

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

Before Commissioners: Jon Wellinghoff, Chairman;  
Philip D. Moeller, John R. Norris,  
Cheryl A. LaFleur, and Tony Clark.

New York Independent System Operator, Inc.

Docket No. ER13-1380-000

ORDER ACCEPTING PROPOSED TARIFF REVISIONS AND ESTABLISHING A  
TECHNICAL CONFERENCE

(Issued August 13, 2013)

1. On April 30, 2013, the New York Independent System Operator, Inc. (NYISO) filed proposed revisions to its Market Administration and Control Area Services Tariff (Services Tariff) and its Open Access Transmission Tariff (OATT) to establish and recognize a new capacity zone that would encompass NYISO Load Zones G, H, I, and J (the G-J Locality). In this order, we accept NYISO's proposed tariff revisions to become effective July 1, 2013, with the exception of certain sections listed below that shall become effective January 15, 2014, and January 27, 2014, respectively, as requested. We also direct Staff to hold a technical conference, in a separate proceeding, to discuss with interested parties whether or not to model Load Zone K as an export-constrained zone for a future Demand Curve reset proceeding.

**I. Background**

2. NYISO's Installed Capacity (ICAP) market currently uses NYISO-determined demand curves for each of three ICAP pricing zones: New York Control Area (NYCA or Rest-of-State), New York City (NYC, comprised of Load Zone J), and Long Island (LI, comprised of Load Zone K). The entire NYCA has a reliability requirement for minimum capacity meeting a one day in ten year (0.1 day per year) Loss of Load Expectation (LOLE).<sup>1</sup> The NYC and LI capacity zones are referred to as "locational" zones because they each have a separate requirement that a certain minimum percentage of the zone's required generating capacity must be physically located within that zone defined formally as Locational Minimum Installed Capacity Requirements (Locational Capacity Requirements).<sup>2</sup>

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<sup>1</sup> New York State Reliability Council Reliability Rule A-R1, *available at* <http://www.nysrc.org/pdf/Reliability%20Rules%20Manuals/RR%20Manual%2027%20final-2%20July%2010-10.pdf>.

3. In a June 30, 2009 order,<sup>3</sup> the Commission accepted NYISO's proposal to work with stakeholders to address dynamic changes to the NYCA that might warrant the creation of additional capacity zones within the ICAP market. In a September 8, 2011 order,<sup>4</sup> in compliance with the June 30, 2009 Order, the Commission accepted in part and rejected in part NYISO's proposed criteria and considerations that would govern the evaluation and potential creation of new ICAP zones in the NYCA. In an August 30, 2012 order, the Commission accepted tariff revisions that implement Commission-approved Criteria for evaluating, identifying and, if necessary, establishing new capacity zones in the NYCA.<sup>5</sup> According to those provisions, the new capacity zone process begins with a new capacity zone study (NCZ Study) in accordance with the methodology set forth in section 5.16.1 of the Services Tariff. If the NCZ Study identifies a constrained Highway<sup>6</sup> interface into one or more load zones, NYISO must file with the Commission, on or before March 31, of a Demand Curve reset year, proposed tariff revisions necessary to establish and recognize the new capacity zone or zones and a report of the results of the NCZ Study.<sup>7</sup> Section 5.16.1.1.5 of the Services Tariff provides that NYISO will perform the NCZ Study by applying the deliverability methodology from Attachment S of the NYISO OATT.<sup>8</sup>

4. Section 5.16.3 of the Services Tariff directs NYISO to establish an Indicative NCZ Locational Minimum Installed Capacity Requirement (Indicative Locational Capacity Requirement)<sup>9</sup> for each load zone or group of load zones identified in the NCZ Study as

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<sup>2</sup> NYISO Services Tariff, § 2.12.

<sup>3</sup> *New York Indep. Sys. Operator, Inc.*, 127 FERC ¶ 61,318 (2009) (June 30, 2009 Order).

<sup>4</sup> *New York Indep. Sys. Operator, Inc.*, 136 FERC ¶ 61,165 (2011) (September 8, 2011 Order).

<sup>5</sup> *New York Indep. Sys. Operator, Inc.*, 140 FERC ¶ 61,160 (2012) (August 30, 2012 Order).

<sup>6</sup> Highway is generally defined as 115 kV and higher transmission facilities. *See* NYISO April 30, 2013 Filing Letter at 25.

<sup>7</sup> NYISO Services Tariff § 5.16.4. If the NCZ Study does not identify a constrained highway interface, NYISO must file with the Commission its determination that the NCZ Study did not indicate that any new capacity zone is required pursuant to this process, along with a report of the results of the NCZ Study.

<sup>8</sup> NYISO is to apply sections 25.7.8.2.6, 25.7.8.2.7, 25.7.8.2.8, 25.7.8.2.9, 25.7.8.2.12, and 25.7.8.2.13.

having a constrained Highway interface, on or before March 1 of each ICAP Demand Curve reset year. The Services Tariff provides that the Indicative Locational Capacity Requirement will be used solely for establishing revised ICAP Demand Curves.

5. On April 30, 2013, NYISO filed proposed tariff provisions to provide for a new capacity zone encompassing the G-J Locality and provided its NCZ Study Report. NYISO requests an effective date of July 1, 2013 with the exception of its proposed revisions to sections 2.7, 2.12, 2.18, and 23.2.1. NYISO is requesting an effective date of January 27, 2014, for these provisions because that date is sixty days after the ICAP Demand Curves are filed and thus, it will be the effective date for all ICAP Demand Curves including the Demand Curve for the G-J Locality. NYISO is also requesting an effective date of January 15, 2014, for section 26.4.3(iv), regarding credit exposures and credit requirements in a new capacity zone. On June 6, 2013, a deficiency letter (Deficiency Letter) was issued to NYISO regarding the new capacity zone. On June 12, 2013 and June 14, 2013, NYISO filed responses to the Deficiency Letter.

## **II. Summary of NYISO's Filing**

6. NYISO states that the NCZ Study identified a Highway deliverability constraint which triggered the requirement to create a new capacity zone. NYISO proposes to establish a new capacity zone that would encompass NYISO Load Zones G, H, I, and J (the G-J Locality). NYISO states that it examined and considered the transmission system, capacity market, and economic consequences of its proposal and concluded that establishing and implementing the G-J Locality for the May 1, 2014 start of the 2014/2015 Capacity Year is necessary to send more efficient price signals, enhance reliability, mitigate potential transmission security issues, and serve the long-term interest of all consumers in New York State. NYISO also states that its Independent Market Monitoring Unit (MMU) supports NYISO's proposal.

7. To recognize the creation of the new capacity zone, NYISO proposes revisions to (1) several existing Services Tariff and OATT definitions; (2) certain tariff provisions related to the ICAP market to accommodate the fact that the new capacity zone will be a Locality that contains another Locality,<sup>10</sup> to specify that certain capacity cannot be used

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<sup>9</sup> Section 2.9 of the Services Tariff defines "Indicative NCZ Locational Minimum Installed Capacity Requirement" as "[t]he amount of capacity that must be electrically located within a New Capacity Zone, or possess an approved Unforced Capacity Deliverability Right, in order to ensure that sufficient Energy and Capacity are available in that NCZ and that appropriate reliability criteria are met."

<sup>10</sup> Proposed G-J Locality and the existing NYC Locality (Load Zone J). NYISO's tariff defines "Locality" as a single LBMP Load Zone or set of adjacent LBMP Load Zones within one Transmission District or a set of adjacent Transmission Districts (or a

to satisfy a Locational Capacity Requirement,<sup>11</sup> and to modify language describing the payment of ICAP suppliers to specify that their compensation will be computed using the ICAP Demand Curve applicable to their offer; (3) specify a pivotal supplier threshold for the new capacity zone in Attachment H to the Services Tariff; and (4) the credit provision of Attachment K of the Services Tariff to reflect, *inter alia*, what the potential exposure will be, based on the fact that there will be a Locality contained within another Locality. NYISO also proposes a number of minor OATT revisions and certain ministerial formatting revisions.

8. NYISO further notes that, although it met the March 1 tariff deadline to establish an Indicative Locational Capacity Requirement, the Commission granted its request for a waiver of the deadline so that NYISO could adjust the Indicative Locational Capacity Requirement, if necessary, after further technical analysis. NYISO notes the application of its methodology for the proposed G-J Locality resulted in an Indicative Locational Capacity Requirement of 88 percent.<sup>12</sup>

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

9. Notice of NYISO's April 30, 2013 Filing was published in the *Federal Register*, 78 Fed. Reg. 28,210 (2013), with interventions, comments and protests due on or before May 21, 2013. Notice of NYISO's June 12, 2013 Filing was published in the *Federal Register*, 78 Fed. Reg. 38,707 (2013) with a comment date of June 19, 2013. Notice of NYISO's June 14, 2012 Filing was published in the *Federal Register*, 78 Fed. Reg. 38,706 (2013) with a comment date of June 21, 2013. Calpine Corporation; TC Ravenswood, LLC; New York Association of Public Power; CPV Valley, LLC; Exelon Corporation; Transmission Developers, Inc.; Direct Energy Services, LLC; and PSEG

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portion of a Transmission District(s)) within which a minimum level of Installed Capacity must be maintained, and as specifically identified in this subsection to mean (1) Load Zone J and (2) Load Zone K. On June 19, 2013, in Docket No. ER12-360-003, NYISO filed to revise this definition to add "and (3) Load Zones G, H, I, and J collectively (i.e., the G-J Locality)" to its list of localities. That filing is pending before the Commission.

<sup>11</sup> NYISO states that capacity associated with External Capacity Resource Interconnection Rights (CRIS), Grandfathered External Installed Capacity Agreements listed in Attachment E of the ICAP Manual, and Existing Transmission Capacity for Native Load for the NYSEG are not eligible to satisfy a Locational Capacity Requirement. NYISO adds that the restriction would not apply to External capacity associated with Unforced Capacity Deliverability Rights (UDRs). NYISO April 30, 2013 Filing at 15.

<sup>12</sup> NYISO April 30, 2013 Filing Letter at 5 and notes 17-19.

Energy Resources & Trade LLC and PSEG Power New York LLC; Independent Power Producers of New York, Inc. (IPPNY); H.Q. Energy Services, Inc.; and NRG Companies filed motions to intervene.

10. Consolidated Edison Solutions, Inc. (ConEd Solutions); Multiple Intervenors;<sup>13</sup> Entergy Nuclear Power Marketing, LLC (Entergy Nuclear); Central Hudson Gas & Electric Corporation (Central Hudson), Indicated New York Transmission Owners (Indicated NYTOs);<sup>14</sup> and Consolidated Edison Company of New York, Inc. (ConEd), Orange and Rockland Utilities, Inc. (O&R), and Central Hudson (collectively, the Companies) filed motions to intervene and protests. New York State Public Service Commission (NYPSC) filed a notice of intervention and protest. Long Island Power Authority (LIPA) filed a motion to intervene and comments.

11. On June 5, 2013, ConEd and O&R; LIPA; Entergy Nuclear; and NYISO filed answers to various pleadings. On June 13, 2013, Indicated NYTOs filed an answer. On June 20, 2013, Central Hudson filed an answer to LIPA's and NYISO's answers. On June 18, 2013, Multiple Intervenors filed an answer. On June 19, 2013, Entergy Nuclear and the Companies each filed an answer to NYISO's June 12, 2013 Filing. On June 24, 2013, NYISO filed an answer to the Companies' June 19, 2013 answer.

#### **IV. Discussion**

##### **A. Procedural Issues**

12. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2013), the notice of intervention and timely unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

13. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2013), prohibits an answer to a protest or to an answer unless otherwise ordered by the decisional authority. We will accept the answers filed in this proceeding because they have provided information that assisted us in our decision-making process.

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<sup>13</sup> Multiple Intervenors state that they are an unincorporated association of over 55 large industrial, commercial, and institutional energy consumers with manufacturing and other facilities located throughout New York State.

<sup>14</sup> Indicated NYTOs collectively consist of Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York Power Authority, New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation d/b/a National Grid, Orange and Rockland Utilities, Inc. and Rochester Gas & Electric Corporation.

**B. Substantive Issues****1. Need for a New Capacity Zone****a. NYISO's Filing**

14. NYISO states that the NCZ Study determined that the Upstate New York/Southeast New York (UPNY/SENY) Highway interface into Load Zones G, H, and I was constrained because it was bottling<sup>15</sup> 849.2 MW of generation from Load Zones A through F, and therefore, NYISO was required to create a new capacity zone.<sup>16</sup> NYISO explains that the NCZ Study applied the assumptions and methodology required under section 5.16.1.1 of the Services Tariff.

**b. Comments and Protests**

15. LIPA supports NYISO's proposed revisions to implement and establish the G-J Locality and asserts that the proposed revisions are consistent with the requirements of NYISO's Services Tariff. LIPA states that it is not necessary for the Commission to examine issues related to the functions of NYISO's ICAP markets, such as the computation of the ICAP market Demand Curve for the new capacity zone, or the computation of the Locational Capacity Requirement in the new capacity zone.<sup>17</sup> Rather, according to LIPA, the Commission should solely consider whether NYISO has complied with the existing provisions of the Services Tariff related to the creation of a new capacity zone.<sup>18</sup>

16. Entergy Nuclear also supports the creation of the new capacity zone and asserts that the erosion of the electric system in the Lower Hudson Valley over time provides proof of the harm that results when inaccurate price signals fail to adequately value capacity in a region. It states that the capacity price signal for the Lower Hudson Valley zones was suppressed by the excess capacity levels in the remainder of the Rest-of-State region that cleared against the NYCA curve, but were not deliverable to the Lower Hudson Valley zones due to the UPNY/SENY constrained interface.<sup>19</sup> It asserts that the

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<sup>15</sup> If the net generation available upstream is greater than the calculated First Contingency Incremental Transfer Capability (FCITC), that amount of generation above the FCITC is considered to be constrained or "bottled" capacity and may not be fully deliverable under all conditions, NCZ Study Report at 5.

<sup>16</sup> NYISO April 30, 2013 Filing, NCZ Study Report at 13.

<sup>17</sup> LIPA May 21, 2013 Comments at 4.

<sup>18</sup> *Id.* at 5.

new capacity zone must be established without any further delay in order to address, among other things, reliability needs and the need to send accurate price signals.<sup>20</sup>

17. The NYPSC argues, to the contrary, that the Commission should find that there is no need to implement a new capacity zone at this time and that the new capacity zone will result in unjust and unreasonable rates. The NYPSC asserts that NYISO's filing ignores the fact that the NYPSC has two proceedings underway<sup>21</sup> that will result in the construction of major new transmission facilities during the 2016-2018 timeframe, thus alleviating the congestion that is leading to the creation of the new capacity zone.<sup>22</sup> The NYPSC is concerned that implementation of NYISO's proposal at this time would cost ratepayers almost half a billion dollars over a three-year Demand Curve reset period without achieving any benefits. Further, according to the NYPSC, the benefits to ratepayers from implementing this new zone in 2014 are speculative and unlikely to materialize as the planned transmission upgrades will come into operation over the same period. The NYPSC also argues that NYISO's filing inappropriately emphasizes the MMU's contention that the lack of a price signal in the Lower Hudson Valley zones has contributed to a reduction of 1 GW of unforced capacity (UCAP) since 2006. The NYPSC states that most of the generation retirements were coal-fired units that were retired due to environmental restrictions and not because of low capacity prices.<sup>23</sup>

**c. Answers**

18. In its answer, NYISO asserts that the scope of this proceeding should be limited to the questions of whether NYISO properly conducted the NCZ Study, whether it correctly concluded that there was a constrained Highway interface, and whether the proposed new capacity zone boundary is just and reasonable.<sup>24</sup> NYISO states that the Services Tariff establishes a straightforward new capacity zone implementation "trigger," i.e., if the NCZ Study identifies a constrained Highway interface, a new capacity zone must be created.

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<sup>19</sup> Entergy Nuclear May 21, 2013 Comments at 10.

<sup>20</sup> *Id.* at 11.

<sup>21</sup> The NYPSC states that it has solicited proposals for new generation and transmission projects that could be placed in service by the summer of 2016 in the event that Indian Point nuclear units are not relicensed, and it is seeking to secure approximately 1000 MW of AC transmission upgrades to address constraints on the UPNY/SENY and Central-East interfaces and to place such upgrades in service by 2018.

<sup>22</sup> NYPSC May 21, 2013 Protest at 4.

<sup>23</sup> *Id.* at 6.

<sup>24</sup> NYISO June 5, 2013 Answer at 4.

NYISO states that the current tariff does not allow NYISO to consider other factors. NYISO contends that no party disputes that the Services Tariff contains this requirement, no party sought rehearing of the August 30, 2012 Order that accepted those tariff provisions, and there is no dispute that NYISO correctly identified a constrained Highway interface and adhered to the tariff requirements that it identify a new capacity zone boundary. NYISO argues that the NYPSC's argument that NYISO should not create a new capacity zone despite the results of the NCZ Study is an impermissible collateral attack on the Commission's September 8, 2011 Order and August 30, 2012 Order.

19. Entergy Nuclear asserts that the NYPSC overlooks the need to ensure that NYISO's market design is efficient and sends accurate price signals, principles which are necessary for competitive markets to be sustainable over the long run. Furthermore, Entergy Nuclear states that, while no party has challenged the fact that severe constraints exist in the UPNY/SENY Interface, the NYPSC's reliance on regulatory solutions to the constraints is an approach that will harm NYISO's markets. Entergy Nuclear also states that the NYPSC fails to provide evidence to counter the MMU's core assertions that the new capacity zone will provide incentives to properly value capacity to reflect reliability needs.

**d. Commission Determination**

20. For the reasons explained below, we find that NYISO has properly followed its tariff provisions for identifying a constrained Highway interface and adhered to the tariff requirement that it identify a new capacity zone boundary.

21. In the September 8, 2011 Order, the Commission found that:

NYISO should use the methodology contained in the existing Attachment S Deliverability Test in section 25.7.8 of Attachment S to the NYISO OATT in determining whether to create new [capacity] zones. That is, a new zone should be created when the total transmission transfer capability (including any upgrades that would be required to be built to make new resources capacity qualified) is insufficient to allow all of the capacity resources in a pre-existing zone to be deliverable throughout the pre-existing zone.<sup>25</sup>

According to criteria accepted in the August 30, 2012 Order, if the NCZ Study identifies a constrained Highway interface into one or more load zones, NYISO must file with the Commission, on or before March 31, of a Demand Curve reset year, proposed tariff revisions necessary to establish and recognize the new capacity zone or zones and a report of the results of the NCZ Study.<sup>26</sup>

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<sup>25</sup> September 8, 2011 Order, 136 FERC ¶ 61,165 at P 52.



22. NYISO's NCZ Study identified a Highway deliverability constraint, which triggered the requirement to create the proposed new capacity zone. Therefore, we find that NYISO complied with its tariff in identifying a need for and proposing a new capacity zone.

23. The NYPSC argues that there is no need to implement a new capacity zone at this time because it expects two large transmission upgrades to be built in the near future that will alleviate the existing congestion. But the criteria specified in NYISO's tariff for creating a new capacity zone does not consider whether transmission constraints will be alleviated in the future. Rather, it considers whether binding transmission constraints exist at present. As noted above, NYISO applied the Attachment S test and found that a binding transmission constraint exists. Therefore, a new capacity zone must be created under the terms of NYISO's tariff. In any event, the transmission upgrades that the NYPSC expects to result from its proceedings have not yet been built. The record in this proceeding suggests that the UPNY/SENY transmission constraint has been binding for several years. The price differential that is expected to develop when a new capacity zone is created will provide incentives to alleviate this constraint, such as by completing the transmission upgrades.

24. Further, we disagree with the NYPSC's assertions that a new capacity zone will result in unjust and unreasonable rates. The results of NYISO's application of the Attachment S Deliverability test demonstrate that a significant transmission constraint currently exists into NYISO's proposed new capacity zone. Any resulting higher capacity prices in the new capacity zone will help to encourage the development of new generation and/or transmission capacity to help alleviate the constraint. Such price changes promote efficient decisions and are not unreasonable. As noted below, a separate price signal in the G-J Locality will encourage capacity additions to a locality that is experiencing increasing reliability needs.

25. Finally, we disagree with the NYPSC that creating a new capacity zone would provide no economic benefits and would needlessly increase customers' bills. We conclude that creating a new capacity zone is necessary to provide more accurate price signals over the long run to encourage new investment in the new capacity zone when it is needed.

26. The NYPSC is concerned that prices in the new capacity zone would be higher than in the Rest-of-State, because the higher net cost of new entry in the new capacity zone would raise the new capacity zone's ICAP Demand Curve. In the NYPSC's view, the transmission upgrades expected to be completed in the next few years would eliminate the need to create a new capacity zone and the resulting higher prices, because the upgrades would relax the transmission constraint that has bottled generation capacity.

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<sup>26</sup> NYISO Services Tariff § 5.16.4.

But no one argues that the upgrades would eliminate the reliability need for some capacity to be located within the new capacity zone. In order to encourage new resources to be built in the new capacity zone when they are needed, capacity prices on average over time must approximate the net cost of new entry in the new capacity zone. Otherwise, developers will be reluctant to build the new capacity that will be needed as load grows and resources retire over time. Because the net cost of new entry in the new capacity zone is higher than in the Rest-of-State, the new capacity zone needs its own ICAP Demand Curve, reflecting its higher net cost of new entry, in order to send the necessary price signals over the long run and provide the higher capacity revenue over the long run needed to encourage new investment.

## **2. Phase-In of the New Capacity Zone**

### **a. NYISO's Filing**

27. NYISO did not propose tariff revisions that would provide for the phase-in of a new capacity zone.

### **b. Protests**

28. Indicated NYTOs protest that NYISO's proposal does not provide for a phase-in of the new capacity zone, even though NYISO's filing shows that the new capacity zone will likely cause an immediate and substantial capacity price increase to consumers in the G-I region.<sup>27</sup> Indicated NYTOs assert that the new capacity zone price impacts should be phased-in over a period of time consistent with the phase-in period that was applied for the implementation of the original demand curves and the Commission should convene a technical conference to determine the price parameters of the phase-in so that they can be considered as part of the upcoming demand curve reset process.

### **c. Answers**

29. In its answer, NYISO states that it believes that the establishment and implementation on May 1, 2014, of a G-J Locality will be in the ultimate long-term economic interests of all New York consumers, but it takes no position on whether the phase-in of capacity price impacts is warranted on non-economic grounds. NYISO states that the MMU argues against the phase-in of capacity prices in the 2012 State of the Market Report, and that a phase-in would delay the capacity markets' ability to send more efficient investment price signals.<sup>28</sup> NYISO notes that it is not yet able to evaluate

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<sup>27</sup> Indicated NYTOs assert that NYISO's simulations show capacity charges for customers in load zones G through I will nearly double, increasing by \$168 million per year solely as the result of the creation of the new capacity zone, and, combined with the impact of recent retirements, mothballing, and other factors, to quintuple.

if the administrative considerations of phasing-in price impacts of a new capacity zone would delay implementation of a new capacity zone.<sup>29</sup>

30. Entergy Nuclear disagrees with Indicated NYTOs' argument to phase-in the price impacts of a new capacity zone and contends that the argument glosses over the fact that the value of capacity in the Lower Hudson Valley has been significantly understated for years. Entergy Nuclear states that the Commission has long emphasized the need for NYISO to create new capacity zones to send efficient price signals and, over the time period since the Commission orders were issued, the need for capacity in the Lower Hudson Valley has grown. Entergy Nuclear concludes that, given seven years of undervalued capacity in the Lower Hudson Valley, any further arbitrary diminution of the value provided by capacity in this region will only turn merchant generation investment away from the New York markets.

**d. Commission Determination**

31. We do not agree with Indicated NYTOs that the effect of the new capacity zone should be phased in, and thus, we will not require such a phase-in. We agree with the MMU that a phase-in would delay the capacity market's ability to send more efficient investment price signals. Moreover, stakeholder discussions about the need for a new capacity zone in the Lower Hudson Valley have been ongoing over several years and have provided notice to stakeholders of the need for a new capacity zone. We also agree with Entergy Nuclear that the Commission has long emphasized the need for NYISO to explore creating new capacity zones to send efficient price signals to influence capacity investment decisions, and over the time period since the Commission's orders were issued, the need for a new capacity zone in the Lower Hudson Valley has only become more pronounced. We also agree that these issues have been considered over a seven-year time period with extensive focus placed on them over the past two years and parties have been on notice of these impending market design changes. For example, the 2006 State of the Market Report by NYISO's MMU identified the potential need for such a new capacity zone.<sup>30</sup> The report stated that "[o]ne location where long-term reliability

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<sup>28</sup> NYISO June 5, 2013 Answer at 34-35 (citing Potomac Economics, *2012 State of the Market Report for the New York ISO Markets* (April 2013) at 52 available at <[http://www.nyiso.com/public/webdocs/markets\\_operations/committees/mc/meeting\\_materials/2013-04-24/4\\_NYISO%202012%20SOM%20Report.pdf](http://www.nyiso.com/public/webdocs/markets_operations/committees/mc/meeting_materials/2013-04-24/4_NYISO%202012%20SOM%20Report.pdf)> ("2012 SOM Report")) ("In summary, the creation of a SENY capacity zone before 2014 would have facilitated more efficient investment in both new and existing resources where the Reliability Needs Assessment has identified resources are necessary for resource adequacy over the next ten years. Nonetheless, it should remain a high priority for NYISO to move forward expeditiously to create and price the SENY zone.").

<sup>29</sup> NYISO June 5, 2013 Answer at 34.

concerns have arisen is in the lower Hudson Valley.... Hence, we recommend that the NYISO initiate an assessment to determine whether a new capacity zone with local requirements is warranted to address the Hudson Valley reliability requirements.<sup>31</sup> Additionally, NYISO's capacity deliverability tests beginning in 2008 identified that the UPNY/SENY transmission interface between the Upper Hudson Valley and the Lower Hudson Valley was overloaded.<sup>32</sup>

### **3. Boundaries of the New Capacity Zone**

#### **a. NYISO's Filing**

32. As noted above, NYISO's proposed new capacity zone encompasses Load Zones G, H, I, and J, but excludes Load Zone K. NYISO states that, pursuant to section 5.16.2 of the Services Tariff, if the NCZ Study identifies a constrained Highway interface into one or more load zones, NYISO is required to identify the boundary of one or more new capacity zones by considering the extent to which incremental capacity in individual constrained load zones could impact the reliability and security of the constrained load zones.<sup>33</sup> That is, NYISO must determine which of the load zones on the import side of the constrained interface to include in the new capacity zone. Five load zones – G, H, I, J, and K – exist on the import side of the UPNY/SENY interface.

33. NYISO states that it determined the boundary of the new capacity zone based primarily on resource adequacy assessments. In those assessments, NYISO indicates that it ran simulations using General Electric's Multi-Area Reliability Simulation model, as well as, "unified" or "Tan 45" methodology where capacity was relocated from Load Zones G, H, and I to Load Zones J and K while monitoring compliance with New York State Reliability Council (NYSRC) LOLE requirements.<sup>34</sup> The simulations reveal that almost 6,000 MW could be relocated from Zones G, H, and I to Zone J before the LOLE criterion would be violated, but only 300 MW could be relocated from Load Zones G, H, and I to Zone K before the LOLE criterion would be violated.<sup>35</sup> The simulations also found that if 3500 MW was added to Zone J, LOLE in Zones G, H, and I dropped from

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<sup>30</sup> Entergy Nuclear, May 21, 2013 Comments, Younger Aff. ¶ 12 (citing 2006 State of the Market Report at vi).

<sup>31</sup> 2006 State of the Market Report at vii.

<sup>32</sup> *Id.*, Younger Aff. ¶ 15.

<sup>33</sup> *See* NYISO April 30, 2013 Filing Letter at 6. *See also* Chao/Adams Aff. ¶ 5.

<sup>34</sup> NYISO April 30, 2013 Filing Letter at 12.

<sup>35</sup> NYISO April 30, 2013 Filing, Chao/Adams Aff. ¶ 21.

0.1 days per year to 0.001 days per year.<sup>36</sup> But when the same amount was added to Zone K, LOLE in Zones G, H, and I dropped from 0.1 to only 0.012.<sup>37</sup>

34. NYISO states that these simulations indicated that capacity in Load Zones G, H, and I was more fungible with capacity in Load Zone J than it was with Load Zone K. According to NYISO, this means that capacity in Load Zone K could only provide limited support to Load Zones G, H, and I. NYISO, therefore, proposes to establish a new capacity zone that would encompass Load Zones G, H, I and J and implement this new G-J Locality for the May 1, 2014 start of the 2014/2015 Capability Year.<sup>38</sup>

35. As further justification for the G-J Locality, NYISO notes that the reliability needs of the G-J Locality are significant and increasing. NYISO notes that the MMU's 2012 State of the Market Report referenced recent generator retirements in Load Zones G and H that resulted in higher Locational Capacity Requirements for Load Zones J and K and commensurate price increases in these Localities.<sup>39</sup> In addition, NYISO notes that the amount of UCAP in Load Zones G, H, and I has fallen by 1 GW since the summer of 2006 and NYISO asserts that this capacity reduction has occurred in part because of the lack of a separate price signal in these load zones.

36. Furthermore, NYISO states that including Load Zone K in a new capacity zone would be inconsistent with sound market design principles because it would incent capacity additions in an area with less reliability value to Load Zones G, H and I and the NYCA region. NYISO also notes that the Patton Affidavit<sup>40</sup> agrees with NYISO that creating the G-J Locality is consistent with market design principles and is a reasonable configuration.

37. In its June 12, 2013 response to the Deficiency Letter, NYISO states that the only direct ties between Zone K and NYCA are with Zones I and J. NYISO explains that because the NYCA minimum ICAP requirement includes the requirements of Zone K, capacity located in Zone K does in fact contribute directly to meeting the NYCA requirement. But because capacity in Zone K has very little ability to be transferred to Load Zones G, H, and I, it cannot adequately be relied on to satisfy the reliability needs

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<sup>36</sup> *Id.*, Chao/Adams Aff. ¶ 25.

<sup>37</sup> *Id.*, Chao/Adams Aff. ¶ 26.

<sup>38</sup> NYISO Load Zones G, H and I collectively are also sometimes referred to as the "Lower Hudson Valley" zone.

<sup>39</sup> NYISO April 30, 2013 Filing Letter at 7.

<sup>40</sup> NYISO April 30, 2013 Filing, Patton Affidavit (David B. Patton of Potomac Economics serves at the Market Monitoring Unit (MMU) for NYISO).

of Load Zones G, H, and I. In response to Dr. Sasson's comment<sup>41</sup> that adding 1000 MW of capacity to Zone K would reduce the LOLE of Zones G, H, and I from 0.087 to 0.012, which, according to Dr. Sasson, is a significant reliability benefit, NYISO states that most of the reduction in the Zone G, H, and I LOLE comes from the first 300 MW of capacity, since capacity in excess of 300 MW would become bottled due to transmission transfer limits.

38. The Deficiency Letter also asked about the minimum quantitative criteria to determine whether to include or exclude a load zone in a new capacity zone, and how the 300 MW from the LOLE study and the 344 MW from the transmission security analysis apply to determining whether to exclude Load Zone K. NYISO responds that its minimum quantitative criterion was whether the incremental capacity was fully fungible in the new capacity zone – that is, whether the incremental capacity would provide equivalent reliability as measured by LOLE to the other load zones on the constrained side of the Highway interface. NYISO states that the results of its simulation analysis showed that about 300 MW of incremental capacity in zone K would be fungible. NYISO also states that the 344 MW figure from the transmission security analysis is the upper bound limit of the transfer capability from zone K under emergency conditions, that the lower bound is 144 MW, and that the normal transfer capability is 233 MW.

39. In response to the Deficiency Letter's question regarding the quantity of fungible transfer capacity that would have been sufficient for Zone K to be included in the proposed new capacity zone, NYISO responded that it would not be unreasonable to include Zone K in the new capacity zone if incremental capacity in Zone K equal to at least half of the total generation capacity in Zones G, H, and I (i.e., 2000-2500 MW) was fungible. NYISO's response is based on its assessment of the potential for retirements in the near future.

#### **b. Protests and Comments**

40. LIPA states that NYISO has correctly applied the provisions of the Services Tariff to establish the Zone G-J new capacity zone by: (1) properly identifying a constraint along a Highway interface; (2) establishing the boundaries of the new capacity zone based on the interface capability between load zones; and (3) providing proposed revisions to establish and recognize the new capacity zone along with the NCZ Study report.<sup>42</sup> LIPA believes it is just and reasonable to create a new capacity zone that excludes Zone K because it will create a price signal to construct capacity in Zone G-J, where it is most beneficial relative to the identified constraint.

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<sup>41</sup> Dr. Mayer Sasson is a consultant for the Companies.

<sup>42</sup> LIPA May 21, 2013 Comments at 5-6.

41. Multiple Intervenors state that NYISO announced, on January 30, 2013, a determination to include Zones G-K as the boundary of the new capacity zone based on analyses showing that Zone K can provide reliability and security benefits to the new capacity zone. Multiple Intervenors state that based on this determination, the requirements of section 5.16.2 of NYISO's Services Tariff call for the inclusion of Zone K in the boundary of the new capacity zone. Further, Multiple Intervenors note that, although NYISO confirmed this determination at subsequent Installed Capacity Working Group meetings and maintained this position for two months, it later decided that Zone K would be excluded from the new capacity zone boundary. Multiple Intervenors state that NYISO's decision to subjectively compare the level of reliability and security support provided by each zone under consideration for inclusion in the boundary of the new capacity zone is not provided for in NYISO's Services Tariff. Multiple Intervenors state that, therefore, NYISO's proposal to exclude Zone K from the boundary of the new capacity zone is fundamentally inconsistent with the results of its own analyses and with the requirements of section 5.16.2 of NYISO's Services Tariff.

42. Multiple Intervenors state that NYISO's analyses have shown that Zone K can provide 300 MW of reliability and security support to the new capacity zone and that such significant support would require inclusion of Zone K under any subjective criteria added to section 5.16.2 of NYISO's Services Tariff. Further, Multiple Intervenors note that this level of support is more than 50 percent greater than the capacity rating of the applicable ICAP Demand Curve proxy unit that would likely apply to the new capacity zone and therefore, justifies the inclusion of Zone K within the new capacity zone boundary. In addition, Multiple Intervenors state that this level of identified support available from Zone K can play a significant role in addressing reliability issues throughout the southeastern New York region. Multiple Intervenors also state that Zone K should be included in the new capacity zone boundary because it relies upon the Lower Hudson Valley region for reliability and security support, as well as for achieving 12 percent of the statewide minimum installed reserve margin.

43. Multiple Intervenors, however, state that if the Commission were to determine that the level of available support from Zone K warrants special considerations with respect to its inclusion in the new capacity zone, then the Commission should direct NYISO to further consider whether modeling Long Island as an export-constrained zone is warranted. Multiple Intervenors add that the Commission should require an examination of the costs and efforts necessary for NYISO to accomplish such modeling in order to determine if the pursuit of special considerations would be prohibitive from a cost perspective and result in imposing unnecessary costs on consumers. Further, according to Multiple Intervenors, if the Commission were to determine that: (1) modeling Zone K as an export-constrained zone is warranted, necessary, and not cost-prohibitive; and (2) NYISO is unable to implement export-constrained modeling in time

for the implementation of the proposed new capacity zone, then the Commission should direct NYISO to include Zone K within the new capacity zone boundary without any restrictions in the interim and model Zone K as an export-constrained zone when, and if, the appropriate modeling capability becomes feasible.

44. Both Multiple Intervenors and the Companies argue that NYISO's proposal to exclude Load Zone K from the new capacity zone is unjust and unreasonable and not in compliance with NYISO's tariff. They state that the test in NYISO's tariff for including an additional load zone in a new capacity zone is the extent to which incremental capacity in the load zone could impact the reliability and security of the proposed new capacity zone, taking into account the interface capability between that load zone and the other load zones included in the proposed new capacity zones. Multiple Intervenors argue that the fact that New York City can provide a comparatively greater amount of reliability support to the new capacity zone than Long Island can is not only irrelevant, it is completely predictable given the size of the New York City market. They contend that the assessment must be done on a load zone by load zone basis. The Companies argue that NYISO's filing incorrectly discounts the support that Zone K could provide to the proposed new capacity zone, that the filing incorrectly determines that Zone K is electrically isolated from the proposed new capacity zone, and that the filing incorrectly concludes that Zone K has limited ability to assist and support the proposed new capacity zone and could not fully satisfy a capacity need in the event of a generator retirement in the new capacity zone.

45. Dr. Sasson, testifying for the Companies, raises additional points. He asserts that NYISO's arguments largely rest on a comparison of the relative abilities of Zones J and K to provide capacity assistance to Zones G, H, and I. But, in Dr. Sasson's view, such a comparison is not an appropriate test; both Zones J and K could be included in the new capacity zone if they both provide sufficient assistance. Dr. Sasson agrees with NYISO that shifting more than 300 MW from Zones G, H, and I to Zone K would raise the NYCA LOLE, but he disagrees that the LOLE increase is due to a transmission limitation. Rather, in his view, it is due to the fact that the capacity shift would lower the LOLE of Zone K by less than it would raise the LOLE of Zones G, H, and I. As support for his view, Dr. Sasson presents data to show that there were flows from K to I for only 215 hours for the year and that, during those hours, the average flow from K to I was only 130 MW. The transfer capability limit flow was reached for an average of less than one hour.<sup>43</sup> Dr. Sasson states that the emergency transfer capability from Zone K to Zones G, H, and I is 530 MW. Dr. Sasson also describes another simulation test performed by NYISO in which generation capacity was added to Zone K until the transmission constraint bound. The constraint bound at a level of 3500 MW. This level of additional capacity would lower the LOLE of Zones G, H, and I from 0.087 to 0.012. In Dr.

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<sup>43</sup> The Companies May 21, 2013 Protest, Sasson Aff. ¶ 14.



Sasson's view, these numbers are significant, and demonstrate that Zone K should be included in the new capacity zone.

**c. Answers**

46. NYISO asserts that the Commission should not review the proposed new capacity zone boundary as if there were only one correct configuration because the Services Tariff gives NYISO the flexibility to use its expertise and judgment to make a reasonable determination. NYISO states that its decision to exclude Zone K from the new capacity zone was based on its analyses, which showed that incremental capacity in Long Island cannot effectively provide reliability benefits to other Load Zones in the new capacity zone.<sup>44</sup> NYISO reiterates that its analyses included looking at Load Zone K separately from Load Zone J and jointly. However, NYISO avers that the pertinent consideration in determining the new capacity zone boundary is the impact on the one-day-in-ten-years LOLE requirement, not the potential increase in transfer capability, the factor on which ConEd's and Central Hudson's protests focus.<sup>45</sup>

47. In response to the arguments of the Companies and their witness, Dr. Sasson, NYISO states that it is true that 530 MW is the maximum transfer limit from Load Zone K to Load Zones G, H, and I, but the actual limit will often be significantly lower because of simultaneous transfer and generator availability impacts.<sup>46</sup>

48. NYISO witnesses Chao and Adams explain further that the fungibility test was the primary test utilized by NYISO in its new capacity zone boundary analysis, and that this test assesses whether capacity in a load zone can be substituted one-for-one with capacity in Load Zones G, H, and I. NYISO found that incremental capacity of 300 MW, equivalent to less than 7 percent of the existing capacity in load zones G, H, and I, is fungible with capacity in Load Zone K, and that such a small value confirms that excluding Load Zone K from the new capacity zone is reasonable.<sup>47</sup> By contrast, NYISO's analysis found that incremental capacity in Load Zone J could replace all of the capacity in Load Zones G, H, and I.<sup>48</sup>

49. Chao and Adams also dispute Dr. Sasson's claim that transmission transfer limits did not cause the NYCA LOLE to exceed 0.1 when more than 300 MW of capacity were

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<sup>44</sup> NYISO June 5, 2013 Answer at 19-20, 23-24.

<sup>45</sup> *Id.* at 24, 28-29.

<sup>46</sup> *Id.* at 25.

<sup>47</sup> *Id.*, Chao/Adams Aff. ¶¶ 27-29.

<sup>48</sup> *Id.*, Chao/Adams Aff. ¶ 31.

relocated from Load Zones G, H, and I to Load Zone K under the fungibility test. Chao and Adams also disagree with Dr. Sasson that the proper transfer limit to use between Zones G, H, and I and Zone K is the emergency limit of 530 MW. Chao and Adams argue that Dr. Sasson focused only on the transmission path between Zones G, H, and I and K. However, they state, Zone K has transmission ties to both Zones G, H, and I and Zone J. In their view, while the maximum independent transfer capability between Zones G, H, and I and Zone K (taking into account only flows between these zones) is 530 MW, the simultaneous capability limit (taking account of flows to all locations) will often be lower. They add that of the simulation cases involving excess capacity in Zone K, the excess capacity was delivered solely to Zones G, H, and I in only 5 percent of the cases. By contrast, according to Chao and Adams, in 95 percent of the simulations when Zone K had excess capacity, Zone J received part or all of the excess. Thus, they argue, it is more appropriate to consider the simultaneous transfer limit rather than the independent transfer limit.<sup>49</sup>

50. LIPA argues for the exclusion of Zone K. It asserts that ConEd, Central Hudson and Multiple Intervenors are motivated to include Zone K in the new capacity zone because doing so will more broadly socialize the new capacity zone implementation costs and also utilize Long Island's existing capacity to offset the purchase obligation of ConEd, Central Hudson and Multiple Intervenors in the new capacity zone auction. LIPA asserts that it is illogical to include Zone K in the new capacity zone and send a price signal to construct capacity in a zone that cannot benefit the constrained zone. According to LIPA, this price signal should be focused on New York City and the Lower Hudson Valley or Zones G-J, where generation is most able to relieve the area downstream of the UPNY/SENY transmission constraint. LIPA argues that including Long Island in a new capacity zone will both dilute and misdirect the price signal away from the Lower Hudson Valley and New York City.

51. In its June 19, 2013 answer to NYISO's response to the deficiency letter, the Companies (and its witness, Dr. Sasson) argue that since Zone K's capacity counts toward the NYCA capacity requirement, it must be reasonable to count the same Zone K capacity toward the new capacity zone and Zone GHI requirements. The Companies also argue that the fungibility test is not the most useful test for determining whether to include or exclude Zone K from the new capacity zone. In the Companies' view, the fungibility test ignores lesser but important reliability benefits, especially when requiring fungibility equal to 50 percent of Zones G, H, and I's capacity requirement. The Companies argue that the appropriate test is whether Zone K can, in some meaningful respect, impact the reliability and security of the proposed new capacity zone. Finally, the Companies argue that adding capacity in Zone K will increase the transfer capability between Zone K and Zones G, H, and I, because the additional generation capacity will need to provide additional transmission capacity in order to be deliverable within Zone K.

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<sup>49</sup> *Id.*, Chao/Adams Aff. ¶¶ 37-38, and ¶ 47.

### **Commission Determination**

52. As discussed below, we find NYISO's proposal to be reasonable; however we will also establish a technical conference to explore the concept of modeling Zone K as an export constrained Load Zone in the next Demand Curve Reset proceeding.

53. Five Load Zones – G, H, I, J, and K – are located south of the constrained UPNY/SENY interface. Under NYISO's proposal, the new capacity zone includes four of the five load zones – G-J. Two load zones – J and K – currently are separate capacity zones with separate Locational Capacity Requirements and separate ICAP Demand Curves based on their respective Locational Capacity Requirements. Under NYISO's proposal, although Zone J would be a part of the new capacity zone, Zone J would also continue to be a separate capacity zone with its own Locational Capacity Requirement and its own ICAP Demand Curve. Therefore, Zones G, H, and I, by themselves, would not have a separate Locational Capacity Requirement or ICAP Demand Curve. Rather, Zones G, H, I, and J together would have an aggregate Locational Capacity Requirement and ICAP Demand Curve. This means that capacity located anywhere within the G-J new capacity zone could be used to meet the Locational Capacity Requirement of the new capacity zone. It is therefore important that capacity located in Zone J (or in any other location within the proposed G-J new capacity zone) be deliverable and capable of satisfying the reliability needs of loads in Zones G, H, and I. NYISO has concluded that sufficient transmission capability exists between Zones G, H, I and J to allow any amount of capacity located in Zone J to reliably satisfy the capacity needs of Zones G, H, and I. No party disputes this conclusion.

54. However, NYISO has not proposed to include Zone K in the new capacity zone. NYISO states that, based on its "fungibility" test,<sup>50</sup> insufficient transmission capability exists to allow capacity located in Zone K to reliably serve the needs of loads in Zones G, H, and I. NYISO acknowledges that approximately 300 MW of generation capacity added to Zone K would be "fungible" with capacity in Zones G, H, and I – that is, 300 MW added to Zone K could displace an equal amount of capacity in Zones G, H, and I while maintaining the LOLE.<sup>51</sup> Many commenters dispute NYISO's conclusion that

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<sup>50</sup> NYISO explains its fungibility test as, "running simulations in which capacity was removed from Load Zones GHI and added to Load Zones J and K while monitoring whether compliance with the NYSRC rule of a loss-of-load event of not more than once in ten years (or a loss-of-load expectation ("LOLE") evaluated probabilistically of not more than 0.1 days per year) would be maintained. The degree to which capacity in Load Zones J and K could substitute for capacity on a reliability basis in GHI would measure how fungible GHI capacity was with capacity in Load Zones J and K and, thus provide guidance on which Load Zones should be included in the NCZ." *See* Chao/Adams Aff.

¶ 17.

Zone K should be excluded based on the idea that Zone K can provide some level of support to Zones G, H, and I. In particular, Multiple Intervenors and the Companies argue that additional amounts of capacity added to Zone K could provide lesser, but significant, reliability benefits to Zones G, H, and I, and thus, that Zone K should be included in the new capacity zone. Multiple Intervenors also suggest that, if the Commission concludes that Zone K warrants special consideration, NYISO should be directed to model Zone K as an export-constrained load zone for the new capacity zone.

55. We find NYISO's proposal to exclude Zone K from the new capacity zone to be reasonable at this time. Section 5.16.2 of the Services Tariff states: "In determining the new capacity zone boundary, the ISO shall consider the extent to which incremental Capacity in individual constrained load zones could impact the reliability and security of constrained Load Zones, taking into account interface capability between constrained Load Zones." NYISO has considered, in its NCZ Study and in the instant filing, the extent to which capacity in Zone K could impact the reliability and security of the proposed G-J Locality. Thus, we find that NYISO has reasonably complied with the requirements of its tariff with respect to the determination of the boundary of the new capacity zone. We agree with NYISO that under section 5.16.2 considering "the extent to which incremental Capacity..." does not mean that *any* Load Zone that has *any* impact in adjacent constrained zones must be included in the new capacity zone.<sup>52</sup>

56. However, commenters have raised the possibility of modeling Load Zone K as an export-constrained zone. NYISO's MMU also recommends modeling export-constrained zones, in the latest State of the Market Report for NYISO.<sup>53</sup> In light of the comments, the Commission would like to explore in a separate proceeding whether and how Zone K should be modeled as an export-constrained zone for future Demand Curve reset proceedings. Due to the complex nature of this issue, the Commission believes it should be explored in a Staff-led technical conference. Therefore, we direct Commission staff to conduct a technical conference in a separate docket to discuss with interested parties whether or not to model Load Zone K as an export-constrained zone for a future Demand

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<sup>51</sup> See Chao/Adams Aff. ¶ 21. See also NYISO June 5, 2013 Answer at 25.

<sup>52</sup> See NYISO June 5, 2013 Answer at 19.

<sup>53</sup> "Placing additional capacity in a nested capacity zone typically provides reliability benefits to the larger region. As described above, however, the reliability benefits of additional capacity in the nested capacity zone is sometimes limited by inter-zonal transmission limitations when an excess exists. Modeling the export constraints between zones in the capacity market limits how much capacity is sold in the nested capacity zone in order to meet the requirement in the larger region." *2012 State of the Market Report* at vii, and 53 – 54.

Curve reset proceeding. The details of such conference will follow in a subsequent notice.

#### **4. Calculation of the Indicative Locational Capacity Requirement**

##### **a. Protests**

57. Central Hudson alleges that NYISO's filing to establish a new capacity zone will impact customers of Central Hudson in several ways, including: (1) higher capacity prices, (2) an unfair subsidy to customers of ConEd in Zone J and customers of LIPA in Zone K, and (3) uncertain prospects for capacity rate relief for customers in Zones G, H, and I even if new transmission lines are built to relieve the congested UPNY/SENY interface.<sup>54</sup> Central Hudson attributes these results to NYISO's failure to take into account the impact that customers in Zones J and K have on the constrained UPNY/SENY interface and the benefits they receive from formation of the new capacity zone. Central Hudson states that customers in Zones J and K will not bear their proportionate share of the costs of the new capacity zone and customers in the Lower Hudson Valley may not see future rate relief even if the UPNY/SENY interface constraint is relieved because NYISO's method of developing the new capacity zone's LCR does not properly account for deliverability constraints in the first place. As a result, Central Hudson asserts that NYISO's method fails to satisfy cost causation ratemaking requirements and is therefore unjust and unreasonable.

58. Central Hudson asserts that NYISO has incorrectly developed the Locational Capacity Requirements by: (1) using system reliability concepts to develop the Locational Capacity Requirements instead of system deliverability concepts; (2) including all of the capacity installed in zones G-I with the result that even if new transmission lines are built to relieve the congested UPNY/SENY interface, capacity rate relief in Zones G-I would not occur; and (3) excluding Zone K in the new capacity zone despite the fact that the Zone K computed Locational Capacity Requirements will change depending on the addition or retirement of generation capacity in Zones G, H, or I.<sup>55</sup> Central Hudson further asserts that the NYISO method is at odds with the Commission's intent to promote more efficient price signals. It asserts that NYISO's "nested" capacity zone concept will allow Zones J and K to shift capacity costs to Zones "G-H-I."<sup>56</sup> It states that it estimates that recent system changes along with NYISO's "nested" proposal could increase capacity prices to its customers from \$19 million to as much as \$89 million annually, an increase of 475 percent.<sup>57</sup> It also asserts that NYISO has not

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<sup>54</sup> Central Hudson May 21, 2013 Protest at 1.

<sup>55</sup> *Id.* at 8.

<sup>56</sup> *Id.*

attempted to ensure that costs are allocated to the boundaries of the new capacity zone, but instead has used a method that assumes Load Zones G-I should pay all of the capacity costs attributable to the UPNY/SENY interface, whether constrained or not, presumably indefinitely.<sup>58</sup>

59. Central Hudson states that it has developed an alternative Locational Capacity Requirement calculation method using deliverability concepts for all zones downstream of the UPNY/SENY interface (Zones G, H, I, J, and K).<sup>59</sup> Central Hudson's alternative method starts with NYISO's reliability based Locational Capacity Requirements, but then adds a deliverability based Locational Capacity Requirements component to reflect the impact of all zones downstream (i.e., zones G-K) on the UPNY/SENY interface. Central Hudson's witness Borchert estimates that, under Central Hudson's alternative method, the capacity cost impact to Central Hudson's customers, although still significant, would be lower than under NYISO's method, i.e., \$71 million for the 2013/2014 capacity year, compared to \$89 million.<sup>60</sup>

60. Therefore, Central Hudson requests that the Commission reject NYISO's cost allocation method and order NYISO to modify its method for calculating the Indicative Locational Capacity Requirements to take into account the deliverability constraint across the UPNY/SENY interface using the alternative Locational Capacity Requirement calculation method discussed in the Borchert Affidavit. Further, Central Hudson states that the Commission has expressed its intent to promote correct price signals in connection with a new capacity zone, which is necessary to comply with cost causation ratemaking principles which require that costs must be allocated to customers in rough proportion to the benefits they receive. Central Hudson asserts that NYISO has not attempted to ensure that costs are allocated to the beneficiaries of the new capacity zone, but instead has used a method that assumes Load Zones G-I should pay all of the capacity costs attributable to the UPNY/SENY interface, whether constrained or not, seemingly indefinitely. Central Hudson argues that the Commission should resolve this unjust and unreasonable result by requiring that the new capacity zone Locational Capacity Requirements be based on the deliverability constraint and that the Locational Capacity Requirements must be eliminated when the deliverability constraint is removed.<sup>61</sup> Central Hudson states that, in the alternative, the Commission should convene a technical conference where Central Hudson can work with NYISO to further address these issues.<sup>62</sup>

<sup>57</sup> *Id.*; Borchert Aff ¶ 15.

<sup>58</sup> Central Hudson May 21, 2013 Protest at 10.

<sup>59</sup> *Id.* at 8-9; Borchert Aff. ¶ 16.

<sup>60</sup> Borchert Aff. ¶ 22.

<sup>61</sup> Central Hudson May 21, 2013 Protest at 10.

61. Indicated NYTOs assert that the proposal reverts to a reliability approach that the Commission rejected rather than the deliverability approach that the Commission ordered. Indicated NYTOs argue that at a minimum, to the extent that reliability concerns are at issue, these concerns must be aired with Commission staff and stakeholders in a technical conference.<sup>63</sup>

62. ConEd Solutions objects to NYISO's exclusion of UDRs from capacity that would satisfy the local capacity requirement. ConEd Solutions asserts that external supply not associated with UDRs, but deliverable to the new capacity zone should be allowed to satisfy the Locational Capacity Requirements of the new capacity zone. ConEd Solutions disagrees with NYISO's claim that external supply not associated with UDRs is not controllable, and therefore, must be counted as available only in Rest-of-State. ConEd Solutions believes that NYISO's position fails to recognize that capacity from ISO-NE is more deliverable to the new capacity zone as a result of the unique configuration of the NYISO transmission grid with lines such as Pleasant Valley to Long Mountain/Frost Bridge that connect directly to Load Zone G. Specifically, ConEd Solutions notes NYISO assigns a lower shift factor of 47.5 percent to imports from ISO-NE versus 92 – 93 percent shift factors applied to other external resources.<sup>64</sup> According to ConEd Solutions, those shift factors imply that resources from ISO-NE are twice as deliverable into the constrained Load Zones G, H, and I compared to other external resources because they use less of the constrained interface and should be eligible to satisfy Locational Capacity Requirements accordingly.<sup>65</sup>

**b. Answers**

63. LIPA states that Central Hudson's alternative Locational Capacity Requirement computation proposal is unjust, unreasonable and unduly discriminatory because it uses LIPA's surplus capacity without compensating LIPA to benefit the rest of the participants in the new capacity zone and it also ignores the firm transmission rights that LIPA owns across the UPNY/SENY interface. Furthermore, according to LIPA, Central Hudson's proposal is beyond the scope of this proceeding because NYISO does not propose to modify its Locational Capacity Requirement methodology in the April 30, 2013 filing.

64. In its answer, NYISO asserts that the scope of this proceeding should be limited to the questions of whether NYISO properly conducted the NCZ Study, correctly concluded that there was a constrained Highway interface, and whether the proposed new capacity

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<sup>62</sup> *Id.* at 11.

<sup>63</sup> Indicated NYTOs May 21, 2013 Protests at 11.

<sup>64</sup> ConEd Solutions May 20, 2013 Comments at 3, note 2.

<sup>65</sup> *Id.* at 3.

zone boundary is just and reasonable and that the current Services Tariff does not permit NYISO to consider other factors.<sup>66</sup> NYISO states that the Services Tariff and its filing are both very clear that the Indicative Locational Capacity Requirements are used “solely for establishing revised ICAP Demand Curves in accordance with section 5.14.1.2,” and that the Indicative Locational Capacity Requirements for the proposed G-J Locality will be an element of the November 2013 ICAP Demand Curve Reset filing.<sup>67</sup> Therefore, NYISO argues that arguments relating to Indicative Locational Capacity Requirements<sup>68</sup> are beyond the scope of this proceeding<sup>69</sup>

65. In its answer, Central Hudson objects to NYISO’s assertion that Central Hudson’s methodology for calculating the new capacity zone Locational Capacity Requirement ignores reliability concepts. Central Hudson states that its proposed methodology is based on Locational Capacity Requirement values computed by NYISO itself and the NYCA Installed Reserve Margin, which is developed by use of the “unified” or “Tan 45” methodology.<sup>70</sup> Central Hudson states that, through this approach, system reliability will be maintained using Central Hudson’s proposed methodology.

**c. Commission Determination**

66. Central Hudson requests that the Commission direct NYISO to change its process for developing Locational Capacity Requirements in the proposed new capacity zone, resulting in a different process from that used for the existing capacity regions. We note, however, that NYISO is not proposing to change its methodology for calculating Locational Capacity Requirements in this proceeding.<sup>71</sup> Moreover, the Indicative Locational Capacity Requirement for the new capacity zone is not used to determine whether a new capacity zone should be created or to establish the new capacity zone boundary; it is used solely for establishing an ICAP Demand Curve for the new capacity zone, in accordance with section 5.14.1.2 of the Services Tariff. Further, the Indicative

<sup>66</sup> NYISO June 5, 2013 Answer at 1-5.

<sup>67</sup> *Id.* at 12.

<sup>68</sup> NYISO says that Indicative Locational Capacity Requirements are being discussed in the stakeholder process related to Demand Curve Reset proceedings.

<sup>69</sup> NYISO June 5, 2013 Answer at 12.

<sup>70</sup> Central Hudson June 20, 2013 Answer at 2.

<sup>71</sup> “The actual Locational Minimum Installed Capacity Requirements that will be used to administer market rules for the G-J Locality will be established in the same manner as, and concurrent with, the [Locational Capacity Requirements] for existing Localities J and K.” NYISO April 30, 2013 Filing Transmittal Letter at note 17.



Locational Capacity Requirement for the new capacity zone was only included in the April 30, 2013 filing to demonstrate to the Commission that NYISO has satisfied the requirements under section 5.16.3 of the Services Tariff.<sup>72</sup> This proceeding is narrowly focused on determining whether NYISO followed its tariff in determining that a new capacity zone should be created. We agree with NYISO that arguments regarding the computation of the Indicative Locational Capacity Requirements are beyond the scope of this proceeding.

67. We also clarify that, contrary to Central Hudson's assertions, the Commission did not in prior orders direct NYISO to develop Locational Capacity Requirements using system deliverability concepts. The Commission also did not direct a method of allocating the costs of capacity based on the impact of flows on the UPNY/SENY interface as Central Hudson argues for in this proceeding.

## **5. Elimination of a Capacity Zone and Mitigation**

### **a. Summary of NYISO's Filing**

68. NYISO did not propose tariff revisions that would govern the elimination of a capacity zone. Nor does NYISO's filing in the instant proceeding contain tariff revisions to establish market power mitigation rules in the new capacity zone; market power mitigation was the subject of the proceeding in Docket No. ER12-360. The Commission conditionally accepted NYISO's proposed market power mitigation measures for new capacity zones in that proceeding on June 6, 2013.<sup>73</sup>

### **b. Protests and Comments**

69. Indicated NYTOs are concerned that price separation will continue between the new capacity zone and the Rest-of-State region even after the deliverability constraints have been eliminated, resulting in consumers paying too much for capacity and sending the wrong incentives to generation and transmission developers. Indicated NYTOs also assert that the filing proposes that, even when the deliverability constraint is eliminated, new entrants will only be tested for deliverability to the boundary of the new capacity zone.<sup>74</sup> That is, once the new capacity zone is created, NYISO will not conduct an analysis to determine if the deliverability constraint has been removed and Rest-of-State

<sup>72</sup> Section 5.16.3 of the Services Tariff directs NYISO to establish an Indicative Locational Capacity Requirement for each load zone or group of load zones "identified in the NCZ Study as having a constrained Highway Interface, on or before March 1 of each ICAP Demand Curve Reset Filing Year."

<sup>73</sup> *New York Indep. Sys. Operator, Inc.*, 143 FERC ¶ 61,217 (2013).

<sup>74</sup> Indicated NYTOs May 21, 2013 Protest at 16.

capacity is deliverable to the new capacity zone. Indicated NYTOs contend that not analyzing the continuing existence of the constraint at the interface is completely inconsistent with the rationale underlying the deliverability requirement. Indicated NYTOs argue that it could also eviscerate one of the objectives of the Energy Highway initiatives, which is to create additional transmission transfer capacity across key interfaces, because there will be no test to determine if new resources would once again cause the interface to bind. To the extent that new resources do cause the interface to bind, Indicated NYTOs assert that the generator should be required to fund System Deliverability Upgrades to address the impact, as required in Attachment S. Therefore, Indicated NYTOs request that the Commission order NYISO to modify its tariff to provide for a procedure in which NYISO will perform an appropriate deliverability test at the reasonable request of a market participant, and that the precise details of such a procedure should be resolved in a technical conference.

70. Indicated NYTOs also note that NYISO has not yet begun to develop a mechanism for the removal of the new capacity zone when the deliverability constraint is eliminated, which they assert is contrary to the Commission's premise when it directed NYISO to evaluate the need for new capacity zones, that price separation would cease if the deliverability constraint were eliminated.<sup>75</sup> Indicated NYTOs ask the Commission to direct a technical conference to address the issue of continued price separation.<sup>76</sup>

71. Indicated NYTOs are also concerned that NYISO's failure to provide for elimination of unneeded capacity zones will perpetuate unneeded mitigation in those capacity zones. Indicated NYTOs also request that the Commission require NYISO to eliminate the mitigation measures when the deliverability constraint is removed and ask that the Commission direct a technical conference to address this issue.

72. The NYPSC also asserts that NYISO should have included a mechanism to determine when a new capacity zone is no longer necessary and should be eliminated. The NYPSC asserts that new capacity zones will remain even after the deliverability issue dissipates resulting in a permanent capacity price increase for customers in the new capacity zone.

73. The NYPSC also argues that the Commission should reject the proposed mitigation measures, which are unjust and unreasonable. The NYPSC states that NYISO seeks to apply to the new capacity zone the same buyer-side mitigation rules that were crafted for the particular circumstances facing the New York City market. However, NYISO has not adequately justified the need to impose mitigation upon new entrants in the new capacity zone, and the presumption of mitigation and the uncertainty that it

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<sup>75</sup> *Id.* at 9 and note 27.

<sup>76</sup> *Id.* at 10.

entails will most likely discourage new entry and harm the competitiveness of the NYISO markets.<sup>77</sup>

74. LIPA supports NYISO's request for prompt Commission action on the pending tariff revisions that would implement buyer-side mitigation to all new capacity zones, but only to the extent Zone K is excluded from new capacity zones, or LIPA generation capacity is exempt from buyer-side mitigation. Entergy Nuclear further supports NYISO's request that the Commission act on its new capacity zone mitigation filing by August 30, 2013.

**c. Answers**

75. Entergy Nuclear states that Indicated NYTOs' arguments that zone elimination criteria must be established is an argument previously pursued by National Grid more than two years ago. However, Entergy Nuclear notes that Indicated NYTOs have not pursued this issue in the stakeholder process. Entergy Nuclear asserts the stakeholder process is clearly the appropriate venue for discussion of new provisions to eliminate a new capacity zone. Entergy Nuclear also asserts that the issues surrounding elimination of capacity zones are not well suited to a technical conference. Moreover, according to Entergy Nuclear, the fact that the zone elimination issue has not been pursued in any material manner until this proceeding provides no basis, at this time, for the Lower Hudson Valley new capacity zone to be established subject to refund.

76. In response to arguments about the elimination of zones, NYISO states that the Commission's prior orders directed NYISO to put in place rules for the creation of new capacity zones and expressly authorized NYISO to defer to the stakeholder process rules pertaining to the elimination of capacity zones.<sup>78</sup> According to NYISO, the development of rules to eliminate capacity zones is beyond the scope of this proceeding, which focuses on new capacity zone creation. Furthermore, NYISO's external market monitor, Dr. Patton, asserts that rules to eliminate capacity zones could put NYISO in the position of having to define, un-define, and then re-define new capacity zones as system conditions change.<sup>79</sup> Dr. Patton continues that such rapid changes could undermine the stability of the market and introduce substantial risk for investors. Therefore, Dr. Patton urges the Commission to reject the arguments presented by Indicated NYTOs, the NYPSC and Central Hudson and allow the market to determine when price separation occurs. Dr. Patton further asserts that there is no reason to actively eliminate capacity zones after they are created and notes that this is consistent with what the Commission has approved in both the PJM and MISO markets.<sup>80</sup>

<sup>77</sup> NYPSC May 21, 2013 Protest at 8.

<sup>78</sup> *Id.* at note 17.

<sup>79</sup> *Id.*, Patton Answering Aff. ¶ 6.

77. NYISO answers that Indicated NYTOs acknowledge that the Commission expressly held that the filing was not required to “define criteria regarding the potential elimination of capacity zones.”<sup>81</sup> According to NYISO, the September 8, 2011 Order, clearly instructed NYISO to establish rules to govern the creation of new capacity zones, and it expressly authorized NYISO to defer stakeholder discussions regarding the potential elimination of unneeded capacity zones. NYISO argues that it is therefore an impermissible collateral attack on the September 8, 2011 Order, to oppose the filing on the grounds that it does not include capacity zone elimination or price separation provisions.<sup>82</sup>

78. NYISO contends that the development of rules or criteria for the elimination of a Locality (i.e., a new capacity zone that has been established) even if not a collateral attack, would be beyond the scope of this proceeding. NYISO argues that new capacity zone elimination rules would apply to more than just the proposed new Locality that is the subject of this proceeding; they would apply to the existing Localities and to any new capacity zones that result from future triennial filings in accordance with section 5.16.4(a) of the Services Tariff.<sup>83</sup>

79. Indicated NYTOs answer that NYISO’s mechanism to calculate the price of capacity in the new capacity zone will not ensure the elimination of price separation between capacity zones when deliverability constraints between those zones have been removed.<sup>84</sup> In addition, Indicated NYTOs note that evidence has not been presented in this proceeding that demonstrates that NYISO’s mechanism will eliminate price separation when the deliverability constraint is alleviated.<sup>85</sup>

80. Indicated NYTOs note that NYISO’s MMU now states that price separation may remain, even if the binding deliverability constraint is alleviated and states that the Locational Capacity Requirement should determine locational capacity pricing.<sup>86</sup> Indicated NYTOs state that this finding is inconsistent with the rationale the Commission used in approving the new capacity zone framework and with the deliverability criteria

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<sup>80</sup> *Id.*, Patton Answering Aff. ¶ 7.

<sup>81</sup> September 8, 2011 Order, 136 FERC ¶ 61,165 at P 70.

<sup>82</sup> NYISO June 5, 2013 Answer at 7-8.

<sup>83</sup> *Id.* at 8.

<sup>84</sup> Indicated NYTOs June 13, 2013 Answer at 2.

<sup>85</sup> *Id.* at 3.

<sup>86</sup> *Id.* at 3-4.

that govern the creation of the new capacity zone.<sup>87</sup> Further, Indicated NYTOs state that, since there are other inputs to the new capacity zone ICAP demand curve, the Locational Capacity Requirement alone does not govern locational capacity pricing or the conditions under which price separation is eliminated.<sup>88</sup>

81. With respect to the development of mitigation measures for the new capacity zone, NYISO answers that the scope of this proceeding should be limited to the questions of whether NYISO properly conducted the NCZ Study, correctly concluded that there was a constrained Highway interface, and whether the proposed new capacity zone boundary is just and reasonable and that the current Services Tariff does not permit NYISO to consider other factors.<sup>89</sup> Therefore, NYISO says that arguments relating to buyer-side mitigation rules are beyond the scope of this proceeding and should have been submitted in Docket No. ER12-360.<sup>90</sup> NYISO contends that there is no need to delay issuing an order to weigh the merits of, or to allow for, such an evaluation.

**d. Commission Determination**

82. We do not agree with the NYPSC and Indicated NYTOs that the Commission should require at this time a mechanism for determining whether a new capacity zone is no longer needed and should be eliminated. In our September 8, 2011 Order on NYISO's proposal of criteria for the creation of a new capacity zone, we explicitly declined to require NYISO to define criteria regarding the potential elimination of capacity zones as some commenters had suggested. We held that the impact of the failure to create a zone where one is needed is much more significant than the impact of a failure to eliminate an existing unneeded zone. However, we also said that NYISO is free to discuss with its stakeholders a mechanism to eliminate an unneeded capacity zone. We reiterate here that NYISO should work with its stakeholders, and if a mechanism for zone elimination is deemed necessary, NYISO should file appropriate tariff revisions with the Commission. We note that the fact that NYISO did not propose a new capacity zone elimination mechanism in this proceeding has no bearing on its requirement to establish a new capacity zone. Further, because any capacity zone elimination rules would apply not only to the Locality being proposed here, but also to existing Localities, and because NYISO has not proposed any such mechanism here, we find that the record in this proceeding is insufficient on which to make a determination.

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<sup>87</sup> *Id.* at 4.

<sup>88</sup> *Id.* at 5-6.

<sup>89</sup> *Id.* at 1-5.

<sup>90</sup> *Id.* at 10-12.

83. Indicated NYTOs are concerned that, in the absence of a mechanism for the elimination of a capacity zone, price separation will continue between the new capacity zone and the Rest-of-State region even after deliverability constraints have been eliminated. We agree that price separation may well continue after the constraint leading to a new capacity zone disappears, but we believe such potential distinction between prices is appropriate. As indicated by Dr. Patton,<sup>91</sup> once a new capacity zone is created, price will be based upon the ICAP demand curve for the new zone, which, in turn, is based upon the Locational Capacity Requirement. In other words, price separation reflects the cost of satisfying the Locational Capacity Requirement for the new capacity zone and is based upon reliability needs as indicated by LOLE. The deliverability test, in contrast, is not designed to provide an accurate indication of the reliability needs in the new capacity zone in that it is not formulated using the LOLE. As Dr. Patton explains, as long as the cost of entry is higher in the new capacity zone than in the surrounding area, eliminating the new capacity zone and its associated higher demand curve when the deliverability constraint is temporarily eliminated, jeopardizes the market's ability to attract and maintain adequate resources for market reliability in the new capacity zone.<sup>92</sup>

84. With respect to mitigation measures, we find these issues to be beyond the scope of this proceeding. On June 6, 2013, the Commission accepted, subject to conditions, NYISO's proposed revisions to its Services Tariff to implement buyer-side and supplier-side market power mitigation measures for new capacity zones.<sup>93</sup>

## **6. Conforming Tariff Revisions**

85. NYISO states that as a result of identifying the need for creation of a new capacity zone it must make several conforming changes to its tariff. Some of NYISO's proposed tariff changes are minor typographical edits and others are more substantial. For example, because the new capacity zone will be an additional Locality (Load Zones G, H, I and J), NYISO must revise the definition of Locality accordingly.<sup>94</sup> NYISO also proposes to add a new defined term, "G-J Locality" to its tariff in section 2.7. In addition, NYISO proposes to set a new Pivotal Supplier Threshold in Attachment H as control over 650 MW of unforced capacity in the G-J Locality.<sup>95</sup> In comparison, the existing Pivotal Supplier Threshold for NYC Load Zone J is control of 500 MW. NYISO also proposes to make several other clarifying and conforming changes to its tariff to,

<sup>91</sup> Patton Answering Aff. ¶¶ 11-15.

<sup>92</sup> Patton Answering Aff. ¶ 15.

<sup>93</sup> *New York Indep. Sys. Operator, Inc.*, 143 FERC ¶ 61,217 (2013).

<sup>94</sup> NYISO April 30, 2013 Filing Letter at 13.

<sup>95</sup> *Id.* at 19-20.

among other things, redefine “Rest-of-State” as Load Zones A-F, revise the credit requirements in Attachment K for a Locality contained within another Locality, and update the rules regarding the Installed Capacity Requirement and the Load Serving Entities obligations regarding the new G-J Locality.

86. NYISO proposes similar definition changes in its OATT. NYISO states that the OATT definition of Locality requires revisions due to the creation of the G-J Locality. NYISO is also proposing to revise the existing OATT definition of Locational Installed Capacity Requirement to achieve consistency with the proposed Services Tariff definition. In addition, NYISO proposes revisions to Attachments S and X to change the definition of Capacity Region, the treatment of External CRIS rights and the definition of a Highway. NYISO states that the definition of a Highway is revised to remove the UPNY/SENY interface because in the new Capacity Region, the UPNY/SENY interface would no longer be considered a Highway interface, and instead, would be considered an “Other Interface.”<sup>96</sup> In conjunction, NYISO proposes changes to the definition of Other Interfaces. NYISO also proposes minor changes to OATT Attachments S, X and Y.

87. We accept NYISO’s conforming changes.

The Commission orders:

(A) NYISO’s proposed tariff revisions are hereby accepted, to be effective July 1, 2013, as discussed in the body of this order, with the exception of the revisions to sections 2.7, 2.12, 2.18, and 25.14.3.2(iv) and 23.2.1, which shall be effective January 27, 2014, as requested, and section 26.4.3(iv), which shall be effective January 15, 2014, as requested.

(B) The Commission’s Staff is hereby directed to convene a technical conference, to be held at a date specified in a subsequent notice, and to report the results of the conference to the Commission, as discussed in the body of this order.

By the Commission.

( S E A L )

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<sup>96</sup> *Id.* at 25.

Kimberly D. Bose  
Secretary.