

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**

September 10, 2015

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.
10 Walden has developed, financed, constructed and either currently operates, or sold upon
11 completion, over 10 MW of renewable generation assets in Massachusetts and Vermont, and is
12 currently developing over 200 MW of wind, solar and hydro generation assets, including Antrim
13 Wind, in 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
22 Renewables LLC, from 2001 to 2011, I held various positions of increasing leadership at

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

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

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

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

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

1 monetizations, covering numerous commodity and energy related markets. Walden’s founders
2 are intimately familiar with the requirements for a successful financing of a wind project such as
3 Antrim Wind. Examples of relevant energy-related transactions led and executed by the Walden
4 management team are described in the Application of Antrim Wind Energy, LLC (“AWE”).

5

6 **Qualifications of Eric Shaw**

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

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

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

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

1 home to Europe's largest energy trading floor, complementing a network of additional trading
2 floors and subsidiary, affiliate and branch offices in the United States, Europe, and Asia.

3 **Q. Please briefly summarize your educational background, work experience,**
4 **and qualifications.**

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

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

17 A. RWE, as one of Europe's five leading electric and gas companies, has extensive
18 experience and a proven track record in the development and financing of wind power projects,
19 as well as successfully bringing such projects into operation. Founded in 1898 in Essen,
20 Germany, RWE has a market capitalization of \$12.9 billion, assets of \$104.4 billion (as of
21 December 31, 2014), and 2014 operating revenues of \$63.3 billion. RWE and its affiliates have
22 49,064 MW of electric generation capacity throughout Europe, and have developed, financed,

1 constructed and operate 3,112 MW of renewable generation assets, including 2,530 MW of
2 onshore and offshore wind assets.

3 **Purpose of Testimony**

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

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

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

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

16 A. AWE is a Delaware limited liability company incorporated in 2009 to develop,
17 construct, own and operate the Project. AWE is jointly owned by Walden Green Energy
18 Northeast Wind LLC, a wholly owned subsidiary of Walden, and Eolian Antrim LLC, a wholly
19 owned subsidiary of Eolian Renewable Energy LLC (“Eolian”). Eolian, which is headquartered
20 in Portsmouth, New Hampshire, was formed in 2009 to manage the development, construction,
21 and operation of utility scale wind energy facilities in New England, and is the original developer
22 of the Project. In February 2015, Eolian and Walden entered into a Limited Liability Company

1 Agreement to advance the Project through development, financing, construction and operation.
2 The two companies have been working together since 2013 and are partnered on other projects in
3 the region.

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

15 **Q. Please describe the Project Financing Plan of Walden, Eolian, and RWE**
16 **(the "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: construction financing phase, comprising a construction loan and construction equity to
20 complete the turnkey construction process; and permanent financing phase, during which the
21 construction loan will convert to a "term loan" after the Project becomes operational. After the
22 project is operational, the cash flow generated from electricity production and sales will be used

1 to amortize the term loan. This is the most commonly utilized financing structure for funding
2 wind projects in the United States, representing over \$60 billion over the past five years in
3 completed financings. As the majority owner and controlling shareholder of the Project, Walden
4 will provide the equity to construct and operate the Project.

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

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

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

20
21
22 Based on the results of recent RFPs issued by New England utilities, as well as bilateral
23 discussions with interested parties, AWE is confident that it will be able to secure a long-term
24 PPA contract or a financial hedge that will support a successful financing. AWE has received a

1 letter of interest from Altenex, a leading energy management company that sources clean energy
2 supply for Fortune 500 companies, demonstrating the strong interest in purchasing AWE's
3 electricity and clean energy attributes on a long-term basis. That letter is included in Appendix
4 18A. Furthermore, it has entered into a binding memorandum of understanding ("MOU") with
5 Siemens for a TSA and service and maintenance agreement ("SMA") to be executed after
6 issuance of a Certificate of Site and Facility. AWE has also entered into a preconstruction
7 services agreement ("PSA") with Reed and Reed, a premier wind project construction firm in
8 New England, which will be replaced by a BOP agreement upon issuance of a Certificate.

9 AWE's financing plan is structured to comply with market standard underwriting criteria
10 for project lenders, which are described more fully in AWE's application. Assuming that AWE
11 secures a long-term PPA at current market rates, a construction cost of approximately \$63-65
12 million, and the criteria required by lenders, the Project's construction will be funded with a \$38-
13 45 million construction loan converting to a term loan, and \$20-25 million of equity. Due to the
14 strength of the Project and the experience of the Project's Sponsors, AWE has obtained Letters
15 of Intent ("LOIs") from two separate commercial banks with considerable experience in lending
16 to utility scale wind projects that are interested in providing the debt financing package for the
17 Project. To the extent that assumptions or actual conditions change with respect to PPA price or
18 other factors, Walden's equity contribution and resulting overall financing structure will be
19 adjusted accordingly.

20 **Q. Mr. Weitzner, how will the construction financing phase transition into the**
21 **permanent financing phase?**

1 A. Construction financing will convert to permanent financing upon the completion
2 of Project construction and AWE's acceptance of the turnkey facility from Reed & Reed and
3 Siemens. As noted above, Walden, backed by RWE, will provide 100% of the construction
4 equity, which will be deployed in full to bring the Project to commercial operation. At that
5 stage, the construction loan will convert into a term loan, which will be repaid by the Project's
6 cash flow from operations. AWE has received LOIs from several large commercial banks
7 experienced in providing project construction loans to wind projects in the US, and will seek the
8 most competitive terms.

9 Market standard criteria for the issuance of project debt, which require that the Project
10 demonstrate sufficient contracted cash flow net of all project expenses to service a certain
11 multiple of debt principal and interest payments, ensure that the Project will have sufficiently
12 strong revenues for its continued operation in compliance with all conditions contained in a
13 Certificate and industry best practices once financing is closed.

14 AWE notes that it has made the conservative assumption that there will be no Production
15 Tax Credit ("PTC") available at the time of starting the Project's construction. In the event that
16 the PTC is renewed and available to the Project, AWE will adjust the structure to include a tax
17 equity provider to the Project. If utilized, the tax equity provider will act in a similar manner as
18 project debt, which has been a very standard funding structure for U.S. wind projects that can
19 utilize the PTC.

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

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

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

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
22 and Appendices 19A, 19B and 19C. Reed & Reed has been involved in this project since 2010

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

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

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

20 **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
5 and 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. The experience of the Project Sponsors, their
13 ability to deploy the equity and secure a construction loan ensure that the Project may be
14 constructed, owned, and operated in continuing compliance with the terms and conditions of a
15 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 the Walden members of AWE's ownership
20 and management team, backed by the global experience of RWE and combined with the industry
21 leading capabilities of AWE's selected consultants and contractors in Reed & Reed, Siemens and
22 DNV-GL demonstrates that AWE has all of the requisite technical and managerial capability to

1 construct and operate the facility in continuing compliance with the terms and conditions of a
2 Certificate.

3

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

5 **A. Yes.**