

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

**IN RE: INVENERGY THERMAL DEVELOPMENT LLC's
APPLICATION TO CONSTRUCT THE
CLEAR RIVER ENERGY CENTER IN
BURRILLVILLE, RHODE ISLAND**

DOCKET No. SB-2015-06

**PRE-FILED DIRECT TESTIMONY OF
CHRISTOPHER DONTA**

(JUNE 30, 2017)

SUMMARY

Christopher Donta is a Senior Principal Investigator of Gray and Pape, Inc. and testifies regarding Gray & Pape's analysis and studies provided in the application with regard to cultural and archeological survey performed on the Clear River Energy Center ("CREC") project location. He describes his findings as it relates to the Project on cultural and historic properties. Mr. Donta, relying on his experience and expertise, the application as supplemented, his analysis, surveys and testing and relevant rules and regulations, the cultural analysis supplied with the RIDEM application for alteration of wetlands, opines that the Project will not cause unacceptable harm to any significant cultural or historic properties.

LIST OF EXHIBITS

- CD-1 Smith and Donta 2016, Phase I Archaeological Identification Survey for the Proposed Invenegy LLC, Clear River Energy Center, Burrillville, Providence County, Rhode Island AND Phase II Archaeological Site Examination of the Iron Mine Brook Dune Site (RI 2757)

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I. INTRODUCTION

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

A. My name is Christopher Donta. I am a Senior Principal Investigator at Gray & Pape, Inc., located at 60 Valley Street, Suite 103, Providence, Rhode Island 02909.

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 Energy Facility Siting Board (“EFSB” or “Board”) to construct the Clear River Energy Center project in Burrillville, Rhode Island (“Clear River” or “CREC” or “Project”).

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I received a bachelor’s degree in history from the College of Holy Cross, a master’s degree in anthropology from Bryn Mawr College and a Ph.D. in anthropology from Bryn Mawr College. I have over twenty-three (23) years of experience directing more than three hundred (300) archaeological projects throughout the Northeast. A detailed description of my educational background and professional experience is included in my CV, filed with the Board on September 12, 2016.

Q. PLEASE DESCRIBE YOUR EXPERIENCE PROVIDING TESTIMONY TO REGULATORY COMMISSIONS, BOARDS, AGENCIES OR AS AN EXPERT.

1
2 **A.** I provided expert written testimony as part of one other utility project in Massachusetts in
3 2015. I provided text for submissions to the Massachusetts Department of Public Utilities
4 regarding a proposed National Grid project in western Massachusetts.

5 **Q. PLEASE DESCRIBE THE SECTIONS OF THE EFSB APPLICATION THAT YOU**
6 **ASSISTED WITH AND CAN SPEAK ABOUT.**

7
8 **A.** Section 6.13 (Cultural Resources).

9 **II. ANALYSIS**

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

11
12 **A.** To provide information as to our findings regarding the effects of the proposed Project on
13 cultural and historic properties. The study included the power plant area as well as the proposed
14 route of the electric transmission line across the property owned by Algonquin Gas Transmission
15 to the existing National Grid right of way (this is the CREC 345kV transmission line).

16 **Q. WHAT DID YOU REVIEW WHEN CONDUCTING YOUR ANALYSIS?**

17
18 **A.** We reviewed the site files of the Rhode Island Historic Preservation and Heritage
19 Commission, which include reports and site forms from previous archaeological projects in the
20 area of Burrillville, mapping of all known Native American and historic period archaeological
21 sites, and mapping of all known Native American burial locations within an approximately two-
22 mile radius of the proposed Project.

23 We reviewed State and National Registers of Historic Places; conducted a literature survey
24 of archaeological studies, historic sources, maps and photographs from the nineteenth and
25 twentieth centuries; studied geological and USDA soil maps; reviewed nineteenth through twenty-
26 first century topographic maps; reviewed existing conditions and proposed layout plans provided
27 by ESS and reviewed LiDAR data (Light Detection and Ranging data, which provides detailed

1 mapping of the ground surface from above, regardless of vegetation) covering the proposed Project
2 area. We also met with Betty and Carlo Mencucci of the Burrillville Historical & Preservation
3 Society and Paul Roselli of Burrillville Land Trust in the field on March 31, 2016, to review the
4 Project area, our work and findings. We also have consulted with representatives of the
5 Narragansett Indian Tribe and the Wampanoag Tribe of Gay Head (Aquinnah) regarding the
6 Project. Invenergy has also consulted with representatives with the Blackstone Valley Heritage
7 Corridor.

8 **Q. PLEASE EXPLAIN THE METHODOLOGY UTILIZED WHEN CONDUCTING**
9 **YOUR ANALYSIS.**

10
11 **A.** Based on our review of the topography, soil and geology data, and the findings of previous
12 archaeological surveys and background research, we developed a testing strategy for identifying
13 archaeological sites. This strategy consisted of stratifying the Project area into areas of high and
14 low potential for the presence of archaeological sites, and then focusing our testing efforts on the
15 high potential locations within proposed impact areas. Such a strategy is rooted in decades of
16 archaeological testing research across the region, in which both Native American and historic
17 period archaeological sites have been found to be associated with certain consistent parameters.

18 This strategy is in accordance with the Rhode Island Archaeological Standards and
19 Guidelines (2015), published by the Rhode Island Historic Preservation and Heritage Commission.
20 Following the development of a sensitivity assessment for the Project area, a reconnaissance
21 survey was conducted in which the Project impact areas were observed on the ground, while
22 conducting a survey on foot. This reconnaissance survey serves to confirm the sensitivity
23 assessment, and to look for evidence of possible site locations based on the background research,
24 literature survey, and LiDAR data. The next step was to complete subsurface testing, by excavating
25 shovel test pits (“STPs”) into the ground. These STPs measured 50 x 50 cm and were generally

1 excavated into glacial soils, if possible, frequently below 50 cm in depth. Soils from the STPs were
2 screened and checked for artifacts. The excavated test pit soils were examined and described. Any
3 soil anomalies or cultural features were documented. Any artifacts found were recorded for
4 provenience and collected, if recovered from undisturbed soil contexts. All STP locations were
5 recorded using GPS. The full testing methodology is explained in detail in our report, attached as
6 **Exhibit CD-1**, on pages 33-40, while the exact testing locations and results are detailed on pages
7 41-104, as well as in Appendix B (Smith and Donta 2016, Phase I Archaeological Identification
8 Survey for the Proposed Invenergy LLC, Clear River Energy Center, Burrillville, Providence
9 County, Rhode Island AND Phase II Archaeological Site Examination of the Iron Mine Brook
10 Dune Site (RI 2757)). In total, 611 STPs were excavated.

11 **Q. AFTER CONDUCTING YOUR ANALYSIS, DID YOU MAKE ANY FINDINGS**
12 **REGARDING CREC'S IMPACT ON CULTURAL AND HISTORIC**
13 **RESOURCES?**

14
15 **A.** Yes. Investigations included subsurface testing of 15 survey areas, resulting in a total of
16 611 STPs excavated. Six areas of archaeological interest were identified. These include a historical
17 structure located in the area that was originally considered for CREC 345 kV transmission line
18 ROW, a cluster of waste material from the working of Native American stone tools (known as a
19 "lithic scatter") located in the northeastern portion of the Power Block survey area, a historical
20 artifact scatter located in the southeastern portion of the Power Block survey area, a lithic scatter
21 located in the Area 4 survey area, a historical structure in the northeastern portion of the 137-m
22 Frontage survey area, and historical artifacts recovered from STP K-3 in the Frontage survey area.

23 The historical and Native American scatters identified in the Power Block do not appear to
24 retain their original context and, therefore, no further archaeological work was recommended for
25 those two locations. The ephemeral structure location found in the originally proposed CREC 345

1 kV transmission line area was considered to have the potential to aid in understanding nineteenth
2 century settlement in this region of Rhode Island. As such, Gray & Pape recommended avoidance.
3 Invenenergy rerouted the line to avoid this site, as was recommended by the RI Historical and
4 Preservation Commission, and the proposed new line configuration was tested. The historical
5 artifact scatter identified in the Frontage survey area (parcel along Wallum Lake Road) does not
6 appear to retain its original context and, therefore, no further archaeological work was
7 recommended for this location. The historical structure foundation, likely associated with a barn,
8 identified in the Frontage survey area should be better documented prior to any disturbance, if
9 impacts to this location are required. As such, Gray & Pape recommended avoiding it and an
10 associated 20-m radius or, if avoidance is not possible, Gray & Pape recommended additional
11 archaeological investigations.

12 Also, the Iron Mine Brook Dune site (RI 2757) in Area 4 was identified within dune or
13 dune-like deposits similar to many early Native American sites in New England. Given these
14 deposits, the site was considered to be possibly in its original context and to have the potential to
15 aid in understanding Native American settlement in this region of Rhode Island. Gray & Pape
16 recommended avoidance of the Iron Mine Brook Dune site (RI 2757). However, Invenenergy did
17 not feel that avoidance of this location was possible. Therefore, a Phase II site examination survey
18 was conducted to assess the eligibility of the site for the National Register of Historic Places. Based
19 on a lack of diversity of artifacts and the absence of cultural features, this site was evaluated as not
20 eligible. Information on this work was also included in the report submitted to the RIHPHC
21 referenced earlier (Smith and Donta 2016), which is attached as **Exhibit CD-1**.

22 **Q. PLEASE SUMMARIZE YOUR FINDINGS FOR THE BOARD.**
23

1 A. Based on background research, a sensitivity assessment, a reconnaissance survey, and
2 subsurface testing, a number of locations were found within the proposed impact areas that
3 contained archaeological deposits. Three locations were recommended for avoidance, while a
4 number of others were considered to be in disturbed contexts and not significant. The nineteenth
5 century structure along the original 345kV line, the Frontage barn site, and the Iron Mine Brook
6 Dune Native American site were all recommended for avoidance. The Project plans are such that
7 the former two sites will be avoided, while the latter site was further examined and subsequently
8 recommended as not eligible for the National Register.

9 **Q. HAVE YOU REVIEWED THE ADVISORY OPINION OF THE RHODE ISLAND
10 HISTORICAL PRESERVATION AND HERITAGE COMMISSION?**

11
12 A. Yes.

13 **Q. DO YOU HAVE AN OPINION?**

14
15 A. I agree with their opinion, as it concurs with the recommendations we provided them in
16 June of this year.

17 **Q. HAVE YOU REVIEWED THE COMMENTS FROM THE BLACKSTONE RIVER
18 VALLEY NATIONAL HERITAGE CORRIDOR?**

19
20 A. Yes.

21 **Q. DO YOU HAVE ANY RESPONSE TO THOSE COMMENTS?**

22
23 A. The Blackstone Heritage Corridor, Inc. (“BHC”), the designated local coordinating entity
24 for the John. H. Chafee Blackstone River Valley National Heritage Corridor, comments that their
25 strategic plan includes encouraging regional planning to protect shared cultural resources and to
26 identify and protect important cultural resources from adverse development impacts. They further
27 state that they have not yet reviewed the archaeological survey and site examination report. Given

1 that my expertise is relative to cultural heritage management, I cannot provide authoritative
2 comment regarding non-cultural issues such as environmental stewardship.

3 I can, however, provide expert commentary regarding cultural resources that relate to their
4 strategic plan objectives. First, it is my professional opinion that our archaeological surveys are
5 consistent with their objective of identifying and protecting important cultural resources. Using
6 methodologies accepted and promoted by the RIHPHC and consistent with state and federal
7 guidelines, we identified three archaeological resources within the project impact areas, further
8 examined one of these resources and recommended that it is not significant, and recommended
9 avoidance of impact of the other two resources, which may or may not be significant. Invenergy
10 has designed around the two resources recommended for avoidance.

11 Therefore, I reiterate my conclusion that the proposed Project will not impact any
12 significant cultural or historical resources. Secondly, I note that in reviewing documentation
13 relative to the Blackstone Valley National Heritage Corridor, the National Park Service and the
14 BHC point to several historical resources in Burrillville that may be considered contributing
15 elements of the Corridor or places to see relative to the Corridor in Burrillville. These include
16 White Mill Park, located approximately 1.65 miles to the southeast of the Project, the Bridgeton
17 Car Park, located approximately 2.1 miles to the southeast of the Project, the Burrillville Historical
18 and Preservation Society, located approximately 1.8 miles to the southeast of the Project, and the
19 Black Hut Management Area, located approximately 4.25 miles to the east of the Project. It is my
20 professional opinion that the proposed impacts of the Project will not affect the settings,
21 characteristics, or feelings of these historical resources.

22

23

1 **III. CONCLUSIONS**

2

3 **Q. IN YOUR EXPERT CAPACITY, DO YOU HAVE AN OPINION TO A**
4 **REASONABLE DEGREE OF SCIENTIFIC CERTAINTY REGARDING CREC'S**
5 **CULTURAL AND HISTORIC IMPACT?**

6

7 **A.** I do. The proposed Project configuration will not impact any significant cultural or historic
8 properties.

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

10 **A.** Yes.

11