STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS ENERGY FACILITY SITING BOARD

IN RE: INVENERGY THERMAL DEVELOPMENT LLC'S APPLICATION TO CONSTRUCT THE DOCKET No. SB-2015-06 CLEAR RIVER ENERGY CENTER IN BURRILLVILLE, RHODE ISLAND

PRE-FILED DIRECT TESTIMONY OF ROBERT SMITH

(JUNE 30, 2017)

SUMMARY

Robert Smith is a traffic engineer and Project Manager at McMahon Associates and testifies regarding his road condition analysis conducted for the Project. Specifically, he testifies regarding what if any impact Clear River Energy Center ("CREC") would have on road conditions in the Town, and he testifies regarding the traffic impact studies conducted for CREC, as well as the expected truck route utilized during construction and transporting water trucks to the site. Mr. Smith, relying on his experience and expertise, the application, materials in support of the application as supplemented, his analysis and review of road conditions along the planned routes, relevant rules and regulations of Rhode Island Department of Transportation, and the updated traffic analysis in the Revised Water Supply Plan, opines that CREC will not produce significant adverse effects on the quality of the state's roads and bridges and thereby not cause unacceptable harm on road conditions, or the traffic safety environment.

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<u>INVENERGY THERMAL DEVELOPMENT LLC'S PRE-FILED DIRECT TESTIMONY</u> OF ROBERT A. SMITH, MCMAHON ASSOCIATES (ROAD CONDITIONS)

2 I. INTRODUCTION

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

- 6 A. My name is Robert A. Smith. I am a Senior Project Manager at McMahon Associates,
- 7 located at 14 Breakneck Hill Road, Lincoln, RI 02865.
- 8 Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. My testimony is on behalf of the applicant, Invenergy Thermal Development LLC
("Invenergy"), in support of its application (the "Application") for a license from the Rhode Island

12 Energy Facility Siting Board ("EFSB" or "Board") to construct the Clear River Energy Center

13 project in Burrillville, Rhode Island ("Clear River" or "CREC").

14Q.PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND15PROFESSIONAL EXPERIENCE.

A. As I stated previously, I am employed by McMahon Associates, and I am a Senior Project
Manager. I received my Bachelors of Science degree in civil engineering from the University of
Rhode Island. I am a registered professional engineer in Rhode Island. I worked for thirty-two
(32) years at the Rhode Island Department of Transportation ("RIDOT"). A detailed description
of my educational background and professional experience is included in my CV, which was filed
with the EFSB on September 12, 2016.

1Q.PLEASE DESCRIBE YOUR EXPERIENCE PROVIDING TESTIMONY TO2REGULATORY COMMISSIONS, BOARDS, AGENCIES OR AS AN EXPERT3WITNESS.

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A. I have testified in front of numerous planning boards, zoning boards and on behalf of the State of Rhode Island in numerous court cases.

- 7 II. ROAD CONDITION ANALYSIS
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Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

11 In accordance with the Preliminary Order of the EFSB, the Burrillville Planning Board was A. 12 to advise whether CREC complied with the Town of Burrillville ("Town") Comprehensive Plan 13 and the Zoning Board was to advise whether a Special Use Permit should be granted. One of the 14 areas at issue before the Planning Board and Zoning Board was CREC's traffic impact. I was 15 retained to analyze what if any impact CREC would have on road conditions in the Town, to 16 conduct a traffic impact study of the site and to conduct a roadway assessment of the expected 17 truck route in Burrillville in order to establish a pre-construction baseline of the roadway 18 conditions. Finally, I will comment on the RIDOT Advisory Opinion.

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Q. WHAT DID YOU REVIEW WHEN CONDUCTING YOUR ANALYSIS?

A. I reviewed the field conditions including site access, travel routes and roadway conditions,
as well as general conformance with American Association of State Highway and Transportation
Officials (AASHTO) design standards along the expected travel routes for construction vehicles
to the site.

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Q. PLEASE EXPLAIN THE METHODOLOGY UTILIZED WHEN CONDUCTING YOUR ANALYSIS.

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- **A.** We conducted an assessment of the existing pavement conditions to set a baseline to determine what would be the impact of the construction vehicles during construction of CREC. I
- 30 went out to Burrillville in the Spring of 2016 and reviewed pavement. I performed a review of all

the conditions along the expected truck route, specifically Route 100 just north of Chepachet all the way to the site entrance. Also, following-up to requests by the Town's Planning Board, I reviewed the roads on an alternative route. Additionally, I reviewed the intersection of Church and High Street for a second time, based on the request of the Town's Planning Board. Further, I reviewed Invenergy's revised Water Supply Plan, filed with the Board on January 11, 2017.

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Q. AFTER CONDUCTING YOUR ANALYSIS, DID YOU MAKE ANY FINDINGS REGARDING THE TRAFFIC IMPACT OF THE CREC PROJECT?

9 A. Yes. Please see our report titled "Traffic Impact Study for the Clear River Energy Center
10 – Wallum Lake Road (Route 100) Burrillville, Rhode Island," dated May 2016 and the appendix,
11 filed with the Board on August 2, 2016 as a supplement Exhibit 2 to Invenergy's Response to the
12 EFSB's Data Request No. 1-1. Please also see Appendix E, entitled "McMahon Traffic Analysis,"
13 of the revised Water Supply Plan, filed with the Board on January 11, 2017.

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Q. PLEASE SUMMARIZE YOUR FINDINGS FOR THE BOARD.

16 A. We measured baseline road conditions and identified some areas where the pavement was in relatively poor condition and other areas where it was in good condition. Specifically, just 17 18 coming out of Chepachet, a section of Route 100, between Route 98 and Route 102 was in rather 19 poor condition and in need of immediate maintenance upon our April 2016 review. Since that 20 time, RIDOT has performed a full width mill and overlay along this piece of roadway. On Route 21 100 approaching Pascoag, there has been some paying and chip sealing done. Entering Pascoag, 22 the road condition is generally good, with the exception of some existing pavement rutting and 23 damage to the sidewalk at the intersection of South Main Street and Pascoag Main Street. Along 24 Church Street, there are some sections of poor pavement condition where maintenance has been 25 ongoing. Approaching CREC on Route 100 beyond Pascoag, there again are some areas where 26 chip sealing of pavement has been performed.

1Q.PLEASE SUMMARIZE YOUR FINDINGS WITH REGARD TO THE TRAFFIC2CONDITIONS ASSOCIATED WITH THE REVISED WATER SUPPLY PLAN?

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A. Subsequent to our initial study, the proposed route for delivery of water to the site was evaluated, and it was determined that the additional truck loading resulting from proposed delivery of water would not produce a significant additional burden on the State Highways along the route.

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Q. WHY DID YOU MEASURE BASELINE ROAD CONDITIONS?

A. The purpose is to set a baseline of conditions before construction starts so that everyone is
aware of what the conditions are, and so we can measure at the end of construction to determine if
deterioration has taken place beyond what would normally be expected given whatever conditions,
(weather, development, etc.) are going to be occurring in the area over the next few years.

12Q.DO YOU HAVE AN OPINION AS TO HOW CREC WILL IMPACT ROAD13CONDITIONS?

14 A. I do. As the expected truck route is entirely on State maintained roads, the impact will be 15 minimal, as these roadways are designed to handle higher volumes of traffic, including truck 16 traffic. If any noticeable impact were to occur, it would likely be at intersections where repeated 17 braking and turning truck traffic can produce pavement rutting conditions. This condition is 18 already occurring (pre-construction) at the intersection of South Main Street and Pascoag Main 19 Street. Our report has noted the level of rutting currently being experienced, and this can serve as 20 a baseline. The intersection of Route 100 and the site access drive, as well as the curve in the 21 northbound direction at Church and Main have also been evaluated in terms of rutting. Existing 22 pavement condition for the remainder of Route 100 from Chepachet to the site entrance drive has 23 been catalogued, but I do not anticipate any noticeable impact from construction vehicles 24 associated with Invenergy.

The route for delivery of water to the site is expected to follow along the same route as the expected route of construction truck traffic. Similarly, this route was evaluated, and it was determined that the additional truck loading resulting from proposed delivery of water would not
 produce a significant additional burden on the State Highways along the route.

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Q. DURING THE PLANNING BOARD PROCESS, THE TOWN'S PEER REVIEW RECOMMENDED THAT THE TOWN PURSUE A FURTHER COMMITMENT WITH REGARD TO IDENTIFYING DEGRADED AREAS AND THE APPROPRIATE RESTORATIONS. DO YOU HAVE A RESPONSE?

7 I do. This appears to be an unprecedented request of a proposed project in Rhode Island. A. 8 Nevertheless, I understand that Invenergy is willing to repair Route 100, if damaged by the 9 construction traffic associated with Invenergy. Route 100 falls under RIDOT jurisdiction. 10 Coordination with RIDOT has already been initiated. In my opinion, Invenergy has proactively 11 documented the roadway conditions on the Route 100 travel route to the site, which establishes a 12 baseline condition to assess roadway damage that may be attributed to increased truck traffic. 13 Invenergy will continue to coordinate with RIDOT on this matter and on the matter of its 14 application for a physical alternation permit.

15 It should be noted that, in my thirty-two (32) years at RIDOT (the last twenty-five (25) in 16 a supervisory capacity in the Roadway Design section), I am not aware of this level of pre-17 construction commitment from a company regarding potential damage from construction vehicles 18 being made for any private, off-road construction project.

19 Q. HAVE YOU READ RIDOT'S ORIGINAL ADVISORY OPINION?

20 A. Yes.

21 Q. DO YOU HAVE ANY COMMENTS OR RESPONSE?

A. In the RIDOT advisory opinion, RIDOT indicated which permits are required for the site.
I agree with their list. We met with RIDOT's Managing Engineer of Road Design and the Chief
Civil Engineer of Traffic Design in March of 2016 to discuss the traffic study and pavement
management plan. At this meeting, we discussed the travel routes to the site. RIDOT informed

us of relevant roadway projects, identified the permits required and discussed sources and methods
 for assessing pavement conditions. We will continue to coordinate with RIDOT and the Board as
 the Project moves forward and as permit applications are assessed. We will also defer any further
 comments until such time as we have reviewed RIDOT's Supplemental Advisory Opinion.
 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

- 6 **A.** Yes.
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