

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

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

Devon Power LLC, *et al.*

Docket Nos. ER03-563-039  
EL04-102-002

ORDER ON COMPLIANCE FILING

(Issued November 8, 2004)

1. On July 2, 2004, ISO New England Inc. (ISO-NE) submitted a compliance filing in accordance with the Commission's directives in a June 2, 2004 Order.<sup>1</sup> The June 2 Order considered an ISO-NE compliance filing that proposed to establish a locational installed capacity (LICAP) mechanism in New England. In that order, the Commission directed ISO-NE to submit a further filing addressing the Commission's proposal to create a separate, import-constrained installed capacity (ICAP) region for Southwest Connecticut (SWCT). Additionally, the Commission instituted an investigation and paper hearing in Docket No. EL04-102-000 regarding whether a separate energy load zone should also be implemented for SWCT, and whether it should be established in advance of the implementation of the LICAP mechanism. ISO-NE's July 2 compliance filing (July 2 Filing) responds to these directives. In this order, the Commission accepts ISO-NE's compliance filing and amends its earlier LICAP proposal to include a separate SWCT ICAP region and corresponding energy load zone. This order benefits customers by helping to ensure that generating capacity is appropriately valued based on its location, allowing existing generators to recover their costs while also providing an incentive to invest in new transmission infrastructure and capacity resources.

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<sup>1</sup> *Devon Power LLC, et al.*, 107 FERC ¶ 61,240 (2004) (June 2 Order), *order on rehearing* to be issued contemporaneously with the instant order on compliance filing.

## I. Background

2. The procedural history of these proceedings is fully described in the June 2 Order, and need not be fully recounted here.<sup>2</sup> In short, this proceeding was initiated on February 26, 2003, when Devon Power LLC, Middletown Power LLC, Montville Power LLC, Norwalk Power LLC and NRG Power Marketing Inc. (collectively NRG) filed, pursuant to section 205 of the Federal Power Act (FPA),<sup>3</sup> four cost-of-service reliability-must-run (RMR) agreements covering generating capacity in the Connecticut and SWCT designated congestion areas. The RMR agreements were negotiated between NRG and ISO-NE in accordance with New England Power Pool (NEPOOL) Market Rule 17.3 to provide compensation for generating units necessary for reliability in SWCT and Connecticut, after NRG contended that the recently-approved New England Standard Market Design (NE-SMD) would not provide adequate compensation to the units covered by the contracts.

3. In a series of orders on these and other New England RMR agreements submitted for filing, the Commission rejected the widespread use of RMR agreements as a default tool to provide cost recovery to generating facilities that must run to ensure reliability because the units' cost-of-service under such contracts are recovered through payments made outside of the market.<sup>4</sup> These orders directed ISO-NE to establish, on an interim basis, new bidding mechanisms (called Peaking Unit Safe Harbor (PUSH) bidding) to provide those generators an opportunity to recover their costs through the market. To develop a replacement for the PUSH mechanism, the Commission directed ISO-NE to file, by March 1, 2004, a mechanism establishing a LICAP market or regional deliverability requirements, "so that capacity within [designated congestion areas] may be appropriately compensated for reliability."<sup>5</sup>

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<sup>2</sup> *See id.* at P 5-8.

<sup>3</sup> 16 U.S.C. § 824d (2000).

<sup>4</sup> *Devon Power LLC, et al.*, 102 FERC ¶ 61,314 (2003) (March 25 Order); *Devon Power LLC, et al.*, 103 FERC ¶ 61,082 (2003) (April 25 Order); *PPL Wallingford Energy LLC*, 103 FERC ¶ 61,185 (2003) (May 16 Order); *Devon Power Company, et al.*, 104 FERC ¶ 61,123 (July 24 Order); *PPL Wallingford Energy LLC, et al.*, 105 FERC ¶ 61,324 (2003) (December 22 Order) (collectively, PUSH Orders).

<sup>5</sup> April 25 Order at P 37.

4. On March 1, 2004, ISO-NE made a compliance filing in accordance with the Commission's directives. In that filing, ISO-NE proposed to establish a LICAP market in New England, beginning on June 1, 2004. Under the proposal (which is more fully described in the June 2 Order), separate ICAP requirements would be established in four regions to take account of transmission constraints: Maine, Connecticut, Northeastern Massachusetts/Boston (NEMA/Boston), and the remainder of New England (Rest of Pool). Load serving entities that are responsible for procuring ICAP would be limited in the amount of capacity they could procure from outside the region in which they are located by capacity transfer limits set by ISO-NE, based on certain planning criteria. Additionally, ISO-NE proposed to utilize a demand curve to set the amount of ICAP required and the price in each region, based on certain administratively-determined parameters. ISO-NE proposed to phase in the demand-curve over a five-year period in import-constrained regions to avoid price shock, and also proposed price caps and transition payments to low capacity factor generators during the phase-in period. Additionally, the proposal included the use of Capacity Transfer Rights, a financial instrument that would allow market participants to hedge ICAP congestion costs.

5. In the June 2 Order, the Commission agreed with two broad concepts in ISO-NE's proposal. First, the Commission approved of the establishment of separate ICAP regions, but expressed concern that the specific regions proposed by ISO-NE did not adequately reflect the areas in New England where infrastructure investment is needed most. Specifically, the Commission was concerned that the regions proposed, including a single Connecticut region, did not properly address the need for new infrastructure in SWCT, where significant reliability problems have been identified. As a result of these documented reliability issues, the Commission stated that it believed a separate SWCT ICAP region could be appropriate, and directed ISO-NE to submit a further filing in Docket No. ER03-563-030 addressing whether the Commission should revise the LICAP proposal to create a separate import-constrained SWCT ICAP region.

6. Additionally, the Commission noted ISO-NE's statement that it would be necessary to create a separate SWCT energy load zone for pricing energy if a separate SWCT ICAP region were established. The Commission stated that a separate energy load zone in SWCT could have significant benefits for the region, even in advance of the implementation of the LICAP mechanism. As a result, pursuant to section 206 of the FPA,<sup>6</sup> the Commission instituted an investigation and paper hearing in Docket No. EL04-102-000 regarding whether a separate energy load zone should be created for SWCT, and whether it should be implemented in advance of the implementation of LICAP. The

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<sup>6</sup> 16 U.S.C. § 824e (2000).

Commission directed ISO-NE to address these issues within 30 days, and permitted interested parties to intervene and file responses to ISO-NE's filing within 21 days of the date ISO-NE made its filing.

7. The Commission agreed with ISO-NE's overarching proposal to use a demand curve as part of the LICAP mechanism. The Commission found, however, that ISO-NE had not justified the specific parameters it chose to determine the slope and height of the demand curve, and set these parameters for hearing procedures. The June 2 Order also set for hearing ISO-NE's proposed method for calculating capacity transfer limits for each ICAP region and its proposed allocation of capacity transfer rights.

8. Finally, the June 2 Order delayed the implementation date for the LICAP mechanism to January 1, 2006, to allow market participants in import-constrained regions additional time to develop plans for needed infrastructure, and to provide an incentive for already planned projects to be completed before the realization of full LICAP rates. Additionally, the Commission rejected the transition mechanisms proposed by ISO-NE.

## **II. ISO-NE's July 2 Filing**

9. The filing made by ISO-NE states that it would be appropriate to establish a separate ICAP region for SWCT, which would include both the SWCT region and Norwalk/Stamford region that had been separately identified in Regional Transmission Expansion Plan studies prepared by ISO-NE.<sup>7</sup> The ISO states that such a region is warranted because of the differences in reliability and the significant locational ICAP price differences between SWCT and the rest of Connecticut. ISO-NE also states that a separate energy zone must be created that is no larger than the new SWCT ICAP region. ISO-NE also states that it is not necessary to implement the energy zone prior to the implementation of LICAP and that both should be implemented simultaneously.

10. Specifically, ISO-NE's July 2 Filing evaluated the amount of capacity available in different sub-regions and the amount of capacity that could be imported and calculated estimated capacity prices to provide a basis of comparison between the regions. The analysis used scenarios for Connecticut as a whole, SWCT and a "Rest of Connecticut" ICAP region (comprising the remaining portion of Connecticut if SWCT were carved

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<sup>7</sup> The SWCT and Norwalk Sub-areas were identified as having reliability concerns that are distinct from the rest of Connecticut. The report questions the ability of the existing infrastructure in the SWCT and Norwalk region to reliably support projected loads. See [http://www.iso-ne.com/smd/transmission\\_planning/Regional\\_Transmission\\_Expansion\\_Plan/RTEP\\_2003/Toc57098405](http://www.iso-ne.com/smd/transmission_planning/Regional_Transmission_Expansion_Plan/RTEP_2003/Toc57098405).

out). Using regional planning criteria for loss of load probability of one day in ten years, ISO-NE determined the capacity requirements for each region and then calculated the amount of capacity that must be located within each region (local sourcing requirement), taking into account transmission constraints while maintaining the one day in ten year criteria. The local sourcing requirement represents the point at which transmission limits prevent capacity from outside the region from being used to maintain the one day in ten year criteria.

11. ISO-NE calculated the local sourcing requirement under two conditions, labeled “at criteria” and “as is”.<sup>8</sup> This sets up a range of possible local sourcing requirements for the LICAP regions, based on “at criteria,” a more restrictive assumption of the amount of capacity that can be imported from the remainder of NEPOOL into Connecticut, or the “as is” assumption, under which the pool is able to supply whatever quantity is needed by the import constrained region.

12. The result of this analysis, according to ISO-NE, shows that under the more restrictive “at criteria” assumptions, SWCT is deficient in capacity (i.e., it fails to meet the one day in ten loss of load probability requirement) compared to the rest of Connecticut, which has nearly 14 percent more capacity available than needed to meet the loss of load probability requirement. Under the “as-is” analysis, when the capacity transfer limits are increased, ISO-NE states that reliability differences persist between SWCT and the rest of Connecticut; SWCT is estimated to have 6 percent more capacity than is required, while the rest of Connecticut is estimated to have 22 percent more capacity than required. The ISO states that the differences in reliability between SWCT and the rest of Connecticut are significant enough to justify the establishment of a separate ICAP region.

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<sup>8</sup> “At criteria” simulates the condition that there is just enough capacity within the entire New England region to meet the reliability standards and that there is no surplus, resulting in less pool-wide capacity available to be transferred into the constrained region. “As-is” assumption allows the constrained region to rely on the pool-wide capacity by increasing the transfer capability to the capability needed by the constrained region resulting in higher capacity transfer limits. Whether the LICAP market should use the “at criteria” or “as-is” assumptions when developing the local sourcing requirement is an issue that was set for hearing in the June 2 Order.

13. ISO-NE also presents an analysis showing the price differences between SWCT and the rest of Connecticut under a range of assumptions for the transfer limits and the demand curve.<sup>9</sup> The ISO developed indicative regional clearing prices for all of Connecticut, SWCT, and Connecticut with SWCT excluded. ISO-NE states that the predicted price separation between the sub-regions (in excess of several hundred percent) reflects the reliability differences between SWCT and the rest of Connecticut. The ISO states that the data presented suggest that a separate ICAP region is warranted for SWCT.<sup>10</sup>

14. ISO-NE also presents a discussion of the transmission projects planned for SWCT and southern New England. The ISO states that establishing a SWCT ICAP region will properly price the value of capacity in SWCT and should help justify and expedite the essential transmission projects underway in that area.

15. Addressing the energy load zone issue raised by the June 2 Order, ISO-NE states that a separate energy load zone must be created for SWCT if a SWCT ICAP region is created. It states that if energy zones are larger than ICAP regions, contracting would be complicated for load serving entities because they would have to enter into different combinations of contracts to serve load, leading to reduced market liquidity. ISO-NE also notes that different zones would require a costly and time-consuming redesign of the ISO settlement system. ISO-NE recommends establishing a separate energy zone for SWCT simultaneously with, and not before, the implementation of establishing a separate ICAP region for SWCT. First, ISO-NE states that, as a practical matter, it could not implement a separate SWCT energy zone much before implementation of a SWCT ICAP region. ISO-NE also notes that the earliest that a separate energy zone could be implemented would be late summer or early fall of 2005, which is only a few months before the required LICAP implementation date of January 1, 2006. Additionally, ISO-NE references its report on nodal pricing, stating that current energy price differentials alone do not justify establishing a separate SWCT energy zone at the present time if a separate ICAP region is not also created.<sup>11</sup>

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<sup>9</sup> ISO-NE states that because the parameters of the LICAP demand curve were set for hearing by the June 2 Order, it developed the range of prices represented by the demand curve used by the New York Independent System Operator (NYISO) as well as the demand curve included in the March 1, 2004 LICAP filing.

<sup>10</sup> July 2 Filing at 18.

<sup>11</sup> See Report on Alternatives to Full Nodal Pricing for Load in New England, filed July 1, 2004 in Docket No. ER02-2330-029.

### **III. Notice of Filing, Protests, Comments and Intervention**

16. Notice of ISO-NE's compliance filing was published in the *Federal Register*,<sup>12</sup> with comments, protests or interventions due on or before July 23, 2004. The entities filing timely motions to intervene or notices of intervention in the Docket No. EL04-102-000 proceedings are listed in Appendix A to this order. Motions to intervene out-of-time were filed by the Fitchburg Gas and Electric Light Company and Unitil Energy Systems, Inc., and the NRG Companies. Answers to the compliance filing were filed by the Connecticut Department of Public Utility Control, jointly with several other Connecticut Parties (CT DPUC *et al.*),<sup>13</sup> and the Long Island Power Authority (LIPA). Comments were filed by PPL EnergyPlus, LLC, PPL Wallingford Energy LLC, PPL Maine, LLC, and PPL Great Works, LLC (collectively PPL), Select Energy, Inc. (Select), and TransCanada Power Marketing Ltd. (TransCanada). Protests were filed by the Connecticut Municipal Electric Energy Cooperative (CMEEC), Dominion Resources, Inc. Dominion Energy Marketing, Inc., and Dominion Nuclear Connecticut, Inc. (collectively Dominion), the NEPOOL Industrial Customer Coalition (NICC), and PSEG Energy Resources & Trade LLC (PSEG).

17. On August 10, 2004, ISO-NE filed a motion for leave to file answer to protests, answers and comments, and answer. Additionally, on August 9, 2004, Lake Road Generating Company, L.P. (Lake Road) filed an answer to LIPA's response to the compliance filing. On August 17, 2004, LIPA filed a motion for leave to file a response and response to the answers of ISO-NE and Lake Road. On August 25, 2004, CMEEC filed an answer to ISO-NE's answer.

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<sup>12</sup> 69 Fed. Reg. 42,151 (2004).

<sup>13</sup> The other Connecticut parties jointing the answer are the Connecticut Office of Consumer Counsel, Richard Blumenthal, Attorney General of the State of Connecticut, Northeast Utilities Service Company, and the Southwestern Area Commerce and Industry Association of Connecticut.

#### IV. Discussion

##### A. Procedural Matters

18. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure,<sup>14</sup> the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to the Docket No. EL04-102-000 proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure,<sup>15</sup> the Commission finds good cause to grant the untimely, unopposed motions to intervene out-of-time, given the interests in this proceeding of the parties filing the motions and the absence of any undue prejudice or delay. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure<sup>16</sup> prohibits an answer to a protest and answer unless otherwise ordered by the decisional authority. We will accept the answers because they have provided information that assisted us in our decision-making process.

##### B. SWCT ICAP Region

19. The CT DPUC *et al.*, CMEEEC, Dominion and TransCanada all filed responses objecting to ISO-NE's support of the creation of a separate import-constrained ICAP region for SWCT, and objecting to the analysis ISO-NE performed in reaching the conclusion that a SWCT region is appropriate. CT DPUC *et al.* argue that the Commission should reject ISO-NE's filing "because it is legally and factually insufficient as a foundation for determining that a separate SWCT region would produce just and reasonable rates."<sup>17</sup> Specifically, CT DPUC *et al.* first contend that ISO-NE has failed to establish that a separate SWCT ICAP region would provide an incentive to build additional generation. ISO-NE cannot make this case, according to CT DPUC *et al.*, because the transmission infrastructure in the region cannot accommodate any new generation until Phases I and II of the planned Southwest Connecticut Reliability Project are completed.<sup>18</sup> As a result, asserts CT DPUC *et al.*, LICAP charges imposed on SWCT

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<sup>14</sup> 18 C.F.R. § 385.214 (2004).

<sup>15</sup> 18 C.F.R. § 385.214(d).

<sup>16</sup> 18 C.F.R. § 385.213(a)(2) (2004).

<sup>17</sup> Joint Answer to Compliance Filing of ISO-NE by CT DPUC *et al.* at 2.

<sup>18</sup> *Id.* at 4.

customers before planned upgrades are completed will not result in any increase in resource adequacy or reliability. In a related argument, CT DPUC *et al.* contend that a separate SWCT ICAP region will not send price signals to retail consumers, in part because Connecticut requires that standard offer service rates be equal for ratepayers across the state, with the result that SWCT charges would be passed on to customers outside the area to ensure that standard offer rates remain equal. Second, CT DPUC *et al.* contend that there are several flaws in ISO-NE's analysis which undermine its conclusion that a separate SWCT ICAP region is appropriate. In particular, they take issue with ISO-NE's use of "untested assumptions and analyses," including the use in its analysis of four scenarios using two demand curves and two pricing assumptions, with a further "at criteria" assumption that there is no excess capacity that is available for import to Connecticut from the rest of New England. Additionally, CT DPUC *et al.* dispute ISO-NE's statement that application of the New York ISO's demand curve to New England is appropriate because of their geographic proximity, arguing that with the exception of similar weather characteristics, "geographic proximity is not a sufficient proxy for demand-side factors."<sup>19</sup>

20. CMEEC, in a similar argument to that advanced by CT DPUC *et al.*, contends that the Commission should reject ISO-NE's filing because its analysis is insufficient to support a separate SWCT ICAP region. It notes that no factual affidavits or witnesses support ISO-NE's assumptions, and that the analyses in the July 2 Filing are based on criteria that are currently in hearing. Alternatively, CMEEC protests ISO-NE's filing, and asserts that it should be consolidated with the ongoing hearing procedures ordered in the June 2 Order. Specifically, CMEEC argues in its protest that ISO-NE, in performing its analyses supporting a SWCT ICAP region, failed to take into account the impact that proposed transmission upgrade projects in that area will have on the need for a SWCT region. Additionally, CMEEC asserts that ISO-NE's analyses failed to examine the possible effects on future transmission projects of the predicted price signal created by a SWCT ICAP region, and failed to support ISO-NE's contention that a SWCT LICAP region will help expedite already planned transmission upgrades in SWCT. According to CMEEC, the higher prices in a SWCT ICAP region, and resulting lower prices in the remaining Rest of Connecticut region, could negatively impact transmission upgrades in the Rest of Connecticut, including efforts to improve transmission between Connecticut and the rest of New England. In summary, CMEEC states that the creation of a SWCT ICAP region could "serve the pointless objective of 'incentivizing' the development of

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<sup>19</sup> Joint Answer to Compliance Filing of ISO-NE by CT DPUC *et al.* at 11.

infrastructure that is already well on the way to completion, while blunting the ‘signal’ that may be needed to encourage important infrastructure construction in the remainder of Connecticut.”<sup>20</sup>

21. Dominion also protests ISO-NE’s July 2 Filing. It argues that creating a separate SWCT ICAP region would ignore reliability problems facing all of Connecticut, and that “the establishment of a new ICAP region for [SWCT] focuses undue attention on SWCT and creates disincentives to critical new investment outside of SWCT.”<sup>21</sup> Specifically, Dominion notes that ISO-NE’s studies have shown that all existing generation in Connecticut is needed to maintain reliability, not just those generating units in SWCT. Dominion argues that the fact that many of the generating units subject to RMR agreements in Connecticut are located outside of SWCT is evidence that Reliability Compensation Issues exist in the entire state, and not just in SWCT. Dominion asserts that creating a SWCT ICAP region would likely produce capacity prices in the Rest of Connecticut region approaching zero, creating a situation where existing generation in the rest of the state (where reliability problems exist) is inadequately compensated, requiring the continued use of RMR agreements.<sup>22</sup> Furthermore, it asserts, capacity prices in the Rest of Connecticut region approaching zero would send the inaccurate price signal that there is excess generation, thus not producing an incentive to build new generation in that region, and incorrectly informing generators that units may be retired. Like CT DPUC *et al.* and CMEEC, Dominion objects to ISO-NE’s analyses in the July 2 Filing because they did not take into account planned transmission system upgrades which, according to Dominion, will eliminate the price differentials upon which ISO-NE’s conclusions are based. Additionally, Dominion states that the higher ICAP prices a separate SWCT region would produce will not induce investors to build new generation because the planned transmission improvements will eliminate those price differentials, making the higher ICAP prices too short lived to allow a generator to recover its capital investment.

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<sup>20</sup> Motion to Intervene, Request for Rejection of Filing or, in the Alternative, Protest and Request for Initiation of Hearing Procedures and for Consolidation of CMEEC at 14.

<sup>21</sup> Motion to Intervene and Protest of Dominion at 8.

<sup>22</sup> Dominion also contends that creating a separate SWCT ICAP region will result in customers in the Rest of Connecticut region paying the costs of RMR agreements that support reliability in both regions because most of the generating units under RMR agreements are located outside of SWCT, and the costs of such agreements are currently allocated to network load in the applicable reliability region.

Also, Dominion contends, like CT DPUC *et al.*, that the price signals created by a separate SWCT region cannot incent new generation in the area because the transmission infrastructure cannot support the addition of new generation.

22. TransCanada, while not supporting or opposing the creation of a separate SWCT ICAP region, states that the analysis offered by ISO-NE is insufficient to support the establishment of such a region. Along with CT DPUC *et al.*, CMEEC, and Dominion, TransCanada also argues that ISO-NE should have considered and described the impact that planned transmission upgrades would have on transfer capability and system reliability in SWCT. TransCanada requests that the Commission require ISO-NE to supplement its compliance filing with a status report on transmission upgrades underway in Connecticut, to allow the Commission to consider whether sufficient transmission to remedy reliability problems is near completion.

23. LIPA, PPL and Select each support the establishment of a separate SWCT ICAP region. LIPA states that ISO-NE's analysis supporting a SWCT ICAP region is based on reliability and price considerations, and is thus consistent with the principles outlined in the Commission's recent order setting up a framework for considering Reliability Compensation Issues.<sup>23</sup> Select also states that it supports ISO-NE's analysis, noting the reliability and price differentials shown in the compliance filing. Select states that these differentials warrant the creation of a separate ICAP region to send more efficient price signals and encourage capacity resource and transmission infrastructure upgrades. Select cautions, however, that approving ISO-NE's analysis in the compliance filing should not be construed as advance approval of the method by which ISO-NE should develop other parameters of the LICAP market, including the resource requirements and demand curve pricing.

24. In its answer, ISO-NE states that its filing provided analytical support demonstrating that a separate SWCT ICAP region is appropriate. ISO-NE notes that it used a model that simulates the uncertainty and random nature of future peak loads and resource availability to calculate ICAP requirements. Also, ISO-NE reiterates that by using the "at criteria" and "as-is" assumptions, it determined a range of capacity transfer limits between regions and identified price level differences between Connecticut and SWCT under two possible demand curves. ISO-NE asserts that this analysis represents a range of possible outcomes from the issues that were set for hearing by the June 2 Order. ISO-NE argues that the results of its analysis show substantial price differences between SWCT and the rest of Connecticut at a range of possible hearing outcomes, consistent

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<sup>23</sup> *PJM Interconnection, L.L.C.*, 107 FERC ¶ 61,112 (2004) (PJM Order).

with the reliability differences, which supports the creation of a separate SWCT ICAP region. Further, ISO-NE states that the significance of its analysis is the magnitude of the price differences between SWCT and the rest of Connecticut under the varied assumptions used, and that this provides a reasonable basis for the Commission to conclude that a separate SWCT region is appropriate. Additionally, ISO-NE responds to the protests of CT DPUC and Dominion that the ISO has not shown that a separate ICAP region will produce new generation investment by stating that a separate region will properly value both generation and transmission. Having separate regions will provide regional price signals which would encourage location of new generation and retention of existing generation as well as encourage distributed generation, demand side resources, and transmission infrastructure.

25. Commission Response. ISO-NE's July 2 Filing has justified the appropriateness of a separate ICAP region for SWCT. The purpose of creating a separate ICAP region for SWCT is to ensure that the price of capacity in that area reflects its actual need for investment and demand response as compared to the rest of the state. We are persuaded that the need for investment and demand response differs between SWCT and the rest of Connecticut. As shown in the July 2 Filing, there are significant transmission constraints into SWCT that result in a substantial difference in the balance of supply and demand between SWCT and the rest of Connecticut. Under "at criteria" assumptions, SWCT is deficient in capacity while the rest of Connecticut has 14 percent more capacity than needed to meet the one-day-in-ten years reliability requirement. Under "as-is" assumptions, while the capacity in both regions exceed this minimum reliability requirement, SWCT's capacity relative to the minimum requirement is still 16 percent less than there is in the rest of Connecticut, with SWCT having 5 percent more than the minimum requirement and the rest of Connecticut having 22 percent more than the requirement. It is reasonable to conclude that such substantial differences in the supply-demand balance are likely to produce different values for ICAP in the two areas. Of course, the specific price differences would depend on the specific demand curve and assumptions regarding transmission capacity, both matters that are being examined at hearing.

26. ISO-NE has demonstrated that under a wide range of assumptions, there will be a substantial ICAP price difference between SWCT and the rest of Connecticut due to the reliability problems that currently exist. To determine the local sourcing requirements under LICAP, this analysis included testing scenarios that encompass the range of outcomes that are likely to result from the hearing process under way to determine the amount of capacity that can be transferred between regions. The analysis also took into account a range of potential ICAP prices by using two demand curves that represent a range of likely outcomes from the hearing process regarding demand curve parameters. While several parties attack ISO-NE's analysis, no party provided an alternative analysis

that would contradict ISO-NE's conclusions. The ICAP price differentials shown in ISO-NE's analysis, together with the known reliability problems specific to SWCT articulated in the June 2 Order,<sup>24</sup> justify a separate ICAP region. Therefore, we direct ISO-NE to establish an import-constrained ICAP region for SWCT that is separate from the rest of Connecticut, to be effective on the effective date of the LICAP market.

27. Several intervenors argue that ISO-NE has not shown that a separate SWCT ICAP region will improve the supply picture in SWCT because existing transmission limitations prevent additional generation from being built. Additionally, many intervenors argue that a separate region will not produce the desired price signals on the demand side because Connecticut law requires equal standard offer service rates to all retail customers in the state. We disagree on both of these issues. Preliminary, we note that the LICAP market structure, which places an appropriate value on capacity based on its location, is intended to adequately compensate generators necessary to maintain reliability. Previously, these generators have been forced to rely on out-of-market RMR contracts to recover their costs.

28. Regarding the effects on the supply side of a SWCT ICAP region, intervenors' comments focus too narrowly. Even if the existing transmission infrastructure in SWCT cannot support additional generation capacity, higher ICAP prices in a separate SWCT region would encourage existing generation capacity not to retire. Indeed, this proceeding was initiated because generators needed for reliability planned to retire due to inadequate revenues under the current market design. Also, higher ICAP prices in SWCT would create greater incentive for the planned transmission upgrades to be completed promptly. These upgrades, once completed, would permit greater generation capacity to be located within SWCT as well as greater imports of energy from outside SWCT. In short, by ensuring adequate compensation to generators through the market, the LICAP mechanism will provide incentives not only for construction of new generation, but for development of new infrastructure (including needed transmission improvements) generally. Regarding the effects of a separate SWCT region on the demand side, intervenors' comments also focus too narrowly. Even if Connecticut law

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<sup>24</sup> June 2 Order at P 49 – 50.

requires equal standard offer *retail* prices across the state,<sup>25</sup> *wholesale* buyers (i.e., load serving entities) would face higher ICAP prices in SWCT than in the rest of the state. As a result, load serving entities will have the incentive to take steps to encourage demand-side response from retail customers within SWCT. Moreover, higher ICAP prices in SWCT would encourage greater participation from SWCT loads in ISO-NE's demand response programs.

29. With regard to the arguments raised by the parties that the assumptions used by ISO-NE in its analysis are flawed because they rely on parameters awaiting the outcome of the hearing, and that the scenario that uses the NYISO demand curve is not applicable to New England, we note that the analysis presented by ISO-NE partly relied on demonstrating the price differences that would exist between proposed zones. The prices that resulted from the ISO's analysis are not intended to represent the actual prices that the LICAP market would produce, and ISO-NE recognized that the issues are set for hearing. The result of the analysis justifies the creation of a SWCT ICAP region, because the price differences shown will be present under a range of likely outcomes of the hearing. Additionally, as stated by ISO-NE, the analysis did not suggest that the prices for LICAP will necessarily be the same as those in New York. Also, as we have already noted above, intervenors did not present any alternatives regarding the assumptions to be used, nor did they present any methods to analyze the issue differently than ISO-NE, which bolsters our conclusion that the analysis presented is not flawed.

30. Some of the parties also contended that ISO-NE's analysis is flawed because it failed to include the impact of planned transmission projects. These upgrade projects are not complete, and in fact, the process underway indicates that there is much uncertainty as to when they might be completed.<sup>26</sup> Therefore, it would be inappropriate to include these uncompleted projects in the analysis, since the result would be an analysis that does not represent actual conditions. Likewise, it would be inappropriate to include planned

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<sup>25</sup> The July 26, 2004 Joint Answer of CT DPUC *et al.* states that to ensure that all Connecticut retail customers pay the same retail standard offer service rates, Connecticut regulators will be required to pass along the added costs from LICAP to customers outside of SWCT. We note that in accomplishing this pass through, Connecticut regulators do not have the authority to require one load serving entity (or other wholesale buyer) to pay for the LICAP costs of another wholesale buyer. The allocation of wholesale electricity costs is a matter within the Commission's exclusive jurisdiction.

<sup>26</sup> See Compliance Report of ISO New England Inc., filed in Docket Nos. ER03-563-043, EL04-104-003 (August 31, 2004).

projects in the price of capacity until the projects are completed and providing tangible benefits to the system. As the Commission has stated previously, the objective of the LICAP mechanism is to value capacity appropriately to provide appropriate compensation to generators, thereby incenting needed investment in new transmission infrastructure and capacity. Including proposed and planned projects when establishing ICAP regions and setting the price of capacity would not produce this result, which is necessary to ensure that planned projects are completed. The impact of any future transmission upgrades on the SWCT ICAP region once it is established is discussed later in this order. Additionally, in response to Dominion's argument that a separate SWCT ICAP region will reduce the price of ICAP in the rest of the state, and therefore provide incorrect market signals, we note that the price of capacity under the LICAP mechanism will represent its value on a locational basis. A lower price in the rest of Connecticut is not necessarily an incorrect market signal. That lower price will simply reflect the need for capacity in the Rest of Connecticut ICAP region, and to the extent additional capacity is needed the price in that ICAP region will rise to reflect such need.

### **C. New SWCT Energy Load Zone**

31. CT DPUC *et al.* argue that ISO-NE has not supported its claim that a separate energy load zone would be necessary in SWCT if the area were also established as a separate ICAP region, and has not adequately quantified the costs of establishing a separate energy load zone. They contend that this lack of evidence, and ISO-NE's position that a separate energy load zone should not be implemented in advance of the LICAP mechanism, require that the issue of a separate SWCT energy load zone be set for hearing.

32. CMEEC also asserts that ISO-NE has not adequately supported the necessity of a separate energy load zone for SWCT, because ISO-NE's sole basis for claiming that a separate zone is necessary is "that 'energy zones cannot be larger than the LICAP Regions.'"<sup>27</sup> CMEEC notes that in New England today, there are multiple energy zones and only a single ICAP region, meaning that they are not coterminous. Additionally, CMEEC objects to ISO-NE's statement that differing energy zones and ICAP regions would require a costly redesign of its settlement system, asserting that "[s]oftware development should not dictate market design,"<sup>28</sup> and that ISO-NE should have provided specific facts regarding the expense of maintaining differing ICAP and energy zones.

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<sup>27</sup> *Id.*, citing July 2 Filing at 21.

<sup>28</sup> *Id.* at 15-16.

33. Dominion also argues that a separate energy load zone for SWCT is unnecessary, and contends that creating such a zone could have unintended consequences. Dominion notes that ISO-NE's recently completed report on full nodal pricing concluded that energy load zones should not be altered because the pricing differentials would disappear once transmission upgrades were complete, making the benefits of the altered zones only temporary. Dominion also states that the creation of a separate SWCT energy load zone will be costly, and could disrupt current state pricing policies and impact the bilateral power supply arrangements already put in place by load serving entities to provide standard offer service.

34. PSEG argues that a separate energy load zone in SWCT is not necessary to implement a separate ICAP region, and that ISO-NE "has greatly overstated its case for a separate energy Load Zone."<sup>29</sup> PSEG contends that maintaining the current energy load zones would not create administrative inconvenience for load serving entities, as ISO-NE asserts. PSEG notes that while load serving entities would need to procure energy and capacity separately, the process of procuring these resources is not necessarily related, and load serving entities in Connecticut are already entering into separate supply and capacity contracts for transitional standard offer service.<sup>30</sup>

35. PPL supports the creation of a separate SWCT energy load zone "at the earliest date possible," stating that it believes the establishment of a separate ICAP region and energy load zone in SWCT can help improve existing market conditions and assure that New England will attract and maintain sufficient generation.<sup>31</sup> Select also argues that a separate energy load zone for SWCT is appropriate, noting the reliability and price differentials presented in ISO-NE's compliance filings.

36. In its answer, ISO-NE states that the energy load zone analysis demonstrated that a separate energy load zone for SWCT would be beneficial. The ISO also reiterated that modifications to the settlement software system required by an ICAP region that is smaller than the energy load zone would be substantially more extensive than those required to create "co-extensive" energy and capacity zones.

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<sup>29</sup> Motion to Intervene and Protest of PSEG at 5.

<sup>30</sup> *Id.* at 6-7.

<sup>31</sup> Motion to Intervene and Comments of PPL at 2, 4-6.

37. Commission Response. ISO-NE has justified the creation of a separate SWCT energy zone that will match the SWCT ICAP region once the LICAP market becomes effective. As ISO-NE states, having an ICAP region that is smaller than the energy zone would require a costly and time-consuming redesign of the ISO settlement system. Moreover, we agree that contracting would be complicated for load serving entities once the LICAP mechanism is implemented because they would need to enter into different combinations of contracts for LICAP and energy to serve load. While Dominion and PSEG argue that such contracting will not necessarily be made more difficult by creating an ICAP region that is smaller than the energy load zone, they have not made the case that having a separate SWCT energy load zone will be detrimental to the market or unduly expensive to create and maintain. Additionally, while the Commission does not doubt that load serving entities are capable of navigating ICAP regions and energy load zones of different sizes, making them the same size should improve overall market performance. We are thus persuaded to permit ISO-NE to establish a separate SWCT energy load zone effective the same day the LICAP mechanism becomes effective, by January 1, 2006.

38. Additionally, ISO-NE stated that although creating a separate energy load zone for SWCT will provide benefits to the energy market, those benefits alone do not justify the establishment of the zone in advance of LICAP. This responds to one question that the Commission asked in the June 2 Order, regarding whether a separate SWCT energy load zone should be implemented prior to the implementation of the LICAP market. The Commission raised this question because we initially believed that implementation of a separate energy load zone early would provide better price signals during the interim period before LICAP is implemented. ISO-NE's analysis has shown that these benefits are not substantial enough to justify establishing the zone early. Additionally, ISO-NE states that it could not practically implement a separate SWCT energy zone much before January 1, 2006. As a result, we conclude that it would be advantageous to implement both the separate ICAP region and the separate energy load zone on the same date.

#### **D. "Rest of Connecticut" ICAP Region and Later Merger of Regions**

39. LIPA raises concerns with regard to the designation of the remaining portion of Connecticut as a fifth ICAP region should a SWCT ICAP region be implemented. LIPA notes that it has been able to access generation in the Rest of Pool region through the Cross Sound Cable interface at New Haven, Connecticut, and is concerned that a "Rest of Connecticut" ICAP region, in addition to a SWCT ICAP region, could create a barrier to accessing other regions and burden wholesale transaction between the Rest of Pool and adjacent external regions. LIPA argues that ISO-NE has failed to meet its burden to justify the creation of a "Rest of Connecticut" ICAP region, should SWCT be established as a separate region.

40. CT DPUC *et al.* argue that if a SWCT ICAP region is established, it must be narrowly tailored and of a limited duration. They contend that the Commission must ensure that LICAP charges in SWCT will be reduced to near zero, as in the Rest of Pool region, once planned transmission upgrades are complete and physical transmission barriers are eliminated. CT DPUC *et al.* and NICC state that the Commission should build into the LICAP mechanism conditions for merging the SWCT ICAP region back into the Connecticut ICAP region once transmission upgrades are completed.

41. In its answer, ISO-NE states in response to LIPA that the June 2 Order only suggested that SWCT be removed from the rest of Connecticut. ISO-NE states that it does not believe that the Commission intended the rest of Connecticut to be combined with the Rest of Pool region. Additionally, ISO-NE contends that LIPA has given no reason why the rest of Connecticut should be combined with the Rest of Pool, and reiterates that the creation of an unnecessary region poses little risk, whereas the omission of a region will result in cross subsidization.<sup>32</sup> Further, ISO-NE states in response to CT DPUC *et al.* that to the extent new transmission increases the capacity transfer limits between regions, price differences will decrease on their own. The ISO also notes the uncertainties surrounding whether the proposed transmission projects will be completed as currently planned.

42. Lake Road also filed an answer to LIPA's arguments, arguing that the position LIPA takes here opposing a "Rest of Connecticut" ICAP region is contrary to the position it initially took regarding ISO-NE's filing and is inconsistent with the June 2 Order. Additionally, Lake Road argues that LIPA's argument that the remaining portion of Connecticut should be merged with the Rest of Pool ICAP region is outside the scope of the paper hearing established by the Commission, and ignores the price differentials between the potential "Rest of Connecticut" region and Rest of Pool region shown in ISO-NE's filing. LIPA, in an August 17, 2004 response to the answers of ISO-NE and Lake Road, states that ISO-NE and Lake Road misinterpret the June 2 Order as ruling on the correct number of ICAP regions that should be established in Connecticut, and that Lake Road's assertion that LIPA had previously advocated for the remainder of Connecticut to remain an ICAP region is false.

43. Commission Response. In the June 2 Order, the Commission directed ISO-NE to consider whether its LICAP proposal should be revised to include a separate, import-constrained ICAP region for SWCT. Our intent was that such a region would be an additional region, and not replace the Connecticut ICAP region initially proposed. Had the Commission intended ISO-NE to analyze the effects of making only SWCT an ICAP

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<sup>32</sup> Answer of ISO-NE at 24.

region, and placing the remainder of Connecticut in the Rest of Pool region, it would have clearly directed ISO-NE to perform such an analysis. Therefore, ISO-NE correctly interpreted our order when it included a “Rest of Connecticut” region in its analysis. Furthermore, maintaining an ICAP region for the portions of Connecticut outside of SWCT appropriately recognizes that reliability problems, albeit of a lesser magnitude, exist in the portions of Connecticut outside of SWCT. Maintaining a separate ICAP region for these areas will ensure that capacity located in the state will be appropriately valued, thereby reducing the need for RMR agreements, and also providing incentives to construct new transmission facilities that will increase the ability of Connecticut, as a whole, to access generation in the Rest of Pool.

44. Additionally, LIPA has not persuaded us that the Rest of Connecticut region will create barriers to accessing generation in the Rest of Pool region or in adjacent regions such as New York. LIPA’s response provides no analysis showing the barriers it claims will be created by a Rest of Connecticut ICAP region and the Commission does not find that the creation of additional LICAP regions will place any impediment on LIPA’s ability to access generation in the Rest of Pool. The purpose of the ICAP regions is to ensure that capacity is appropriately valued and compensated based on its location within the system, with the result that existing generators are adequately compensated through the market and an accurate price signal is sent to incent new investment. The price signals sent by a region where infrastructure investment is needed are in the control of NEPOOL participants. CT DPUC *et al.* suggest that the SWCT LICAP region be abolished once upgrades are complete and prices are near zero. The ICAP regions will become less relevant as transmission upgrades are installed, because these upgrades will alleviate capacity transfer limits and allow for greater delivery of capacity between regions, resulting in a convergence of prices between adjoining regions. As a result, it is preferable to initially maintain more regions rather than fewer, to ensure that the LICAP mechanism provides proper incentives for infrastructure development. It is premature, however, to rule now on how the ICAP regions should be reconfigured in the event that capacity transfer limits are alleviated by new infrastructure.

45. Furthermore, the Commission believes that maintaining the LICAP regions will help to ensure that the system maintains the ability to deliver energy. Maintaining a SWCT ICAP region after capacity prices there equal prices in the Rest of Connecticut or in the Rest of Pool regions will serve to provide the needed incentive to maintain the deliverability improvements that are achieved. Should the system degrade again in the future, there will be a structure in place to allow capacity prices within the region to rise, appropriately valuing that capacity and creating incentive for investment. Therefore, we will not implement a mechanism that would cause the SWCT LICAP region to disappear

solely because planned near-term transmission upgrade projects are completed. As noted above, however, the Commission will carefully consider any proposals to alter or eliminate the zones made through the appropriate NEPOOL process.

**E. Alternative ICAP Regions**

46. In its protest, NICC reiterates its objection to the LICAP mechanism filed by ISO-NE in response to the April 25 Order. NICC argues that if the Commission elects to proceed with the LICAP market, it should establish the Norwalk-Stamford Regional Transmission Expansion Plan sub-area as a separate LICAP region and energy load zone, instead of SWCT. NICC argues that establishing a Norwalk-Stamford region and energy zone will better respond to the Commission's concerns regarding the appropriateness of price signals and corresponding stimulation of investment and infrastructure development. NICC notes that ISO-NE's own analyses regarding full nodal pricing in New England have shown noticeable price differences among the Norwalk-Stamford region, SWCT, and the rest of Connecticut. Also, NICC states that a Norwalk-Stamford ICAP region and energy zone would recognize that planned transmission upgrades in Connecticut will alleviate transmission constraints in that area last. Alternatively, NICC requests that the Commission establish the three ISO-NE Regional Transmission Expansion Plan sub-areas (Norwalk-Stamford, SWCT, and Rest of Connecticut) as ICAP regions and energy load zones. NICC states that these sub-areas are established transmission planning tools based on known grid interfaces, and generally reflect the actual transmission transfer capabilities of the system in Connecticut.

47. ISO-NE, in its answer, argues that NICC's suggestion that the Commission create a Norwalk-Stamford region is beyond the scope of the compliance filing directed by the June 2 Order.

48. Commission Response. The Commission agrees with ISO-NE that the creation of a separate Norwalk-Stamford ICAP region is beyond the scope of the investigation and paper hearing established in the June 2 Order. Based on the evidence presented to the Commission during its initial consideration of ISO-NE's LICAP proposal, the Commission established the instant investigation and paper hearing to address whether the Commission should revise ISO-NE's LICAP proposal to create a separate import-constrained ICAP region for SWCT, and whether a separate energy load zone should be created for SWCT.<sup>33</sup> In the prior proceedings, no party (including NICC) argued that Norwalk-Stamford should constitute a separate ICAP region. The current record before the Commission supports the establishment of a separate SWCT ICAP region (including

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<sup>33</sup> June 2 Order at P 51.

Norwalk-Stamford). NICC cites a report filed by ISO-NE in Docket No. ER02-2330-029 that states that energy prices in the Norwalk/Stamford area of Connecticut are statistically different than the prices in the rest of Connecticut. The report also states that annual average differences are quite small - no greater than \$1.51/MWh. In these circumstances, the Commission will not create a Norwalk/Stamford region on the basis of the record here. Because the geographic scope of SWCT includes Norwalk/Stamford in its entirety, reliability will not be compromised. Should the New England market participants find that the Norwalk/Stamford region is necessary to provide needed price signals, through either further analysis or actual market experience under LICAP, the Commission will carefully consider proposals made through the appropriate NEPOOL procedures.

**F. Remaining Issues Raised by the Parties**

49. CT DPUC *et al.* asserts that LICAP fees paid by SWCT customers should not be paid to generators who cannot physically deliver electricity to the region. They suggest that these fees should be held in escrow for use in a Request for Proposal process to attract a mixture of new generation resources to the region, including permanent generation and demand-side resources.

50. CT DPUC *et al.*, CMEEC, and Dominion each argue, either as an alternative to rejecting ISO-NE's compliance filing outright or as a primary course of action, that the question of whether to implement a separate SWCT ICAP region should be consolidated and set for hearing with the other LICAP issues set for hearing in the June 2 Order. They each argue that the issues raised by ISO-NE's compliance filing are intertwined with the issues already set for hearing by the Commission, thus making consolidation and hearing procedures necessary. PSEG, while stating that it agrees that a separate SWCT ICAP region may be appropriate, contends that the Commission should defer action on the compliance filing until the pending hearing procedures have concluded, because the outcome of that hearing will impact the pricing differential presented in the compliance filing.

51. In its answer, ISO-NE responds that the creation of a separate SWCT ICAP zone should be decided on this record by the Commission, just as the demarcation of other ICAP regions have been accepted by the Commission. ISO-NE goes on to state that while protesters criticize the use in its analysis of demand curve and capacity transfer limit parameters that are set for hearing, they have presented no factual evidence that would preclude the Commission from making a determination on the current record of whether SWCT should be a separate ICAP region and energy load zone.

52. Commission Response. In response to CT DPUC *et al.*'s suggestion that LICAP fees paid to generators who cannot deliver to SWCT be held in escrow, we note that CT DPUC *et al.* does not state how this provision will help to achieve the goals of the LICAP market. The load serving entities operating in SWCT will need to procure capacity either from within the SWCT region, or from outside the area within the limits of the capacity transfer limits. The LICAP market will help to ensure that capacity that does not meet these constraints is not contracted for in an effort to meet ICAP requirements, which would threaten reliability.

53. Finally, with regard to the request that we set certain issues raised in the July 2 Filing for hearing,<sup>34</sup> we note that in this order, the Commission directs ISO-NE to establish a separate SWCT ICAP region and energy load zone, and thus will not consolidate these issues with the ongoing hearing procedures. The earlier pleadings raising the issue of establishing a separate SWCT ICAP region and energy load zone, combined with the record developed in this investigation and paper hearing, have provided the Commission with a sufficient factual record to rule on the issues presented. While the Commission agrees that the issue of establishing SWCT as a separate ICAP region is related to the issues set for hearing, we believe that establishing that region in this order will assist the ongoing hearing procedures by providing the final configuration of regions that will impact the capacity transfer limit calculation and capacity transfer rights allocation methodologies set for hearing. We do not believe, however, that the outcome of the hearing will affect the analysis regarding the need for a separate SWCT ICAP region. As noted above, ISO-NE used a broad range of assumptions in its analysis supporting a separate SWCT ICAP region that cover a wide range of possible hearing outcomes. While ISO-NE could not have presented analyses covering all possible outcomes from the hearing procedures, its broad analysis convinces the Commission that a separate SWCT ICAP region will be justified regardless of the result that is reached in the ongoing hearing.

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<sup>34</sup> The June 2 Order directed a hearing to determine the demand curve parameters, the proper method for calculating capacity transfer limits, and the appropriate method for determining the amount and allocation of capacity transfer rights.

The Commission orders:

ISO-NE is hereby directed to establish a separate SWCT ICAP region and energy load zone, for implementation on the date the LICAP mechanism is implemented in New England, as discussed in the body of this order.

By the Commission. Commissioner Kelly not participating.

( S E A L )

Linda Mitry,  
Deputy Secretary.

**Appendix A**

Boston Generating, LLC  
Connecticut Municipal Electric Energy Cooperative  
Connecticut Office of Consumer Counsel  
Consolidated Edison Energy, Inc.  
Dominion Resources, Inc.  
Dominion Energy Marketing, Inc.  
Dominion Nuclear Connecticut, Inc.  
Duke Energy North America, LLC  
Lake Road Generating Company, LP  
Long Island Power Authority  
Milford Power Company, LLC  
NEPOOL Industrial Customer Coalition  
New England Power Pool Participants Committee  
Northeast Utilities Service Company on behalf of the NU Operating Companies  
PPL EnergyPlus, LLC  
PPL Wallingford Energy, LLC  
PPL Maine, LLC  
PPL Great Works, LLC  
PSEG Energy Resources & Trade LLC  
Richard Blumenthal, Attorney General for the State of Connecticut  
Select Energy, Inc.  
Southwestern Area Commerce and Industry Association of Connecticut, Inc.  
TransCanada Power Marketing Ltd.  
The United Illuminating Company  
USGen New England, Inc.