The Narragansett Electric Company d/b/a National Grid

and Clear River Energy LLC

(Burrillville Interconnection Project)

RIPUC Dkt. No. 4737

Testimony of

Mark A. Stevens, P.E.

November 7, 2017

Q. Mr. Stevens, please state your name and business address.

A. My name is Mark A. Stevens. My business address is 40 Sylvan Road, Waltham, Massachusetts 02451.

Q. By whom are you employed and in what position?

A. I am employed as a Principal Engineer by National Grid USA Service Company ("National Grid") in the Transmission Planning Department.

Q. What are your responsibilities in that position?

A. I am responsible for transmission system planning for National Grid in its New England service territory.

Q. Please describe your education, training and experience.

A. I am a graduate of the University of Vermont, holding a Bachelor of Science degree in Electrical Engineering; I am also a graduate of Northeastern University, holding a Master of Science degree in Electrical Engineering. I have fourteen years of experience in power system planning and analysis. I have been a Principal Engineer in the Transmission Planning Department since July of 2016; prior to that I was a Lead Engineer (since 2007) and a Senior Engineer in the department since October of 2003. During this time, I have been responsible for many transmission planning studies. From September 1995 to October 2003, I was employed as an electrical engineer in the Energy Management System group in the Dispatching Department at National Grid. I am also a Registered Professional Engineer in the Commonwealth of Massachusetts.

Q. Have you previously testified before public utility regulatory bodies in Rhode Island?

A. Yes. I have presented testimony before the Public Utilities Commission for the Interstate Reliability Project and the Rhode Island Reliability Project.

Q. Mr. Stevens, are you familiar with the Burrillville Interconnection Project ("Project")?

A. Yes. We participated in a study led by the ISO – New England ("ISO-NE"), which evaluated different options for connecting the proposed Clear River Energy Center ("CREC") to the New England electric system.

Q. Mr. Stevens, are you familiar with National Grid's and Clear River Energy LLC's Energy Facility Siting Board Application, including the Environmental Report prepared by Power Engineers for the Project?

A. Yes, I helped prepare the description of the need for the Project in the Environmental Report.

Q. What is the Burrillville Interconnection Project?

A. The Project is a new transmission line to connect the proposed CREC to the New England electric system. The major component of the Project is the new 6.8 mile 345 kV transmission line from the CREC to the Sherman Road Switching Station.

Q. What is the scope of your testimony in this proceeding?

A. I will describe the transmission planning study that was conducted and address several alternatives which were examined as part of the process. A more detailed description is contained in Chapter 3.0 of the ER and in the Feasibility Study Report for Generation Interconnection Request: Queue Project 489 (August 7, 2015).

Q. Please describe the process for determining how a new generator will connect to the electric system.

A. When a new generator is proposed, ISO-NE typically performs a feasibility study to explore interconnection options and to preliminarily identify any reliability issues relative to the criteria and standards of ISO-NE, the Northeast Power Coordinating Council, the North American Electric Reliability Corporation as well as those contained in the National Grid Transmission Group Procedure 28 – Transmission Planning Guide. After the study is completed, a preferred interconnection option is selected and a more detailed system impact study is initiated. The feasibility study for the CREC interconnection, Feasibility Study Report for Generation Interconnection Request: Queue Project 489 (August 7, 2015), examined the impact of connecting CREC to the existing 341 Line, to the 347 Line, and to both lines. The study concluded that each of these connection alternatives would adversely impact the import capability of the Southeastern Massachusetts/Rhode Island electrical zone under N-1-1 contingency scenarios. ISO-NE determined that a direct connection to the Sherman Road Switching Station via a dedicated 345 kV line avoided this adverse impact.

Q. Does this complete your testimony?

A. Yes, it does.