

**STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL**

The Connecticut Light & Power Company)
Application for a Certificate of Environmental)
Compatibility and Public Need for the Connecticut)
Portion of the Interstate Reliability Project that)
traverses the municipalities of Lebanon, Columbia,)
Coventry, Mansfield, Chaplin, Hampton, Brooklyn,)
Pomfret, Killingly, Putnam, Thompson, and)
Windham, which consists of (a) new overhead)
345-kV electric transmission lines and associated)
facilities extending between CL&P's Card Street)
Substation in the Town of Lebanon, Lake Road)
Switching Station in the Town of Killingly, and the)
Connecticut/Rhode Island border in the Town of)
Thompson; and (b) related additions at CL&P's)
existing Card Street Substation, Lake Road)
Switching Station, and Killingly Substation.)

Docket 424

October 1, 2012

BRIEF OF ISO NEW ENGLAND INC.

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SUMMARY

ISO New England Inc. (the "ISO"), an intervenor in the above-captioned proceeding, offers the following summary of its position as set forth in this brief:

1. The ISO is the Reliability and Planning Authority for New England's regional electric system and is responsible for determining system needs;
2. The ISO has determined, in accordance with applicable planning procedures, that the system is now in need of action to eliminate violations of national and regional reliability standards and criteria;
3. The ISO has reviewed the proposed Interstate Reliability Project ("IRP") and has determined that the improvements which embody the IRP meet the system's identified needs;
4. The ISO supports the Application and believes that the Connecticut portions of the IRP should be approved in this proceeding.

A non-profit organization without stockholders, the ISO is not motivated by money or the prospect of financial gain to participate in this proceeding, nor is its testimony steered by compensation toward a particular result. Instead, reliability is the ISO's top priority and its bottom line.

BACKGROUND

On December 23, 2011, The Connecticut Light and Power Company ("CL&P" or the "Applicant") filed an application (the "Application") with the Connecticut Siting Council (the "Council") pursuant to §§16-50k(a) and 16-50l(a) of the Connecticut General Statutes ("CGS") for a certificate of environmental compatibility and public need (the "Certificate") pertaining to the Connecticut portions of the IRP, a proposed set of improvements to the electric transmission systems in northeastern Connecticut, northwestern Rhode Island, and south-central Massachusetts. While the IRP encompasses about 75 miles of new 345-kilovolt (kV) electric transmission lines in all, as well as improvements to existing 345-kV and 115-kV facilities, slightly less than half of the proposed 345-kV transmission lines would be in Connecticut, where lines from the Rhode Island border to the Lake Road Switching Station and then the Card Street Substation would traverse approximately 36.8 miles.

The IRP is part of an overall plan, known as the New England East-West Solution ("NEEWS"), to address electric system issues in Southern New England. The first of the NEEWS projects, the Greater Springfield Reliability Project (the "GSRP") was considered by the Council in Docket 370 and approved in 2010. As part of NEEWS, the IRP would improve the bulk power electric transmission system of Southern New

England and ensure compliance with applicable national and regional reliability standards and criteria.

The benefits of the IRP are regional in nature, including enhanced capability to move power from resources in eastern New England to load in western New England, and to move power from resources in western New England to load in eastern New England, but such benefits help the reliability of the electrical systems serving each of the states involved in the IRP, including increased capability to move power into Connecticut from the rest of New England. By reinforcing the electrical connections between key substations and switching stations in Connecticut, Rhode Island, and Massachusetts, the IRP resolves reliability violations that would otherwise occur within the 10-year planning horizon and would provide long-term flexibility to dispatch existing and potential generation resources efficiently for all three states.

The ISO requested intervenor status in this proceeding on July 17, 2012, pursuant to CGS Sections 16-50n and 4-177a and Section 16-50j-15a of the Regulations of Connecticut State Agencies (“RCSA”), and the Council granted the ISO’s request on July 26, 2012. The ISO’s interest is based on its role as both the independent system operator of the New England transmission system and the Regional Transmission Organization (“RTO”) responsible for regional planning throughout New England, including assessing system needs, and the reliable operation of the New England regional power system. Specifically, the ISO is concerned for the reliability of the bulk power system in the area which will be served by the IRP in Connecticut, Rhode Island, and Massachusetts.

The Council is charged under CGS Section 16-50p with the responsibility of determining both the public need for the Applicant's proposal and its probable environmental impacts and then assessing whether the environmental impacts are sufficient reason to deny the Application. The ISO's expertise in this proceeding is most relevant to issue of need from a planning and reliability perspective, so its participation has been geared toward providing assistance to the Council's consideration of the public need for the IRP, particularly the Connecticut portion of the IRP. The ISO will leave discussion of environmental issues and route, which it fully respects, to other parties.

DISCUSSION

I. **The ISO Is the Reliability and Planning Authority for New England's Regional Electric System and Is Responsible for Determining System Needs.**

The ISO was established to be the independent system operator of the New England transmission system on July 1, 1997, and as such, it is responsible for the reliable daily operation of the New England power grid¹ and has exclusive authority from the Federal Energy Regulatory Commission ("FERC") for transmission planning throughout the New England region.²

¹ *New England Power Pool, Order Conditionally Authorizing Establishment of as Independent System Operator and Disposition of Control Over Jurisdictional Facilities*, 79 FERC 61,374 (1997) (authorizing formation of ISO New England Inc.); *Promoting Wholesale Competition Through Open Access, Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, 75 FERC 31,306 (1996) (establishing principles for the ISO's operation and governance).

² *ISO New England Inc. & New England Power Pool, Order on Rehearing Requests and Compliance Filings*, 95 FERC 61,384 (2001) (authorizing the ISO to oversee regional transmission planning); ISO Ex. 2, Rourke and Oberlin PFT, p. 6.

On February 1, 2005, the FERC granted RTO status³ to the ISO, providing it with broader authority for its functions. As an RTO, the ISO undertakes the role of security coordinator for the New England region and must comply with principles set forth by the FERC for such organizations.⁴ As security coordinator, the ISO must ensure reliability of system operation and is responsible, among other things, for performing load-flow and stability studies to anticipate, identify and address security problems and directing actions to maintain reliability.⁵ The FERC has concluded that the RTO must perform its functions consistent with established NERC reliability standards⁶ and further, in order to ensure that transmission planning and expansion result in least cost outcomes, that:

...the RTO must have ultimate responsibility for both transmission planning and expansion within its region that will enable it to provide efficient, reliable and non-discriminatory service and coordinate such efforts with the appropriate state authorities.⁷ (emphasis added)

The FERC has also affirmed the obligations of transmission providers regarding transmission upgrades and expansion:

Because an RTO may not own all of the facilities it operates, we clarify that nothing in this Rule relieves any public utility of its existing obligation under the pro forma transmission tariff to expand or upgrade its transmission system upon request.⁸

³Order Authorizing RTO Operations, ISO New England Inc. et al, Docket No. RT04-2-005, 110 FERC ¶ 61,111.

⁴ Regional Transmission Organizations, Order No. 2000, 65 Fed. Reg. 809 (2000), FERC Stats. & Regs. ¶ 31,089 (1999), order on reh'g, Order No. 2000-A, 65 Fed. Reg. 12,088 (2000) Docket No. RM99-2-000.

⁵ *Id.* at 278-79.

⁶ *Id.* at 323.

⁷ *Id.* at 486.

⁸ *Ibid.*

The FERC's requirements are reflected in the Transmission Operating Agreement (the "TOA") among the ISO and participating transmission owners ("PTOs"), including CL&P, which became effective when the ISO became an RTO on February 1, 2005. The TOA recites that the ISO will be responsible for regional system planning⁹ and Section 3.02(c) of the TOA states that the ISO shall act as the Reliability Authority for the New England transmission system. Schedule 3.09(a) of the TOA requires a PTO to construct any new transmission facility or upgrade designated in the ISO's Regional System Plan ("RSP"), and PTOs must comply with the ISO's planning procedures.¹⁰

The FERC's requirements are further imported into the ISO's Open Access Transmission Tariff (the "OATT"),¹¹ which is Section II of the ISO's Transmission, Markets and Services Tariff.¹² Section II.46 of the OATT provides that a reliability transmission upgrade may be required as part of the RSP. The RSP process is prescribed in Attachment K¹³ to the OATT, which sets forth the ISO's responsibility for regional transmission planning in New England and requires the ISO to assess the needs of the regional system to ensure the reliability of the New England Transmission System and compliance with national and regional planning standards, criteria and procedures.¹⁴

⁹ CL&P Admin Notice Item 9, "Transmission Operating Agreement" among ISO New England and Participating Transmission Owners. ISO-NE. February 1, 2005 ("TOA"), p. 1.

¹⁰ *Id.* at Sched. 3.09(a), Sections 1.1(a), 2.3.

¹¹ CL&P Admin Notice Item 8, "ISO New England Inc. Transmission, Markets and Services Tariff, (formerly known as "FERC Electric Tariff No. 3"). ISO-NE, July 15, 2009, Section II.

¹² CL&P Admin Notice Item 8, ISO New England Inc. Transmission, Markets and Services Tariff (formerly known as FERC Electric Tariff No. 3). October 1, 2011.

¹³ CSC Admin Notice Item 15, "ISO New England Inc. FERC Electric Tariff No. 3, Open Access Transmission Tariff, Section II – Attachment K -- Regional System Planning Process." December 7, 2007.

¹⁴ *Id.* at Section 1.

The RSP is a comprehensive annual system planning report that is developed through a process open to a wide variety of stakeholders, including state regulators, consumer advocates, transmission customers, utilities and market participants, all of whom have the opportunity to provide input through the Planning Advisory Committee (“PAC”), a stakeholder group for which the ISO holds periodic planning meetings throughout the year.¹⁵ Because of the RSP process and PAC input, the ISO brings to the Council in this proceeding the results of an evaluative process which involves expertise, objectivity, openness and inclusivity.

As part of the RSP process, the ISO conducts regular and ongoing assessments of the adequacy of the regional system in accordance with criteria set forth in Section 4.1 of Attachment K. Such needs assessments analyze, among other things, whether transmission system facilities meet applicable reliability standards and have adequate transfer capability to support local, regional, and inter-regional reliability. Needs assessments are reviewed at PAC meetings to obtain input from PAC participants regarding the assumptions used in such assessments.¹⁶ Needs assessments, along with the RSP, must incorporate market responses that have met specified criteria designed to assure certainty in delivering proposed resources,¹⁷ and the ISO looks first to the marketplace for solutions to identified needs. Market responses include Forward Capacity Auction (“FCA”) results and may entail generation, distributed generation,

¹⁵ ISO Ex. 2, Rourke and Oberlin PFT, July 17, 2012, p. 9.

¹⁶CSC Admin Notice Item 15, Attachment K, Section 4.1(f).

¹⁷ *Id.* at Section 4.2(a), which provides that only such market responses shall be considered as: (i) have cleared in a Forward Capacity Auction pursuant to Market Rule 1 of the ISO Tariff, (ii) have been selected in, and are contractually bound by, a state-sponsored Request for Proposals, or (iii) have a financially binding obligation pursuant to a contract.

demand response and conservation. Thus, the RSP serves to assess and identify system needs and signal the need for market responses to identified needs.

Where market responses incorporated into a needs assessment are insufficient to eliminate identified needs, the ISO shall conduct a solutions study, pursuant to Section 4.2(b) of Attachment K, to develop regulated transmission solutions for such needs. The ISO may conduct needs assessments and solutions studies in concert with affected transmission owners, and the ISO has the authority, both under the TOA, as cited above, and pursuant to Attachment K, to obligate the appropriate transmission owner or owners to construct necessary transmission upgrades.¹⁸ Although the ISO welcomes market responses, it has no authority to require the construction of generation or the implementation of any market response.

II. The ISO Has Determined that the System Is Now in Need of Action to Eliminate Violations of National and Regional Reliability Standards and Criteria.

A. The ISO, pursuant to applicable standards and criteria, has determined that reliability needs exist.

In accordance with provisions of the ISO Tariff embodied in Attachment K, the ISO has extensively studied both the need, from a reliability perspective, for system improvements in the area to be served by the IRP and the suitability of the proposed IRP as a solution to the needs identified. Despite previous studies¹⁹ which found system

¹⁸ *Id.* at Section 8.

¹⁹ Studies of electrical system deficiencies in Southern New England began in 2004 through a working group of the ISO, CL&P and National Grid, resulting in the 2008 Southern New England Transmission Reliability Analysis (“SNETR”). CL&P Ex. 16, Zaklukiewicz and Laskowski PFT, May 21, 2012, p. 5. The ISO published a follow-up report to the SNETR analysis in April, 2011 entitled *New England East-*

needs in southern New England and proposed comprehensive regional solutions to remedy such needs, the ISO insisted, in accordance with its obligations under Attachment K, on subjecting the system to one further analysis of need, taking into account all developments to and even beyond the date of the Application. The resulting evaluation, entitled *Follow-Up Analysis to the 2011 New England East-West Interstate Reliability Project Component Updated Needs Assessment* (“Follow-Up Needs Assessment”),²⁰ assessed the reliability of the southern New England transmission system under 2022 projected system conditions and took into account the following updated information: (1) the results from FCA 6 held in April 2012; (2) the most recent load forecast as reported in the 2012 Capacity, Energy, Loads and Transmission (“CELT”) report;²¹ and (3) the newly formulated Energy Efficiency forecast published in the CELT report.²² Even considering the impacts of these developments on system reliability, the ISO concluded, as recently as July 2012, that there continues to be a need for system improvements in Connecticut, as well as in bordering areas of Rhode Island and Massachusetts.

The ISO further found, in a draft report entitled *Follow-Up Analysis to the 2012 New England East-West Interstate Reliability Project Component Updated Solution Study Report* (“Follow-Up Solutions Report”),²³ that such need will be met by the IRP.

West Solution (NEEWS) Interstate Reliability Project Component Needs Assessment (the “2011 Updated Needs Report”). See CL&P Ex.1, Vol. 5.

²⁰ See CL&P Ex. 29, “ISO New England’s Follow-up Analysis to the 2011 New England East-West (NEEWS) Interstate Reliability Project,” dated July 2012 (subject to Protective Order, dated February 16, 2012). The draft Follow-up Needs Assessment filed by CL&P on July 10, 2012, has since become final.

²¹CSC Admin Notice Item 22, Forecast of Capacity, Energy, Loads & Transmission, ISO New England, May 1, 2012.

²² ISO Ex. 2, Rourke and Oberlin PFT, p. 4.

²³ See CL&P Ex. 32. Transmittal Letter to CSC, dated July 24, 2012, re ISO-NE Draft Report entitled: *Follow-up Analysis to the 2012 New England East-West Solution (NEEWS) Interstate Reliability Project*

Both the Follow-Up Needs Assessment and the Follow-Up Solutions Report, like prior studies concluded in 2008 and 2011, result from application of the ISO's expertise and experience in transmission system planning and operation to mandatory reliability criteria and standards established by the North American Electric Reliability Corporation ("NERC"), the Northeast Power Coordinating Council ("NPCC")²⁴ and the ISO.²⁵ The Follow-Up Needs Assessment was performed in accordance with the transmission planning study methodology prescribed by the ISO's Planning Procedure 3 ("PP3"),²⁶ utilizing assumptions which were reviewed by various stakeholder and regulatory participants through the open PAC process, including a PAC meeting on July 18, 2012,²⁷ and determined by the ISO to be reasonable and appropriate. As Mr. Oberlin testified, it is the ISO, as transmission planner for the New England region, which has the ultimate responsibility for choosing dispatch scenarios and other planning assumptions.²⁸

The Follow-Up Needs Assessment demonstrated critical weaknesses in the transmission system serving Connecticut and also Rhode Island and Massachusetts. The Follow-Up Needs Assessment documented violations of NERC reliability standards that

Component Updated Solution Study Report, July 2012 (subject to Protective Order, dated February 16, 2012). The draft Follow-up Solutions Report filed by CL&P on July 24, 2012, has since become final.

²⁴CSC Admin Notice Item 19, Northeast Power Coordinating Council, Inc. Regional Reliability Reference Directory #1, Design and Operation of the Bulk Power System." December 1, 2009 (replaced NPCC Document A-2, "Basic Criteria for the Design and Operation of Interconnected Power Systems." Revised May 6, 2004.)

²⁵ CSC Admin Notice Item 13, "ISO New England Planning Procedure 3, PP 3 – Reliability Standards for the New England Area Bulk Power Supply System." Effective Date: March 5, 2010.

²⁶ *Ibid.*

²⁷ ISO Ex. 2, Rourke and Oberlin PFT, p. 16.

²⁸ 8/28/12 Tr. 28-29, 119-120.

became mandatory in 2005,²⁹ as well as violations of regional reliability standards established in NPCC Regional Reliability Reference Directory #1 and PP3.

Only one violation of NERC, NPCC or ISO reliability standards would cause an electrical system to be considered out of compliance, and each violation could result in substantial daily fines.³⁰ In this case, the Follow-Up Needs Assessment shows several thermal and voltage violations³¹ resulting from either N-1 or N-1-1 contingency events, including line overloads and voltage violations potentially leading to voltage collapse in southern New England that could result in cascading outages affecting Connecticut and other states.³² In Connecticut, a number of thermal violations under N-1-1 contingency events involved a 345 kV line as the initial line outage followed by another criteria contingency.³³ The 115 kV path from Rhode Island to Connecticut along the Long Island Sound shoreline also had N-1-1 thermal violations for the loss of two 345 kV lines.³⁴

The Follow-up Needs Assessment divided three electrical sub-areas into two analyses, the Eastern New England Reliability Analysis and the Western New England Reliability Analysis.

The Eastern New England Reliability Analysis showed N-1 and N-1-1 thermal violations on numerous lines, including the 345 kV path between Killingly and West

²⁹ CL&P Ex. 1, Vol. 1, Section 2, pp. 2-2, 2-3.

³⁰ *Id.* at p. 2-3.

³¹ ISO Ex. 2, Rourke and Oberlin PFT, pp. 12-13. *See also* CL&P Ex. 29, Sections 5.1.4, 5.2.2, and 5.2.3. Because this Exhibit contains Critical Energy Infrastructure Information (“CEII”), the ISO will simply call attention to the Exhibit itself, for a summary of reliability violations.

³² ISO Ex. 2, Rourke and Oberlin PFT, pp. 7, 10, 13-14. *See also* CL&P Ex. 29, ISO New England’s Follow-up Analysis, Sections 5.2.3.1 and 5.2.3.3.

³³ *Id.* at Sections 5.1.4 and 5.2.3.4.

³⁴ *Id.* at Section 5.1.4.

Medway and on the 115 kV network connecting Rhode Island and Southeastern Massachusetts to Central Massachusetts.³⁵ N-1 and N-1-1 thermal and voltage violations were observed on the 115 kV path connecting Connecticut to Rhode Island along the Long Island Sound shoreline.³⁶ Taking certain 345 kV lines out of service as the first contingency indicated the potential for voltage collapse upon the occurrence of a second contingency. These results indicate a need to increase the eastern New England import capability.³⁷

In the Western New England Reliability Analysis, certain 345 kV lines which form the central 345 kV East-West path connecting Boston to western Massachusetts were thermally overloaded as the other remaining 345 kV lines were lost under a N-1-1 contingency event.³⁸ N-1-1 violations were also observed in Connecticut for the loss of a certain 345-kV line as the initial element out of service.³⁹ The 115 kV path from Rhode Island to Connecticut along the Long Island Sound shoreline also had N-1-1 thermal violations under certain contingencies.⁴⁰ Because the overloading 115 kV lines are on a Connecticut import path, and the critical first element is a Connecticut import line, the foregoing results demonstrate a need to increase Connecticut import capability along with increasing western New England import capability.⁴¹

³⁵ ISO Ex.2, Rourke and Oberlin PFT, p. 12.

³⁶ *Id.* at 13.

³⁷ *Ibid.*

³⁸ *Ibid.*

³⁹ *Ibid.*

⁴⁰ *Ibid.*

⁴¹ *Ibid.*

In Rhode Island, the loss of certain transmission lines results in a voltage collapse scenario indicating inability to serve load.⁴² These results indicate a need for a new 345 kV line into the area to reliably serve load in Rhode Island.⁴³

The needs identified in the different sub-areas studied occur within the 10-year planning horizon which must be considered in a system needs analysis. As Mr. Oberlin testified, the need is immediate in Rhode Island; it occurred in approximately 2011 in the Eastern New England Reliability, going West to East; and it is projected to occur in 2017 or 2018 going East to West.⁴⁴

It may be tempting to separate the deficiencies of the system in Connecticut from those in Massachusetts and Rhode Island, but electric systems respond to the laws of physics, and as Mr. Rourke testified, they are not cognizant of political boundaries.⁴⁵ The ISO must therefore view system deficiencies from a regional perspective, seeking solutions which resolve interrelated, interstate problems in the most cost effective and electrically efficient manner.⁴⁶

In summary, the ISO is concerned that the existing system in southern New England faces an unreliable combination of limited transmission capacity, limited generation that is effectively integrated to serve the load, and limited transfer capability into and through the area. As the Follow-Up Needs Assessment shows, there is an increasingly high risk that the system will be unable to withstand single and multiple

⁴² See CL&P Ex. 29, ISO New England's Follow-up Analysis, Section 5.2.3.3

⁴³ ISO Ex. 2, Rourke and Oberlin PFT, p. 13.

⁴⁴ 8/28/12 Tr. 123-127.

⁴⁵ *Id.* at 64.

⁴⁶ *Ibid.*

element contingencies following the single loss or outage of certain critical facilities in these areas as the system approaches or exceeds forecasted peak load levels.⁴⁷

The record in this proceeding is replete with evidence that the power system serving the area of southern New England studied in the Follow-up Needs Assessment, including portions of Connecticut, does not meet reliability criteria. Transmission improvements are necessary to enhance system performance and ensure compliance with national reliability standards and regional reliability criteria. The record thus amply supports a finding of public need for appropriate transmission system upgrades.

B. No lack of need for the IRP has been demonstrated.

The only challenge to the need for the IRP in this proceeding comes from Victor and Richard Civie (together, the “Civies”), whose position has been expressed during hearings mainly by Victor Civie (“Mr. Civie”). While the Civies may be commended for their efforts in participating in this proceeding, Mr. Civie’s attempted contribution to the analysis of need lacks merit.

In its broadest form, the Civies’ argument against need is simply that “past projects have satisfied the public need for power.”⁴⁸ The Civies further assert that the IRP does not conform to a long-range plan for expansion of the power grid. The Civies’ position clearly ignores the needs demonstrated by the Follow-up Needs Assessment, a rigorous, updated evaluation of need released in July 2012, after the Civies’ unsupported pronouncement in May 2012, that past projects had satisfied the need for power. The Civies have similarly ignored the fact that the IRP is part of NEEWS, which has been

⁴⁷ ISO Ex. 2, Rourke and Oberlin PFT, p. 11.

⁴⁸ Civie Ex. 3, Civies PFT, May 21, 2012, p. 1. Such testimony does not indicate which “past projects” have satisfied the public need for power or where such need may have existed.

characterized by the Council in its decision approving the GSRP component of NEEWS as being consistent with Connecticut's energy policy and a "comprehensive long-range regional plan for expansion that addresses electric concerns throughout New England."⁴⁹

More specifically, Mr. Civie argues that there is no need for the IRP because the existing 330 line between the Lake Road and the Card Street is sufficient to remove all reliability violations in all three states and adequate to serve the power needs in those parts of eastern Connecticut to be served by the IRP.⁵⁰ On cross-examination, however, Mr. Civie conceded that if the 330 line were out of service, there would, as shown in the ISO's Follow-up Needs Assessment, be violations of reliability criteria.⁵¹

⁴⁹ CSC Admin Notice Item 33, Opinion in Docket 370, p. 3.

⁵⁰ 8/30/12 Tr. 69-70, 75.

⁵¹ The following dialogue took place between the ISO's counsel and Mr. Civie (8/30/12 Tr. 75-76):

MR. MACLEOD: Do you recall the testimony of the ISO witnesses yesterday that said that if you take that 330 line out, there are violations?

MR. V. CIVIE: Yes, I do.

MR. MACLEOD: Okay, and your hypothesis basically is as long as that line is in, then there are no violations?

MR. V. CIVIE: That's correct.

MR. MACLEOD: Do you agree with the ISO witnesses that if that line is out, there are violations?

MR. V. CIVIE: I don't agree with that procedure. If the line is out –

...

MR. V. CIVIE: ...If the line is out though, yes, there will be violations.

It is clear that Mr. Civie does not subscribe to the reliability criteria and standards established by NERC, NPCC and the ISO and does not understand that they must be applied in a deterministic fashion (*i.e.*, for specific disturbances or “contingencies”) in order to assess the ability of the system to perform under a series of defined contingency situations.⁵² As noted above, the Follow-Up Needs Assessment was performed in accordance with the transmission planning study methodology prescribed by PP3, utilizing assumptions determined by the ISO to be reasonable and appropriate.⁵³

While Mr. Civie has an electrical engineering background and taught a variety of college electrical engineering courses for six years, he has never worked for a utility, a utility regulatory agency, or an engineering consultant that provided services related to electric system engineering or planning, and he admits that he does not have experience in planning or operating electric utility systems.⁵⁴ He recalls taking three courses in power system engineering,⁵⁵ but cannot recall the year he received his Bachelor’s degree in electrical engineering and can only approximate 1980 as the year he received his Master’s degree in electrical engineering.⁵⁶ What is abundantly clear is that Mr. Civie’s involvement as both a student and a teacher of electrical engineering, which seems to have ended in the late 1980’s, preceded the mandatory reliability standards and criteria which govern system planning today. His refusal to accept these mandatory standards in

⁵² ISO Ex. 2, Rourke and Oberlin PFT, p. 10.

⁵³ *Supra*, p. 10.

⁵⁴ 8/30/12 Tr. 28-29.

⁵⁵ *Id.* at 28.

⁵⁶ *Id.* at 72-73.

his own views of need and reliability may simply be a matter of unfamiliarity. It contrasts sharply with the ISO's adherence to such standards.⁵⁷

III. The ISO Has Reviewed the Proposed IRP and Has Determined that It Meets the System's Identified Needs.

While the Follow-up Needs Assessment paints a clear picture of the inadequacy and unreliability of the existing power system in the southern New England area and strongly supports a finding that there is a public need to improve the system in order to make it reliable, the Follow-Up Solutions Report indicates that the IRP constitutes the preferred transmission solution for meeting this public need. The IRP, a component of NEEWS, has been listed as a needed transmission upgrade in the ISO's Regional System Plan for 2011 ("RSP11")⁵⁸ and in previous RSPs.

The IRP, will eliminate thermal and voltage reliability criteria violations, improve transfer capabilities and system performance, and thus enable the transmission system to remain in compliance with reliability standards and criteria established by NERC, the NPCC, and the ISO.

In particular, the IRP will address reliability issues reported in the Follow-up Needs Assessment through the following benefits: (1) the proposed line into Millbury from West Farnum will provide a new import line into eastern New England and enable power to flow from western New England and Greater Rhode Island to reliably serve load in eastern New England during capacity deficiency conditions in eastern New England; (2) the line into Card Street substation via Lake Road and West Farnum will

⁵⁷ As Mr. Oberlin testified, "NERC, NPCC and ISO New England criteria require us to evaluate two contingencies deep... I'm required to do this by criteria. I can't ignore it." 8/28/12 Tr. 130.

⁵⁸ CSC Admin Notice Item 12, "ISO New England Inc., 2011 Regional System Plan" (October 21, 2011).

provide a new import path into Connecticut and western New England and allow power to move from eastern New England and Greater Rhode Island to reliably serve load in Connecticut and western New England during capacity deficiency conditions in the West; and (3) two new 345 kV lines into West Farnum will resolve criteria violations in Rhode Island.⁵⁹

No market response has come forward that could resolve the needs identified by the Updated Needs Assessment. As explained in the Follow-Up Needs Assessment, the ISO considered the impact on the need for the IRP based on the cleared resources in the most recent FCA, the most recent load forecasts and forecasted state-sponsored energy efficiency measures through 2022. Even considering these updates, there continues to be a need for the IRP within the 10-year planning horizon,⁶⁰ and the ISO accordingly supports the IRP as the appropriate solution to that need.

CONCLUSION

The ISO firmly believes that there is a compelling public need for the IRP and that a Certificate of Environmental Compatibility and Public Need should be granted to allow the Applicant to construct the Connecticut-based facilities which are part of the IRP, as proposed in the Application.

⁵⁹ ISO Ex. 2, Rourke and Oberlin PFT, p. 15.

⁶⁰ *Id.* at p. 16.

Respectfully submitted,


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CERTIFICATION

I hereby certify that a copy of the foregoing was hand delivered or sent via email or first class mail, postage prepaid, on October 1, 2012 to all parties and intervenors of record as shown on the Service List of August 13, 2012.


Anthony M. Macleod
Commissioner of the Superior Court