investments in the energy sector. Prior to that, I held similar positions at
12 Barclays Capital and a leading European based energy merchant, focusing on the origination and
13 execution of principal investments and of long-term structured deals in power and natural gas.
14 Early in my career I spent a number of years working for Kenetech Corporation, the parent
15 company of US Windpower, the predecessor for GE Wind. I have an AB degree from The Johns
16 Hopkins University and a Masters of Business Administration degree from Boston University's
17 Questrom School of Business.

18 **Q. Please generally describe the relevant business aspects of RWE.**

19 A. RWE, as one of Europe's five leading electric and gas companies, has extensive
20 experience and a proven track record in the development and financing of wind power projects,
21 as well as successfully bringing such projects into operation. Founded in 1898 in Essen,

1 Germany, RWE has a market capitalization of \$12.9 billion, assets of \$104.4 billion (as of
2 December 31, 2014), and 2014 operating revenues of \$63.3 billion. RWE and its affiliates have
3 49,064 MW of electric generation capacity throughout Europe, and have developed, financed,
4 constructed and operate 3,112 MW of renewable generation assets, including 2,530 MW of
5 onshore and offshore wind assets.

6 **Purpose of Testimony**

7 **Q. What is the Purpose of your testimony?**

8 A. The purpose of our testimony is to address the financial capabilities of Antrim
9 Wind Energy (“AWE”) to assure construction and operation of the Antrim Wind Project (the
10 “Project”) in continuing compliance with the terms and conditions of a Certificate of Site and
11 Facility issued by the New Hampshire Site Evaluation Committee (“SEC”) as a result of this
12 proceeding. Mr. Weitzner also addresses the technical and managerial capability of the AWE
13 management team and their ability to assure the safe and reliable construction and operation of
14 the Project in conjunction with Reed & Reed, Siemens and DNV-GL.

15 **Financial Capability to Construct and Operate the Project**

16 **Q. Mr. Weitzner - Please describe the Ownership Structure of the Applicant,**
17 **Antrim Wind Energy, LLC (“AWE”) and the relationship between AWE, Walden, and**
18 **RWE.**

19 A. AWE is a Delaware limited liability company incorporated in 2009 to develop,
20 construct, own and operate the Project. Eolian Renewable Energy, LLC (“Eolian”) was the
21 original developer of the Antrim Wind Project (“Project”). AWE became a partnership between

1 Eolian and Walden in February 2015. In March, 2016, Walden acquired Eolian through an Asset
2 Purchase Agreement, which included all of Eolian's membership interests in AWE. As a result,
3 AWE is now 100% owned by Walden through two wholly owned subsidiaries, Walden Green
4 Energy Northeast Wind LLC and Walden Antrim LLC.

5 Walden is jointly controlled by its founding partners and RWEST. RWE's Principal
6 Investments team ("RWE PI") resides within RWEST and manages RWEST's investment in
7 Walden. RWE PI invests RWE's capital by providing equity to energy companies and investing
8 in energy assets. RWE PI focuses on investments where RWE has deep knowledge of the
9 underlying commodity and where it brings physical trading capabilities to manage commodity
10 risk for the investment. In its investments RWE PI leverages RWE's broader organizational
11 engineering, operations and power market expertise as well as its track record of successfully
12 managing its large power generation portfolio. In 2014 RWE invested \$4.2 billion in property,
13 plant and equipment, of which \$929 million was allocated to renewable assets. Examples of
14 RWE's relevant energy-related transactions are described in AWE's Application.

15 **Q. Please describe the Project Financing Plan of Walden and RWE (the**
16 **"Project Sponsors").**

17 **A.** The Project Sponsors will use a traditional project finance approach consistent
18 with market standards in the United States wind industry. The financing will consist of two
19 phases - a Construction Financing Phase and a Permanent Financing Phase. The Construction
20 Financing Phase will consist of a construction loan and construction equity to complete the
21 turnkey construction process. Once the Project is operational, a tax equity investor will come in

1 and replace part of the construction loan, which will convert to a “term loan”. As a result, the
2 Projects’ permanent capital structure will be comprised of tax equity, bank term loan, and
3 common equity, thus completing the Permanent Financing Phase. This is the most commonly
4 utilized financing structure for funding wind projects in the United States, representing over \$60
5 billion of financings completed in the past 5 years. In 2015 alone, \$17 billion of bank
6 construction loans and \$6.4 billion of tax equity was deployed in 40 wind projects in the U.S..
7 Walden will provide the equity to construct and operate the Project.

8 **Q. Mr. Weitzner, how will the construction financing be structured?**

9 A. As noted above, Walden, backed by RWE, will provide all of the construction
10 equity required to complete the Project. Securing the construction equity for the Project will be a
11 requirement to close on the construction debt financing. The construction loan will be a “non-
12 recourse” project loan secured by collateral consisting of all project assets, including the
13 turbines, equipment and buildings, leases, PPAs, and service agreements. Lending banks
14 typically require that several conditions precedent be met before providing a final funding
15 commitment for a construction loan. In this case, those conditions will include:

- 16 • The issuance of a Certificate of Site and Facility;
- 17 • Execution of a long-term PPA or financial hedge with a bankable investment-
18 grade rated counterparty;
- 19 • Execution of an acceptable turbine supply agreement (“TSA”);
- 20 • Execution of an acceptable balance of plant construction (“BOP”) agreement; and
- 21 • Negotiation of acceptable operations and maintenance (“O&M”) agreements for
22 the ongoing maintenance of the Project.

1 Based on the results of recent RFPs issued by New England utilities, as well as bilateral
2 discussions with interested parties, AWE is confident that it will be able to secure a long-term
3 PPA contract or a financial hedge that will support a successful financing. AWE has received a
4 letter of interest from Altenex, a leading energy management company that sources clean energy
5 supply for Fortune 500 companies, demonstrating the strong interest in purchasing AWE's
6 electricity and clean energy attributes on a long-term basis. That letter is included in Appendix
7 18A. Furthermore, it has entered into a binding memorandum of understanding ("MOU") with
8 Siemens for a TSA and service and maintenance agreement ("SMA") to be executed after
9 issuance of a Certificate of Site and Facility. AWE has also entered into a preconstruction
10 services agreement ("PSA") with Reed and Reed, a premier wind project construction firm in
11 New England, which will be replaced by a BOP agreement upon issuance of a Certificate.

12 AWE's construction financing plan is structured to comply with market standard
13 underwriting criteria for project lenders, which are described more fully in AWE's application.
14 Assuming that AWE secures a long-term PPA at current market rates, a construction cost of
15 approximately \$63-65 million, and the criteria required by lenders, the Project's construction will
16 be funded with a \$50-55 million construction loan converting to a term loan, and \$10-13 million
17 of equity. Due to the strength of the Project and the experience of the Project's Sponsors, AWE
18 has obtained Letters of Intent ("LOIs") from two separate commercial banks with considerable
19 experience in lending to utility scale wind projects that are interested in providing the
20 construction debt financing for the Project, and will seek the most competitive terms. To the
21 extent that assumptions or actual conditions change with respect to PPA price or other factors,

1 Walden's equity contribution and resulting overall financing structure will be adjusted
2 accordingly.

3 **Q. Mr. Weitzner, how will the Construction Financing Phase transition into the**
4 **Permanent Financing Phase?**

5 A. Construction financing will convert to permanent financing upon the completion
6 of the Project construction and AWE's acceptance of the turnkey facility from Reed & Reed and
7 Siemens. As noted above, Walden, backed by RWE, will provide 100% of the construction
8 equity, which will be deployed in full to bring the Project to commercial operation. At that stage,
9 a tax equity investor will come into the Project to claim the Production Tax Credits ("PTC").
10 The tax equity capital will replace a portion of the construction loan and become the third piece
11 of the capital stack, and the remaining portion of the construction loan will convert to a term
12 loan. Walden is already in discussion with several of the largest U.S. tax equity investors who
13 executed more than \$6.4 billion of deals in 2015, and are interested in the Project..

14 Market standard criteria for the debt and tax equity, which require that the Project
15 demonstrate sufficient contracted cash flow net of all project expenses to service tax equity
16 payments and debt principal and interest payments, ensure that the Project will have sufficiently
17 strong revenues for its continued operation in compliance with all conditions contained in a
18 Certificate and industry best practices once permanent financing is closed.

19 **Technical and Managerial Capability to Construct and Operate the Project**

20 **Q. Mr. Weitzner - How will your previous work experience help you in the**
21 **managerial and technical aspects of the Project?**

1 A. Walden's management team has extensive relevant experience that demonstrates
2 our ability to effectively set up, manage, and fund the operation of high-value, complex energy
3 infrastructure projects. Some examples include: (i) Walden principals have hired staff and
4 established the necessary processes to manage the exacting requirements around transporting
5 natural gas from a floating LNG facility; (ii) Walden principals have created the trading
6 infrastructure to accurately price and manage natural gas storage deals with a duration of over 10
7 years; (iii) Walden principals have set up the infrastructure to be able to finance the physical
8 delivery of oil and gas molecules, and the supply and offtake of refined petroleum products such
9 as heating oil and diesel. Walden also has direct experience in developing, financing and
10 operating diverse renewable energy projects (solar PV, solar thermal and hydro). In the case of
11 the Antrim Project, Walden has sought out and engaged additional expertise that is specific to the
12 wind industry with relevant regional experience to ensure that the project will be built and
13 operated in a manner that is consistent with or exceeds industry standards for safety and
14 reliability. Managing these types of relationships for complex energy projects is a core element
15 of the Walden team's deep experience. With its recent acquisition of Eolian, Walden now also
16 benefits from the long history that the members of Eolian's senior management, who have joined
17 the Walden team and remain as Executive Officers of AWE, have with the Antrim Project.

18 **Q. Mr. Weitzner - How did AWE select the current team of partners for the**
19 **Project?**

20 A. Siemens, Reed & Reed, and DNV-GL are all recognized as industry leaders with
21 impeccable reputations and abundant experience in their fields as evidenced in this Application

1 and Appendices 19A, 19B and 19C. Reed & Reed has been involved in this project since 2010
2 and since that time their impressive wind energy experience in New England has only grown -
3 they are the undisputed leader in wind construction in New England. The Siemens turbines are
4 very well suited to the Project site, combining the ability to generate significant amounts of clean
5 electricity with a smaller footprint (e.g. 3.2 MW of generation from a smaller machine than the
6 previous 3.0 MW turbine) and their turbines have an excellent reputation for reliability. Siemens
7 operations staff is also regarded as among the best in the industry. Finally, the depth and breadth
8 of the experience of DNV-GL makes them an obvious choice for owner's engineer. DNV-GL
9 has also been involved with the Antrim Project since 2012 in various capacities. As a final
10 component of our diligence, we have confirmed the qualifications of all these parties with bank
11 lenders who had worked with each party in the past and hold them in the highest regard.

12 **Q. Who will be responsible for managing these contracts and any staff that**
13 **AWE will hire for the Project?**

14 A. As the sole owner of AWE, Walden will be responsible for managing these
15 contractual relationships and AWE staff. With the assistance of DNV-GL acting as AWE's
16 owner's engineer, Walden will negotiate and finalize the TSA and SMA with Siemens and the
17 BOP contract with Reed & Reed after a Certificate is issued. Walden will also work with DNV-
18 GL to hire and train the two on-site AWE staff described in the Application. Siemens, Reed &
19 Reed and AWE staff will all report directly to the Walden management team in their capacity as
20 Executive Officers of AWE.

21 **Conclusions**

1 **Q. Mr. Weitzner - in your opinion, does AWE possess the requisite financial**
2 **capability to assure construction and operation of the facility in continuing compliance**
3 **with the terms and conditions of a Certificate?**

4 A. Yes. As discussed above, 100% of the equity required to construct the Project and
5 place it into commercial operation will be provided by Walden, with the backing of RWE.
6 Moreover, AWE has lined up many of the conditions precedent to securing a construction loan,
7 and with the issuance of a Certificate in this Docket expects to obtain a construction loan on
8 favorable terms. Additionally, as a condition to granting the Certificate, AWE is willing to agree
9 to provide evidence that the financing required for the construction of the Project is in place prior
10 to commencement of construction. The appealing economics of the Project, in combination with
11 Walden's deep experience in managing energy project financings and the backing of RWE, have
12 already attracted interest from project lenders and tax equity providers. The experience of the
13 Project Sponsors, their ability to deploy the equity and secure a construction loan ensure that the
14 Project may be constructed, owned, and operated in continuing compliance with the terms and
15 conditions of a Certificate.

16 **Q. Mr. Weitzner - In your opinion, does AWE possess the requisite technical**
17 **and managerial capability to assure construction and operation of the facility in continuing**
18 **compliance with the terms and conditions of a Certificate?**

19 A. Yes. The significant experience of AWE's ownership and management team,
20 backed by the global experience of RWE and combined with the industry leading capabilities of
21 AWE's selected consultants and contractors at Reed & Reed, Siemens and DNV-GL,

1 demonstrates that AWE has all of the requisite technical and managerial capability to construct
2 and operate the facility in continuing compliance with the terms and conditions of a Certificate.

3 **Q. Does this conclude your testimony?**

4 A. Yes.

5