

BEFORE THE ENERGY FACILITY SITING BOARD OF THE
STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

INVENERGY THERMAL DEVELOPMENT LLC – : DOCKET No. SB-2015-06
CLEAR RIVER ENERGY CENTER :

POST-HEARING MEMORANDUM
OF
THE TOWN OF BURRILLVILLE

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3. Governor Gina M. Raimondo press release regarding 400 MW Revolution Wind offshore wind project – April 22, 2019
4. Save the Bay position memorandum to the EFSB
5. Blackstone Heritage Corridor, Inc. position memorandum to the EFSB

TABLE OF ACRONYMS AND ABBREVIATIONS

Acronym/ Abbreviation	Definition
Act	Energy Facility Siting Act
ARA	Annual Reconfiguration Auction
ASSF	Area Subject to Stormwater Flow
BHC	Blackstone Heritage Corridor
BLT	Burrillville Land Trust
Board	Energy Facility Siting Board
BTM	Behind-the-Meter
CELT	Capacity, Energy, Loads, and Transmission
CLF	Conservation Law Foundation
Corridor	Blackstone River Valley National Heritage Corridor
CREC	Clear River Energy Center
CSO	Capacity Supply Obligation
DDBT	Dynamic Delist Bid Threshold
DEM	Department of Environmental Management
DOH	Department of Health
DOT	Department of Transportation
DPUC	Division of Public Utilities and Carriers
ECRI	Environment Council of Rhode Island
EFSA	Energy Facility Siting Act
EFSB	Energy Facility Siting Board
EIS	Environmental Impact Statement
Exh.	Exhibit
FCA	Forward Capacity Auction
FCM	Forward Capacity Market
FCO	Forward Capacity Obligation
FCTS	Forward Capacity Tracking System
FERC	Federal Energy Regulatory Commission
FRA	Forward Reserve Auction
FRM	Forward Reserve Market
ICR	Installed Capacity Requirement
Invenergy	Invenergy Thermal Development, LLC
Inv.	Invenergy
ISO	Independent System Operator for New England
ISO-NE	Independent System Operator for New England

KW	Kilowatt
MOPR	Minimum Offer Price Rule
MW	Megawatt
NECEC	New England Clean Energy Connect
NICR	Net Installed Capacity Requirement
OER	Office of Energy Resources
OSP	Ocean State Power
PAP	Physical Alteration Permit
PFD	Pascoag Fire District
PUC	Rhode Island Public Utilities Commission
PUD	Pascoag Utility District
SENE	Southeast New England
Town	Town of Burrillville
Tr.	Transcript

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INTRODUCTION

On October 29, 2015, Invenergy Thermal Development, LLC (“Invenergy”) filed an Application with the Energy Facility Siting Board (“EFSB” or “Board”) seeking a major energy facility license to construct and operate the proposed Clear River Energy Center (“CREC”) in the pinch point of a wildlife corridor in an unfragmented forest in the Town of Burrillville (“Town”). CREC would be an approximate 1,000 MW combined cycle dual fuel (natural gas and oil) electric generating facility with two units.¹

Under the Energy Facility Siting Act (“EFSA” or “Act”),² Invenergy has the burden of proof on all issues.³ Therefore, Invenergy must prove by a preponderance of the evidence that (among other things):

1. CREC “is necessary to meet the needs of the state and/or region for energy of the type to be produced . . .”,⁴ and
2. CREC “will not cause unacceptable harm to the environment . . .”⁵

Also, under R.I.G.L. § 42-98-2(7), this Board must “determine whether cost effective efficiency and conservation opportunities provide an appropriate alternative to the proposed

¹ Inv. Exh. 1A.

² R.I.G.L. § 42-98-1 *et seq.*

³ R.I.G.L. § 42-98-11(b) and EFSB Rule 1.13(c)(1). This Board is authorized by R.I.G.L. § 42-98-7(c) to issue rules. Therefore, the rules of this Board have the force and effect of law. *In re: Advisory Opinion to the Governor*, 732 A.2d 55, 75-76 (R.I. 1999). See also, tr. 7/19/18, at 10; tr. 1/22/19, at 101; tr. 4/2/19, at 207; tr. 1/17/19, at 91; tr. 10/31/18, at 5. See EFSB Order No. 113 in Docket SB2016-01, at 2 (6/13/17); EFSB Order No. 54 in Docket SB2003-01, at 7 (10/29/04); EFSB Order No. 7 in Docket SB1987-01, at 6 (10/25/88).

⁴ R.I.G.L. § 42-98-11(b)(1) and EFSB Rule 1.13(c)(1)(i).

⁵ R.I.G.L. § 42-98-11(b)(3) and EFSB Rule 1.13(c)(l)(iv).

facility.”⁶

R.I.G.L. § 42-98-2 is the Declaration of Policy for the Act. To comply with the Declaration of Policy, Invenergy must prove (1) that CREC is “justified by long term state and/or regional energy need forecasts”,⁷ and (2) that CREC “shall produce the fewest possible adverse effects on the quality of the state’s environment; most particularly, its land and its wildlife and resources, the health and safety of its citizens, the purity of its air and water, its aquatic and marine life, and its esthetic and recreational value to the public.”⁸

The evidence shows that CREC is not needed. Electricity supply in New England has been steadily increasing, even as net demand has been decreasing because of (1) successful energy efficiency programs, (2) 150,000 behind-the-meter solar installations to date,⁹ and (3) increasing renewables such as onshore and offshore wind and hydropower. As Invenergy witness Ryan Hardy conceded in response to Director Coit, “. . . supply has increased . . . demand has decreased . . .” (tr. 1/9/19, at 113).¹⁰ Moreover, Invenergy does not have a Capacity Supply Obligation (“CSO”) for either Unit, and as Invenergy has said, “**If CREC fails to get a CSO . . . it will not be needed.**”¹¹

The evidence also shows that CREC would cause unacceptable harm to the environment in several ways, including clearing and fragmentation in the pinch point of a wildlife corridor in a high value unfragmented forest and the resulting adverse impacts to the habitats of numerous rare species. As Jason Osenkowski, Deputy Chief of Wildlife at the Department of Environmental Management

⁶ See also, R.I.G.L. § 42-98-8(7) and EFSB Rule 1.6(b)(16).

⁷ R.I.G.L. § 42-98-2(2) and EFSB Rule 1.13(c)(1)(i).

⁸ R.I.G.L. § 42-98-2(3) and EFSB Rule 1.13(c)(1)(iv).

⁹ A Behind-The-Meter (“BTM”) system is a renewable energy generating facility that produces power intended for on-site use in a home or other building. The location of the system is literally behind-the-meter on the owner’s property, not on the side of the electric grid/utility. In effect, it is a micro generating facility. The 150,000 (and growing) BTM systems in New England have a combined nameplate generating capacity of about 2,900 MW. (ISO 2019 Regional Electricity Outlook, Town Exh. 49, at 12).

¹⁰ As the expert need witness for Conservation Law Foundation (“CLF”) testified: “there’s a surplus of capacity and the plant is not needed.” (tr. 1/17/19, at 195).

¹¹ Tr. 4/2/19, at 69-70, quoting from Invenergy’s Post-Hearing Memorandum in PUC Docket 4609 (emphasis added).

(“DEM”) testified in response to questions from Chairperson Curran and Director Coit: “I would view it as unacceptable harm . . . the detriment to the continuity of that habitat and the species that rely on that continuity, to me, is avoidable, and, as a result, I think it’s unacceptable.” (tr. 3/26/19, at 172-79).

Therefore, the Town respectfully submits that Invenergy’s Application for a major energy facility license for CREC should be rejected.

ARGUMENT

I. CREC IS NOT NEEDED

A. Need forecasts show that net demand is steadily declining for electricity in New England.

The evidence shows there is no need for CREC, based on steadily decreasing net demand. The steady decrease is primarily due to increasing energy efficiency, 150,000 BTM solar installations (and growing), increasing renewables (including onshore and offshore wind and baseload hydropower), and limited plant retirements.¹²

Increasing energy efficiency and BTM solar resources have steadily decreased the net peak load needs of the region in every year since 2015, with the 2018 Independent System Operator – New England (“ISO”) long-term forecast showing about a 3,000 MW decrease in net peak load for the year 2024 relative to the 2015 forecast.¹³

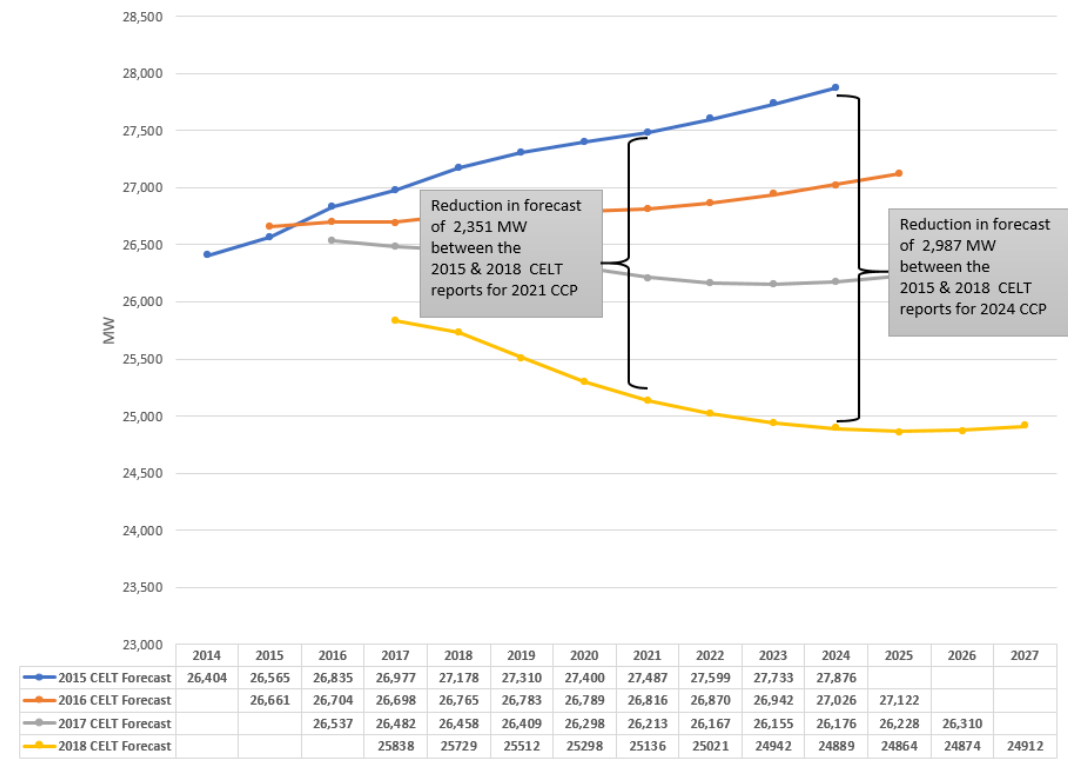
As ISO stated in March, 2019, “**New England has adequate capacity resources to meet projected demand**” and “**electricity demand from the regional power grid is trending downward over the next decade. . . .**”¹⁴ This is illustrated in the following Figure 1.

¹² Town Exh. 36, at 2-4.

¹³ Town Exh. 36, Exhibit GCW-1; Town Exh. 40, at 10-11.

¹⁴ 2019 ISO Regional Electricity Outlook, Town Exh. 49, at 12, 32.

Figure 1 – Forecast of Net Summer Peak Load¹⁵



As shown in this Figure, the ISO long-term forecast has decreased each year since 2015 from 27,876 MW (2024), to 27,122 MW (2025), to 26,310 MW (2026), and to 24,912 MW (2027).

John Niland, Invenergy’s Project Manager for CREC, conceded that the Net Installed Capacity Requirement (“NICR”) in New England went down from 2015 to 2019, and that renewables have steadily increased. (tr. 4/2/19, at 43).

As Ryan Hardy, Invenergy’s expert energy witness, testified in response to a question from Director Coit, “solar and energy efficiency are really two of the primary reasons why you see tempered load growth” (tr. 1/16/19, at 25-26). Mr. Hardy also conceded that the peak demand forecast in New England is negative. (tr. 1/16/19, at 26-27). As Mr. Hardy testified: “There has been a downward trend in the forecast for summer peak demand over the last several years.” (tr. 1/8/19,

¹⁵ ISO Capacity, Energy, Loads, and Transmission (“CELT”) reports, Section 1.1, Town Exh. 40, at 11.

at 199). The ISO forecast of net peak summer load is important because it is used by ISO to set the annual NICR, which can tell us whether new power plants are needed in New England.

CLF's expert witness on need, Robert Fagan, concurred: "ISO New England's forecasts of load . . . in each successive year have gone down as they have accounted for the effects of relatively aggressive energy efficiency policies that exist in New England and as they account for the effects of smaller scale behind-the-meter solar." (tr. 1/16/19, at 119). The current ISO long-term 10-year forecast shows that "peak load declines at minus .07 percent per year." (tr. 1/16/19, at 157).¹⁶

The Town's expert witness, Glenn Walker, testified that "since 2015 there has been a drastic decline in the actual and forecast net peak demand." (Town Exh. 36, at 5; tr. 1/23/19, at 24).

B. ISO's Net Installed Capacity Requirement shows no need for CREC.

There are several reasons why the evidence shows there is no need for CREC. These include (1) CREC easily replaced and sold its Unit 1 CSO for two successive Forward Capacity Auctions ("FCAs"), (2) ISO has determined there are sufficient resources in the Southeast New England ("SENE") zone to meet reliability needs without the CREC Units, and (3) ISO has acquired a significant surplus of capacity in all recent FCAs, including 1,089 MW in the 2019 FCA 13. In addition, there is little in the way of future retirements that will change the supply demand relationship.¹⁷

ISO is the independent entity responsible for developing the long-term local and regional energy need forecasts for the New England market area and assuring sufficient resources are available to meet forecasted needs. (tr. 1/16/19, at 56). The NICR is the minimum capacity needed to meet system reliability needs. The NICR is established based on ISO's long-term 10-year

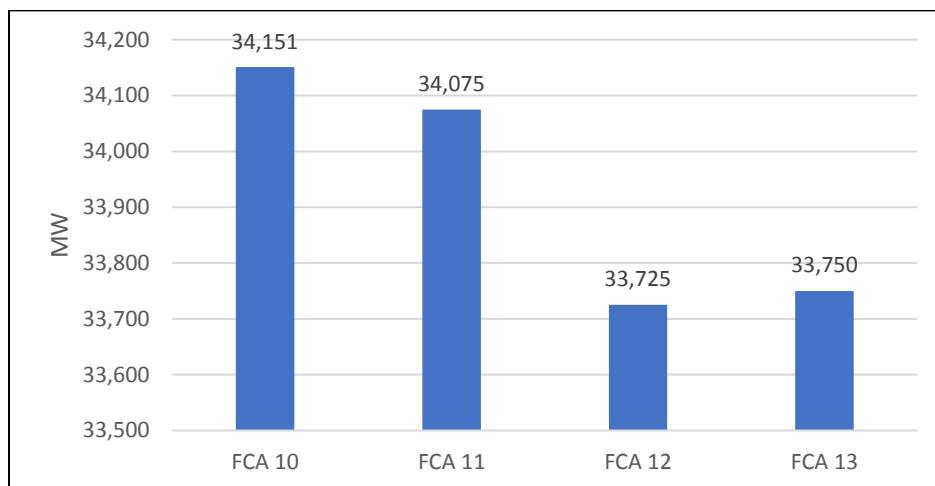
¹⁶ Mr. Fagan's testimony can be summarized as follows: (1) New England has surplus capacity, (2) future demand is declining, (3) the pace of retirements shows no need, and (4) many new renewables are coming into the New England market. (tr. 1/16/19, at 173-74).

¹⁷ Town Exh. 40, at 31-35; ISO FCA 13 press release February 6, 2019, Ad. Notice Exh. 11.

forecasts of system needs. (tr. 4/2/19, at 78).¹⁸

Based on FERC filings by ISO that forecast local and regional needs, NICR has been trending down,¹⁹ even with the ISO recently increasing its system reserves assumption. This trend is illustrated in the following Figure 2.

Figure 2 – Net Installed Capacity Requirements per FCAs 10-13²⁰



For FCA 13, the ISO system reserves assumption was increased from 200 MW to 700 MW, but this only resulted in an increase of 25 MW in the forecasted NICR. The following ISO testimony in a FERC proceeding explains why this increase in the reserves assumption did not result in a corresponding increase in NICR.

Q: WHAT IS THE IMPACT OF USING 700 MW OF SYSTEM RESERVES IN THE DETERMINATION OF THE INSTALLED CAPACITY REQUIREMENT?

A: The use of the 700 MW reserves assumption increased the Installed Capacity Requirement by 550 MW.

Q: DOES THAT MEAN THAT THE INSTALLED CAPACITY REQUIREMENT FOR FCA 13 IS 550 MW HIGHER THAN THE INSTALLED CAPACITY REQUIREMENT FOR FCA 12?

¹⁸ Mr. Niland conceded that any forecast beyond 10 years is really just a “guess.” (tr. 4/2/19, at 79).

¹⁹ Tr. 4/2/19, at 66.

²⁰ ISO Informational Filing to FERC, Town Exh. 40, at 27.

A: **No. Due to the decline in the projected loads determined as part of the load forecast for 2018** versus those forecasted in 2017, the net Installed Capacity Requirement for FCA 13 (33,750 MW) is only 25 MW higher than the net Installed Capacity Requirement for FCA 12 (33,725 MW). Thus, **the impact of the increase in the system reserve assumption is effectively netted out by the decline in the load forecast for 2018** used in the calculation of the FCA 13 ICR-Related Values.²¹

Therefore, had ISO kept its reserve assumption the same, then the NICR for FCA 13 would have gone down by approximately 500 MW due to declining net demand. (tr. 1/9/19, at 28).

Importantly, long term need forecasts from ISO show declining net demand for the next 10 years. The 2018 ISO need forecast estimates that net peak summer load in New England will decline in the next 10 years from 25,729 MW in 2018 to 24,912 MW in 2027.²²

As Glenn Walker, the Town's energy market expert, testified:

. . . the passage of time has eliminated the need for either of the CREC units . . . the demand for electricity continues to decline in the region as evidenced by the ISO-NE's 2018 draft forecast of future net summer peak loads which, under very conservative assumptions, is at least 500 MW lower than the ISO-NE 2017 Capacity, Energy, Loads, and Transmission ("CELT") Report. (Town Exh. 32, at 7-8).

What is reducing the ISO need forecasts? Mr. Walker explains this is "a result of excess supply relative to demand and lower energy prices which are a result of new renewable and demand resources." (Town Exh. 32, at 9). As a result, there is a "continued surplus of capacity." (*Id.*).

Mr. Niland argued in his prefiled testimony that because in FCA 9, ISO used an 800 MW "proxy unit" to bring our zone into compliance with system requirements, that was an indication our zone needed a new plant of approximately 800 MW. (Inv. Exh. 58A, at 10). However, FCA 9 was conducted in February, 2015, before this docket was opened, and Mr. Niland later conceded that ISO has **not** needed or used a proxy unit in our zone since FCA 9. (tr. 4/2/19, at 92).

²¹ Prepared Testimony of ISO staff Carissa Sedlacek and Maria Scibelli in FERC Docket No. ER19-291, page 35, lines 6-19, Town Exh. 40, Exhibit GCW-3 (emphasis added).

²² Town Exh. 40, at 11.

Because the determination of need must, by Rhode Island law, be “justified by long term state and/or regional energy need forecasts.” (R.I.G.L. § 42-98-2(2)), the ISO long term forecasts of steadily decreasing need (and steadily increasing supply) should end the need inquiry. A license for this proposed plant should be rejected by this Board because CREC is simply not needed to meet long term need forecasts.²³

C. In recent auctions, ISO has consistently and easily procured significant surplus capacity, at steadily declining prices.

In ISO’s FCA 10, conducted in February 2016, ISO procured a surplus of 1,416 MW of capacity.²⁴ In FCA 11, in February 2017, ISO procured a surplus of 1,760 MW of capacity.²⁵ In FCA 12, in February 2018, ISO procured a surplus of 1,103 MW of capacity.²⁶ In FCA 13, in February 2019, ISO procured a surplus of 1,089 MW of capacity. The capacity price for each successive auction was **less** than the previous auction.²⁷

Importantly, in 2019, many more resources were qualified to bid in FCA 13 (43,641 MW) than the ISO procured (34,839 MW). (*Id.*). These continuing capacity surpluses, at declining prices, demonstrate that CREC is not needed.

D. Effective Energy Efficiency and Demand Response programs are reducing need.

In 2019, 4,040 MW of Energy Efficiency and Demand Response measures cleared FCA 13, including 654 new MW. (*Id.*). As ISO said, these 654 new MW alone are “the equivalent of a large power plant.” (*Id.*). Effective Energy Efficiency and Demand Response programs, together with

²³ Invenergy has recently begun arguing that the 10-year long-term forecasts of need prepared by ISO do not look far enough into the future. However, as noted above, Mr. Niland has conceded that when trying to look beyond a 10-year time horizon, “the exercise becomes kind of really a guess.” (tr. 4/2/19, at 78-79). Of course, a guess is not a forecast, nor is it admissible evidence. However, in Invenergy Exh. 203, the ABB Power Reference Case Northeast, energy market expert ABB makes a very long term forecast from 2018 to 2042 and concludes that there will be negative peak demand growth from 2018 to 2042. (tr. 1/30/19, at 28-30). Other energy market experts concurred. (*Id.*, at 59).

²⁴ CLF Exh. 23.

²⁵ CLF Exh. 24.

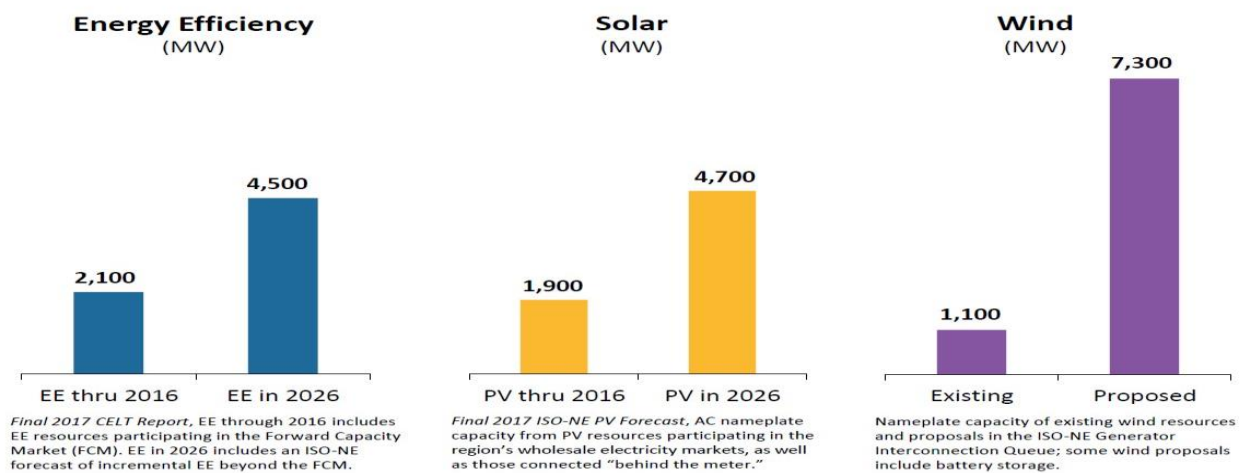
²⁶ CLF Exh. 25.

²⁷ See the ISO press release dated February 6, 2019 (Admin. Notice No. 11, attached as Exhibit 1).

rapidly growing solar, wind, and hydropower renewables, have essentially eliminated any need for additional new fossil fuel fired power plants in New England.

As ISO forecasted in its report entitled “Transformation of the New England Electric Grid and Impacts on Energy Affordability and Reliability” (Inv. Exh. 37B; tr. 1/8/19, at 205-06), Energy Efficiency in New England is expected to grow from 2,100 MW in 2016 to 4,500 MW in 2026 (an increase of 114%); solar is expected to grow from 1,900 MW in 2016 to 4,700 MW in 2026 (an increase of 147%); and wind is expected to grow from 1,100 MW in 2016 to 7,300 MW in 2026 (an increase of 564%). (Inv. Exh. 37B, RH Supp. 3, at 10; tr. 1/8/19, at 205-06). This is illustrated in the following ISO bar graph:

Energy-Efficiency and Renewable Resources Are Trending Up in New England



E. Baseload renewables are increasing.

Massachusetts selected New England Clean Energy Connect (“NECEC”) to bring approximately 1,200 MW of low carbon, fast ramping, baseload renewable energy (hydropower) into our zone from Canada (Town Exh. 36, Exhibit GCW-3; Town 40, at 11, tr. 4/2/19, at 52-53). On April 11, 2019, the Maine PUC approved this project.²⁸

²⁸ See the Maine PUC Press Release attached hereto as Exhibit 2. The Town asks the Board to take administrative notice of this Press Release under EFSB Rule 1.29(c).

F. Offshore wind is increasing.

Massachusetts, Rhode Island, and Connecticut selected Vineyard Wind and Deepwater Wind to develop about 1,400 MW of offshore wind.²⁹ As ISO stated in March, 2019:

In 2018, the amount of new wind power seeking interconnection in New England was for the first time more than double the amount of natural gas-fired generation proposed—and today, there are four times more wind power proposals than natural gas. Of the roughly 13,500 MW (nameplate) of wind power being proposed regionally (as of January 2019), about 9,500 MW would be offshore of Massachusetts, Rhode Island, and Connecticut, with most of the remaining 4,000 MW located on shore in Maine. Massachusetts utilities have executed contracts (subject to regulatory approval) for 800 MW of offshore wind to be on line by 2023, with plans for an additional 800 MW of offshore wind by 2027. Connecticut and Rhode Island utilities have also negotiated contracts for offshore wind to be on line by 2023.³⁰

On August 9, 2018, Massachusetts Governor Baker signed into law An Act to Advance Clean Energy³¹ authorizing the solicitation of an additional 1,600 MW of offshore wind (for a total of 3,200 MW) by 2035. And Rhode Island is also aggressively pursuing 400 MW of offshore wind.³² Approval by the PUC is projected by the summer of 2019 and operation by 2023. See PUC Docket No. 4929, tr., 4/2/19, at 49-50.³³

As Mr. Fagan testified in response to a question from Director Coit about “the thousands of megawatts of offshore wind in Southern New England”:

Part of what is so powerful is the effect of energy efficiency [and] small scale solar alone sort of dramatically reduce or eliminate the need for this plant before you even factor in storage and offshore wind and additional Canadian hydro down the pike. It's those additional components on top of the fundamentals with solar and energy efficiency that make the case all the stronger for, of course this is not needed . . . (tr. 1/16/19, at 171).

²⁹ Town Exh. 36, Exhibits GCW-4, GCW-5, and GCW-6; Town Exh. 40, at 12; 2019 ISO Regional Electricity Outlook, at 22, Town Exh. 49; tr. 4/2/19, at 48-52.

³⁰ 2019 ISO Regional Electricity Outlook, at 22, Town Exh. 49; tr. 4/2/19, at 46-50.

³¹ MA House Bill 4857, Town Exh. 40, at 12.

³² Town Exh. 40, Exhibit GCW-7; Town Exh. 40, at 12.

³³ This project is expected to create more than 800 direct construction jobs and 50 permanent jobs for Rhode Islanders. If approved, this project will generate approximately 25% of the electricity used by Rhode Islanders annually and will increase Rhode Island's clean energy portfolio by ten times. See the April 22, 2019 Press Release from the Governor, attached as Exhibit 3. We ask that the Board take administrative notice of the Governor's Press Release under EFSB Rule 1.29(c).

G. There have been minimal retirements.

Although Invenenergy (and Mr. Hardy) did not mention retirements in Section 7.1 of Invenenergy's EFSB Application entitled "Standards for Determining Need for the Proposed Facility" (tr. 1/8/19, at 142), Mr. Hardy later argued that possible "at risk" plant retirements show a need for CREC. (See, e.g., Inv. Exh. 37A, at 3-5). However, retirements in the FCAs held in 2016-2018 resulted in only about 1,320 MW of retirements in the region, with the Pilgrim Nuclear Plant (701 MW) and the Bridgeport Harbor coal unit (383 MW) accounting for most of the retiring megawatts.³⁴ Moreover, as ISO recently stated: "**In parallel to the retirements**, Connecticut, Massachusetts, and Rhode Island are signing up large quantities of renewable energy resources through long-term contracts . . ."³⁵

H. The Dynamic Delist Bid Threshold ("DDBT") price recently dropped because of surplus capacity.

The DDBT price comes into play when existing plants want to retire. The DDBT price is reviewed by ISO and FERC every three years. On January 8, 2018, ISO made a filing with the Federal Regulatory Energy Commission ("FERC"). (CLF Exh. 14, Tab. C). In that filing, ISO asked to reduce the DDBT price because New England has a significant capacity surplus. FERC approved this request, and the DDBT price was reduced from \$5.50 per kilowatt month to \$4.30 per kilowatt month, starting with FCA 13 in 2019.

The ISO explained the need for this price reduction in its filing with FERC:

The decrease in the DDBT is warranted by the **changes in supply and demand dynamics** since the last time the DDBT was set. Data from FCA-9 used when the IMM [Internal Market Monitor] last set the DDBT for FCA-10 reflected a projected capacity shortage of over 1,600 MW. **Since that time existing capacity has increased each year, while the Installed Capacity Requirement has consistently decreased.** (*Id.*, at 2 - 3, emphasis added).

³⁴ Town Exh. 40, at 12. Moreover, Mystic 8 & 9 and Millstone are not retiring. See Town Exh. 40, at 35-39, and Town Exh. 41.

³⁵ ISO 2019 Regional Electricity Outlook, Town Exh. 49, at 3 (emphasis added).

* * *

. . . the New England system has continued to experience increasing existing capacity surpluses relative to net ICR There is no indication that the current trend of increasing surpluses will reverse in the near future. (*Id.*, at 12, emphasis added).

As ISO said in its 2019 Regional Electricity Outlook (Town Exh. 49) “**New England has adequate capacity to meet projected demand.**” (Town Exh. 49, at 32, emphasis added).

I. The declining price trend is because of surplus capacity.

On February 4, 2019, ISO conducted FCA 13. As shown in the ISO’s press release (Admin. Notice No. 11): “the clearing price was the lowest in six years.” The auction had a clearing price of \$3.80 per kilowatt month. In recent years, the clearing price has consistently dropped in each successive auction. The \$3.80/kw/mo. in FCA 13 is a dramatic drop from \$17.73 in FCA 9, and is evidence of the steady, continuing decline in the need for capacity.

Let’s look at the numbers. The clearing price for new units in our zone in FCA 9, which took place in 2015, was **\$17.73** per kilowatt month. In FCA 10, which took place in 2016, the price declined to **\$7.03** per kilowatt month. In FCA 11, which took place in 2017, the price declined to **\$5.30** per kilowatt month. In FCA 12, which took place in 2018, the price declined to **\$4.63** per kilowatt month. And in FCA 13, which took place in 2019, the price declined again to **\$3.80** per kilowatt month. (*Id.*). This steady decline in capacity prices shows we have a significant **surplus** of capacity, and it demonstrates the lack of need for CREC.

2015	FCA 9	\$17.73
2016	FCA 10	\$ 7.03
2017	FCA 11	\$ 5.30
2018	FCA 12	\$ 4.63
2019	FCA 13	\$ 3.80

J. CREC’s lack of a Capacity Supply Obligation (“CSO”) shows that CREC is not needed.

Seth Parker, a witness for the Office of Energy Resources (“OER”) and the DPUC, testified

in the PUC Advisory Opinion Docket 4609 that: “If CREC clears in future FCAs and is awarded CSOs, it will be needed. **If CREC fails to get a CSO in the future, it will not be needed . . .**” (tr. 4/2/19, at 69-70, emphasis added). Invenergy quoted and adopted Mr. Parker’s statement on page 5 of its post-hearing Memorandum in PUC Docket 4609. (*Id.*).

Both the termination of CREC’s Unit 1 CSO by ISO and the inability of Unit 2 to ever obtain a CSO are clear and strong indications that there is no need for CREC.³⁶ As Mr. Hardy, Invenergy’s market consultant on need and the ISO-NE markets, said, “resources that clear an FCA maximize social surplus in order to meet both system-wide and local reliability needs and are by definition needed by ISO-NE.”³⁷ Therefore, based on Mr. Hardy’s continued claim that capacity that clears an FCA and holds a CSO is, “by definition needed,” the absence of a CSO is by definition a strong indication there is no need for CREC. (Town Exh. 40, at 14).³⁸

Until Invenergy lost the Unit 1 CSO in 2018, Invenergy consistently and repeatedly argued that because ISO awarded Invenergy a CSO of 485 MWs for Unit 1, the proposed CREC was needed.³⁹ Now, however, after ISO took the unprecedented step of terminating Invenergy’s CSO for Unit 1 (tr. 1/8/19, at 122-23), Invenergy has been expending much effort to distance itself from its earlier assertions that equated having a CSO with need for CREC.

For example, in unsuccessfully arguing to this Board that the 2016 PUC Advisory Opinion

³⁶ As Mr. Hardy admitted: “DIRECTOR COIT: . . . just looking at what is on the screen there, the second unit was never needed or never determined to be needed. THE WITNESS [Mr. Hardy] A. It was not determined to be needed under the FCA market construct because it never cleared an FCA.” (tr. 1/8/19, at 159).

³⁷ Town Exh. 40, at 14.

³⁸ Also, as Mr. Walker testified: “I think if the ISO thought that this unit was truly needed, that it would have retained the CSO and pushed this resource towards the finish line to bring it online.*** . . . when [ISO] modeled this system with and without Invenergy, they really didn’t find a difference . . .” (tr. 1/23/19, at 43-44, 55).

³⁹ Invenergy similarly relied on the Unit 1 CSO to support its argument that the proposed project was cost-justified. For example:

- “The project is cost-justified because a competitive wholesale market process awarding CREC a CSO has ensured, and future auctions will ensure, that the capacity prices and the energy prices for CREC’s electrical generation are cost-justified.” (Invenergy’s Post-Hearing Memorandum in Docket 4609, at 1).
- “By clearing the auction and being awarded a CSO, by definition, CREC is cost-justified.” (Invenergy’s Post-Hearing Memorandum in Docket 4609, at 7).

was not stale, Invenenergy stated:

- “. . . even without a [CSO], CREC is still needed . . .” (Inv. Objection to the Town’s Supplement, at 2).
- “Most important, the absence of a CSO *does not* equate to absence of need . . .” (Inv. Objection to the Town’s Supplement, at 4, emphasis in original).

However, in presenting its case before the PUC two years ago in Docket 4609, Invenenergy argued quite the opposite. For example:

- “Why is the forward capacity market (“FCM”) the appropriate mechanism to determine the need for Clear River? [. . .] The FCM is the competitive free market mechanism that determines need for new power generating units in ISO-NE.” (Ryan Hardy PUC Rebuttal Testimony, at 2).
- “Is the FCM the free market mechanism that determines the need for new generating units in ISO-NE? Yes.” (Ryan Hardy PUC Rebuttal Testimony, at 3).
- “Clearing an FCA determines that a facility is needed by ISO-NE to maintain reliability for that delivery year.” (Ryan Hardy PUC Rebuttal Testimony, at 4).
- “By clearing the auction, Clear River was determined by the free market to be needed. Moreover, ISO-NE explicitly stated after FCA 10 that the new resources that cleared FCA 10 are needed. In its press release following the auction, ISO-NE affirmed that FCA 10 ‘provided the incentives for developers to bring new – **and needed** – resources to the market.’” (Ryan Hardy PUC Rebuttal Testimony, at 5, emphasis in original).
- “. . . all cleared capacity in an FCA is needed by ISO-NE . . .” (Ryan Hardy PUC Rebuttal Testimony, at 6).
- “The ISO-NE has determined that CREC is needed to meet the reliability needs of the region by awarding a [CSO] in its recent competitive wholesale capacity auction.” (Inv. Post-Hearing Memorandum, at 1).
- “Invenenergy was recently awarded a CSO for 485 MWs in FCA-10. The award of a CSO by itself is compelling evidence of need.” (Inv. Post-Hearing Memorandum, at 3).
- “Seth Parker testified that ‘if CREC clears in future FCAs and is awarded CSOs, it will be needed. **If CREC fails to get a CSO in the future, it will not be needed . . .**’” (Inv. Post-Hearing Memorandum, at 5, emphasis added).

Now that it has lost the CSO for Unit 1, Invenenergy has changed its argument: “. . . whether or not we have a CSO . . . we don’t believe it’s relevant.” (Michael Blazer responding to a question

from the Chairperson, tr. 3/21/19, at 194.)

If, as Invenergy so fervently argued, the award of the CSO by ISO was strong evidence of need for CREC, then the termination of the CSO by ISO is strong evidence of lack of need.

K. Invenergy twice easily sold its Unit 1 CSO at a profit.

Before it was terminated by ISO, Invenergy twice sold its 485 MW CSO for Unit 1 to an existing resource in our zone in Annual Reconfiguration Auctions (“ARAs”) at a price well below the original award price. Invenergy realized an arbitrage profit of about \$26 million. (Town Exh. 36, at 20-23; Town Exh. 40, at 12; tr. 1/8/19, at 119-20).

The ability of Invenergy to easily satisfy its former CSO obligation (and realize a significant profit) is a clear sign there is no need for CREC. Recent testimony filed by Robert Ethier of ISO in FERC Docket No. ER14-2400 (at 8) confirms this:

Where a new resource is most needed, it is unlikely to be able to cover its obligations. This is true because a new resource is most likely to clear an FCA in an import-constrained zone when the zone is short of capacity and additional capacity is required to meet load. That being the case, there will be, by definition, no other resource in that zone with excess capacity, and because only the needed new resource will have cleared, it is unlikely there will be available substitute resources that can cover the delayed resource’s obligations. (Town Exh. 40, at 25-26).

Therefore, if Unit 1 was needed, it would not have been able to so easily cover its CSO of 485 MW because there would have been a lack of substitute resources.

CREC’s CSO for Unit 1 was terminated by ISO in 2018. CREC’s Unit 2 failed to obtain a CSO from ISO in FCA 10 and FCA 11, and then Unit 2 was disqualified from even bidding in FCA 12 and FCA 13. This is strong evidence that CREC is, in the language of R.I.G.L. 42-98-11(b)(1), not “necessary to meet the needs of the state and/or region.” If CREC was needed, ISO would not have terminated Unit 1’s CSO and would not have entirely disqualified CREC from bidding at all.⁴⁰

⁴⁰ The new Footprint plant experienced permitting delays similar to CREC. But ISO went so far as to change its rules in order to keep Footprint’s CSO in place. By contrast, ISO simply terminated CREC’s Unit 1 CSO, even though it had

L. Because of ample capacity, the potential SENE import constraints are not an issue.

The evidence shows that although SENE is modeled by ISO as an import-constrained zone, in the last four FCAs these potential constraints were not “binding.” That means that ISO easily obtained ample capacity within the SENE zone to meet its Local Sourcing Requirement, and there was no price separation between the SENE zone and the Rest of Pool.⁴¹ As Mr. Walker testified:

DIRECTOR COIT: . . . So how does that ARA, and the easily, to quote you, secured alternative capacity relate to the import constrained status that ISO states for SENE?

* * *

[Mr. Walker] . . . in the last several capacity auctions there has been enough resources locally in both the SENE zone and elsewhere that that constraint was not a problem and it did not bind, as Mr. Fagan said, and it did not cause a difference.

* * *

THE CHAIRPERSON: Isn't the SENE zone still considered import constrained?

* * *

[Mr. Walker] For modeling purposes, it's import constrained, but I believe the way the ISO defines it is SENE may be import constrained in an auction depending on how . . . many resources are located within each zone. **So it has the possibility to be import constrained, but in the last several FCAs it has not been import constrained.** (tr. 1/23/19, at 45-48, emphasis added).

M. To lock in its \$26 million profit, Invenenergy unsuccessfully sought a FERC waiver instead of a one-year deferral.

A one-year deferral of a CSO obligation is possible under ISO's rules. However, such a deferral would have required Invenenergy to forfeit the \$26 million of windfall arbitrage profits Invenenergy made when it sold its CSO two years in a row.⁴² Therefore, Invenenergy did not make a deferral request. Instead, Invenenergy gambled and sought a waiver from FERC, trying to obtain the benefits of a deferral without forfeiting its arbitrage profits. Invenenergy's gamble failed, because

the discretion not to terminate the CSO. (Town Exh. 40, at 43-44). If CREC were needed, ISO would not have exercised its discretion and terminated the Unit 1 CSO. (tr. 1/23/19, at 43). Also, because Footprint built on the “footprint” of an old coal plant (a “brownfield”), it did not cause the environmental harms that CREC would cause by building in the pinch point of a wildlife corridor in a high value, unfragmented forest (a “greenfield”). (tr. 3/26/19, at 217-24).

⁴¹ CLF Exh. 4, at 8; tr. 1/17/19, at 11 (explaining the difference between a zone being modeled as potentially import constrained and actually having the constraints bind in an auction). See also Town Exh. 40, at 18-26; tr. 1/23/19, at 45-48, 53-55; tr. 1/24/19, at 38-44.

⁴² Town Exh. 40, at 40-44; tr. 1/23/19, at 33-34, 45.

FERC rejected the waiver request, the CSO was terminated, and Invenergy's Financial Assurance was forfeited.⁴³ But Invenergy locked in its \$26 million profit.

N. Alternative resources are available.

The fact that Invenergy received a 485 MW CSO for Unit 1 does **not** mean that ISO ever believed those 485 MW needed to be produced in Burrillville by CREC. That power could be produced anywhere in our zone by any qualified provider. This is demonstrated by Invenergy selling its CSO for 2019 - 2020 and 2020 - 2021 to other providers in our zone, at a lower price, and ISO approving that sale. In other words, existing providers in our zone are ready, willing, and able to provide the 485 MW, at a less expensive capacity price. (tr. 1/23/19, at 34; 4/2/19, at 62).

Mr. Walker explains that although CREC Unit 1 received a CSO for 485 MW in early 2016 in FCA 10, the passage of time since the award of that CSO “has eliminated the need for either of the CREC units.” (Town Exh. 32, at 7, 18). The electricity market in New England has quickly been adding renewable resources and alternative energy supplies, including solar, wind, hydropower, and electric storage. As a result, renewable and alternative energy resources are rapidly increasing, and the overall net demand for electricity in our region continues to steadily decrease. Clearly, the market has shown that “cost effective efficiency and conservation opportunities provide an appropriate alternative to this proposed facility.” See R.I.G.L. § 42-98-2(7).

As Mr. Fagan testified:

Between 2016 and this year there have been lots of developments across New England, particularly in the areas of alternative resources, offshore wind, continuing solar, storage developments, and policy moves in Rhode Island, Connecticut, Massachusetts at a minimum that make it an even greater certainty than what I would have thought in 2016 that the alternative resources will be available and will be in sufficient quantity to avoid having to consider building this particular plant. (tr. 1/16/19, at 124-25).

⁴³ FERC Docket Nos. ER18-2457 and ER19-94 (Town Exh. 40, Exhibit GCW-1).

O. Mr. Hardy's predictions of need have been consistently wrong.

Invenergy's expert witness, Mr. Hardy, has repeatedly predicted that CREC would be needed. He now predicts that CREC will obtain a CSO from ISO in 2020 in FCA 14. However, Mr. Hardy's predictions have been consistently wrong.

Despite Mr. Hardy's confident predictions, CREC's Unit 2 did not obtain a CSO from ISO in 2016, 2017, 2018, or 2019. Mr. Hardy was wrong when he predicted in Invenergy's Application (Section 7) that both Unit 1 and Unit 2 would obtain CSOs in FCA 10 in 2016. Mr. Hardy was wrong when he predicted in his testimony that Unit 2 would obtain a CSO in FCA 11 in 2017. Mr. Hardy was wrong when he predicted that Unit 2 would obtain a CSO in FCA 12 in 2018. And Mr. Hardy was wrong once again when he predicted that Unit 2 would obtain a CSO in FCA 13 in 2019.⁴⁴

Undaunted by his failed predictions, and ignoring the long-term forecasts of declining need and surplus capacity, Mr. Hardy now predicts that both CREC Units 1 and Unit 2 will receive CSOs from ISO in FCA 14 in 2020. This prediction is now the foundation of Invenergy's entire case regarding need. However, Mr. Hardy is likely to be just as wrong in his 2020 prediction as he was in his failed 2016, 2017, 2018, and 2019 predictions.

P. Connecticut recently rejected a proposed new gas plant in Killingly because of lack of need due to the lack of a CSO.

In 2017, the Connecticut Siting Council rejected a Certificate of Necessity for a proposed 550 MW dual fuel (gas and oil) combined cycle plant in Killingly CT. The Siting Council found that the proposed plant lacked a CSO from ISO and therefore was not needed. Similar to Rhode Island, the Siting Council had to balance the need for adequate and reliable public utility services at the lowest reasonable cost to consumers with the need to protect the environment and ecology of

⁴⁴ Tr. 1/8/19, at 21-29.

the state. On May 11, 2017, in its Opinion, the Siting Council found that, due to the absence of a CSO from ISO, the proposed plant was “not necessary for the reliability of the electric power supply of the state or for a competitive market for electricity at this time” and the certificate of necessity was denied.⁴⁵ This Board should do the same because CREC does not have a CSO.

Q. CREC would provide little, if any, fuel security benefits.⁴⁶

Although CREC would provide some limited fuel security benefit, it would be less than the other New England dual fuel plants, which all have either a well or a water pipeline. No gas plant in New England exclusively trucks in water. All things being equal, CREC’s unique water supply trucking plan makes it much less attractive than a plant with an onsite well or pipeline delivery of water. If our region experienced a prolonged cold spell, like the polar vortex, and ISO required electric gas generators to utilize onsite oil storage, CREC’s operating duration would only be approximately three days before it would run out of onsite water. (tr. 7/19/18, at 52-53, 58-60). It would then take approximately one month to refill its onsite water storage. (*Id.*, Town Exh. 40, at 40). This would mean that if, during the one-month period CREC was filling its onsite water storage, CREC was called upon by the ISO to run for fuel security reasons, it would likely be unavailable or very limited in its ability to respond to the ISO.

R. CREC is not needed to cover retirements.

As ISO stated in the 2019 Regional Electricity Outlook (Town Exh. 49): “**In parallel to the retirements**, Connecticut, Massachusetts, and Rhode Island are signing up large quantities of

⁴⁵ CT Siting Council Opinion in Docket No. 470, 5/11/17, at 11, Town Exh. 4, Exhibit GCW-1.

⁴⁶ Fuel security and reliability are often incorrectly interchanged or confused due to both having a similar outcome, which is a less robust electric system. The issue of **reliability** relates to the question of whether the electric system has enough generating capacity in the region to meet the needs of the electric market. The issue of **fuel security** relates to the question of whether there is adequate fuel availability for these electric resources to operate. (Town Exh. 36, at 12). With regard to the issue of need, Mr. Fagan was correct when he testified that need is “. . . not a fuel security issue. It’s a capacity issue. The problem with fuel security in the wintertime in New England is not to be solved by building another new generator. The problem is to be solved by thinking about the fuel issues” (tr. 1/17/19, at 165, 167).

renewable energy through long-term contracts . . .” (at 3, emphasis added). The evidence shows that retirements will not create a need for CREC. In fact, there are more qualified resources seeking to **enter** the market than could **exit** the market through retirement. The recently concluded FCA 13 makes this clear.

As shown in ISO’s testimony to FERC and in the ISO February 6, 2019 press release (Admin. Notice No. 11) attached as Exhibit 1, ISO was seeking to procure 33,750 MW in FCA 13. The ISO already had **existing** capacity of 34,925 available for FCA 13. **Therefore, existing qualified capacity alone exceeded NICR by 1,175 MW.** In addition, however, ISO also qualified 238 **new** resources to bid in FCA 13 with a total capacity of 8,716 MW (without the CREC units that were disqualified from the auction). Therefore, 43,641 MW were qualified to participate in FCA 13, **which was 9,891 MW more than the amount ISO needed to obtain.** And as noted by ISO in Inv. Exh. 202, “the region is expected to experience more generating resource additions than retirements by summer 2020.” (tr. 1/30/19, at 17, 19).

The market therefore had more than enough capacity available in FCA 13 to meet the 33,750 MW NICR, and procure a surplus. The primary auction concluded with commitments from 34,839 MW, which includes 1,089 MW of surplus supply. Many qualified resources received no commitments from ISO in FCA 13. ISO had no problem obtaining more than enough capacity, plus a large surplus, even without CREC. And the capacity price continued its steady decline, down to \$3.80/kw/mo., “the lowest in six years” per ISO’s press release.

Mr. Hardy has stated there are approximately 8,000 MW of units at risk for retirement. But there were no significant retirements in FCA 11 or FCA 12 and only about 2,000 MW of retirements in FCA 13. (*Id.*). However, there were 8,716 MW of new resources qualified for FCA 13, even without the disqualified 970 MW of CREC capacity. This level of new units alone is more than

enough capacity to fully cover retirements.⁴⁷

S. CREC is not needed to provide fast start or fast ramp benefits.

There are ample existing fossil-fired resources in New England with fast start and fast ramp characteristics to support growing renewables. For example, between 2018 and 2020, the ISO market will add approximately 2,500 MW of new natural gas fired capacity. All of that new capacity is efficient, flexible, fast starting, and fast ramping generation. Mr. Niland conceded on cross examination that there are several new natural gas fired units in our zone (and throughout New England) that provide efficient, flexible, fast ramping, and fast starting benefits to support growing renewables, including, but not limited to, Bridgeport Harbor (484 MW), Footprint/Salem Harbor (674 MW), Towantic (750 MW), Canal 3 (333 MW) and West Medway (195 MW).⁴⁸ (tr. 4/2/19, at 43-44, 93-95; See also Inv. Exh. 212A).

ISO is no longer counting on CREC to be a part of the system mix due to ISO's termination of the CSO for CREC Unit 1 and ISO's disqualification of the entire CREC from FCA 13. Therefore, ISO is confident that it has sufficient resources to meet all of its reliability needs, including fast starting and fast ramping plants.

Fast starting and fast ramping units can bid into a separate ISO market called the Forward Reserve Market ("FRM"). The results of the Winter 2018-2019 ISO Forward Reserve Auction ("FRA") for the FRM are shown by Mr. Walker in Table 4 of Town Exh. 40, at 48. The table summarizes the supply offers and the amounts cleared by the ISO. The table shows that the FCA

⁴⁷ Mr. Hardy was also concerned that the Millstone nuclear power plant in Connecticut would retire, but the evidence shows that Millstone will not retire for at least the next 10 years. See Town Exh. 41; (tr. 1/9/19, at 157-58). Moreover, as Director Coit pointed out, ISO "procedures allow the ISO to mitigate the retirement variable in a way they cannot with other risk factors." (tr. 1/17/19, at 170). As Mr. Fagan testified, a unit cannot just unilaterally retire; ISO can "keep these things online if they are truly needed" like ISO did with Mystic 8 and 9. (tr. 1/17/19, at 170-72). Mr. Hardy agrees that ISO has to "approve market entry and exit." (tr. 1/8/19, at 50-51).

⁴⁸ A proposed efficient, fast starting, fast ramping 650 MW gas plant in Killingly, CT was also awarded a CSO in FCA 13, but it does not yet have a CT Siting Council license (and it is not in our SENE zone). (tr. 1/24/19, at 76).

had **twice** as much fast start supply than ISO needed. (*Id.*).

Forward Reserve Procurement Period	Reserve Zone Name	Forward TMNSR		Forward TMOR	
		Total Supply Offered (MW)	Supply Cleared (MW)	Total Supply Offered (MW)	Supply Cleared (MW)
Winter 2018-2019	ROS	2,547	1,044	616	398
	SWCT	0	0	227	205
	CT	358	358	28	25
	NEMABSTN	0	0	208	208

Source: ISO New England Forward Reserve Auction Results.

Mr. Hardy agreed with Mr. Walker’s fast ramping testimony, admitted that the FRM’s role is to “ensure an adequate supply of fast ramping capacity,” and conceded that this market has “sufficient megawatts . . . They have a surplus” (tr. 1/16/19, at 31-33).⁴⁹

T. Future estimated benefits from CREC were overstated and are far outweighed by the environmental harm CREC would cause.

The claimed impact of CREC on jobs creation for Rhode Island residents was overstated. For example, the Rhode Island Building and Trades Council and Statewide Planning witnesses both assumed that **100%** of the permanent jobs at CREC would go to Rhode Island residents. (tr. 7/19/18, at 161; 7/24/18, at 24; tr. 8/16/18, at 64). However, the Board issued a record request to Ocean State Power (“OSP”), a dual fuel power plant in Burrillville, and discovered that only **71%** of OSP’s workers are Rhode Island residents. (Board Exh. 9). Invenergy has estimated there will be 23 jobs at CREC during operations (tr. 7/19/18, at 160). Using 71% for Rhode Island, this translates to only 16 jobs for Rhode Island residents.⁵⁰

In addition, the continued and dramatic decline of capacity prices from about \$17 per

⁴⁹ Mr. Hardy also testified that “as of now in the current forward reserve market, there is more than enough capacity to meet the calculated demand . . . for fast start and fast ramp.” (tr. 1/9/19, at 57).

⁵⁰ The monetary impact of the construction jobs was also significantly overstated. Witness Sabitoni of the Building and Construction Trades Council testified that the average construction worker would be paid about \$90,000 (tr. 7/19/18, at 97), but the Invenergy/OER job benefits analyses used a figure of approximately \$170,000. (tr. 7/19/18, at 152-56; 8/16/18, at 61-62).

kw/month to \$3.80 per kw/month means that CREC would produce little, if any, ratepayer savings to Rhode Island ratepayers (Town Exh. 40, at 6-8). Although Mr. Parker testified before the PUC there would be what he identified as “small but meaningful savings” in the range of 1% to 2%, his calculations were done in 2016 before the lower capacity price results of FCA 11 in 2017, FCA 12 in 2018, and FCA 13 in 2019. Moreover, the small 1% to 2% savings would be greatly outweighed by the unacceptable harm CREC would cause to our environment.

II. THE CLEAR RIVER ENERGY CENTER WOULD CAUSE UNACCEPTABLE HARM TO THE ENVIRONMENT

A. The legal standard

R.I.G.L. § 42-98-11(b) and EFSB Rule 1.13(c) prohibit this Board from issuing a license for CREC unless this Board specifically finds that “the proposed facility will not cause unacceptable harm to the environment.” R.I.G.L. § 42-98-2(3) also requires that “the facility shall produce the fewest possible adverse effects on the quality of the state’s environment; most particularly, its land and its wildlife and resources, the health and safety of its citizens, the purity of its air and water, its aquatic and marine life, and its esthetic and recreational value to the public.”

In the 1998 *Ocean State Power* decision of this Board (at V.(a)), this Board stated “state policy requires that a major energy facility ‘produce the fewest possible adverse effects on the quality of the state’s environment’ and the Board must implement that policy in its final decision. Thus, we conclude that the Board has both the responsibility and power to evaluate all individual and cumulative environmental impacts of the proposed facility before arriving at a final decision.”

In this Board’s Preliminary Decision and Order regarding CREC, this Board ruled:

In the Board’s consideration of this issue, it construes the term “environment” broadly, including individual and cumulative environmental impacts such as, but not limited to, the Facility’s impacts on public health, air quality, water quality, water supply, groundwater, wetlands, ambient noise, traffic, wastewater disposal, fish, wildlife, and soil. (at 11).

The evidence demonstrates that CREC would cause unacceptable “individual and cumulative” harms to the environment in several ways.

B. Forest land fragmentation and biodiversity

President Franklin Roosevelt once said: “A nation that destroys its soils destroys itself. Forests are the lungs of our land, purifying the air and giving fresh strength to our people.”

Carbon dioxide, a leading cause of climate change, is absorbed by forest land at thousands of pounds per acre per year. (tr. 9/18/18, at 157-58). Importantly, as explained in DEM’s Advisory Opinions, the forest lands that would be destroyed by this project are some of the highest quality within the state. They are part of a core natural area in DEM’s Rhode Island Wildlife Action Plan and are part of Rhode Island’s forest land conservation priorities.

DEM’s Advisory Opinions (Board Exhs. 1A and 1B), together with the testimony of Anthony Zemba, Scott Comings, and Jason Osenkowski make several important points:

1. The proposed site (a) is in a core natural area in an unfragmented forest, (b) is at a “funnel pinch point” of an important wildlife corridor (tr. 3/26/19, at 13), and (c) has high value for wildlife, with a diverse number of animals and plants (including many state listed species).⁵¹
2. Forest clearing and the resulting fragmentation of this critical wildlife corridor would negatively impact the free and continuous movement of both wildlife and plants in the vicinity and would inhibit DEM’s ability to enhance landscape resiliency and mitigate the loss of biodiversity.
3. Fragmentation of the forest by the proposed plant would produce negative impacts upon fish and wildlife **that cannot be mitigated**. (tr. 3/26/19, at 49). As Jason Osenkowski, Deputy Chief of Wildlife at DEM testified in response to questions from Chairperson Curran and Director Coit: “**I would view it as unacceptable harm . . . the detriment to the continuity of that habitat and the species that rely on that continuity, to me, is avoidable, and, as a result, I think it’s unacceptable.**” (tr. 3/26/19, at 172-79, emphasis added). Mr. Osenkowski also testified that “**once you fragment that landscape, you can’t really mitigate for that . . .**” (tr. 3/26/19, at 76, emphasis added). (See also tr. 3/26/19, at 168).

⁵¹ DEM’s original Advisory Opinion (Board Exh. 1A), explains that “. . . wildlife rely on habitat connectivity to find scarce resources, preserve gene flow, and locate alternatives to lost habitat.” (at 10).

4. Mr. Osenkowski testified: “Habitat connectivity is critically important to wildlife . . . It’s imperative.” (tr. 3/26/19, at 12).
5. The facility would bring stressors to wildlife in the forms of added noise and light pollution and potential changes to the air and water.
6. The location of the facility adjacent to substantial state holdings of conservation land would not be consistent with the conservation priorities that underlie the state’s conservation plans. (tr. 3/26/19, at 53).
7. Obtaining a wetlands permit “is not going to protect the species” that are outside of jurisdictional wetlands (tr. 3/26/19, at 70); nor will a wetlands permit address forest loss and fragmentation and loss of upland habitats. (tr. 3/26/19, at 69).
8. Mr. Osenkowski of DEM agreed this plant “should not be built.” (tr. 3/26/19, at 165-66).
9. This Board can address upland issues and wetland issues. (tr. 3/20/19, at 221; tr. 3/21/19, at 15) (Mr. Horbert of DEM). As the Chairperson noted in questions to Mr. Zemba:
 - “Q. I think I’m trying to get to the fact that while upland areas are not as strictly regulated or in some places hardly regulated by environmental protections like the permits that DEM has jurisdiction over, but then in determining harm to the environment it’s important to consider both the uplands and protected wetlands.
 - A. Correct, yes.” (tr. 3/20/19, at 100).
10. As Mr. Comings testified:
 - “Q. . . . the conclusion you reach is that construction of the power plant would result in an adverse impact to the environment, correct?
 - A. That’s correct.”
 - Q. And it’s your position that it should not be built at all.
 - A. That’s correct.
 - Q. And that there is no mitigation that could make it appropriate to be built.
 - A. That’s correct.” (tr. 2/7/19, at 123).

As explained in DEM’s Supplemental Advisory Opinion, Invenergy’s limited biological inventory report dated August 2, 2017, documented 520 animal and plant species just in the area of the proposed CREC facility and the related right of way. These include 81 birds, 21 mammals (including 2 bat species), 8 amphibians, 3 reptiles, 147 butterflies and moths, 25 dragonflies and damselflies, 48 other invertebrates, and 187 plants. (Board Exh. 1B, at 5).

The biological inventory report acknowledged that 17 state-listed rare species were encountered. They included 1 state endangered species, 4 state threatened species, 10 species of

concern, and 2 protected species. Furthermore, 47 species are identified in the Rhode Island State Wildlife Action Plan as “Species of Greatest Conservation Need.” (*Id.*). As testified to by Town witness Anthony Zemba (Town Exh. 16), the Invenergy Biological Survey Report, and the methods and protocols used by Invenergy to survey the biota, have inherent limitations and constraints that precluded the identification of all species suspected of using the site. The main problem is Invenergy’s failure to survey even a single entire season. As testified to by Mr. Zemba: “typically you do . . . at least a whole year cycle so you capture all the seasons”. (tr. 3/20/19, at 33). Mr. Osenkowski of DEM agreed. (tr. 3/26/19, at 42-45).

DEM’s original (2016) and supplemental (2017) Advisory Opinions both put Invenergy on notice that DEM expected Invenergy’s biodiversity survey to cover full seasons over several years, **but Invenergy did not do so.**⁵² As a result, as Mr. Zemba testified, “there’s huge data gaps in the biological survey because of the timing.” (tr. 3/13/19, at 187).

DEM listed various examples of the most severe harms that would result from construction of the proposed facility, such as forest loss and fragmentation, forest biodiversity loss, adverse impacts to forest interior birds, such as the rare Black-throated Blue Warbler, loss of upland habitat, and adverse impacts to other state listed or otherwise at risk species outside of the wetlands.

DEM’s supplemental Advisory Opinion concluded that “**mitigation might not be possible**” regarding the negative wildlife impacts and that “**the best course of action is to avoid further fragmentation to the greatest extent practicable . . . rather than to continue to fragment landscapes and look for mitigation elsewhere.**” (tr. 3/26/19, at 75-76, emphasis added).⁵³

Mr. Horbert of DEM testified that the “most severe” adverse impacts to wetlands would be

⁵² As Mr. Osenkowski of DEM testified, “. . . it’s critically important to have a longer time frame of monitoring.” (tr. 3/26/19, at 58). Also, Invenergy has not yet filed a completed wetlands application. (tr. 3/21/19, at 26).

⁵³ See also tr. 3/21/19, at 20-21.

caused by (1) the access road, (2) the lay down and stockpile areas, (3) the elimination of a special aquatic site, and (4) the adverse impacts of constructing the transmission line for the interconnection which crosses several wetlands and streams. (tr. 3/21/19, at 9-15).

Mr. Zemba testified this property: “. . . has a multitude of threatened and endangered and special concern species and apparently some of the most biologically diverse and valuable property in the entire state . . .” (tr. 3/13/19, at 156-57). “I’ll tell you [in] my 30 years of working as an ecologist that I’ve never had a site where we’ve had 17 listed species and 48 species of greatest conservation need. That was remarkable to me.” (tr. 3/13/19, at 157). Mr. Zemba also explained:

Q. In your time doing this work, how would you describe the richness of this particular site just as explained by Invenergy’s own survey?

A. I’ve rarely come across a site that has this many number of species of concern on it. To give you some context, I’ve done conservation planning for US Fish and Wildlife, for the National Audubon Society and other conservation organizations, and those assessments include looking at the resources and determining if it’s worthy of federal, state or private funding to acquire those parcels based on which species occur on them, and typically when I’m up around a dozen species of concern, I’m amazed. And this site had even more. So this really is a truly amazing site in that respect.

Q. In your opinion as a biodiversity expert, how would you describe it in terms of a location for a proposed power plant?

A. It’s probably one of [the] worst uses that I could think of. Well, any industrial or commercial use at this location that would obliterate these habitats is abominable in my opinion. (tr. 3/20/19, at 77-78).

As shown by Mr. Zemba and the DEM Advisory Opinions, CREC would have significant adverse impacts on wetlands at the site, including adverse impacts on special aquatic sites. One of the special aquatic sites, and the obligate fauna that depend on it, would be obliterated.

Mr. Zemba concluded in his prefiled testimony that “the proposed facility would cause significant and unacceptable harm to the environment in that it would adversely impact biodiversity, including rare native Rhode Island Species, and additional Species of Greatest Conservation Need.”

(Town Exh. 16, at 19-20).

Importantly, both DEM and Mr. Zemba explained that Invenergy's limited biodiversity survey, which was performed over just a few selected days in the summer of 2017, was inadequate to determine what rare species may exist on the site. (Town Exh. 16, at 13-14.) An adequate biodiversity survey should at a minimum take place over several full seasons and over several years. Yet, even after being informed of this by DEM in the 2016 and 2017 Advisory Opinions, Invenergy failed to do so, claiming it was not needed, that DEM "didn't direct us to do that" (tr. 4/2/19, at 207), and that the study Invenergy did was "sufficient." (tr. 4/2/19, at 198).

DEM stated in its Original Advisory Opinion dated September 12, 2016, at 20, and tr. 3/26/19, at 42-45 (emphasis added):

A complete biological inventory would need to be done in all on-site habitats **over several seasons**, and ideally over several years, to provide a reasonable picture of what species utilize which portions of the site and for what portion of their lifecycle.

And as stated in DEM's Supplemental Advisory Opinion August 15, 2017, page 5-6:

While the above results of the survey efforts are certainly helpful and further support the conclusion that the forest interior habitat provided on site is quite valuable, it should be noted that a single season of survey is unlikely to reveal the full suite of biodiversity on site. As stated in the Department's original Advisory Opinion, "[A] complete biological inventory would need to be done in all on-site habitats over several seasons, and ideally over several years, to provide a reasonable picture of what species utilize which portions of the site and for what portion of the lifecycle." As is evidenced by the small number of reptiles and amphibians uncovered, the most cryptic species can easily go undetected during the course of a single study. **As such, this list should by no means be considered exhaustive of the potential species on site, State-listed or otherwise.** (Footnotes omitted, emphasis added).

Moreover, in 2016, before Invenergy performed its limited 2017 biodiversity survey, the Burrillville Land Trust ("BLT") offered to perform a biodiversity survey on the site at no cost to Invenergy, with several highly qualified biodiversity experts. (Town Exhs. 46 and 47). The BLT

offer was flatly rejected. (Town Exh. 48).⁵⁴ The reason for the rejection was an unsubstantiated “concern that some of the proposed participants . . . may pose a safety issue for our employees or perhaps an impact to the operations of the plant.” (*Id.*). When cross-examined, Mr. Niland could not say which (if any) of the experts posed a “safety issue.” Was it the conservation biologist/naturalist with the Natural Heritage Program? The Ph.D. in Geological Sciences from Brown? The Ph.D. in Physics from Bryant? The Ph.D. in Economics from Bryant? The President of the BLT with a BS in Plant and Social Science and an MS in Education? The botanist? The aquatic invertebrate specialist? The ornithologist? The NPR and EcoRI environmental reporters? (tr. 4/2/19, at 37-38).

Invenergy’s refusal to follow DEM’s clear and repeated direction to extend its limited biodiversity survey shows a basic lack of understanding about what the EFSA means when it says that Invenergy has the burden of proof on all issues and must therefore demonstrate by a preponderance of the evidence that CREC will not cause unacceptable harm to the environment. If Invenergy were serious about identifying all rare species and habitats that would be adversely impacted by CREC, it would have continued its biodiversity study work on site from the summer of 2017 until now. Had Invenergy done so, the Board and the parties would have almost two additional years of biodiversity data to review. Why was Invenergy opposed to continuing its biodiversity survey? Was it because Invenergy’s time-limited survey uncovered so many rare species in such a small span of time that Invenergy was concerned that a complete survey over full seasons would uncover even more rare species in this unique, biologically rich and sensitive location?

Invenergy’s biodiversity witness, Jason Ringler, provided testimony which makes it abundantly clear that Invenergy has failed to meet its burden of proving that CREC will not cause unacceptable environmental harm to biodiversity. During Mr. Ringler’s cross examination, Mr.

⁵⁴ The Burrillville Land Trust has no affiliation with the Town of Burrillville.

Ringler conceded each of these important points:

- The forest lands on the CREC site have high value, are part of a core natural area in DEM's wildlife action plan, and are part of forest land conservation priorities set by DEM. (tr. 1/30/19, at 182).
- The proposed site for CREC is a parcel of high value for wildlife, with a diverse number of plants and animals and many state listed species. (tr. 1/30/19, at 182-83).
- The forest clearing associated with CREC will negatively impact both wildlife and plants in the vicinity. (tr. 1/30/19, at 184-86).
- Invenergy's limited biological survey documented 520 animal and plant species. (tr. 1/30/19, at 187). These include 81 birds, 21 mammals (including 2 bat species, including the critically imperiled hoary bat), 8 amphibians, 3 reptiles, 147 butterflies and moths, 25 dragonflies and damselflies, 48 other invertebrates, and 187 plants. (tr. 1/30/19, at 187-89).
- Invenergy's limited biological inventory report found 17 state listed species on site, including the cerulean warbler, a state endangered species. (tr. 1/30/19, at 192-93). The survey also found 4 threatened species, 10 species of concern, 2 protected species, and 47 species of greatest conservation need. (tr. 1/30/19, at 194). **All of them have the potential to be adversely impacted because of CREC.** (tr. 1/31/19, at 65-66).
- It is the goal of the State of Rhode Island to protect endangered species, threatened species, species of concern, species of greatest conservation need, and their habitats. (tr. 1/30/19, at 189-92).
- Construction of CREC would have adverse impacts on forest biodiversity, including adverse impacts on forest interior birds, such as the black throated blue warbler, which is a threatened species. (tr. 1/30/19, at 200-01).
- Construction of CREC would cause forest loss and fragmentation and adverse impacts on upland habitats. (tr. 1/31/19, at 6). Adverse impacts to both wetlands and uplands are important to consider in determining whether there is unacceptable environmental harm. (tr. 1/31/19, at 8-9).
- CREC would cause adverse impacts to state listed or otherwise at risk species outside of wetlands. (tr. 1/31/19, at 9-10).
- For consistency with DEM's goals, the best cause of action is to avoid further fragmentation to the greatest extent practicable. (tr. 1/31/19, at 10-11).
- To do a complete survey of the biodiversity on site might take at least a year. (tr. 1/31/19, at 34-35).
- Had Invenergy done surveys on more days, it is entirely probable, almost certain, that Invenergy would have found additional species besides those already identified. (tr. 1/31/19, at 56, 73).
- Had Invenergy done a multi-year, multi-seasonal inventory, we would have a more refined list of species, and some of these species could be state protected species. But Invenergy has done no biodiversity survey work since mid-2017. (tr. 1/31/19, at 63-64).

- In performing its biodiversity survey, Invenergy’s “**goal wasn’t to document all or every species . . . by no means were we trying to document all.**” (tr. 1/31/19, at 73-74, emphasis added).
- No study was done to determine the potential impacts of the noise generated by CREC on the wildlife that relies on vocalizations to communicate. (tr. 1/31/19, at 97-98).
- Invenergy’s biodiversity study did not include a genetic analysis of rabbit pellets to determine whether the rabbits Invenergy identified as Eastern Cottontail were actually the rare New England Cottontail. (tr. 1/31/19, 102-05).
- The biological survey did not include any systematic beetle sampling and also did not include any fish or mussel sampling in the two brooks on the site. (tr. 1/31/19, at 112).

Therefore, the evidence (or more accurately, the lack of evidence) shows that Invenergy has failed to meet its heavy burden of proof regarding unacceptable environmental harm.

C. Air pollution

As President Obama said in a 2014 address at the Children’s National Medical Center:

Today, about 40 percent of America’s carbon pollution comes from our power plants. There are no federal limits to the amount those plants can pump into the air. None. We limit the amount of toxic chemicals like mercury, and sulfur, and arsenic in our air and water, but power plants can dump as much carbon pollution into our atmosphere as they want. It’s not smart, it’s not right, it’s not safe.

Rhode Island’s emissions have gone up over the last few years. (tr. 1/22/19, at 36-37). Huge amounts of additional air pollution would be produced in Rhode Island by CREC. Right now the proposed CREC site in Burrillville is forested and is producing beneficial oxygen and absorbing harmful carbon dioxide. However, according to CREC’s own submittals, if the 1,000 MW CREC were built, in terms of carbon dioxide alone, which is the primary climate change pollutant, CREC has the potential to emit **7.2 billion** pounds per year of CO₂ into the air above Burrillville. (Town Exh. 7, at 9 and Exh. EE1, at 2; tr. 1/22/19, at 30).

As the Town’s expert air witness Eric Epner testified, the increase in carbon dioxide alone would be an increase of almost 30% over existing carbon dioxide emissions produced in the entire state of Rhode Island, making it virtually impossible for Rhode Island to comply with the Resilient

Rhode Island Act and the Paris Agreement on global warming. (Town Exh. 7, at 12).

CREC would also have the potential to emit many noxious pollutants, including 546,000 pounds per year of nitrogen oxides, 446,000 pounds per year of carbon monoxide, 156,000 pounds per year of volatile organic compounds, 310,000 pounds per year of particulate matter, and 104,000 pounds per year of sulfur dioxide. (Town Exh. 7, at 9-10 and Exh. EE1, at 1-2; tr. 1/22/19, at 30).

Mr. Epner detailed the adverse health and environmental effects of each pollutant in his testimony. (Town Exh. 7, at 10-11 and Exh. EE1, at 1-5). Many of these air pollutants cause cancer and other serious health problems, including severe respiratory ailments. (*Id.*) (tr. 1/22/19, at 66).

There would also be significant ground level noxious emissions from the many vehicles constantly servicing the facility. (tr. 1/22/19, at 70-71). Large diesel trucks would be transporting materials, water, oil, ammonia, hydrogen, wastes, demineralization trailers, and other products to and from the facility. These trucks would spew hazardous and fine particulate air emissions close to the ground, harming the people and wildlife in the immediate vicinity. As Mr. Byrns of DOH testified, the traffic air emissions “will have a negative impact.” (tr. 1/23/19, at 15).

The Town recognizes there are separate DEM permitting procedures for air, wetlands, and stormwater. Even if Invenergy is given a “license to pollute” in these areas, this Board must independently determine whether all the **cumulative** adverse impacts of CREC would cause unacceptable environmental harm. The **individual** permits do not end the inquiry. As Deputy DEM Director Terrence Gray testified:

Q. You’re not saying to this Board that if we issue these permits, you’re required to make a finding that there is no unacceptable harm to the environment, correct?

* * *

A. No. We are not saying that.

Q. And you’re expressing no opinion with regard to whether there is unacceptable harm to the environment as that standard is set forth in the Energy Facility Siting Act, are you?

* * *

A. We are not saying that, no. (tr. 3/21/19, at 129-30).

These pollutants should not be added to Rhode Island’s air or water, especially because other low polluting, low carbon alternatives to CREC are available, such as energy efficiency programs, behind-the-meter solar installations, onshore wind, offshore wind, and Canadian baseload hydropower. Under R.I.G.L. § 42-98-2(7), these are “an appropriate alternative to the proposed facility.”

D. Noise

Noise can hurt both humans and animals. (tr. 1/30/19, at 158-163; 3/20/19, at 105-15; tr. 12/5/18, at 101-02). Noise from CREC would exacerbate and compound existing noise from the Spectra/Enbridge/Algonquin gas compressor station located immediately adjacent to the proposed facility. CREC would use air cooled condensers. This system is prone to high noise levels during steam turbine bypass operations during plant start up and shut down. It is usually louder than anticipated during the design phase and it is difficult to control and mitigate the noise. (Town Exh. 9, at 4-6; Town Exh. 10, at 2-4).⁵⁵

Although CREC has committed to meeting the Town’s noise limits, based on his experience with similar plants, the Town’s expert noise witness, David Hessler, has said that, as a practical matter, “it’s going to be definitely very difficult” for Invenergy to meet this commitment, (tr. 12/5/18, at 159), especially during start-up and shut down and “. . . sound emissions from the CREC facility during bypass may be louder than the Applicant currently anticipates . . .” (Town Exh. 10, at 4). As Mr. Hessler also testified in response to questions from Chairperson Curran:

. . . when it first starts up, there will be some retrofits involved.

* * *

. . . that has been a major noise issue at every plant I’m familiar with that has an air cooled condenser, and I’ve never seen one that was quiet at least initially when

⁵⁵ DEM is of the opinion that Invenergy has underestimated the indirect impacts to interior forest communities with regard to noise and lighting. (tr. 1/30/19, at 123, 136).

the plant was first built. In fact, the last two that I tested both had guaranties from the valve manufacturer . . . and in both cases the actual levels were way over the guaranty. So they can't be relied on.

THE CHAIRPERSON: And so what are the retrofits that would be required?

* * *

[Mr. Hessler] . . . what's been done at other plants that I've been involved in is you have to put that whole area around the bypass duct valve and the duct in a building, and that's why I say that doesn't go up overnight. That would take a long time to build. (tr. 12/5/18, at 161-63).

Mr. Hessler also testified in response to a question from Associate Director Brady that truck noise "would be a significant noise issue." (tr. 12/5/18, at 193-94). Such noise can have adverse health effects. (tr. 3/20/19, at 106-07).

In response to a question from Director Coit, Mr. Hessler explained another significant noise problem that may have no solution:

I finally had an opportunity to measure one of these plants. It's essentially identical . . . on rare occasions they do develop a resonance, a standing wave resonance that just bounces back and forth inside the boiler cavity at a low frequency.

* * *

The only way to get rid of it is to build into the original boiler design plates that are inside parallel to the gas flow to change the geometry so that the sound wave gets broken up. But it's not an easy thing to do . . . The HRSG vendors are reluctant or outright refuse to make these changes.

* * *

I can't say that it's going to happen. I'm just worried that it's happened on this essentially identical unit. Once it's in operation, I don't know of any way to fix it.

* * *

. . . it's a low frequency hum . . . and you can't cover that up. There's nothing that can be done about it, really. It's a concern here because that's the last thing that's needed is another low frequency noise in this area.

* * *

It would be continuous during normal operation, just a low frequency hum between about 50 and 60 Hertz. Unpleasant. (tr. 12/5/18, 198-201, emphasis added).

Mr. Hessler (and the Town Planning Board) asked Invenergy to post a performance bond to

secure noise compliance, but Invenergy has consistently refused.⁵⁶ So what happens if Invenergy builds the \$1 billion plant, but cannot meet the agreed noise limit?

E. Water supply, waste water disposal, stormwater and public safety

Under R.I.G.L. § 42-98-8(a)(6), Invenergy must submit to this Board evidence of “measures for protecting the public health and safety and the environment during the facility’s operations, including plans for the handling and disposal of wastes from the facility . . .” This statutory requirement is also in EFSB Rule 1.6(b)(15). And EFSB Rule 1.6(b)(11) requires Invenergy to demonstrate that it has access to “required support facilities, e.g. road, gas, electric, water, telephone, and an analysis of the availability of the facilities and/or resources to the project.”

1. Water Supply

Invenergy’s plans for water supply have been unreliable and ever changing. Invenergy has struggled with locking down a firm water supply.⁵⁷ Let’s look at the travel of the water situation. Invenergy’s first attempt was to try to get water from the Pascoag Utility District (“PUD”). This failed because Invenergy made the mistake of signing a non-binding letter of intent with the PUD and that allowed the PUD to back out of the deal.⁵⁸ Invenergy’s second attempt was to try to get water from Harrisville. That failed. Invenergy’s third attempt was to try to get water from Woonsocket. That failed. Invenergy also tried to get water from the Narragansett Indian Tribe in Charlestown. That failed.

No fossil fired plant in New England exclusively trucks in its water (tr. 2/5/19, at 46-47, 70),

⁵⁶ However, Invenergy would have to obtain a performance bond in connection with its Physical Alteration Permit (“PAP”) for the access road, so clearly Invenergy can obtain such performance bonds. (tr. 2/5/19, at 174, 199).

⁵⁷ CREC would need 15,840 gallons per day in normal operation, but as much as 1,464,480 gallons per day when firing oil in both units. (tr. 2/5/19, at 55-60). After three days of oil firing, CREC would be out of oil and water. (tr. 2/5/19, at 97). CREC reduced its water needs by proposing to use demineralization trailers on site. But CREC would be the only fossil fired power plant in New England to rely on demineralization treatments for its primary water source. (tr. 2/5/19, at 75).

⁵⁸ Tr. 4/2/19, at 75-76.

yet Invenergy's current plan is to exclusively truck water from Johnston to CREC in large tanker trucks.⁵⁹ CREC would be "the largest plant in the U.S. that would have water trucked in."⁶⁰

As Invenergy has admitted, ". . . water supply to the project must be from a reliable source that can meet the water quality and volume requirements." (Inv. EFSB Application, at 46; tr. 2/5/19, at 34-35, 55). The Town agrees. However, Invenergy, a multi-billion dollar company, is asking this Board to approve a unique water supply arrangement for one of the most crucial needs of a \$1 billion plant – water – with Benn Water and Heavy Transport Co., a small company that has fewer than 10 employees and primarily fills pools. (tr. 4/2/19, at 87-91). How could the Town (or this Board) feel comfortable that such a water plan, which requires 365 day a year deliveries regardless of weather for 30-40 years, would be continuously safe and reliable in the hands of this little company?

2. Waste water disposal

Regarding the handling and disposal of waste water from the facility,⁶¹ we have been told that Invenergy's current plan is not to build a sewer line. Instead, Invenergy plans to truck its waste water off site. Only one to three percent of fossil fuel fired power plants in New England operate without a sewer line. (tr. 2/5/19, at 46-47). Invenergy has also continuously refused to tell the Board where these wastes will be disposed.⁶² Again, Invenergy has not met its burden of proof.

3. Stormwater

Invenergy's stormwater witnesses⁶³ initially claimed that the quality of the stormwater would be "quite a bit" less polluted than it is now. (tr. 3/12/19, at 144-46). When pressed, they eventually conceded that "water quality will be worse." (tr. 3/12/19, at 161-62).

⁵⁹ Invenergy's primary backup water supply arrangement is with the City of Fall River. However, on April 23, 2018, the Fall River City Council Committee on Health and Environmental Affairs voted not to renew the water contract once it expires after three years. (tr. 4/2/19, at 136-37).

⁶⁰ Tr. 7/19/18, at 54.

⁶¹ CREC will produce about 1,440 gallons of wastewater per day. (tr. 2/5/19, at 58).

⁶² Tr. 2/5/19, at 116.

⁶³ Chad Jacobs (Inv. Exhs. 47 and 48) and Jim Riordan (Inv. Exhs. 66 and 67).

Mr. Jacobs created an Exhibit 1 to his rebuttal testimony. (Inv. Exh. 48).⁶⁴ This Exhibit shows that, even after using stormwater “best management practices,” total suspended solids in the stormwater from the main site would increase by an additional 5,123.4 pounds per year; total phosphorus would increase by 13.1 pounds per year; and total nitrogen would increase by 187.4 pounds per year. (tr. 3/12/19, at 165-71). Bacteria will increase by 124,918.10 colonies per 100 milliliter per year, **43 times** what exists on site. (tr. 3/12/19, at 172). Similar dramatic adverse impacts to stormwater quality are shown for the dry stormwater swales. (tr. 3/12/19, at 172-74). Yet Invenergy’s witnesses insisted that the additional stormwater treatment recommended by the Town’s expert witness was not needed. (tr. 3/12/19, at 174-78).

Invenergy’s witnesses conceded that Exhibit 1 does not show that Invenergy would meet the 85% removal standard required by the stormwater manual for suspended solids. (tr. 3/12/19, at 178-80). And in a demonstration of continuing failure of proof by Invenergy’s witnesses, they eventually sought to distance themselves from their own testimony by claiming “those numbers are not necessarily reflective of reality.” (tr. 3/12/19, at 271).⁶⁵ Those are Invenergy’s own calculations!⁶⁶

Finally, Invenergy’s stormwater witnesses claimed there would be no adverse impacts from stormwater on the John H. Chafee Blackstone River Valley National named Heritage Corridor (“Corridor”) (tr. 3/12/19, at 228), but failed to bring to this Board’s attention the fact that the Corridor had expressed significant concerns about CREC in a detailed letter to this Board, including “significant additional stormwater flow” concerns that “cannot be overstated.” (Town Exh. 44, at 5). As Mr. Zemba has also testified, even if DEM issues a stormwater permit, there will be unacceptable harm to the environment. (tr. 3/13/19, at 109).

⁶⁴ “Invenergy – Rhode Island – Clear River Energy Pollution Calculations Summary Tables.”

⁶⁵ Other problems included Invenergy missing an Area Subject to Stormwater Flow (“ASSF”) altogether (tr. 3/12/19, at 126-28), and various mistakes that were made in the Soil Erosion and Sediment Control Plan. (tr. 3/12/19, at 245-51).

⁶⁶ Neither Invenergy stormwater witness holds a national or Rhode Island certification in the preparation of stormwater pollution control plans. (tr. 3/12/19, at 181-82).

4. Public safety

Invenergy must demonstrate that it has in place “measures for protecting the public health and safety and the environment during the facility’s operations.” (R.I.G.L. § 42-98-8(a)(6)). However, Invenergy has not adequately defined the measures they are proposing to protect public health and safety, such as exactly how Invenergy plans to support the Pascoag Fire District (“PFD”) and how they would coordinate responding to potential catastrophic events. No agreement has been produced by Invenergy with PFD (and, to our knowledge, no such agreement exists) that addresses the issues of fire and emergency training and equipment needs. Also, because Invenergy has not filed updated plans for its 2 million gallon oil storage facilities, DEM cannot say whether the proposed oil storage facilities conform to DEM’s regulations. (tr. 1/30/19, at 102-08, 118). Once again, Invenergy has failed to meet its burden of proof on these important public safety issues.

F. Traffic

The Town’s traffic engineers, Mr. Coogan and Mr. Brayton (Town Exhs. 13 and 14), and Invenergy’s traffic engineers, Ms. Chelbek and Mr. Smith, (Inv. Exhs. 25, 26, 72, and 73), testified that during the construction period, which could last 30 months, there would be significant increases in traffic, with as many as **458 additional vehicles per hour** during the peak hours. (tr. 2/7/19, at 157-59). This traffic will cause adverse impacts and delays, especially at local intersections, where sharp turns will require large trucks to travel into opposing lanes, or even on the sidewalk, creating traffic hazards.⁶⁷ In addition, damage will be caused to the roads.

Traffic problems are also outlined in the Memorandum from Burrillville Sergeant (now Lieutenant) William Lacey dated August 1, 2017, which is attached to and incorporated into the testimony of Mr. Coogan (Town Exh. 13, Exhibit 1). As Lieutenant Lacey stated:

. . . large [commercial motor vehicles] will have a difficult time navigating the nearly

⁶⁷ Tr. 2/7/19, at 189-90, 195-96.

1 mile stretch of road from the South Main and High St. intersection, to the curve near Serio's Pizza. With the small lanes of travel almost every commercial vehicle which will pass through the area will have to violate traffic laws to navigate these intersections. (at 3).

Invenergy's traffic witnesses calculated that up to an additional 437 vehicles would be going in and out of the facility in the morning peak hour (7:00 - 8:00 a.m.) and an additional 458 vehicles in the afternoon peak hour (3:15 - 4:15 p.m.) for a total of 895 additional vehicles in the two peak hours. (tr. 2/7/19, at 157-59). These witnesses also conceded that trucks would have to cross the double yellow center line in certain locations (tr. 2/7/19, at 173-76, 198-203) and drive up on the sidewalk (tr. 3/12/19, at 62-63). They also conceded that it would be safer if the Church Street/Main Street intersection was widened (tr. 3/12/19, at 177-78), but Invenergy has not explored acquiring the small piece of land needed for such an expansion.⁶⁸

The Invenergy witnesses conceded that during construction, certain intersections would decline to unacceptable service levels E and F, with long delays, and would be over capacity. (tr. 2/7/19 at 184-85, 207-11; tr. 3/12/19, at 28-36). Also, Invenergy admitted that truck-related crash frequency would go up. (tr. 3/12/19, at 43-44). Mr. Brayton also explained how Invenergy's traffic witnesses had underestimated intersection traffic congestion and delays due to Invenergy's mistake in omitting traffic coming from the east. (tr. 3/12/19, at 110-11).⁶⁹

G. Other environmental harms

As shown by the DOH Advisory Opinions, (Board Exhs. 4A and 4B), the proposed plant

⁶⁸ As further examples of Invenergy not being ready for prime time, the Invenergy initial traffic study contained a number of errors that had to be corrected, including the incorrect width for Main Street (32 feet, not 62 feet), the incorrect afternoon peak hour (3:15 to 4:15, not 5:00 to 6:00), and the incorrect number of ammonia trucks (15 per month, not 2 per month). (tr. 3/12/19, at 9-12).

⁶⁹ Tellingly, the Department of Transportation ("DOT") recommended that during construction, a detail officer should be assigned at the South Main Street/Main Street intersection during **both** the morning and afternoon peak hours. (tr. 2/5/19, at 186). However, Invenergy's traffic witnesses continued to insist at the hearings that in their opinion, there was no need for a detail officer in the morning peak. (tr. 2/7/19, at 213-18). Invenergy also has not yet prepared a traffic management plan for coordination with Burrillville. (tr. 3/12/19, at 38-40).

would create a potential for catastrophic events, including toxic releases of ammonia, fire, and explosion hazards associated with compressed hydrogen. There are also potential issues with spills or releases of fuel oil, storage and transportation of hazardous materials, and emergencies involving natural gas at the facility or in the pipeline and related infrastructure.⁷⁰

The DOH has “grave concerns about climate changes” in Rhode Island. (Board Exh. 4B, at 9). It identified health risks in Rhode Island from climate change as including such matters as heat related morbidity and mortality, increase in symptoms of allergy, asthma, and other respiratory diseases, and threats to the food and fresh water supply, among others.⁷¹ DOH concluded that “alternative energy should be prioritized” in order to “maximize[e] carbon emission reductions and the development of alternative and renewable energy sources” and “if Rhode Island is to meet the commitments in the Resilient Rhode Island Act, it is essential the state begin to move from fossil fuel energy generation as soon as possible.”⁷² Rejecting the requested license for this fossil fuel plant would not only eliminate many harmful environmental impacts, it would greatly assist the state in moving away from fossil fuel energy generation.

III. PUBLIC INPUT

Public input has a crucial statutory role to play in this Board’s decision. The Energy Facility Siting Act, specifically R.I.G.L. § 42-98-9.1(e), mandates that “public input **shall** be a part of the decision making process.” (Emphasis added). A very brief review of some of the massive public input submitted during this process is as follows.

A. **Opposition from the public.** No fewer than 32 out of the 39 cities and towns in Rhode Island have passed formal resolutions opposing this plant and filed them as public comment. (Town

⁷⁰ EFSB Exh. 4A, at 23-27; EFSB Exh. 4B, at 6-9.

⁷¹ EFSB Exh. 4A, at 28-31; EFSB Exh. 4B, at 9-11.

⁷² EFSB Exh. 4A, at 30; EFSB Exh. 4B, at 9.

Exhs. 20, 21, and 22 for i.d.). “Public input” has also been loud and clear in a mass outpouring of thoughtful and informed opposition. Hundreds of verbal and written submissions have been made to this Board, overwhelmingly in opposition to this plant. People and organizations from all walks of life and all parts of the state have made impassioned statements in strong opposition to the plant.

B. Opposition from environmental groups. Virtually every environmental group in the state is strongly opposed to the proposed plant.

1. **Environment Council of Rhode Island.** The Environment Council of Rhode Island (“ECRI”) is a coalition of over 60 small, medium, and large environmental groups in this state. The ECRI’s official position is:

Climate change is the most urgent problem facing Rhode Island and, indeed, the world. One of the major causes of climate change is the burning of fossil fuels, like coal, oil and natural gas, to make energy. In this context, the Environment Council of Rhode Island (ECRI) strongly opposes the proposal to build a new, long-lived natural gas fueled electricity generator in Burrillville. ECRI supports the quickest transition to clean, renewable energy and greater energy efficiency; this is not the time to be building new fossil fuel-fired power plants.

2. **Save the Bay.** Save the Bay’s position paper is well researched and thorough. It is attached as Exhibit 4. The Board may wish to read it in its entirety. It states in part:

Save the Bay, on behalf of its members and supporters, submits that the Energy Facility Siting Board must deny the application to construct the Clear River Energy Center (CREC) because the applicant cannot meet its burden: the proposed facility will cause unacceptable harm to the environment. (Emphasis in original).

* * *

1. The Department of Environmental Management’s Advisory Opinions are clear and uncontroverted: The Clear River Energy Center (CREC) does not belong in the proposed location, an interior forest of high conservation value, vital to the conservation of biodiversity.

* * *

. . . the harm will be severe and irreparable . . .

2. The Energy Facility Siting Board (EFSB), not DEM, must make a finding. The permitting processes under DEM jurisdiction do not address some of the most severe impacts that would result from construction, operation and maintenance of the facility. The EFSB has a statutory duty to find that the applicant has met its burden to show that “[T]he proposed facility will not cause unacceptable harm to the

environment . . .” prior to approving the application.

The environment clearly includes forest biodiversity impacts and other impacts that have come to light outside of wetlands and other permitting programs. The threats to wildlife and habitat, forest loss and fragmentation, loss of upland habitat, and impacts to state-listed or otherwise at-risk species outside of wetlands set forth in DEM’s Opinions, supported by the testimony of Scott Comings, are essentially uncontroverted and preclude a finding that there will not be unacceptable harm to the environment. §42-98-11(b)(3).

3. The Nature Conservancy

1. **Public comment:** “Invenergy’s proposed 900MW power plant for Burrillville will make it more difficult for Rhode Island to achieve its newly enacted greenhouse gas reduction targets; it has not been proven necessary to meet energy needs; and it will pose unacceptable environmental risks to habitats and plant and animal species. For these reasons, The Nature Conservancy opposes the development of this power plant.

* * *

Building a Power Plant in This Location Would Threaten the Ecosystem and its Biodiversity: The Invenergy power plant would threaten the integrity of a 12,000-acre forest area, one of the largest intact natural areas in Rhode Island. Moreover, the power plant’s proposed location is within a critical corridor for wildlife movement to other healthy forest areas. . . .”

2. **Testimony of Scott Comings:**

Q. If we’re talking about these being pinch points . . . the conclusion you reach is that construction of the power plant would result in an adverse impact to the environment, correct?

A. That’s correct.

Q. And it’s your position that it should not be built at all.

A. That’s correct.

Q. And that there is no mitigation that could make it appropriate to be built.

A. That’s correct. (tr. 2/7/19, at 123).

* * *

Q. . . . it is the connectivity that is the core of your objection . . .

A. Yes. It’s all about the connectivity.

* * *

Q. And your conclusion in your testimony and the basis of your opposition to the proposed plant is that it would cause unacceptable harm to the environment.

A. That’s correct.

* * *

Q. The Chairperson just referred you to Page 17 of your rebuttal testimony . . . It says, “I agree with DEM and submit that the only scientifically sound conclusion on the question of habitat connectivity is that the proposed power plant would cause unacceptable harm to the environment by destroying a wildlife corridor that is key to ecological flow locally and even regionally. . . . Is that the essence of your testimony?”

A. Yes, it is. (tr. 2/7/19, at 136-38).

4. **Blackstone Heritage Corridor**. The Blackstone River Valley National Heritage Corridor Act of 1985 (“Act”) established the Blackstone River Valley National Heritage Corridor (“Corridor”). Under its federal statutory duties, Blackstone Heritage Corridor (“BHC”) evaluated CREC’s EFSB application and submitted a letter to the EFSB summarizing BHC’s many concerns. (Town Exh. 44). This was admitted as a full exhibit. A copy is attached as Exhibit 5.

BHC’s overall position is that “the project may have the potential for significant adverse impacts to the resources of the [Corridor].” (*Id.*, at 1).

The BHC Letter further states:

- “The site is located in perhaps the most natural and forested area of Rhode Island . . .” (*Id.*, at 3).
- “Existing forest resources have extraordinary value relative to intercepting stormwater and thereby attenuating stormwater impacts. Given the expanse of anticipated forest removal for this project as well as the acres of filling and alteration of wetlands and areas of hydric soils, we can expect millions of gallons of additional stormwater will be introduced to the wetlands and water systems associated with [CREC]. Clearing additional land in order to construct stormwater basins addresses only a portion of the issue and typically creates additional issues such as time and duration of flows, as well as appropriate recharge. **The consequences of such significant additional stormwater flow cannot be overstated.**” (*Id.*, at 5, emphasis added).
- “Both the volume of trucking and the material being transported present risk on a number of levels.” (*Id.*, at 5).
- “Even providing culverts for wildlife passage, the concern is that entire habitat regions will be severely restricted or even eliminated.” (*Id.*, at 6).
- “In addition to the disruption of stormwater management, carbon management, and water recharge, it is unclear what the impact will be on the natural existence of and migration patterns for local wildlife. The site is located in a predominant north/south wildlife corridor . . . This miles-long corridor is a regional critical habitat and ecosystem.” (*Id.*, at 6).
- “The project proponent has indicated that a number of these items could be further analyzed in later permit review stages, after EFSB approval is attained. However, these items and their impacts are integral to whether this project (as well as the appurtenant elements whose potential impacts have thus far been omitted from review) is being

appropriately sited.” (*Id.*, at 7).

IV. OPPOSITION FROM THE TOWN OF BURRILLVILLE

A. **Town Council**. John F. Pacheco, III, President of the Burrillville Town Council, testified that the overwhelming opinion of the residents of the Town, and the unanimous view of the Town Council itself, is that the proposed power plant would cause unacceptable harm to the Town, its environment, its socio-economic fabric, and its residents. (Town Exh. 1).⁷³

B. **Town expert reviews**. The Town hired several expert consultants to review Invenergy’s application. The Town’s expert consultants concluded that the CREC would cause unacceptable harm to the Town, its environment, its socioeconomic fabric, and its residents, including, but not limited to: (1) unacceptable risks to the community from the transportation, storage, and use of ammonia, hydrogen, diesel fuel, water and wastes; (2) unacceptable increases in noise; (3) unacceptable increases in dangers associated with large truck traffic constantly navigating Burrillville’s small, winding rural roads; (4) unacceptable increases in toxic air emissions; (5) destruction and further fragmentation of many acres of prime forest land and wildlife habitat; (6) destruction of many acres of wetlands and their associated supporting upland buffer habitat; (7) potential toxic releases of ammonia; (8) potential release, and fire and explosion hazards associated with compressed hydrogen; (9) potential spills and releases of fuel oil and other petroleum compounds; and (10) potential releases and catastrophic events involving the large amounts of natural gas used at the facility. (See Town Exh. 26).

C. **Town Planning Board**. At the request of this Board, the Town’s Planning Board conducted an investigation and hearing and issued an Advisory Opinion (Town Exh. 26). The

⁷³ Mr. Pacheco also testified that in 1988, when Ocean State Power sought and received approval from this Board for the 560 MW power plant that now stands in Burrillville, the general area of the site now being proposed by CREC was one of Ocean State Power’s “alternative sites.” At that time, it was referred to as the Buck Hill Road site. During that proceeding, FERC prepared a formal Environmental Impact Statement (“EIS”). Although the EIS review found that the Buck Hill Road site was one of the three least expensive sites overall, the site was rejected. (Town Exh. 1, at 3).

Planning Board held several public meetings at which sworn testimony was received from experts for Invenergy and the Town. Extensive public input was also obtained.

The Planning Board advised this Board that CREC would be a land use that would be inconsistent in many specific ways with Burrillville's Comprehensive Plan and with the Rhode Island Comprehensive Planning and Land Use Regulation Act. Whether the EFSB agrees with the Planning Board or Invenergy on this important issue will to a large extent depend upon whether the EFSB finds the Planning Board Advisory Opinion and the supporting testimony of the Planning Board Chairman, Jeffrey Partington (tr. 8/15/18, at 157-250 and 8/16/18, at 4-52), to be more credible than the testimony of Mr. Edward Pimentel for Invenergy. (tr. 8/15/18, at 14-157).

The EFSB will compare Mr. Partington's measured testimony with Mr. Pimentel's over-the-top, combative testimony. For example, when asked by Director Coit, "so if . . . the planning board didn't have enough information to make the conclusion that it was inconsistent, are you saying you had enough information to say it was compliant?" Mr. Pimentel said "Yeah." (tr. 8/15/18, at 84).

Mr. Pimentel also testified:

- ". . . the project cannot negatively impact other community goals and policies." (tr. 8/15/18, at 91-92).
- . . . "there's no evidence . . . to support any conclusion that [CREC] will in some manner negatively impact those resources." (tr. 8/15/18, at 98).
- He disagreed with "each and every one" of the Planning Board's findings. (tr. 8/15/18, at 66).
- CREC "complies with every single goal and objective in the Town's comprehensive plan." (tr. 8/15/18, at 83).

As Director Coit pointed out to Mr. Pimentel, ". . . you're saying so stridently that there's no impacts specifically on forest resources and then resorting to comparison or general principle, and I think it's hard to follow the logic." (tr. 8/15/18, at 102).

D. **Town Zoning Board**. At the request of this Board, the Town’s Zoning Board also followed its usual statutory process and issued an Advisory Opinion. (Town Exh. 27). The Zoning Board concluded that CREC would not meet the requirements of Burrillville’s zoning ordinance and that no special use permit or variance should be granted. The Zoning Board held several public hearings, which included testimony from expert witnesses for Invenergy and the Town, and extensive input from the public. Zoning Board Chair Ken Johnson defended the Advisory Opinion in the face of aggressive cross examination. (tr. 8/16/18, at 109-268).⁷⁴

E. **Town Building Inspector**. Responding to a directive from this Board to issue an Advisory Opinion, the Town’s Building Inspector informed this Board that the proposed plant would not comply with the Town’s Zoning Ordinance for multiple reasons he addressed in his two Advisory Opinions, and that Invenergy failed to request the correct relief from the Town’s Zoning Board. (Town Exhs. 29 and 30). Building Inspector Joseph Raymond testified to his reasoning in detail. (tr. 7/25/18, at 24-184; Town Exh. 19).

V. INVENERGY LACKS CREDIBILITY

Invenergy’s credibility has been called into question by its actions throughout this docket. One example is Invenergy’s November 9, 2018, filing with FERC. Invenergy was trying to persuade FERC not to approve ISO’s termination of the Unit 1 CSO. Invenergy argued in two separate locations in its FERC filing that a license from this Board was “the only gating item for the project.” (CLF Exh. 21, at 4, 10). Invenergy made this claim even though Invenergy needed, but did not yet have (1) a DEM air permit, (2) a DEM wetlands permit, (3) an Army Corps of Engineers permit, and (4) an EFSB permit for the electrical interconnection. (tr. 3/26/19, at 209-12).

Invenergy also made many representations to ISO in its Forward Capacity Tracking System

⁷⁴ Invenergy’s counsel was at times, as stated by Director Coit, “obnoxious” to Mr. Johnson. (tr. 8/16/18, at 182).

(“FCTS”) filings. These representations simply did not comport with reality. See confidential tr. 3/28/19, at 4-127.

Invenergy’s credibility suffered its most serious blow when, after representing to this Board repeatedly that this project would be built at Invenergy’s sole expense and with no cost to the New England ratepayers, Invenergy filed a suit at FERC seeking to have over \$160 million in project costs related to the CREC interconnection shifted to New England ratepayers. As this Board ruled in Order No. 117 issued on December 12, 2017 regarding pending Invenergy actions before FERC:

One of those actions seeks to have Invenergy’s financial obligations with respect to operation and maintenance costs of its interconnection shifted to ratepayers. As Invenergy has consistently represented to the Board that the project will be privately funded with no cost to ratepayers, FERC’s decision in this matter could render those representations inaccurate. If FERC approves Invenergy’s complaint and costs are shifted to ratepayers, the Board will be required to evaluate a revised cost component of the project as part of its overall evaluation. In addition to the Board’s evaluation, the other parties in the proceeding must have the right to address these changes.

In light of . . . the uncertainty of the effect of the FERC complaint, the Board ordered Invenergy to appear before it to show cause as to . . . whether the application, as submitted, under Board Rules 1.5 and 1.6 would be sufficiently changed as to the cost impact on ratepayers so as to require suspension during the pendency of the actions before FERC. (at 1-2).

In response to the Show Cause Order, Invenergy eventually withdrew this ill-advised FERC filing (but did so **without** prejudice).

Another example relates to Ryan Hardy. Mr. Hardy drafted “recommended questions for ISO-NE as part of the CREC decision,” as set forth in Mr. Hardy’s October 4, 2017 email sent to Invenergy employees John Niland and Kenneth Parkhill. (Inv. Exh. 151; tr. 4/2/19, at 123-25). Mr. Hardy recommended to Mr. Niland and Mr. Parkhill they tell ISO that:

Based on our experience before the Rhode Island EFSB and NTE Killingly’s experience before the Connecticut Siting Council, it appears that the applicable state permitting boards are unlikely to approve the construction of new natural gas plants without having secured a CSO through an FCA.

While the Town believes that Mr. Hardy’s statement is correct, Mr. Hardy testified that even

though he drafted this statement, and he recommended that it be used in negotiations with ISO regarding CREC's CSO, Mr. Hardy did not believe it was a true statement. (tr. 1/8/19, at 131-32; tr. 1/9/19, at 178-79). In other words, Mr. Hardy, by his own admission, had no problem recommending that Invenergy provide information to ISO in connection with CREC that he felt was not true to try to move the CREC project forward. Although Mr. Hardy's recommended question was apparently never asked of ISO by Mr. Niland or Mr. Parkhill,⁷⁵ the fact that Mr. Hardy suggested that information he believed was untrue should be utilized in this process reflects poorly on the credibility of both Invenergy and Mr. Hardy. (tr. 4/2/19, at 123-28).

Finally, as shown earlier, when Invenergy had a CSO for Unit 1, Invenergy repeatedly argued that the award of a CSO by ISO was "strong evidence" of the need for CREC. But now that Invenergy has lost its CSO, it is arguing that the lack of a CSO is "irrelevant."⁷⁶

Invenergy has made many representations to this Board in the 3½ years since this docket was opened. The Town respectfully submits that Invenergy's representations are not trustworthy. Invenergy has misrepresented crucial matters in its ISO filings, it has misrepresented the status of its permitting in its FERC filings, and it has misrepresented its intentions regarding this project in its filings to this Board.

In the opinion of the Town, these are disqualifying events. If there were a need for CREC

⁷⁵ Tr. 4/2/19, at 126-27

⁷⁶ See tr. 10/31/18, at 16 (morning) ("the CSO termination . . . is irrelevant to the issue of need.") Moreover, in its Application to this Board, Invenergy told this Board that it had no intention of constructing CREC unless and until it was awarded a CSO: "Once CREC is awarded an FCO, Invenergy will construct the project." (tr. 4/2/19, at 26). See also Invenergy's EFSB Application Exh. 1A Section 3.1, at 7. "FCO" stands for a Forward Capacity Obligation, which is the same as a CSO. (Tr. 4/2/19, at 26).

Contrary to its earlier representations to this Board, Invenergy is now saying that if it gets a license from this Board, it intends to build CREC even without a CSO from ISO. (tr., 4/2/19, at 138-39). Testimony from Mr. Walker in this matter has established that some power plant developers try to obtain a "pocket permit" from a siting agency, and then sell the permit or wait for the market to change for the better, and then start construction, often many years later. (tr. 1/23/19, at 35-38). Mr. Walker testified that a "pocket permit" should not be allowed by this Board because ". . . if there's no immediate need, the denial of the permit assures that we don't have a phantom or ghost plant in the rural corner of Rhode Island." (*Id.*, at 38).

(which there is not), and if there were no unacceptable environmental harm (which there is), then the Town respectfully submits that Invenergy would not be an appropriate entity to be given a license to build a 1,000 MW, \$1 billion power plant in Rhode Island.⁷⁷

CONCLUSION

Invenergy has the burden to prove, among other things, that the proposed 1,000 MW plant is “necessary to meet the needs of the state and/or region for energy,” as demonstrated by “long term state and/or regional energy need forecasts.” Primarily because ISO’s forecasts of net peak summer load have been steadily decreasing, and surplus, inexpensive supply has been steadily increasing, Invenergy has not met its burden of proving need for the plant.

Invenergy also has the burden to prove that the proposed facility “will not cause unacceptable harm to the environment.” The evidence shows that CREC would fragment a vital forest and wildlife corridor at a vital pinch point. This harm could not be mitigated. CREC would also harm animals and plants, including many species that have threatened and protected status, and their habitats. CREC would discharge toxic emissions that can cause cancer and other health problems. CREC would create traffic harm, noise harm, stormwater harm, and public health and safety harm. Invenergy has not met its burden of proving that the plant will not cause unacceptable harm to the environment.

The Town therefore respectfully submits that this Board should not license this facility.

⁷⁷ Moreover, under R.I.G.L. § 42-98-8(a) and (b), and EFSB Rule 1.7, Invenergy was obligated to submit a licensing application that met all of the detailed requirements of the EFSB and the EFSB Rules. However, after more than three years, Invenergy is still repeatedly correcting and adding to its original substandard and incomplete application. For example, among other things, the biodiversity study remains incomplete; the access road proposal has significantly changed (but still does not address the Town’s or DEM’s main concerns); the lot configuration has changed a number of times; the wetlands and ACOE applications are incomplete; and there is no public safety arrangement with the PUD.

Respectfully submitted,
Town of Burrillville
By its attorneys

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CERTIFICATE OF SERVICE

I hereby certify that on the 17th day of May, 2019, I sent a copy of the foregoing to the service list.

/s/ Michael R. McElroy