

The Narragansett Electric Company
d/b/a National Grid and Clear River Energy LLC
Burrillville Interconnection Project
EFSB Dkt. No. SB-2017-01
Witness: Daniel Ewan

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD**

In re The Narragansett Electric Company :
d/b/a National Grid and Clear River Energy LLC : Docket No. SB-2017-01
(Burrillville Interconnection Project) :

Pre-Filed Testimony of

Daniel Ewan, Clear River Energy LLC

In support of the Joint Application of
The Narragansett Electric Company d/b/a National Grid
and
Clear River Energy LLC

August 24, 2018

SUMMARY

Daniel Ewan is the Vice President of Project Development and representative for Clear River Energy LLC (“CRE”). His testimony provides a general overview of the CRE right-of-way, as well as an overview of the construction schedule for Clear River Energy Center and the Burrillville Interconnection Project.

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EXHIBITS

Exhibit DE-1

Daniel Ewan's Curriculum Vitae

PRE-FILED DIRECT TESTIMONY OF DANIEL EWAN

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, BUSINESS TITLE AND BUSINESS ADDRESS.

A. Daniel Ewan, Vice President of Project Development for Clear River Energy LLC, One South Wacker Drive, Suite 1800, Chicago, IL 60606.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. My testimony is on behalf of the applicant, Invenergy Thermal Development LLC (“Invenergy”) and the company formed for this project, Clear River Energy LLC (collectively “CRE”), in support of the CRE and The Narragansett Electric Company d/b/a National Grid application (the “Application”) for a license from the Rhode Island Energy Facility Siting Board (“EFSB” or “Board”) to construct the Burrillville Interconnection Project in Burrillville, Rhode Island (the “Project” or the “BIP”).

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. As Vice President of Project Development, I am responsible for the development, engineering and construction activities for Invenergy’s thermal power business throughout the United States.

I have more than 30 years of broad experience in the energy and utilities industry including roles in business development, project development and management, federal and state permitting, equipment procurement, engineering, project financing, project construction and start-up. I have led the development, construction, and start-up efforts of numerous energy centers throughout the United States.

1 Prior to joining Invenergy, my power experience included positions as Director of Project
2 Development at Calpine Corporation, Project Manager at SkyGen Energy, LLC (Acquired by
3 Calpine in 2000), a variety of engineering positions at ABB Impell Corporation and engineering,
4 construction and start-up positions at Commonwealth Edison, an Exelon company. I received a
5 MBA from University of Chicago, BS in Mechanical Engineering from Iowa State University of
6 Science and Technology, and Certificate in Financial Markets & Trading from Illinois Institute of
7 Technology. A more detailed description of my educational background and experience is
8 attached as **Exhibit DE-1**.

9 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

10 **A.** I will provide a general overview of the CRE right-of-way ("ROW"). This ROW is
11 necessary to interconnect the Clear River Energy Center ("CREC") to the National Grid
12 transmission system. I will also provide an overview of the construction schedule for CREC and
13 the BIP.

14 **II. OVERVIEW OF THE CRE ROW**

15 **Q. PLEASE PROVIDE AN OVERVIEW OF THE CRE ROW.**

16 **A.** The CRE ROW is for the new proposed 3052 Line to interconnect CREC to the existing
17 electric transmission network using the National Grid ROW (the "TNEC ROW"). The TNEC
18 ROW is currently occupied by two 345 kV transmission lines, designated as the 341 and 347 Lines.
19 The CRE ROW is approximately 0.8 miles long from the CREC to the TNEC ROW. The CRE
20 ROW will be 250 feet wide, of which approximately 150 feet will be cleared for the new 3052
21 Line, and will have eight H-frame structures to support the new line that will have a height of 86
22 feet.

1 **Q. WILL THERE BE ANY RATEPAYER FUNDING ASSOCIATED WITH THE CRE**
2 **INTERCONNECTION OR THE ROW?**

3 **A.** No, CRE will fully fund all costs associated with building the interconnection facilities and
4 there will be an agreement between CRE and National Grid where CRE will be obligated to pay
5 for the use of the portion of TNEC's ROW.

6 **Q. HAVE YOU REVIEWED THE BUILDING INSPECTOR'S ADVISORY OPINION?**
7

8 **A.** Yes.

9 **Q. THE ADVISORY OPINION DISCUSSES A 2014 OPTION AGREEMENT CRE**
10 **HAS WITH ALGONQUIN AND STATES THAT THE CRE ROW WAS NOT**
11 **WITHIN THE 2014 OPTION AGREEMENT. (PAGE 6) DO YOU HAVE A**
12 **RESPONSE?**

13 **A.** Yes. The Option Agreement that CRE has with Algonquin was for the purchase of
14 approximately 67 acres and the final shape of the parcel was to be determined during the
15 development process. The Option Agreement also included the requirement that Algonquin
16 provide separate easements for gas, electric and possibly water as needed.

17 On March 7, 2018, Algonquin provided an easement to CRE for purposes of supporting
18 this interconnection with National Grid's transmission system. The easement was filed with the
19 Board on April 17, 2018.

20 **Q. TO CLARIFY, HOW MANY ACRES IS ALGONQUIN INTERESTED IN**
21 **SELLING INVENERGY?**
22

23 **A.** Approximately sixty seven (67).

24 **Q. HAS THIS CHANGED SINCE 2014?**

25 **A.** No.

26 **Q. THE BUILDING INSPECTOR ALSO STATES "IT APPEARS THAT A DECISION**
27 **WAS MADE AT A POINT IN TIME, FOR WHATEVER REASON, THAT THE**

1 **CREC WAS GOING TO BE SITED WHERE IT IS BEING PROPOSED NO**
2 **MATTER WHETHER IT WAS REASONABLE, REALISTIC OR COST**
3 **EFFECTIVE.” (PAGE 7) DO YOU HAVE A RESPONSE?**

4 **A.** Yes, when Invenergy first began discussions with Algonquin about possible locations for
5 the CREC we examined several locations including the one that the Building Inspector suggested
6 would be better than the one that was ultimately chosen. That location, between the Burrillville
7 Compressor Station (“BCS”) and the TNEC ROW, was rejected by Algonquin, so CRE did not
8 have the option to propose this location.

9 **III. CONSTRUCTION SEQUENCING**

10 **Q. PLEASE EXPLAIN THE CONSTRUCTION SEQUENCING FOR THE CREC**
11 **PROJECT AND THE BIP.**

12
13 **A.** The Project will be constructed using conventional overhead electric transmission line
14 construction techniques. CRE and its consultants conducted detailed constructability field reviews
15 to assess proposed structure locations, determine access and work space requirements, and
16 evaluate measures to avoid or minimize environmental impacts. It is expected that National Grid
17 and CRE will work collectively to construct the 3052 line on their respective ROWs.

18 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

19 **A.** Yes

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EXHIBIT DE-1

Daniel S. Ewan

PROFESSIONAL EXPERIENCE

Invenergy LLC

October 2012 to present

Vice President, Thermal Development

In his role as Vice President of Thermal Development, Mr. Ewan has responsibility for the development, engineering, procurement and construction activities for Invenergy's U.S. thermal (natural gas) energy developments. These responsibilities include the management of a team of professionals with a wide variety of talents and skills. Specific roles vary from project to project and include land procurement activities, environmental and other permitting activities with local, state and federal officials, negotiation and administration of electrical, gas and water interconnection agreements, management of consultant contracts, selection and management of the design engineer and engineering, procurement and construction (EPC) contractors, overall project budget and schedule responsibilities, assistance in obtaining project financing, compliance with credit documents and various other activities. Specific roles and responsibilities and accomplishments include:

- Responsible for an ongoing development pipeline of sites under development in the U.S.
- Responsible for the engineering and construction of the Altamira cogeneration project in Altamira, MX that will provide steam, electricity and chilled water to a Mexican chemical facility. This project is expected to commence construction in September 2018.
- Responsible for the engineering and construction of the Los Ramones Energy Center, an approximate 600 megawatt 2 unit simple cycle power plant in Los Ramones, Monterrey, Mexico. This project utilizes GE's latest H class combustion turbine technology. The project commenced construction in August 2018.
- Responsible for development and construction of the Lackawanna Energy Center, an approximate 1,500 megawatt 3 unit combined cycle power plant in Jessup, Pennsylvania. This project utilizes GE's latest H class combustion turbine technology. Unit 1 entered commercial operation on May 31, 2018 and Units 2 and 3 are currently in testing and expected to enter commercial operation before the end of the year.
- Responsible for the development and construction of the Ector County Energy Center, a 300 megawatt 2 unit simple cycle power plant in Ector County, TX. that entered commercial operation in July 2015.

Invenergy LLC

October 2009 to October 2012

Vice President, Procurement and Construction

In his role as Vice President of Procurement and Construction, Mr. Ewan was responsible for the procurement of wind turbine generators and the management of legacy contracts for the procurement and maintenance of a fleet of 5 GE F class gas turbines. Mr. Ewan also was also responsible for the engineering and construction of Invenergy's wind farm construction during this time period.

In this role, Mr. Ewan was responsible for the negotiation and administration of equipment contracts,

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management of consultant contracts, selection and management of the design engineer and EPC contractors, overall project budget and schedule responsibilities, assistance in obtaining project financing, compliance with credit documents and various other activities. In this time period, Mr. Ewan and his team of project managers engineered and constructed over 1,000 MWs of wind turbines in ten different projects:

- Bishop Hill II Energy Center, Henry County, IL, commercial operation in 2012, 81 MW
- Bishop Hill I Energy Center, Henry County, IL commercial operation in 2012, 211.4 MW (This project included the construction of a 26 mile transmission tie line.)
- California Ridge Energy Center, Champaign and Vermillion Counties, IL commercial operation in 2012, 217.1 MW
- Le Plateau I Energy Center, Quebec, Canada, commercial operation in 2012, 138.6 MW
- Gratiot County II, Gratiot County, MI, commercial operation in 2012, 102.4 MW
- Gratiot County Energy Center, Gratiot County, MI, commercial operation in 2012, 110.4 MW
- Raleigh Energy Center, Chatham-Kent, Ontario, Canada, commercial operation in 2011, 78 MW
- White Oak Energy Center, McClean County, IL, commercial operation in 2011, 150 MWs (This project included the purchase of turbines that were previously destined for a project and had been placed into storage in Canada; the turbines were subsequently imported from Canada.)
- Vantage Energy Center, Kittitas County, Washington, commercial operation in 2010, 90 MWs
- Beech Ridge Energy Center, Rupert, West Virginia, commercial operation in 2010, 100.5 MWs

Calpine Corporation

June 1998 to October 2009

Director, Project Development

SkyGen Energy, LLC (Acquired by Calpine in 2000)

Project Manager

In his role as Director of Project Development and Project Manager, Mr. Ewan has been responsible for a broad variety of development and construction activities for the development of six different energy facilities as well as direct responsibility for the divestiture of certain non-strategic assets. These responsibilities varied from project to project and included assistance in land procurement activities, environmental and other permitting activities with state and federal officials, negotiation and administration of electrical, gas and water interconnection agreements, management of consultant contracts, selection and management of the design engineer and EPC contractor, overall project budget and schedule responsibilities, assistance in obtaining project financing, compliance with credit documents and various other activities.

- Responsible for the project development of the Russell City Energy Center, an approximately 600 megawatt 2x1 combined cycle power plant located in Hayward, CA. The Russell City Energy Center entered commercial operation in 2013.
- Responsible for the divestiture of the partially constructed Fremont and Hillabee Energy Centers. Fremont is an approximately 600 MW 2x1 combined cycle facility in Fremont, Ohio and Hillabee is

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an approximately 700 MW 2x1 combined cycle facility in Alexander City, AL.

- Responsible for final construction and startup of the Mankato Energy Center, an approximately 375 megawatt 1x1 combined cycle power plant in Mankato, MN that entered commercial operation in July 2006.
- Responsible for development and construction of the Fox Energy Center, an approximately 600 megawatt 2x1 combined cycle power plant in Kaukauna, Wisconsin that entered commercial operation in two phases. Phase A in June 2005 and Phase B in March 2006.
- Responsible for final construction of the Calgary Energy Center, an approximately 375 megawatt 1x1 combined cycle power plant in Calgary, Canada that entered commercial operation in March 2003.
- Responsible for construction of Zion Energy Center Phase I, a 300 megawatt 2 unit simple cycle plant in Zion, Illinois that entered commercial operation in June 2002. Also, responsible for construction and development of Zion Energy Center Phase II, a 150 megawatt single unit simple cycle plant in Zion, Illinois that entered commercial operation in June 2003.
- Responsible for development and construction of the Pine Bluff Energy Center, a 230 megawatt combined cycle cogeneration plant in Pine Bluff, Arkansas that entered commercial operation in June 2001.

Commonwealth Edison

Lead I&C Engineer

April 1995 to May 1998

As Lead Instrumentation and Controls Design Engineer for the 2 unit Zion Nuclear Power Station, managed the preparation and implementation of modification designs for power plant electrical and instrumentation controls systems.

ABB Impell Corporation

Instrumentation and Controls Design Engineer

March 1989 to March 1995

As Instrumentation and Controls Design Engineer for an architect engineering firm, performed various design related tasks and project engineer and project manager responsibilities in the preparation of detailed modification designs for nuclear plants throughout the midwest and eastern part of the U.S.

Commonwealth Edison

Start-Up Engineer

June 1983 to February 1989

As Start-up Engineer for the 2 unit Braidwood Nuclear Power Station, performed system and integrated plant start-up tests to take both units from construction to operational status.

Daniel S. Ewan

EDUCATION

Certificate in Financial Markets & Trading, Spring 2000
Illinois Institute of Technology, Chicago, IL

Master of Business Administration, June 1989,
University of Chicago, Chicago, IL

Bachelor of Science in Mechanical Engineering, June 1983
Iowa State University of Science and Technology, Ames, IA

PROFESSIONAL AFFILIATIONS

Registered Professional Engineer in Illinois, 1993 to 2009