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July 1, 2010

#### VIA ELECTRONIC FILING

The Honorable Kimberly D. Bose, Secretary The Honorable Nathaniel J. Davis, Sr., Deputy Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

#### Re: ISO New England Inc. and New England Power Pool <u>Docket Nos. ER10-787-000, EL10-50-000, and EL10-57-000</u> (consolidated)

Dear Secretary Bose and Deputy Secretary Davis:

Attached for electronic filing in the above-referenced, consolidated dockets is the *First Brief of ISO New England Inc*. The attached First Brief is being filed pursuant to the Commission's April 23, 2010 Order on Forward Capacity Market Revisions and Related Complaints in the above referenced dockets. A copy of the attached has been served upon all parties included in the Commission's service list.

If you have any questions or concerns regarding this filing, please feel free to contact me. Thank you for your assistance in this matter.

Respectfully submitted,

<u>/s/ Sherry A. Quirk</u> Sherry A. Quirk, Esq.

Counsel for ISO New England Inc.

Attachment

cc: Official Service List

#### UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

ISO New England Inc. and New England Power Pool	) ) )	Docket No. ER10-787-000
New England Power Generators	)	
Association, Inc. v.	)	Docket No. EL10-50-000
ISO New England Inc.	)	
	)	
PSEG Energy Resources & Trade LLC,	)	
PSEG Connecticut LLC, NRG Power	)	
Marketing LLC, Connecticut Jet	)	
Power LLC, Devon Power LLC,	)	
Middletown Power LLC, Montville	)	
Power LLC, Norwalk Power LLC, and	)	
Somerset Power LLC v.	)	Docket No. EL10-57-000
ISO New England Inc.	)	
	)	
	)	(consolidated)

#### FIRST BRIEF OF ISO NEW ENGLAND INC.

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Counsel for ISO New England Inc.

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ISO New England Inc.	)	
2	)	
	)	(consolidated)

#### FIRST BRIEF OF ISO NEW ENGLAND INC.

Pursuant to the Federal Energy Regulatory Commission's ("Commission"

or "FERC") April 23, 2010 Order on Forward Capacity Market Revisions and

Related Complaints<sup>1</sup> ("April 23 Order") in the above captioned consolidated

<sup>&</sup>lt;sup>1</sup> ISO New England Inc. and New England Power Pool Participants Committee et al., Order on Forward Capacity Market Revisions and Related Complaints, 131 FERC ¶ 61,065 (2010) ("April 23 Order"). The Commission issued its April 23 Order in response to filings made by the ISO and New England Power Pool Participants Committee on February 22 and 25, 2010, collectively referred to herein as the FCM Redesign Filing. See ISO New England Inc. and New England Power Pool, Various Revisions to FCM Rules Related to FCM Redesign, Docket No. ER10-787-000 (filed February 22, 2010); ISO New England Inc. and New England Power Pool, Supplement to Filing of Various Revisions to FCM Rules Related to FCM Redesign, Docket No. ER10-787-

proceedings, ISO New England Inc. (the "ISO") submits this First Brief in the paper hearing ordered by the Commission. In accordance with the Commission's April 23 Order, the ISO submits herein a proposal ("Revised FCM Proposal") redesigning certain aspects of the Forward Capacity Market<sup>2</sup> ("FCM"). In particular, in the April 23 Order, the Commission set certain issues for a paper hearing with briefs due on July 1 and September 1, 2010. The issues set for hearing include: (1) issues relating to the Alternative Capacity Price Rule ("APR"); (2) modeling of Capacity Zones; and (3) the proper value of the Cost of New Entry ("CONE"). This brief responds to the Commission's directive to the parties to effectively address each of these issues in their opening briefs.<sup>3</sup>

#### I. INTRODUCTION

At the outset, it is important to place this paper hearing in context. Over the past decade, New England stakeholders, the ISO and the Commission have worked diligently to develop and implement an efficient capacity market. When capacity market discussions began, the goals were to provide efficient locational

<sup>000 (</sup>filed February 25, 2010) (enclosing page 28 which was inadvertently omitted from the initial February 22 filing).

<sup>&</sup>lt;sup>2</sup> Capitalized terms used but not otherwise defined in this filing have the meanings ascribed thereto in the ISO's Transmission, Markets and Services Tariff (FERC Electric Tariff No. 3) (the "Tariff"). Section III of the Tariff is Market Rule 1.

<sup>&</sup>lt;sup>3</sup> In the April 23 Order, the Commission set for paper hearing issues that were specifically enumerated in paragraph 18 of that Order. In addition, the Commission identified other matters related to these issues that should be addressed in the briefs. While the issues identified by the Commission throughout the April 23 Order are addressed below in the ISO's First Brief, for the Commission's convenience the ISO includes an attachment setting forth citations to the brief identifying the sections where responses to each of those questions are located.

price signals and to replace the need for the then-proliferating reliability must-run contracts which were being used to retain units in constrained areas because of reliability needs.<sup>4</sup> On March 1, 2004, the ISO filed the Locational Installed Capacity ("LICAP") structure, which was predicated on a demand curve that provided capacity compensation based upon the level of installed capacity in the region.<sup>5</sup> That filing resulted in a Commission order setting the LICAP matter for hearing<sup>6</sup> and began one of the most contentious periods in the saga of capacity market development in New England. After the issuance of the Administrative Law Judge's decision, given the fervent opposition of the load representatives and state regulators to the LICAP structure, the Commission set the matter for a rare oral argument before the Commission itself.<sup>7</sup> Subsequent to this argument, the region coalesced around the current FCM design which was ultimately approved by the Commission.<sup>8</sup>

Since the Commission's approval of the core FCM design, parties have worked together to refine the FCM rules. The ISO has conducted three auctions under the FCM construct successfully and the Commission has approved their

<sup>&</sup>lt;sup>4</sup> See Devon Power LLC et al., 103 FERC ¶ 61,082 at P 29 and n.19; reh'g granted in part and denied in part, 104 FERC ¶ 61,123 (2003).

<sup>&</sup>lt;sup>5</sup> *Devon Power LLC et al.*, Compliance Filing of ISO New England Inc., Docket No. ER03-563-030 (filed March 1, 2004).

 $<sup>^6</sup>$  Devon Power LLC et al., 107 FERC  $\P$  61,240; reh'g denied and clarified in part, 109 FERC  $\P$  61,154 (2004).

<sup>&</sup>lt;sup>7</sup> *Devon Power LLC et al.*, Notice Scheduling Oral Argument, Docket No. ER03-563-030 (issued Aug. 25, 2005).

<sup>&</sup>lt;sup>8</sup> Devon Power LLC, 115 FERC ¶ 61,340 (2006) (FCM settlement order), order on reh'g, 117 FERC ¶ 61,133 (2006) (FCM rehearing order); *ISO New England Inc.*, 119 FERC ¶ 61,045 (2007) (FCM market rules order).

outcomes.<sup>9</sup> Notably, in light of the original goals for a capacity market, reliability must-run agreements essentially have been eliminated in New England.

Pursuant to Section 13.8.4<sup>10</sup> of Market Rule 1, the Internal Market Monitor ("IMM") was required to prepare a report analyzing the effectiveness and operation of the FCM after the second auction.<sup>11</sup> Among other issues, the IMM report recommended changes to the APR and the modeling of zones. Additionally, the Tariff contained an obligation to further analyze specific elements of the APR and submit changes no later than May 17, 2010.<sup>12</sup> As a result of the IMM Report and the APR Tariff obligation, a working group was established to address those issues and other stakeholder concerns with the FCM. The working group was co-chaired by NEPOOL, the New England Conference of Public Utility Commissioners ("NECPUC") and the ISO. The working group process culminated in the February 22, 2010 FCM Redesign Filing.

While the FCM Redesign Filing represented real improvement to the FCM design, that filing made it clear that more work needed to be done to address

<sup>&</sup>lt;sup>9</sup> *ISO New England Inc.*, 123 FERC ¶ 61,290 (2008) (order accepting filing of results of first FCA); *ISO New England Inc.*, 127 FERC ¶ 61,040 (2009); and *ISO New England Inc.*, 130 FERC ¶ 61,145 (2010).

<sup>&</sup>lt;sup>10</sup> The ISO notes that Section III.13.8.4 (the section pursuant to which the IMM issued his report), has since been removed from the tariff. *ISO New England Inc. and New England Power Pool*, Order No. 719 Compliance Filing, Docket No. ER09-1051-000 (filed April 28, 2009).

<sup>&</sup>lt;sup>11</sup> Internal Market Monitoring Unit Review of the Forward Capacity Market Auction Results and Design Elements, ISO New England Inc. Market Monitoring Unit (June 5, 2009) ("Internal Market Monitor Report"), available at http://www.iso-ne.com/markets/mktmonmit/rpts/other/fcm\_report\_final.pdf.

<sup>&</sup>lt;sup>12</sup> Tariff Section III.13.2.5.2.5(f).

essentially the same issues that the Commission set for this paper hearing.<sup>13</sup> In that regard, the filing suggested an eighteen month stakeholder process (later shortened to nine months) to address these issues. Subsequent to that filing, the External Market Monitor ("EMM") filed an opposition to the FCM Redesign Filing<sup>14</sup> and the generators filed two complaints under Section 206 of the Federal Power Act ("FPA").<sup>15</sup> Those filings culminated in the April 23 Order which set these matters for a paper hearing.<sup>16</sup>

Since the April 23 Order, there has been significant debate within New England regarding the ISO's proper role in this hearing. Some parties have asserted that the ISO should simply file additional support for the FCM Redesign Filing and should go no further. Based upon its reading of the April 23 Order, the ISO believes that the Commission did not intend such a narrow role for the ISO and, indeed, taking such a narrow role would not well serve either the Commission or the region. The ISO notes that the FCM Redesign Filing contained the full

<sup>&</sup>lt;sup>13</sup> FCM Redesign Filing, Transmittal Letter at 10:

The ISO and stakeholders continue to believe that further improvements to the design of the FCM are possible as we collectively gain more experience with the market's operation. As a result, the ISO believes that future stakeholder processes will continue to consider how to improve the FCM and, among other issues, consider further refining the definition of OOM resources, when the APR should be triggered and how the price should be set under the APR.

<sup>&</sup>lt;sup>14</sup> Motion to Intervene and Comments of Potomac Economics, Ltd. on Revisions to FCM Rules Related to FCM Redesign Filed By ISO New England, Inc., Docket No. ER10-787-000, at 18-19 (filed March 15, 2010) ("EMM Comments").

<sup>&</sup>lt;sup>15</sup> New England Power Generators Ass'n v. ISO New England Inc. ("NEPGA v. ISO-NE"), Docket No. EL10-50-000 (filed March 23, 2010); PSEG Energy Resources & Trade LLC v. ISO New England Inc. ("PSEG v. ISO-NE"), Docket No. EL10-57-000 (filed April 2, 2010).

<sup>&</sup>lt;sup>16</sup> April 23 Order at PP 15-18.

supporting rationale for the FCM redesign, and it would not be productive to simply restate that information again.

More importantly, the Commission's April 23 Order clearly contemplates more. The Commission's first finding is that: "[o]ur preliminary analysis indicates that the remainder of the Rules Changes Filing [relating to the APR, zones and mitigation, and CONE] has not been shown to be just and reasonable and may be unjust, unreasonable, unduly discriminatory or preferential, or otherwise unlawful."<sup>17</sup> The order goes on to state that: "The Filing Parties must submit briefs addressing our questions, either supporting their prior proposal, or making new proposals."<sup>18</sup> Throughout the remainder of the April 23 Order, the Commission provides significant guidance, creating the strong impression that, as the ISO expressed in the FCM Redesign Filing, more work must be done on the issues of APR, zonal modeling and mitigation, and the value of CONE. In other words, both the ISO and the Commission have indicated that further design work is necessary on these elements of the FCM design, and the Commission made clear that these briefs are the place to present such new proposals.

Furthermore, for the ISO to take a passive role on these critical issues at this point would leave the Commission with a record developed exclusively by load and generation. While the appropriately self-interested advocacy of these groups plays an important role in the development of the markets, the ISO's

<sup>&</sup>lt;sup>17</sup> *Id*. at P 15.

<sup>&</sup>lt;sup>18</sup> *Id*. at P 21.

independent viewpoint must be represented. The ISO, in its role as the independent entity charged with the responsibility for efficient markets, is providing the Commission with its best efforts at addressing the issues set for this paper hearing.

The ISO has done considerable further analysis and design work in developing a response to the issues that the Commission set for paper hearing. The Revised FCM Proposal presented here reflects the input of numerous people and several departments across the ISO. These efforts were led by Dr. Robert Ethier, Vice President of Market Development; Mark Karl, Senior Director of Resource Adequacy; and David LaPlante, Vice President of Market Monitoring. In addition, the ISO retained National Economic Research Associates, Inc. ("NERA") to consider the APR issues in the context of the ISO's Revised FCM Proposal. David Patton, the EMM, also reviewed and supports the conceptual design. Finally, the design framework was considered by the Markets Committee of the Board of Directors and reviewed by the full Board. While there was insufficient time to vet the design with stakeholders fully, the ISO presented the conceptual framework to the region at a meeting on June 15, 2010. Furthermore, on June 22, 2010, the Board of Directors met with all six NEPOOL sectors and state regulators to receive their initial feedback on the proposed design. Further meetings are being planned over the next month to discuss both the ISO proposal and the proposals of other stakeholders after their presentation to the Commission.

The ISO's proposal represents its best effort at answering – at this point in time and without the benefit of comprehensive stakeholder input – the questions posed by the Commission in the April 23 Order. The Revised FCM Proposal necessarily reflects high level, market design concepts and if approved, time will be needed to write the tariff rules, and implement those rules, as further explained in the ISO's June 2 Answer.<sup>19</sup> The ISO emphasizes that its Revised FCM Proposal is an integrated whole and a comprehensive solution to the issues raised in this proceeding. The proposal should not be viewed as a menu of ideas from which one can choose certain items and reject others. The ISO requests that the Commission approve the fundamental design principles offered in this brief, and permit the ISO to follow the process outlined in the ISO's June 2 Answer to implement this proposal.

#### II. ALTERNATIVE CAPACITY PRICE RULE

In the FCM Redesign Filing, the Filing Parties proposed three nonoverlapping APR mechanisms to address additional circumstances not covered by the previous design. In the April 23 Order, the Commission stated that the currently effective APR does not ensure that capacity prices reflect the market cost of new entry when new entry is needed.<sup>20</sup> Specifically, the Commission stated that:

the existing APR provides a price adjustment for OOM resources only when there is a need for new capacity as reflected by an ICR

<sup>&</sup>lt;sup>19</sup> *ISO New England Inc. and New England Power Pool, et al.*, Docket Nos. ER10-787 *et al.*, Motion for Leave to File Answer and Answer filed June 2, 2010 at 4-6 ("June 2 Answer").

<sup>&</sup>lt;sup>20</sup> April 23 Order at PP 69-70.

that exceeds all existing capacity. But new capacity may be needed in other situations, such as when some existing capacity retires from the market. Moreover, we also agree with commenters that OOM resources can affect prices even when no new capacity is needed, by displacing what would otherwise be the marginal, price-setting existing resource. And we agree with commenters that the price adjustment under the existing APR does not always fully correct for the effect of OOM resources on the capacity price. That is, the existing APR does not establish the price that would have arisen had all of the OOM resources offered at prices that reflect their full entry costs net of in-market revenues. Thus, when OOM resources are offered into the market, the existing APR does not ensure that capacity market prices reflect the market cost of new entry when new entry is needed.<sup>21</sup>

The Commission agreed that the changes to the APR presented in the FCM Redesign Filing represented an improvement,<sup>22</sup> but discussed several concerns and directed that various issues related to the APR be addressed in the paper hearing.<sup>23</sup> The issues identified by the Commission are consistent with those which the Filing Parties indicated in the FCM Redesign Filing warranted further consideration.<sup>24</sup> The revised APR mechanism presented in detail below fully compensates for the effects of OOM investment in each auction and sends appropriate price signals to both new and existing resources.

#### A. Overview Of The New Proposed Alternative Capacity Price Rule

An APR is needed only in the presence of out of market ("OOM")

resources. When there are no OOM resources affecting the Forward Capacity

<sup>&</sup>lt;sup>21</sup> *Id*. at P 70.

<sup>&</sup>lt;sup>22</sup> *Id*. at P 72.

<sup>&</sup>lt;sup>23</sup> *Id.* at PP 69-87.

<sup>&</sup>lt;sup>24</sup> FCM Redesign Filing at 10-11.

Auction ("FCA") price, there is no need to apply an APR. The ISO's revised APR proposal, while applicable in every FCA, only affects the price paid to existing resources when there are OOM resources that lower the FCA clearing price. Instead of the original APR or the three-part APR with distinct triggering conditions that was presented in the FCM Redesign Filing, the Revised FCM Proposal includes a single APR mechanism that would apply whenever new or carried-forward OOM capacity clears in the FCA.

OOM resources typically hold contracts that ensure full payment for the resource or otherwise receive particularized subsidies regardless of the capacity price that they could receive through their participation in the FCA. Because OOM resources receive "out-of-market" revenue, these resources can be offered into the FCA at very low prices that do not reflect a market-based or competitive cost of entry. OOM resources clear in the FCA on the basis of these low offers, and in so doing take the place of new or existing resources that offer in the FCA at competitive but higher prices. As a result, the FCA clears at a price (the "Capacity Clearing Price") that is too low to retain or attract the displaced new or existing resources.

The new APR proposed here administratively sets a price (the "Alternative Capacity Price") that fully corrects for this effect of OOM resources on the price resulting from the FCA.<sup>25</sup> The way to correct for the effect of OOM resources is not to set a price that would have resulted absent the entry of OOM resources.

<sup>&</sup>lt;sup>25</sup> This section discusses the "price" of the FCA rather than the "prices" for simplicity of exposition. As explained further in Section III of this Brief, it is proposed that zones be modeled all the time in the FCA. The APR would then apply separately to each zone.

Rather, the way to correct for the effect of OOM resources is to establish the price that would have prevailed if the OOM resources had submitted competitive offers into the FCA – that is, the price that would have prevailed if these resources did not receive OOM revenues and had offered into the FCA at prices reflecting their full cost of entry. In this "but-for" world, the FCA would clear based on the competitive but higher offers of the resources that were displaced by the OOM resources. This higher price, the Alternative Capacity Price, is established on the basis of resource bids that fully reflect their cost of entry. The Alternative Capacity Price thus fully corrects for the price-suppressing effect of some resources being OOM.

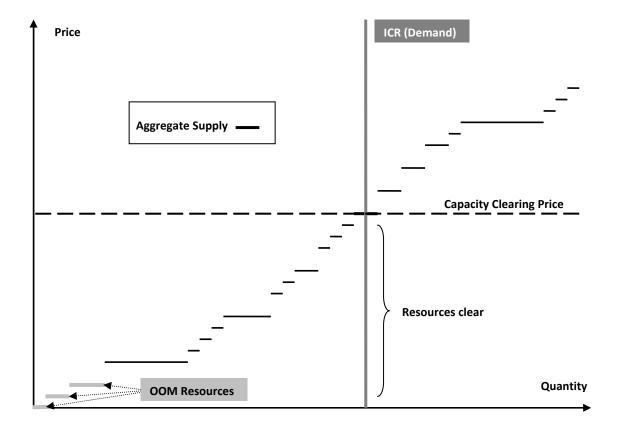
While the Alternative Capacity Price properly approximates the cost of new entry and appropriately compensates existing resources, it is not an appropriate signal for new resources. Providing the Alternative Capacity Price to new resources is not necessary as such resources typically have not yet committed to entry and would generate additional excess capacity that would be carried in this and future FCAs. The appropriate price signal for new resources, the price that reflects the demand-supply balance, is the Capacity Clearing Price – the price from the FCA with OOM resources as offered and not as re-priced. Providing the Alternative Capacity Price to existing resources is appropriate as these resources formulated their entry prices without being able to account for the price suppression that might come from future OOM resources. Paying the Alternative Capacity Price to existing resources will in turn help ensure that new resources,

which will become existing resources, can offer the best possible price and accept a relatively short-term price commitment. The new proposed APR offers a single method to set an Alternative Capacity Price that offsets the effect of OOM resources in the instant and subsequent FCAs. The details of the new proposed APR are discussed below.

# B. Mechanics Of The New Proposed Alternative Capacity Price Rule1. Generally

The descending clock FCA will be run, with offers submitted over multiple rounds, ignoring any potential OOM designations. That is, the aggregate supply curve in the FCA will reflect all offers *as submitted to the ISO* – including offers from resources that may be designated as OOM. The price at which resources are just sufficient to meet the Installed Capacity Requirement ("ICR") will be the Capacity Clearing Price (see Figure 1). At that price, the aggregate supply curve constructed on the basis of the offers submitted in the FCA meets the ICR, or the demand in the market. The resources that offer at or below that price – the portion of the aggregate supply curve below the Capacity Clearing Price and to the left of the ICR – clear in the FCA.





The APR is triggered, and an administrative Alternative Capacity Price is set, if any new or carried-forward OOM resource has cleared in the FCA. New OOM resources are defined as capacity that remains in the FCA below specified benchmark prices that will be determined by the IMM, unless cost justification for such capacity has been submitted to and approved by the IMM prior to the FCA. These benchmarks will be developed by the IMM, will be specific to each resource type, and will be fully known to participants ahead of the FCA. These benchmarks and the process for reviewing offers are discussed in more detail in Section II.F below. Such OOM resources are then carried forward into future FCAs until offset by load growth and retirements, as further explained below.

The Alternative Capacity Price is the price at which resources are just sufficient to meet the ICR when OOM resources are re-priced at their competitive offer prices. These adjusted competitive offers will be based on the resourcespecific benchmarks determined by the IMM, and are hereafter referred to as "benchmark offers." To calculate the Alternative Capacity Price, the benchmark offers are used for OOM resources, and the as-submitted offers are used for all other resources. This substitution results in an adjusted aggregate supply curve that reflects all offers and de-list bids used in setting the Capacity Clearing Price, except for OOM resources that are re-priced. At the Alternative Capacity Price the adjusted aggregate supply curve meets the ICR. In the case where the benchmark offers for OOM resources are all above the Alternative Capacity Price, the resources displaced by the OOM resources are those "in-between" the Capacity Clearing Price and the Alternative Capacity Price. (See Figure 2a. Another case where some but not all OOM resources are above the Alternative Capacity Price is provided in Figure 2b.)

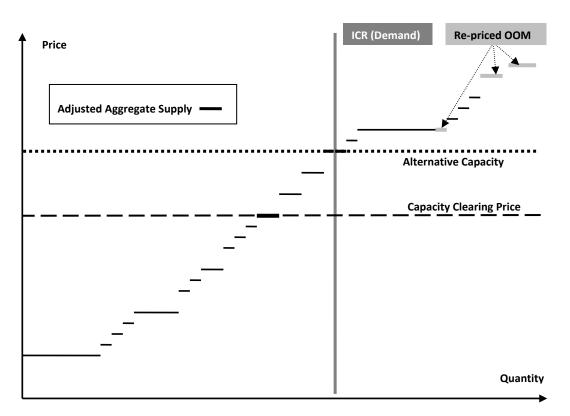
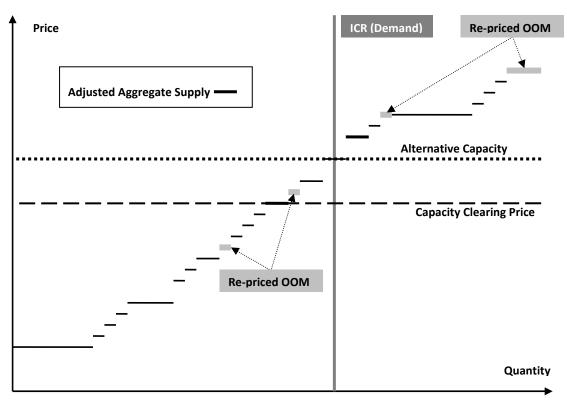


Figure 2a – Alternative Price





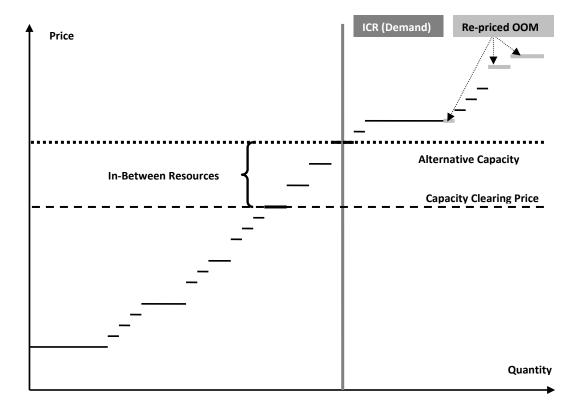
Replacing low offers from OOM resources with higher benchmark offers results in an Alternative Capacity Price that is higher than the Capacity Clearing Price.<sup>26</sup> With all of the resources in the aggregate supply curve represented at their competitive offer level, as revealed either through the auction mechanism or by the benchmark offers, the Alternative Capacity Price represents the clearing price that would have prevailed had the OOM resources been offered competitively in the FCA.

All resources that clear in the FCA receive a Capacity Supply Obligation ("CSO"). New resources will receive capacity payments for a fixed period of five consecutive Capacity Commitment Periods based on the Capacity Clearing Price determined through the first FCA in which the resource clears. The Capacity Clearing Price reflects the supply-demand balance in the FCA. New resources receive this price for a fixed period so as to provide the proper incentives to offer based on the cost of entry rather than based on the possibility of obtaining the higher Alternative Capacity Price in near-term subsequent FCAs. Existing resources (other than those still in the fixed five-year period described above) will receive capacity payments during the Capacity Commitment Period associated with the FCA based on the Alternative Capacity Price determined for that FCA. Paying the higher Alternative Capacity Price to existing resources insulates them from the effect of OOM resources depressing the Capacity Clearing Price. These

<sup>&</sup>lt;sup>26</sup> When the adjusted competitive offers for OOM capacity are below the Capacity Clearing Price, the Alternative Capacity Price would be the same as the Capacity Clearing Price.

payments – the Alternative Capacity Price for existing resources and the Capacity Clearing Price for new resources – apply whether or not the resource is OOM. This two-tiered pricing is discussed further in Section II.C below.

Some resources that do not clear in the FCA also receive a CSO (see Figure 3). Existing resources, whether OOM or not, that did not clear in the FCA but that offered in the FCA at or below the Alternative Capacity Price receive a CSO. These existing, "in-between" resources were displaced by the OOM resources. Paying such existing resources based on the Alternative Capacity Price similarly insulates them from the effect of OOM resources on the capacity price. Insulating these existing resources as well from the effect of OOM resources on the capacity price of the price helps to obtain the best possible offer price from new resources.



**Figure 3 - In Between Resources** 

#### 2. Carried-Forward OOM Capacity

The effect of new OOM resources is not limited to the FCA in which these resources enter. The effect of OOM resources continues as long as they displace other "in-market" resources that would offer at higher but competitive prices into the FCA and prevent these in-market resources from setting a competitive price that reflects the cost of new entry. In the April 23 Order, the Commission addressed the Filing Parties' proposal regarding carried-forward OOM capacity, and the generators' objections thereto.<sup>27</sup> With respect to the prospective treatment of OOM that may have price effects for multiple FCAs, the Commission stated that:

Both sides have raised important points about the duration of mitigation once an OOM resource has triggered APR mitigation. As the parties consider this issue further, we offer the following guidance. Our guidance is focused on determining when mitigation of a particular OOM resource used initially to suppress market clearing prices might be lifted. Two general options might be considered. First, surplus OOM capacity in one year could, in principle, suppress market clearing capacity prices for more than the seven years proposed by the Filing Parties, if the initial OOM surplus were substantial enough. The price suppressing effect could be offset by load growth or enhanced by load declines. Thus, mitigation could be applied for a period that accounted for the magnitude of the surplus introduced by the OOM capacity and the expected changes in load growth. Alternatively, APR mitigation could be lifted if offers from the OOM resource cleared in a FCA without replacing a lower cost in-market capacity resource. The statements submitted by the Filing Parties in their First Briefs should address these issues.<sup>28</sup>

The Revised FCM Proposal follows the first option laid out by the Commission.

The quantity of new OOM capacity clearing in an FCA will be added to a running

<sup>&</sup>lt;sup>27</sup> April 23 Order at PP 78-84.

<sup>&</sup>lt;sup>28</sup> *Id*. at P 84.

tally of past OOM capacity that will be carried forward. The tally will be decreased each year by load growth and resource retirements, in a manner similar to the APR proposal in the FCM Redesign Filing (APR-2). Going into each subsequent FCA, the existing, carried-forward OOM that will participate will be the capacity captured in the tally of OOM capacity from previous FCAs, adjusted to account for both load growth and retirements. Unlike under the three-part APR mechanism proposed in the FCM Redesign Filing, the new proposed APR will need to track not only the quantity of carried-forward megawatts, but also the competitive offers and quantity for each resource so that the adjusted aggregate supply curve can be constructed for the determination of the Alternative Capacity Price. Reductions in the tally would be applied first to the oldest OOM resources participating in the instant FCA. When the OOM resources for a particular year were not fully removed from the tally by load growth and retirements, the megawatts from each OOM resource in that year would be reduced pro rata.

In a subsequent FCA, existing, carried-forward OOM capacity will be treated like any other existing capacity. However, the APR will be triggered and the resource will be re-priced for the purposes of constructing the adjusted aggregate supply curve. It will be re-priced at the benchmark offer that was determined by the IMM for the FCA in which the capacity was a new resource.

This comprehensive APR is superior because it meets the Commission's goal of fully correcting prices for OOM entry. In each year that OOM resources enter or are carried forward, the price that would have prevailed without OOM is

determined and applied. The carry-forward mechanism ensures that all OOM megawatts are accounted for in this mechanism, and that in a year with large quantities of OOM resources, the effects of those OOM resources on future auctions are properly addressed.

#### 3. Sunsetting Application Of The Alternative Capacity Price For Existing Resources

As discussed above, existing resources will receive capacity payments based on the higher Alternative Capacity Price during the one-year Capacity Commitment Period associated with the FCA. The Alternative Capacity Price is a price expected to reflect the cost of new entry in an FCA. Existing resources entered in a previous FCA, however, and could not realistically be expected to forecast the entry of OOM resources and their effect in depressing the capacity price in future FCAs. It is appropriate, then, that these existing resources be insulated from the effect of OOM resources by receiving payments based on the Alternative Capacity Price when they accept a CSO in the FCM.

It is also appropriate, however, that such a resource not receive the Alternative Capacity Price in all future FCAs. The rationale for providing payments to existing capacity based on the higher Alternative Capacity Price becomes less compelling as time passes. If a resource is insulated from the impact of OOM resources for a period of time sufficiently long that the present value of payments in additional years has little impact on its offer price at entry and the time frame is beyond the horizon that is reasonably considered when a resource makes its initial entry decision, there is little incremental benefit in having the resource's capacity payments continue to be based on the Alternative Capacity Price. Additionally, as a resource ages, it will face decisions to retire or de-list, decisions best informed by the Capacity Clearing Price, which reflects the demandsupply balance of the market and provides a more appropriate price signal.

For this reason, the Revised FCM Proposal provides that an existing resource will not receive capacity payments based on the Alternative Capacity Price after the 20th FCA in which the resource participates. That is, during the Capacity Commitment Period associated with the 21st FCA in which a resource participates and thereafter, the resource will receive capacity payments based on the Capacity Clearing Price in that FCA, rather than the Alternative Capacity Price. Twenty years is a reasonable time horizon for this sunsetting provision because beyond 20 years, the incremental expected revenue has little impact on the expected price at which a new entrant would offer. New resources are expected to take this horizon into consideration when formulating their offers.

The practical effect of this provision in conjunction with others described above is that a new resource clearing in an FCA in which the APR is triggered would receive payments for five years based on the Capacity Clearing Price from the single FCA in which it cleared as new. For the next fifteen years, it would be eligible to receive payments in each year based on the Alternative Capacity Price from the FCA associated with that year if the APR applies. At the end of that fifteen years, the sunset provision described here would apply, and thereafter the

resource would receive payments in each year based on the Capacity Clearing Price from the FCA associated with that year.<sup>29</sup> This should provide price signals that are appropriate for de-list and retirement bids at the appropriate time.

#### C. Treatment Of Historical OOM

As in the FCM Redesign Filing, the Revised FCM Proposal provides for no OOM capacity to be carried forward from the first three FCAs. The running tally of carried-forward OOM capacity described above will be calculated going forward beginning with OOM capacity clearing in the fourth FCA, the first to be conducted using carry-forward rules.

Counting OOM capacity from the first three FCAs would be inappropriate for two main reasons. First, it would constitute retroactive application of new rules, which would create significant market uncertainty. While some will strongly argue that it would be harmless to simply use numbers from the first three FCAs as an input to the new APR mechanism, it overlooks the fact that those numbers may have been quite different had different rules been in effect. Second, to do so would be at odds with Commission guidance in NYISO, where

1,000 MW of OOM capacity was built before NYISO adopted rules to address OOM investment. In the NYISO proceeding, the Commission approved NYISO's proposed rules to address future OOM investments, but concluded that the rules should not be applied to the 1,000 MW of OOM capacity that entered the market prior to adopting the rules. In the *NYISO* case, the Commission found that mitigation policy should be directed at avoiding

<sup>&</sup>lt;sup>29</sup> These sunsetting provisions will not be applied retroactively for capacity installed prior to the effectiveness of those provisions. In other words, the earliest that eligibility for the Alterative Capacity Price will sunset for any resource is 20 years after the third FCA.

inefficient and unneeded entry. Whether or not the entry of past resources was efficient or needed, their entry and their associated costs could not now be avoided, so mitigation would no longer be effective.<sup>30</sup>

A non-zero amount of carried-forward OOM from the first three FCAs would be at odds with these principles. Whether or not the OOM capacity from earlier FCAs was efficient or needed, no purpose is served by accounting for that capacity in future FCAs, as the associated costs can no longer be avoided. Beginning the tally of OOM capacity with the fourth FCA is appropriate because parties will be fully apprised of the carry-forward mechanism that has been put in place, and of the design of the new APR mechanism.

#### D. The Appropriate Price Adjustment For OOM Resources: Two-Tiered Pricing

In the April 23 Order, the Commission indicated that both the currently effective FCM rules and the revisions included in the FCM Redesign Filing "fail to fully adjust for the effect of OOM investment on the capacity price."<sup>31</sup> The two-tiered pricing mechanism described above properly addresses the Commission's concerns in this regard, and provides significantly better price signals than previously considered approaches to capacity pricing in New England. The Capacity Clearing Price will send appropriate signals to new investors about the need for new capacity, while the Alternative Capacity Price will insulate investors from the risk that OOM resources will inappropriately

<sup>&</sup>lt;sup>30</sup> April 23 Order at P 80 (citing *New York Independent System Operator, Inc.* 122 FERC ¶ 61,211, at PP 118-119 and 100-101 (2008)).

<sup>&</sup>lt;sup>31</sup> April 23 Order at P 85.

depress clearing prices. When there are no OOM resources in the FCA, the APR will not apply and there will be only one capacity price.

As the Commission correctly notes, the primary purpose of the APR is to correct FCA prices for the presence of OOM resources. The approach described above does this as fully and accurately as possible, by constructing the supply curve that would have prevailed had OOM resources offered at competitive levels, and using that supply curve to set the Alternative Capacity Price. It is appropriate to pay this higher Alternative Capacity Price to existing resources because it is the best approximation of the price that would have prevailed but for the presence of OOM resources in the FCA. In this manner, the APR will fully adjust for the presence of OOM resources on the capacity price, as required by the Commission, and will ensure that participants do not receive an inappropriately depressed capacity price.

It is critical to note, however, that this higher Alternative Capacity Price does not send an accurate signal about the need for new capacity. At the Alternative Capacity Price, there is excess supply in the market. The adjusted aggregate supply curve used to determine the Alternative Capacity Price uses the benchmark offers determined by the IMM for OOM offers. Capacity is less scarce than is signaled by the higher Alternative Capacity Price because the OOM resources that are re-priced (presumably above the Alternative Capacity Price) did clear in the FCA and will exist in the market. If all resources were paid the higher Alternative Capacity Price, too much new capacity would be installed and

purchased. Experience in New England has shown that setting administrative prices above market-determined levels produces excess new entry.<sup>32</sup> Such excess new entry is a significant inefficiency that diverts capital away from other more productive uses and should be avoided to the extent possible.

The two-tiered pricing mechanism for the APR in the ISO's Revised FCM Proposal addresses these problems efficiently. Because it is simple to distinguish new resources from existing resources, it is possible to send a price signal to potential new entrants that reflects the actual capacity supply situation in the region, while still meeting the goal of providing appropriate prices, not inappropriately depressed by OOM resources, to existing resources. This is done by paying all new resources the Capacity Clearing Price. This approach should reduce oversupply in the FCM, both in current and future FCAs. The amount of oversupply would be reduced by the amount of new capacity that withdraws from the FCA at prices between the higher Alternative Capacity Price and the Capacity Clearing Price. While this two-tiered pricing model is different from the typical design of uniform price auctions, where every resource is paid the same rate for the same product, it addresses the oversupply problem introduced while using the higher Alternative Capacity Price as the payment rate for existing resources.

<sup>&</sup>lt;sup>32</sup> This can be seen in the recent FCAs with the price floor. The price floor sends a signal that capacity is more valuable than it actually is, and this incents excess new entry, or forestalls retirements, and leads to oversupply. While not the sole cause, this has contributed to the current capacity surplus. The same phenomenon was evident in the Transition Period when an administrative rate was paid to all capacity, with no limit; significant surplus capacity was purchased in the transition period as well.

This two-tiered pricing approach should not be viewed as harming new resources. By definition, the Capacity Clearing Price is the price that new resources clearing in the FCA indicated that they were willing to accept. That price must be sufficient compensation for such a resource to enter the market and provide capacity, or the resource would have been withdrawn from the FCA at a higher price. The rational Project Sponsor will submit an offer for its resource that is sufficient to cover its costs; in doing so it will not need to consider the higher adjusted price for which it is not eligible. Similarly, new resources that might have cleared at prices between the higher Alternative Capacity Price and the natural Capacity Clearing Price are also not harmed. The new APR mechanism proposed by the ISO here simply presents such a resource with pricing information that reflects the actual capacity situation in the region, and there should be no complaint that the market *failed* to make an *uneconomic* decision – such a resource is not needed to meet ICR and should not be constructed or installed.

The Revised FCM Proposal treats imports similarly to resources within New England. New imports that require a significant investment (*e.g.*, similar to the level required for existing resources to become new under the current market rules) to provide capacity to New England would be treated as a new resource, and would be eligible for the Alternative Capacity Price after the expiration of the initial five-year price commitment. However, if a resource does not need to make a significant investment to sell capacity in New England and is simply, and legitimately, selling capacity to New England because it believes that the capacity

is more valuable here than in its local control area, it is appropriate to pay that resource the Capacity Clearing Price, like an existing resource past the 20 year limit on being paid the Alternative Capacity Price. Paying the resource the Alternative Capacity Price in that case would only increase capacity costs and increase the amount of surplus capacity above the ICR, neither of which is necessary for reliability or for market efficiency. Capacity seeking to arbitrage prices across control area boundaries should face the price that reflects the actual supply-demand balance in the region, not the Alternative Capacity Price that is intended to facilitate long-term investment.

#### E. The Proposed Two-Tiered Pricing Provides Appropriate Offer Incentives

The ISO and NERA have evaluated the offer incentives for both new and existing resources under the proposed pricing construct and believe that suppliers generally will be incented to offer their resources at marginal costs. This is because the proposed design, despite its two-tiered pricing structure, maintains the fundamental elements of a uniform price auction: like resources are all paid the same price, that of the marginal resource, and the price that is paid is the one that determines whether or not the resource clears in the auction. Paying all like resources the same marginal price avoids introducing pay-as-bid incentives to the auction. Using one price level to determine whether a resource clears but paying another price level generally provides incentives to shade a resource offer in a way that reflects the difference in these two prices. For example, if a resource were

cleared at the lower Capacity Clearing Price but paid at the higher Alternative Capacity Price, resources with true costs between the two prices would have strong incentives to reduce their offers below their costs, and below the Capacity Clearing Price, because they would know that they would be paid the higher Alternative Capacity Price.

One element of the proposal does change the offer strategy for new resources. The proposal would require new resources to accept a five year commitment at the Capacity Clearing Price in an FCA in which the APR is triggered. The requirement may or may not make the offer decision more complicated, but it is necessary to avoid having new resources enter in a year when the APR is applied and the Capacity Clearing Price is below their costs based on the expectation that in the next year the APR will again be applied but that, because they would by then be existing resources, they would be eligible to receive it.

#### F. Procuring Capacity In Excess Of ICR

In some cases when it is applied, the new proposed APR mechanism will result in the purchase of more capacity than is required to meet the ICR. This is unavoidable if both new OOM resources are to be counted as capacity and existing resources are to be held harmless for the entry of new OOM resources. If current experience is a guide, the sum of these two categories, excluding any new non-OOM resources, is likely to exceed the ICR for periods of time. The proposed APR seeks to minimize the amount of the over-purchase by sending a price signal to new capacity that reflects the actual total quantity in the market, but there can

be no guarantee that there will not be an over purchase without relaxing the principles that new OOM may freely enter the market and that existing resources should not be harmed by OOM entry.

#### G. Out-of-Market Capacity Determination

In the April 23 Order, the Commission rightly noted that the determination of resources that are OOM is a "critical element" of the APR.<sup>33</sup> The Revised FCM Proposal includes improvements to the OOM determination that will help to ensure that the APR is effective.

#### 1. Using Resource-Specific Benchmarks Instead Of CONE As The Threshold For IMM Review Of Offers From New Resources

Under the currently-effective FCM rules, the IMM reviews each offer from new resources submitted at prices below 0.75 times CONE to determine if the offer is OOM.<sup>34</sup> Under the Revised FCM Proposal, this threshold and the process for review would change. Instead of using CONE as a benchmark, the IMM will calculate benchmark offers for different types of generation and demand resources (including, for example, combined-cycle, wind, solar, biomass, landfill gas, simple-cycle turbine, energy efficiency, distributed generation, and direct load control). These benchmark offers will reflect what a resource of each type would seek from the capacity market via its offer to achieve its target rate of return, accounting for revenues from other wholesale electricity markets and certain,

<sup>&</sup>lt;sup>33</sup> April 23 Order at P 75.

<sup>&</sup>lt;sup>34</sup> See Tariff Section III.13.1.1.2.6, III.13.1.4.2.4(b).

generally available sources such as production tax credits. The methodology for calculating the benchmark offers would be developed by the IMM, and the IMM will present its methodology and results to stakeholders. The benchmark offers may be developed in conjunction with Monitoring Analytics, PJM's Independent Market Monitor, which intends to develop new benchmark offers for PJM's Reliability Pricing Model in the near future. The benchmark offers would be updated periodically by the IMM and would be posted to the ISO's website.

The use of resource-type specific benchmarks provides two significant benefits over the use of CONE. First, the use of a single CONE value for all resource types is inefficient and results in the review of far more offers than is necessary. Because different resource types have very different project cost and benefit profiles, a low capacity offer for one resource type may be perfectly reasonable, while the same capacity offer for another resource type may warrant scrutiny. Triggering review based on a single value, CONE, for all resource types fails to recognize this fact and results in unnecessary reviews.

Second, as discussed above, the new proposed APR mechanism requires that in the determination of the Alternative Capacity Price, offers that have been designated as OOM are replaced with an adjusted competitive offer. The resource-specific benchmark offers calculated by the IMM will provide the basis for these adjusted competitive offers. CONE, which bears no relationship to the specific characteristics of each resource type, would not serve this purpose as well.

This change also addresses an important issue raised by the Commission in the April 23 Order. In that order, the Commission noted several concerns about determining the proper value of CONE, and stated that the proper calculation of CONE is especially important because it is "intrinsically tied to the OOM determinations" that are central to a well-functioning APR.<sup>35</sup> The use of resourcespecific benchmarks as described here eliminates this concern; under the Revised FCM Proposal, CONE will play no role in the OOM determinations.<sup>36</sup>

#### 2. Streamlined Qualification And Review Process

Under the current process, all new resources that wish to remain in the auction below 0.75 times CONE must indicate their desire to do so before the auction. That request must be accompanied by sufficient documentation for the IMM to determine whether the offers below 0.75 times CONE are consistent with the long run average costs of the resource net of expected net revenues other than capacity revenues. If the offers are consistent with those costs, then the resource may stay in the auction and will not be treated as OOM. If the offers are not consistent with those costs, then the resource is considered OOM.

The implementation of specific benchmarks by resource type as proposed here by the ISO will enable the IMM to streamline the qualification and review process for OOM resources. New resources that remain in the auction when the auction clock drops below 0.8 times the relevant benchmark will be designated as

<sup>&</sup>lt;sup>35</sup> April 23 Order at P 151.

<sup>&</sup>lt;sup>36</sup> The calculation of CONE is discussed in detail in Section IV.A of this Brief.

OOM unless the resource's Project Sponsor submitted cost data supporting its offer to the IMM before the auction. If such data are submitted before the auction, the IMM will review that information and determine whether the resource's proposed offer level is supported. If the offer level is supported, the resource is considered an in-market resource if it remains in the auction and the clock stops at a price above its supported offer level. If the clock drops below the supported offer level and the resource remains in the auction, it will be considered OOM. If the Project Sponsor submits no cost data, then the resource will be considered OOM at all prices below 0.8 times the relevant benchmark.

# 3. No Change To The OOM Definition Or Standard Of Review

Although this proposal will affect which new resource offers are reviewed, the standard of review applied to reviewed offers and the definition of OOM will be unchanged under the Revised FCM Proposal. For offers that are reviewed under the ISO's new proposal, the analysis will be as described in currently effective Sections III.13.1.1.2.6 and III.13.1.4.2.4(b) of the FCM rules. Specifically, for offers that are reviewed, the IMM shall determine whether the offer submitted is consistent with the long run average costs of the resource net of expected net revenues other than capacity revenues. The current FCM rules furthermore explain that the IMM:

will consider reductions in costs such as reduced taxes in determining expected net revenues. Expected net revenues considered in this determination shall only include net revenues that are: (i) tradeable throughout the New England Control Area or not

restricted to resources within a particular state or other geographic sub-region; and (ii) available to all resources of the same physical type within the New England Control Area, regardless of the resource owner. Expected net revenues shall include economic development incentives that are offered broadly by state or local government and that are not expressly intended to reduce prices in the Forward Capacity Market.<sup>37</sup>

These principles will continue to be applied in the same manner to all resource

types in the determination of the benchmark offers. If the IMM determines that

the offer is not consistent with the resource's long run average costs net of

expected net revenues other than capacity revenues, then the offer will be

designated as OOM at prices below 0.8 times the relevant benchmark.

In the April 23 Order, the Commission directed parties to:

address whether or how APR mitigation might accommodate OOM capacity introduced for resource adequacy or to satisfy public policy goals, such as the integration of renewable and demand response resources. In general, Commission precedent requires bright-line measures or tests to distinguish OOM capacity that should trigger

Sections III.13.1.1.2.6 and III.13.1.4.2.4(b) are being revised to provide that the Internal Market Monitor will consider certain reductions in costs in determining expected net revenues. In addition, the definition of expected net revenues is limited to net revenues that are broadly tradable and available to all resources of the same physical type throughout the New England region. The Rule Changes also provide that expected net revenues shall include economic development incentives that are offered broadly by state or local governments and that are not expressly intended to reduce prices in the Forward Capacity Market. As discussed further below, these rules will not change the determination of whether a specific project is found to be in-market or out-of-market because the Internal Market Monitor already implements the current tariff consistent with these clarifications. While they provide more detail concerning the out-of-market determinations in the current rule, they do not change the current Tariff's basic principle that differentiates out-of-market capacity from in-market capacity.

FCM Redesign Filing at 5 (footnotes omitted).

<sup>&</sup>lt;sup>37</sup> Tariff Section III.13.1.1.2.6. Note that clarifications to the OOM definition in Sections III.13.1.1.2.6 and III.13.1.4.2.4(b) of the Tariff were filed as part of the FCM Redesign Filing and were approved by the Commission in the April 23 Order. *See* April 23 Order at PP 153-156. As explained in the FCM Redesign Filing:

APR mitigation (i.e., that used as a tool for price suppression) from capacity that should not trigger such mitigation because it does not inappropriately suppress market-clearing prices below a competitive level.<sup>38</sup>

The IMM does not believe that any changes to the current OOM definition are necessary or warranted for this purpose. Except in the case of incentives that are expressly intended to reduce capacity prices, the IMM does not believe that it is possible to craft tariff language that will allow it to determine the intent behind a project's development. In virtually every case, there are several purposes driving the development of a project. Determining which of those purposes is the primary one is largely a subjective process, if it is possible at all, and could likely only be accomplished in a hearing-type proceeding.

More importantly, it is not appropriate or necessary to inquire into the intent behind a low-priced offer. If the offer is OOM, it should be treated as such to address its impact on price. All OOM resources have the ability to depress the Capacity Clearing Price below competitive levels, and therefore it is appropriate to include all OOM resources in calculating the Alternative Capacity Price. If a repriced OOM resource is lower cost than other new resources or existing resources, this will appropriately lower the Alternative Capacity Price. The new resource-specific benchmarks will help to ensure that low-priced offers that are not OOM will appropriately be recognized as in-market.

<sup>&</sup>lt;sup>38</sup> April 23 Order at P 77 (footnote omitted).

# 4. Benchmark Offers For OOM Capacity

Pursuant to the Revised FCM Proposal, for each offer designated as OOM, the IMM will establish a benchmark offer based on the benchmark determined for the applicable resource type. The new resource will be included in the aggregate supply curve in the determination of the Alternative Capacity Price at that benchmark offer level. The reason for changing the offer of an OOM resource is to develop a supply curve for the auction based on competitive offers. Since the benchmark level is the best estimate of a competitive offer by an OOM resource, it will be used as the replacement offer for OOM resources in determining the Alternative Capacity Price.

# 5. Ensuring That Load Can Hedge Its Capacity Obligation Without Distorting FCM Prices And Types Of OOM Triggering APR

In the April 23 Order, the Commission indicated that parties to this

proceeding should address in their briefs:

how APR mitigation can be constructed so that load is able to hedge its capacity obligation outside of ISO-NE's capacity market with bilateral contracting while ensuring that such bilateral contracting does not distort the capacity market clearing price. Similarly, parties should address whether or how APR mitigation might accommodate OOM capacity introduced for resource adequacy or to satisfy public policy goals, such as the integration of renewable and demand response resources. In general, Commission precedent requires bright-line measures or tests to distinguish OOM capacity that should trigger APR mitigation (*i.e.*, that used as a tool for price suppression) from capacity that should not trigger such mitigation because it does not inappropriately suppress market-clearing prices below a competitive level.<sup>39</sup>

<sup>&</sup>lt;sup>39</sup> April 23 Order at P 77 (footnote omitted).

In assessing how the APR mechanism and OOM determination in the Revised FCM Proposal address these questions, there are two key issues to consider: first, whether resources with bilateral contracts and resources that meet policy objectives are able to participate in the market, and second, how the OOM determination rules for these various resources would result in triggering mitigation and the APR.

Under both the existing and the proposed rules, resources with bilateral contracts, resources built to satisfy resource adequacy needs, and resources that help achieve public policy objectives all count as capacity resources and can clear in the FCA. There are no provisions in the existing or proposed rules that exclude properly qualified resources from clearing in the market. This inclusive characteristic supports robust participation in the market for both private purposes and to meet policy objectives. The APR ensures that their participation does not inappropriately distort the capacity price.

Resources acquired under a bilateral contract or built to meet a policy goal may not require capacity market revenues to justify their entry, so they may rationally prefer to offer a low price in order to assure a capacity obligation, in order to meet the terms of the contract, for example. Such resources may not be attempting to suppress FCM prices, but will have a price-suppressing effect nonetheless. The APR ensures that their participation does not inappropriately distort the capacity price.

As implemented in the rule, OOM capacity is defined as resources that offer below levels that are consistent with their project costs and wholesale market revenues. All OOM resources inappropriately suppress price. As discussed above, the intent of the resource owner is difficult, if not impossible, to determine and has no bearing on whether the price is suppressed. The Commission notes that a bright-line test should be used to distinguish OOM capacity that should trigger mitigation from OOM capacity that should not.<sup>40</sup> The existing Market Rules that characterize the revenues and costs to consider in determining whether a resource's offer is supported draw the required bright lineand provides a sound basis for OOM determination and triggering of the APR.

The proposed rules assure that the markets both support capacity developed to meet bilateral contracts and public policy objectives and assure efficient prices. Importantly, the resource owner is not disadvantaged by the proposed design because all resources are allowed to clear in the market and be counted as capacity. The owner of an OOM resource is paid a competitive price that reflects the quantity of capacity required to meet the ICR. The market rules appropriately pay the Alternative Capacity Price to all existing generators because the OOM offers were not consistent with the associated costs and therefore the OOM offers were not competitive.

<sup>&</sup>lt;sup>40</sup> See April 23 Order at P 77.

#### 6. Rejected De-List Bids Will Not Be Treated As OOM

The Revised FCM Proposal does not include rejected de-list bids in the APR as OOM capacity. This was a feature of APR-3 in the FCM Redesign Filing. This is no longer appropriate with the introduction of more granular capacity zones, as discussed in Section III of this brief. Under the existing zonal construct, this was appropriate because zones were restricted to only large areas, and there was no intent or expectation that they would reflect more localized transmission constraints. Under the revised design, it is expected that the FCA will reflect smaller zones and would thereby naturally capture the sorts of transmission constraints that currently lead to de-list bids being rejected for reliability. There may be unique, unit-specific constraints that lead to the rejection of de-list bids even under the new proposed design, but in those cases it would not be appropriate to adjust the zonal price to reflect this. In such cases, the resource with the rejected delist bid would be paid its de-list bid price, which is the right payment level, and the rest of the zone would not have its price adjusted, which is also appropriate. This is consistent with the EMM's comments on the FCM Redesign Filing.<sup>41</sup>

### III. MODELING OF CAPACITY ZONES AND MARKET POWER MITIGATION OF DE-LIST BIDS

A brief review of the provisions contained in the FCM Redesign Filing is helpful in order to understand the differences between the FCM Redesign Filing and the ISO's instant Revised FCM Proposal on the modeling of Capacity Zones

<sup>&</sup>lt;sup>41</sup> EMM Comments at 14-15.

in response to the Commission's April 23 Order. For import-constrained zones, the ISO proposed in the FCM Redesign Filing to harmonize the use of local resource adequacy criteria for the resource adequacy requirement and the criteria in the transmission security analyses used to maintain system reliability when the ISO reviews de-list bids for the FCA. The Commission accepted this proposal.<sup>42</sup> In addition, the Commission accepted the ISO's proposal to use the existing energy market Load Zones (and/or their subdivision) as the initial basis for modeling potential Capacity Zones in the FCA.<sup>43</sup> Finally, the Commission approved of the ISO's proposal to allow certain, additional de-list bids to be considered in the test to determine whether an import-constrained zone was to be used as a separate Capacity Zone in an auction.<sup>44</sup>

However, in reviewing the FCM Redesign Filing there are three important points to keep in mind regarding the circumstances under which an importconstrained Load Zone would have been modeled as a separate Capacity Zone in an auction. First, in order to be modeled as a separate Capacity Zone, the total projected installed capacity in the import-constrained Load Zone must be less than the import-constrained Load Zone's Local Sourcing Requirement ("Market

<sup>&</sup>lt;sup>42</sup> April 23 Order at P 108. Specifically, the ISO's proposal was to calculate the Local Sourcing Requirement for an import-constrained Capacity Zone as the amount of capacity needed to satisfy "the higher of" the (i) the Local Resource Adequacy Requirement or (ii) the Transmission Security Analysis.

<sup>&</sup>lt;sup>43</sup> See April 23 Order at P 15 (regarding acceptance of the "remaining proposed tariff provisions").

<sup>&</sup>lt;sup>44</sup> April 23 Order at P 132. The Commission stated the change was a market improvement since the successful de-listing by the resources submitting the relevant de-list bids meant that the resources should not be relied upon to provide capacity during the commitment period. *Id*.

Modeling Test").<sup>45</sup> Second, the Market Modeling Test or requirement is determined *in advance* of the auction. Third, the Commission's approval of the ISO's proposal to allow more de-list bids to be included in the Market Modeling Test (*i.e.*, allowing certain additional de-list bids to be considered in determining whether an import-constrained zone was to be used as a separate Capacity Zone) increases the likelihood of modeling or using a Capacity Zone for a particular auction but the determination still occurs before that auction. In addition, a zone whose installed resource base was close to, but still in excess of the local requirement would not be modeled.

As discussed in greater detail below (and in Section III.D. in conjunction with the revised market power mitigation provisions), the ISO proposes to eliminate the Market Modeling Test and to model all zones all the time in the auctions (*i.e.*, model or use all delineated zones as separate Capacity Zones in each auction).<sup>46</sup> The ISO emphasizes that its proposal in this First Brief allows for the possibility of price separation in a Capacity Zone during an auction. However, the ISO also notes that its modeling proposal does not mean that there will be price separation or different prices in all Capacity Zones used in an auction.

<sup>&</sup>lt;sup>45</sup> For the purposes of this brief, the general description of the Market Modeling Test set forth above is sufficient. There are other details of the Market Modeling Test in Tariff Section III.12.4 but it would not be helpful to describe those details here.

<sup>&</sup>lt;sup>46</sup> The ISO's proposal to model all zones all the time and to allow all de-list bids to set the price is premised on, and in conjunction with, the proposed revisions to the market power mitigation measures.

#### A. All Zones Would Be Modeled All the Time

In the April 23 Order, the Commission stated that it is important to model zones wherever possible in order to set locational prices.<sup>47</sup> The Commission noted that it had discussed the need for locational pricing in New England for many years (citing to the absence of locational pricing in the capacity market that was the predecessor to the FCM).<sup>48</sup> In addition to the Commission's statements, the notion of modeling all zones all the time was recognized as an ideal goal by the ISO, the IMM, and the EMM so long as appropriate market power mitigation provisions were in place.<sup>49</sup>

For example, in its comments on the FCM Redesign filing the EMM recognized that modeling zones all the time raised market power concerns that are not fully addressed by the current mitigation measures.<sup>50</sup> In examining the trade-off between keeping the existing market power mitigation measures without modeling zones all the time, or revising the mitigation measures and modeling zones all the time, the EMM expressed a preference for modeling zones all the

<sup>&</sup>lt;sup>47</sup> April 23 Order at P 134.

<sup>&</sup>lt;sup>48</sup> *Id.* The Commission stated that the absence of locational pricing in the ICAP market "was a significant flaw since 'location is an important aspect of ensuring optimal investment in resources." *Id.* (citing to *New England Power Pool and ISO New England, Inc.*, 100 FERC ¶ 61,287 at P 101 (2002)).

<sup>&</sup>lt;sup>49</sup> See, e.g., Motion for Leave to File Answer and Answer of the Internal Market Monitor for ISO New England Inc., Docket No. ER10-787-000 (filed March 30, 2010) at 3 (indicating that "modeling zones all of the time is the preferred approach, so long as there is comprehensive and effective mitigation of all de-list bids"); EMM Comments at 17-19 (explaining the market power concerns with capacity zones). *See also* IMM Report at 4 ("[i]deally, in the absence of market power, all zones would be included in the auction").

<sup>&</sup>lt;sup>50</sup> See EMM Comments at 19.

time and adjusting the market power mitigation measures.<sup>51</sup> The ISO's proposal is to do exactly as recommended by the EMM.<sup>52</sup> In addition, the ISO's Revised FCM Proposal addresses certain limitations regarding use of the descending clock auction as the clearing mechanism for the auction.

There are several reasons for the ISO's proposal to model all of the Capacity Zones used in the auction all the time. First, the Market Modeling Test for using a Capacity Zone (*i.e.*, asking the pre-auction question as to whether the total projected installed capacity in the import-constrained Load Zone is less than the import-constrained Load Zone's Local Sourcing Requirement) has never been satisfied in any of the auctions conducted to date. This has resulted in using large zones in the FCA, and, with large zones it is not possible to reflect important electrical constraints in clearing the auction. Second, the use of large zones, in turn, can prevent certain de-list bids from clearing the auction (*i.e.*, their offer is higher than the clearing price but they are not allowed to opt out of the FCA for the Capacity Commitment Period and are required to take on a CSO) because they are needed for local reliability reasons in a sub-area that failed the Market Modeling Test. This has happened in the first and third FCAs. Third, rejecting the de-list bid for reliability reasons means that the resource is paid an out-ofmarket price. The ISO notes that under the existing design resources might also be

<sup>&</sup>lt;sup>51</sup> *Id.* The External Market Monitor stated that: "we would generally recommend improving the mitigation measures as necessary, rather than mitigating market power by adjusting the market design (*i.e.*, by not always modeling the zones)."

<sup>&</sup>lt;sup>52</sup> The proposed revisions to the market power mitigation measures are discussed Section III.D of this brief.

prevented from leaving the market when a localized need develops in a reconfiguration auction because there is no opportunity to model the Capacity Zone in the reconfiguration auction and find a substitute resource in the Capacity Zone.

If Capacity Zones were established that reflected the significant constraints on the system and if the Capacity Zones were modeled all the time in the auctions, a local reliability need would have a greater chance of being met with resources clearing in the market rather than with rejected de-list bids. With the use of smaller Capacity Zones that reflect the constraints in the system, there is a greater likelihood of having a higher zonal clearing price that reflects the local reliability need that otherwise could have caused a cleared de-list request to be rejected. With a higher zonal clearing price there is a greater likelihood that a de-list bid will not clear (*i.e.*, the bid will be an in-market bid and will not exit the FCM for the Capacity Commitment Period) and the resource thereby would retain a CSO for the Commitment Period.

The Commission and both the IMM and EMM have indicated that inmarket solutions that serve to address reliability needs (as opposed to the out-ofmarket process described above) are preferable. The ISO's proposal on the modeling of zones is intended to promote in-market solutions addressing reliability needs.

#### B. Prospective Changes To The Capacity Zones Will Occur Through The System Planning Process

As with the FCM Redesign Filing, the ISO proposes that the eight energy Load Zones be used as the Capacity Zones for the sixth FCA.<sup>53</sup> The eight load zones are Connecticut, Maine, New Hampshire, Rhode Island, Vermont, Northeastern Massachusetts/Boston ("NEMA"), Southeastern Massachusetts ("SEMA") and Western/Central Massachusetts ("WCMA"). The existing energy Load Zones capture most, but not all, of the relevant electrical constraints in the transmission system. Prospectively, the ISO will develop the zones to be used subsequent to the sixth FCA and will vet these changes through the ISO's system planning stakeholder process.<sup>54</sup>

To maintain the stability of the modeled Capacity Zones and to address resource shortages that may develop subsequent to the conduct of a particular FCA, the Capacity Zones modeled in each FCA will be used for subsequent annual reconfiguration auctions associated with the same Capacity Commitment Period. As noted above, changes to the Capacity Zones (or the creation of new zones) will be vetted through the ISO's system planning stakeholder process and may only take place between each FCA.

<sup>&</sup>lt;sup>53</sup> See FCM Redesign Filing, Transmittal Letter at 9, 27. See also April 23 Order at P 109.

<sup>&</sup>lt;sup>54</sup> The types of items that could lead to a change in the Capacity Zones generally would be any change in system topology that materially impacts resource substitutability within a zone.

#### C. Consideration Of De-List Bids In The Modeling Of Zones

As described above, the ISO proposes to allow all de-list bids, mitigated as appropriate, to set zonal prices in the auction. In the market to date, before conducting the FCA certain de-list requests are netted from the installed capacity base in each Capacity Zone, and that net installed base is compared to the local zonal sourcing requirement. If this comparison indicates a projected shortage, the zone is modeled. Otherwise, the zone is eliminated. As noted earlier, this process has been referred to as the "Market Modeling Test."

In the instant, Revised FCM Proposal, the Market Modeling Test is eliminated and all zones will be modeled all the time. In addition, all de-list bids will be allowed to set zonal prices in the auction. However, the proposal to model all zones all the time and to allow all de-list bids to set zonal prices is critically dependant upon the implementation of effective mitigation procedures to preclude the exercise of market power by suppliers in the zones. The proposed changes to the market power mitigation rules are discussed immediately below.

#### D. Modifications To The Current Mitigation Rules Are Necessary In Order To Model All Zones In The Auction

In the April 23 Order, the Commission endorsed modeling Capacity Zones at all times, but also cautioned, based on concerns expressed by both the EMM and the IMM, against doing so without reviewing the current mitigation rules. In particular, the Commission identified certain issues for further analysis, including: whether the current mitigation rules are adequate to model zones at all times,

whether all de-list bid types should be allowed to set a zonal price (*i.e.*, whether a "pivotal supplier" test is necessary, and whether it should have a market share threshold), and what, if any, corresponding revisions to the current mitigation rules are necessary.<sup>55</sup>

Since the IMM and the ISO support modeling all zones all the time, the IMM has developed new rules that appropriately mitigate potential market power. The Revised FCM Proposal improves the current mitigation regime by changing the rules that determine the prices at which existing resources may exit the FCM so that the prices are competitive. Since these revised mitigation rules result in competitive de-list bids for all resources, it is appropriate to permit all de-list bids to set zonal prices and create zones. This mitigation scheme thereby permits all zones to be modeled in the auction, whether or not a need for the zone is identified prior to the auction.

#### 1. Zonal Price Setting

Rather than test whether a participant has market power and preclude its bid from price setting (as proposed in the FCM Redesign Filing), the Revised FCM Proposal's mitigation regime would evaluate and mitigate, as required, all Static and Permanent De-List bids *ex ante* and set a competitive threshold for Dynamic De-List Bids. As a result, all de-list bids would be set at competitive levels and would be appropriate for use in the auction and for price setting purposes. The

<sup>&</sup>lt;sup>55</sup> April 23 Order at P 135.

adoption of this proposal obviates the need for the Pivotal Supplier test, as described further in Section III.E below.

#### 2. The Existing Rules For De-List Bids In The Forward Capacity Auction

Under the current rules, unless an existing resource submits a de-list bid it is a price taker in the FCM. De-list bids permit a resource to exit the market for a year or permanently. Absent mitigation, the ability of existing resources to leave the market would enable resources that possess market power to use it and raise the price above competitive levels through de-list bids.<sup>56</sup> In order to mitigate market power, under the current rules the IMM reviews certain de-list bids submitted by existing resources at specified levels below CONE. There are two types of de-list bids that permit a resource to leave the market for a year: Dynamic De-List Bids, which are submitted during the auction, and Static De-List Bids which are submitted in advance of the auction. Permanent De-List Bids enable a resource to leave the market permanently. Static and Permanent De-List Bids are subject to limited mitigation under the current rules.

The existing mitigation rules provide that Dynamic De-List Bids can only be submitted when the auction clock reaches 0.8 times CONE or below. Static De-List Bids may be submitted for any amount above 0.8 times CONE. However, Static De-List Bids are subject to IMM review before the auction to ensure that

<sup>&</sup>lt;sup>56</sup> The ISO notes that buyers can attempt to exercise buyer market power as well and the mechanism to do this in the FCM is with new resources submitting inappropriately low-priced or OOM bids.

they are consistent with the resource's net risk adjusted going forward costs. Resources that wish to exit the market permanently may submit Permanent De-List Bids. Permanent De-List Bids that exceed 1.25 times CONE are subject to market monitor review to assure that they are consistent with the resource's net risk adjusted going forward costs. However, resources that submit de-list bids are able to continue to participate in the energy and ancillary services markets.

Both the EMM and the IMM have expressed concern that the existing mitigation rules do not result in de-list bids that are set at competitive levels. The EMM has concluded that the 80 percent of CONE threshold "is too high to be fully effective in mitigating the substantial market power that likely exists in the local capacity zones"<sup>57</sup> and noted that the standard of review for other de-list bids above 80 percent of CONE "may not be fully effective in requiring that the de-list bids be competitive."<sup>58</sup> Thus, the current review thresholds for de-list bids need to be modified to address these concerns.

The IMM also identified an issue in the 2009 Annual Markets Report ("AMR") that must be addressed to assure that all de-list bids are set at a competitive level. The review of the FCM conducted for the 2009 AMR:

... identified an issue with the determination of the going-forward costs used to calculate the correct price for both static and permanent delist bids. The current rules calculate going-forward costs under the implicit assumption that the resource is going to leave the energy market. However, the appropriate going-forward cost calculation for a resource in the capacity market is based on the costs that are

<sup>&</sup>lt;sup>57</sup> EMM Comments at 20.

<sup>&</sup>lt;sup>58</sup> Id.

avoided by leaving the capacity market. Because a resource is not required to leave the energy market if it is not in the capacity market, the inclusion of costs avoided by leaving the energy market in a delist bid is appropriate only if a resource will also leave the energy market. The IMM recommends that the rules governing the calculation of both permanent and static delist bids be revised to address this issue.<sup>59</sup>

To permit all zones to be modeled in the auction, the revised proposal includes a comprehensive mitigation scheme that changes the mitigation rules for Dynamic, Static and Permanent De-List Bids. These changes and their rationale are described below.

# 3. The New Mitigation Rules In The Revised FCM Proposala. Dynamic De-List Bids

The current rules on Dynamic De-List Bids permit resources to leave the capacity market at a price of 0.8 times CONE or below without IMM review. The design of Dynamic De-List Bids, and more particularly the choice of the threshold price, was made in the context of the current zonal modeling approach in which only zones that were projected to be short of capacity before the auction were modeled in the FCA. This zonal modeling approach prevented entities from forcing price separation via strategic dynamic delisting. Given the proposed changes to zonal modeling, the deterrent to the exercise of market power inherent in the current zone creation rules must be replaced by improved rules for submission of de-list bids. Consequently, the Dynamic De-List Bid threshold

<sup>&</sup>lt;sup>59</sup> 2009 Annual Markets Report, ISO New England Inc. Internal Market Monitor, at 19 (May 18, 2010), available at http://www.iso-

ne.com/markets/mktmonmit/rpts/other/amr09\_final\_051810.pdf.

price must be reexamined to assure that all auction outcomes will be competitive. A competitive level for de-list bids is one that reflects a resource's going forward or opportunity costs. Since 0.8 times CONE is not *a priori* representative of a resource's opportunity or going forward costs, absent IMM review and confirmation, a bid at that price cannot be considered competitive.<sup>60</sup> Accordingly, it is not appropriate that Dynamic De-List Bids at this level be allowed to set zonal prices in the FCA.

Given the descending clock structure of the FCA, it is worthwhile to maintain Dynamic De-List Bids to permit resources to leave the auction without having to submit Static De-List Bids for IMM review below a predetermined lower price threshold. However, that price threshold should represent a competitive price for existing resources to provide capacity. If the threshold represents a competitive price for capacity, there is no need to review de-list bids at or below that level. As part of FCM, the ISO conducts annual reconfiguration auctions in which resources that wish to shed Capacity Supply Obligations can trade with other resources that wish to take on an obligation. Unlike the primary auction which has stopped at the administrative floor price, the clearing prices from these auctions represent competitive estimates of the cost of providing capacity. Table 1 shows the results of the first three annual reconfiguration auctions.

<sup>&</sup>lt;sup>60</sup> EMM Comments at 20.

Т	able	1

Auction	Commitment Period	Auction Date	Clearing Price
Annual			
Reconfiguration			
Auction 2	2010-2011	May-2009	\$1.50
Annual			
Reconfiguration			
Auction 3	2010-2011	March-2010	\$1.43
Annual			
Reconfiguration			
Auction 2	2011-2012	May-2010	\$1.00

The table shows that the annual reconfiguration auction prices, and thus the cost of providing capacity, are between \$1.00/kW-month and \$1.50/kW-month. Since the Dynamic De-List Bid threshold price represents a level below which there is no review of bids, it is appropriate to use the lowest clearing price in the reconfiguration auctions to date for the threshold. Thus, the revised FCM proposal has a Dynamic De-List Bid threshold of \$1.00/kW-month. This maximizes the likelihood that the auction outcomes will be competitive. While this number is significantly below the current Dynamic De-List Bid threshold, it does not prevent resources from leaving the market. Resources that wish to leave the market at prices greater than \$1.00/kW-month may

The IMM will periodically review the Dynamic De-List Bid threshold level taking into account the results of the annual reconfiguration auctions, bi-lateral transactions and Static De-List Bid submittals under the Revised FCM Proposal to assure that it remains a reasonable estimate of the cost of providing capacity for an existing resource that wishes only to exit the capacity market.

#### b. Static And Permanent De-List Bids

As noted previously, Static De-List Bids and Permanent De-List Bids above 0.8 and 1.25 times CONE, respectively, are subject to review by the IMM under the current Tariff.<sup>61</sup> The IMM reviews each bid to determine whether the bid is consistent with the resource's net risk-adjusted going forward costs and opportunity costs. Any Existing Generating Capacity Resource submitting a Static or Permanent De-List Bid must provide certain data in support of the bid. If the IMM determines that the bid is consistent with the resource's net risk-adjusted going forward and opportunity costs, then the bid is entered into the FCA. If the bid is not consistent with the resource's net risk adjusted going forward and opportunity costs, then the bid will be rejected. However, a resource may elect to have the ISO-determined bid entered into the FCA.

Pursuant to the Revised FCM Proposal, the rules determining the net risk adjusted going forward costs for Static and Permanent De-list Bid levels will be modified. The new proposal continues the general standard that Static and Permanent De-List Bids are capped by a resource's going forward or opportunity costs. However, there is an important change in how the going forward costs are calculated. In calculating going-forward costs under the current market rules, it is assumed that the resource will leave both the capacity market and the energy and

<sup>&</sup>lt;sup>61</sup> Tariff Section III.13.1.2.3.2.

ancillary service markets. However, the FCM rules do not actually require resources to leave or not participate in the energy and ancillary service markets. Therefore, rather than assuming that a resource will leave the energy and ancillary service markets, the Revised FCM Proposal assumes that a resource submitting a Static or Permanent De-List Bid intends to remain active in those markets.

For a resource that remains active in the energy and ancillary service markets, it must staff and maintain its plant. This means that the incremental or avoided cost of not participating in the FCM, in which the most significant obligation is to participate in the energy market each day, is very low. Therefore, unless a resource submits a plan that describes how it will reduce or avoid the resource's hours of operation and thereby reduce or avoid labor and other expenditures, its going forward costs will be close to zero. If its going forward costs are close to zero, then the level at which the resource may submit a Static or Permanent De-List Bid will be close to zero. The ISO notes that if a resource includes a plan and commits to leave the energy and ancillary service markets for all or part of the Capacity Commitment Period, then the associated going forward costs will be taken into account in the IMM's review of Static and Permanent De-List Bids. Such bids may be reasonable if the resource seeks to shut down for part or all of the year to address a repowering or other long term outage. In other words, non-zero Static and Permanent De-List Bids are possible when a resource is deactivated (e.g., for repowering) or when taking into account another opportunity for that capacity.

All Static and Permanent De-List Bids must be submitted to the IMM for review. However, there is no practical reason for a resource to submit Static De-List Bids below \$1.00 kW/month because this is the threshold level for Dynamic De-List Bids which also enable a resource to leave the auction for a year.

Any Static and Permanent De-List Bid that is not properly supported will be rejected and the resource will be entered into the auction as a price taker. The IMM will establish criteria for evaluating Static and Permanent De-List Bids that provide for the submission of going forward costs to support such bids and the rules designed to implement them as well as provide for consultation on them. The rules will also provide for a material change in circumstances for a resource that has had a Static De-List Bid accepted, but desires to operate in the energy market in the relevant Capacity Commitment Period.

#### c. Quantity Rule

As part of its Revised FCM Proposal related to changes in the mitigation rules, the ISO proposes to eliminate the quantity rule. The quantity rule is a market power mitigation mechanism designed to prevent very high de-list bids from setting prices. The quantity rule defers purchasing replacement capacity for high priced de-list bids from the FCA to the annual reconfiguration auctions. The quantity rule has not been invoked in the auctions held to date, as there have been few high priced Static or Permanent De-List Bids. It has not been necessary to invoke the quantity rule to replace the few high-priced de-list bids that have been submitted because there has been sufficient capacity in the FCA to cause the price

in the auction to drop below 0.8 times CONE, enabling the purchase of the deferrable capacity in the FCA. As discussed above, the revised mitigation rules will provide for a stricter reading of going forward costs, making it even less likely that high priced de-list bids will occur.

The implementation of the improved mitigation standards under the Revised FCM Proposal and the robust participation of new resources in the FCM render the quantity rule largely irrelevant. Therefore, there is no need for the rule, which creates significant complications for auction design and execution (as noted in III.F below), suppresses efficient pricing, and reduces the new capacity development timeline, which increases reliability risks.

The Quantity Rule suppresses efficient pricing because it reduces the amount of capacity purchased below the ICR in the presence of relatively highpriced de-list bids. These purchases are delayed until the annual reconfiguration auctions. This results in inefficient pricing in the FCA because the full ICR is not purchased, and the resulting price is lower than the price that would be needed to fully clear the market. Importantly, this price depression will occur only when capacity is in relatively short supply, which is a time when sending the proper price signals is especially important for inducing competitive new entry.

The quantity rule has another unintended consequence of reducing the lead time to develop new resources to meet reliability needs at exactly the times when capacity is relatively scarce. The quantity rule defers purchases to the annual reconfiguration auctions only when the capacity price is high, which generally is

when there would be little or no excess existing capacity, so new resources are likely to be needed. But by deferring the purchase of new resources for a year, the development timeline is reduced by nearly one third. Not only will this have the effect of reducing the number of resources that are able to compete to meet the need, thereby increasing prices, but it also reduces the time that developers have to build a resource or install demand reduction measures. This can increase the risk of having insufficient capacity to meet reliability needs.

#### E. A Pivotal Supplier Test Is No Longer Necessary

As described above, the ISO has developed a revised mitigation proposal that constitutes a fundamental component of the Revised FCM Proposal. This mitigation proposal will obviate the need for a Pivotal Supplier test by changing the mitigation rules to assure that all de-list bids are at competitive levels. In the FCM Redesign Filing, the ISO introduced a Pivotal Supplier test for market power to assure that only non-pivotal one year de-list bids could affect zonal pricing and creation.<sup>62</sup> The Pivotal Supplier test would act as a safeguard against the exercise of market power by identifying which suppliers are non-pivotal and therefore likely to offer competitively. If the Pivotal Supplier test shows that a bid (*i.e.*, Static De-List Bids, Export Bids, and Administrative Export De-List Bids) is from a Lead Market Participant that is not an FCM Pivotal Supplier, such a bid is likely to be at a competitive level and would be included in the determination of whether to model a Capacity Zone.

<sup>&</sup>lt;sup>62</sup> FCM Redesign Filing, Transmittal Letter at 29-30.

Because the Revised FCM Proposal assures that all de-list bids will be set to competitive levels, it provides that any conforming or appropriately mitigated de-list bid may set price in any zone. Thus, a Pivotal Supplier test is not necessary.

# F. In Proposing To Model All Zones All The Time The ISO Will Retain The Descending Clock Auction With Modifications To The Clearing Mechanism

The ISO will continue to use the descending clock auction structure but will use a different auction clearing mechanism or engine in order to model all zones

all the time. The ISO previously noted certain bi-directional modeling and

clearing issues that needed to be addressed if it were to model all zones all the

time.<sup>63</sup> Specifically, the ISO stated that:

... when considering whether to model all zones all the time (besides considering the potential impact of market power) it is essential to also consider the ability of the descending clock auction process to model the zonal topology. This issue was discussed extensively with stakeholders at the Reliability Committee as part of the development of the FCM Redesign Filing. <u>The descending clock</u> <u>auction clearing design requires a discrete clearing "order" from</u> <u>most constrained region from least constrained. Each region must be</u> <u>able to be represented with a single interconnection between itself</u> <u>and a single adjacent region, and the constraint must be unidirectional</u>.

While fairly complex topologies may be represented within these limitations, these limitations do preclude many configurations that may otherwise be desirable. In particular, mesh networks, where each zone is connected to more than one adjacent zone, may not be represented with the [existing clearing mechanism]. Therefore, in the event that market power concerns can be addressed and it was determined to consider modeling all zones all the time, it is essential

<sup>&</sup>lt;sup>63</sup> See Motion for Leave to File Answer and Answer of ISO New England Inc., Docket No. ER10-787-000 (filed March 30, 2010) at 25.

# that any discussion of the change recognize the limitations of the clearing design.<sup>64</sup>

With the Revised FCM Proposal, the ISO proposes to use a different clearing mechanism (*e.g.*, something similar to a location-based pricing ("LMP") model or clearing mechanism). The ISO notes that the objective function of the new market clearing mechanism will seek to minimize long-run costs by selecting the set of resources that maximizes social welfare while recognizing bi-directional and mesh network constraints, in a manner similar to that currently used in the New England Energy Market and the Locational Forward Reserve Market. Retaining the current objective function while using a more complicated network structure is likely to result in an optimization problem that requires extensive use of heuristic solution methods and is likely to produce multiple locally optimal solutions that the solution software would not be able to consistently identify. These problems would be made worse by the quantity rule.

#### IV. THE PROPER VALUE OF THE COST OF NEW ENTRY

#### A. Whether The Value Of CONE Should Be Reset

In the April 23 Order, the Commission required the ISO to address the issue of the proper CONE value going forward. The Commission noted that the CONE value is "intrinsically tied to the OOM determinations that are part of the APR Issue" and that this issue "is significant since, for example, the IMM review of delist bids from new capacity (to assess OOM capacity) is only triggered *below* 0.75

<sup>&</sup>lt;sup>64</sup> *Id*. (emphases added).

\* CONE."<sup>65</sup> Thus, "at very low levels of CONE, this allows parties seeking to affect the FCM price the ability to offer new capacity well below their resource costs, yet at a level above the IMM threshold for review."<sup>66</sup> Accordingly, the Commission set for paper hearing the issue of the proper CONE value.

Under the Revised FCM Proposal, many of the uses of CONE are eliminated with the revision of the mitigation and OOM rules, and with the elimination of the Quantity Rule. These include the Dynamic De-List Bid threshold and the level at which resources are reviewed as out-of-market capacity. The remaining uses can reasonably use other indices, such as the FCA clearing price or the FCA starting price. These remaining uses include: the price at which the ISO will buy replacement capacity in annual reconfiguration auctions; the price at which resources must submit offers to "cover" a CSO on which the resource can not deliver; the price paid to existing resources when there is inadequate supply or insufficient competition in the FCA; and setting the level of financial assurance required for new capacity clearing in an FCA. Additionally, where the current market rules provide that the FCA starting price in the FCA for the Capacity Commitment Periods beginning on June 1, 2013, June 1, 2014, and June 1, 2015 shall equal 2.0 times CONE, the Revised FCM Proposal replaces the two times CONE value with the FCA starting price as filed in the FCM Redesign Filing.

<sup>&</sup>lt;sup>65</sup> April 23 Order at P 151.

<sup>&</sup>lt;sup>66</sup> Id.

Under the Revised FCM Proposal, several bid values tied to CONE will be replaced with the FCA starting price. Replacement bids that currently are entered into the annual reconfiguration auctions at 2.0 times CONE will be submitted at the FCA starting price. Specifically, the current market rules provide that if the reliability need that prevented the de-listing of a resource is met through a reconfiguration auction or other means, the resource shall be de-listed and relieved of its CSO. In that case, the ISO currently shall enter bids at 2.0 times CONE to replace the capacity on behalf of load in subsequent annual reconfiguration auctions. The replacement bid under the Revised FCM Proposal will be the FCA starting price.

The same change would be made for resources that experience significant decreases in capacity or a new resource that are not able to become commercial by the start of the relevant Capacity Commitment Period. Previously the significant decrease in capacity rules required that a bid be submitted at a price of 2.0 times CONE; the new value is the FCA starting price. The same change will be made for the demand bids for resources not able to achieve their commercial operation date, which the current rules provide that the ISO shall enter at 2.0 times CONE on behalf of the resource in the third annual reconfiguration auction. Finally, the price at which demand bids are submitted by the ISO in an annual reconfiguration auction to make up for a capacity shortfall would also be changed from 2.0 times CONE to the FCA starting price.

The payment rates for existing capacity in the event of inadequate supply and insufficient competition also depend on CONE. They were previously 1.1 times CONE and will be replaced with 1.1 times the existing capacity clearing price from the last competitive FCA. This includes the current Inadequate Supply rules under Sections III.13.2.8.1.1 and III.13.2.8.1.2 and the Insufficient Competition rules under Section III.13.2.8.2.

Financial assurance collateral for new capacity is currently an amount equal to CONE (on a \$/kW-month basis) for the applicable Capacity Zone and Capacity Commitment Period, multiplied by the number of kilowatts of capacity awarded to that Designated FCM Participant in that FCA, times three installments. Under the revised proposal, CONE would be replaced with 2 times the FCA Capacity Clearing Price for new resources. This would result in a net financial assurance for a new resource of one-half of one year's revenue, or two times the Capacity Clearing Price times three installments.

# V. CONCLUSION

For the foregoing reasons, the ISO respectfully requests that the Commission accept the ISO's Revised FCM Proposal, approve the fundamental design principles offered in this brief, and permit the ISO to follow the process outlined in the ISO's June 2 Answer to implement this proposal.

Respectfully submitted,

#### ISO NEW ENGLAND INC.

By: <u>/s/ Ray W. Hepper</u>

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Dated: July 1, 2010

ATTACHMENT A

#### **RESPONSES TO ISSUES SET FOR PAPER HEARING**

In the April 23 Order, the Commission set for paper hearing a number of issues pertaining to the Alternative Capacity Price Rule, modeling of Capacity Zones, and the proper value of the Cost of New Entry that were specifically enumerated in paragraph 18 of that Order. In addition, the Commission identified other matters related to these issues that should be addressed in the briefs. While the issues identified by the Commission throughout the April 23 Order were addressed above in the ISO's First Brief, for the Commission's convenience the ISO sets forth below citations to the brief identifying the sections where responses to each of those questions are located.

### A. Issues Relating to Alternative Capacity Price Rule (APR)

#### 1. Triggering conditions, if any, for the APR

#### **Commission Order:**

Until adequate mitigation measures are in place to address this issue, it may not be reasonable to model capacity zones that reflect all transmission constraints. Therefore, as with the other proposed APR rule changes, this change will be in effect for the August 2010 auction, but subject to further discussion in the paper hearing. April 23 Order at P 73.

#### **ISO Response:**

Please see the ISO's First Brief at Section II.A-B.

# **Commission Order:**

Therefore, we direct parties to address further, in the First Briefs in the paper hearing discussed above, the appropriate conditions that should trigger mitigation under the APR. The briefs should include a discussion of how APR mitigation can be constructed so that load is able to hedge its

capacity obligation outside of ISO-NE's capacity market with bilateral contracting while ensuring that such bilateral contracting does not distort the capacity market clearing price. Similarly, parties should address whether or how APR mitigation might accommodate OOM capacity introduced for resource adequacy or to satisfy public policy goals, such as the integration of renewable and demand response resources." April 23 Order at P 77 (see also P 76).

# **ISO Response:**

Please see the ISO's First Brief at Section II.G.3.

# 2. Treatment of OOM resources that create capacity surpluses for multiple years

# **Commission Order:**

Both sides of this issue raise important arguments <u>on the treatment of</u> <u>historical OOM</u> that require further consideration. We will therefore require the Filing Parties, and other parties with a position on this issue, to submit arguments on this issue to us in their First Briefs in the paper hearing discussed above. April 23 Order at P 82 (see also P 81).

# **ISO Response:**

Please see the ISO's First Brief at Section II.C.

# **Commission Order:**

Both sides have raised important points about the duration of mitigation once an OOM resource has triggered APR mitigation. As the parties consider this issue further, we offer the following guidance.... The statements submitted by the Filing Parties in their First Briefs should address these issues. April 23 Order at P 84 (see also P 83).

# **ISO Response:**

Please see the ISO's First Brief at Section II.C.

# 3. Appropriate price adjustment under APR

# **Commission Order:**

In light of these issues, we are directing the parties to address, in their First Briefs, whether further changes are necessary to the price adjustment aspects of the APR. In particular, we encourage the development of mitigation mechanisms that result in market clearing prices that do not reflect the exercise of market power. Mechanisms that fail to address OOM capacity surpluses do not provide the long term price signals that support efficient private investment. April 23 Order at P 87 (see also P 86).

# **ISO Response:**

Please see the ISO's First Brief at Section II.D-E.

# **B.** Modeling of Capacity Zones

# 1. Whether revisions to the current mitigation rules would be necessary in order to model all zones

# **Commission Order:**

We believe that the proposed Rule Changes to consider additional de-list bids in the modeling of zones represent a first step to the zone modeling issue, and we will accept these revised rules on a transitional basis. We will, however, direct the Filing Parties and any other parties who wish to address this question to do so in their First Briefs in the paper hearing. April 23 Order at P 135.

# **ISO Response:**

Please see the ISO's First Brief at Section III.C.

# C. Proper Value of CONE

# 1. Whether the value of CONE should be reset

# **Commission Order:**

While we do not agree with the logic offered by the generator parties as to why ISO-NE's CONE value is relatively lower, it still leaves open this

issue of an appropriate value for CONE going forward.... Therefore, as the CONE value is intrinsically tied to the OOM determinations that are part of the APR Issue, we will require the Filing Parties and others to address in their First Briefs in the paper hearing, above, the issue of the proper CONE value. April 23 Order at P 151.

### **ISO Response:**

Please see the ISO's First Brief at Section IV.A.

#### **CERTIFICATE OF SERVICE**

I hereby certify that I have this day served the foregoing document upon the parties designated on the official service list for the above-captioned dockets in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.2010 (2010).

Dated at Washington, D.C. on this the 1st day of July, 2010.

<u>/s/ Sherry A. Quirk</u> Sherry A. Quirk, Esq. Attorney for ISO New England Inc.

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