

126 FERC ¶ 61,090  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Acting Chairman;  
Sudeen G. Kelly, Marc Spitzer,  
and Philip D. Moeller.

Maine Public Utilities Commission

Docket No. EL07-38-000

v.

ISO New England Inc.

ORDER DENYING COMPLAINT

(Issued February 3, 2009)

1. This order addresses a complaint filed on February 27, 2007,<sup>1</sup> as amended on September 17, 2007, and September 25, 2008,<sup>2</sup> by the Maine Public Utilities Commission (Maine Commission), in which the Maine Commission seeks to replace the current and proposed capacity cost (CC) component of the rate for providing reactive power supply and voltage control service (reactive service) in Schedule 2 of ISO New England Inc.'s (ISO-NE) open access transmission tariff (OATT) with its CC Rate Deadband proposal.<sup>3</sup> The Maine Commission contends that the CC Rate component of Schedule 2 is unjust and unreasonable because it produces a double recovery of capital costs by generators when combined with the payments provided to generators under the Forward Capacity Market (FCM) settlement agreement.<sup>4</sup> As discussed below, the Commission will deny the complaint.

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<sup>1</sup> The February 27, 2007 complaint was corrected on February 28, 2007.

<sup>2</sup> All references herein to the "complaint" refer to the September 25, 2008 revised amended complaint unless otherwise noted.

<sup>3</sup> This CC component of Schedule 2 is referred to as the CC Rate component.

<sup>4</sup> *Devon Power, LLC*, 115 FERC ¶ 61,340 (2006) (*Devon Power*). The FCM settlement agreement provides that fixed payments will be made to all installed capacity during a transition period (FCM transition payments) beginning December 1, 2006, and ending June 1, 2010, at which point payments from Forward Capacity auctions will commence. *Id.* P 30.

## I. Background

2. In Opinion No. 440,<sup>5</sup> the Commission approved a method presented by American Electric Power Service Corp. (AEP) to compensate generators for providing reactive power. AEP identified three components of a generation plant related to the production of reactive power: (1) the generator and its exciter, (2) accessory electric equipment that supports the operation of the generator-exciter, and (3) the remaining total production investment required to provide real power and operate the exciter. Because these plant items produce both real and reactive power, AEP developed an allocation factor to sort the annual revenue requirements of these components between real and reactive power production.<sup>6</sup> Subsequently, the Commission determined that all generators should use the AEP method when seeking to recover reactive power costs.<sup>7</sup>

3. The Commission later issued an order accepting a proposal by PJM Interconnection, LLC (PJM) that would allow non-affiliated generators to be compensated for providing reactive power.<sup>8</sup> The Commission explained that a transmission owner must compensate a non-affiliated generator for providing reactive power to the extent that the transmission owner compensates an affiliated generator for providing reactive power.<sup>9</sup>

4. In Order No. 2003,<sup>10</sup> the Commission required generators to maintain a power factor range of 0.95 leading (absorbing) and 0.95 lagging (supplying), with the understanding that the transmission provider could establish a different power factor

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<sup>5</sup> *Am. Elec. Power Serv. Corp.*, Opinion No. 440, 88 FERC ¶ 61,141 (1999).

<sup>6</sup> The factor for allocating reactive power, developed by AEP, is  $Mvar^2$  divided by  $MVA^2$ , where  $Mvar$  is megavolt amperes reactive capability and  $MVA$  is megavolt amperes capability at a power factor of 1.

<sup>7</sup> *WPS Westwood Generation, LLC*, 101 FERC ¶ 61,290, at 62,167 (2002).

<sup>8</sup> *PJM Interconnection LLC*, Docket No. ER00-3327-000 (Sept. 25, 2000) (unpublished letter order).

<sup>9</sup> *Michigan Elec. Transmission Co.*, 97 FERC ¶ 61,187, at 61,853 (2001) (*METC*).

<sup>10</sup> *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146 (2003), *order on reh'g*, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160, *order on reh'g*, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171 (2004), *order on reh'g*, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005), *aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007).

range under certain circumstances. The Commission also determined that the transmission provider must compensate the interconnection customer for reactive power during an emergency when the interconnection customer provides reactive power outside the power factor range. In Order No. 2003-A, the Commission clarified that if a transmission provider pays its own or its affiliated generators for reactive power within the established range, it must also pay the interconnection customer.<sup>11</sup>

5. In order to maintain transmission voltages within acceptable limits, ISO-NE may direct Qualified Generator Reactive Resources to produce or absorb reactive power, that is, to provide reactive service. These qualified resources are compensated for such reactive service under Schedule 2 of the ISO-NE OATT. More specifically, the qualified resources are compensated for providing reactive power as well as for the associated energy costs of providing the reactive service. Moreover, these generation facilities are compensated for their capability of providing such reactive service.

6. The compensation methodology under Schedule 2 consists of four cost components: the fixed CC Rate component and three variable components. The CC Rate component is a negotiated New England-wide rate for all VAR-capable resources. It is designed and intended to compensate qualified resources for their fixed capital costs related to the installation and maintenance of equipment necessary to provide reactive power. The first variable component, the lost opportunity component, compensates generators for the value of lost opportunities in the energy market when they are directed to reduce their real power output to provide more reactive power. Next, the cost of energy consumed component compensates generators for the cost of energy they consume to provide reactive power support. Finally, the cost of energy produced component (referred to as the PC component) addresses circumstances in which a generator is directed by ISO-NE to come online or to increase its output above its economic loading point in order to provide reactive power. The PC component also compensates the generator for the difference between the locational marginal price (LMP) and its offer price for each hour the generator provides reactive power, where the LMP is lower than the offer price.

7. Both the Forward Capacity Market and the interim transition payments are intended to provide the revenues needed by generators to keep them in operation to preserve reliability.<sup>12</sup> More specifically, the Commission has found that the Forward Capacity Market construct, when fully implemented after June 2010, will provide a

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<sup>11</sup> Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160 at P 416.

<sup>12</sup> See, e.g., *ISO-NE 2004 Annual Markets Report* at 111-12, available at [http://www.iso-ne.com/markets/mkt\\_anlys\\_rpts/annl\\_mkt\\_rpts/2004/2004\\_annual\\_markets\\_report\\_.pdf](http://www.iso-ne.com/markets/mkt_anlys_rpts/annl_mkt_rpts/2004/2004_annual_markets_report_.pdf).

market-based mechanism to appropriately value capacity resources based on their location, satisfying cost-causation principles.<sup>13</sup> The forward-looking nature of the Forward Capacity Market will provide appropriate signals to investors when new infrastructure resources are needed, giving sufficient lead time to allow that such infrastructure be put into place before reliability is sacrificed.<sup>14</sup> The locational component of the Forward Capacity Market will ensure that new infrastructure is added to where reliability problems are most imminent. Furthermore, during the transition period, fixed payments will be paid to all installed capacity. These payments are intended to serve as a bridge to the Forward Capacity Market and are not locational-based. All suppliers, regardless of type (e.g., fossil-fueled, nuclear, etc.) or ability to provide reactive service, will receive the same transition payments, although these payments will be netted against Reliability-Must-Run payments, as well as adjusted to account for outages. The Commission has found that transition payments serve as a reasonable transitory mechanism that enables the New England region to shift to the Forward Capacity Market.<sup>15</sup>

8. On December 29, 2006, ISO-NE and New England Power Pool (NEPOOL) jointly filed with the Commission a proposal to increase the CC Rate component of the Schedule 2 rate.<sup>16</sup> On February 28, 2007, the Commission issued an order in Docket No. ER07-397-000<sup>17</sup> that found, *inter alia*, that transition payments do not compensate resources for their reactive power capabilities because they are below the cost of new entry.<sup>18</sup> However, the Commission also stated that it was concerned that double recovery can occur during the first Forward Capacity Auction since the payments equal the cost of new entry. Accordingly, the Commission required ISO-NE to implement, prior to the commencement of the first Forward Capacity Auction commitment year, beginning June

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<sup>13</sup> *Devon Power*, 115 FERC ¶ 61,340 at P 65 & n.73 (citing *PJM Interconnection, L.L.C.*, 107 FERC ¶ 61,112, at P 19-20 (2004); *PJM Interconnection, L.L.C.*, 115 FERC ¶ 61,079, at P 49-51 (2006) (*PJM Interconnection*)).

<sup>14</sup> See *PJM Interconnection*, 115 FERC ¶ 61,079 at P 67-72.

<sup>15</sup> *Devon Power*, 115 FERC ¶ 61,340 at P 65, 75, 102.

<sup>16</sup> *ISO New England Inc.*, Transmittal Letter and Filing, Docket No. ER07-397-000 (filed Dec. 29, 2006).

<sup>17</sup> *ISO New England Inc.*, 118 FERC ¶ 61,163 (2007) (February 28, 2007 Order). A request for rehearing of this order dealing with the same double recovery issue has been pending, along with the instant complaint, as the parties were attempting to resolve the matter through negotiations.

<sup>18</sup> February 28, 2007 Order, 118 FERC ¶ 61,163 at P 30.

1, 2010, tariff provisions to ensure that resources eligible for CC payments under Schedule 2 for providing reactive service do not receive double compensation.<sup>19</sup>

## II. The Complaint

9. The Maine Commission's September 25, 2008 revised amended complaint supplants its original, February 27, 2007 complaint, as well as its amended September 17, 2007 complaint. In its complaint the Maine Commission contends that the CC Rate component of Schedule 2, when combined with revenues resulting from implementation of the FCM settlement agreement, results in a double recovery of capital costs associated with the generating equipment used to provide energy and reactive service, and thus is unjust and unreasonable. The Maine Commission requests that the Commission order ISO-NE to substitute its CC Rate Deadband proposal (i.e., that the Schedule 2 CC rate will provide compensation only for capability to provide reactive service outside the 0.95 leading to 0.95 lagging power factor range), which, it claims, avoids such alleged double recovery.

10. According to the Maine Commission, the FCM settlement agreement provides for several billion dollars in capacity payments to generators in the transition period alone, and these payments compensate generators for their investment in generation equipment used to generate energy as well as to provide reactive service. The Maine Commission argues that, because these FCM payments allegedly already provide a compensatory revenue stream, it is reasonable to eliminate the CC Rate component from Schedule 2 of the OATT.

11. The Maine Commission states that Order No. 2003-A makes clear that generators are not entitled to payment for providing reactive service within the so-called deadband or bandwidth (i.e., power factor range of 0.95 leading to 0.95 lagging). The Maine Commission cites *Calpine Oneta Power, L.P.* for the proposition that, while a regional transmission organization or an independent system operator may choose to allow compensation, a generator is not entitled to the compensation except when the transmission provider compensates its own affiliated generators for reactive power within that range.<sup>20</sup> The Maine Commission proffers a new approach to this compensation scheme because it claims that there is double recovery of capital costs from the

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<sup>19</sup> *Id.*

<sup>20</sup> Complaint at 14-15 (citing *Calpine Oneta Power, L.P.*, 116 FERC ¶ 61,282, at P 26 (2006) (*Calpine*)).

implementation of the FCM settlement agreement and the CC Rate component of Schedule 2.<sup>21</sup>

12. The Maine Commission maintains that its CC Rate Deadband proposal is a reasonable remedy for the purported double recovery of capital costs. By this proposal, the Maine Commission asks that “the Commission order ISO-NE to modify the CC [Rate] component such that it will provide compensation only for capability to provide reactive service *beyond* the level the generator is required to provide under Order Nos. 2003 and 2003-A.”<sup>22</sup> In addition to curtailing the alleged double recovery of capital costs for the same equipment, the Maine Commission contends that this proposal will compensate those generators that have invested in equipment that provides reactive support outside the required power range. The Maine Commission concedes that it proposed the CC Rate Deadband within ISO-NE and that, when put to a vote, stakeholders rejected the proposal.<sup>23</sup>

### **III. Notice and Responsive Pleadings**

13. Notice of the February 27, 2007 complaint filed by the Maine Commission was published in the *Federal Register*, 72 Fed. Reg. 10,201-02 (2007), with interventions and protests due on or before March 19, 2007. On March 15, 2007, the Maine Commission and ISO-NE jointly filed a motion to hold the complaint in abeyance. Parties filed status

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<sup>21</sup> *Citing Calpine*, 116 FERC ¶ 61,282 at P 50 (expressing Commission’s willingness to consider new approaches).

<sup>22</sup> Complaint at 12.

<sup>23</sup> Complaint at 10-11 (citing original February 27, 2007 Complaint, Attachment E at 2). The proposed language to implement the CC Rate Deadband reads:

The ‘Base VAR Rate’ shall be zero for reactive support provided by generators between a .95 leading and a .95 lagging power factor. For power factors below .95 leading or .95 lagging, the ‘Base VAR Rate’ shall be \$2.32/kVAR-yr commencing January 1, 2007. The .95 power factor exclusion shall not apply to non-generator sources of reactive support. The Base VAR Rate shall be examined no later than July 1, 2011 to determine whether the Base VAR Rate is still appropriate or whether it should be changed commencing January 1, 2012.

February 27, 2007 Complaint, Attachment E at 2.

reports and requests for extension of time for comments up until the September 25, 2008 revised amended complaint.

14. Following the September 25, 2008 revised amended complaint, on October 3, 2008, the Commission's Deputy Secretary granted a motion jointly filed on October 2, 2008, by Mirant Energy Trading, LLC, Mirant Canal, LLC, and Mirant Kendall, LLC (collectively, Mirant); BG Energy Merchants, LLC, BG Dighton Power, LLC, Lake Road Generating, L.P., and MASSPOWER; NRG Power Marketing Inc., Connecticut Jet Power LLC, Devon Power LLC, Middletown Power LLC, Montville Power LLC, Norwalk Power LLC, and Somerset Power LLC (collectively, NRG Companies); and Millennium Power Partners, L.P. requesting an extension of time for comments until October 13, 2008. The notice extended the comment date to and including October 14, 2008.

15. Motions to intervene and notices of intervention were filed by: Bridgeport Energy, LLC; Casco Bay Energy Company, LLC; Central Maine Power Company; Millennium Power Partners, L.P.; NRG Companies; Mirant; NSTAR Electric Company (NSTAR); NU Companies;<sup>24</sup> National Grid USA;<sup>25</sup> Calpine Corporation; PPL EnergyPlus, LLC, PPL Wallingford Energy LLC, and PPL Maine LLC; BG Energy Merchants, LLC, BG Dighton Power, LLC, Lake Road Generating, L.P., and MASSPOWER; FPL Energy, LLC, on behalf of its subsidiaries in ISO-NE;<sup>26</sup> Massachusetts Department of Telecommunications and Energy; Connecticut Department of Public Utility Control; the Attorney General of Rhode Island, Division of Public Utilities and Carriers; the Maine Office of the Public Advocate; and the Attorney General of Massachusetts.

16. Motions to intervene with comments were filed by: Bangor Hydro-Electric Company (Bangor); Dominion Resources Services, Inc. (Dominion); NSTAR; NEPOOL; the New England Conference of Public Utility Commissioners (NECPUC) and the Maine

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<sup>24</sup> The NU Companies include: The Connecticut Light and Power Company, Western Massachusetts Electric Company, and Public Service Company of New Hampshire.

<sup>25</sup> National Grid USA stated that it is filing on behalf of its NEPOOL participants, namely, New England Power Company, Massachusetts Electric Company, The Narragansett Electric Company, and Granite State Electric Company.

<sup>26</sup> FPL's subsidiaries in ISO-NE include: FPL Energy Cape, LLC; FPL Energy Maine Hydro LLC; FPL Energy Seabrook, LLC; FPL Energy Wyman, LLC; FPL Energy Wyman IV, LLC; FPLE Rhode Island State Energy, L.P.; and Northeast Energy Associates, a limited partnership (collectively, FPL).

Office of the Public Advocate (Maine Public Advocate); the Attorney General of Massachusetts; and Indicated Suppliers.<sup>27</sup> NEPOOL subsequently filed supplemental comments.

**A. Answer and Comments Opposing Complaint**

17. On October 14, 2008, ISO-NE filed an answer to the complaint. In its answer, ISO-NE maintains that, in addition to being unsupported, the allegations in the complaint are premised on the erroneous assumption that payments that certain generators will receive for capacity service under the Forward Capacity Auctions are designed to compensate generators for providing reactive service,<sup>28</sup> “as though they arose from a cost-of-service regime” rather than from a negotiated market-based context.<sup>29</sup> ISO-NE maintains that the payments under the Forward Capacity Auctions and for reactive service provide compensation for two distinct products, one capacity-based and the other capability-based.<sup>30</sup> Further, ISO-NE explains that “the VAR CC Rate paid to Qualified Reactive Resources bears no relationship to the costs associated with the equipment of a particular generator,” but rather is a negotiated rate designed to compensate qualified resources for their capability to provide reactive service within the power factor ranges required in interconnection agreements under Schedules 22 and 23 of the ISO-NE OATT.<sup>31</sup>

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<sup>27</sup> Indicated Suppliers include: Mirant Energy Trading, LLC, Mirant Canal, LLC, and Mirant Kendall, LLC; Boston Generating, LLC, Mystic I, LLC, Mystic Development, LLC, and Fore River Development; Dominion Resources Services, Inc., on behalf of Dominion Energy Marketing, Inc., Dominion Energy New England, Inc. and Dominion Nuclear Connecticut, Inc.; Casco Bay Energy Company, LLC and Bridgeport Energy, LLC; FPL Energy, LLC, on behalf of FPL Energy Cape, LLC, FPL Energy Maine Hydro LLC, FPL Energy Seabrook, LLC, FPL Energy Wyman, LLC, FPL Energy Wyman IV, LLC, FPLE Rhode Island State Energy, L.P., and Northeast Energy Associates, a limited partnership; Millennium Power Partners, L.P.; and NRG Power Marketing, LLC, Connecticut Jet Power LLC, Devon Power LLC, and Somerset Power LLC.

<sup>28</sup> Answer at 3.

<sup>29</sup> *Id.* at 11-12.

<sup>30</sup> *Id.* “VAR” or “Var” stands for “Volt-ampere-reactive.” Reactive power is measured in Vars. (In contrast, real power is measured in watts.)

<sup>31</sup> *Id.* at 7.

18. ISO-NE states that the Maine Commission has provided “no empirical evidence or theoretical support” for the assertion of double compensation and thus has not carried its burden of proof. In addition, according to ISO-NE, the evidence shows that the Maine Commission’s proposed solution, the CC Rate Deadband proposal, “would systematically under-compensate” qualified resources that clear the Forward Capacity Auction.<sup>32</sup>

19. In support, ISO-NE proffers a “game-theoretic analysis” of the data from the first Forward Capacity Auction, which it states reveals the expected behavior of qualified resources in light of various payment structures—and which it contends confirms the appropriateness of maintaining separate payments under the Forward Capacity Auction and under the CC Rate component in Schedule 2 for reactive service. ISO-NE explains that the question such analysis poses is, given the rules of the capacity auction, the potential competitors, and the opportunity set of a generator offering into the Forward Capacity Auction, “What is such a generator’s best bidding strategy?”<sup>33</sup> ISO-NE states that its analysis reveals that such generating resources have an incentive to formulate their bids to account for revenues from the CC Rate component, in light of the fact that resources which do not provide reactive service (e.g., demand resources and imports) do not need to recover the costs of such reactive service.<sup>34</sup> ISO-NE explains that if a new generating resource hoping to sell capacity in the Forward Capacity Auction did not adjust its offer to net out expected revenues from the sale of all other services, including reactive service, this resource would be at a competitive disadvantage in the auction. ISO-NE concludes that the analysis shows that qualified resources’ revenue-maximizing strategy is to net expected CC Rate component revenues against their bids and offers.<sup>35</sup>

20. ISO-NE emphasizes that not all resources are capable of providing reactive service in the Forward Capacity Auction, which negates even a theoretical prospect of over-compensation through the Forward Capacity Auction payments and CC Rate component. This is because, ISO-NE explains, the CC Rate component is “a negotiated value and is not set equal to, nor is it intended to recover, the cost of service of any particular generating Resource.”<sup>36</sup>

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<sup>32</sup> *Id.* at 10-11.

<sup>33</sup> *Id.* at 14.

<sup>34</sup> *Id.* at 18-19.

<sup>35</sup> *Id.* at 19.

<sup>36</sup> *Id.* at 20.

21. ISO-NE states that generators were unwilling to provide the additional dynamic VAR capability that ISO-NE currently relies on to reliably operate the system without appropriate financial inducements such as the VAR CC Rate. Without such additional dynamic VAR capability, ISO-NE would have to work with transmission owners to install transmission devices, which are normally more expensive and have more limited dynamic response capability than generators. If insufficient VAR capability clears as capacity through the Forward Capacity Market, ISO-NE states that it remains obliged to ensure that the necessary mix of VAR-capable resources is procured and installed. ISO-NE states that consequently, rather than relying on the capacity market to procure the package resource (capacity plus VAR capability), ISO-NE would have to turn to a supplemental procurement scheme to purchase the desired capability. ISO-NE believes that such an approach undoubtedly would be less efficient and more costly than ISO-NE's current approach. ISO-NE takes the position that maintaining the current system of providing separate capacity payments for capacity service and VAR capability payments to Qualified Generator Reactive Resources for VAR service is consistent with the proper market design and, therefore, just and reasonable.

22. With respect to the Maine Commission's CC Rate Deadband proposal, ISO-NE identifies numerous deficiencies. ISO-NE states the CC Rate Deadband proposal is administratively infeasible because the services for which the VAR-capable resources would be paid could not be accurately quantified, because the proposal is inconsistent with the manner in which units are tested to determine their qualified VARs for compensation (over their entire range). ISO-NE states that determining and isolating the particular costs of providing VAR service outside the minimum requirements would pose significant methodological challenges and a new mechanism would have to be added to track units that have cleared in a Forward Capacity Auction to determine which units' payments should be reduced, since not all VAR-capable resources will be participating, much less clearing, in the Forward Capacity Market.

23. Dominion points out that, in its February 28, 2007 Order, the Commission already held that FCM "transition payments do not compensate resources for their reactive power capabilities since they are below the cost of new entry,"<sup>37</sup> which precludes the Maine Commission from arguing that the CC Rate component of Schedule 2 can result in double recovery.

24. NEPOOL contends that the current Schedule 2 provision that pays generators for reactive power capability within a power factor range required by their interconnection agreements is just and reasonable because ISO-NE compensates all such generators on a

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<sup>37</sup> Dominion comments at 5 (citing February 28, 2007 Order, 118 FERC ¶ 61,163 at P 30).

comparable basis, consistent with Commission policy.<sup>38</sup> Like Dominion, NEPOOL contends that the Commission already decided the issue of whether the CC Rate component provides double recovery in the February 28, 2007 Order and, therefore, the Maine Commission's assertion otherwise is inconsistent with Commission precedent and a collateral attack on that finding.<sup>39</sup>

25. Indicated Suppliers aver that the Maine Commission fails to provide any economic analysis or empirical evidence to establish its principal claim of double recovery. Further, Indicated Shippers contend that adopting the Maine Commission's CC Rate Deadband proposal would overturn ISO-NE's decision to compensate generators for providing reactive power services to the transmission grid, including reactive power within the established power factor range. Thus, Indicated Suppliers maintain that the Maine Commission has not shown that Schedule 2 is unjust and unreasonable or demonstrated that its CC Rate Deadband proposal is a just and reasonable alternative to the existing Schedule 2.

26. Indicated Suppliers refer to the affidavit of Robert B. Stoddard, attached to their comments. Mr. Stoddard states that FCM transition payments do not result in double recovery because they are not necessarily fully "compensatory" in the sense implied by the Maine Commission. He states that the FCM transition payments are well below the agreed-to full (or gross) cost of new entry (CONE) and, indeed, are not intended to allow full recovery of capital costs; instead, these payments represent a middle ground between payments derived from estimated long-run prices based on CONE and the inadequate payments under the prior ISO-NE capacity construct, and were part of the negotiated FCM settlement agreement approved by the Commission.

27. Further, Mr. Stoddard points out that, at the time the FCM settlement agreement was negotiated, Schedule 2 already included the CC component. According to Mr. Stoddard, the FCM settlement agreement did not propose the elimination of this CC Rate component, and such removal now would amount to a material change in the compensation package that the parties to the settlement reasonably expect to receive both during the transition and afterwards.

28. Mr. Stoddard states that the Forward Capacity Market was designed so that new capacity resources that seek to clear in the market will have an incentive to bid a price that reflects the minimum revenue needed to support their investment costs, net of other

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<sup>38</sup> NEPOOL Comments at 7 (citing *Calpine*, 116 FERC ¶ 61,282 at P 50 n.62, and February 28, 2007 Order, 118 FERC ¶ 61,163 at P 28)).

<sup>39</sup> *Id.* at 8-9 (citing February 28, 2007 Order, 118 FERC ¶ 61,163 at P 30)).

anticipated revenue streams.<sup>40</sup> Mr. Stoddard argues that, “[b]ecause the VAR-related capital costs can be recovered under Schedule 2, the competitive dynamic of the [Forward Capacity Auction] should result in their exclusion from the offers of either new or existing capacity resources.”<sup>41</sup> Further, Mr. Stoddard concludes that eliminating the CC Rate component would simply lead a new resource to raise its offers to cover those lost CC Rate component payments, “likely leading to the same level of total compensation..., but raising the FCM clearing price payable to all resources should that [resource] be the marginal resource.”<sup>42</sup> Mr. Stoddard cautions that, if a capacity resource that does not have VAR capability (e.g., a demand response resource) sets the auction clearing price, a new VAR-capable resource would not recover its VAR-related capital costs without the CC Rate component of Schedule 2, much less receive double recovery.

29. NSTAR’s comments partially opposing the complaint are directed to an issue that the revised amended complaint no longer raises.

### **B. Comments Supporting Complaint**

30. Bangor states that it supports the complaint, shares the Maine Commission’s concerns regarding double recovery, and also supports the Maine Commission’s CC Rate Deadband proposal.

31. NECPUC and the Maine Public Advocate support the Maine Commission’s complaint. They state that ISO-NE’s position that it does not need to file any tariff provisions to ensure against double recovery, as directed in the February 28, 2007 Order,<sup>43</sup> appears to be based on its “theory” that “generators, with the Schedule 2 capital cost payments already in hand, will reduce their bids in the FCM to net out the Reactive Service capital cost payment as a means of being more competitive.”<sup>44</sup> They argue that a “mathematical theory cannot *ensure* that the entity receiving reactive Schedule 2 revenues will voluntarily deduct these revenues from their bid.”<sup>45</sup> They state that ISO-

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<sup>40</sup> Indicated Suppliers Comments, Stoddard Aff. ¶¶ 10, 12.

<sup>41</sup> *Id.* ¶ 12; *see id.* ¶¶ 15-16 (noting that clearing price is well below the deemed gross CONE and concluding, “This evidence indicates that the FCM has and will continue to lead to competitive outcomes that would prevent generators (old and new) from receiving double capital cost recovery.”).

<sup>42</sup> *Id.* ¶ 16.

<sup>43</sup> February 28, 2007 Order, 118 FERC ¶ 61,163 at P 30.

<sup>44</sup> NECPUC and Maine Public Advocate Comments at 7.

<sup>45</sup> *Id.* at 11 (emphasis in original).

NE appears to incorrectly assume that the equipment used to produce reactive service is not the same as the equipment used to generate electricity, but the equipment is the same.<sup>46</sup> Thus, NECPUC and the Maine Public Advocate conclude that there is no or only a *de minimis* incremental cost of reactive power capability. Further, since the equipment is the same, they conclude that there is no need for a second revenue stream for generators receiving FCM revenues.<sup>47</sup>

32. The Attorney General of Massachusetts cites to the February 28, 2007 Order directing ISO-NE to ensure against such double recovery via tariff provisions and contends that ISO-NE should be precluded from arguing that the Forward Capacity Auction clearing price does not include compensation for the minimum capability to provide reactive service required for generator interconnection (i.e., that the clearing price is not equal to the cost of new entry) as a justification for ISO-NE's failure to implement tariff provisions to ensure there is no double recovery of capital costs. Further, the Attorney General posits that a fair reading of ISO-NE's "model" would lead the Commission to conclude that ISO-NE's estimates are nothing more than "suppositions and assumptions and are not based on the observation of actual data."<sup>48</sup> The Attorney General states that, unless ISO-NE "demonstrates that there are no conditions under which a rational actor will bid VAR capacity costs into the [Forward Capacity Auction], the Commission's concern that there may be double recovery has not been addressed."<sup>49</sup>

33. On October 15, 2008, the Attorney General of Massachusetts submitted a memorandum on the "Interaction of FCM and VAR capacity payments" from Marc D. Montalvo and Jinye Zhao to the ISO-NE Markets Committee, which was inadvertently omitted from the earlier comments in support.

34. On October 29, 2008, the Maine Commission and the Maine Public Advocate filed a joint reply to both ISO-NE's answer and the Indicated Suppliers' comments in which they reiterate their arguments relating to alleged double recovery. Their principal argument is that, contrary to ISO-NE's claim, the CC Rate component was intended to provide compensation for capital costs. According to the Maine Commission and the Maine Public Advocate, ISO-NE's claim rests on the flawed assumption that there is an incremental capability cost of providing reactive service beyond the capital cost of

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<sup>46</sup> *Id.* at 9 (citing *Midwest ISO Transmission Owners*, 122 FERC ¶ 61,305 (2008)).

<sup>47</sup> *Id.* at 9; *see also id.* at 12-13.

<sup>48</sup> Attorney General of Massachusetts Comments at 5.

<sup>49</sup> *Id.* at 5.

providing generation service. They contend that there is no such incremental cost. Thus, they reason that removing the revenue stream from the CC Rate component cannot put VAR-capable resources at a disadvantage with respect to non-VAR-capable qualified resources (e.g., demand response), because there is no incremental—or additional—capability cost to provide reactive service. Further, they dismiss Indicated Suppliers’ reliance argument as “unreasonable” because no such assurance of receiving the CC Rate component is in the FCM settlement agreement. The Maine Commission and the Maine Public Advocate contend that information about actual generator transmission payments from the FCM (to establish their allegation of double recovery) would not have been relevant since the Commission, in determining the justness and reasonableness of the transition payments and the FCM mechanism, did not undertake individual fact-finding proceedings regarding the circumstances of each generator.

### C. Additional Comments in Opposition

35. On November 13, 2008, ISO-NE responded to the reply submitted by the Maine Commission and the Maine Public Advocate. ISO-NE reiterates that the CC Rate component has a compensatory purpose and that “neither the VAR CC Rate nor the [FCM] payments are ‘*cost of service*’ rates based on the costs of the particular generators providing two distinct products—VAR service and capacity.”<sup>50</sup> ISO-NE surmises that the complaint is “based on a faulty notion that the VAR CC Rate cannot be just and reasonable because of cost overlap judged on a phantom cost-of-service basis.”<sup>51</sup> ISO-NE also clarifies a misunderstanding about the recovery of lost opportunity costs, as well as how the price floor has no bearing on the ISO-NE’s game theory analysis. ISO-NE points out that a resource makes its strategic bidding decision before the auction is conducted. Thus, according to ISO-NE, the only safe assumption is that the Forward Capacity Auction will be competitive; therefore, to have a prospect of clearing, the VAR resource must formulate and submit the lowest offer that can cover its costs: a rational resource will net the CC Rate component payments from its offer. ISO-NE states that its game-theoretic analysis admits of no preference for generating resources; rather, it identifies straightforwardly the strong behavior incentive for generating resources to net out the CC Rate component revenues simply in order to develop an auction offer that can be competitive with demand resources that have no VAR capital costs. In fact, ISO-NE asserts, the CC Rate component revenue stream cannot place the demand resource at a disadvantage, since demand resources have no VAR capital costs that they must cover with such revenues. ISO-NE contends that it has complied with Commission directives by conducting such analysis, which has shown that there is no double compensation.

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<sup>50</sup> ISO-NE November 13 Reply at 3 (citing ISO-NE Answer at 21) (emphasis in original).

<sup>51</sup> *Id.*

#### IV. Discussion

##### A. Procedural Matters

36. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2008), timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

37. Rules 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2008), prohibits an answer to an answer unless otherwise ordered by the decisional authority. We will accept the answers of the Maine Commission and the Maine Public Advocate, as well as ISO-NE, because they have provided information that assisted us in our decision-making process.

##### B. Commission Determination

38. The Commission denies the complaint. The Maine Commission has failed to persuade us that the CC Rate component of Schedule 2 produces any unjust or unreasonable double or excess recovery of capital costs for generating equipment used to generate energy and provide reactive service when combined with either transition payments or payments from the Forward Capacity Auctions. Further, we reject the Maine Commission's proposal that the burden be shifted to ISO-NE to "demonstrate[] that there are no conditions under which a rational actor will bid VAR capital costs into the [Forward Capacity Auction]" to address the concern of double recovery.<sup>52</sup> We agree with Indicated Suppliers that the Maine Commission has failed to carry its burden of proof and provide adequate economic or empirical analysis to support its allegations of double recovery. Nor has the Maine Commission shown that its CC Rate Deadband proposal is a just and reasonable alternative to the existing Schedule 2 CC Rate component. On the contrary, we find that adopting the Maine Commission's CC Rate Deadband proposal effectively would overturn ISO-NE's decision to compensate generators (on a comparable basis) for providing reactive power services to the transmission grid, including reactive power within the established power factor range.<sup>53</sup> We discuss the basis of these findings in more detail below.

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<sup>52</sup> Attorney General of Massachusetts Comments at 5.

<sup>53</sup> See *METC*, 97 FERC at 61,853.

**1. Payments under both Schedule 2 and the FCM settlement agreement (transition and FCM auctions) are for separate services and do not result in double recovery of capital costs**

39. We find that ISO-NE and its supporting parties have demonstrated to our satisfaction that capacity payments under the FCM settlement agreement (both during the transition and from the Forward Capacity Auctions) and capability payments for reactive service under Schedule 2 do not result in double recovery of capital costs. First, we emphasize that, these are two distinct services, designed to achieve different purposes. As the Commission has explained in an earlier order, under the FCM construct, the Forward Capacity Auction procures sufficient capacity to meet the Installed Capacity Requirement for the given Capacity Commitment Period. The Installed Capacity Requirement is a resource adequacy standard that reflects the amount of resources needed to meet the reliability requirements defined for the New England Control Area of disconnecting non-interruptible customers, a loss of load expectation of no more than once every ten years.<sup>54</sup> Capacity resources, regardless of type (and whether they are capable of providing reactive service or not), will receive the same Forward Capacity Auction clearing price.<sup>55</sup> In short, Forward Capacity payments are designed to ensure resource adequacy and, in the words of Indicated Suppliers' affiant, Mr. Stoddard, the Forward Capacity Market itself is designed so that new capacity resources that seek to clear in the market have an incentive to bid a price which reflects the minimum revenue needed to support their investment costs, net of other anticipated revenue streams.<sup>56</sup>

40. With respect to the transition payments that precede payments from the Forward Capacity Auctions, the Commission previously addressed this question of alleged double recovery at issue in this complaint and concluded that the "transition payments do not compensate resources for their reactive power capabilities since they are below the cost of new entry."<sup>57</sup> Nothing that Maine Commission has proffered in this complaint persuades us to revisit, much less reverse, this earlier finding. We reiterate that capacity payments that were negotiated as part of the FCM transition period are at rates well below the agreed-to full (or gross) cost of new entry; they are not intended to allow full recovery of capital costs. Thus, as Indicated Suppliers' affiant Mr. Stoddard maintains, the transition payments alone are not necessarily fully "compensatory," and much less result in double recovery of capital costs.

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<sup>54</sup> *ISO New England Inc.*, 125 FERC ¶ 61,102, at P 22 n.17 (2008) (*ISO-NE*).

<sup>55</sup> *Devon Power*, 115 FERC ¶ 61,340 at P 16.

<sup>56</sup> Indicated Suppliers Comments, Stoddard Aff. ¶¶ 10, 12.

<sup>57</sup> February 28, 2007 Order, 118 FERC ¶ 61,163 at P 30.

41. Furthermore, in another earlier order, we found that, with respect to compensation for reactive service, “if generators are asked to provide additional services including VAR support or regulation, they will be compensated for those services through the appropriate ISO tariff or markets, not through the FCM.”<sup>58</sup> Thus, we previously found that reactive service is a unique service the compensation for which is not covered by capacity payments, whether transition payment or auction revenues. Again, nothing in this complaint has persuaded us to reverse our previous determination that the provision of reactive service requires payment separate from, and in addition, to those received in the Forward Capacity Market.

42. The CC Rate component of the second service, reactive service, is a negotiated New England-wide rate for all VAR-capable resources that is designed to compensate qualified resources for their VAR capability to provide reactive service, but not for the costs associated with the equipment of a particular generator. Moreover, the CC Rate component is “a negotiated value and is not set equal to, nor is it intended to recover, the cost of service of any particular generating Resource.”<sup>59</sup> The CC Rate component also provides an appropriate financial inducement for qualified resources to invest in additional dynamic VAR capability, which ISO-NE currently relies on to reliably operate the system.<sup>60</sup>

43. We agree with ISO-NE that the complaint is “based on a faulty notion that the VAR CC Rate cannot be just and reasonable because of cost overlap judged on a phantom cost-of-service basis.”<sup>61</sup> In other words, neither the FCM payments nor the payments under the CC Rate component arise from a traditional cost-of-service methodology, under which specific costs are allocated to a service class to produce a set rate. On the contrary, both the CC Rate component and the FCM payments (both transition and auction) are not “‘*cost-of-service*’ rates based on the costs of the particular generators providing the two distinct products—VAR service and capacity.”<sup>62</sup> Therefore, treating these two payment methodologies as if they were derived from a cost-of-service basis results in misleading, if not inaccurate, conclusions.

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<sup>58</sup>*ISO-NE*, 125 FERC ¶ 61,102 at P 54 (quoting *ISO New England Inc.*, 119 FERC ¶ 61,239, at P 37 (2007)).

<sup>59</sup> ISO-NE Answer at 20.

<sup>60</sup> *Id.* at 26.

<sup>61</sup> ISO-NE November 13 Reply at 3.

<sup>62</sup> *Id.* (citing ISO-NE Answer at 21) (emphasis in original).

**2. Sellers' bidding incentives in the Forward Capacity Auction belie duplication of compensation**

44. Even if we were to accept *arguendo* that the combined revenue streams from the Forward Capacity Market and provision of reactive service create the potential for some double recovery, sellers' bidding incentives in the Forward Capacity Auction make such double recovery highly unlikely. ISO-NE's analysis, based on data from the first Forward Capacity Auction, describes the likely bidding behavior of sellers in the Forward Capacity Auction process with respect to compensation from the CC Rate component. We agree with ISO-NE that any potential for double recovery is sufficiently reduced to ensure that the CC Rate component is just and reasonable. That is, qualified, VAR-capable generating resources have an incentive to reduce their FCM bids by the amount of their net revenues from the CC Rate component, given that resources which do not provide reactive service (e.g., demand resources and imports) do not need to recover the costs of such reactive service.<sup>63</sup>

45. Indicated Suppliers' affiant, Mr. Stoddard, makes a similar point. He explains that the Forward Capacity Market was designed so that new capacity resources that seek to clear in the market will have an incentive to bid a price that reflects the minimum revenue needed to support their investment costs, net of other anticipated revenue streams, including those from providing reactive service.<sup>64</sup> He adds that the competitive dynamic of the Forward Capacity Auction should result in the exclusion of the CC Rate component payments from the offers of either new or existing capacity resources.<sup>65</sup> That is because bidding above this minimum level would result in the supplier pricing itself out of the capacity market at times when being in the market would be profitable. We agree that sellers in a competitive Forward Capacity Auction will have an incentive to submit bids that take into account revenues from the CC Rate component and, as a result, double recovery is not a concern.

**3. FCM payments are part of a negotiated package**

46. At the time the FCM settlement agreement was negotiated, the CC Rate component was already reflected in the rates for reactive service established in Schedule

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<sup>63</sup> ISO-NE Answer at 18-19.

<sup>64</sup> Indicated Suppliers Comments, Stoddard Aff. ¶¶ 10, 12.

<sup>65</sup> *Id.* ¶ 12; *see id.* ¶¶ 15-16 (noting clearing price is well below the deemed gross CONE and concluding, "This evidence indicates that the FCM has and will continue to lead to competitive outcomes that would prevent generators (old and new) from receiving double capital cost recovery.").

2. The FCM settlement agreement did not remove or compromise legitimate payments to qualified resources under Schedule 2 for certain costs related to providing reactive service. Such qualified resources have relied on compensation from the CC Rate component payments, as well as the FCM payments, for the various components related to reactive service. We concur with Indicated Suppliers that removal of the CC Rate component now would amount to a material change in the compensation parties reasonably expected. The Commission does not believe it is just and reasonable to change this piece of the FCM settlement package.

47. We also agree that it is likely that eliminating the CC Rate component would simply lead a new resource to raise its offers to cover those lost CC Rate component payments, “likely leading to the same level of total compensation..., but raising the FCM clearing price payable to all resources should that [resource] be the marginal resource.”<sup>66</sup> We acknowledge, as Indicated Suppliers point out, that if a capacity resource without VAR capability (e.g., a demand response resource) sets the auction clearing price, a new VAR-capable resource would not recover its VAR-related capital costs without the CC Rate component of Schedule 2 and, therefore, would not receive double recovery.

The Commission orders:

The Maine Commission’s complaint is hereby denied, as discussed in the body of this order.

By the Commission. Commission Kelly is concurring with a separate statement attached. Commissioner Kelliher is not participating.

Nathaniel J. Davis, Sr.,  
Deputy Secretary.

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<sup>66</sup> Indicated Suppliers Comments, Stoddard Aff. ¶ 16.



UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Maine Public Utilities Commission

Docket No. EL07-38-000

v.

ISO New England Inc.

(Issued February 3, 2009)

KELLY, Commissioner, *concurring*:

This order addresses a complaint filed by the Maine Public Utilities Commission (Maine Commission). The Maine Commission asserts that the combined revenue stream provided by 1) the capacity cost (CC) component of the rate for reactive service and 2) payments provided under the implementation of the Forward Capacity Market (FCM) Settlement results in generators receiving double recovery for capital costs. Payments provided under the FCM settlement come in two forms: transition payments that are paid until May 2010 and payments based on the FCM auction prices that are paid thereafter.

I believe that the Commission has addressed Maine Commission's concerns over double recovery in both instances. With respect to the transition payments, the Commission has found that transition payments do not compensate resources for their reactive power capabilities because they are below the cost of new entry.<sup>1</sup> With respect to payments resulting from FCM auctions, the Commission required ISO New England to implement, prior to the commencement of the first Forward Capacity Auction commitment year, beginning June 1, 2010, tariff provisions to ensure that resources eligible for CC payments under Schedule 2 for providing reactive service do not receive double compensation.<sup>2</sup>

For these reasons, I respectfully concur with the order.

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Sudeen G. Kelly

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<sup>1</sup> *ISO New England Inc.*, 118 FERC ¶ 61,163 (2007) at P 30.

<sup>2</sup> *Id.*