

125 FERC ¶ 61,313  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

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

NSTAR Electric Company

Docket Nos. ER09-14-000 and  
ER09-14-001

ORDER ON TRANSMISSION INCENTIVES

(Issued December 18, 2008)

1. On October 2, 2008,<sup>1</sup> NSTAR Electric Company (NSTAR) filed pursuant to the Federal Power Act (FPA) section 205<sup>2</sup> and 219<sup>3</sup> an application seeking two return on equity (ROE) incentives for its 345 kV Transmission Reliability Project (345 kV Project) and for three separate transmission projects, the Brook Street, the Carver, and the Barnstable Projects, collectively referred to as the Southeastern Massachusetts Upgrade Projects (SEMA Upgrade Projects). Specifically, NSTAR requests the following: (1) a limited waiver of the December 31, 2008 termination date for the 100 basis point ROE adder established in Opinion No. 489,<sup>4</sup> or alternatively, a 100 basis point ROE adder

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<sup>1</sup> NSTAR filed an errata on October 6, 2008, to correct the requested effective date from December 1, 2008 to December 2, 2008, which was docketed ER09-14-001.

<sup>2</sup> 16 U.S.C. § 824d (2006).

<sup>3</sup> 16 U.S.C. § 824s (2006).

<sup>4</sup> *Bangor Hydro-Electric Co.*, Opinion No. 489, 117 FERC ¶ 61,129 (2006), *order on reh'g*, 122 FERC ¶ 61,265 (2008) (Opinion No. 489 Rehearing Order), *order granting clarification*, 124 FERC ¶ 61,136 (2008).

pursuant to Order No. 679<sup>5</sup> for Phase II of its 345 kV Project; <sup>6</sup> (2) a 100 basis point ROE incentive for the Carver and Barnstable Projects under Order No. 679; and (3) a 46 basis point ROE incentive for use of advanced transmission technologies for the entirety of its 345 kV and Barnstable Projects, and for portions of its Brook Street and Carver Projects.

2. For the reasons discussed below, we grant the request for limited waiver of the December 31, 2008 termination date established in the Opinion No. 489 Rehearing Order for Phase II of the 345 kV Project, deny the request for a 100 basis point ROE incentive for the Carver and the Barnstable Projects because these projects fail to meet the Commission's nexus test established in Order No. 679, deny the request for an ROE incentive for use of advanced transmission technologies for the Brook Street and 345 kV Projects because these projects are completed or nearly completed, and deny the ROE incentive for use of advanced technologies for the Carver and Barnstable Projects.

## **I. Proposal**

### **A. Background**

3. NSTAR is a public utility and a Participating Transmission Owner (TO) in ISO-New England, Inc. (ISO-NE) under the terms of the Transmission Operating Agreement by and among the New England TOs and ISO-NE. NSTAR is engaged in the provision of regulated transmission and distribution services and default electric service. NSTAR's service area includes approximately 1.1 million commercial and residential end-use customers in eastern Massachusetts, including the Boston metropolitan area and extending to the southeast to include much of Cape Cod.

### **B. Description of the Projects**

4. NSTAR states that the 345 kV Project consists of three 345 kV underground transmission lines that together traverse 47 miles in and around Boston.<sup>7</sup> According to NSTAR, this project was needed to maintain the reliability of the existing transmission system in the city of Boston and the surrounding areas beginning in 2006. NSTAR states that Phase I and Phase II of the 345 kV Project were designed as a single project, but

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<sup>5</sup> *Promoting Transmission Investment through Pricing Reform*, Order No. 679, FERC Stats. & Regs. ¶ 31,222, *order on reh'g*, Order No. 679-A, FERC Stats & Regs. ¶ 31,236 (2006), *order on reh'g*, 119 FERC ¶ 61,062 (2007).

<sup>6</sup> NSTAR states that both Phase I of the 345 kV Project and the Brook Street Project each already qualify for a 100 basis point ROE incentive under Opinion No. 489 because the projects entered into service before the December 31, 2008 termination date.

<sup>7</sup> NSTAR's Transmittal Letter at 9 (Transmittal Letter).

Phase I was needed first to address reliability issues and prevent customer service interruptions.<sup>8</sup> NSTAR contends that Phase I of the 345 kV Project consisted of a new switching station and two 345 kV underground transmission lines, one eleven and the other eighteen miles long, which entered into service in October 2006 and April 2007, respectively.<sup>9</sup> NSTAR asserts that when the Phase I transmission lines entered into service, they were the longest 345 kV underground transmission lines in the country.<sup>10</sup> NSTAR claims that Phase II of this project consists of a single eighteen-mile 345 kV underground transmission line and associated equipment, and is expected to be in service by the end of 2008, and all that remains is final testing and any additional work that such testing shows to be necessary.<sup>11</sup> NSTAR estimates the total cost of the project to be \$306 million, and the post-EPAAct 2005<sup>12</sup> costs to which the requested incentives would apply to be \$236 million.<sup>13</sup> In addition, NSTAR estimates that annual savings, primarily from reduced congestion costs, will exceed \$80 million for the project as a whole.<sup>14</sup>

5. NSTAR states that the three SEMA Upgrade Projects were designed to address reliability concerns in southeastern Massachusetts.<sup>15</sup> NSTAR states that the Brook Street Project is located just north of Cape Cod and consists of a new substation, a new 115 kV transmission line, new breakers and protection systems, and new fiber optic communications.<sup>16</sup> NSTAR states that the Brook Street Project entered into service in June 2008 and cost \$12.3 million.<sup>17</sup> NSTAR states that the Carver Project is also located just north of Cape Cod and consists of enhancing the existing substation by interconnecting a third 345 kV transmission line and installing a new 345 kV/115 kV

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<sup>8</sup> *Id.* at 6 and Exhibit NS-1 at 6.

<sup>9</sup> Transmittal Letter at 8.

<sup>10</sup> *Id.*

<sup>11</sup> *Id.* at 4 and 8.

<sup>12</sup> Energy Policy Act of 2005, Pub. L. No. 109-58, §§ 1261 et seq., 119 Stat. 594 (2005) (EPAAct 2005).

<sup>13</sup> Transmittal Letter at 8.

<sup>14</sup> *Id.* at 7.

<sup>15</sup> *Id.* at 22.

<sup>16</sup> *Id.* at 24; Exhibit NS-2 at 4-5; Exhibit NS-3 at 10.

<sup>17</sup> Transmittal Letter at 24; Exhibit NS-3 at 10; Exhibit NS-21 at 3.

autotransformer. According to NSTAR, the projected cost of the Carver Project is \$43.5 million and it is expected to enter service in June 2009.<sup>18</sup> NSTAR states that the Barnstable Project involves the installation of a Static VAR Compensation System at the Barnstable Switching Station, which is located in the middle of Cape Cod.<sup>19</sup> NSTAR states that the purpose of the Static VAR Compensation System is to instantaneously inject reactive power into Cape Cod's 115 kV transmission system should the system voltage fall below a prescribed set point, thereby maintaining system voltage and preventing voltage collapse.<sup>20</sup> According to NSTAR, the Barnstable Project is projected to cost \$30.6 million and is anticipated to be in service in September 2009.<sup>21</sup> NSTAR estimates that the three SEMA Upgrade Projects will reduce the need to rely on out-of-merit generation from two oil-fired Canal generation plants,<sup>22</sup> which Cape Cod currently relies on for voltage support, resulting in total annual cost savings of \$138 million at 2008 prices.<sup>23</sup>

### C. Requested Incentives

#### 1. 100 Basis Point ROE Adders

6. Regarding Phase II of the 345 kV Project, NSTAR requests that the Commission either grant a limited waiver of the December 31, 2008 termination date for the 100 basis point ROE adder established in Opinion No. 489 or, alternatively, grant the 100 basis point ROE adder pursuant to Order No. 679.<sup>24</sup> NSTAR claims that the Brook Street Project is also eligible for the 100 basis point ROE adder pursuant to Opinion No. 489 because the project entered service in June 2008. However, NSTAR states that if it misunderstands the Opinion No. 489 Rehearing Order, and the 100 basis point ROE adder is not deemed applicable to the Brook Street Project, NSTAR requests that the 100

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<sup>18</sup> Exhibit NS-21 at 4; Transmittal Letter at 24.

<sup>19</sup> *Id.*; Exhibit NS-1 at 31-32.

<sup>20</sup> Transmittal Letter at 24; Exhibit NS-1 at 32-33 and Exhibit NS-3 at 12.

<sup>21</sup> Transmittal Letter at 25; Exhibit NS-21 at 2.

<sup>22</sup> The two Canal generating units are located on the Cape side of the Cape Cod Canal. The two units generate onto a 345 kV bus at the Canal Station and each can be considered a 345 kV source. Exhibit NS-3 at 6.

<sup>23</sup> Transmittal Letter at 23; Exhibit NS-3 at 6 and 16.

<sup>24</sup> Transmittal Letter at 4.

basis point ROE adder be granted pursuant to Order No. 679.<sup>25</sup> NSTAR also requests a 100 basis point ROE adder pursuant to Order No. 679 for the Carver and Barnstable Projects because these two SEMA Upgrade Projects are not expected to be in service until 2009.<sup>26</sup>

## 2. 50 Basis Point Advanced Transmission Technology Adders

7. In addition to the 100 basis point ROE adder for the four projects, NSTAR also requests a 50 basis point advanced technology ROE adder for the entirety of the 345 kV and Barnstable Projects, and for portions of the Carver and Brook Street Projects.<sup>27</sup>

### D. Zone of Reasonableness

8. NSTAR states that it has reduced its request for a 50 basis point advanced technology adder by four basis points so as not to exceed 13.1 percent, the upper end of the zone of reasonableness originally established in Opinion No. 489. NSTAR acknowledges that the Opinion No. 489 Rehearing Order establishes a zone of reasonableness of 7.3 percent to 13.5 percent, and uses the midpoint of that zone, 10.4 percent, as the baseline for its requested incentives. However, NSTAR states that it has capped its requested incentives so as not to exceed 13.1 percent, the upper end of the zone originally established by Opinion No. 489.<sup>28</sup> NSTAR requests a 46 basis point advanced technology adder assuming that the Commission grants the requested 100 basis point ROE adder. If the 100 basis point ROE adder is not granted by the Commission, NSTAR requests the full 50 basis point advanced technology adder.

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<sup>25</sup> Transmittal Letter at 25, fn 46.

<sup>26</sup> *Id.* at 4.

<sup>27</sup> *Id.* The advanced technology adder would apply to the following portions of total costs for each of the SEMA Project Upgrades: (1) \$7.7 million out of a total \$12.3 million cost for Brook Street; (2) \$12.8 million out of a total \$43.5 million cost for Carver; and, (3) the entirety of the \$30.6 million cost for Barnstable. Exhibit NS-26 at 1, Exhibit NS-27 at 1 and Exhibit NS-25 at 1.

<sup>28</sup> Exhibit NS-28 at 3, n.1.

**E. Eligibility for Incentives**

**1. Waiver of Opinion No. 489 Deadline**

9. NSTAR contends that good cause exists to waive the December 31, 2008 deadline established in Opinion No. 489,<sup>29</sup> and grant the 100 basis point ROE incentive pursuant to Opinion No. 489 for Phase II of the 345 kV Project if it fails to enter service by that deadline.<sup>30</sup> NSTAR asserts that the Commission granted a waiver of the same December 31, 2008 deadline in *Northeast Utilities*<sup>31</sup> under circumstances that are very similar to Phase II of NSTAR's 345 kV Project.<sup>32</sup> Both the Middletown-to-Norwalk Project at issue in *Northeast Utilities* and the 345 kV Project were approved in the ISO-NE 2004 Regional Transmission Expansion Plan (RTEP). NSTAR asserts that similar to the Middletown-to-Norwalk Project, all aspects of the 345 kV Project have moved ahead expeditiously with the expectation that the 345 kV Project would achieve a 2008 in-service date, and that Phase II thus qualifies for the 100 basis point ROE incentive granted under Opinion No. 489.

10. Furthermore, NSTAR states at the time the Commission issued *Northeast Utilities*, the Middletown-to-Norwalk Project was expected to be completed, except for final testing, by December 31, 2008. NSTAR contends that Phase II of the 345 kV Project may be closer to completion than the Middletown-to-Norwalk Project and may still be completed by the end of the year because all that remains is final testing and any additional work that such testing shows to be necessary. NSTAR argues that like *Northeast Utilities*, the final in-service date for Phase II of the 345 kV Project will be substantially in compliance with the December 31, 2008 deadline established in Opinion No. 489, and that NSTAR has relied reasonably and in good faith on the availability of the 100 basis point ROE adder in moving forward with the planning, financing and construction of the 345 kV Project.<sup>33</sup>

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<sup>29</sup> The Opinion No. 489 Rehearing Order reaffirmed the Commission's approval of a 100 basis point ROE incentive for existing Regional Transmission Expansion Plan (RTEP) approved projects provided that the projects were completed and on-line as of December 31, 2008. Opinion No. 489 Rehearing Order, 122 FERC ¶ 61,265 at P51.

<sup>30</sup> Transmittal Letter at 14.

<sup>31</sup> *Northeast Utilities Service Co.*, 124 FERC ¶ 61,044 (2008) (*Northeast Utilities*).

<sup>32</sup> Transmittal Letter at 15.

<sup>33</sup> *Id.* at 16.

## 2. Section 219 Requirement

11. NSTAR acknowledges that in order to receive incentives under Order No. 679 it must show that the projects are eligible for incentives under section 219 of the FPA because they either ensure reliability or reduce the cost of delivered power by reducing transmission congestion.<sup>34</sup> NSTAR argues that the 345 kV Project and all three SEMA Upgrade Projects are entitled to the rebuttable presumption that they meet the section 219 requirement of ensuring reliability or reducing congestion because the projects were vetted and approved by ISO-NE's fair and open regional planning process. NSTAR states that the 345 kV Project was approved in ISO-NE's 2004 RTEP and the three SEMA Upgrade Projects were approved in the ISO-NE's 2007 Regional System Plan (RSP).<sup>35</sup>

## 3. Order No. 679 Nexus Requirement

12. NSTAR acknowledges that in addition to satisfying the section 219 requirement, it must demonstrate, pursuant to Order No. 679, that there is a nexus between the incentive sought and the investment being made.<sup>36</sup> NSTAR states that the Commission clarified in Order 679-A that the nexus test is satisfied when an applicant demonstrates that the total package of incentives requested is tailored to address the demonstrable risks or challenges faced by the applicant. NSTAR states that in determining whether such a demonstration has been made, the Commission considers the question of whether a project is "routine" to be probative.

13. NSTAR notes that in considering whether a project is routine the Commission will consider all relevant factors including a project's scope (e.g., dollar investment, increase in transfer capability, involvement of multiple entities or jurisdictions, size, or effect on region); effect (e.g., improving reliability or reducing congestion costs); and the challenges or risks faced by the project (e.g. siting, internal competition for financing with other projects, long lead times, regulatory and political risks, or specific financing challenges).<sup>37</sup> NSTAR asserts that the Commission has explained that "these are only

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<sup>34</sup> *Id.* at 17, 25.

<sup>35</sup> *Id.* at 4. In 2005, ISO-NE changed the name of its regional plan from RTEP to Regional System Plan (RSP).

<sup>36</sup> Transmittal Letter at 19.

<sup>37</sup> *Id.* at 19-20, citing *Baltimore Gas & Elec. Co.*, 120 FERC ¶ 61,084, at P 52 (2007) (*BG&E*).

examples of evidence that can help inform the Commission on the question of whether a project is routine” and this is not “a new formulaic checklist that must be met by every applicant for every proposed incentive or project.”<sup>38</sup>

**a. 345 kV Project**

14. NSTAR argues that Opinion No. 489 should have *res judicata* effect and conclusively establish that the 345 kV Project, as one of the RTEP 2004 projects, satisfies the requirements of Order No. 679.<sup>39</sup> NSTAR reasons that such conclusion is warranted because the Commission has (1) already determined that its Opinion No. 489 standard is consistent with section 219 of the FPA and Order No. 679, (2) ruled that the RTEP 2004 projects serve an “undisputed” and “demonstrated” need, (3) found the requisite link between the 100 basis point incentive and the RTEP 2004 projects, and (4) approved the 100 basis point incentive for those projects. While NSTAR believes that Opinion No. 489 conclusively establishes that the 345 kV Project qualifies for the 100 basis point ROE incentive under Order No. 679, it maintains that the 345 kV Project, inclusive of Phase II, “easily satisfies” the Commission’s nexus test as embodied in Order 679 and its progeny, and offers further support “out of an abundance of caution.”<sup>40</sup>

**i. Scope**

15. According to NSTAR, the \$306 million total cost of the 345 kV Project is very substantial and represents the largest construction undertaking in its 110-plus-year history. NSTAR states that its net transmission plant in rate base at the end of 2004, prior to constructing the 345 kV Project, was \$431 million, which means the total projected cost of \$306 million for this project will increase NSTAR’s existing net transmission plant in rate base by 71 percent.<sup>41</sup>

**ii. Effect**

16. NSTAR claims that the 345 kV Project addressed significant reliability problems, and that it undertook the project, under ISO-NE’s oversight, to prevent load growth from exceeding available capacity and causing the area to experience potential overload conditions under single contingency situations, thereby providing critical reliability

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<sup>38</sup> Transmittal Letter at 20, n.38, citing *BG&E* at P 52, n.53.

<sup>39</sup> Transmittal Letter at 19.

<sup>40</sup> *Id.* at 19-20.

<sup>41</sup> Exhibit NS-4 at 6.



reinforcement of the regional transmission grid in the Greater Boston area.<sup>42</sup> NSTAR states that prior to the 345 kV Project, load forecasts prepared by both ISO-NE and NSTAR indicated that the Greater Boston area would have had insufficient capacity to serve loads and maintain adequate reserve margins beginning in 2006.<sup>43</sup> NSTAR also equates ISO-NE's planning process with PJM's baseline transmission planning, arguing that the Commission has, in several recent cases, held that baseline transmission upgrades in PJM's RTEP are, "by definition, regional projects and thus, not routine."<sup>44</sup>

17. Further, NSTAR states that completion of Phase I of the 345 kV Project increased the overall import capability of its transmission system supplying the Greater Boston area by approximately 800 MW in 2006, and will add an additional 1,000 MW once Phase II of the project is completed.<sup>45</sup> Finally, NSTAR argues that the magnitude of congestion cost savings produced by the project, which should exceed \$80 million annually, qualifies the project as unique and non-routine.<sup>46</sup>

### iii. Risks and Challenges

18. NSTAR states that the 345 kV Project faced several siting, construction, regulatory, financial, and environmental risks and challenges. NSTAR claims that before it could proceed with the project, it needed to obtain numerous regulatory approvals from state and local agencies, which included an extensive and comprehensive siting/permitting process before the Massachusetts Energy Facilities Siting Board that considered factors such as need for the project, alternatives to the project, alternative routes, environmental impacts, costs and reliability of the project. NSTAR claims that if any agency had not granted regulatory approval, the 345 kV Project could not have moved forward.<sup>47</sup>

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<sup>42</sup> Transmittal Letter at 20.

<sup>43</sup> Exhibit NS-1 at 16.

<sup>44</sup> Transmittal Letter at 20, citing *BG&E* at P 58; *Commonwealth Edison Co.*, 122 FERC ¶ 61,037, at P 28 (2008); *Virginia Elec. & Power Co.*, 124 FERC ¶ 61,207, at P 52, 57, 66 (2008) (*Virginia Power*).

<sup>45</sup> *Id.* at 14.

<sup>46</sup> *Id.* at 21.

<sup>47</sup> *Id.* at 20, Exhibit NS-1 at 18. Exhibit NS-7 contains a detailed list of environmental information submitted to Office of Environmental Affairs in Massachusetts.

19. NSTAR contends that the undergrounding of 47 miles of 345 kV transmission lines through a densely developed urban and suburban area in and near Boston was complicated, time-consuming and resulted in a unique and first-of-its-kind design and engineering achievement.<sup>48</sup> Further, NSTAR states that the project was accomplished at an accelerated pace in order to provide urgently needed reliability relief in the most populated core in New England. NSTAR asserts that the Commission has acknowledged the added complexity involved in undertaking a major construction project in a downtown area with limited space and narrow right-of-ways.<sup>49</sup> Also, NSTAR argues that in *Virginia Power*, the Commission found that several projects were not routine due in part to the significant risks involved in completing construction in very densely populated urban areas.<sup>50</sup>

**b. The SEMA Upgrade Projects**

20. With respect to the SEMA Upgrade Projects, NSTAR attempts to address the criteria laid out in *BG&E* regarding scope, effect, risks and challenges of the projects, and emphasizes that the SEMA Upgrade Projects are “by no means routine or ordinary.”<sup>51</sup> NSTAR claims that although the combined capital outlay of \$86 million for the three SEMA Upgrade Projects is less than the \$306 million outlay for the 345 kV Project, the Commission has granted ROE adders for projects of much smaller investment magnitude.<sup>52</sup> NSTAR asserts that the \$86 million investment for these three projects is almost 90 percent of NSTAR’s entire 2007 transmission capital investment of \$96 million.<sup>53</sup>

21. In general, NSTAR argues that the SEMA Upgrade Projects are by no means routine or ordinary because they: were constructed pursuant to very aggressive

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<sup>48</sup> *Id.* at 21, Exhibit NS-1 at 18.

<sup>49</sup> Transmittal Letter at 21, citing *Baltimore Gas & Elec. Co.*, 121 FERC ¶ 61,167, at P 30 (2007).

<sup>50</sup> Transmittal Letter at 21, citing *Virginia Power*, 124 FERC ¶ 61,207, at P 89, 110 (2008) (*Virginia Power*).

<sup>51</sup> Transmittal Letter at 26.

<sup>52</sup> *Id.*, citing *Virginia Power* 124 FERC ¶ 61,207 at P 15-17, in which NSTAR claims the Commission has authorized ROE incentives for projects costing as little as \$3 million, \$5 million and \$6 million.

<sup>53</sup> Exhibit NS-4 at 6.

timetables; employed innovative and challenging construction techniques and specifically designed equipment suitable to accelerate the construction process; achieved reliability improvements not only by adding transmission capacity but also in large part through the application of new technologies and a creative reconfiguration of facilities producing alternative 345 kV and 115 kV paths for power to reach the SEMA area; involved financial commitments by NSTAR in advance of achieving project approvals to speed construction and the realization of customer benefits sooner; overcame regulatory and siting obstacles; and included the use of advanced technologies.<sup>54</sup>

22. Specifically, NSTAR contends that the Barnstable Project is not a routine project because ISO-NE included it as a reliability project in its 2007 RSP. NSTAR claims that the effect of the Barnstable Project on regional reliability also indicates it is non-routine, and the Static VAR Compensation system prevents voltage collapse and loss of service to Cape Cod, eliminating the need to dispatch the Canal generation except during high demand periods. Further, NSTAR states that the impact of the Barnstable Project on its 115 kV transmission system is equivalent to operating one of the two Canal generating units for voltage support, but without the cost of burning fossil fuel.<sup>55</sup> NSTAR also asserts that the project faces significant risks and challenges due to the custom design, installation and technical needs of the Static VAR Compensation system.<sup>56</sup> Finally, NSTAR states that the Barnstable Project should increase power imports into the lower SEMA area by approximately 170 MW to 220 MW.

23. Regarding the Carver Project, NSTAR states that the Carver Substation is a major substation located at the northern end of lower SEMA that provides additional transmission support at the 345 kV and 115 kV transmission levels.<sup>57</sup> NSTAR argues that the Carver Project is non-routine for similar reasons as the Barnstable Project: it was approved by ISO-NE as a reliability project in the 2007 RSP, it eliminated the need to rely on out-of-merit Canal generation, there were siting and permitting risks and challenges related to the underground installation of the Cross Linked Polyethylene (XLPE) cable beneath the Carver Substation,<sup>58</sup> and the expedited construction schedule

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<sup>54</sup> Transmittal Letter at 26 and 30.

<sup>55</sup> *Id.* at 25.

<sup>56</sup> Exhibit NS-1 at 35 and 36.

<sup>57</sup> Transmittal Letter at 24.

<sup>58</sup> NSTAR claims that before the Carver Project could proceed with construction it needed regulatory approvals from several state and local regulatory agencies. NSTAR states that this project underwent a comprehensive permitting process before the

minimized reductions in service reliability.<sup>59</sup> Lastly, NSTAR contends that the Carver Project will increase the transfer capability of the 115 kV transmission system serving that area by a range of 100 MW to 130 MW and further promotes reliability by creating significant new 345 kV transmission paths for electricity to reach the Cape Cod area.<sup>60</sup>

24. According to NSTAR, the Brook Street Project added a new 115 kV transmission line that can bring 463 MW to the Brook Street substation, which has a current carrying capacity of 600 MW. NSTAR states that the rebuilt Brook Street substation has redundant control and protection equipment in compliance with North American Electric Reliability Corporation standards, and new fiber optic communication equipment that all provide improved surveillance and greater flexibility in handling system contingencies. In addition, NSTAR states that the modular cabinets were prefabricated off-site, which helped expedite the construction process and enabled this project to be completed before the Carver Project, which was also required for reliability reasons.<sup>61</sup> NSTAR claims that the Brook Street Project was able to improve the reliability of and bolster the 115 kV transmission supply to the lower SEMA area by between 170 MW and 220 MW.<sup>62</sup>

25. NSTAR estimates the three SEMA Upgrade Projects will result in significant cost savings to customers by reducing the need to operate the two oil-burning Canal generators that Cape Cod currently relies on for voltage support. Specifically, NSTAR states that the Brook Street Project alone will reduce the need to run Canal generation by 130 days a year for a savings of over \$57 million in 2008 dollars on an annualized basis. NSTAR contends that the Brook Street and Carver Projects combined will result in a 250 day per year reduction in Canal generation, producing annualized savings of \$110 million based on 2008 costs. Finally, NSTAR states that the Brook Street, Carver and Barnstable

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Massachusetts Department of Public Utilities, which considered the need for the project, impacts of the project, and zoning issues. Further, NSTAR adds that the project required approval by the Conservation Commission of each town, the United States Army Corps of Engineers, the United States Environmental Protection Agency, and the Massachusetts Division of Fisheries and Wildlife. Exhibit NS-2 at 16.

<sup>59</sup> Exhibit NS-2 at 15 and 16.

<sup>60</sup> Transmittal Letter at 25.

<sup>61</sup> Exhibit NS-2 at 4 - 12.

<sup>62</sup> Transmittal Letter at 24.

Projects together will result in a 315 day per year reduction in Canal generation, for a total savings of \$138 million based on 2008 costs on an annualized basis.<sup>63</sup>

#### **4. Total Package of Incentives**

26. NSTAR acknowledges that in Order 679-A, the Commission stated that in determining whether an applicant has met the nexus test, the Commission will examine “the total package of incentives being sought, the inter-relationship between any incentives, and how any requested incentives address the risks and challenges faced by the project.”<sup>64</sup> NSTAR further states that the principal concern addressed by this requirement is the situation in which an applicant requests incentives that are inconsistent or incompatible with the other requested incentives.<sup>65</sup>

27. NSTAR states that the incentives it is requesting are both consistent and compatible. NSTAR states that the 100 basis point ROE adder is intended to offset the significant risks and challenges associated with planning, financing, developing, siting, and building 345 kV Project and the SEMA Upgrade Projects.<sup>66</sup> NSTAR states that the Commission has found that the advanced technology incentive is independent and serves a different purpose from other incentives.<sup>67</sup> According to NSTAR, the Commission should therefore grant the requested 46 basis point advanced technology adder independent of its consideration of NSTAR’s proposed 100 basis point incentive adders requested for its projects, as it did in *United Illuminating* and *Northeast Utilities*.

#### **F. Technology Statement**

28. As required by Order No. 679, NSTAR has included an advanced technology statement in its application.<sup>68</sup> NSTAR states that the 345 kV Project and three SEMA Upgrade Projects each make extensive use of advanced transmission technologies that are listed in section 1223 of EPCRA 2005. NSTAR requests a 46 basis point adder for the use

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<sup>63</sup> Exhibit NS-3 at 16.

<sup>64</sup> Transmittal Letter at 34, quoting Order No. 679-A at P 21.

<sup>65</sup> *Id.* at 34, citing Order No. 679-A at P 21.

<sup>66</sup> Transmittal Letter at 34.

<sup>67</sup> *Id.*, citing *The United Illuminating Co.*, 119 FERC ¶ 61,182, at P 73-75 (2007) (*United Illuminating*) and *Northeast Utilities*.

<sup>68</sup> Exhibit NS-14.

of advanced technology for the entirety of the 345 kV and Barnstable Projects, and for portions of the Brook Street and Carver Projects.

29. NSTAR states that the 345 kV project uses several kinds of advanced technologies. NSTAR has stated that its 47 miles of underground transmission lines are the longest 345 kV underground transmission lines in the country.<sup>69</sup> Specifically, NSTAR claims that its use of High Pressure Fluid Flow underground cable and the Polypropylene Paper insulation, the variable reactance shunt reactors and state-of-the-art equipment control and protection system are advanced technologies.

30. NSTAR asserts that High Pressure Fluid Flow cable is a “pipe-type” underground cable technology that provides the best combination of constructability, reliability, capacity, cost, minimal environmental impact, and is particularly suitable for construction in heavily populated and developed urban areas.<sup>70</sup> In addition, NSTAR claims that the Polypropylene Paper insulation is the most modern insulation technology available for High Pressure Fluid Flow cable.<sup>71</sup> NSTAR states that it selected High Pressure Fluid Flow underground cable due to right-of-way space and citing concerns, thereby avoiding the need to purchase nearly 100 acres of prohibitively expensive urban real estate.<sup>72</sup> NSTAR argues that the major benefit of the High Pressure Fluid Flow underground cable technology is that it allows all three phase cables to be housed in a single steel conduit, thereby by reducing trenching requirements for the project’s preferred route.

31. NSTAR also states that the 345 kV Project used six 345 kV, 160 MVAR shunt reactors to compensate for the inherent capacitance of the High Pressure Fluid Flow cable. NSTAR claims that the variable reactance shunt reactors are an integral part of the design because they enhance NSTAR’s operational capability to operate all three underground 345 kV transmission lines under a wide variety of loading conditions without removing transmission lines from service. NSTAR adds that variable reactance shunt reactors at this voltage are rarely used. The state-of-the-art control and protection package, NSTAR continues, provides a communication link between the project’s substations and the central command center in Boston by way of fiber optics, which permits the system to submit real-time data regarding cable gas build-up, moisture levels in insulating oil and equipment loading.<sup>73</sup>

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<sup>69</sup> Transmittal Letter at 9.

<sup>70</sup> Exhibit NS-1 at 21.

<sup>71</sup> *Id.*

<sup>72</sup> *Id.*

<sup>73</sup> Exhibit NS-1 at 28-29.

32. NSTAR requests an advanced transmission technology adder for its 115 kV Static VAR Compensation System located in the Barnstable substation project. NSTAR states that this Static VAR Compensation System acts as fast-acting absorber to dampen out electrical shocks. NSTAR claims, as part of the SEMA upgrades, the Static VAR compensation System improves reliability and works to prevent voltage collapse, which could cause a loss of the entire Cape Cod load affecting Cape Cod and other customers. In addressing widespread use of the Static VAR Compensation Systems, NSTAR claims that while similar systems are used in various applications around the world, there is no standard Static VAR Compensation System because each system is custom-designed to the application and need.<sup>74</sup>

33. NSTAR states that the use of XLPE cable, substation modular cabinet design, and fiber optics for communications and the automated safety system at the Carver substation qualifies as an advanced transmission technology. NSTAR states an incentive is appropriate for the 345 kV XLPE underground cable because it will mitigate congestion and enhance grid reliability.<sup>75</sup> NSTAR states that the use of modular cabinets at the Brook Street Project is a form of modular design, which is designed to house control and protection equipment such as wiring, terminating devices, relays, and digital devices. NSTAR states that the cabinets themselves are designed and assembled off-site allowing for quicker on-site construction.<sup>76</sup> NSTAR also claims that the use of fiber optic technology in its communications system creates a more reliable communications system, under the control of NSTAR, rather than the local phone company. In addition, NSTAR adds that its automated safety system will be connected via fiber optics creating a redundant independent line of communication.<sup>77</sup>

## **II. Notice of Filings and Responsive Pleadings**

34. Docket No. ER09-14-000 was noticed in the *Federal Register*,<sup>78</sup> with comments and interventions due on or before October 23, 2008. Docket No. ER09-14-001 was

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<sup>74</sup> Exhibit NS-1 at 33-34.

<sup>75</sup> Exhibit No. NS-2, at 18.

<sup>76</sup> *Id.* at 8-9.

<sup>77</sup> *Id.* at 11.

<sup>78</sup> 73 Fed. Reg. 60,684 (2008).

noticed in the *Federal Register*,<sup>79</sup> with comments and interventions due on or before October 27, 2008. On October 21, 2008, NSTAR, the New England Conference of Public Utilities Commissioners (NECPUC) and the Attorney General of the Commonwealth of Massachusetts (Massachusetts AG) filed a joint motion requesting that the comment period be extended through November 14, 2008, and that the Commission defer action until December 19, 2008. On October 22, 2008, the Commission issued a notice extending the time period for filing interventions and protests up to and including November 14, 2008.

35. Timely Notices of Intervention were filed by the Connecticut Department of Public Utility Control (Connecticut DPUC), the Department of Public Utilities of the Commonwealth of Massachusetts (Massachusetts DPU), the New Hampshire Public Utilities Commission (New Hampshire PUC), the Maine Public Utilities Commission (Maine PUC). Timely motions to intervene were filed by the Connecticut Office of Consumer Counsel (Connecticut Consumer Counsel), NECPUC, Northeast Utilities Services Company (Northeast Utilities), the Vermont Department of Public Service (VT DPS), the Attorney General for the State of Connecticut (Connecticut AG), the Massachusetts AG and the New Hampshire Office of Consumer Advocate (New Hampshire Consumer Advocate). A timely joint motion to intervene and protest was filed by Braintree Electric Light Department, Concord Municipal Light Plant, Hingham Municipal Lighting Plant, Reading Municipal Light Department and Taunton Municipal Lighting Plant, collectively, the Eastern Massachusetts Consumer Owned Systems (EMCOS). Timely joint protests were filed by NECPUC, Maine PUC and New Hampshire PUC, collectively, NECPUC; and by Massachusetts AG, Massachusetts DPU, the Massachusetts Municipal Wholesale Electric Company (MMWEC), Connecticut Consumer Counsel, Connecticut DPUC, Connecticut AG, Rhode Island AG, the Rhode Island Division of Public Utilities and Carriers (Rhode Island PUC), Vermont DPS, and New Hampshire Consumer Advocate, collectively, the Public Parties.<sup>80</sup> On November 26, 2008, NSTAR filed an answer to the protests. On December 11, 2008, NECPUC, Maine PUC and Connecticut DPUC jointly filed an answer to NSTAR's answer. On December 12, 2008, NSTAR filed an answer to the December 11, 2008 pleading filed by NECPUC, Maine PUC and Connecticut DPUC.

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<sup>79</sup> 73 Fed. Reg. 62,267 (2008).

<sup>80</sup> MMWEC separately filed and the Rhode Island AG and the Rhode Island PUC jointly filed timely motions to intervene or notices of intervention and protests that incorporate and support the Public Parties' protest.



### III. Discussion

#### A. Procedural Matters

36. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure,<sup>81</sup> the timely, unopposed motions to intervene and notices of intervention serve to make the entities that filed them parties to this proceeding.

37. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure<sup>82</sup> prohibits an answer to a protest unless otherwise ordered by decisional authority. We are not persuaded to accept NSTAR's answers or the answer of NECPUC, Maine PUC and Connecticut DPUC and will therefore reject them.

#### B. Applicability of Opinion No. 489 to Projects In Service

##### 1. Protests

38. Public Parties assert that Phase I of the 345 kV Project is not eligible for incentives under Opinion No. 489 because the project was placed into service eighteen months before NSTAR's instant application requesting incentives. Therefore, Public Parties argue, there is no "rational relationship between the investment being made and the requested incentive," a requirement of Opinion No. 489.

39. Public Parties argue that in *Commonwealth Edison*<sup>83</sup> the Commission denied incentives for a project completed three months prior to the project owner's request for incentives on the grounds that the project had failed to demonstrate why it needed incentives to encourage investment that had already been made, and Public Parties argue the 345 kV Project should be similarly denied. Nor, asserts Public Parties, has NSTAR demonstrated that the 100 basis point adder will allow it to secure financing or help it bring Phase I to completion sooner, as it was completed a year and-a-half ago. Although the Commission denied Commonwealth Edison's request under Order No. 679, Public Parties argue that there is nothing in Opinion No. 489 that indicates that the Commission intended to approve incentive adders for transmission projects years after they were completed.

40. Public Parties request that, at a minimum, the Commission find that there is no nexus between the requested adder under Opinion No. 489 and the first portion of Phase

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<sup>81</sup> 18 C.F.R. § 385.214 (2008).

<sup>82</sup> *Id.* § 385.213(a)(2).

<sup>83</sup> *Commonwealth Edison Co.*, 122 FERC ¶ 61,037, at P 31 (2008).

I, the two-year old Stoughton to Hyde Park Line, which was placed in service in October 2006, before the October 31, 2006 issuance of Opinion No. 489.

41. In addition, Public Parties and NECPUC argue that Opinion No. 489 is not applicable to the Brook Street Project because the project was included in ISO-NE's 2007 RSP, rather than in the 2004 RTEP. Public Parties also contend that NSTAR provides no explanation as to how the Commission's ruling under Opinion No. 489 could be interpreted to extend beyond "existing" 2004 RTEP projects.

## 2. Commission Determination

42. As explained below, the Commission rejects these arguments as contrary to the holding in Opinion No. 489. Moreover, the arguments related to Phase I are beyond the scope of this proceeding. The entire 345 kV Project, both Phase I and Phase II, was approved in ISO-NE's 2004 RTEP as a reliability transmission upgrade. In this proceeding, NSTAR is not asking for a new transmission incentive for Phase I of the 345 kV or Brook Street Projects because in Order No. 489, the Commission already granted an incentive for these projects. With respect to Phase II of the 345 kV Project, NSTAR is asking for waiver of Opinion No. 489's completion deadline to the extent that an extension is necessary.

43. Phase I of the project included an eleven-mile 345 kV underground line directly connecting the Stoughton Switching Station to the Hyde Park Substation that entered service in October 2006. Phase I also included an eighteen-mile underground transmission line directly connecting the Stoughton Switching Station to the K Street Substation, which entered into service in April 2007. The Brook Street Project was completed in June 2008 and is currently providing service to customers in the SEMA region.

44. In the Opinion No. 489 Rehearing Order, the Commission affirmed the approval of a 100 basis point ROE incentive for RTEP-approved projects, "provided that these projects are completed and come on line as of December 31, 2008."<sup>84</sup> Further, in that order the Commission restates that it "accepted the proposed ROE incentive as applicable to *all* projects identified as necessary by ISO New England in its regional planning process."<sup>85</sup> Therefore, because Phase I of the 345 kV Project and the Brook Street Project were approved through ISO-NE's regional planning process, and entered into service prior to the December 31, 2008 deadline established by the Commission, Phase I of the 345 kV Project and the Brook Street Project are entitled to, without further Commission action, the 100 basis ROE incentive under Opinion No. 489.

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<sup>84</sup> Opinion No. 489 Rehearing Order, 122 FERC ¶ 61,265 at P 51.

<sup>85</sup> *Id.* P 82 (emphasis in original).

**C. Waiver of the December 31, 2008 Deadline Established in the Opinion No. 489 Rehearing Order**

**1. Protests**

45. NECPUC argues that NSTAR's request for waiver of the Commission's December 31, 2008 deadline with respect to Phase II of the 345 kV Project is an untimely collateral attack on the Commission's Opinion No. 489 Rehearing Order and must be rejected as a matter of law. NECPUC states that the Opinion No. 489 Rehearing Order contained a clear directive that transmission owners must make a "separate filing" for projects not in service by December 31, 2008, to demonstrate that the projects satisfy the requirements of Order No. 679. Moreover, NECPUC states that even if the Commission could waive the deadline, there is no good cause to grant a waiver at this time, six months after issuance of the Opinion No. 489 Rehearing Order.

46. As further support for not granting the waiver, NECPUC states that NSTAR's request for a total 146 basis point ROE adder would increase the overall cost of the 345 kV Project by \$46.5 million, substantially increasing customers' transmission costs.

47. Moreover, NECPUC states that ISO-NE's updated project listing suggests a March 2009 completion date for Phase II of the 345 kV Project, not the December 2008 projected completion date NSTAR claims. NECPUC argues that the Commission should not grant the same waiver of the December 31, 2008 deadline granted in *Northeast Utilities*, because that project was "virtually complete," while ISO-NE's project listing indicates that NSTAR's 345 kV Project completion date has been pushed back by three months. Finally, NECPUC asserts that granting waivers of the December 31, 2008 deadline renders the deadline meaningless.

**2. Commission Determination**

48. Because we find good cause to grant NSTAR's request for limited waiver of the December 31, 2008 deadline established in the Opinion No. 489 Rehearing Order, we approve the 100 basis point ROE incentive adder for Phase II of the 345 kV Project pursuant to Opinion No. 489, for the reasons discussed below.

49. NSTAR provides several reasons to support its request for a limited waiver of the December 31, 2008 cut-off date for receiving a 100 basis point ROE adder under Opinion No. 489, similar to those that established good cause in *Northeast Utilities*. First, NSTAR states that at the time the Commission issued *Northeast Utilities*, the Middletown-to-Norwalk Project was expected to be completed except for final testing by December 31, 2008 and that Phase II of the 345 kV Project may be closer to completion than the Middletown-to-Norwalk Project, and may still be completed by the end of the

year because all that remains is final testing, and any additional work the final testing shows to be necessary. Therefore, Phase II of the 345 kV Project is similar to the project at issue in *Northeast Utilities*.

50. Second, the 345 kV Project, including Phase II, was approved in ISO-NE's RTEP 2004 as a reliability project similar to *Northeast Utilities*, which was specifically considered in Opinion No. 489, where the Commission concluded that the ISO-NE planning process identified "an undisputed need for projects" to which the 100 basis point ROE adder would apply.<sup>86</sup> Third, the Commission agrees that NSTAR has relied reasonably and in good faith on the availability of the 100 basis point ROE adder in moving forward with the planning, financing and construction of the 345 kV Project and that it would be fundamentally unfair for it to be penalized by a strict application of the December 2008 deadline to Phase II of the project.

51. Further, the regional benefits resulting from the reliability enhancements and reduced congestion costs will not be diminished if Phase II comes into service after December 31, 2008. Contrary to the arguments of several protestors, the December 31, 2008 cut-off date did not provide a line of demarcation regarding the benefits of Phase II. Nor did we establish the cut-off date to induce the timely or quicker completion of projects, like Phase II.<sup>87</sup> In the Opinion No. 489 Rehearing Order, we selected the date as a reasonable approximation of when we thought that ongoing RTEP projects that have not come on line, or have not been proposed or even envisioned, should no longer be exempt from our new policy under Order No. 679.<sup>88</sup> NSTAR's customers have benefitted greatly from the portion of the 345 kV Project that is currently in-service.<sup>89</sup> Moreover, they will continue to benefit when Phase II comes into service, whether that be

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<sup>86</sup> Opinion No. 489 at P 107.

<sup>87</sup> *Northeast Utilities*, 124 FERC ¶ 61,044 at P 61-62.

<sup>88</sup> Order No. 489 Rehearing Order, 122 FERC ¶ 61,265 at P 63.

<sup>89</sup> The 345 kV Project represents the largest construction undertaking in NSTAR's 110-year plus history, and it will increase its existing net transmission plant in rate base by 71 percent compared to 2004 levels. The completion of Phase I of the 345 kV Project increased the overall import capability of its transmission system supplying the Greater Boston area by approximately 800 MW in 2006.

in December 2008 or in early 2009.<sup>90</sup> Phase II is substantially completed and in fact, all of the physical construction of Phase II is completed and all that is left to be completed is testing.<sup>91</sup>

52. Finally, we note that denial of the incentive at this late stage, given that the project is substantially completed, could create regulatory uncertainty and could deter the development of future projects. Therefore, we grant limited waiver, to the extent that waiver is necessary, of the December 31, 2008 construction deadline for Phase II of the 345 kV Project, and approve the 100 basis point ROE incentive pursuant to Opinion No. 489.

#### **D. Obligation to Build**

##### **1. Protests**

53. EMCOS, NECPUC and the Public Parties argue that NSTAR is subject to preexisting contractual obligations that required it to build the transmission projects for which it now seeks additional incentives. EMCOS and NECPUC argue that NSTAR, as a signatory to the TOA, has voluntarily assumed an obligation to construct or upgrade transmission included in ISO-NE's RSP, subject to approval by relevant siting authorities. NECPUC argues that because NSTAR is obligated to build the projects at issue, the requested incentives "do not materially affect" NSTAR's investment decisions.

54. EMCOS argues because NSTAR signed the TOA and is already paid a 50 basis point adder for ISO-NE membership, it would be neither just nor reasonable to make customers pay for additional adders to induce the utility to honor its contractual obligations.

55. While Public Parties concede that the Commission has stated that the TOA-imposed obligation to build "*does not preclude* eligibility for incentives," it notes that the

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<sup>90</sup> The overall import capability of its transmission system supplying the Greater Boston area should increase by an additional 1,000 MW once Phase II of the project is fully operational.

<sup>91</sup> In this regard, in the Opinion No. 489 Rehearing Order, the December 31, 2008 deadline was tied to projects "scheduled to be completed" by December 31, 2008. Under these circumstances, it is reasonable to conclude that Phase II meets that deadline. Nonetheless, we grant waiver, as discussed herein, to the extent that waiver is needed.

Commission has also stated that “such obligations may have a bearing on [the Commission’s] nexus evaluation of individual applications.”<sup>92</sup>

56. Furthermore, EMCOS and Public Parties assert that NSTAR assumed a heightened obligation with respect to the construction of the SEMA Upgrade Projects in the settlement approved by the Commission on July 21, 2007 in Docket No. ER07-921-000 (SEMA Settlement). Public Parties argue that NSTAR’s obligations under the SEMA Settlement demonstrate that it already has more than sufficient incentive to construct the SEMA Upgrades. EMCOS states that it would be unjust, unreasonable and would frustrate the Commission’s pro-settlement policies to require customers to pay incentive rates on top of the economic concessions made in the interests of achieving a settlement as a condition of realizing the settlement’s benefits.

## **2. Commission Determination**

57. We reject the protestors’ obligation to build arguments because the “obligation to build” does not preclude the Commission from granting incentives. This argument is a narrow interpretation of Order No. 679 and would deny the Commission the ability to exercise the authority it was expressly granted under section 219 of the FPA.

58. With respect to the arguments of Public Parties and EMCOS regarding the SEMA Settlement, the Commission notes that the SEMA Settlement makes no mention of ROE, nor does it contain any discussion of incentive adders. Like the Transmission Operating Agreement’s imposed obligation to build, the SEMA Settlement does not preclude eligibility for incentives.

## **E. Incentives and the Commission’s Nexus Test**

### **1. Protests**

59. EMCOS, NECPUC and Public Parties argue that NSTAR has not established the required nexus between either the 345 kV Project or the SEMA Upgrade Projects and the requested ROE incentives.

60. EMCOS states that granting the requested incentives would amount to rewarding NSTAR for what is, at best, the execution of good utility practice. EMCOS contends that there have been delays in the implementation of both the 345 kV Project and the SEMA Upgrade Projects that have cost NSTAR’s customers millions of dollars and that, at a minimum, the Commission should investigate the causes for the delayed in-service date

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<sup>92</sup> *Northeast Utilities Service Company*, 124 FERC ¶ 61,044, at P 89 (2008) (emphasis in original).

for the 345 kV Project. Further, EMCOS states that the SEMA Upgrade Projects should have been put in place before the reliability events of early 2006 that led to the use of the Canal generating units as a local second contingency protection resource, leading to the costs being allocated to SEMA load only. As such, EMCOS states, granting NSTAR incentives for these upgrades would be rewarding it for failure to analyze the weaknesses of its transmission system and implement a timely solution.

61. In addition, EMCOS argues that NSTAR has not shown any nexus between the requested ROE incentive adder and the investments already committed to and made. According to EMCOS, the vast majority of investments in the projects have already been made, and there is little, if any, basis for NSTAR to now argue that the investments that have been made, or that remain to be made, will be affected by whether or not the Commission grants NSTAR's total package of requested ROE incentives. Finally, EMCOS argues that the total package of incentives would add annually approximately \$4,485,000 to the regional network service rates, and may be unjust and unreasonable.

62. NECPUC similarly argues that NSTAR's alternative request for an Order No. 679 incentive for Phase II of the 345 kV Project, as well as its request for an advanced technology adder are unjustified given that Phase I of the 345 kV project is already in service and Phase II is nearly complete. As a result, NECPUC claims that there is no nexus between the requested incentives and completion of the facilities.<sup>93</sup> On the contrary, NECPUC states the Commission has made clear that no incentives should be provided for transmission facilities that are already in-service or nearly complete.<sup>94</sup>

63. Public Parties and NECPUC argue that the Brook Street Project does not qualify for incentive rate treatment under either Opinion No. 489 or Order No. 679 because the Brook Street Project entered service before NSTAR filed the instant application. Therefore, Public Parties and NECPUC continue that the Commission should deny NSTAR's request for the 100 basis point ROE and advanced technology adders for the Brook Street Project under *Commonwealth Edison Co.* NECPUC also argues that because the Carver and Barnstable Projects are largely complete, these projects are also ineligible for both the 100 basis point adder and the advanced technology incentive under *Commonwealth Edison Co.*<sup>95</sup>

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<sup>93</sup> For this proposition, NECPUC cites *Commonwealth Edison Co.*, 119 FERC ¶ 61,238, at P 57-59 (2007), *order on reh'g*, 124 FERC ¶ 61,231, at P 9 (2008).

<sup>94</sup> For this proposition, NECPUC cites *Commonwealth Edison Co.*, 122 FERC ¶ 61,037, at P 36 (2008).

<sup>95</sup> *Id.*

64. Moreover, NECPUC contends that the SEMA Upgrade Projects fail the Commission's nexus test because they are routine, short-term reliability fixes. Public Parties assert that NSTAR faces no siting risks with respect to the SEMA Upgrade Projects because the Brook Street Project is complete, NSTAR has obtained siting overrides for the Carver Project, and NSTAR has not identified any siting issues for the Barnstable Project. Public Parties further state that NSTAR faces no financial risks with respect to the SEMA Upgrade Projects because the short-term projects did not entail any significant carrying costs and NSTAR may include fifty percent of Construction Work in Progress in rate base, and accrue Allowance for Funds Used During Construction to the remainder. Therefore, Public Parties contend that NSTAR faces no risk that it will be unable to recover any prudently incurred costs and it faces no risk from siting or construction cost increases or from project cancellation. Public Parties also state that if ISO-NE determines that the SEMA Upgrade Projects should be classified as Pool Transmission Facilities, NSTAR will recover the cost of the SEMA Upgrade Projects through a formula rate regimen, which should reduce the rate of return needed to attract capital, and eliminate any need for an ROE adder.

## 2. Commission Determination

65. In addition to satisfying the section 219 requirement of ensuring reliability or reducing the cost of delivered power by reducing congestion, an applicant must demonstrate that there is a nexus between the incentive sought and the investment being made. In Order No. 679-A, the Commission clarified that the nexus test is met when an applicant demonstrates that the total package of incentives requested is "tailored to address the demonstrable risks or challenges faced by the applicant."<sup>96</sup>

66. As part of the evaluation of whether the incentives requested are tailored to address the demonstrable risks or challenges faced by the applicant, the Commission has found the question of whether a project is "routine" to be particularly probative. In *BG&E*, the Commission provided guidance on the factors that it will consider when determining whether a project is routine. The Commission states that it will consider all relevant factors presented by the applicant, including evidence on: (1) the scope of the project (e.g., dollar investment, increase in transfer capability, involvement of multiple entities or jurisdictions, size, or effect on region); (2) the effect of the project (e.g., improving reliability or reducing congestion costs); and (3) the challenges or risks faced by the project (e.g., siting, internal competition for financing with other projects, long lead times, regulatory and political risks, specific financing challenges, or other

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<sup>96</sup> Order No. 679-A, FERC Stats. & Regs. ¶ 31,236 at P 40.



impediments).<sup>97</sup> The Commission has also recognized that risks, challenges, and benefits associated with the use of advanced technologies can be relevant considerations in conducting the Order No. 679 nexus analysis.<sup>98</sup>

67. Because the Commission grants the requested waiver of the December 31, 2008 deadline established in its Opinion No. 489 Rehearing Order, and finds that Phase II of the 345 kV Project is entitled to the 100 basis point ROE incentive under Opinion No. 489, the protestors' Order No. 679 arguments with respect to that project are dismissed as moot.

68. With respect to the Carver and Barnstable Projects, the Commission agrees with the protestors that these projects are routine in nature and do not involve the kind of scope, effects, and risks or challenges that merit incentive rate treatment. We find that these projects should be undertaken in the ordinary course of business in keeping with good utility management practices. The Commission finds that NSTAR has not presented sufficient evidence regarding the financial impact or burden that NSTAR faces in financing these two projects. In addition, both of these projects are being developed and constructed entirely by NSTAR, are located in Massachusetts, and thus have limited regional reliability impacts. Further, NSTAR has not presented sufficient evidence of significant siting challenges, internal competition for financing with other projects, long lead times, regulatory or political risks, specific financing challenges, or other compelling impediments that warrant incentives. As a result, we find that the Carver and Barnstable Projects fail the Commission's nexus test and are not eligible for the 100 basis point ROE incentives under Order No. 679.

## **F. Advanced Technology Incentive**

### **1. Protests**

69. Public Parties, EMCOS and NECPUC argue that the Commission should deny the requested 46 basis point advanced technology incentive for the 345 kV Project because it does not employ advanced technologies. Rather, the protestors state the 345 kV Project employs mature technologies with a track record of few electrical failures. Public Parties also states that High Pressure Fluid Flow cable technology has been in use in the field for 70 years, and that NSTAR has operated High Pressure Fluid Flow lines at the 345 kV level for 40 years. Further, Public Parties claim that NSTAR has 28 years of experience with 345 kV underground transmission systems, and that the use of Polypropylene Paper

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<sup>97</sup> July BG&E Order, 120 FERC ¶ 61,084 at P 52-55.

<sup>98</sup> See, e.g., *New York Regional Interconnect, Inc.*, 124 FERC ¶ 61,259 at P 42-57 (2008); *Tallgrass Transmission, LLC*, 125 FERC ¶ 61,248 at P 55, 59 (2008).

insulation with 345 kV cables is more than 20 years old. EMCOS adds that High Pressure Fluid Flow underground transmission systems with system voltages up to 345 kV have been in commercial operation for over 70 years. Moreover, Public Parties state that use of underground High Pressure Fluid Flow cables does not increase the capacity, efficiency, or reliability of the proposed facility, a requirement of Order No. 679. NECPUC argues that to award an incentive for the use of technologies that were, in effect, the only possible cost effective choices for the project in question would illogically award the utility for doing what it was required to do as a prudent utility operator.

70. EMCOS argues that the Static VAR Compensation System to be used in the Barnstable Project has been used in various applications around the world for many years. Similarly, EMCOS asserts that NSTAR (and Boston Edison before it) has used the fiber optic technology to be utilized in the 345 kV Project and the SEMA Upgrade Projects for many years.

71. Finally, Public Parties contend that if the Commission is inclined to provide an advanced technology adder for the 345 kV Project, the incentive should be limited to the investment in variable reactance shunt reactors, and should not apply to the cost of installing the underground High Pressure Fluid Flow facilities.

## **2. Commission Determination**

72. The Commission denies NSTAR's request for a 50 basis point incentive for the use of advanced transmission technologies for all of the projects. The Brook Street and 345 kV Projects are completed or substantially near completion, and therefore are ineligible for Order No. 679 incentives.<sup>99</sup> We therefore find it unnecessary to evaluate the technologies being proposed for these two projects.

73. The Commission denies NSTAR's request for a 50 basis point adder for the use of advanced transmission technology for its Barnstable and Carver Projects. The Commission finds that NSTAR has failed to provide sufficient evidence to support incentive rate treatment for these projects.

74. With respect to the technology that NSTAR highlighted in connection with the Barnstable Project, the Commission has previously stated that a Static VAR Compensator represents three of the advanced technologies cited by Congress in section 1223 of EPAct 2005.<sup>100</sup> However, the Commission has also recognized that we are required under

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<sup>99</sup> *Commonwealth Edison Co.*, 122 FERC ¶ 61,037 at P 32-37.

<sup>100</sup> *Trans-Allegheny Interstate Line Co.*, 119 FERC ¶ 61,219 at P 83 (2007) (*TrAILCo*).

section 1223 of EPCAct 2005 to “encourage, as appropriate” the deployment of such technologies, and that use of such technologies does not automatically warrant the granting of incentives.<sup>101</sup> The Commission's evaluation of risks, challenges, and benefits associated with the proposed use of advanced technologies must be a dynamic process that takes into account technological improvements and evolving practices in the industry.

75. In *TrAILCo*, the applicant seeking an incentive for a Static VAR Compensator recognized that the technology itself was not new.<sup>102</sup> However, the SVC employed in *TrAILCo* was one of the largest installations in the world (with a capacity of 675 MVAR), and it will be the largest unit installed in the United States to date with its unique risks and challenges. The Commission cited these characteristics as important to the SVC employed in *TrAILCo* warranting an incentive ROE adder.<sup>103</sup>

76. By contrast, the Commission denies NSTAR's request for an incentive for use of a Static VAR Compensator because NSTAR had not identified either any unusual characteristics of or risks, challenges, or benefits associated with that technology that warrant incentive treatment. The Commission also agrees with EMCOS that Static Var Compensation System technology, as used in the Barnstable Project, has been used in various applications around the world for many years. This result is consistent with the Commission's recent denial of another requested incentive ROE adder in connection with a Static VAR Compensator project.<sup>104</sup>

77. Regarding the Carver Project and the use of the 345 kV XLPE three-phase circuit technology used to interconnect the 345 kV transmission lines serving the Carver substation, the Commission has granted a technology adder for use of XLPE underground cable technology in *United Illuminating and Northeast Utilities*.<sup>105</sup> However, in *United Illuminating and Northeast Utilities*, the Commission found that the incentive for the use of XLPE underground cable was justified when the project at issue involved both higher

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<sup>101</sup> *The Nevada Hydro Company, Inc.*, 122 FERC ¶ 61,272 at P 84-85 (2008).

<sup>102</sup> *TrAILCo*, 119 FERC ¶ 61,219 at P 19.

<sup>103</sup> *Id.* at P 82, 88-89.

<sup>104</sup> *Commonwealth Edison Co.*, 125 FERC ¶ 61,250, at P 40-44 (2008).

<sup>105</sup> *See, United Illuminating Co.*, 122 FERC ¶ 61,183, at P 73 (2008) (*United Illuminating*) and *Northeast Utilities Service Co.*, 124 FERC ¶ 61,044, at P 83-86 (2008) (*Northeast Utilities*).

voltage levels and longer distances.<sup>106</sup> The Carver Project does not reflect that combination of characteristics. NSTAR uses only 2,340 feet of three-phase 345 kV XLPE underground cable to interconnect the 345 kV transmission lines serving the Carver substation. Further, NSTAR acknowledged that the challenges of working the XLPE cable were not present in the Carver Project because the cable was not being laid for long distances in congested urban streets.<sup>107</sup> We find that NSTAR's application of this technology is limited and differs from *United Illuminating and Northeast Utilities*, where it was used at much greater distances which presented greater engineering and installation challenges than those faced by NSTAR for this project. Moreover, the Commission recognizes that fiber optics have been used in transmission design for many years, and that such utilization may not be, in and of itself, worthy of incentives. Accordingly, we deny NSTAR's request for an advanced technology incentive for the Carver Project.

## G. ROE

### 1. Protests

78. NECPUC contends that the overall rate of return that would result from application of the various adders produces an unjust and unreasonable result.<sup>108</sup> NECPUC contends that incentive adders should be predicated on a base ROE of at most 10.5 percent, inclusive of the 50 basis points ROE adder for joining the RTO, and that accepting a higher base ROE would be grossly unfair for ratepayers. It suggests that NSTAR's current guaranteed ROE is significantly higher than the true cost of equity, suggesting that the projects would attract equity capital even without additional adders. According to NECPUC, an 11.64 percent base ROE already falls at the upper end of the Commission's zone of reasonableness for New England Transmission Owners. If the Commission does not reject the adders requested by NSTAR, NECPUC asserts that the Commission hold an evidentiary hearing to consider closely whether an additional 146 basis points<sup>109</sup> on top of an already generous ROE is just and reasonable.

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<sup>106</sup> See, *United Illuminating* at P 72 (2008) and *Northeast Utilities* at P 85 and fn 99 (2008).

<sup>107</sup> Exhibit NS-14, Page 4.

<sup>108</sup> NECPUC Protest at 17-18.

<sup>109</sup> Transmittal Letter at 5. NSTAR proposes to cap any incentives awarded at 13.1 percent, which is 146 basis points above the 11.64 percent base ROE awarded to all New England Transmission Owners in Opinion No. 489.

79. NECPUC also asserts that conditions have changed in the bond market since the Commission issued Order No. 489 in August 2006.<sup>110</sup> The average monthly yield on 10-year U.S. Treasury bonds for the six-month period from May 2008 to October 2008 was 3.90 percent. This is 34 basis points below the 4.24 percent level on these bonds during the July 2004 through December 2004 period, the time period of the data upon which Order No. 489 was based. Therefore, NECPUC claims an updated base ROE of 10.5 percent, with a downward adjustment of 108 basis points, would be more appropriate.

80. NECPUC further contends that the NSTAR's proxy group used to update the Order No. 489 Discounted Cash Flow (DCF) analysis is inappropriate. It argues that the average Standard and Poor's (S&P) bond rating of the proxy group lies somewhere between BBB and BBB+, well below NSTAR's S&P rating of A+. They explain that Dr. Avera does not apply the Commission's "comparable risk band," which the Commission has interpreted as one credit "notch" higher or lower than the credit rating of the utility at issue. In addition, NECPUC recommends excluding NSTAR from its own proxy group due to "circularity," as well as excluding Allegheny Energy due to its higher risks than NSTAR. Further, NECPUC asserts that Dr. Avera inappropriately excludes Consolidated Edison and that its 8.0 percent low end ROE is sufficiently higher than comparable utility bond rates. With these adjustments to the proxy group, NECPUC asserts that the base ROE should be reduced to a midpoint of 10.5 percent resulting in a zone of reasonableness of 8.0 percent to 13.0 percent.

## 2. Commission Determination

81. As previously discussed, based on the facts of this case, we authorize the limited waiver of the December 31, 2008 termination date for the 100 basis point ROE adder for Phase II of the 345 kV Project, to be bound by the upper end of the zone of reasonableness established in Opinion No. 489. The Opinion No. 489 Rehearing Order modified the high-end implied cost of equity and the midpoint ROE for the New England Transmission Owners.<sup>111</sup> As a result, the zone of reasonableness for the New England Transmission Owners is 7.3 percent to 13.5 percent, with a midpoint ROE of 10.4 percent.<sup>112</sup>

82. The "going-forward" ROE for New England Transmission Owners is 11.64 percent, including the 50 basis point incentive for RTO participation and the 74 basis point adjustment reflecting updated bond data, applicable as of November 1, 2006 (10.4 +

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<sup>110</sup> Chattopadhyay Affidavit at P 8-10.

<sup>111</sup> Opinion No. 489 Rehearing Order, 122 FERC ¶ 61,265 at P 9-13.

<sup>112</sup> *Central Maine*, 125 FERC ¶ 61,079, at P 72 (2008).

0.5 + 0.74).<sup>113</sup> Our granting limited waiver of the December 31, 2008 termination date for the 100 basis point ROE adder for Phase II of the 345 kV Project, in conjunction with the 11.64 percent base level ROE as determined by the Opinion No. 489 Rehearing Order, results in a 12.64 percent ROE (10.4 + 0.5 + 0.74 + 1.00) for Phase I and Phase II of the 345 kV and Brook Street Projects, which falls within the upper range of the zone of reasonableness.

83. With respect to NECPUC's concern about whether the base ROE and zone of reasonableness remain appropriate under current market conditions, the Commission prefers to make such assessment based upon a DCF analysis performed with updated data.

84. NSTAR submitted a DCF analysis based on the Opinion No. 489 methodology, using updated data for the six month period ending September 2008. According to Dr. Avera's analysis, the updated zone of reasonableness was determined to be 8.6 percent to 15.2 percent, using a fourteen company proxy group of Northeast Transmission Owners. However, we agree with NECPUC that Dr. Avera did not apply the appropriate screen for corporate credit risk, as the resulting proxy group has an average S&P bond rating at least three notches below NSTAR's A+ rating. Given the limited number of companies with S&P bond ratings as high as NSTAR's, however, we find it appropriate to include all companies rated in the broader A-rated category (A+, A, and A- by S&P) in order to produce a proxy group of a reasonable size of four companies.<sup>114</sup>

85. We agree with NECPUC that Consolidated Edison's low end ROE of 8.0 percent should not cause the company to be excluded from the proxy group. While Dr. Avera had removed this company because its low end ROE is too close to the six-month average Moody's bond yield of 6.93 percent for BBB-rated utilities (the average bond rating of his fourteen company proxy group), the Commission's focus has been on the relationship between the debt and equity costs of each company and in Opinion No. 489 we eliminated only those companies with ROEs that were below their cost of debt.<sup>115</sup> Further, we believe the more appropriate comparison would be to use the 6.37 percent six-month average yield for A-rated utilities (given NSTAR's A+ rating) which makes the differential between Consolidated Edison's ROE and debt cost even greater. We

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<sup>113</sup> *Id.* P 73. Opinion No. 489 was issued on October 31, 2006 and the 74 basis point adder to the base ROE became applicable going forward.

<sup>114</sup> The four remaining companies with S&P bond ratings between A+ and A- are Consolidated Edison, Dominion Resources, FPL Group, and NSTAR.

<sup>115</sup> Opinion No. 489, 117 FERC ¶ 61,129 at P 45, 53-59.

conclude that the differential between Consolidated Edison's ROE and its debt costs is not so small to cause a rational investor not to invest in Consolidated Edison's equity and therefore we will not exclude Consolidated Edison from the proxy group.<sup>116</sup>

86. However, we disagree with NECPUC and would not exclude NSTAR from its own proxy group, as the Commission routinely includes an applicant in the DCF analysis. The adjusted proxy group has a zone of reasonableness of 8.0 percent (determined by Consolidated Edison) to 13.0 percent (determined by both Dominion Resources and FPL Group) with a midpoint ROE of 10.5 percent, consistent with NECPUC's recommendation, and a median ROE of 11.2 percent.

87. We also disagree with NECPUC that the base ROE should be determined exclusive of the 50 basis point incentive RTO adder awarded to all New England Transmission Owners, as NSTAR continues to be a member of ISO-New England and remains entitled to the 50 basis point ROE incentive. Therefore, based upon the new DCF analysis, and using the median ROE consistent with recent Commission policy,<sup>117</sup> the base ROEs for the projects for which the Commission is awarding a 100 basis point

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<sup>116</sup> We note further that there is no Commission precedent for eliminating companies with low-end ROEs more than 100 basis points above the average public utility's bond yield. The 8.0 percent low-end ROE of Consolidated Edison is 107 basis points above the six-month average yields of 6.93 percent for BBB-rated public utilities, the average credit rating of the proxy group under Dr. Avera's analysis. Under the Commission's analysis that eliminates from NSTAR's proxy group all companies rated below A-, more consistent with NSTAR's strong A+ credit rating, the Consolidated Edison low-end ROE is 163 basis points above the six-month average yields of 6.37 percent for A-rated public utilities.

<sup>117</sup> *Golden Spread Electric Cooperative, Inc. v. Southwestern Public Service Co.*, Opinion No. 501, 123 FERC ¶ 61,047, at P 62-64 (2008) (*Golden Spread*). In *Golden Spread*, the Commission determined that, for an individual utility, the median best represents the central tendency in a proxy group with a skewed distribution of returns. Further, the Commission stated that the use of the median is a more refined measure of central tendency because it "lessens the impact of any single proxy company whose ROE is atypically high or low" and has the advantages of "taking into account more of the companies in a proxy group rather than only those at the top and bottom." In contrast, the Commission found that using the midpoint is the most appropriate measure for determining a single generic ROE for all members of a regional transmission organization, since it fully considers the range of returns applicable to those members. Finally, the Commission found that the midpoint is appropriate when the ROE range of distributions of the proxy group is not substantially skewed. See *Midwest Independent Transmission System Operator, Inc.*, 106 FERC ¶ 61,302, at P 12 (2004).

adder would be 11.2 percent and the overall ROE would be 12.7 percent (11.2 + 0.5 + 1.0). Since the only incentive ROEs that the Commission is awarding to NSTAR, the 12.64 percent<sup>118</sup> ROEs for both phases of the 345 kV Project and the Brook Street Project, fall below the high end ROE as determined by this updated DCF analysis (13.0 percent, as adjusted for the corporate credit screen), we find that the updated DCF analysis confirms that all of the ROEs we are granting to NSTAR continue to fall within the zone of reasonableness for New England Transmission Owners.

88. Finally, we deny the request of NECPUC and EMCOS to set this matter for hearing. In general, the Commission sets matters for a trial-type evidentiary hearing only to resolve material issues of law and fact. In this case, however, the Commission was able to make a determination on the reasonableness of the incentives requested based on the evidence presented by the parties.

The Commission orders:

NSTAR's request for waiver of the Opinion No. 489 deadline applicable to the 100 basis ROE incentive adder for Phase II of the 345 kV Project is granted pursuant to Opinion No. 489, and all other incentive adders are hereby denied as discussed in the body of this order.

By the Commission. Commissioner Kelly concurring in part and dissenting in part with a separate statement attached.  
Commissioners Moeller and Wellinghoff dissenting in part with separate statements attached.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.

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<sup>118</sup> These 12.64 percent ROEs are determined by adding the 100 basis point ROE adder (granting the limited waiver to the December 31, 2008 termination date) to the 11.64 percent ROE for New England Transmission Owners as determined by the Opinion No. 489 Rehearing Order.



UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

NSTAR Electric Company

Docket Nos. ER09-14-000 and  
ER09-14-001

(Issued December 18, 2008)

KELLY, Commissioner, *concurring in part and dissenting in part*:

This order addresses a request for transmission incentive rate treatment filed by NSTAR Electric Company (NSTAR). NSTAR seeks, among other incentives, a 100 basis point adder for the Phase 2 section of its 345 kV Project. NSTAR seeks either a limited waiver of the December 31, 2008 termination date for the 100 basis point ROE adder established in Opinion No. 489, or alternatively, a 100 basis point ROE adder pursuant to Order No. 679.<sup>1</sup> In today's order, the majority finds that NSTAR has shown good cause to grant NSTAR's request for limited waiver of the December 31, 2008 deadline established in the Opinion No. 489 Rehearing Order.<sup>2</sup>

I dissented from Opinion No. 489 and continue to believe that the Commission erred by granting the requested incentive ROE adder. I do not believe that granting the 100 basis point adder is justifiable as an incentive to get more transmission built in New England. However, in Opinion No. 489 I stated that I would have allowed the filing parties an opportunity to file a new incentive proposal under the newly enacted section 219(a) of the Federal Power Act, which would have allowed an opportunity to seek incentive rate treatment under what has become Order No. 679 and 679-A.

In assessing the merit of the incentives request per Order No. 679 and applying the project-based criteria that I have relied upon in previous transmission incentives proceedings,<sup>3</sup> I do not believe that the 345 kV Project or the SEMA Upgrades warrant incentive rate treatment.

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<sup>1</sup> *Promoting Transmission Investment through Pricing Reform*, Order No. 679, FERC Stats. & Regs. ¶ 31,222, *order on reh'g*, Order No. 679-A, FERC Stats & Regs. ¶ 31,236 (2006), *order on reh'g*, 119 FERC ¶ 61,062 (2007).

<sup>2</sup> *Bangor Hydro-Electric Co.*, 122 FERC ¶ 61,265 (2008) (Opinion No. 489 Rehearing Order), *order on reh'g* 124 FERC ¶ 61,136 (2008).

<sup>3</sup> *See American Electric Power Service Corporation*, 118 FERC ¶ 61,041 (2007).

For these reasons, I concur in part and dissent in part from this order.

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Sudeen G. Kelly

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

NSTAR Electric Company

Docket Nos. ER09-14-000  
ER09-14-001

(Issued December 18, 2008)

MOELLER, Commissioner, *dissenting in part*:

Under present economic conditions, the competition for available capital has increased. For this reason, the Commission should do what it can to encourage capital investment in needed transmission infrastructure projects.<sup>1</sup> While this agency cannot force a utility to build a transmission project, we can influence the process. One very important tool in this effort is our ability to provide incentive rate treatment for new transmission projects that meet certain conditions. Our authority to offer such incentives was made explicit by Congress in the Energy Policy Act of 2005.<sup>2</sup>

Although the majority has approved certain incentives in this case, this order also rejects certain incentives for transmission projects that will have important benefits in reducing carbon dioxide emissions in New England. The projects are designed to reduce reliance on two oil-fired generators on Cape Cod, and in addition to the environmental benefits, NSTAR's commitment to these projects is expected to result in annual cost savings of \$138 million. Given the obvious benefits of these projects, the Commission should carefully consider whether it makes sense to deny incentives to construct them. My review of these projects compels me to find that these projects should receive incentives, and that is why I respectfully dissent.

In this case, the majority denies NSTAR's request for incentive rate treatment for two transmission projects in an area that has recently experienced both increased congestion and reliability problems. The Carver and Barnstable Projects were specifically designed to create additional transmission capacity and improve reliability in

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<sup>1</sup>*Commonwealth Edison Co. and Commonwealth Edison Co. of Indiana*, 125 FERC ¶ 61,250 (2008) (Moeller, Comm'r, dissenting).

<sup>2</sup>Section 1241 of the Energy Policy Act of 2005 amended the Federal Power Act to require the Commission to establish incentive-based rate treatment for the purpose of benefitting consumers by ensuring reliability and reducing the cost of delivered power by reducing transmission congestion.

the ISO-NE's Southeastern Massachusetts Reliability Region ("SEMA"). The Carver Project, with an estimated cost of \$43 million, involves the expansion of a major substation and the addition of a new 115 kV transmission line, autotransformer, breakers and circuits.<sup>3</sup> The effect of the Carver Project is to increase transfer capability by a range of 100-130 MW and create needed 345 kV paths for electricity to reach the Cape Cod area. The Barnstable Project, with an estimated cost of over \$30 million, is a new Static VAR Compensation System ("SVC") that will work to prevent a voltage collapse at the 115 kV level.<sup>4</sup> NSTAR estimates that Barnstable SVC system will increase power import levels into Lower SEMA in the range of 170-220 MW.<sup>5</sup> The Carver and Barnstable Projects are scheduled to enter service next year.

Notwithstanding the documentation supplied by NSTAR in its application, the majority summarily determines that the Projects are "routine in nature and do not involve the kind of scope, effects, and risks or challenges that merit incentive rate treatment."<sup>6</sup> I disagree with this determination and would find that taken together, the SEMA Upgrade Projects<sup>7</sup> are not routine.

These Projects will fundamentally change the dispatch of generation in the Lower SEMA region. Currently, the ISO-NE employs an operating procedure that requires the daily dispatch of oil-fired generators (the "Canal Units") that have largely become uneconomic due to increases in oil prices. Since the Lower SEMA region relies heavily on the Canal Units for system security, there is no current alternative but to run these generators whether or not they are chosen by economic merit. In fact, since 2006, the uplift charges associated with the out-of-merit dispatch of the Canal Units have exceeded \$280 million.<sup>8</sup> NSTAR estimates that the benefits associated with the SEMA Upgrade

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<sup>3</sup>Mayall Ex. No. NS-2 at 13-14, and Clarke Exh. No. NS-3 at 11-12.

<sup>4</sup>Oheim Ex. No. NS-1 at 31-35.

<sup>5</sup>Clarke Ex. No. NS-3 at 12.

<sup>6</sup>Order at P 68.

<sup>7</sup>The SEMA Upgrade Projects consist of the Carver, Barnstable, and Brook Projects. The Brook Project is already entitled to receive a 100 basis point ROE adder pursuant to Opinion No. 489. *See* Order at P 44.

<sup>8</sup>Clarke Ex. No. NS-3 at 9.

Projects will result in cost savings of over \$138 million based on 2008 costs by reducing the operation of the Canal Units to no more than approximately 50-85 days a year.<sup>9</sup>

The Carver and Barnstable Projects are major additions to the transmission infrastructure and deserve construction incentives, consistent with Order No. 679 and Section 219 of the Federal Power Act. Moreover, the expected benefits associated with these Projects (i.e., reliability enhancements, customer cost savings, and the ability to shift away from less-efficient, uneconomic generation) demonstrate that they are not routine in scope or effect. Further, the evidence demonstrates that these Projects face specific engineering challenges and construction risks.<sup>10</sup> While the majority concludes that the Carver and Barnstable Projects will “have limited regional reliability impacts,” there is an ongoing debate as to the precise boundaries of the SEMA region.<sup>11</sup> Given the electrical configuration of NSTAR’s existing system, if the Canal Units fail to start there is a significant possibility that a loss of load could extend beyond the Cape Cod area, to communities in the north and east.<sup>12</sup> Accordingly, I find that there is convincing evidence on which to base a decision that that these Projects will have a regional reliability impact.

As I’ve stated previously, the Commission should not be excessively rigid during a time when significant investment is needed in transmission infrastructure for increased reliability. Each transmission project is unique to the area and system for which it is proposed, and such individual circumstances should be considered when deciding

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<sup>9</sup>*Id.* at 16-17.

<sup>10</sup>NSTAR Transmittal Letter at 28-30, summarizing various risks and hurdles faced by the Carver and Barnstable Projects.

<sup>11</sup>*See Braintree Elec. Light Dep’t v. ISO New England, Inc.*, 124 FERC ¶ 61,061 at P 29 (2008) (“The SEMA reliability region was adopted by ISO-NE from the existing electric regional boundaries of NEPOOL; it was originally established by engineering analysis of interfaces and transmission constraints. However, the SEMA regional boundary may no longer result in a just and reasonable allocation of the costs at issue here.”)

<sup>12</sup>Clarke Ex. No. NS-3 at 7.

whether to grant incentives. Based on the foregoing reasons, I would have awarded the Carver and Barnstable Projects an incentive ROE adder pursuant to Order No. 679.<sup>13</sup>

For these reasons, I respectfully dissent in part.

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Philip D. Moeller  
Commissioner

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<sup>13</sup>My calculation of a basis point ROE adder would have considered the Commission's contemporaneous decision (in Docket No. ER08-1051-000) permitting NSTAR to include construction work in progress in its rate base for the SEMA Upgrade Projects.

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

NSTAR Electric Company

Docket Nos. ER09-14-000  
ER09-14-001

(Issued December 18, 2008)

WELLINGHOFF, Commissioner, dissenting in part:

In Opinion No. 489, the Commission approved a request for a 100 basis point incentive ROE adder for all new transmission investment in New England. I dissented from that order based on a lack of record evidence demonstrating any nexus between the requested incentive ROE adder and the construction of new transmission facilities.<sup>1</sup>

In today's order, the majority finds that NSTAR has shown good cause to justify a waiver of the December 31, 2008 in-service cut-off date that the Commission established in its order on rehearing of Opinion No. 489. I continue to believe that the Commission erred in Opinion No. 489 by granting the requested incentive ROE adder. I dissent in part from today's order because I conclude that it is inappropriate to grant a waiver that allows additional projects to qualify for that inadequately supported incentive.

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Jon Wellinghoff  
Commissioner

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<sup>1</sup> See *Bangor Hydro-Electric Co.*, 117 FERC ¶ 61,129 (2006) (dissent in part of Commissioner Wellinghoff). I also wrote separately, concurring in part and dissenting in part, when the Commission issued its order on rehearing of Opinion No. 489. See *Bangor Hydro-Electric Co.*, 122 FERC ¶ 61,265 (2008).