

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

**IN RE: INVENERGY THERMAL DEVELOPMENT LLC :
APPLICATION TO CONSTRUCT AND :
OPERATE THE CLEAR RIVER ENERGY : SB-2015-06
CENTER, BURRILLVILLE, RHODE ISLAND :**

DECISION AND ORDER

I. INTRODUCTION

On October 29, 2015, Invenergy Thermal Development LLC¹ (Invenergy or Applicant) filed with the Energy Facility Siting Board (EFSB or Board) an application to construct and operate the Clear River Energy Center (Facility or Project),² a combined-cycle electric generating facility to be located on Wallum Lake Road in Burrillville, Rhode Island.³ The proposed Facility would have a nominal power output at base load of approximately 850-1,000 megawatts (MW) while firing natural gas. The electric power generated from the proposed Facility would be transmitted through a new 345 kilovolt (kV) transmission line to be installed from the Facility along an existing National Grid right-of-way to the Sherman Road Substation in Burrillville. Because it would be used for the generation of electricity and be designed for or capable of operating at a gross capacity of 40 MW or more, the proposed Facility is a major energy facility, as that term is defined and used in the Energy Facility Siting Act (Act), R.I. Gen. Laws § 42-98-4.

¹ Invenergy Thermal Development LLC is a Delaware limited liability company authorized to do business in Arizona, Florida, and Texas. It is an independently-owned company that develops and operates power generation and energy storage facilities in North America and Europe. Clear River Energy LLC is a Delaware limited liability company that is the project company for the Clear River Energy Center Project and is authorized to do business in Rhode Island. Both Invenergy Thermal Development LLC and Clear River Energy LLC are subsidiaries of Invenergy Thermal Global LLC, also a Delaware limited liability company.

² Some of the parties prefer using the acronym CREC; the Board does not.

³ The application and all documents filed are available at the Public Utilities Commission offices located at 89 Jefferson Boulevard, Warwick, Rhode Island or at <http://www.ripuc.org/efsb/index.html>, organized by docket number.

On June 20, 2019, having heard and considered all of the testimony and evidence, and having received and reviewed the Post-Hearing Memoranda from the parties, the three-member Board — Chairperson Margaret E. Curran, Chairperson of the Public Utilities Commission; Janet Coit, Director of the Department of Environmental Management; and Meredith E. Brady, Associate Director, Division of Planning — convened an Open Meeting for discussion and decision on the matter. The Board began its substantive deliberations by addressing the question of need. Finding that the Applicant had failed to meet its burden of proving the Facility was needed, and that a negative finding on that element was dispositive, the Board denied the requested license.

II. THE APPLICATION

Invenergy's original application⁴ proposed to construct and operate a combined-cycle electric generating facility at a location adjacent to the Spectra Energy Algonquin Compressor Station site on Wallum Lake Road in Burrillville, Rhode Island. The proposed Facility would have a two-unit one-on-one, duct-fired, combined-cycle configuration with a heat recovery steam generator equipped with natural gas-fired duct burners and one steam turbine. The combustion turbine, steam turbine, and generator of each unit would be connected via a common shaft.

Each of the two gas turbines⁵ would fire natural gas as its primary fuel. Natural gas would be supplied by a pipeline from the adjacent Spectra Energy Algonquin Compressor Station. Were natural gas unavailable, the turbines could instead rely on a back-up fuel source, firing for limited periods using ultra-low sulphur diesel fuel stored in two one-million-gallon, on-site tanks. The ultra-low sulphur diesel would be delivered to the proposed Facility by truck. When firing natural gas, the proposed Facility would have a nominal power output at base load of approximately 850-

⁴ During the course of these proceedings, Invenergy altered or modified its initial proposal(s) a number of times. Specific relevant changes are addressed where appropriate in this order.

⁵ The two were designated throughout as Unit One and Unit Two.

1,000 MW with supplementary heat recovery steam generator duct firing. Output would be lower when using ultra-low sulphur diesel; nominal power output at baseload when firing ultra-low sulphur diesel would be approximately 650-850 MW. The power generated by the Facility would be transmitted by a new 345 kV line to the Sherman Road Substation. The proposed Facility would include state-of-the-art air emissions controls and sound abatement systems.

The Facility would also use air-cooled condensers. Therefore, the amount of water used, as well as the amount of wastewater generated by the Facility, would be significantly less than that used by a similar facility with traditional condensers. The Applicant originally proposed that the Facility's water would be supplied by a dedicated pipeline from a decommissioned Pascoag Utility District (Pascoag) water supply well field, Well 3A. Its wastewater was to be discharged to the Burrillville Wastewater Treatment Facility through a dedicated sewer line.

The original water plan proposed to use Well 3A, a gasoline-contaminated well that had been previously closed down, decommissioned, and disconnected from Pascoag's water system. Remedial actions were initiated in 2001. While Invenergy contended that its use of non-potable water from the decommissioned well would facilitate its remediation, there was widespread concern over Invenergy's proposed use.

Invenergy contended that the Facility would make a significant contribution in helping the New England Independent System Operator (ISO-NE) meet its capacity, reliability, and operational requirements and needs for the electric transmission network. Invenergy also proffered a list of benefits that it claimed the Facility would furnish to the region, including providing new, highly advanced generating technology; reducing air emissions on a regional basis; modernizing the electric generating infrastructure; and using, as well as cleaning, the previously unusable Pascoag water supply. Invenergy further noted a number of economic benefits including new jobs

created by both the construction and operation of the facility, new property taxes, and power market cost savings for Rhode Island ratepayers. When the application was filed, Invenergy asserted that these benefits to Rhode Islanders would total approximately \$100 million for the 2017-2018 year as well as providing about 350 new long-term jobs annually.

Invenergy asserted, as well, that because the proposed Facility would have such low generation costs, end-use consumers would pay less for the energy it generated, relative to what they would pay for the energy generated from other sources. In its application, Invenergy claimed that the Facility would provide cumulative savings to Rhode Island ratepayers of approximately \$70 million annually for the 2019-2022 period. Invenergy also contended that because of the Facility's ability to be dispatchable on demand, it would provide balance to support the rapid and desirable increase of renewable energy resources.

III. TRAVEL OF THE CASE

The application was docketed on November 17, 2015. Subsequently and pursuant to Rule 445-RICR-00-00-1.10(A)(1) of the EFSB Rules of Practice and Procedure (Rules), the Town of Burrillville filed a Notice of Intervention.⁶ National Grid, the Progressive Democrats of Rhode Island (Progressive Democrats),⁷ the Rhode Island Building and Construction Trades Council (RIBCTC), Kathryn and Dennis Sherman (the Shermans), and Paul and Mary Bolduc (the Bolducs), filed motions to intervene pursuant to Rule 1.10(B)(2).⁸ The Rhode Island Office of Energy Resources (OER), Conservation Law Foundation (CLF), Fossil Free Rhode Island (Fossil

⁶ Rule 1.10(A)(1) provides that "the city or town in which the proposed facility is to be located" is entitled to intervene by right upon filing a notice of intervention.

⁷ The Progressive Democrats also cited Rule 1.10(B)(3) and asserted that they had an interest of such a nature that their participation was in the public interest.

⁸ Rule 1.10(B)(2) allows intervention for persons with "an interest which may be directly affected and which is not adequately represented by existing parties and as to which petitioners may be bound by the Board's action in the proceeding."

Free RI), Occupy Providence, Sister Mary Pendergast, the Burrillville Land Trust, Fighting Against Natural Gas (FANG), Burrillville Against Spectra Expansion (BASE), and Sally Mendzela filed Motions to Intervene pursuant to Rule 1.10(B)(3).⁹

After public notice, the Preliminary Hearing was convened on January 12, 2016. The Siting Act provides that the purpose of the Preliminary Hearing is “to determine the issues to be considered by the board in evaluating the application, and to designate those agencies of state government and of political subdivisions of the state which shall act at the direction of the board for the purpose of rendering advisory opinions on these issues, and to determine petitions for intervention.”¹⁰

At the Preliminary Hearing, the motions to intervene filed by National Grid, OER, CLF, and the RIBCTC were granted. Invenergy presented two witnesses. John Niland, Director of Business Development for Invenergy, described the Company and the Project. Michael Feinblatt, an environmental consultant from the ESS Group, described some of the environmental impacts.

Following up on the Preliminary Hearing, on January 29, 2016, the Board conducted an Open Meeting. At that meeting, the Board ruled on the remaining motions to intervene and identified the issues and Advisory Opinions to be requested from various state and municipal agencies. The motions to intervene filed by the Shermans and Bolducs were granted. The remaining motions to intervene were denied. The Board designated the following agencies and municipal bodies to render Advisory Opinions, by September 10, 2016, on issues specified in the Board’s designation notice: the Rhode Island Public Utilities Commission (PUC), OER, the Rhode Island Department of Environmental Management (DEM), the Rhode Island Department of Health (DOH), the Rhode

⁹ Rule 1.10(B)(3) allows intervention for persons claiming “[a]ny interest of such nature that petitioner’s participation may be in the public interest.”

¹⁰ R.I. Gen. Laws § 42-98-9(a).

Island Department of Transportation (DOT), the Statewide Planning Program (Planning), the Pascoag Utility District (Pascoag), the Town of Burrillville Building Inspector, the Town of Burrillville Planning Board, the Town of Burrillville Zoning Board, the Town of Burrillville Tax Assessor, and the Rhode Island Historical Preservation and Heritage Commission (RIHPHC). The Preliminary Order was issued on March 10, 2016.¹¹ Subsequent to the issuance of the Preliminary Order, other persons filed Motions to Intervene. All but one were denied. The single exception was David Harris. The Board determined that his interests could not be adequately represented by other parties in light of the fact that his nearby property was intended for future commercial purposes.

On February 8, 2016, shortly after the Board's Open Meeting decision on the Preliminary Hearing but prior to the written decision being issued, Invenenergy participated in ISO-NE's Forward Capacity Auction (FCA) 10. It was awarded a Capacity Supply Obligation (CSO) of 485 MW, the output of Unit One, for the capacity commitment period beginning in June 2019. The CSO required Invenenergy to supply 485 MW to the electric grid beginning in 2019. Unit Two failed to receive a CSO in FCA-10.

The first two of the seven public comment hearings were held in Burrillville on March 31, 2016 and May 10, 2016. Based on many of the comments heard, on June 2, 2016, the Board issued a modification to its Preliminary Order, requesting DEM to provide additional information in its Advisory Opinion.

As previously noted, Invenenergy had identified Pascoag's contaminated Well 3A as its primary water source for the Facility's cooling water. However, by letter dated August 22, 2016, Invenenergy informed the Board that the Pascoag Board of Commissioners had voted to terminate the Letter of

¹¹ An Errata Order was issued the following day, on March 11, 2016, to correct a date.

Intent between Invenergy and Pascoag that would have allowed Invenergy to use Well 3A. In the letter, Invenergy advised that it would file supplemental and amended information regarding its water supply. On October 3, 2016, with Invenergy having failed to provide any new information, the Board found that the lack of information regarding any water supply rendered Invenergy's application incomplete and, therefore, out of compliance with the Board's rules. Accordingly, the Board issued a show cause order requiring Invenergy to appear and show cause why the proceedings should not be suspended. Ten days later, Invenergy appeared before the Board and agreed that the proceedings should be suspended. The Board therefore, pursuant to R.I. Gen. Laws § 42-98-16(a), suspended the proceedings for ninety days to allow Invenergy time to remedy its incomplete application.

On January 11, 2017, Invenergy filed a Revised Water Supply Plan. It provided that water would be trucked from the Town of Johnston to the Facility along public roads in trucks owned or leased by Invenergy. The Revised Water Supply Plan also identified a private trucking concern, Benn Water & Heavy Transport Company, as a contingent or backup supplier. In response to the Revised Water Supply Plan, the Town of Burrillville and CLF filed motions asking the Board to require additional Advisory Opinions to address issues related to the change in Invenergy's water source. The Board ordered further Advisory Opinions from DEM, DOT, DOH, Planning, and the Burrillville Building Inspector.¹²

On February 6, 2017, Invenergy participated in ISO-NE's FCA-11. The proposed Facility's second turbine, Unit Two, again failed to secure a CSO.

On September 28, 2017, Invenergy filed a Supplement to its Revised Water Supply Plan in order to provide another back-up supply. By its new supplement, Invenergy proposed to truck

¹² See Order No. 120 (Oct. 17, 2017).

water from Narragansett Indian Tribe (Tribe) land in Charlestown, Rhode Island to the proposed Facility in Burrillville. The Town of Charlestown filed a Motion to Intervene and the Board granted it. The Tribal Council of the Tribe also filed a Motion to Intervene. The Board denied that Motion, finding there was insufficient evidence to establish that the Tribal Council had authority to represent the Tribe. The Board noted that the contract memorializing the agreement between Invenergy and the Narragansett Indian Tribe was signed by the Chief Sachem and the Historical Preservation Officer of the Tribe. The Board expressed concern about getting involved in internal Tribe conflicts. In response to the Board's denial of the Tribal Council's Motion to Intervene, seven individual members of the Tribe filed their own Motions to Intervene.

On November 1, 2017, Invenergy provided the Board with an informational filing. By its filing, Invenergy notified the Board that Invenergy's Unit Two had been disqualified from participating in ISO-NE's FCA-12, to be held in February 2018. Invenergy stated that the disqualification of Unit Two was based on delays in the permitting process and the consequent deferral of major equipment orders.

On November 17, 2017, Invenergy filed a complaint with the Federal Energy Regulatory Commission (FERC), Docket EL 18-31. Specifically, Invenergy sought modification of certain charges the ISO-NE tariff imposes on interconnection customers.¹³ Shortly thereafter, on November 29, 2017, ISO-NE and New England Power Company (National Grid) submitted an unexecuted Large Generator Interconnection Agreement to FERC, Docket EL 18-349. They

¹³ In Docket EL 18-31, Invenergy named ISO-NE, National Grid, and New England Participating Transmission Owners as respondents. The Complaint requested a determination that ISO-NE's Transmission, Markets, and Services Tariff was unjust and unreasonable because it allowed transmission owners to assign the costs of network upgrades — specifically, network upgrades that are done to facilitate an interconnection — to that interconnection customer. It also contended that the tariff was unjust and unreasonable because it allowed National Grid to directly assign operation and maintenance costs to interconnection customers through a Direct Assignment Facilities Charge.

requested that FERC approve the Interconnection Agreement as filed and without modification because it complied with the provisions of FERC's Tariff.¹⁴

In an order dated December 12, 2017, the Board directed Invenergy to appear on January 30, 2018 and

show cause (1) whether the Supplemental Water Supply Plan with the Narragansett Indian Tribe (Tribe), as submitted, contain[ed] sufficient detail for the Board to evaluate [the Supplemental Water Supply Plan] and/or whether the Supplemental Water Supply Plan should not be dismissed from the pending application and (2) whether the application, as submitted, under the 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 action before Federal Energy Regulatory Commission (FERC) filed by Invenergy regarding an ISO-NE tariff.¹⁵

On January 22, 2018, Invenergy notified the Board that its contract with the Tribe had been mutually terminated. On January 23, 2018, the individual members of the Narragansett Indian Tribe, through counsel, withdrew their Motions to Intervene.

On January 24, 2018, Invenergy provided to the Board a copy of the motion it had filed with FERC requesting to withdraw Docket EL 18-31, its pending complaint challenging ISO-NE's tariff. As the issues that were the basis of the December 12, 2017 Show Cause Order no longer existed, the Board vacated the Order. That same day, the Town of Charlestown withdrew from the proceedings. Because FERC Docket EL 18-349 was still pending, the Town and CLF filed a joint motion asking the Board to stay the matter until the FERC docket was resolved. On January 29, 2018, FERC accepted the Large Generator Interconnection Agreement filed by ISO-NE and

¹⁴ ISO-NE and National Grid asserted that the unexecuted agreement was being filed because Invenergy had disagreed with various aspects of the Large Generation Interconnection Agreement. Specifically, Invenergy disagreed with (1) the dates on which it was to provide financial security for the cost of required transmission upgrades; (2) its request to self-build certain interconnection facilities; (3) its cost responsibility for transmission upgrades required to accommodate its interconnection; (4) the provision of information related to the results of ISO-NE's interconnection studies; and (5) the requirement that it provide a spare transformer for the West Farnum Station. The interconnection of the Facility to the electric grid was being considered by the Board in a separate docket, SB-2017-01. As a result of these disagreements, there was no executed agreement to file.

¹⁵ Order No. 117 (Dec. 12, 2017).

National Grid, and FERC closed EL 18-349. On April 10, 2018, CLF and the Town withdrew their Motion to Stay.

As previously noted, the Board conducted seven public comment hearings. Five of those hearings were held in Burrillville between March 31, 2016 and December 6, 2017. The two other public comment hearings were held in Warwick and Charlestown.¹⁶ Prior to the commencement of the evidentiary hearings, the parties provided prefiled direct and rebuttal testimony. A total of forty witnesses submitted prefiled testimony: twenty-three for Invenergy; nine for the Town; three for CLF; three for RIBCTC; one for OER; and one for David Harris.

On April 11, 2018, the Board convened the Final Hearing¹⁷ and heard procedural motions. Opening statements were heard on April 26, 2018. Testimony and cross-examination commenced on July 19, 2018. The Final Hearing concluded more than eight months later, on April 2, 2019.

Several months into the evidentiary hearings, on September 20, 2018, Invenergy informed the Board that ISO-NE had filed a letter with FERC requesting to terminate Invenergy's CSO for Unit One, pursuant to Section 205 of the Federal Power Act, 16 U.S.C.A. § 8244 (2012). ISO-NE's letter cited three reasons in support of its request: 1) Invenergy had covered Unit One's CSO for two Capacity Commitment Periods; 2) Invenergy failed to make sufficient progress to achieve Unit One's critical path schedule milestones; and 3) Invenergy's commercial operation date was more than two years beyond the start of the Capacity Commitment Period in which Invenergy first obtained a CSO. ISO-NE requested an order from FERC within sixty days of its filing. In response, Invenergy filed a request for waiver of certain provisions of ISO-NE's tariff related to

¹⁶ The December 5, 2017 hearing in Charlestown was necessary after the Applicant filed the Supplement to its Revised Water Plan.

¹⁷ The Act, in § 42-98-11, provides that the Board "shall convene the final hearing on the application," the purpose of which is to provide all the parties "the opportunity to address in a single forum, and from a consolidated, statewide perspective, the issues reviewed, and the recommendations made" by the agencies that provided advisory opinions. The Board may allow the presentation of new evidence by the parties. The Final Hearing contemplated clearly is expected to take some time and "shall be conducted expeditiously."

the termination of the CSO. Invenergy, the Town, CLF, and OER agreed that the Board should stay the hearings until FERC issued a decision, which the Board did on September 26, 2018.

On October 31, 2018, the Board held a hearing on the Town's Motion to Reject the PUC's Advisory Opinion. The Town argued that because the Advisory Opinion had been issued by only one Commissioner, it was invalid.¹⁸ The Town also asserted that because a number of significant events had occurred since its issuance, the Advisory Opinion was stale. The events referred to by the Town in its Motion included, but were not limited to, the proposed termination of Unit One's CSO; the disqualification of Unit Two from FCA-13, as well as its failure to obtain a CSO for the previous three annual auctions; and the reduction in peak loads over the past few years which was caused, in part, by existing and planned energy efficiency measures. In granting the motion and rejecting the Advisory Opinion, the Board found only that the information relied on by the PUC was stale, and that in order for the Board to make a sound decision, it was necessary to hear evidence on the issue of need, consider for itself what had changed since the PUC issued its decision, and make its own determination on whether "construction of the proposed facility is necessary to meet the needs of the state and/or region."¹⁹

On November 19, 2018, FERC denied Invenergy's request to waive certain provisions of ISO-NE's tariff and granted ISO-NE's request to terminate Invenergy's CSO. On December 5, 2018,

¹⁸ Chairperson Margaret Curran serves as Chairperson of both the PUC and the Board. In her role as Chairperson of the Board, she is barred from participating in the PUC's Advisory Opinion process. Subsequent to Invenergy filing its application, Marion Gold, who was serving as Commissioner of the Office of Energy Resources, was appointed to the PUC. To avoid the appearance of impropriety, as OER was a party in the instant proceedings, Commissioner Gold recused herself from participation in the Advisory Opinion proceedings. That left only a single Commissioner, Herbert F. DeSimone, Jr., to render the Advisory Opinion. Thus, although there are three PUC commissioners, only one was available to conduct the hearing and render an Advisory Opinion. The Board did not reach this issue when ruling on the motion in which it was raised.

¹⁹ R.I. Gen. Laws § 42-98-11(b)(1).

the EFSB hearings resumed and the Board heard the remainder of the evidence. The hearings concluded on April 2, 2019.

IV. DECISION

At the Open Meeting on June 20, 2019, about one month after receiving the Post-Hearing Memoranda from the parties, during which time the Board members had the opportunity to individually review the entire record in light of the specific arguments each party chose to advance, the Board members convened to discuss and deliberate on Invenergy's application. The Board began, as it does here, by reviewing the statutory language that directs how the Board must decide the matter before it. The Board shall issue a decision granting a license only upon a finding that the applicant has shown that: first "[c]onstruction of the proposed facility is necessary to meet the needs of the state and/or region for energy of the type to be produced by the proposed facility[;]" second, the "proposed facility is cost-justified, and can be expected to produce energy at the lowest reasonable cost to the consumer consistent with the objective of ensuring that the construction and operation of the proposed facility will be accomplished in compliance with all of the requirements of the laws, rules, regulations, and ordinances, under which absent this chapter, a permit, license, variance, or assent would be required, or that consideration of the public health, safety, welfare, security and need for the proposed facility justifies a waiver of some part of the requirements when compliance cannot be assured[;]" and third, the "proposed facility will not cause unacceptable harm to the environment and will enhance the socio-economic fabric of the state."²⁰ If the Board finds that all three have been proved, it must address a number of other matters. If the Applicant fails to meet its burden of proof, the Board must deny the requested license.

²⁰ R.I. Gen. Laws § 42-98-11(b).

The proceedings in this docket took a long time. And Invenergy's case was not helped by the lengthy delays. The market changes that accrued over the four forward capacity auctions conducted during the pendency of Invenergy's application undercut the credibility of Invenergy's original arguments on the issue of need. It is worth noting that the vast majority of delays were caused by the Applicant. Examples include Invenergy's selection of a site without a readily accessible source of water to use for the Facility's operation; its need to locate an acceptable water source and submit a revised water plan; its filing of a subsequent supplemental water plan; its attempts to modify ISO-NE's interconnection tariff; and its challenging ISO-NE's request to terminate Unit One's CSO. These actions required the Board to seek supplemental Advisory Opinions, additional information by discovery, and supplemental prefiled testimony to ensure that the record contained comprehensive information on newly-incorporated issues. The Board also had to schedule additional hearings so it could hear and rule on new evidence and hold an additional public comment hearing in Charlestown. Moreover, the matter was twice suspended at the request and/or with the concurrence of the Applicant.

The Board does not intend to suggest that Invenergy did anything wrong in causing the delays. However, the Board does want to make clear that Invenergy cannot place blame for the delays, or the consequences they wrought, on the Board.

In its Post-Hearing Memorandum, Invenergy correctly identified need and unacceptable harm to the environment as the most significant issues for decision by the Board.²¹ The opposing parties essentially concurred with Invenergy that need and unacceptable environmental harm were the key issues to be decided.²² Invenergy also included, as a third significant issue, credibility. However,

²¹ Invenergy Post-Hearing Memorandum at 3.

²² Town Post-Hearing Memorandum at 2-3; CLF Post-Hearing Memorandum at 2-21,26-34. CLF additionally argued that Invenergy failed to meet its burden of proving cost-justification and producing energy at the lowest cost. On that point, CLF largely reemphasized their arguments about need. CLF Post-Hearing Memorandum at 34-39.

in any contested matter, with conflicting testimony and evidence proffered on both or all sides, credibility is always an issue. While credibility certainly was at issue throughout, it never constituted a discrete element of proof separate from the elements required by statute.

The Board agreed with Invenergy and the opposing parties that need and unacceptable harm to the environment were the controlling issues for decision. At the June 20, 2019 Open Meeting, after reviewing the procedural history of the proceedings and making some general opening remarks, the Board turned to the issue of need. Following a motion, made by the Chairperson and seconded by Associate Director Brady, that provided the Applicant had failed to prove that the proposed Facility was necessary to meet the needs of the State and/or region for energy of the type to be produced by the proposed Facility, Director Coit led a review of the high points from the record evidence and testimony related to need. The Board considered and discussed the major components of the case for need that the Applicant had presented, as well as the major points made by the challengers. The Board found that the Applicant failed to prove that the proposed Facility was needed, and therefore denied the license. As the following review of the most pertinent parts of the record demonstrates, the Board's decision is supported by the record.

A. LONG-TERM NEED

In its Post-Hearing Memorandum, avouching it had successfully met its burden of showing the Facility was needed, Invenergy relied heavily on its contention that any consideration of need under the Energy Facility Siting Act must be based on long-term forecasts involving at least a twenty-year horizon. In its emphasis on twenty-year or longer long-term forecasts, Invenergy claimed it was relying expressly on the Statewide Planning Program's Advisory Opinions and its State Guide Plan, particularly the State Energy Plan, Energy 2035 (Energy Plan or Energy 2035). These contentions were, largely, not emphasized by Invenergy during the proceedings.

Invenergy argued that the Board's consideration of the issue of need requires a long-term resource adequacy analysis because the phrase "long-term" is used in R.I. Gen. Laws § 42-98-2(2). Invenergy asserted that because Planning's authorization to adopt a long-term plan assessing the State's future energy needs defines long-term need based on a twenty-year horizon, long-term, as used in the Act, should be interpreted to mean twenty years or more. The Board disagrees. The Act provides, in R.I. Gen. Laws § 42-98-11(b)(1), that the Board must find that the applicant has shown that the facility is "necessary to meet the needs of the state and/or region for the energy of the type to be produced by the proposed facility." The Act does not require or specify that those needs be long-term or short-term. Although R.I. Gen. Laws § 42-98-2 states that construction of a facility shall only be undertaken when it can be justified by the long-term state and/or regional energy need forecasts, nowhere does it specifically define long-term or insist it must be a term of twenty or more years.

Invenergy's insistence on a twenty-year horizon for the Board's consideration of need is not grounded in law. The elements of the State Guide Plan may forecast conditions, based on data, public outreach, and other accepted planning methods, for periods of ten, twenty, or sometimes thirty or more years. Each of the elements is intended to give a general direction. They do not provide a specific and detailed path. Thus, they are very different from the specific and detailed planning and forecasting in which ISO-NE engages. Consistency with Energy 2035 should not be considered evidence of need. The fact that Planning concluded that the proposed Facility was consistent with Energy 2035, which is one of the questions the Board directed it to consider, does not establish that the Facility is "necessary to meet the needs of the state and/or region for energy of the type to be produced by the proposed facility."

The Statewide Planning materials do not actually support Invenergy's contentions. Invenergy ignores the Energy Plan's repeated references to the situations that would involve additional fossil-fuel generation, which might include a project such as the Invenergy facility as part of short- and medium-term reliability assessments. The Energy Plan's references to long-term and/or twenty to twenty-five-year forecasting involve generally, if not exclusively, the Energy Plan's long-term vision. That vision comprises, inter alia, less in-state use of fossil fuels, including natural gas, for generating electricity; greater use of renewable resources overall and for electricity generation; and greater fuel diversity, particularly for generating electricity. In discussing Energy 2035, Statewide Planning said: "[t]he Plan takes an economy-wide view of Rhode Island's energy use, highlighting areas and sectors of greatest impact and opportunity. The Energy Plan uses the best available data and analysis to develop ambitious but achievable goals and performance measure targets for *transforming Rhode Island's energy system*."²³ The kind of transformation that the Energy Plan contemplates does not expressly involve or address construction and operation of a very large, natural gas-fueled electric generator. While not explicitly prohibiting such a development, the Energy Plan does not endorse it. Absent the retirement of some currently operating large gas-fired generation in Rhode Island, the addition of Invenergy's proposed plant would greatly increase the type of generation the Energy Plan proposes to decrease.

Energy 2035 identified the 2013 baseline percentage of in-state generation of electricity using natural gas to be 93%. In addition to producing net economic benefits from the development of renewables and distributed energy resources, as well as reducing greenhouse gas emissions by 45% by year 2035, increased fuel diversity is an identified goal of Energy 2035.²⁴ The primary challenge for increasing fuel diversity identified in the Energy Plan is "to move away from [the

²³ Energy Plan at 2 (emphasis added).

²⁴ *Id.* at 3.

state's] heavy reliance on natural gas.”²⁵ In no sector is that reliance greater than the electric sector.

The Energy Plan is not directly instructive on the issue of whether this specific, proposed Facility is needed. While the Energy Plan is relevant to the Board's overall consideration of the application, it contains no directives helpful to the Board's determination of whether the Applicant met its burden on the element of need. The primary importance of Energy 2035 in this proceeding is whether the construction and operation of the proposed plant would be “consistent” with the State Guide Plan, as the Act requires.²⁶ While the proposed Facility may be consistent, or not inconsistent, with the State Energy Plan, because more than 90% of electricity generated in-state comes from natural gas, adding a new natural gas plant—even a fast-start, more efficient one—does not advance the stated goals of greater fuel diversity, significantly lowered greenhouse gas emissions, or a transformed system. Adding Invenergy's proposed Facility would, at most, perpetuate the status quo. Indeed, the Plan calls for replacing and significantly reducing the relative percentage of gas-fueled electricity generation.

Despite Invenergy's emphasis on the Energy Plan's forecast horizon, the Energy Plan does not identify the need for a facility such as the one proposed in that horizon. After noting that part of its “consistent with” finding is supported by the absence of an actual prohibition of new facilities such as Invenergy's proposed project, Statewide Planning describes Energy 2035 as “setting a long-term vision and establishing high-levels goals” rather than providing any “prescriptive guidance around specific individual projects that should or should not be built.”²⁷ The Plan neither

²⁵ *Id.* at 43.

²⁶ R.I. Gen. Laws § 42-98-9(e).

²⁷ Statewide Planning Program Advisory Opinion at 28 (Aug. 3, 2016).

contains “any goals or policies specific to” anything like Invenergy’s proposed Facility, “nor does [it] include an outright prohibition of such facilities.”²⁸

Planning’s Advisory Opinion goes on to explain that the Energy Plan “sets a bold, long-term vision that clearly contemplates a concerted transition to an energy system that incorporates more energy efficiency, renewable energy, and alternative fuels.”²⁹ Lest that future vision be viewed to completely block a Facility such as Invenergy proposed, Planning notes that Energy 2035 “explicitly states in multiple instances that achieving [that] long-term vision should not come at the expense of near-term steps necessary to maintain the security and reliability”³⁰ of Rhode Island’s and New England’s energy systems. “The [Energy] Plan emphasizes the need for a balanced approach that meets the immediate and short-term needs of our energy system while also setting the state on a long-term path towards energy system transformation.”³¹ Fossil fuel plants do not figure prominently in that transformation.

While Invenergy relied on Planning’s participation and support of the Facility before the PUC during the PUC 2016 proceeding, it was the PUC that the Board charged with conducting an evaluation of need and issuing an Advisory Opinion thereon. Statewide Planning was specifically directed to provide an Advisory Opinion to the Board regarding socio-economic impacts. Planning’s actual contribution on the issue of need was neither significant nor specifically focused on the proposed Facility. Therefore, the Board gives no weight to Invenergy’s argument that Planning’s Advisory Opinion found that the Facility is needed.

In its extended arguments regarding the Advisory Opinion of Statewide Planning supporting the element of need and arguing that the Board rely on twenty or twenty-five year and not shorter

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

forecasts, in combination with the previously described related submissions, Invenergy's primary purpose seems to have been to discourage the Board from relying on any information relating to ISO-NE. That is clear when one considers Invenergy's positions at the outset of this proceeding. Invenergy's reliance on the Statewide Planning Advisory Opinion, most specifically Energy 2035, its argument that the Act mandates consideration of twenty-year and longer forecasts, and its efforts to dissuade the Board from relying on ISO-NE and its Forward Capacity Auctions in determining whether the Facility is needed, contrast strongly with how Invenergy framed the issue of need at the outset of this matter. From the time the application was filed in 2015, when Unit One obtained a CSO in FCA-10, and through the PUC's investigation that resulted in its Advisory Opinion to this Board recommending that the Facility was needed, Invenergy relied almost completely and exclusively on ISO-NE to prove need. In its Post-Hearing Memorandum filed with the PUC on August 18, 2016, following the hearing before the PUC investigating need, Invenergy contended that the competitive market determines the need for a merchant generating plant such as the Facility Invenergy proposed.³² Invenergy acknowledged that the competitive energy market in New England is controlled by ISO-NE.³³ Even more significantly, Invenergy argued that ISO-NE had determined the Facility was needed by awarding it the CSO.³⁴ However, sometime after the PUC concluded its investigation of and issued the Advisory Opinion on need, Invenergy took a markedly different position. As market conditions changed and the operation of the Forward Capacity Market increasingly indicated that demand was waning and supply from other resources was increasing, Invenergy abandoned its reliance on ISO-NE. By the time it

³² Invenergy Post-Hearing Memorandum, PUC Docket No. 4609 at 3-4.

³³ *Id.* at 3.

³⁴ *Id.* at 1. On page 9 of his June 30, 2017 testimony, Mr. Hardy stated that "[b]y clearing the auction, Clear River was determined by the free market to be needed."

submitted its Post-Hearing Memorandum to the EFSB, Invenergy was arguing that the Board would be wrong to rely on ISO-NE.

The Board rejected the Applicant's invitation to eschew the ISO-NE information. The Board found that the evidence before it supported ISO-NE's forecasts, noting that the forward capacity market is designed based on long-range planning. Considering all of the evidence about ISO-NE and its forecasts, the Capacity, Energy, Load and Transmission (CELT) and regional reports, it was clear to the Board that all of these forecasts and reports were based on long-term planning. The Board described "long-term" planning as being an integral part of the forward capacity market and noted that independent generators/developers, like Invenergy, are planning to operate and economically benefit twenty to thirty years into the future. While merchant generators may plan for an operating life of twenty or thirty years or longer, the forecasting upon which ISO-NE relies to determine the need for new generation facilities is only ten years out because, as all parties acknowledged, longer forecasts are not reliable. During Mr. Niland's testimony on the final day of the evidentiary hearings, he acknowledged that ISO-NE, the entity responsible for regional energy need forecasting, uses a ten-year timeframe in its forecasting and planning.³⁵ The Board found that all of these factors fully support that the information from ISO-NE is based on long-term planning by all entities involved in the forward capacity market, in order to ensure the reliability of the electric system.

Invenergy failed to persuade the Board that the evidence used and relied on by ISO-NE was not an accurate depiction of the state and/or regional forecasts. Not only did Invenergy fail to prove that the Board is required to look out twenty years, it did not present convincing evidence to support a finding of need during the next twenty years. To the contrary, the experts for the

³⁵ Tr. at 78 (Apr. 2, 2019).

Town and CLF presented strong and credible evidence demonstrating that the need for this type of facility would likely decrease in the coming decade. Examples of that evidence included the annual CELT Reports and regional forecasts from ISO-NE used by Glenn Walker, the Town's expert on the issue of need, and Robert Fagan, CLF's expert on the issue of need, to show a declining demand. Those same reports referenced during the testimony revealed plans forecasting a significant increase in renewables and a continued decrease in peak load. The Board found those reports to be reliable and credible and strong indicators of the lack of need for the Clear River Energy Center. Invenenergy's experts, Ryan Hardy and John Niland, both acknowledged that forecasts become very difficult, uncertain, and unreliable past ten years.

B. ADDITIONAL NEED ANALYSIS

In contrast to its earlier testimony before the PUC, as these proceedings continued to unfold, Invenenergy submitted that there ultimately are a number of circumstances to consider in determining whether a facility is needed. Invenenergy identified the specific circumstances applicable to its proposed Facility as: 1) having a CSO; 2) at-risk plant retirements creating a system reliability gap; 3) Rhode Island being located in an import-constrained zone, and therefore, needing additional generation; and 4) capacity above the net installed capacity requirement being necessary surplus acquired as part of the inseparable total, and therefore needed to ensure system reliability.

The Board concurred that a number of factors must be considered when determining need. Moreover, it addressed not just the factors Invenenergy had identified, but additional factors it determined were necessary for a thorough analysis and finding as to whether or not a facility is needed.³⁶

³⁶ See, e.g., Tr. at 60-66 (June 20, 2019).

1. CAPACITY SUPPLY OBLIGATION

The first factor the Board addressed was the CSO that Invenergy obtained for Unit One in FCA-10. Early in these proceedings, Invenergy placed significant reliance on this to demonstrate need. Notably, it also predicted repeatedly through the pendency of these proceedings that Unit Two would also obtain a CSO at every subsequent auction, even after it failed to do so each time. Mr. Hardy, throughout the proceedings, asserted Unit Two would clear the next auction. Mr. Walker consistently asserted that Unit Two would not clear the next several auctions. Contrary to Mr. Hardy's predictions, Unit Two not only failed to clear FCA-10 and FCA-11, but also was disqualified from FCA-12 and FCA-13.

At the hearing on September 20, 2018, Invenergy informed the Board that ISO-NE had made a discretionary filing with FERC to terminate Unit One's CSO. Within sixty days, FERC allowed ISO-NE to terminate. Also subsequently, as with Unit Two, Unit One was disqualified from participation in FCA-13. Thus to the extent having a CSO demonstrates need, Invenergy could not make such a demonstration. The credibility of Invenergy's assertion that its Facility is needed because it has or will have CSOs for both units, which was the primary basis of its proof of need when the application was filed, was eliminated when FERC approved ISO-NE's unilateral termination.

Invenergy argued that the CSO for Unit One was terminated solely because of scheduling delays that impacted dates and deadlines set forth in ISO-NE's tariffs, and the disqualification of Unit Two was a result of delays in the construction timeline. Invenergy insisted that neither the disqualification nor the termination could be considered a basis for a finding that the Facility is not needed. While Invenergy's statements on this point accurately reflect the language of the

FERC termination letter, which alluded to the delays in the process,³⁷ it is undisputed that the decision to terminate Invenergy's CSO for Unit One was discretionary on behalf of ISO-NE and FERC, and that the unilateral termination of the CSO was an extraordinary choice given the evidence that ISO-NE has never before taken a similar action.

Both Mr. Walker and Mr. Fagan disagreed with Invenergy's assertions and predictions regarding the CSO. Both experts testified that Unit Two's inability to clear an auction or obtain a CSO was indeed indicative of a lack of need for that resource. They also agreed that the unilateral termination of Unit One's CSO was indicative of a lack of need. Nevertheless, the Board found that while obtaining a CSO may not be the sole determinant of need, neither may the lack of a CSO be the sole determinant of the lack of need.

Mr. Walker supported his claim that the Facility was not needed, in part, by noting Invenergy's ability to shed its obligation in the annual reconfiguration auction, and the relative ease with which substitute resources were acquired. Because of process delays, caused primarily by Invenergy, the Facility would have been unable to meet its Unit One CSO for the first years of the obligation, and Invenergy had to choose whether to defer, as allowed under the ISO-NE tariff, or to sell off its obligation. Invenergy chose to sell that obligation — at a profit — in the annual reconfiguration auction, clearly indicating to the Board that there is additional capacity available in the market to satisfy the obligation that Invenergy was unable to cover directly. The Board found Mr. Walker's explanation to be credible and reasonable.³⁸

³⁷ Invenergy Ex. 189.

³⁸ Despite accusations raised or suggested by attorneys for the parties during emotionally charged hearings, the Board finding certain witnesses to be less credible than others is not tantamount to finding such witnesses were deliberately misleading or intentionally untruthful.

In further support of the Town's position that the proposed Facility is not needed, Mr. Walker cited the Connecticut Siting Council's recent rejection of a proposed 550 MW dual fuel combined-cycle facility.³⁹ The Connecticut Siting Council found that because the proposed facility lacked a current CSO, it was not necessary for reliability for the power supply of either the State or a competitive market for electricity.⁴⁰

Mr. Walker argued that because Unit One's CSO was so easily replaced in the last FCA, the termination of the Invenergy CSO is not likely to result in a shortage of resources in the South East New England (SENE) zone. The ease of replacement, he claimed, demonstrated that ISO-NE has determined there are sufficient resources to meet reliability needs without the Facility. Additionally, given that ISO-NE is responsible for developing long-term goals and regional energy needs, and for procuring the Net Installed Capacity Requirement (NICR), it is unlikely it would have terminated Unit One's CSO if its planning criteria indicated the Clear River Energy Center was needed for the region.

ISO-NE's unilateral termination of Unit One's CSO belied Invenergy's contention that capacity that clears an auction cannot be broken up. Resources are bought and sold in annual reconfiguration auctions and substitution auctions, thereby further breaking up that "package" of resources originally obtained by ISO-NE during an annual forward capacity auction.

In its Post-Hearing Memorandum, Invenergy argued that OER's witness, Seth Parker, gave compelling testimony before the PUC supporting the argument that the Clear River Energy Center is needed. However, Mr. Parker's testimony and review of the proposed project were conducted

³⁹ Town Ex. 39 at 15-16.

⁴⁰ NTE Connecticut, LLC Application for a Certificate of Environmental Compatibility and Public Need for the Construction, Maintenance, and Operation of a 550-Megawatt Dual-Fuel Combined-Cycle Electric Generating Facility and Associated Electrical Interconnection Switchyard Located at 180 and 189 Lake Road, Killingly, CT, Docket No. 470 (May 11, 2017).

prior to Unit Two failing to obtain a CSO in FCA-11 and being disqualified from FCA-12 and FCA-13, as well as prior to Unit One's CSO being terminated. Moreover, his testimony did not consider the influx of renewables to the region since the application was filed. Neither did Mr. Parker rebut any of the testimony Mr. Walker or Mr. Fagan provided after the PUC hearings. Like the PUC Advisory Opinion, Mr. Parker's testimony before the PUC is stale, and is not worthy of creditable consideration by the Board.

With regard to the CSO, the Board found that Mr. Walker's credible testimony regarding the termination of Unit One's CSO, Unit Two's failure to ever obtain a CSO, Invenergy's ability to shed its Unit One CSO for two auction periods before it was terminated, and ISO-NE's procuring surplus in excess of 1,000 MW for the past four auctions strongly indicated the proposed Facility was not needed.

2. RETIREMENTS

The Board also identified and rejected Invenergy's contentions regarding announced and at-risk facility retirements across the region. Invenergy acknowledged that there is significant uncertainty related to retirements and that it is unlikely that all facilities that could potentially retire would do so simultaneously.

The Board found Mr. Fagan's testimony regarding retirements to be instructive, credible, and convincing. He provided that 8,000 MW of new entrants, more than double the potential megawatts at risk of retiring, qualified to participate in FCA-13. Additionally, he noted that the existing capacity surplus in the region coupled with the consistent decrease in the NICR prompted ISO-NE to seek FERC approval to amend its dynamic de-list bid threshold. He contended that the risk of reliability issues created by the potential retirement of older plants is significantly mitigated by declining peak load, surplus capacity, the addition of renewables, and energy efficiency

measures. He noted that retirements can be made to “take a little longer” if necessary to allow more time for renewables and storage to come on line.⁴¹ The fact that ISO-NE retained Mystic 8 and 9 clearly supports Mr. Fagan’s assertions. The retention of those two units, totaling 2,000 MWs, through 2024, when offshore wind projects in Rhode Island, Massachusetts, and Connecticut are expected to be in commercial operation, undercuts Invenergy’s argument that the possible retirement of plants in the region is evidence that the Clear River Energy Center is needed.⁴²

The many delays afforded the parties the opportunity to follow the real-time changes, particularly of ISO-NE’s operations, over four years. The parties provided the Board with regular analysis of the changing conditions. These conditions including the retirement and at-risk scenarios that played out over the four years were significant in the Board’s evaluation of Invenergy’s failure to meet its burden of proof. Given all of that evidence in the record, the Board is not convinced that retirements will cause reliability issues within the region or create a need for this facility.

3. IMPORT CONSTRAINED ZONE

Invenergy also contended that because Rhode Island is in an import-constrained zone, the Clear River Energy Center is needed to alleviate this constraint. In light of the evidence to the contrary, this argument was unconvincing. Both Mr. Walker and Mr. Fagan accurately noted that while ISO-NE models SENE as import-constrained, there has not been a “break out” in price (i.e., higher prices in SENE than in the rest of the region) in the auctions since FCA-9 in 2015, which would reflect a premium on power generated here. Because SENE has not actually performed like an import-constrained zone, the fact it is modeled as one does not support any claim that the proposed

⁴¹ Tr. at 171-72, 203-4 (Jan. 17, 2019).

⁴² *Id.* at 203.

Facility is needed. The Board found Mr. Walker to be convincing and the most credible on this issue. It found that the weight of the evidence demonstrated that prices for the last few auctions have been consistent, with no separation observed for the SENE zone, indicating that sufficient generating capacity already exists in the SENE zone.

4. NET INSTALLED CAPACITY REQUIREMENT AND SURPLUS CAPACITY

One of ISO-NE's key roles is to ensure system reliability, and part of that reliability requires ISO-NE to procure some amount of surplus capacity over and above the NICR, which is the minimum capacity required to "keep the lights on." The evidence demonstrated that the NICR has gone down consistently since it peaked in 2015. There is no set surplus amount that ISO-NE is obligated to procure; the surplus amount is discretionary and determined by a variety of factors. From FCA-10 through FCA-13, ISO-NE had well over 1,000 MW of qualified capacity exceeding the NICR available to bid into the auction. Mr. Fagan presented un rebutted evidence demonstrating that in FCA-13, in addition to the qualified capacity, ISO-NE qualified more than 8,000 MW of new resources to bid. With those added, more than 8,000 MW of total qualified resources above the NICR were available to bid into the auction. It was undisputed that even without Invenenergy participating in the auction, ISO-NE had significantly more qualified resources than needed to procure the NICR. Evidence showed that in FCA-10 through, and including, FCA-13, more than 1,000 MW of surplus capacity above the NICR cleared, an amount greater than the total output of both of Invenenergy's units. In the absence of an Invenenergy unit participating in FCA-13, ISO-NE procured more than 1,000 MW of surplus capacity.

Further support for the Board's finding that the Facility is not needed is the fact that capacity prices have decreased consistently every year, from \$17.73 per kilowatt month in FCA-9 in 2015 to \$3.80 per kilowatt month in FCA-13 in 2019. Invenenergy attributed this dramatic decrease in

clearing prices to the fact that Invenergy had entered the market by participating in FCA-10 in 2016, the same year that prices began to drop. However, while that may have contributed somewhat to the price drop, the evidence showed and the Board found that the decline in the NICR over the past few years, the likelihood of continued decline in the foreseeable future, plus the consistent existence of surplus capacity in the region were more likely drivers of the decreases. Mr. Fagan's testimony that peak load is declining and that forecasts predict it will continue to decline was credible, convincing, and supported by the other evidence in the record. The CELT Reports and regional energy forecasts are compelling evidence that despite overall economic growth, demand for energy in the region has decreased markedly in recent years, and that trend is predicted to continue for the foreseeable future.

Mr. Walker provided credible evidence that the estimate of benefits from the Clear River Energy Center has diminished every year because of the continued surplus of capacity and lower peak loads. His forecast of decreasing demand proved to be accurate over the course of this proceeding. His testimony regarding the ABB Power Reference Case Northeast Report's projection of negative peak demand growth from 2018-2042 and the LEI Report from the New England Clean Energy Connect Project, which indicates that no new thermal would be needed in the region during their forecast period that looked out to 2037, was both credible and convincing. The Board found both reports to be compelling.

Mr. Walker also testified that demand is slowing. He disagreed with Invenergy's claims that ISO-NE's change in Installed Capacity Requirement methodology for FCA-13, from 200 MW to 700 MW system reserves assumption, and increased penetration of electric vehicles and electric heating, show a need for the Clear River Energy Center. The evidence demonstrated that without the change to the system reserves assumption, the NICR would have continued on its downward

trajectory this year. This conclusion was supported by Mr. Fagan who stated that with the 500 MW increase to the system reserves, the NICR was only 25 MW higher for FCA-13 than it was for FCA-12. As discussed above, ISO-NE has procured in excess of 1,000 MW of surplus capacity over and above the NICR in the past few FCAs; a mere 25 MW does not augur a need for the proposed Facility. The Board found it uncontroverted that existing capacity has increased while the NICR has continually decreased. The Board found Mr. Fagan and Mr. Walker's testimony on this issue to be credible and convincing, and to be supported by the reports and forecasts in the record. Invenenergy's witness on this issue, Mr. Hardy, did not effectively rebut those arguments, and agreed that supply has increased and demand has decreased over the course of this proceeding.⁴³

C. RENEWABLES

The Board also considered the affect the growth in renewables had on the need for the proposed Facility. The Board found that the evidence regarding renewables further demonstrated that significant additional capacity is increasingly being added and available both within the state and throughout the region. The Board noted that the increase in renewable resources since the issuance of the PUC's Advisory Opinion has been remarkable. It found that the pace at which renewables, storage, and new and additional energy efficiency measures were coming on line exceeded what Mr. Hardy projected in his modeling. The Board mentioned specifically the recently-approved 400 MW offshore wind procurement, which will be capable of generating about one-quarter of Rhode Island's annual electricity usage, and also heard testimony on similar large offshore wind projects in Massachusetts and Connecticut.⁴⁴

⁴³ Tr. at 167-68 (Jan. 16, 2019).

⁴⁴ PUC Docket No. 4929, Order No. 23609. *See also* note 39.

Mr. Fagan's reliance on the large procurements of new renewables coming into Rhode Island, energy efficiency, and small-scale behind the meter solar dramatically reducing the need for a new plant was convincing to the Board especially because in 2019, over 4,000 MW of energy efficiency and demand response measures cleared in FCA-13. Of the 4,000 MW that cleared, 654 MW were new. Mr. Walker provided similar testimony, noting that any benefits attributable to the Clear River Energy Center have diminished every year, in part because new renewables reduce summer peak load while providing energy to the system at no cost. The Board agreed with Mr. Walker that Rhode Island is aggressively and successfully pursuing clean energy and greenhouse gas reduction policies to meet its decarbonization goals.

The Board also had uncontroverted evidence of more than 6,000 MW of new clean power, 2,900 MW of behind the meter nameplate capacity, and almost 2,000 MW of new hydro power from Canada as further proof of sufficient resources. All of these thousands of megawatts coming online in large scale offshore wind, land-based wind, behind-the-meter solar systems, and imported hydroelectric capacity add up to provide a significant increase in capacity and support the decline in demand. The Board found the evidence in the record on the increase in renewable resources to be credible. When taken in conjunction with the other evidence, the increase in renewables supports the Board's conclusion that the proposed Facility is not needed.

D. FAST START AND FAST RAMPING BENEFITS

The Board was also not persuaded that the proposed Facility's dual fuel, efficient fast ramping and fast start-up capabilities are necessary for the region. The Board found credible and convincing Mr. Walker's testimony⁴⁵ that there are six newly-developed natural-gas fired facilities in the region with efficient fast start and fast ramping capabilities, four of which are also dual fuel,

⁴⁵ Tr. 44-49 (Jan. 30, 2019); Town Ex.39 at 44-49.

as well as the fact that the proposed Facility is to be built as a baseload unit. That information is all further evidence demonstrating that the proposed Facility is not needed. Moreover, the Board also found that the market has been readily satisfied over the last ten to fifteen years by facilities that could supply the megawatts that the Clear River Energy Center was projected to supply in two minutes using both turbines.

The Board further noted that Mr. Hardy had confirmed some of the facts provided by Mr. Walker and Mr. Fagan. Mr. Hardy acknowledged that tempered load growth was caused in part by increased renewable capacity and energy efficiency measures. He acknowledged, for example, that the peak demand forecast is negative in New England. Mr. Hardy also acknowledged the downward trend in the summer peak forecast over the last several years. He acknowledged the downward trend in prices over the last few FCAs and attributed that to increased supply and decreased demand in the region. He did not credibly rebut the other experts' assertions that the pace of retirements does not demonstrate the need for new power plants at this time. Mr. Hardy's confidence in his consistently incorrect predictions also factored into the Board's determination of his and Invenergy's relative lack of credibility.⁴⁶

V. CONCLUSION

After reviewing the totality of the evidence in the record, and for the reasons outlined above, the Board found that the Applicant, Invenergy, failed to show by a preponderance of the evidence that its proposed Facility is "necessary to meet the needs of the state and/or region for energy of the type to be produced by the proposed facility."

The Energy Facility Siting Act, R.I. Gen. Laws § 42-98-11(b) requires an affirmative finding on each requisite element before the Board may issue a decision granting a license for a major

⁴⁶ See note 36.

energy facility. Therefore, an Applicant's failure to meet its burden of proof on any one element is dispositive. A negative finding on need constitutes a failure of the proof required to allow the Board to grant a license. Because the Applicant failed to demonstrate that "construction of the proposed facility is necessary to meet the needs of the state and/or region for energy of the type to be produced by the proposed facility," the Board cannot grant the license. The Board need not reach the remaining elements set out in the Act in its consideration of the proposed Facility's application.

Accordingly, it is hereby

(140) ORDERED:

Invenergy's application for a license to construct the Clear River Energy Center is denied.

EFFECTIVE AT WARWICK, RHODE ISLAND ON JUNE 20, 2019 PURSUANT TO AN
OPEN MEETING DECISION. WRITTEN ORDER ISSUED NOVEMBER 5, 2019.

ENERGY FACILITY SITING BOARD



Margaret E. Curran, Chairperson



Janet Coit, Member



Meredith E. Brady, Member



NOTICE OF RIGHT OF APPEAL PURSUANT TO R.I. GEN. LAWS SECTION 42-98-12, ANY PERSON AGGRIEVED BY A DECISION OF THE BOARD MAY, WITHIN TEN (10) DAYS OF THE ISSUANCE OF THIS ORDER PETITION THE SUPREME COURT FOR A WRIT OF CERTIORARI TO REVIEW THE LEGALITY AND REASONABLENESS OF THIS ORDER.