COMMONWEALTH OF MASSACHUSETTS SUPREME JUDICIAL COURT

SJC - 12997

THE TOWN OF SUDBURY, PROTECT SUDBURY, INC. Petitioners-Appellants,

v. ENERGY FACILITIES SITING BOARD, Respondent-Appellee.

ON APPEAL FROM DECISION OF THE ENERGY FACILITIES SITING BOARD

BRIEF OF AMICUS CURIAE KIN K. GEE, PRO SE IN SUPPORT OF APPELLANTS

Kin K. Gee, *Pro Se* 8 Sage Street Holmdel, NJ 07733 (732) 807-6471 kin.k.gee@gmail.com

January 28, 2021

TABLE OF CONTENTS

TABLE OF AUTHORITIES	4
RULE 17(c)(5) DECLARATION	6
INTEREST OF AMICUS CURIAE	7
STATEMENT OF ISSUES	9
STATEMENT OF FACTS	10
SUMMARY OF ARGUMENTS	11
INTRODUCTION	14
ARGUMENTS	15
I. Eversource Did Not Meet Its Heavy Burden of Proof	15
II. Load Forecasts Are Overly Conservative And Inevitably	Support New
Transmission Projects	19
III. RTOs and Utilities Give Too Much Weight to New Trans	mission Lines
As The Preferred Solution	
IV. Utilities Don't Play Well With Each Other, Even When T	hey Are In The
Same RTO	32
V. A Recent Eversource Project Argues Against This Propose	d Project 35
CONCLUSION	

CERTIFICATE OF COMPLIANCE	39
CERTIFICATE OF SERVICE	40

TABLE OF AUTHORITIES

Case

<u>Romano v. Kimmelman</u>, 96 N.J. 66, 89 (1984)15

Statute

G.L. c. 164, § 69J	. 16
12	, 10

Federal Rule and Regulation

Energy Policy Act of 2005, Public Law 109-58, 119 Stat. 594 (2005)19

Federal Energy Regulatory Commission

Potomac-Appalachian Transmission Highline, LLC, 122 FERC ¶ 61,18826

Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 136 FERC ¶ 61,05118, 35

Energy Facilities Siting Board Decision

NSTAR Electric Company d/b/a Eversource Energy, EFSB 17-02/D.P.U. 17-82/17-83 (2019)11, 17, 18, 23, 33, 37

New Jersey Board of Public Utilities/Office of Administrative Law

In The Matter Of The Petition Of Jersey Central Power & Light Company Pursuant to N.J.S.A. 40:55D-19 For A Determination That The Monmouth County Reliability Project Is Reasonably Necessary For The Service, Convenience Or

Pennsylvania Public Utility Commission

Miscellaneous

Kahn, Alfred. The Economics of Regulation, Vol. II, MIT Press, 197114, 15

RULE 17(c)(5) DECLARATION

Neither party nor their counsel authored this brief in part or in whole. Neither party nor their counsel contributed money that was intended to fund the preparation or submission of this brief. Kin K. Gee has not represented one of the parties to the present appeal in any other proceeding involving similar issues, nor in any proceeding that is at issue in the present appeal.

INTEREST OF AMICUS CURIAE

Kin K. Gee is a consumer advocate in the energy/utility sector based in New Jersey. He serves as Co-President of Residents Against Giant Electric, Inc. ("RAGE"), an intervenor in Jersey Central Power & Light Company's proposed 230 kV transmission line project (named Monmouth County Reliability Project or MCRP) in New Jersey. In addition, he serves as President of NJ CHARGE, INC. d/b/a CHARGE, a non-profit grassroots group that seeks to be the consumer voice in the energy/utility sector. Kin K. Gee has presented testimonies before various committees of the New Jersey Legislature and public comments to the New Jersey Board of Public Utilities at various public hearings, all related to the energy/utility sector.

As a consumer advocate, Kin K. Gee has a direct public interest since the case has implications for future transmission projects in the Commonwealth of Massachusetts and elsewhere. Court cases, especially recent ones, have set (and show the need for) a high standard for the approval of proposed transmission projects in the determination that proposed projects are reasonably necessary for the convenience and welfare of the public. The burden of persuasion by utility companies that proposed projects meet the standard for approval is a heavy burden

7

and must be held to the high standard for approval by siting boards, regulators, and the courts.

Kin K. Gee respectfully submits this Brief in response to the Supreme

Judicial Court's solicitation of amicus briefs to assist the Court in addressing the

following issue:

"Whether the final decision of the Energy Facilities Siting Board (board) approving, with conditions, (a) a new underground transmission line located primarily in Sudbury and Hudson, within an inactive Massachusetts Bay Transportation Authority right of way and an in-street segment; and (b) individual and comprehensive zoning exemptions from the zoning bylaws of the towns of Sudbury, Hudson, and Stow, should be set aside."

This Brief is submitted in support of the Appellants and respectfully requests

the Supreme Judicial Court to set aside the final decision of the Energy Facilities

Siting Board.

STATEMENT OF ISSUES

- I. Whether the Energy Facilities Siting Board (hereinafter, "Siting Board") satisfied its governing mandate to provide a reliable energy supply for the commonwealth with a minimum impact on the environment at the lowest possible cost.
- II. Whether the Siting Board erred by not conforming with its requirement for approval that the applicant demonstrates that additional energy resources are needed when it simply accepted the findings of ISO-New England without a rigorous and robust examination of the need.
- III. Whether the Siting Board erred by not conforming with its requirement for approval that the proposed project is superior to alternative approaches in terms of reliability, cost, and environmental impact.
- IV. Whether Eversource Energy has met its heavy burden of persuasion that the proposed project is reasonably necessary for the convenience and welfare of the public.

STATEMENT OF FACTS

On April 20, 2017, Eversource filed three petitions with the Siting Board for a proposed transmission line, together with related infrastructures, for the stated purpose of addressing certain reliability criteria contingent violations. The three petitions were consolidated into a single adjudicatory proceeding pursuant to a Consolidation Order issued on April 27, 2017 by the Chairman of the Massachusetts Department of Public Utilities.

Intervenors in the case raised serious questions and issues including (1) environmental impact, (2) alternatives, and (3) cost estimates in the determination of whether Eversource met the requirements that the proposed project is reasonably necessary for public convenience or welfare. Despite the questions and issues raised, on December 19, 2019, the Siting Board approved Eversource's Petitions, subject to certain conditions.

SUMMARY OF ARGUMENTS

- I. Eversource did not meet its burden of proving the need for the project.
 Utility companies enjoy considerable and overwhelming advantages with greater financial resources, greater expertise of their own employees and officers, and access to relevant data information not available to the public or intervenors. Because of this, courts have held that utility companies not only have the burden of persuasion but that the burden is a heavy one.
 Eversource did not meet this heavy burden because it failed to demonstrate that the proposed project was needed and that it was superior to alternative approaches in terms of cost and environmental impact.
- II. The Siting Board gave undue deference to ISO New England's assessment without requiring an independent, rigorous, and robust examination of the need. The Siting Board stated that it "accords considerable weight to the 2015 Needs Assessment" ¹ by ISO New England and, to a large extent, this was the basis for its finding that additional energy resources were needed. In several recent cases, the finding of a need for a proposed transmission project by a regional transmission organization such as ISO New England was found to be either fleeting or not supported by the findings of the judge

¹ EFSB 17-02/D.P.U. 17-82/17-83 at 25 (2019).

in the legal proceeding. Similarly, in this case, the Siting Board gave too much deference to ISO New England's assessment without requiring Eversource to rigorously demonstrate a real need for additional energy resources.

III. Eversource did not satisfactorily demonstrate that its proposed project is superior to an alternative approach for approval by the Siting Board. Specifically, Eversource is required to demonstrate that the proposed project is "superior to alternative approaches in terms of reliability, cost, and environmental impact and, in its ability to address the identified need" $(emphasis added)^2$ and Intervenors raised serious questions and issues regarding cost comparison and environmental impacts. Eversource admitted that engineering for a transmission alternative in another utility company's right-of-way was not advanced but did not explain why. In a recent Eversource transmission project (in a joint venture with National Grid): the following benefits for that project were touted: (a) maximizing the use of existing transmission facilities and (b) upgrading properties already in use by the energy companies to minimize environmental and community

² "G.L. c. 164, § 69J requires alternatives be presented for a proposed facility. ... In implementing its statutory mandate, the Siting Board requires ... [the] proposed project is superior to such alternatives ...", *Id.* at 27.

impacts. Yet, in this case, Eversource didn't present an advanced design for an alternative that used the existing right-of-way of another utility company to lessen the negative environmental and community impacts. Eversource failed to demonstrate that its proposed project is superior to alternative approaches as required for approval by Siting Board.

INTRODUCTION

Despite the term "public utilities", most utility companies are, in fact, forprofit enterprises, often publicly listed and owned by shareholders who demand earnings with incentive compensation to management for the delivery of earning results.

In his treatise, <u>The Economics of Regulation</u>, Alfred Kahn discussed the "A-J-W Effect" which represents a succinct summary of dangers that were embedded in the old public utility business and regulatory model. These dangers produce "distortions, tending to produce inefficient results ... the social benefits of which fall short of their social costs [and] ... induce[s] [utilities] to adopt an excessively capital-intensive technology....."³ Among those dangers are:

2. A willingness to maintain a large amount of capacity, in excess of peak requirements.

3. Some considerable resistance by electric utility companies to the thorough-going regional planning of investment that represents the most highly integrated form of power pooling. ...

4. A resistance to the introduction of capital saving technology. ...

5. A reluctance to leasing facilities from others. ...

6. A tendency for public utility companies to adhere to excessively high (because extremely costly) standards of reliability and

³ Kahn, Alfred. *The Economics of Regulation*, Vol. II, MIT Press, 1971, at 49.

uninterruptibility of service, with correspondingly high and costly specifications for the equipment they employ. ...⁴

The driver for this behavior is the desire to add to the rate base for greater corporate earnings and management incentives, typically at the expense of consumers/ratepayers under the guise of "reliability".

In the instant case, Eversource exhibited the old public utility model behavior by putting forward a proposal that would benefit the Company to the detriment of the public and it is that behavior that the Siting Board wrongly allowed.

ARGUMENTS

I. Eversource Did Not Meet Its Heavy Burden of Proof

In <u>Romano v. Kimmelman</u>, 96 N.J. 66, 89 (1984), the court stated that the burden of persuasion can "vary depending on the type of proceeding, the comparative interest of the parties, <u>the relative litigational strengths or weaknesses</u> <u>of the parties, the access of the parties to proof</u>, and the objectives to be served by the evidence in the context of the particular proceeding." [Emphasis added.] In this case, because Eversource is a utility company, it enjoys considerable and

⁴ *Id.* at 49-54.

overwhelming advantages and its burden of proof has to be held to a higher standard.

Utility companies have: (i) greater financial resources, (ii) can rely substantially on their own employees and officers, (iii) greater expertise, and (iv) access to relevant data and information. In most cases, intervenors, in stark contrast, do not have the same access to financial resources and can rarely raise enough funds to mount a serious challenge. Even in instances where sufficient funds may be raised, intervenors do not have the expertise and access to relevant information. Intervenors are at the mercy of utility companies for prompt and complete information in reply to discovery. For these reasons, the dangers predicted by Kahn, and the inherent conflicts of interest of for-profit companies, Eversource had a heavy burden of proof, which it did not meet.

G.L. c. 164, § 69J requires alternatives be presented for a proposed facility. The Siting Board requires that "an applicant for a new electrical transmission line must demonstrate that its proposal meets the requirements: (1) that *additional energy resources are needed*; (2) that the proposed project is *superior* to alternative approaches in terms of reliability, *cost*, and *environmental impact*, and, in its ability to address the identified need; and (3) that the applicant has considered a reasonable range of practical siting alternatives and that the proposed facilities are sited in *locations that minimize costs* and *environmental impacts* while ensuring a reliable energy supply." ⁵ Emphasis added.

In the instant case, the Siting Board indicated that it "recognizes the responsibilities and expertise of ISO-NE and accords considerable weight to the 2015 Needs Assessment and its findings." ⁶ To a large extent, the finding by the Siting Board that additional energy resources are needed depended on the 2015 findings of ISO-NE. The two transmission cases, Transource Pennsylvania LLC's Independence Energy Connection and Potomac-Appalachian Transmission Highline, discussed in "Load Forecast Are Optimistic & Inevitably Support New Transmission Organization ("RTO") can and have dramatically changed, sometimes in a very short time.

A basic fundamental requirement for the Siting Board approval is that additional energy resources are needed. As discussed in this Brief, in three recent cases for a new electrical transmission project, the finding of a need by a regional transmission operator was found to be either fleeting or not supported by findings of a judge in the legal proceeding. Given this transmission case history, the

⁵ EFSB 17-02/D.P.U. 17-82/17-83 at 14 (2019).

⁶ *Id.* at 25.

findings of such a need must be independently and rigorously examined by the Siting Board. In this case, it was not.

Eversource acknowledges that engineering for Transmission Alternative 2 was not advanced to the same degree as for its proposed project.⁷ Despite this, the Siting Board accepted Eversource's estimate for Transmission Alternative 2 which did not compare well against Eversource's own proposed project. As discussed above, Eversource has overwhelming advantages (including resources, expertise, and data) and has a very heavy burden of proof. This heavy burden extends to rigorous cost analysis and comparison to alternatives. In addition, when Federal Energy Regulatory Commission ("FERC") Order 1000⁸ was in effect for a 2020 proposed transmission project by Eversource and National Grid (see "Recent Eversource Project Argues Against This Proposed Project" below), benefits touted for that particular proposal included (i) the use of existing transmission facilities and (ii) keeping upgrades entirely on properties already in use by energy companies to minimize environmental and community impacts. These benefits go against many of the arguments of Eversource for this proposed project. As such,

⁷ *Id.* at 44.

⁸ Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 136 FERC ¶ 61,051.

the fundamental requirement for the Siting Board approval that the proposed project is superior to alternative approaches has not been met.

II. Load Forecasts Are Overly Conservative And Inevitably Support New Transmission Projects

In response to the cascading Northeast Blackout, Congress passed the Energy Policy Act of 2005 that included Section 219⁹ that established financial incentives for building new electrical transmission lines. Due to these financial incentives and changes in how the FERC recommends return on equity in rate cases, transmission investments offer a very attractive investment return, especially in the current historic low interest rate environment. A quick review of presentations by utility companies at stock analyst conferences will reveal that many utility companies' earnings growth strategies are tied to transmission expansion.

Unfortunately, RTOs, knowingly or unknowingly, have aided and abetted in these endeavors. RTOs develop future load forecasts as part of their planning process to meet reliability standards. In retrospect, these future load forecasts tend to be overly conservative (i.e., forecasts are higher than actual loads). As an example, in a recent petition in New Jersey that load forecasts prepared by PJM

⁹ Energy Policy Act of 2005, Public Law 109-58, 119 Stat. 594 (2005).

Interconnection, LLC ("PJM"), one of the largest RTOs in the United States, were 14 - 17% higher than the actual loads only three to five years out in the forecast.¹⁰ Actual demand trends due to distributed energy or demand response, are slow to be incorporated into the forecasts.

While it is important to be conservative, the use of overly conservative forecasts is exactly one of the dangers predicted by Kahn. Such forecasts may needlessly result in certain technical violation(s) of reliability criteria due to certain contingent events such as the loss of a transmission element ("N-1 contingency") or an N-1 contingency followed by a second loss of a non-related transmission element ("N-1-1"). These contingent violations must be addressed to comply with reliability standards. More often than not, the RTO's and/or utility company's preferred solution to address these contingent violations is to build a new transmission line. The result is that utility companies typically file petitions stating the proposed transmission project is needed to address reliability criteria based on overly conservative forecast loads.

In 2016, Jersey Central Power & Light Company ("JCP&L"), a subsidiary of FirstEnergy Corporation, proposed a 230 kV transmission line (called Monmouth County Reliability Project or "MCRP") for the stated reason to address an N-1-1

¹⁰ Transcript of Hearing, April 5, 2017 at 58 to 70, New Jersey OAL PUC 12098-16.

contingent violation at a proposed cost of at least \$111 million. The case was assigned by the New Jersey Board of Public Utilities to Administrative Law Judge Gail Cookson ("ALJ Cookson") within the Office of Administrative Law for factfinding and an initial decision.

The instant case is very similar to the JCP&L case. JCP&L argued that its proposed new transmission project was needed to address contingent reliability criteria violations (an N-1-1 contingent event). Under the contingent event, JCP&L predicted dire consequences with a voltage collapse and a loss of load of over 700 megawatts ("MW") affecting over 200,000 customers. In the instant case, Eversource argued that the new transmission project was needed to address thermal overloads and low voltage violation following an N-1-1 contingent event that could result in a power loss to more than 72,000 customers.

In the JCP&L proceeding, ALJ Cookson took note that the basis for the proposed transmission project was to address an N-1-1 contingent violation of reliability criteria based on certain peak load forecasts. However, under cross-examination, PJM witness Mark Sims admitted that the actual peak loads for the immediate five-year window never approached the forecast.¹¹ Specifically, there

¹¹ In The Matter Of The Petition Of Jersey Central Power & Light Company Pursuant to N.J.S.A. 40:55D-19 For A Determination That The Monmouth County Reliability Project Is Reasonably Necessary For The Service, Convenience Or

was a 2010 forecast of 7,323 MW for the year 2016, which would trigger a contingent violation. However, the actual summer peak load, according to PJM's own record, for the year 2016 was 5,955 MW or approximately 19% lower than the forecast only a few short years earlier. In her decision, ALJ Cookson noted that:

"taken together with the analysis of recent adjustments to the peak load projections and those reviewed by Lanzalotta [witness for the New Jersey Division of Rate Counsel], it becomes clear that the need for the MCRP [the proposed transmission project] may only occur as far out as the year 2031 or later, or it may dissipate altogether."¹²

In the instant case, intervenor Sudbury sought to reopen the hearing and stating new load forecast and other data from ISO-New England ("ISO-NE"), show a significant decrease in electricity demand and argued for a revised need assessment for the project given the downward trend in load forecasts. As was the case in the New Jersey JCP&L proceeding, these overly conservative load forecasts by the RTO aided and abetted utility companies' quests for greater transmission investments to fuel their earnings growth.

The Siting Board denied the motion by Sudbury, in part, because of the current need to address reliability criteria and planning standard violations in the

Welfare Of The Public, New Jersey OAL Docket No. PUC-12098-16 (OAL Order March 8, 2018) at 34. ¹² *Id.* at 132.

Marlborough Subarea due to severe thermal overloads well in excess of the longtime emergency and short-time emergency ratings of existing transmission facilities.¹³

This argument is circular. The severity of thermal overloads is the direct result of using higher load forecasts made in earlier years. The use of a significantly lower load forecast is likely to push out the need to later years in the future and, perhaps, may even obviate the need. ISO-NE and Eversource used the initially higher load forecasts to justified the need and then the Siting Board cited the results of the forecast as an argument that there is a current and severe need for the project to move forward.

In the JCP&L case, intervenor Residents Against Giant Electric, Inc. ("RAGE") uncovered that several of JCP&L's circuits currently exceeds 100% of the normal thermal rating with one 230 kV circuit exceeding the seasonal emergency thermal even *without a contingent event*. Therefore, a contingent event (N-1 or N-1-1) would exacerbate the overloading leading to severe overloading. This thermal overloading is a violation of reliability criteria and, as a result, needed to be addressed. The solution proffered by JCP&L was a new 230 kV transmission line. In a perverse sense, the lack of proper maintenance or upgrade of existing

¹³ EFSB 17-02/D.P.U. 17-82/17-83 at 230 (2019).

infrastructure can be the "need basis" for a new transmission project. In other words, had the utility company properly reconductored existing circuits to upgrade the thermal loading ratings, one or more of the conditions that could lead to a violation of reliability criteria may have not materialized. By not properly maintaining its infrastructure, JCP&L created conditions that would exacerbate the severity of any violations of reliability criteria. In the case of JCP&L, the complete solution suggested by intervenor RAGE included reconductoring of several 34.5 kV circuits, a much cheaper alternative to a new 230 kV transmission line, which would completely remove and resolve the thermal overloading problem.

As a general statement, once a project is approved by an RTO, the need for a proposed project is rarely revisited, even when the date required for service is pushed back several times. However, forecasts, assumptions, and models by the RTO is an imperfect science. These forecasts and models seem to come up "short" when checked against actual data. Yet, despite this known deficiency, these forecasts and models are used as the basis for transmission projects that cost millions of dollars. A recent decision issued in December 2020 for the Transource Pennsylvania, LLC's ("Transource") Independence Energy Connection ("IEC") 230 kV transmission line project is a good example of this point.

24

The IEC project consists of two separate unconnected segments, totaling 45 miles of new transmission lines through Pennsylvania and Maryland. According to Transource's website, IEC is "designed to reduce congestion on the regional transmission grid and create access to low-cost electricity for customers in power zones across the mid-Atlantic region."¹⁴ The website went on to say that IEC will provide approximately \$800 million in congestion savings in the first 15 years of service and solves growing reliability violations in Pennsylvania and Maryland that, if the IEC project is not built, would require a new solution before 2023.

In her decision denying the IEC petition, Pennsylvania Public Utility

Commission Administrative Law Judge Elizabeth Barnes wrote:

"In the simulation that PJM performed in 2015, the PROMOD model *simulated a congestion cost of \$110 million* occurring on the AP South Reactive Interface in 2019. Tr. at 2936. According to the simulation, the AP South Reactive Interface had the highest congestion cost simulated in 2019 when compared to the Safe Harbor-Graceton, Conastone-Peach Bottom, and AEP-DOM constraints. Id. *In reality, Congestion* on the AP South Reactive Interface *cost approximately \$14.5 million in 2019*, substantially lower than predicted by PJM's forward-looking models. Tr. at 2921. This indicates the erroneous assumptions that were used to calculate the benefit-cost ratio that PJM relied upon when selecting the IEC Project for approval."¹⁵ [Emphasis added.]

¹⁴ <u>https://www.transourceenergyprojects.com/IndependenceEnergyConnection/</u>

¹⁵ Application of Transource Pennsylvania, LLC for Approval of the Siting and Construction of the 230 kV Transmission Line Associated with the Independence Energy Connection - East and West Projects in portions of York and Franklin Counties, Pennsylvania, Docket No. A-2017-2640195, Pa. PUC December 22,

The Potomac-Appalachian Transmission Highline ("PATH") case is another example of the perils of over-reliance and deference to the RTO's forecast and planning.

PATH, a 290-mile 765 kV transmission joint venture between two utility companies, American Electric Power Company ("AEP") and Allegheny Energy, Inc. ("Allegheny"), was included in PJM's 2007 Regional Transmission Expansion Plan. PATH filed applications for permits in the individual states in 2009. As characterized by FERC, the project, at an estimated cost of \$1.8 billion, is supposed to "relieve overloading on more than 12 locations in PJM's base case study" and "will form a high-transmission backbone overlaying and strengthening the existing system."¹⁶

Just one year after PATH's petitions were filed in the states, Dominion Virginia Power ("Dominion"), a utility company that is a member of the same RTO but was not involved with the PATH project, filed a proposal in July 2010 with PJM to upgrade their existing transmission line that was built in 1966 and needed replacement. That replacement line, at an estimated cost of about \$620

^{2020 (}Recommended Decision) at 88 (footnote 16). https://www.puc.pa.gov/pcdocs/1688185.pdf

¹⁶ Potomac-Appalachian Transmission Highline, LLC,122 FERC ¶ 61,188 at 4.

million (about 1/3 of the cost for PATH), would increase the line's capacity by 66%. In February 2011, just two years after the two utility companies filed the applications for the with the states, the project was first suspended, and later officially terminated by PJM in the summer of 2012. Both the PATH project and the Dominion rebuild projects were presented and discussed at the same planning committee within the same RTO. It is both incredible and unbelievable that a project with a ballooning cost of more than \$2 billion when officially canceled could be so quickly and easily terminated by a much lesser transmission replacement project within a short two years.

These recent cases (PATH, MCRP, and IEC) highlights the fact that despite dire consequences forecasted in support of proposed transmission projects, it is important that siting boards, regulators, and courts remain sanguine and be cleareyed about the need for proposed transmission projects. At times, the forecasts or models used in support of the need for projects seem to build on shifting sands and can change very quickly. On the other hand, the consequences of these projects, if approved and built, have a very long and profound impact (30, 40, or 50 years) on the environment, local communities, and ratepayers who must bear the costs.

In the instant case, the Siting Board did not make an independent and rigorous determination that additional energy resources were needed. This threshold requirement for approval by the Siting Board was not satisfactorily met.

27

III. RTOs and Utilities Give Too Much Weight to New Transmission Lines As The Preferred Solution

As discussed above, the combination of (i) behavior predicted by Kahn; (ii) the financial incentives for new transmission investments under the 2005 Energy Policy Act's Section 219; and (iii) the inherent conflict by for-profit utility companies for corporate earnings growth seem to make new transmission projects as the panacea for all electrical grid problems. There is a saying that if all you have is a hammer, everything looks like a nail. While there are times and circumstances where a new transmission project makes sense, it should not be the default solution to all electrical problems.

In the JCP&L case, the electrical system expert witness for intervenor RAGE presented a viable non-transmission alternative at an estimated cost that was less than 30% of the cost for the transmission proposal. The alternative proposal, which involved the use of two industrial-size "voltage stabilizers" called STATCOMs and the reconductoring of certain circuits due to thermal loading, was backed by a detailed power flow analysis that demonstrated that it would completely address the contingent violation.

A power flow analysis is a gold standard for the determination that a proposed solution would resolve reliability contingent violations. However, power flow analysis requires not only significant electrical system expertise but also depends on system data from the utility company and proprietary software that is not readily available to the public or intervenors. JCP&L initially dismissed the alternative in vague and generalized terms and then later indicated that it was not backed by any power flow analysis, which the company could easily have conducted internally. At great expense to the grassroots intervenor, the expert witness for RAGE was able to conduct the power flow analysis and then demonstrated to the judge that the alternative was a viable and complete solution.

On one hand, it is incredulous that this complete non-invasive solution to address the contingent violation was never investigated or examined by the utility company which insisted that an overhead 230 kV transmission line was the preferred solution. On the other hand, as noted in the Introduction, this sort of behavior is exactly what was predicted by Kahn as one of the notable dangers:

"A tendency for public utility companies to adhere to excessively high (because extremely costly) standards of reliability and uninterruptibility of service, with correspondingly high and costly specifications for the equipment they employ."

In addition to presenting a complete alternative solution, the RAGE expert witness also presented evidence that the probability of exceeding emergency thermal load was about once every 71 years.

After a lengthy legal proceeding, ALJ Cookson issued a decision denying the petition. This decision was officially adopted unanimously by the Commissioners of the New Jersey Board of Public Utilities on July 11, 2018.¹⁷ In her decision, ALJ Cookson stated that she concurs with the characterization that the proposed transmission project was the electrical equivalent of using an elephant gun to kill a gnat.¹⁸ In that same paragraph, ALJ Cookson also stated

"that the degree of risk should inform the extent, timing, and appropriateness of any proposed solution [9T188:7-22.] The preponderance of the credible evidence supports the finding that the P7 [N-1-1] event is a 'really low probability event.' [9T222:1-3.]"

In the PATH case, the replacement of an existing transmission line in an existing right-of-way, at 1/3 of the cost and completed one year ahead of schedule, was able to replace the need for a new \$2.1 billion transmission line in a short two-year time frame.

¹⁷ In The Matter Of The Petition Of Jersey Central Power & Light Company Pursuant to N.J.S.A. 40:55D-19 For A Determination That The Monmouth County Reliability Project Is Reasonably Necessary For The Service, Convenience Or Welfare Of The Public, New Jersey BPU Docket No. EO16080750 (BPU Order July 11, 2018).

¹⁸ In The Matter Of The Petition Of Jersey Central Power & Light Company Pursuant to N.J.S.A. 40:55D-19 For A Determination That The Monmouth County Reliability Project Is Reasonably Necessary For The Service, Convenience Or Welfare Of The Public, New Jersey OAL Docket No. PUC-12098-16 (OAL Order March 8, 2018) at 133.

In the IEC case, the need for a new \$320 million transmission line to address congestion cost was resolved in four years without any action – all simply because of, in the words of the ALJ Barnes, "erroneous assumptions" used by the RTO.¹⁹

In the instant case, Eversource's petition suggested that it examined alternatives including non-transmission alternatives. It is not clear how rigorous this process was. In the JCP&L case, the company attempted to demonstrate that it considered alternatives with a 17 routes study before deciding on the "preferred route". However, this argument fell on its face upon close examination. On crossexamination, the record shows that routes were excluded based on relatively flimsy reasons. This was confirmed when the witness for the outside firm that conducted the route study indicated that they knew of a JCP&L preferred route. Most damaging was the discovery that the route study started almost one year before JCP&L was notified by the RTO that there were reliability criteria violations. Some characterized the proposed project as a transmission line project in search of a contingent reliability violation.

¹⁹ Application of Transource Pennsylvania, LLC for Approval of the Siting and Construction of the 230 kV Transmission Line Associated with the Independence Energy Connection - East and West Projects in portions of York and Franklin Counties, Pennsylvania, Docket No. A-2017-2640195, Pa. PUC December 22, 2020 (Recommended Decision) at 88 (footnote 16). https://www.puc.pa.gov/pcdocs/1688185.pdf

Setting aside the question of whether Eversource conducted a robust process for non-transmission alternatives, it had a transmission alternative that is located within an existing right-of-way of National Grid. Eversource acknowledged that engineering for this transmission alternative was not advanced to the same degree as for its own proposed project and provided a cost estimate that did not compare well with its own proposal – a new transmission line. This will be discussed in greater detail in the next section. A second requirement for Siting Board approval is that a proposed project is superior to alternative approaches in terms of reliability, cost, and environmental impact. This requirement was not satisfactorily met.

IV. Utilities Don't Play Well With Each Other, Even When They Are In The Same RTO

In the PATH case, the utility joint venture partners for PATH as well as Dominion Virginia Power are all members of the same RTO. PJM has a planning process and holds regular meetings to review planning needs. It is or should have been well-known to the planning staff at the RTO and its utility members that the Dominion transmission line (built in 1966) was in need of replacement. Despite this, PATH received approval by the RTO and was allowed to seek approval with state regulators only to be terminated in a short two years because the need was obviated by the Dominion's replacement line.

In the instant case, Eversource indicated a transmission alternative is the upgrade of existing transmission lines in the area. This alternative would involve another utility company, National Grid, converting the "recently refurbished X-24 Line from 69 kV to 115 kV."²⁰

RTOs have great responsibilities for the operation and maintenance of a reliable electrical grid. However, notwithstanding the deference that may be accorded to an RTO, it is interesting to note that ISO-NE would allow an existing line, X-24, to be just refurbished, when it appears that an upgrade from 69kV to 115 kV that could have resolved criteria violations by upgrades could have been done at the same time. It's not clear whether the immediate need is not so immediate and severe thermal loading is not so severe as to not warrant action by ISO-NE as part of the prior refurbishing of line X-24, a transmission alternate to the Eversource transmission line.

The Siting Board indicated that it "recognizes the responsibilities and expertise of ISO-NE and accords considerable weight to the 2015 Needs Assessment and its findings." ²¹ As noted in our Introduction, two of the dangers

²⁰ EFSB 17-02/D.P.U. 17-82/17-83 at 31 (2019).

²¹*Id.* at 25.

predicted by Kahn are: (i) that considerable resistance by electric utility companies to the thorough-going regional planning of investment that represents the most highly integrated form of power pooling and (ii) a reluctance to leasing facilities from others. The PATH case clearly demonstrates that while we should recognize the responsibilities of an RTO, the findings of a need assessment by an RTO is not a substitute for a rigorous and robust examination and determination of the need on a holistic basis.

Not surprisingly, Eversource's estimate for Transmission Alternative 2 does not compare well with the cost estimate for its own proposed project. Eversource acknowledges that engineering for Transmission Alternative 2 was not advanced to the same degree as for its own proposed project. Despite this, the Siting Board accepted Eversource's estimate for Transmission Alternative 2. The PATH case demonstrates that the cost estimate by one utility company (or a joint venture of two utility companies), in and by itself, should not be credibly accepted in comparison to the cost of a comparable and competing alternative. It surprises no one that the sponsors of PATH would not say that the Dominion transmission line replacement, a competing project by another utility company, would be at about 1/3 of the cost for its own project and would also obviate the need for their PATH project until they were confronted with the reality of that competing project moving forward with its own need analysis and cost estimate. The requirement

that Eversource must demonstrate that its proposed project is superior to the alternative approach in terms of reliability, cost, and environmental was not satisfactorily met.

V. A Recent Eversource Project Argues Against This Proposed Project

FERC issued its Order 1000²² in 2011 but allowed the effective date to be when an RTOs formally filed a compliance tariff. Before FERC Order 1000, incumbent utility companies had the right of first refusal for solutions to identified reliability issues by an RTO. FERC Order 1000 mandated that incumbent utility companies no longer have the right of first refusal and that projects will be competitively based and could contain cost caps. According to the Eversource petition, the need for the proposed project was identified as a need by ISO-NE as part of its 2015 Needs Assessment. However, despite the fact that the need assessment happened four years after FERC Order 1000 was issued, the Order was not in effect within ISO-NE and Eversource was allowed the right of first refusal for a proposed solution

In June 2020, ISO-NE completed a competitive process pursuant to FERC Order 1000 for solutions to a reliability need. It is interesting to note that 36 bids

²² Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 136 FERC ¶ 61,051.

were received and ISO-NE adopted a joint proposal from Eversource and National Grid. As reported by Businesswire on June 30, 2020, the adopted solution, Ready Path Solution, offers the following benefits (among other benefits):

- Maximizes the use of existing transmission facilities in the Boston area;
- Keeps upgrades entirely on properties already in use by the energy companies, minimizing environmental and community impacts; ²³
 [Emphasis added.]

The biggest difference between the Eversource proposed project and the 2020 Ready Path Solution is the lack of a competitive process for solutions as required under FERC Order 1000. This lack of a competitive process by ISO-NE for solutions to meet this particular need four years after FERC 1000 was issued taints the proposed project. This is especially true since a transmission alternative is within the right-of-way of National Grid and no robust cost estimate cost was provided for comparison.

The touted benefits of maximizing the use of existing transmission facilities and keeping upgrades on an existing right-of-way that minimizes environmental and community impacts in a more recent transmission case under FERC Order 1000 go

²³ https://www.businesswire.com/news/home/20200630005351/en/ISO-NE-Proposes-Advance-Eversource-National-Grid-Ready

against many of the arguments by Eversource for the proposed project. Therefore, the proposed project did not meet the Siting Board's requirement that the "... (2) proposed project is superior to alternative approaches in terms of reliability, cost, and environmental impact and in its ability to address the identified need;".²⁴

CONCLUSION

Legal precedent, the dangers predicted by Kahn, and the inherent conflicts of interest of for-profit companies mean that utility companies not only have a burden of persuasion for a proposed project but that this burden must be a heavy one and should be held to a very high standard.

For the reasons discussed in this Brief, Eversource's proposed project did not meet the fundamental requirements for approval by the Siting Board. The Siting Board did not conform to its requirement for approval that additional energy resources were needed and its governing mandate to provide a reliable energy supply with a minimum impact on the environment at the lowest possible cost.

The final decision of the Siting Board approving, with conditions, (a) a new underground transmission line located primarily in Sudbury and Hudson, within an inactive Massachusetts Bay Transportation Authority right of way and an in-street

²⁴ EFSB 17-02/D.P.U. 17-82 at 14 (2019).

segment; and (b) individual and comprehensive zoning exemptions from the zoning bylaws of the towns of Sudbury, Hudson, and Stow, should be set aside.

Respectfully submitted,

/S/ Kin K. Gee

Kin K. Gee, *Pro Se* 8 Sage Street Holmdel, NJ 07733 (732) 807-6471 kin.k.gee@gmail.com

CERTIFICATE OF COMPLIANCE

I, Kin K. Gee, certify that this Brief complies with the rules of court that pertain to the filing of briefs, including but not limited to Massachusetts Rules of Appellate Procedure 16, 17, and 20. Rule 21 is not applicable to this Brief. For purposes of the length limitation of Rule 20, this Brief contains 6,178 nonexcluded words and uses Times New Roman 14-point font in Microsoft Office Word 2019.

/s/ Kin K. Gee

CERTIFICATE OF SERVICE

I, Kin K. Gee, certify that on January 28, 2021, I electronically filed the

foregoing brief and addendum via the Court's electronic filing system, which sent

notification of such filing to all counsel for Petitioners-Appellants, Respondent-

Appellee, and Intervener-Appellee registered therein, including:

Jeffrey M. Bernstein Audrey A. Eidelman BCK Law, P.C. 1337 Massachusetts Avenue Box 314 Arlington, MA 02476

George X. Pucci Town Counsel KP Law, P.C. 101 Arch Street 12th Floor Boston, MA 02110

Thomas M. Elcock Richard A. Kanoff Prince Lobel Tye, LLP One International Place, Suite 3700 Boston, MA 02110 Pierce O. Cray Office of the Attorney General One Asburton Place Room 2019 Boston, MA 02108

Cheryl A. Blaine Catherine J. Keuthen David S. Rosenzweig Keegan, Werlin, LLP 99 High Street, Suite 2900 Boston, MA 02110

/S/ Kin K. Gee