UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
Nora Mead Brownell, Joseph T. Kelliher,
and Suedeen G. Kelly.

ISO New England Inc. Docket Nos. ER05-715-000

ORDER ACCEPTING, AS MODIFIED, PROPOSED INSTALLED CAPACITY REQUIREMENTS FOR THE 2005/2006 POWER YEAR

(Issued May 9, 2005)

1. In this order, we accept, as modified, ISO New England, Inc.'s (ISO-NE or ISO) Installed Capacity Requirements (IC Requirements) for the 2005/2006 Power Year.[1] This order benefits customers by providing just and reasonable IC Requirements for the 2005/2006 Power Year.

I. Background

2. Consistent with ISO-NE's Markets and Services Tariff[2] and section 11.4 of the New England Participants Agreement,[3] ISO-NE must file with the Commission the IC Requirements for the Power Year. The IC Requirement is a projection of the minimum amount of capacity required to serve load reliably in the New England region. It is used to determine the monthly Unforced Capacity (UCAP) requirements (with various

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[1] June 1, 2005 to May 31, 2006.

[2] Under section III. 8.1 of Market Rule 1, Annual Installed Capacity Requirement, the ISO calculates the IC Requirements each Power Year and, after consultation with stakeholders (as required by the Participants Agreement), the ISO must file the IC Requirements with the Commission pursuant to section 205 of the Federal Power Act, 16 U.S.C. § 824d (2000).

[3] The Participants Agreement is among ISO-NE, the New England Power Pool (NEPOOL), and the Participants. Under section 11.4, Installed Capacity Requirements, the ISO is required to present the IC Requirements to the Participants Committee and the Participants Committee must take an advisory vote on the proposed IC Requirements for any Power Year.

adjustments) that each Market Participant must purchase. The ISO calculates the IC Requirements to meet system design criteria with a Loss of Load Expectation of one day in ten years. To meet their UCAP obligations, Market Participants must self-supply, purchase UCAP through bilateral transactions, or obtain capacity credits from tie-line benefits, or they must make up any deficiencies in the ISO-administered installed capacity market.

II. The IC Requirements Filing

3. On March 21, 2005, as later supplemented on April 1, 2005, ISO-NE filed its IC Requirements for the 2005/2006 Power Year, along with supporting technical analyses. ISO-NE explains that the only substantive differences between the assumptions used in the development of the IC Requirements for Power Year 2005/2006, versus the assumptions that were used in previous annual IC Requirements calculations, are the use of 1800 MW and not 2000 MW as the measure of tie benefits, and the use of the Equivalent Forced Outage Rate Demand (EFORd) generator availability metric, instead of the Equivalent Forced Outage Rate (EFOR) availability metric. ISO-NE requests that the proposed IC Requirements be made effective on May 1, 2005, to provide Market Participants with certainty of their UCAP responsibilities for the 2005/2006 Power Year.

4. The ISO states that its analysis determined that, consistent with the 2004/2005 Power Year, tie benefits of 2000 MW, which assume 1200 MW on the Hydro-Quebec tie, 600 MW from the New York tie and 200 MW from the New Brunswick tie, continue to be appropriate for the 2005/2006 Power Year.[4] However, the ISO advises that arguments have been made for alternative values, and that diverse stakeholder interests accordingly have reached a broad consensus to instead use 1800 MW as the appropriate measure of tie benefits. ISO-NE further contends that the Power Supply Planning Committee, unable to make a recommendation to the Reliability Committee (RC) on appropriate tie benefit values, provided the RC with four sets of IC Requirements for review. After considerable discussion by the RC at its March 2, 2005 meeting, votes were taken on tie

[4] The ISO states that its study is based on assumptions on the capability of each of the ISO's interconnected control areas, including the reliability of the neighboring areas, the physical transfer capability of the interconnection, and the interrelationship among each of those areas and New England, with respect to load diversity and generation characteristics. ISO-NE states that the study reflects a probabilistic analysis and methodology. ISO-NE states that the values produced by the study reflect the amount of emergency assistance that, without the existence of any firm capacity arrangements and given assumptions regarding the needs of load in that adjacent control area, generation outage forecasts and any known contractual commitments for that generation could be assumed to be potentially available to New England from that neighboring control area during the period of interest.

benefits of 2000 MW and 1400 MW.[5] The 1400 MW prevailed with 70.65 percent in favor as compared to 56.61 percent in favor of 2000 MW. The Participants Committee (PC) at its March 11, 2005 meeting considered the recommendations of the RC. Some participants, according to ISO-NE, argued that 2000 MW of tie reliability benefits appropriately reflected circumstances unique to New England and that 2000 MW was consistent with historical calculations for determining IC Requirements. Others, however, viewed the set of assumptions, with respect to expected system conditions, as unrealistic. After much discussion, ISO-NE states, a motion passed with 80.12 percent in favor to set the IC Requirements for the 2005/2006 Power Year at 1800 MW of tie reliability benefits.

5. In the light of the parallel Locational Installed Capacity (LICAP) proceeding in Docket No. ER03-563-030, and given the pending stakeholder review of the methodology to be used in developing tie benefits and the IC Requirements generally, the ISO believes that it is reasonable to adopt the widely accepted 1800 MW measure of tie benefits. This level is only modestly less than that recommended by the ISO, and is consistent with reliability criteria.

6. With regard to the change from using the EFOR methodology for measuring unit availability, ISO-NE states the method has been altered to be consistent with the current use of EFORd in the installed capacity market and in the UCAP rating for generating units. The ISO explains that unit availability is based on scheduled maintenance and forced outages, with the scheduled maintenance assumptions based on each unit's historical five-year scheduled maintenance average. Moreover, in previous years' IC calculations, the EFOR was based on NERC[6] average data to represent the forced unavailability for each class of unit.[7] This formulation, however, does not differentiate between a forced outage hour that occurs when a unit is needed and an hour when it is not needed. Further, it assumes that the generator is available 100 percent of the time. In contrast, EFORd uses approximations to estimate when a resource is needed and the EFORd equation includes additional information on each unit such as average forced outage duration. ISO-NE quantifies that changing from EFOR to EFORd resulted in an

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[5] The 1400 MW measure of tie benefits were based on 1200 MW assigned to the Hydro-Quebec tie and 200 MW to the New York tie and nothing to the New Brunswick tie. We note that the 1200 MW of tie benefits for Hydro-Quebec was recently approved by the Commission. S*ee New England Power Pool and ISO New England, Inc.,* 111 FERC ¶ 61,112 (2005).

[6] North American Electric Reliability Council

[7] EFOR = Equivalent Forced Outage Hours / (Period Hours – Equivalent Scheduled Outage Hours).

additional 438 MW IC Requirement based on the 2004/2005 Power Year's EFOR, reflecting decreased unit availability and increased forced outages rates of approximately 2 percent.

III. Notice of Filings and Responsive Pleadings

7. Notice of the filing in Docket No. ER05-715-000 was published in the *Federal Register*, 70 Fed. Reg. 17,080 (2005), with protests or interventions due on or before April 11, 2005.

8. The following parties filed timely motions to intervene: Attorney General of the State of Connecticut; Connecticut Municipal Electric Energy Cooperative and Massachusetts Municipal Wholesale Electric Company; Connecticut Office of Consumer Counsel; Dominion Companies; Exelon Corporation; Massachusetts Department of Telecommunications and Energy; Select Energy, Inc.; and Northeast Utilities Service Company.

9. Vermont Department of Public Service; Maine Public Utilities Commission and Vermont Public Service Board also filed timely interventions.

10. FPL Energy, LLC; ANP Funding I, LLC; H.Q. Energy Services (U.S.), Inc., and New Hampshire Public Utilities Commission filed out-of-time interventions.

11. Consolidated Edison Energy, Inc. and Boston Generating, LLC filed timely comments in support of the IC Requirements filing. New England Power Pool Participants Committee (NEPOOL PC) filed an out-of-time motion to intervene and supporting comments.

12. The following filed timely interventions and protests: Calpine Corporation (Calpine); the Connecticut Department of Public Utility Control (CT DPUC); Massachusetts Attorney General, Rhode Island Attorney General and Rhode Island Division of Public Utilities and Carriers, the Maine Public Advocate, and New Hampshire Office of Consumer Advocacy (New England Advocates); National Grid USA; New England Conference of Public Utilities Commissioners (NECPUC); and NSTAR Electric & Gas Corporation, United Illuminating Company, and Associated Industries of Massachusetts (NSTAR). Long Island Power Authority and LIPA (collectively, LIPA) filed an out-of-time motion to intervene and protest.

13. On April 20, 2005, ISO-NE filed a motion for leave to answer and answer of ISO-NE. CT DPUC, LIPA, NEPOOL PC and NSTAR filed answers to ISO-NE's answer.

IV. Protests

14. CT DPUC, New England Advocates, National Grid, NECPUC, NSTAR filed protests opposing the use of tie reliability benefits of 1800 MW and state that tie benefits of 2000 MW, as supported by ISO-NE's tie benefits study, should be used. These parties contend that ISO-NE did not exercise independent judgment when it filed a tie benefits value of 1800 MW and, instead, lowered the 2000 MW to 1800 MW in order to accommodate generator interests and/or avoid protracted litigation. NSTAR notes that stakeholders in related proceedings have argued in favor of lower tie benefits based on the methodologies used in other RTOs and control areas; however, these arguments are irrelevant in ISO-NE's case and NSTAR urges the Commission to reject them.

15. CT DPUC, National Grid, and NECPUC also complain that ISO-NE has not sufficiently justified its use of EFORd over EFOR. CT DPUC further states that EFOR has adequately assessed reliability in the past, and that there is no reason to change this methodology. National Grid contends that ISO-NE has argued against the use of EFORd to measure unit availability in the LICAP proceeding.[8]

16. CT DPUC also argues that changes in unit availability, peak load forecast, and reducing the ISO's tie benefits by 200 MW to establish IC Requirements will artificially increase IC Requirements by an average six percent over the prior year. This change will significantly raise the cost to customers, especially with the implementation of LICAP on January 1, 2006. In an affidavit, CT DPUC's economist Dr. Carl Pechman estimates that the filed IC Requirements will increase average LICAP prices in New England by about 24 percent, or $1.80 per kW-month, over previous projected LICAP prices. New England Advocates calculate that costs to New England customers could increase by as much as $1 billion per year for the next five years. NECPUC argues that the IC Requirement will pose an unwarranted rate increase on New England customers and that the Commission should reject the filing or, in the alternative, set the filing for hearing.

17. CT DPUC further argues that the Commission does not have jurisdiction to set generation resource adequacy requirements for the New England region. Instead, CT DPUC contends, these requirements should be set by the New England states. NECPUC contends that ISO-NE should have consulted with the New England states in determining IC Requirements. In addition, CT DPUC contends that the IC Requirements proposal for 2005/2006 Power Year carries significantly more importance because it determines prices for load serving entities (LSEs) after implementation of ISO-NE's LICAP.

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[8] *Devon Power LLC, et al.*, 107 FERC ¶ 61,240 (2004) (*Devon Power).*

18. CT DPUC and LIPA argue that the ISO improperly failed to include the recently-reopened (July 2004) Cross Sound Cable[9] and what is commonly referred to as the 1385 Cable[10] in its tie line benefits study. LIPA also advises that 2500 MW of new capacity resources have been installed in the New York downstate region between 2003 and 2005. CT DPUC contends that, despite saying that reliability benefits exist and commending their value, the ISO's assignment of 600 MW of New York tie benefits to all of New England raises LICAP issues for Connecticut ratepayers.

19. LIPA suggests that ISO-NE should be required to develop a consistent and uniform method of appraising and attributing reliability benefits to merchant, controllable transmission inter-ties with such benefits allocated to the owners of the transmission rights and the reliability benefits accruing to customers. CT DPUC requests that the Commission: (1) use tie benefits of at least 2000 MW, and (2) order that the ISO file an updated tie reliability benefits analysis that accurately reflects current system conditions.

20. Calpine argues that it is inappropriate for ISO-NE to assume it can borrow a neighboring system's capacity in its capacity procurement planning. Calpine continues that New England LSEs should be required to buy the full amount of capacity service they require to reliably serve their loads.

21. Comments in support of ISO-NE's IC Requirements were filed by Boston Generating, LLC, Consolidated Edison Energy, Inc., and NEPOOL PC. NEPOOL PC states that, at the PC meeting, it was shown that New England's interconnections with its neighbors are substantially weaker than the interconnections of all but one of New England's neighboring control areas. By assuming 2000 MW of tie reliability benefits in the IC calculation, New England is essentially relying on its neighbors' potentially available reserves to a much greater extent than any other control area relies on potentially available reserves of their neighboring control areas.

V. <u>Answers</u>

22. In its answer, ISO-NE continues to support the use of 1800 MW of tie benefits as a reasonable IC value. According to the ISO, other than the formula to determine unit outages, the methodology used to develop the 2005/2006 IC Requirements mirrors the methodology that has been used by NEPOOL for over 20 years. The ISO suggests that

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[9] Cross Sound Cable is a 24-mile underground, bi-directional 330 MW direct current transmission line between New Haven, Connecticut, and Shoreham, Long Island.

[10] According to CT DPUC, the 1385 Cable is an eleven mile 138-kV submarine cable between Norwalk Harbor, Connecticut and Northport, Long Island, and currently undergoing replacement, afterwards its capacity will be 429 MW.

the protests may be driven by the perceived economic impact that the IC Requirements may have on the LICAP currently being litigated in Docket No. ER03-563-030, and that those issues should be considered in the LICAP proceeding. The ISO advises that IC Requirements do not prescribe any rates and will not lead to an unwarranted rate increase. The ISO also suggests that the studies used to determine capacity assistance indicate that there is more than one acceptable value from a reliability perspective to use in calculating tie benefits.

23. The ISO states that it informed its Participants that it may not be appropriate to change the tie benefits assumption for the 2005/2006 IC Requirements without going through an expanded stakeholder review process, including state regulators, and, that without such a process, the ISO could support the 2000 MW tie benefits approved by the Participants Committee in the development of the 2004/2005 Objective Capability (OC)[11] values. The ISO further adds that a stakeholder process will be utilized to undertake a comprehensive review process complete with a review of the IC methodology in the next few months. The ISO believes that this upcoming review, and not this proceeding, is the appropriate forum to resolve issues concerning the IC Requirements methodology for coming years.

24. The ISO therefore requests that the Commission reject the intervenors' arguments that the ISO should either adjust IC Requirements for the expected improved generator availability due to the ISO's shortage hours proposal in the LICAP proceeding, or propose a mechanism to make an adjustment depending on what availability metric the Commission adopts in that case. The ISO notes that the EFORd metric is superior to the EFOR metric, and is consistent with how generating resources receive their UCAP entitlement. The ISO also notes that the shortage hours is just a proposal in the LICAP proceeding, and if the Commission approves that proposal, then the ISO will consider whether to adopt it for determining IC Requirements. The ISO advises that switching to EFORd to calculate the forced outage component should not be considered a change in reliability standards; but, rather, only the factors used to model the outage rate of the generator are expected to change based on the expected performance of the generator. For example, the ISO notes, combustion turbines outage rates during the 1990's were in the 7.7 to 13.7 percent range, compared to the 3 to 4 percent range used today. These changes mean that the amount of generating resources needed to meet the one day in ten years Loss of Load Expectation standard would vary depending on the expected performance of the generators. The one day in ten years Loss of Load Expectation, however, has not changed.

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[11] IC was referred to as OC prior to when UCAP was established, with the ISO's implementation of Standard Market Design.

25. The ISO states that it is well within the Commission's jurisdiction to accept the IC Requirements. ISO-NE advises that it has appropriately provided for the New England states to provide advisory input and a number of regulatory representatives regularly attend NEPOOL meetings. Specifically, the ISO cites the ISO Tariff and Participants Agreement that describe the ISO's authority to make this filing. The ISO notes that both the ISO Tariff and Participants Agreement were approved, as conditioned, by the Commission's orders granting RTO status.[12] ISO-NE notes that most of the protestors in this proceeding intervened in the RTO proceeding and no party in that proceeding pursued through hearing any issue related to the ISO's explicit authority and obligation to make IC Requirements filings. Under these circumstances, the ISO claims that all of these parties should be deemed to have agreed to the ISO's authority in this regard and to the Commission's acceptance of a filing.

26. The CT DPUC answer complains that the ISO has improperly raised new factual issues in its answer that should have been raised in its original filing. CT DPUC points out contradictions in the ISO's answer, *i.e.*, Long Island cannot provide capacity resources to Connecticut compared to what was said in the LICAP proceeding. CT DPUC contends that the ISO improperly attempts to foreclose all challenges to the IC Requirements determination in this proceeding or in the LICAP proceeding. Specifically, during the LICAP proceeding, the CT DPUC states that the ISO opposed any analysis of price impacts arising from ISO's IC Requirements with regard to its proposed LICAP demand curve. CT DPUC contends that the Commission should not accede to the ISO's efforts to avoid any consideration of the significant impact that increases in IC Requirements will have on LICAP payments.

27. LIPA contends that ISO-NE's treatment of tie benefits associated with the Cross Sound Cable and the 1385 Cable is inconsistent with the Northeastern Power Coordinating Council/NEPOOL Resource Planning Criteria and it reflects a misapplication of the one day in ten years Loss of Load Expectation assessment. LIPA advises that it has in the recent past and will in the future continue to provide reliability benefits to New England. LIPA cites to the NEPOOL-NYISO Emergency Energy Transaction Agreement and states that it is obligated to provide emergency assistance to New England whenever that assistance is needed and when it is available. LIPA requests that the Commission reject the 1800 MW of tie benefits and direct a full hearing or technical conference.

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[12] *ISO New England, Inc.*, 106 FERC ¶ 61,280, *order on reh'g*, 109 FERC ¶ 61,147 (2004), *operations authorized*, 110 FERC ¶ 61,111 (2005).

VI. Discussion

A. Procedural Matters

28. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2004), the notices of intervention and the timely, unopposed motions to intervene serve to make the intervenors that filed them parties to this proceeding. Given the early stage of this proceeding, the absence of any undue prejudice or delay, and their interest in this proceeding, we grant the untimely, unopposed motions to intervene.

29. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2004), prohibits answers to protests and to answers unless otherwise permitted by the decisional authority. We find that good cause exists to allow the various answers because they provide additional information that has assisted in the decision-making process.

B. Analysis

30. We agree with the protestors that request tie-line benefits be set at 2000 MW for the 2005/2006 Power Year. Specifically, ISO-NE's study supports a tie line benefit of 2000 MW for the 2005/2006 Power Year. Conversely, the 1800 MW level was not supported by any study but rather was reached by the PC's consensus vote. We note that, while some participants had suggested that the tie lines between New England and New York have grown weaker, LIPA and CT DPUC note that the ties are stronger with the addition of new direct current lines and new generation resources. Therefore, we will direct ISO-NE to include 2000 MW of tie benefits in the determination of the IC Requirements for the 2005/2006 Power Year.

31. We note that ISO-NE believes that it is not appropriate to change the tie benefit assumptions in this proceeding but rather undertake a comprehensive review of the IC Requirements methodology in the near future. We agree; the ISO-NE's participant review process may recommend any necessary changes on a prospective basis.

32. With respect to the change from EFOR to EFORd, we note that the Commission approved the use of EFORd when it approved the Standard Market Design for New England (SMD NE).[13] EFORd provides the generators with incentives to be available when they are needed. If generators are not available when needed, they provide no reliability benefits to New England, and should not be included in the determination of

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[13] *See New England Power Pool*, 100 FERC ¶ 61,287 at P 12, 96-98 (2002), *order on rehearing*, 103 FERC ¶ 61,304 at P 77 & n.29 (2003).

the IC Requirements. Accordingly, we will deny the protests regarding EFORd. The Commission believes that it is both reasonable and consistent to approve its use here.

33. We note that the IC Requirements are inputs to the LICAP determinations and issues related to the LICAP determinations, and the rates applied to LICAP requirements should be addressed in that proceeding. With respect to the issue of resource adequacy, we agree with ISO-NE that in light of the ISO's Tariff and the Participants Agreement the ISO has the authority to file and that we have the authority to accept the ISO's proposed IC Requirements for the 2005/2006 Power Year.

34. Accordingly, as modified by the assumed 2000 MW of tie benefits, we will accept the proposed IC Requirements to become effective on May 1, 2005, as requested. We also dismiss the protests, motions to reject the filing, and requests for hearing.

The Commission orders:

(A) ISO-NE's proposed IC Requirements for the 2005/2006 Power Year, as modified, are hereby accepted for filing effective on May 1, 2005, as discussed in the body of this order.

(B) ISO-NE is hereby directed to reflect 2000 MW of tie benefits in its determination of the IC Requirements for the 2005/2006 Power Year, as discussed in the body of this order.

By the Commission.

(S E A L)

Linda Mitry,
Deputy Secretary.