TABLE OF CONTENTS

I.	INTF	INTRODUCTION			
II.	OVE	OVERVIEW OF COMPLIANCE CHANGES			
	A.	The June 30 Order			
		1.	ISO Governance		
		2.	Divestiture of Certain Financial Interests By ISO Employees 3		
		3.	Disputes Between the ISO and the NYSRC 4		
		4.	Local Reliability Rules		
		5.	Arbitration Awards		
	B.	The J	The January 27 Order		
		1.	Separation of the Transmission Tariff from Non-Transmission Functions		
		2.	Long Term Firm Service		
		3.	Long Term TCCs		
		4.	Customer Definitions		
		5.	Reciprocity		
		6.	Transmission Expansion		
		7.	Liability and Indemnification		
		8.	Disclosure of Information		
		9.	Requests for Interconnection		
		10.	Existing Agreements		
		11.	Transition Payments		
		12.	Installed Capacity		

		13. Treatment of Extern	al Generators	23		
		14. Ancillary Services .		24		
		15. Release of Native Lo	oad TCCs in Retail Access	24		
		16. TCC Auction Proce	ss	25		
III.	DESCRIPTION OF REVISED NEW YORK ISO OPEN ACCESS TRANSMISSION TARIFF ("ISO OATT" or "OATT")					
	A.	Point to Point Transmission	Service	26		
	B.	Network Service				
	C.	Comparability				
	D.	The Transmission Service Charge				
	E.	Other Charges Under the OATT				
	F.	Transmission Expansion .		32		
IV.	DESCRIPTION OF NEW YORK ISO SERVICES TARIFF ("ISO SERVICES TARIFF" or "SERVICES TARIFF")					
	A.	Applicability of Services Ta	riff	33		
	B.	Installed Capacity		35		
	C.	Other Changes from Prior F	iling	37		
V.	TARIFF MODIFICATIONS RELATED TO THE PARTICIPATION OF LIPA IN THE NEW YORK ISO					
	A.	Compliance with Private Us	se Restrictions	39		
	B.	Clarification of LIPA's Nor	-Jurisdictional Status	41		
VI.	INSTALLED CAPACITY REQUIREMENT					
	Α.	Overview		42		

	В.	The Proposed ICAP Requirement is a Continuation of An Important Existing Regional Reliability Practice		
	C.	ICAP Requirements Assure Viable Day Ahead and Real Time Energy and Operating Reserve Markets		
	D.	The PSC Strongly Supports the ICAP Requirement		
	E.	Commission Precedent Supports an ICAP Requirement for LSEs 48		
	F.	Location of ICAP Resources Are Essential to NYCA Reliability 52		
VII.	RETAIL ACCESS			
	A.	Overview of Retail Access Plans in New York		
	B.	Relationship of Retail Access Tariffs and the ISO OATT 57		
	C.	Retail Access Under the ISO OATT		
	D.	Retail Access and the ISO Services Tariff 60		
	E.	ISO Settlement Under Retail Access		
VIII.	CONC	NCLUSION		
APPE	NDIX A	A: AFFIDAVIT OF J. STEPHEN HENDERSON		
	NDIX E ARIFF	B: EXPLANATION OF DEVIATIONS FROM THE PRO FORMA		
APPE	NDIX (C: AFFIDAVIT OF DEAN J. CHAPMAN AFFIDAVIT		
APPE	NDIX I	D: PROPOSED ALTERNATIVE LANGUAGE		

I. INTRODUCTION

This Filing Summary explains the changes that have been made to the documents previously filed by the Member Systems in this docket in order to respond to the Commission's Orders. The Filing Summary is organized as follows:

- I. Introduction
- II. Overview of All Compliance Changes
- III. Description of Revised New York ISO Open Access Transmission Tariff ("ISO OATT" or "OATT")
- IV. Description of New York ISO Services Tariff ("ISO Services Tariff" or "Services Tariff")
- V. Tariff Modifications to Accommodate the Long Island Power Authority ("LIPA")
- VI. Installed Capacity Requirement
- VII. Retail Access Under the New York ISO
- VIII. Conclusion

This Filing Summary also includes the following Appendices:

- A. Affidavit of J. Stephen Henderson, Ph.D., explaining that the revised ISO OATT provides transmission service that is equivalent or superior to the service provided in the *Pro Forma* tariff
- B. Explanation of all significant differences between ISO OATT and the *Pro Forma* tariff
- C. Affidavit of Dean Chapman, P.E., explaining how the OASIS system will operate under the proposed market model
- D. Proposed alternative language for the ISO OATT and ISO Services Tariff

addressing certain issues subject to rehearing.

II. OVERVIEW OF COMPLIANCE CHANGES

In both its June 30, 1998 Order,¹ and its January 27, 1999 Order,² the Commission required the Member Systems to modify certain aspects of their filing consistent with the Commission's directives. In general, the June 30 Order addressed the governance and functions of the ISO and the New York State Reliability Council ("NYSRC"), whereas the January 27 Order addressed the proposed ISO Tariff and market rules.

Today's filing by the Member Systems meets the requirements set forth in both Orders. This section lists the changes ordered by the Commission, in the general order in which they were discussed in the Orders, and identifies the manner in which the required changes have been made.

A. The June 30 Order

The June 30 Order directed the Member Systems to modify certain provisions of their filing with respect to ISO governance, the relationship between the ISO and the NYSRC, and Local Reliability Rules. The Member Systems have complied with these requirements.

¹ <u>Central Hudson Gas & Electric Corp., et al.</u>, "Order Conditionally Authorizing Establishment of Independent System Operator," 83 FERC ¶ 61,352 (1998)(hereinafter "June 30 Order").

² <u>Central Hudson Gas & Electric Corp., et al.</u>, 86 FERC ¶ 61,062 (1999), "Order Conditionally Accepting Tariff and Market Rules, Approving Market-Based Rates, and Establishing Hearing and Settlement Judge Procedures," (hereinafter "January 27 Order").

1. ISO Governance

The Order directed the Member Systems and all interested parties to negotiate and propose a modified voting structure for the ISO committees.³ The Member Systems engaged in an extensive collaborative process that resulted in the ISO Governance Settlement Agreement that was filed with the Commission on October 23, 1998. That Agreement has the support of 26 parties, including generators, customer groups, the New York State Public Service Commission ("PSC"), environmental representatives, and energy service companies. The Member Systems incorporate by reference into this Filing Summary the explanatory material they filed on October 23, 1998 in support of the ISO Governance Settlement Agreement. The Member Systems have made changes to the ISO Agreement to reflect the settlement provisions.

2. Divestiture of Certain Financial Interests By ISO Employees

The Order directed that the ISO Code of Conduct and the ISO Agreement be amended to state that the ISOBoard members, as well as officers and employees of the ISO, must divest themselves of any financial holdings they may have in a New York market participant within six months of the effective date of the ISO Tariff.⁴ The ISO filing had originally given ISO Board members and employees one year to sell any financial holdings they may have in a New York market participant. The ISO Code of Conduct, which is contained in Attachment F to the ISO OATT, has been amended to reflect the six-month period. The ISO Agreement now specifies that each newly elected director shall dispose of financial holdings in accordance with the terms of the ISO's Code

³ June 30 Order, 83 FERC at 62,409.

⁴ Id. at 62,410.

of Conduct. (See ISO Agreement, Section 5.01(a)(i). Additional minor revisions have been made to the ISO Code of Conduct at the request of the ISO Board.

3. Disputes Between the ISO and the NYSRC

The ISO-NYSRC Agreement stated that all disputes between the ISO and the NYSRC will be resolved through a dispute resolution process with the PSC acting as the arbitrator. The Order directed that disputes between the ISO and the NYSRC relating to a FERC-jurisdictional matter must come before FERC, not the PSC.⁵ The ISO/NYSRC Agreement has been modified to reflect that change. (See Section 5.3 of the ISO-NYSRC Agreement).

4. Local Reliability Rules

The NYSRC Agreement as originally filed provided that Local Reliability Rules could be modified only with the consent of the Transmission Owner that proposed the rule. The Order stated that the procedures used by the NYSRC to implement and modify Local Reliability Rules should be the same as those used for other Reliability Rules.⁶ The NYSRC Agreement has been modified to reflect this change. It now provides that if a Transmission Owner proposes that a Local Reliability Rule be adopted as a Reliability Rule by the NYSRC, the NYSRC will use the same procedures to adopt or modify Local Reliability Rules that it uses to adopt or modify other Reliability Rules. (See Section 3.02 of the NYSRC Agreement).

⁵ Id. at 62,412.

⁶ Id. at 62,413.

The ISO Services Tariff also includes new provisions for implementation of Local Reliability Rules by the ISO. Section 4.11 provides that a Transmission Owner may request commitment of additional generators to satisfy a Local Reliability Rule, and Section 4.12 provides that any minimum generation and start-up costs incurred by the ISO as a result of such a supplemental commitment will be recovered through a localized charge.⁷

5. Arbitration Awards

As filed in December 1997, the ISO Agreement and the ISO Tariff included a dispute resolution process. The June 30 Order directed that any arbitration award that resulted from such dispute resolution process should be filed with the Commission.⁸ The dispute resolution process described in Article 10 of the revised ISO Agreement, Section 12 of the ISO OATT, and Article 11 of the ISO Services Tariff has been modified to reflect this provision.

B. The January 27 Order

The January 27, 1999 Order generally approved the Locational Based Marginal Pricing ("LBMP") congestion pricing model proposed by the Member Systems. "We address the LBMP pricing . . . and approve it as a general matter." However, the Commission directed the Member Systems to separate the provision of transmission service from the ISO's other responsibilities, including the operation of competitive markets for energy, capacity and ancillary services. The Commission also directed the Member Systems to restore certain

⁷ The only exception is Storm Watch, a PSC mandated Local Reliability Rule to avoid disruption of service in Southeast New York. As previously filed and approved by the Commission, costs incurred by the ISO due to the implementation of Storm Watch are recovered from load state-wide.

⁸ June 30 Order, 83 FERC at 62,416.

⁹ January 27 Order, 86 FERC at 61,223.

provisions of the *pro forma* tariff in their transmission tariff, and to modify specific aspects of the proposed economic model.

As a result, the Member Systems have divided the single ISO Tariff filed in December 1997 into two separate tariffs, one providing transmission service (the ISO OATT); and one covering market operations and control area services (the Services Tariff). Under the ISO OATT, the ISO will offer stand-alone transmission service, including Network Integration Transmission Service and firm Point-to-Point Transmission Service, as well as required ancillary services, within the context of the LBMP congestion pricing model approved by the Commission, and under the Services Tariff the ISO will operate the LBMP-based centralized market for energy and operating reserves, it will procure certain control services, and it will administer an installed capacity requirement for the New York Control Area.

The following discussion explains how the Member Systems have complied with each specific requirement of the January 27 Order.

1. Separation of the Transmission Tariff from Non-Transmission Functions

In the January 27 Order the Commission directed the Member Systems to "file a transmission tariff that is separate from the rate schedules that govern non-transmission functions, e.g., its operation of a spot market and administration of the NYSRC Agreement." The Commission further stated that "[w]e recognize that there may be some duplication of common features, e.g., LBMP pricing is based upon the prices determined in the energy market. However, it is necessary that transmission and ancillary services be

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¹⁰ Id. at 61.208.

offered as a separate product that is available on a stand-alone basis."11

The Member Systems' revised filing provides for a stand-alone transmission tariff, the ISO OATT, and a separate ISO Services Tariff. Customers who elect to use the Services Tariff will be able to buy and sell energy in the LBMP market, buy and sell capacity, sell ancillary services, and purchase control area services from the ISO. Customers who use the Services Tariff to buy energy in the LBMP market are required to take transmission service under the ISO OATT as well.

The revised ISO OATT provides for stand-alone transmission service and ancillary services. In keeping with the Commission's directive that the operation of the energy market not be contained in the transmission tariff, Eligible Customers can request transmission service under the OATT without requesting service under the Services Tariff. However, congestion pricing under the OATT is provided via the LBMP model approved by the Commission. The OATT, therefore, contains a description of how the LBMP energy market works, consistent with the Commission's recognition that the provision of transmission service and market services could have some "duplication of common features, <u>e.g.</u>, LBMP pricing"

A more detailed description of both tariffs is provided later in this Filing Summary.

2. Long Term Firm Service

In its January 27 Order the Commission stated:

With respect to the absence of long-term firm transmission service at a fixed price under the New York ISO tariff . . . this proposal allows Member Systems to retain their long-term firm rights, while providing no avenue for customers under the proposed New York ISO tariff to obtain long-term firm

7

¹¹ Id.

rights. Accordingly, we direct the member Systems to reinstate the *pro forma* long-term firm tariff services and to extend to all users enough six-month TCCs to cover the length of their transmission service.¹²

In response to this directive, the Member Systems have made substantial alterations to their proposal.

First, the ISO OATT now provides Network Integration Transmission Service ("Network") and Firm Point-to-Point ("PTP") Transmission Service, within the context of the LBMP congestion pricing model. These services are described in Part III of this Filing Summary.

Second, to give all Eligible Customers an opportunity to procure long-term firm service at a fixed price, under the revised OATT the ISO will periodically auction long-term TCCs, as described in the next section.

Third, to address the comparability issue identified by the Commission, the revised OATT eliminates the provision in the previously filed ISO Tariff under which Transmission Owners would hold "Native Load TCCs." Transmission Owners instead will sell these TCCs, either through direct sale or auction.

Under these substantial revisions to the previously filed ISO Tariff, the Member Systems have ensured that all Eligible Customers have the opportunity to procure long-term firm service at a fixed price on a comparable basis to the Transmission Owners. As explained in the Affidavit of J. Stephen Henderson, Ph.D. ("Henderson Affidavit," Appendix A to this Filing Summary) the transmission service provided in the ISO OATT being filed today is equivalent or superior to the *pro forma* tariff in all respects.

8

¹² Id.

Consecutively, it meets the requirements of the January 27 Order and fulfills the policy objectives of Order No. 888.

3. Long Term TCCs

In general, the January 27 Order approved the TCC auction proposed by the Member Systems, conditioned on certain modification to the auction process discussed below. The Member Systems' December 1997 filing provided an auction of Transmission Congestion Contracts ("TCCs") with a term of six months. In response to the Commission's directive, quoted in the prior section, the revised filing provides for a TCC auction from which both short-term (six months) and long-term (one year or greater) TCCs can be purchased. The revised TCC auction proposal is contained in Attachment M to the ISO OATT.

In the LBMP congestion pricing model on which the revised ISO OATT is based, transmission customers receive firm service – network or point-to-point -- by agreeing to pay congestion costs. Customers scheduling firm service under the OATT can obtain price certainty for their congestion costs through the purchase of TCCs (i.e., rights to collect congestion rents) at a market price. The sale of long-term TCCs will allow Eligible Customers to obtain long-term firm transmission service at a fixed price, thus addressing a central directive of the January 27 Order.

Under the ISO OATT, long-term TCCs will be auctioned by the ISO starting in the Spring 2000. TCCs of a more limited term will be auctioned before that time. The first TCC auction will be conducted prior to the start of ISO operations under the ISO OATT, to provide all transmission customers an opportunity to purchase TCCs for use on day one of ISO operations. This auction is described as the "Transitional Auction," in that

the TCCs sold during the first auction will be limited to the period from the start of ISO operations (planned for September 1, 1999) to the end of the winter 1999-2000 Capability Period, which is April 30, 2000 The limited delay in making long-term TCCs available will allow customers to gain experience with congestion pricing under the LBMP structure in New York and enable them to make an informed bid for long-term TCCs. This timetable provides protection against the risk of an early "fire sale" of long-term TCCs when relatively few customers are informed about the market, a concern expressed by various interested parties including the PSC.

As proposed in this filing, long-term TCCs will be sold starting with an auction in the Spring 2000 and in subsequent auctions. The Spring 2000 TCC auction is described in Attachment M as the "Initial Auction" because it will use an interim methodology. Under this design, the ISO will make a determination of the minimum percent of system transfer capability to be made available to support the sale of six-month TCCs, one-year TCCs, two-year TCCs and so on. The Initial Auction will be superseded at a later date by an "End State Auction" design in which market bids will determine the duration of TCCs sold. The design of the Initial Auction is strictly a function of technical limitations. The Member Systems anticipate that the requisite software development to support the End-State auction design will take 18 months, so that the first End-State auction is expected to take place in Spring 2001.

Even under the Initial Auction design, market preferences will play a role in determining the amount of TCCs sold for different durations. The Initial Auction will be conducted as a series of sub-auctions, starting with the auction for the longest duration TCC offered. Any capacity remaining available after a sub-auction will "cascade" to the

next sub-auction to support the sale of TCCs of that duration. For example, assume that TCCs of 5-year, 1-year and 6 months will be sold. Assume further that the ISO has set aside 20%, 40%, and 40% of system capacity to support the sale of those respective TCCs. The first sub-auction will be for 5-year TCCs. If the quantity of 5-year TCCs sold in that sub-auction is associated with only 15% of the available system capacity, then another 5% of system capacity would be available to support the sub-auction for 1-year TCCs, in addition to the 40% the ISO had already set aside. All system capacity remaining after the 1-year and 5-year sub-auctions would be available to support the sale of 6-month TCCs.

For the Spring 2000 Initial Auction only, Attachment M specifies the minimum percentages of system capacity that the ISO must reserve to support the sale of one-year or shorter TCCs:

At least 65% of the system capacity must be used to support the sale of six-month or one-year TCCs.

• The ISO may also sell TCCs of two-, three-, four- and/or five-year durations. In aggregate, no more than 35% of system capacity can be initially allocated to support the sub-auctions for these TCC durations.

The Member Systems have included these provisions because market participants have indicated (through the collaborative process that is underway to facilitate ISO implementation in New York) that they generally engage in transactions of one year or less and do not want longer-term TCCs. Thus, the ISO OATT gives the ISO the option to sell up to one-third of the system in TCCs of two to five years duration, but does not require the ISO to do so. These limitations apply only to the first auction of long-term TCCs. If the ISO conducts a second or third long-term TCC auction using the Initial

Auction design, it can set the initial percentages for each sub-auction at its own discretion, presumably based on the perceived preferences of market participants. Ultimately, the adoption of the End-State Auction design will eliminate the need for the ISO to make such allocation decisions. The ISO simply will determine the duration of TCCs to be offered, and market bids will determine the amount of TCCs sold for each duration offered.

In addition to providing for long-term TCCs, and to respond to the preferences expressed by many market participants, Attachment M of the ISO OATT also provides for monthly TCC auctions, starting after the Spring 2000 long-term TCC auction (or earlier, at the ISO's discretion). The monthly TCC auction will serve two purposes. First, it will allow long-term TCCs to be resold and simultaneously "reconfigured." A TCC from A to B, if offered for resale in an auction, might support a TCC from A to C. In other words, the transmission capacity supporting the particular configuration of a long-term TCC could support a differently configured TCC as well, if that is what the market prefers. Second, the monthly TCC auction will allow the ISO to make short-term TCC sales supported by residual transmission capacity that either was not available or was not associated with the sale of TCCs in the prior long-term TCC auctions.¹³ The monthly auction feature closely tracks the monthly auction recently approved by the Commission for PJM. In that Order, the Commission noted that "[t]he auction would benefit market participants and provide greater price certainty." The Member Systems believe that their proposals for both long-term and monthly TCC auctions achieve the same goals.

¹³ Transmission capacity is not sold in TCC auctions; rather is it used to support the sale of financial rights, i.e., TCCs.

¹⁴ PJM Interconnection, L.L.C., 87 FERC ¶ 61,054 at slip op. 5 (1999).

In sum, the Member Systems believe that the proposed changes to the TCC auction comply with the Commission's directives in its January 27 Order and address the expressed preferences of market participants.

4. Customer Definitions

The Commission directed the Member Systems to make certain modifications to the ISO OATT with respect to the eligibility and definitions of customers taking service from the ISO. Specifically, the Commission directed the Member Systems to "reinstate the *pro forma* definition for eligible customer." The Commission required that the Member Systems "eliminate the limitation that only direct customers may interact with the New York ISO as it relates to transmission service." Id. The Commission also required the Member Systems "to reinstate the *pro forma* tariff definition" of Native Load Customers. 16

The revised transmission tariff reinstates the *pro forma* definitions of "Eligible Customer" and "Native Load Customers." These changes are contained in the Definitions section of the revised ISO OATT. (See Section 1.0 of the OATT). In addition, the revised ISO OATT eliminates the limitation that only "direct" customers may interact with the New York ISO with respect to transmission service. One concern of the Commission was the impact of this limitation on the provision of transmission service to retail access customers. As explained later in this Filing Summary, the revised tariff specifies that retail access customers take transmission service under the OATT, in conjunction with the

¹⁵ January 27 Order, 86 FERC at 61,208.

¹⁶ Id. at 61.210.

approved retail access plans of the Member Systems. To delineate clearly the interface of the individual retail access programs with the ISO OATT, a new Part IV, dealing with retail access, has been added to the OATT.

5. Reciprocity

The Commission also directed the Member Systems "to reinstate the *pro forma* tariff reciprocity provision, modified only to provide that both the Transmission [Owners] and the ISO are the beneficiaries of this requirement."¹⁷ The ISO OATT has been modified to satisfy this requirement. (See Section 6.0 of the ISO OATT).

6. Transmission Expansion

Under the LBMP model, market participants who fund transmission expansions receive any resulting TCCs associated with the incremental transfer capability created by the expansion. The January 27 Order did not alter this fundamental premise of the market model, but it directed the Member Systems to revise their transmission expansion proposal to reinstate the applicable *pro forma* tariff terms. Sections 19 and 32 of the ISO OATT have been modified to reflect the changes required by the Commission in a manner consistent with the LBMP model. The revised OATT provides that any market participant can request a System Impact Study from the ISO to determine transmission expansion options. (See Section 19.1 and 32 of the ISO OATT). In addition, Attachment D, "Methodology for Completing a System Impact Study" has been added to the revised OATT. Section 19.4 and Section 32 detail the Facilities Study procedures, which include

¹⁷ <u>Id.</u> at 61,209.

¹⁸ <u>Id.</u>

a provision under which the ISO estimates the feasible TCCs that would be created by the proposed expansion.

The Member Systems also have responded to a request from the PSC and added a provision under which the PSC may request the ISO to develop illustrative transmission reinforcement options to inform market participants about the possibilities of congestion reduction. (See Section 19A.1 of the ISO OATT). The Member Systems also have provided that market participants may directly request the ISO to develop information about such options. (See Section 19A.2 of the OATT). Parallel language has been added in Section 32 of the OATT for network customers.

7. Liability and Indemnification

The January 27 Order required the Member Systems to modify the transmission tariff "to adopt the indemnification provisions in the *pro forma* tariff without modification. In addition, we direct that the Member Systems remove the provision limiting the liability of the ISO in order to conform the ISO Tariff with the *pro forma* tariff." January 27 Order, 86 FERC at 61,210. The Member Systems sought rehearing on this point in their February 26, 1999 Petition for Rehearing. This petition is still pending. The same issue is currently before the United States Court of Appeals (D.C. Circuit) on an appeal taken to Order No. 888 by a number of utilities, including several of the Member Systems.

The ISO OATT has been modified to comply with the Commission's Order. (See Section 10.2 of the ISO OATT). The Member Systems do not understand the Commission Order to require that corresponding changes be made to the Services Tariff, under which services other than transmission service are provided. Therefore, the Services Tariff contains liability and indemnification provisions which the Member Systems believe are appropriate for the services provided pursuant to that tariff.

8. Disclosure of Information

In its January 27 Order, the Commission ordered the Member Systems to modify their proposal with respect to the disclosure of certain types of information. Specifically, the Commission directed that the Tariff be modified to provide that the PSC would also be given certain transmission information during an emergency. ¹⁹ The ISO OATT has been modified to provide that the PSC be given the requested transmission information during times of emergency. (See Section 10B).

The Commission also required that information about bids into the LBMP energy market and ancillary services market, as well as bids in the TCC auction, be released after 6 months. The ISO Services Tariff as filed includes provisions for the release of bid data after six months. (See Section 6.3 of the ISO Services Tariff). The Member Systems have sought rehearing on this issue. In their Petition for Rehearing, the Member Systems request that the Commission withdraw its directive that the ISO release bid information and, instead, direct the ISO to study the issue, in consultation with market

¹⁹ January 27 Order, 86 FERC at 61,210-11.

²⁰ Id. at 61.224.

participants, and report to the Commission within six months after the start of ISO operations on whether the release of such data is necessary and appropriate. The Member Systems urge the Commission to adopt this alternative. Proposed language to implement this alternate approach is contained in Appendix D to this Filing Summary.

9. Requests for Interconnection

The January 27 Order required the Member Systems to "include procedures for merchant generators to arrange an interconnection in circumstances where they will not be separately obtaining transmission service."²¹

The revised filing outlines the ISO's role in the interconnection of new generators. Requests for new interconnections will be made to the ISO, and the ISO will conduct an Estimated System Reliability Impact Study in cooperation with the Transmission Owner with whose system the generator proposes to interconnect. (See Section 19B of the ISO OATT, "Study Procedures for New Interconnections to the New York State Power System."). In addition, a section relating to the prioritization of applications for interconnection has been added as Section 19C of the OATT. These provisions apply to all new requests for interconnection. Section 19B.3 provides that after receiving approval for the interconnection from the ISO the applicant may enter into an interconnection agreement with the affected Transmission Owner. There is no requirement to obtain transmission service under the ISO OATT in order to interconnect.

²¹ January 27 Order, 86 FERC at 61,211.

10. Existing Agreements

The Commission ordered several tariff modifications with respect to existing transmission agreements and service agreements under the Member Systems' individual company OATTs. With respect to existing transmission agreements between a Member System and a third party, the Commission observed that the Member Systems "must adhere to the existing terms of those contracts . . . until such time as the agreements are modified pursuant to Section 205 or 206." The Member Systems have complied with this requirement. Attachment K of the ISO OATT states that transmission customers under grandfathered agreements will not be charged for losses or ancillary services under the ISO OATT until a Section 205 filing that provides for such charges is filed and the rates under it become effective. ²³

With respect to transmission agreements among the Member Systems, the Commission ordered that the Member Systems file a joint Section 205 filing contemporaneously with this Compliance Filing. Id. The Member Systems have been unable to complete the Section 205 filing due to the number of contracts involved and related issues that must be resolved among the Member Systems. In the Transmittal Letter submitted with this filing, the Member Systems request a 60 day extension in the time to complete the Section 205 filing.

²² Id. at 61,218.

²³ The amended transmission agreements which will be filed represent those agreements subject to Commission jurisdiction. LIPA and NYPA are non-jurisdictional entities. As such, Agreements in which either entity is the Transmission Provider will not be included in any Section 205 filings. Both entities, however, are modifying their existing agreements in conformance with the new tariffs.

The Commission also stated that long-term firm transmission commitments under individual Member System OATTs should be grandfathered. <u>Id</u>. at 61,219. Under the Member Systems' proposal, grandfathering is accomplished either through preservation of existing physical rights or through conversion of those rights to TCCs. In either case, the grandfathered customer continues to pay the rate under its existing agreement, rather than the Transmission Service Charge ("TSC"), which is the charge payable by transmission customers withdrawing energy from the grid under the ISO OATT.²⁴

The Member Systems have included language in Attachment K to of the ISO OATT to comply with this requirement. However, the Member Systems request permission to halt additional grandfathering as of a date 14 days prior to the first TCC auction, which will be held prior to the start of operations under the new tariff. This limited exception is necessary in order for the ISO to conduct a TCC auction and offer the resulting TCCs to bidders. Prior to conducting a TCC auction, there must be a determination of the transmission capacity that will be available to support the sale of TCCs. This narrow limitation on grandfathering is included in the language in Attachment K to the ISO OATT. The Member Systems have sought specific authorization from the Commission for this limitation on grandfathering in the Transmittal Letter submitted with this filing.

²⁴ The TSC includes a credit against the transmission revenue requirement for revenues received by Transmission Owners from the sale of TCCs. This ensures that there is no over recovery of the Transmission Owners' revenue requirement, and provides a TCC revenue rebate in aggregate to all customers who buy TCCs. It would be inequitable and inefficient to charge a TSC rate to grandfathered customers, who do not buy TCCs but instead have TCCs allocated to them.

As explained in the Transmittal Letter, the proposed cutoff date is July 21, 1999. Grandfathered treatment will be accorded to all long-term and short-term firm transmission service agreements in existence as of that date, for which firm service has been confirmed to extend beyond September 1, 1999, the anticipated start date for the ISO. A clear cutoff date for the grandfathering of existing OATT service as of July 21, 1999 will provide certainty for market participants and maximize the value of the first TCC auction.

Following the cutoff date for grandfathering and prior to the effective date of the ISO OATT, the Member Systems will modify Tables 1A and 1B of Attachment L to the ISO OATT to show all contracts²⁵ and service agreements that will be grandfathered.²⁶

11. Transition Payments

The Member Systems propose to make transition payments among themselves to mitigate cost shifting for a limited period under the new market structure. In their prior filings, the Member Systems proposed a formula for these transition payments. The payments for each Member System could be positive or negative, and are designed to net

²⁵ The Member Systems are currently negotiating with the Municipal Electric Utilities Association on these issues, in a process coordinated by a Commission settlement judge. When completed, the results of these negotiations will be reflected in the tables in Attachment L.

²⁶ The tables in Attachment L have been altered from the previous filing to remove existing non-firm service agreements. Such agreements were included in the previous version for completeness, but the grandfathered MW were zero. The Member Systems believe that Table 1 is clearer without such agreements.

to zero in aggregate. These payments (or receipts, as the case may be) are a component of the formula for each Transmission Owner's TSC. The Commission generally approved the TSC but deferred consideration of this element. ²⁷

The Commission directed the Member Systems to "provide additional data showing the amount of the transition payments, the derivation of the payments according to the proposed formula and the impact on transmission rates that will be paid by other customers of the New York ISO."²⁸

The transition payments are to be calculated once, at a point following the results of the first long-term TCC auction. Because this auction will not take place until the Spring 2000, it is not possible at present to determine the magnitude of the payments or their impact on the TSC for each Transmission Owner. Therefore, the Member Systems will temporarily set to zero the "LTPP" term of the TSC formula. Following the first long-term TCC auction, transition payments will be calculated and filed with the Commission, along with the explanatory material requested in the January 27 Order.

12. Installed Capacity

The Commission directed that the Member Systems make certain changes with respect to the installed capacity requirement contained in the previously filed ISO Tariff. Specifically, the Commission stated that the installed capacity requirement cannot be linked to the provision of transmission service, and that it must reside in another tariff or

²⁷ The Commission approved the use of OATT revenue requirements for the TSC of the jurisdictional Transmission Owners. January 27 Order, 86 FERC at 61,212.

²⁸ Id. at 61.219.

agreement.²⁹ As explained above, the Member Systems have created separate tariffs for transmission services and non-transmission services. The proposed OATT does not impose an Installed capacity requirement on transmission customers.

The Commission also noted that "...in a circumstance where loads can shift suppliers on a monthly basis, a requirement that each affected supplier provide capacity based on its individual annual peak fails to take into account that more than one supplier may be serving the same load during the year." The Commission directed the Member Systems to revise the proposed installed capacity requirement to ensure that, as a result of changes among suppliers during the year, the installed capacity requirement does not create a surplus of capacity over and above what the system needs for reliability reasons.

The Member Systems have made several changes to the calculation of installed capacity requirements for load serving entities ("LSEs") to lay the groundwork for retail access. These are found in Section 5.10 of the Services Tariff, "LSE Installed Capacity Requirements." The installed capacity requirement will now be calculated first on a Transmission District basis, based on the energy consumed during the peak hour of energy usage in that district during each six-month Capability Period (a Transmission District is basically the geographic area served by a Transmission Owner; Capability Periods run from November through April and May through October). Each LSE in a district will be

²⁹ Id.

³⁰ Id. at 61,221.

responsible for a share of the installed capacity requirement for that district. This step is designed to avoid cost shifting among various areas of the state as retail access is implemented.

If a customer is served by different LSEs over the course of a six-month Capability Period, each affected LSE's installed capacity requirement for the Capability Period will be adjusted downward based on that LSE's share of the energy supplied to the customer in question during the peak hour of energy usage for the district.

The Commission also stated that it would reserve judgment on:

...whether and to what extent it is appropriate to impose an installed capacity revenue requirement on LSEs outside the context of a power pool arrangement until Member Systems tender their revised filings in response to this order. We shall direct Member Systems to provide further justification for their proposal given our findings in <u>PJM</u> as to the criteria under which an Installed capacity requirement might be extended to LSEs."³¹

The Member Systems have addressed this issue in Section V of this Filing Summary.

13. Treatment of External Generators

The Commission directed the Member Systems to "revise [their] proposal to treat external suppliers the same as internal suppliers" in the energy markets. January 27 Order, 86 FERC at 61,225. The Member Systems sought clarification on this point in the February 26 Petition for Rehearing, pointing out that external generators, meaning generators located in another control area, cannot be treated the same as generators in the New York Control Area in real-time because they are not dynamically scheduled by the ISO. However, the Member Systems revised the ISO OATT to allow external generators

³¹ Id. at 61.220.

to replace their own generation with purchases from the LBMP energy market. (See Attachment J to the ISO OATT).

14. Ancillary Services

With respect to ancillary services, the Commission stated that "we will require that the tariff be modified to permit the ISO to procure more of a 'higher quality' category of reserves and procure correspondingly less of a 'lower quality' category of reserves when to do so would lower total cost."³² In their Petition for Rehearing the Member Systems pointed out that their proposed model already provides for such substitution, but committed to provide explicit language in the revised tariff. (See Petition for Rehearing at 18). The Services Tariff provides such language in Section 4.9.

15. Release of Native Load TCCs in Retail Access

The Commission directed the Member Systems to provide a detailed proposal for the release of native load TCCs.³³ As explained earlier, under the revised structure being filed today, the Member Systems will sell all such TCCs in direct sale or auction.

The capacity previously associated with native load TCCs remains separately identified in the revised OATT in Attachment L, Table 3, "Existing Transmission Capacity for Native Load." This will maintain the appropriate revenue allocation from the sale of TCCs supported by this capacity. In general, revenues from the auction of TCCs will be allocated to Transmission Owners through the "Interface MW-Mile" formula outlined in Attachment N of the OATT, and credited against the individual Transmission Owner's

³² Id. at 61,227.

³³ Id. at 61,230.

TSC. The formula for the TSC is in Attachment H of the ISO OATT. To more accurately reflect existing use of each Transmission Owner's system, revenues from the sale of TCCs associated with the capacity in Table 3 of Attachment L are allocated to the Transmission Owners as listed on that Table, rather than through the Interface MW-Mile formula. All revenues from the sale of such TCCs will be credited against the individual Transmission Owner's TSC through the formula in Attachment H, thus reducing the TSC for transmission customers in its service territory.³⁴

16. TCC Auction Process

With respect to the design of the TCC auction, the Commission stated that "[w]hile we generally approve the Member Systems' proposal, we shall require that the ISO (rather than the Transmission Providers) determine the percentage of TCCs to be awarded in each round . . . We shall also require that the ISO not announce in advance of each round what percentage of TCCs will be awarded and what percentage will be carried forward to the next round." In their Petition for Rehearing, the Member Systems sought rehearing on this issue and pointed out that the required changes could have unintended and undesirable consequences. (See Petition for Rehearing at 6-8). The requisite language complying with the Order is included in Attachment M to the OATT. In

³⁴ Section 8.2 of Attachment M of the OATT notes that in the Transitional Auction to be held in the summer of 1999, TCCs will be made available subject to the terms of a Transmission Owner's retail access plan. Certain Transmission Owners have already committed in their state-approved retail access plans to allocate temporarily the transmission capacity identified on Table 3 of Attachment L to retail access customers on a load-ratio basis. These Transmission Owners will release this capacity to direct sale or TCC auction starting with the Spring 2000 TCC auction.

³⁵ January 27 Order, 86 FERC at 61,232-33.

Appendix D of this Filing Summary, the Member Systems have provided alternative language to implement the protocols as originally filed, should the Commission grant the Member Systems' request.

The Commission also directed the Member Systems to clarify how they would solve the problem of over-subscription of TCCs.³⁶ The Member Systems have included a detailed description of the process in Attachment M to the OATT, Section 3.0, "Description of the Reduction Process."

III. Description of Revised New York ISO Open Access Transmission Tariff ("ISO OATT" or "OATT")

REVISED ISO OATT

The revised ISO OATT provides Network, firm and non-firm PTP service in the context of the LBMP congestion pricing model approved by the Commission in the January 27 Order. The OATT retains flexible scheduling provisions. Any Eligible Customer may schedule transactions day-ahead or hour-ahead. Network customers may schedule from any resource within the New York Control Area ("NYCA") to their Network load. They may also schedule transactions that originate outside the NYCA. Internal PTP customers may schedule transactions from any point in the NYCA or transactions that originate outside the NYCA. External PTP customers may schedule wheel-through or wheel-out transactions to points outside the NYCA.

A. Point-to-Point Transmission Service

Transmission customers scheduling transactions under firm PTP service agree to

³⁶ Id. at 61.230.

pay the congestion costs associated with such service. As explained in the affidavit of J. Stephen Henderson, Ph.D. ("Henderson Affidavit," Appendix A to this Filing Summary), such customers are assured that their transactions will not be curtailed for economic reasons. Non-firm PTP service is provided for customers who are not willing to pay congestion costs.

A firm PTP transmission customer may fix the price of congestion costs associated with its transmission service by acquiring sufficient TCCs with the same points of receipt and delivery as its transmission schedules. Transmission customers holding TCCs receive the congestion rents associated with the MW quantity and injection/delivery locations specified in the TCC, based on the results of the ISO's day-ahead schedule. Thus, the customer buying a TCC exchanges a variable congestion charge for a fixed, market-based payment. As described previously, the ISO OATT includes a provision for the periodic auction of long-term (up to five years in term) TCCs, to address the Commission's concern about the lack of availability of long-term firm service under the prior ISO Tariff. Thus under the ISO OATT, firm service with fixed congestion pricing for up to five years duration is available for customers who take firm PTP service and purchase a TCC that corresponds to the day-ahead schedule they submit.

B. Network Service

The revised ISO OATT will also provide for Network service. A transmission customer taking Network service agrees to pay the congestion costs associated with the provision of such service. Similar to PTP transmission service, a transmission customer may fix the price of congestion by purchasing TCCs corresponding with the day-ahead transmission schedules it submits to serve its load. As stated in the revised tariff, Network

service allows the Network customer to integrate, economically dispatch and regulate its current and planned Network resources in a manner comparable to that in which the individual Transmission Owners utilize their respective transmission systems to serve their native load customers. For load serving entities in the NYCA, all installed capacity resources supplied under the ISO Services Tariff will constitute an aggregate pool of Network resources.

To ameliorate concerns regarding reliability, the Commission, to date, has imposed certain requirements on Network resources. As an initial matter, the Commission has required resources designated as Network resources to be owned, purchased or leased by the Network customer.³⁷ Moreover, a generating resource cannot be designated as a Network resource if any portion of the resource is committed for sale to third parties or otherwise cannot be called upon to meet the Network customer's Network load on a non-interruptible basis.³⁸ For reliability reasons, the Commission has determined such restrictions are appropriate.

The Member Systems' proposal with respect to Network service achieves the Commission's reliability goals. As an initial matter, installed capacity providers must offer their generation to the ISO market on a day ahead basis. Accordingly, such generation becomes available to other entities only in the event that it is not scheduled on a day-

³⁷ Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities, Order No. 888-A, on reh'g, III FERC Stats. & Regs. [Regs. Preambles 1991-1996] ¶ 31,048 at 30,509 (1997) (*pro forma* tariff definition 1.25 Network Resource), Order No. 888-B, on reh'g, 81 FERC ¶ 61,248 (1997), Order No. 888-C, on reh'g, 82 FERC ¶ 61,046 (1998), appeal pending, Transmission Access Policy Study Group, et al. v. FERC, No. 97-1715, et al., (D.C. Cir. Apr. 30, 1998).

³⁸ Id.

ahead basis. Moreover, the proposal meets the Commission's goal of allowing Network customers scheduling priorities since all entities willing to pay congestion will receive transmission alleviating the need to prioritize such requests. The proposal also meets the Commission's requirement that off-system sales of power by Network customers must be made pursuant to PTP service,³⁹ thereby eliminating any subsidy or discrimination issues. Additionally, the ISO OATT meets the requirement that a Network customer can request to import power from non-designated resources on a non-firm basis without paying an additional transmission charge to serve Network load. The ISO OATT further provides that Network customers pay only the congestion and marginal losses charges based on their actual use of the system. Finally, LBMP achieves the Commissioner's goal of prioritizing the optimum use of the facilities by price.⁴⁰

C. Comparability

One of the key aspects of the revised ISO OATT is that the services provided pursuant to it are fully comparable to the services that the Transmission Owners provide to themselves. As previously described, the Transmission Owners will release native load TCCs into the TCC auction or sell them directly on the OASIS. All customers, including the Transmission Owners serving their bundled retail load, will now have to purchase TCCs in order to fix the congestion component of their firm PTP or Network service.

³⁹ Northeast Utilities Service Co., 83 FERC ¶ 61,123 (1998); Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities, FERC Stats. & Regs. [Regs. Preambles 1991-1996] ¶ 31,036 (1996), Order No. 888-A, on reh'g, III FERC Stats. & Regs. [Regs. Preambles 1991-1996] ¶ 31,048, Order No. 888-B, on reh'g, 81 FERC ¶ 61,248 (1997), Order No. 888-C, on reh'g, 82 FERC ¶ 61,046 (1998), appeal pending, Transmission Access Policy Study Group, et al. v. FERC, No. 97-1715, et al., (D.C. Cir. Apr. 30, 1998).

⁴⁰ See 83 FERC ¶61,123 (1998).

The Henderson Affidavit provides an in-depth discussion of how the revised ISO OATT provides service that is equivalent or superior to the service provided in the Commission's *pro forma* tariff. As explained by Dr. Henderson, the services offered in the revised ISO OATT "are equivalent or superior to those provided under the Commission's *pro forma* tariff. Future transmission services provided under the revised OATT and future market and control area services provided under the Services Tariff will be comparable for all transmission customers, including services provided to the Member Systems on behalf of remaining native load customers." Henderson Affidavit at 4.

D. The Transmission Service Charge

The Member Systems' proposed TSC, which was generally approved by the Commission in the January 27 Order, remains the central vehicle for collection of the transmission revenue requirement under the revised OATT. The TSC is Transmission Owner–specific and will be assessed on all withdrawals of energy from the grid in New York, either to serve load in the New York Control Area ("NYCA") or to support an Export or Wheel-Through transaction. It is, effectively, an access charge. The TSC applies to all withdrawals regardless of whether the withdrawal is scheduled as transmission service under the ISO OATT or as a direct purchase from the LBMP market under the ISO Services Tariff.

The TSC is a residual charge, net of congestion-related revenues received by the Transmission Owners, including revenues from the direct sale or auction of TCCs. It will be collected by the Transmission Owners from both wholesale transmission customers and retail transmission customers on a volumetric (kWh) basis, based on actual withdrawals of energy. Wholesale transmission customers include 1) separately metered wholesale

customers such as municipal electric systems;⁴¹ 2) customers scheduling export or wheel-through transactions, including purchases from the LBMP market delivered to NYCA interties with another control area; and 3) LSEs serving customers in "single retailer" retail access programs where the LSE, not the end-use customer, is the transmission customer. In contrast, under other retail access programs the end-use retail access customer is considered the transmission customer. Because the TSC collected from such retail transmission customers will be based on state-approved retail rate design, the TSC for these customers is referred to as a "retail TSC." In all cases the TSC will be paid directly by the transmission customer to the appropriate Transmission Owner.

The TSC does not apply to transactions undertaken by the Transmission Owners on behalf of their remaining bundled retail customers. Such customers pay for transmission through their bundled retail rate. However, the kWh sales associated with such customers are included in the billing determinants used to set the TSC.⁴² Thus, there is no "double" collection of the transmission revenue requirement under this approach. The Transmission Owners also will appropriately account for their own use of the transmission system. (See Section 8 of the ISO OATT). The Transmission Owners will be subject to all other OATT charges in conjunction with their own use of the system, including congestion charges, marginal losses, and ancillary services charges. This is detailed in the billing section of the OATT, Section 7.0.

⁴¹ Many municipal systems will take service under grandfathered agreements, at least initially. As explained earlier, the TSC does not apply to grandfathered agreements. Instead, the customers continue to pay the rates specified in the agreements.

⁴² TSC billing determinants were set for hearing by the Commission.

E. Other Changes Under the OATT

The Member Systems' proposed charges for marginal losses were approved by the Commission in the January 27 Order and remain unchanged in this filing.⁴³ The same is true of the NYPA Transmission Adjustment Charge ("NTAC").

Charges to transmission customers for ancillary services remain basically unchanged from the prior tariff, except for balancing services. For LSEs that are a party to the Services Tariff, Energy Imbalance Service is considered to be supplied at the real-time LBMP price. For other LSEs, Energy Imbalance Service is provided at the greater of 150% of LBMP or \$100 per megawatt hour.

Ancillary services charges are paid by LSEs and, for certain services, by transmission customers scheduling export or wheel-through transactions. In keeping with the division of the previous ISO Tariff into separate transmission and market tariffs, suppliers who provide ancillary services to the ISO are paid pursuant to the ISO Services Tariff. As with the prior tariff, transmission customers who elect to self-supply certain ancillary services can do so by selling the services under the Services Tariff.

F. Transmission Expansion

Under the LBMP model, market participants who fund transmission expansions receive the TCCs associated with the incremental transfer for capacity created by the expansion. Thus, expansion is driven by market participants' economic decisions. However, expansions also may be requested and implemented to resolve reliability concerns. As explained earlier, the revised OATT provides a multi-step process to facilitate the economic

⁴³ The Commission ruled, however, that existing contract provisions inconsistent with the charging of marginal losses would remain in effect unless revised pursuant to a Section 205 filing.

evaluation of expansion opportunities. First, any Eligible Customer may request the ISO to perform a System Impact Study to provide illustrative expansion options. Second, the Eligible Customer may request a Facilities Study from the affected Transmission Owner to evaluate specific options. Third, the Eligible Customer or the PSC may have the ISO undertake a system reinforcement study.

Through this process, a market participant can compare the cost of various expansion options to its own forecast of future transmission congestion costs (i.e., the cost of paying congestion charges on an ongoing basis, or of procuring TCCs to fix its congestion charges). Thus, market participants will play a key role in determining which transmission expansion options receive in-depth analysis, and, ultimately, in the decision as to whether an expansion will be undertaken.

IV. DESCRIPTION OF NEW YORK ISO SERVICES TARIFF ("ISO SERVICES TARIFF" OR "SERVICES TARIFF")

SERVICES TARIFF

A. Applicability of Services Tariff

In its January 27 Order, the Commission "direct[ed] the Member Systems to file a transmission tariff that is separate from the rate schedules that govern non-transmission functions, e.g., its operation of a spot market and administration of the NYSRC Agreement." In this filing, the Member Systems have separated the provision of transmission services from the provision of various market and control area services. Transmission access is provided via the ISO OATT. This section addresses the services provided in the ISO Services Tariff.

The Services Tariff sets forth the provisions applicable to the ISO's administration of the competitive energy, capacity and, ancillary services markets ("Market Services") within the New York Control Area and the ISO's provision of Control Area Services.

Market Services include all services and functions related to the sale and purchase of energy or capacity and payments to suppliers who provide ancillary services to the ISO in the day-ahead and real-time LBMP markets.. The Services Tariff provides the information necessary for the ISO to operate the day-ahead and real-time energy markets.

Any market participant wishing to participate in the LBMP energy market, either as a buyer or seller, must do so in accordance with the ISO Services Tariff. Purchasers buying directly in the LBMP energy market must take transmission service under the ISO OATT as well as service under the Services Tariff.

Suppliers wishing to sell energy, capacity or ancillary services into the ISO-administered markets will make those products available to the ISO under the Services Tariff. In particular, the ISO Services Tariff provides the terms and conditions governing payments to suppliers who provide ancillary services to the ISO. Transmission customers seeking to purchase such ancillary services will purchase such services from the ISO do so under the ISO OATT.⁴⁴

The ISO also will provide Control Area Services pursuant to the Services Tariff. The ISO will act as control area operator for the New York Control Area and will interact with other control area operators in order to carry out external and wheel-through transactions.

⁴⁴ The ISO Services Tariff describes the energy and ancillary services markets to be administered by the ISO. That Tariff also outlines the ISO's facilitation of the Installed capacity market. It is important to note that these markets are subject to any market power mitigation programs approved by the Commission.

As control area operator, it will operate under reliability standards promulgated by NERC, NPCC, and the NYSRC. It will arrange for reserve sharing with other control areas, operate a control room, and facilitate an installed capacity market. It will match generation and load within the New York Control Area on a continuous basis, relying on the generators participating in the real-time LBMP market to do so.

Because the ISO will use the centralized energy market to provide load-following service, all LSEs serving load in the New York Control Area will be served from the LBMP market and must take service under the Services Tariff. LSEs that do not take service under the Services Tariff will not be included in the New York Control Area. They must be located within another NERC-recognized control area that has an interconnection agreement with the New York ISO. If a customer elects to serve as its own control area operator, it must meet NERC and NPCC standards, and sign a control area interconnection agreement with the New York ISO in order to interchange energy with the NYCA.

B. Installed Capacity

The ISO Services Tariff includes provisions for installed capacity. The Services Tariff requires all LSEs who serve load in the New York Control Area to meet the installed capacity requirements specified in the Tariff.⁴⁵ Installed capacity serves an important reliability function in the New York Control Area and also supports the LBMP market which the ISO will rely upon to serve all load in the control area. The installed capacity requirement is addressed in depth in

⁴⁵ The Services Tariff provides that for the period between the start of operations under the ISO OATT and October 31, 1999 (the end of the 1999 Summer Capability Period) LSEs will procure Installed capacity under the existing New York Power Pool procedures (Billing Procedure No. 4) and Transmission Provider settlement agreements with the NYPSC implementing retail access (or NYPA and LIPA policies). For the period starting November 1, 1999 LSE installed capacity requirements will be set by the ISO. (See Section 5.9 of the Services Tariff).

Section VI of this Filing Summary.

As previously discussed, at the direction of the Commission, the Member Systems have altered the calculation of installed capacity requirements for LSEs to accommodate retail access more effectively. The Services Tariff also clarifies that the only locational installed capacity requirements that will be in effect when the ISO commences operations will be those currently in effect under retail access plans filed with the PSC, and the LIPA retail access plan. These requirements are necessary to ensure sufficient generating capacity in transmission-constrained areas of the NYCA. Locational installed capacity requirements also are discussed in Section VI of the Filing Summary.

The Services Tariff includes a description of the ISO's auction for installed capacity, which was mentioned, but not described in detail, in the previous tariff. Such an auction will be implemented shortly after the beginning of ISO operations, to facilitate a liquid installed capacity market with visible prices, and to support retail access programs.

The penalty schedule for installed capacity deficiencies in the first few years of ISO operation has been modified. The reduced penalties for LSEs that fail to procure sufficient installed capacity were instituted at the request of PSC and are intended to mitigate the opportunity for incumbent generators to exercise any short-run market power at the inception of the market during the time it will take for market entrants to construct generating capacity.

Generators and curtailable loads that elect to provide installed capacity for load in the New York Control Area must take service under the Services Tariff.

C. Other Changes from Prior Filing

The Services Tariff includes other changes to the previously filed ISO Tariff that were necessary in order to comply with the January 27 Order or to accommodate retail access. These include provisions relating to Local Reliability Rules (discussed earlier in this Filing Summary) and a provision clarifying which parties must receive metering data, to ensure that the information necessary to render customer invoices under retail access is supplied to the parties responsible for processing that information. (See Section 13.2 of the Services Tariff).

Section 4.18D of the ISO Services Tariff covers payments to suppliers of operating reserves when they are called upon by the ISO to generate additional energy, after the day-ahead market has closed. The Services Tariff clarifies that such suppliers will be paid the real-time price for their additional production. A revision also was made to the "Blackstart" ancillary service. In addition to payments to generators identified in the current NYPP restoration plan, Blackstart payments will now be made by the ISO to generators identified by the Transmission Owners as being needed for localized Blackstart capability.

This filing also contains other minor modifications to clarify or correct provisions in the prior tariff. Finally, the Services Tariff, as well as the ISO OATT, includes certain changes that were required in order to permit LIPA to participate in the New York ISO. These changes are discussed in the next section of this Filing Summary.

The separation of the ISO's market and control areas functions into the Services Tariff and with the modifications explained above, respond to the requirements set forth in the Commission's Orders.

V. TARIFF MODIFICATIONS RELATED TO THE PARTICIPATION OF LIPA IN THE NEW YORK ISO

As noted previously in filings before the Commission, LIPA has expressed a willingness to participate in the New York ISO provided that such participation does not result in a violation of the private use restrictions applicable to publicly financed tax-exempt debt and does not affect LIPA's non-jurisdictional status under Section 201(f) of the Federal Power Act.⁴⁶ On December 15, 1998, the Board of Trustees for the Long Island Power Authority ("Authority") approved the participation of LIPA (its subsidiary) in the ISO, provided that LIPA's participation in the ISO would not adversely affect the Authority's ability to issue tax-exempt debt or jeopardize any of its outstanding tax-exempt debt used to purchase the assets of the Long Island Lighting Company ("LILCO").⁴⁷

The development of the original ISO tariff provisions occurred prior to the Authority's acquisition of LILCO. The tariff, therefore, did not include provisions necessary to accommodate of LIPA's participation in New York ISO. The Member Systems have agreed to modify certain tariff provisions and other ISO documents to allow for LIPA's participation in the ISO. These provisions, do not affect the ability of the ISO to exercise its responsibilities. In fact, the Member Systems believe that LIPA's participation will enhance the effectiveness of the ISO.

⁴⁶ Motion to Intervene and Comments of the Long Island Power Authority (February 27, 1998); Letter of Stan Klimberg, LIPA to Secretary Boergers, Commission (December 29, 1998); and Petition for Rehearing and Clarification on Behalf of the Member Systems of the New York Power Pool (February 26, 1998) (hereinafter "Rehearing Petition").

⁴⁷ See Letter of Stan Klimberg, LIPA to Secretary Boergers, Commission (December 29, 1998).

The scope of tariff modifications related to LIPA's participation in the ISO are limited to: (1) procedures to allow for compliance with the "private use" restrictions applicable to tax-exempt debt issued by the Authority; and (2) clarification of tariff provisions to reflect LIPA's nonjurisdictional status.

A. Compliance with Private Use Restrictions

Under the original ISO Tariff, LIPA would have been unable to participate in the ISO because certain tariff provisions created the potential to violate the private use rules under the Internal Revenue Code. The use or control of LIPA's transmission facilities by a non-governmental entity, as defined under the Internal Revenue Code, could violate the private use rules applicable to the Authority's bonds. The ISO, as a non-profit corporation, is such a non-governmental entity. Similarly, certain types of transmission service contracts for specific end use customers may constitute prohibited private use. While the original ISO Tariff provided non-defeasance language to address protections for use of local furnishings bonds, no similar protection extended to other forms of taxexempt debt used by public entities to finance output facilities. The Authority's purchase of LILCO's assets was accomplished using Electric General Revenue Bonds. In order to provide comparable protections which allow LIPA to participate in the ISO without adversely affecting the Authority's tax-exempt debt, the Member Systems have agreed to include a provision, similar to the local furnishings bond language, which provides that LIPA shall not be required to provide transmission service where the provision of such service would result in the loss of tax-exempt status of the Authority's tax exempt bonds or impair the Authority's ability to issue tax-exempt bonds in the future. This modification is reflected in Section 5.2B of the ISO OATT.

In a related change, if it is determined that LIPA's tax-exempt status is jeopardized, under Section 3.02 of the ISO Agreement, LIPA will be allowed to withdraw from the ISO with thirty (30) days prior notice. LIPA has committed to provide longer notice when possible and will be required to provide an explanation of the need for LIPA's withdrawal.

A particular concern for LIPA's participation in the ISO is the scheduling of transactions over the LIPA transmission facilities. Certain transactions, if scheduled over LIPA's facilities, would constitute private use of the publicly financed facilities. To avoid this problem and avoid situations where LIPA would have to withdraw from the ISO, the Member Systems have agreed to a review process by which LIPA will have the right to review and pre-approve all transactions to be scheduled over its facilities. Furthermore, because of the high degree of risk for private use complications with respect to the Northport-Norwalk Intertie, LIPA will be the only party authorized to submit schedules to the ISO for transmission over the Northport-Norwalk Intertie. This scheduling protocol is limited to a review to ensure LIPA's compliance with the private use restrictions. The actual scheduling of such transactions (outside of the Northport-Norwalk Intertie) will remain a responsibility of the ISO, upon LIPA's certification that the private use rules will not be violated. Furthermore, this scheduling protocol will not require review of grandfathered transactions. This scheduling protocol is included in the ISO OATT at Section 5.2D and in the ISO Agreement at Section 11.02.

LIPA has committed to develop and file with the ISO the scheduling review procedures noted above. This protocol will be on a nondiscriminatory basis and will cover, at a minimum, LIPA's scheduling of transactions on the Northport-Norwalk

intertie, the development of a pre-approved list of transactions that the ISO may schedule over LIPA's transmission facilities and a list of Eligible Customers that may withdraw energy from and inject power into the Long Island Transmission District. Except for grandfathered transactions and pre-approved transactions, LIPA will establish a process by which it will review transactions involving its facilities prior to ISO scheduling of specific transactions. In general, LIPA does not expect the review and approval process to be lengthy except in those instances where advice from bond counsel or the IRS is required. LIPA has committed to take all reasonable actions to pre-approve customers and transactions to minimize inconvenience to market participants.

LIPA must track transactions within the Long Island Transmission District to ensure compliance with the IRS private use rules. In order to facilitate LIPA's compliance tracking, the Member Systems have included a provision under which the ISO will provide LIPA information on net transmission flows in and out of the Long Island Transmission District.

B. Clarification of LIPA's Non-Jurisdictional Status

Pursuant to Section 201(f) of the FPA, LIPA, as a statutorily created agency under the laws of the State of New York, is not subject to Commission jurisdiction with respect to the Commission's exercise of the FPA's general ratemaking authority. As noted previously, the original tariff assumed LILCO's participation as an investor-owned utility subject to the Commission's jurisdiction. In light of LIPA's non-jurisdictional status, the Member Systems have modified the tariff provisions to clearly recognize LIPA's non-jurisdictional status.

It should be noted that in the Member Systems' Petition for Rehearing, the Member Systems sought clarification from the Commission that LIPA's participation in the ISO will not be considered a relinquishment of the Authority's statutory right and responsibility to establish its own transmission rates. Furthermore, the Member Systems requested that with respect to ISO rate components comprised of revenue requirements or other terms and conditions specific to the provision of transmission service over LIPA's facilities, the Commission should exercise "light-handed regulation" by applying the same scrutiny and standards to LIPA that the Commission applies under the safe harbor, reciprocity procedure under Order No. 888. The modifications of the ISO OATT and related agreements relating to LIPA's non-jurisdictional status are consistent with the treatment sought in the Petition for Rehearing.

VI. INSTALLED CAPACITY REQUIREMENT

A. Overview

Under the ISO Services Tariff all LSEs serving load in the New York Control

Area must provide installed capacity ("ICAP") in accordance with ISO requirements. The

ICAP requirement will cover each LSE's peak load plus a share of the installed reserve

requirement for the New York Control Area. In its January 27 Order, the Commission

directed the "Member Systems to provide further justification for their [installed capacity]

proposal"50

⁴⁸ Member Systems' Petition for Rehearing at 27-28.

⁴⁹ <u>Id.</u> at 28-29.

⁵⁰ 86 FERC at 61.220

The requirement that LSEs provide ICAP is a continuation of an important regional reliability practice, reserve sharing, that has historically been implemented in the New York Control Area by the NYP. Reserve sharing benefits all customers by ensuring adequacy of supply, even under unusual supply or demand circumstances, at least cost. In the proposed New York ISO model, the benefits of reserve sharing will continue to be available in the New York Control Area. ICAP resources will be required to be available day-ahead to load in the NYCA either through bilateral schedules or bids into the LBMP market. The ISO will rely on the LBMP market to schedule energy and reserves day-ahead and to balance supply with load in real-time for every end-user of electricity in the New York Control Area.

In order to implement reserve sharing equitably, all load in the NYCA must provide a share of the resources. It is not possible for the ISO to differentiate the reliability of service provided to end-users depending on whether they have provided ICAP. Unless an end-user is interruptible by the ISO (in which case it would not have an ICAP requirement under the Services Tariff) it will receive the same level of reliability as every other end-user. Without an enforceable ICAP requirement for all LSEs in the NYCA, load that did not supply ICAP, in effect, would be able to lean on the resources provided by others.

For these reasons, the ICAP provisions of the Services Tariff are supported by the PSC, and are generally consistent with practices in other regions that the Commission has approved. This section discusses these points in more detail.

B. The Proposed ICAP Requirement is a Continuation of An Important Existing Regional Reliability Practice

The installed capacity requirement is a reliability requirement of the Northeast Power Coordinating Council ("NPCC"), a regional reliability council of the North American Electric Reliability Council ("NERC"). NERC was established in the late 1960's as an outgrowth of the 1965 Northeast Blackout. As a result of this major incident, it was recognized that further integration of the nation's transmission grid would be required to enhance overall system reliability. As integration of the electric grid proceeded, coordination of planning and operating activities became increasingly more important since events in one system could have significant adverse reliability consequences on other interconnected systems. Therefore, promulgation of standard reliability criteria and procedures for the electric industry was required. Responsibility for establishing basic criteria was vested in NERC, with more specific criteria and procedures applicable to specific regions administered and coordinated through the regional councils such as NPCC.

Under general policy direction from NERC, NPCC has long adopted design criteria for generation resource adequacy. That criteria is stated as follows:

Each Area's resources will be planned in such a manner that, after due allowance for scheduled outages and deratings, forced outages and deratings, assistance over interconnections with neighboring Areas and regions, and capacity and/or load relief from available operating procedures, the probability of disconnecting non-interruptible customers due to resource deficiencies, on the average, will be no more than once in ten years.

NPCC Basic Criteria Document A-2, Section 3.0, "Resource Adequacy – Design Criteria." ⁵¹

Each control area within NPCC, including the NYCA, has implemented this resource adequacy design criterion. The New York Power Pool, which is currently responsible for promulgating and enforcing reliability rules for the NYCA, has determined that a 22% reserve requirement, measured against state-wide annual peak load, is necessary to achieve the NPCC reliability criterion on a pooled basis. This level of reserve requirement has been in place for over twenty years and is the basis of the individual Member System's installed reserve requirement contained in the New York Power Pool Agreement, which has been filed with and accepted by the Commission. Under existing rules, the NYPP can order any Member System to operate generating units in order to meet pool-wide reliability needs. ⁵²

Under the new market structure, the NYPP's role will shift to the NYSRC and the ISO. The NYSRC will be responsible for establishing the state-wide annual reserve requirement consistent with NPCC criteria. The NYSRC Agreement provides that the NYSRC initially will adopt the existing 22% reserve requirement, but that level is subject to change in the future. The ISO, which will be the control area operator for the NYCA,

⁵¹ The PJM Capacity Resource requirement, which is discussed below, is derived from an almost identical requirement in MAAC: "Sufficient megawatt generating capacity shall be installed to ensure that in each year for the MAAC system the probability of occurrence of load exceeding the available generating capacity shall not be greater, on the average, than one day in ten years." <u>See MAAC Reliability Principles and Standards</u>, "Installed Generating Capacity Requirements," (Revised March 30, 1990). <u>See http://www.pjm.com/maac/reference/princstandards.html</u>.

⁵² "Each Member shall schedule the operation of surplus capability, which is available but not scheduled to run, when called upon to do so by the Pool in order to meet Pool Minimum Operating Capability Requirements." NYPP Operating Procedure 2.

will be responsible for ensuring that all load serving entities, contribute proportionately to the state-wide reserve requirement. The ISO also will administer the centralized market for energy and operating reserves, which is the mechanism through which all load in the NYCA will benefit from the shared ICAP resources, as described in the next section.

C. ICAP Requirements Assure Viable Day Ahead and Real Time Energy and Operating Reserve Markets

The ICAP requirement is an essential linchpin of the proposed new market structure for New York. It ensures that sufficient resources will be available to support the wholesale energy and operating reserves markets, as well as transmission services, through which all load in the New York control area will be served reliably and economically.

Under the proposed ICAP requirement, all LSEs must procure sufficient commitments from generating or demand-side resources to meet the ICAP requirements determined by the ISO. ICAP resources do not have to supply energy to the LSEs with whom they have contracts. Rather, the ICAP resources procured by the LSEs must be available in the day-ahead market to serve load in the NYCA. Specifically, an ICAP resource must either be scheduled under the OATT day-ahead to serve load in the NYCA, or it must bid directly into the LBMP market day-ahead.⁵³

Under the ISO OATT, ICAP resources serve in aggregate as designated resources for all Network load. Any transmission customer scheduling a transaction to a load within the NYCA can schedule from any ICAP resource, regardless of whether the transmission customer is taking Network or PTP transmission service. This flexibility is possible under the

⁵³ A provision for outages will be made.

ISO OATT based on the important premise that all load in the NYCA has contributed toward the state-wide ICAP requirement.

Using bids and schedules submitted to it, the ISO will ensure that sufficient resources are committed on a day-ahead basis to maintain reliable supply to the forecasted load in the NYCA. The ISO also uses the day-ahead and real-time energy markets that are supported by ICAP to facilitate the economic redispatch of generators, a critical step in ensuring that the transmission grid is used fully and economically. Thus, the ICAP resources, as well as fulfilling an important reliability function for the control area, support the energy market for all LSEs in New York. The energy market provides the redispatch vehicle that, in turn allows the ISO to maximize the transmission service that it offers to transmission customers.

The provisions in the ISO Services Tariff that require LSEs serving load in the NYCA to adhere to the ICAP requirements are necessary and appropriate.

D. The PSC Strongly Supports the ICAP Requirement

The PSC has consistently supported an ICAP requirement in the NYCA. In its most recent comments on the subject, in its Motion for Clarification of the Commission's January 27 Order, it requested clarification that LSEs, rather than the Transmission Owners, bear responsibility for meeting installed capacity requirements. It commented:

...Without the installed capacity requirement, there are two possible concerns: receiving sufficient generator bids for a robust day-ahead market, and the availability of sufficient capacity to meet peak load. The Member Systems' proposal addresses this dilemma by imposing an installed reserve requirement on load, or their representing agents . . .This requirement is nothing more than what current LSEs, namely the members of the New York Power Pool, are required to

meet. It assures that sufficient generation will be available in New York on an annual and daily basis to supply load reliably.⁵⁴

The PSC is overseeing the implementation of retail access in New York and its views on the importance of requiring load serving entities to supply installed capacity should be accorded great weight by the Commission.

E. Commission Precedent Supports an ICAP requirement for LSEs

The Commission has approved ICAP requirements for LSEs in NEPOOL and PJM. In NEPOOL, which is also within NPCC and subject to the same reliability criteria as the NYCA, a long-standing installed capacity requirement in the NEPOOL agreement applies to all LSEs in the NEPOOL control area. The Commission approved a market for installed capability as a way of implementing NEPOOL's ICAP requirements in a restructured environment, and noted that NEPOOL has had capability requirements since its inception and considers them important to maintaining reliability. Further, it recognized the benefits of installed generation sharing as being the "foundation of power pooling." The Commission emphasized the need for assigning ICAP responsibility on the basis of load in power pooling arrangements:

Reserve sharing arrangements will work only if each Participant carries its own weight and does not depend upon the other Participants. It is for this reason that power pools typically have very specific requirements as to the amount of installed generation each Participant must bring to the pool and

⁵⁴ Public Service Commission of the State of New York filed a motion for clarification of the January 27 Order, on March 4, 1999.

⁵⁵ See New England Power Pool, 83 FERC ¶ 61,045 at 61,262 (1998) (hereinafter "NEPOOL").

penalties that apply if these requirements are not met. Typically, these formulas apportion responsibility on the basis of relative load.⁵⁶

Importantly, in NEPOOL, as in the proposed approach for New York, reserve sharing in the context of a power pooling arrangement is not optional for LSEs in the control area. LSEs who wish to serve load located in the NEPOOL control area must abide by the requirements of the Restated NEPOOL Agreement, including the obligation to supply reserves to the pool.

In PJM, the Commission approved an ICAP requirement for LSEs serving load in the PJM control area that are Market Buyers. The Commission distinguished that requirement from the Member Systems' proposed approach for New York, which it characterized as a "universal reliability rule, rather than a reserve sharing agreement." In practice, however, the PJM requirement, like the NEPOOL requirement and the proposed New York requirement, in effect, applies to all entities serving load in the control area. All LSEs serving load in the PJM control area are Market Buyers (i.e., purchasers from the PJM Interchange for purposes of the PJM Operating Agreement. LSEs who are

⁵⁶ Id.

⁵⁷ January 27 Order, 86 FERC at 61,220. The Commission also distinguished the PJM situation from the proposed New York requirement by saying that "[w]e reasoned [in the PJM Order] that the PJM Transmission Providers had committed to make all of their resources, to the extent not committed to serve native load or to make bilateral power sales, available to the PJM PX. We noted that, absent a contractual obligation for all LSEs to contribute installed capacity to the pool, the competitors of the PJM Transmission Providers, to the extent they participated in the PJM PX spot market, could rely unduly on the PJM Transmission Providers' generation resources." Id. The Commission thus recognized the inequity of allowing some market participants to benefit from the reserves supplied by others. Several paragraphs later it compared this situation to the one in New York, saying "nor does it appear that there is a requirement for the [NYPP] Member Systems to make their generating capacity available to the spot market when not being self-scheduled to load or used to support bilateral sales." It should be pointed out that the Transmission Owners in PJM are under no special obligation to make capacity available to the PX. Transmission Owners in PJM are treated the same as any other LSE: they must procure a designated amount of capacity resources like any other LSE, and those resources must be available to the PJM interchange market in the fashion specified in the Operating Agreement. This is the same as the structure proposed for New York.

Network service customers under the PJM transmission tariff are Internal Market Buyers under the PJM Operating Agreement; those that serve load within the control area using Point-to-Point Service are External Market Buyers. Further, the PJM Open Access Transmission Tariff states that for all Network service customers, "Energy Imbalance Service is considered to be PJM Interchange." (PJM OATT, Schedule 4, Revised Sheet No. 80). Network customers, therefore, are explicitly Market Buyers.

Although the PJM requirement may appear to be a narrower requirement than the approach proposed by the Member Systems, its practical effect is the same. In the proposed New York model, all LSEs serving load in the NYCA will take service under the Services Tariff. Any balancing charges they incur under the ISO OATT will be purchases or sales in the real-time LBMP market, regardless of whether they take Network or PTP service under the ISO OATT. In contrast, LSEs that do not take service under the Services Tariff – in other words, LSEs that operate their own control area or contract with another entity to balance their load with their generation resources on a real-time basis -- will be subject to balancing penalties under the OATT. Such LSEs would not be characterized as market buyers under the Services Tariff and, therefore, would not be subject to the Services Tariff requirements, including the ICAP requirement. This structure is consistent with PJM's.

In approving the ICAP requirement on LSEs in PJM, the Commission explicitly recognized the benefits of the historic reserve sharing arrangement in PJM which formed the basis for the current LSE installed capacity requirements.⁵⁸ It also recognized that

⁵⁸ See PJM, 81 FERC ¶ 61,257 (1997).

there was a general preference of the state commissions within the PJM region that the traditional reliability aspects of the pool during the transition to competitive retail markets. Both of these factors are present in New York as well.

As to the Commission's observation that the proposed ICAP requirement in New York is not a reserve sharing agreement or a power pooling arrangement, the Member Systems submit the following comments. As in PJM and NEPOOL, the New York ISO will use the pooled resources of the control area, including the shared ICAP reserves, to balance generation and load within the control area, just as the NYPP does today. What exists in PJM and NEPOOL and what is proposed for the New York ISO are clearly power pooling arrangements. In all three pools an entity that does not wish to have the control area operator match supply to its load on a continual basis – in other words, an entity that does not need the control area operator to load follow on its behalf – can set up its own control area and avoid the pooling arrangement. If, however, it seeks to rely on a control area operator – be it NEPOOL, PJM or the New York ISO – to balance its supply and demand, then, in each case, the control area operator will use the pooling arrangement to carry out this function.

The fact that the traditional pooling arrangements in each of these regions has been or is being transformed into a bid-based energy market does not change the underlying fact that all load serving entities within the control areas rely on the respective pooled resources of each control area and, therefore, should contribute an equitable share of such resources to their respective control areas. The Commission has approved such requirements in the context of PJM and NEPOOL restructuring and it should do so for the New York ISO as well.

F. Location of ICAP Resources Are Essential to NYCA Reliability

In the January 27 Order, the Commission stated:

Because the extent to which installed capacity requirements will be established on a locational basis has not yet been determined [because the New York model assigns this responsibility to the ISO], this issue is not ripe for resolution. However, it is our understanding that the installed capacity requirement included in the present NYPP pooling agreement is not determined on a locational basis and, in fact, we are unaware of any pooling agreement that incorporates such an approach. We clarify that, to the extent that the ISO exercises its authority to establish locational requirements for those entities that are subject to an installed capacity requirement, it must make a filing detailing those requirements and providing justification for its proposal. ⁵⁹

The Member Systems respectfully request that the Commission consider the following comments with respect to locational ICAP requirements. As discussed above, the ICAP requirement ensures that sufficient generating capacity exists to meet the expected peak load in the control area plus contingencies. It is not necessarily sufficient, however, to merely have a certain amount of ICAP available in the NYCA. Because of the physical configuration of the transmission system, as well as the potential for localized transmission outages, it may be essential that installed capacity be located in particular areas of the state, not isolated in one location, in order to maintain the level of reliability the installed capacity requirement is intended to provide. Further, these locational requirements may change over time as load conditions change. And the specific constraining interfaces could change as the physical generation and transmission systems change in the future competitive environment. The ISO will need to update the locational ICAP requirements accordingly.

⁵⁹ January 27 Order, 86 FERC at 61,221.

As the Commission correctly stated, there is no locational ICAP requirement in the New York Power Pool Agreement. Yet ICAP resources in the state have been distributed based on locational requirements. This is because the Member Systems, each of which (except NYPA) has a franchised territory, are currently responsible for procuring sufficient ICAP to support the load in their areas, and they have constructed generation, or contracted with generation near their load, or constructed transmission capability to import generation. It has not been necessary for NYPP to impose any locational requirements to achieve the necessary result.

In the restructured New York market, however, the traditional utilities, with their vertically integrated planning function, are being replaced by independent power producers and non-utility LSEs. A locational ICAP requirement will provide the necessary signals to decentralized market participants to ensure that resources are procured – and sited – in locations that are deliverable to load in the NYCA.

New York City is a prime example of the need for the proper location of generating resources. The peak system load in New York City is about 10,000 MW whereas transmission capability into the City is only about 5,000 MW. Hence, at a minimum, 5,000 MW, of generating capacity would be required to be located in the City. Consideration of in-City generating unit outages, outages of transmission facilities supplying the City or the possibility of inadequate reserves beyond the transmission ties tend to increase the requirement for supply resources located in the City. The PSC recognized the importance of locational ICAP requirements in its Con Edison restructuring order. It specifically imposed a locational requirement on new LSEs serving retail access customers in the Con Edison franchise territory. (Under the Order, ICAP

equal to 80 percent of the LSE's peak demand in-city must be located in the city. The PSC also recognized that this requirement would be superseded by the ISO's locational requirements).

Long Island is another example. Load on Long Island is about 4,300 MW but net transmission capacity into the Island is only about 1,300 MW. Here too, absent consideration of generating unit or transmission outages or the possibility of supply deficiencies beyond the ties, a minimum of 3,000 MW of generating capacity would be required to be located on Long Island. Studies have indicated that resources approximately equal to peak demand should be located on Long Island to maintain reliability of supply to the Island. LIPA operates its system to maintain these reserves and has incorporated local ICAP requirements into its retail access program. If the current complement of generation and transmission remains as is, load growth forecasts indicate that Long Island would become ICAP-deficient relative to their requirement by 2001 to 2003. It is essential that appropriate market signals for locational installed capacity be provided from the start of ISO operations.

Finally, it should be noted that New York is not alone in addressing this issue.

PJM also has created a type of locational ICAP requirement by requiring that an LSE's capacity resources be deliverable to its load. The deliverability requirement can be satisfied if the LSE can obtain firm transmission service from the resource to the load.

The LSE can theoretically designate resources anywhere in PJM, but transmission upgrades may be required. Thus, LSEs face an economic choice between contracting with

⁶⁰ NEPOOL has indicated that it will need to consider a deliverability test for ICAP.

generators with firm transmission service available to their load, or upgrading transmission. The practical effect of this is to create a locational component in the PJM capacity resource requirement, based on available transmission capacity.

VII. RETAIL ACCESS

A. Overview of Retail Access Plans in New York

The ISO OATT and the ISO Services Tariff have been designed to accommodate retail access. Each of the investor-owned Member System has a retail access program approved by the New York PSC, and LIPA, which is not PSC jurisdictional, also has a retail access program. The remaining Member System, the Power Authority, does not have a defined retail service territory and, therefore, a specific retail access program is not applicable for NYPA.⁶¹

Niagara Mohawk's retail access program has been partially phased in, with its largest commercial and industrial customers and all residential customers already having the ability to select their supplier of electricity. By May 1, 1999 the remaining large commercial and industrial customers will have access, and by August 1, 1999 all remaining customers will become eligible.

All electric customers of Orange and Rockland within New York State and Pennsylvania will have access by May 1, 1999, and the company's New Jersey customers will have access later in 1999.

⁶¹ NYPA serves several large industrial end-users by agreement with the host Member Systems, and those customers' ability to select electricity suppliers is a function of both their contractual agreements with NYPA and the retail access programs of the Member System in whose territory they are located.

Ten percent of Rochester Gas and Electric's electric load is currently eligible to participate in retail access. An additional ten percent will become eligible in July 1999 and another ten percent in July 2000. The remaining customers will become eligible for retail access by July 2001.

Con Edison began its retail access program in June 1998. Phase 2 of its Retail

Choice program began on April 1, 1999 and approximately 20% of Con Edison's load is

now served through Retail Choice. The program is currently open to all small residential
and non-demand-metered commercial customers. All customers will be afforded the

option of choosing an alternative supplier by year-end 2001 or 18 months after the ISO is
operating, whichever is sooner.

Central Hudson Gas and Electric Corp. will make retail access available to all of its residential, commercial and industrial electric customers, with a phase-in schedule in effect for the period September 1, 1998 through June 30, 2001, after which all remaining customers will be eligible for retail access.

In the retail access program of New York State Electric and Gas, all retail electric customers will be eligible for retail access as of August 1, 1999.

LIPA began enrollment of retail access customers in April 1999, with 10% of its customer base eligible to participate. Phase II, with deliveries scheduled to begin in May 2000 will allow at least 20% of the customer base to participate in the program. Phase III, to begin in May 2001, will make retail access available to all customers.

As a result of these various programs and arrangements, a large number of retail customers in the New York Control Area already have retail choice. Within two years after the commencement of operation of the ISO, almost all retail customers of the Member Systems will be eligible to select their electricity supplier.

B. Relationship of Retail Access Tariffs and The ISO OATT

The Commission has asserted jurisdiction over unbundled retail transmission service, and the Member Systems have designed their retail access programs and the ISO OATT accordingly. The Commission also has noted its willingness to defer to state regulators in the matter of the design of retail access tariffs. The retail access programs of the Member Systems have been formulated to comply with Commission guidelines.

Each jurisdictional Member System has filed or will file a retail access tariff with the PSC and the Commission; LIPA also has established a retail access tariff. These will be adjusted as necessary to reflect the transition from individual Member System OATTs to the ISO OATT and ISO Services Tariff. Each Member System retains the responsibility for filing its individual retail access tariffs with the appropriate state regulatory body and with the Commission in a timely manner, and to obtain required approvals.

Under the ISO OATT, all retail customers within the New York Control Area will be served by load serving entities responsible for arranging the supply of electricity for the customer. Four principal types of LSE will exist: (a) the Member Systems in their role as LSE for their remaining bundled native load, (b) retail marketers (frequently referred to as ESCOs in New York), (c) individual retail customers who satisfy eligibility requirements, and (d) municipal and cooperative electric systems. The latter generally do not conduct retail access programs and will not be discussed further here; similar arrangements would apply in

the event that a municipal system offers a retail access program. The LSEs have responsibilities under both the ISO OATT and the ISO Services Tariff.

C. Retail Access Under the ISO OATT

Under the ISO OATT, LSEs are responsible for providing forecasts and schedules to the ISO on behalf of their retail access customers. They have three ways to arrange delivery to their customers: the LSE may schedule transmission service for its load as a transmission customer under Part II or Part III of the ISO OATT (PTP service or Network); or it may rely on another transmission customer (e.g., a marketer) to deliver to its load; or it may schedule a direct purchase from the LBMP Market under the Services Tariff and the OATT on behalf of its load. Regardless of the delivery option, the LSE is responsible for the payment of ancillary services charges under the ISO OATT based on the actual energy withdrawals of its load.

The LSE's responsibility for payment of the TSC varies depending on the design of the Transmission Owner's retail access program. There are two basic models: under one approach (at this time adopted only by Rochester Gas and Electric Corp.) LSEs serving load within the RG&E service territory sign transmission service agreements with RG&E, to obtain sufficient transmission service to supply all of the requirements of their retail customers. These LSEs are billed by RG&E for transmission and distribution charges, which include RG&E's TSC.

Under the second approach (adopted by all remaining Transmission Owners excluding NYPA) the retail access end-use customers of each Transmission Owner are transmission customers under the ISO OATT. As outlined in Part IV of the OATT, these customers pay a TSC directly to their respective Transmission Owner. This TSC is referred to as a "retail

TSC" because it is found in the retail access tariffs of the Transmission Owners. The retail TSC may continue, at least for the near term, to be part of a delivery charge that also includes distribution charges. The LSEs serving these retail access customers also are transmission customers under the OATT.

Under both methods, the Transmission Owners are collecting their approved revenue requirements. Additionally, in both cases the collection of transmission revenues from retail customers is accomplished through retail access tariffs approved by the PSC and filed with the Commission, or lawfully approved by LIPA under state law.

Regardless of which model the Transmission Owner uses for TSC collection, the ISO OATT obligates all LSEs serving customers under retail access programs to fulfill the forecasting and scheduling requirements of the ISO OATT on an aggregated basis, and exempts the individual retail customers themselves. This avoids the potential inefficiencies the ISO might otherwise incur from dealing directly with many small customers.

The Transmission Owners will, at least for the near term, continue to be LSEs on behalf of native load customers. Those Transmission Owners that are investor-owned utilities, currently retain statutory obligations to serve as providers of last resort, and beyond that mandatory role, the Transmission Owners, at least for the present, continue to supply those customers that have not switched to alternative suppliers. In serving their remaining bundled service customers, the Transmission Owners enjoy no special treatment under the ISO OATT. Service is provided to the Transmission Owners acting as LSEs in a manner comparable to all other LSEs, and the ISO OATT does not disadvantage other LSEs seeking to compete to serve customers. The ISO's settlement procedures require that the Transmission Owners be treated the same as any other LSE when the determination of ISO

charges is made, when losses and unaccounted-for energy are allocated, and when other charges are assessed.

D. Retail Access and the ISO Services Tariff

The ISO's Services Tariff provides market participants with access to the LBMP markets administered by the ISO. All LSEs serving retail load, including those who do so under retail access programs, have the opportunity to buy and sell energy in the day-ahead and real-time LBMP markets, in conjunction with whatever resources they may own or contract for separately. LSEs also bear responsibility for procuring adequate installed capacity for the loads they supply, under the terms of the Services Tariff. They may do so through self-supply, through separate contractual agreements with generators, or through participation in auctions conducted by the ISO. These rights and responsibilities apply to all LSEs in the New York Control Area, under comparable terms and conditions.

E. ISO Settlement Under Retail Access

The ISO's OATT and Services Tariff and the retail access tariffs of the Transmission Owners require a determination of the actual hourly loads served by each LSE. This determination is needed to ensure that cost for services provided under each of the tariffs is allocated to and borne by the appropriate LSEs, to ensure that the LSEs are fulfilling installed capacity and other applicable obligations, and to enable LSEs to participate in the LBMP markets. The ISO will be applying zonal prices for energy for this settlement process, so it will require load data for each LSE by hour and zone.⁶²

⁶² Settlement with generators will be based on locational prices for the individual generator buses; only load will settle on a zonal basis. Application of locational prices for loads will be the subject of a future filing, as directed by the Commission in its January 27 Order.

As an initial condition, the load data required to accomplish the settlement functions will not be directly available to the ISO. However, using existing data collection processes the Transmission Owners have timely access to load data for all loads within their service territories. In some cases, metering is available to provide actual hourly loads for specific customers, but for most smaller loads (primarily small commercial and residential customers) monthly or bi-monthly energy (kWh) data are all that are available. Each Transmission Owner will develop customer class or type load profiles and apply them to the non-hourly metered load data to produce estimated hourly usage for each load. The profiles will be consistent with the retail access plans of each Transmission Owner, and will be used by the ISO in the settlement process under both the ISO OATT and the ISO Services Tariff.

The ISO will have adequate transmission system data to establish the total load within each zone. In those cases where a zone includes the service territories of multiple Transmission Owners, the ISO will rely on metering data provided by the Transmission Owners to allocate the load in the zone among Transmission Owners involved, defining each Transmission Owner's service territory as a subzone for settlement purposes. The Transmission Owners will have responsibility to allocate the losses, 63 theft, and unaccounted for energy within their subzones among the LSEs serving load in those subzones. Each Transmission Owner will be responsible for completing the aggregation of each LSE's load data, adjusted for these factors, and ensuring that the sum of all LSE loads in each subzone equals the total subzone load established by the ISO. The

⁶³ These are losses that are incurred at lower voltage levels on facilities that are not part of the ISO's transmission model, and therefore are not losses that would otherwise be covered by the LBMP prices.

ISO in support of the ISO's billing and settlement processes. Throughout this process, the Transmission Owners will be treated no differently from any other LSE with respect to the determination of their loads, and they will receive comparable treatment from the ISO.

VIII. CONCLUSION

The Member System respectfully submit that this filing complies in full with the Commission's Orders of June 30, 1998 and January 27, 1999, and request prompt Commission approval of the filing and all other pending matters related to the Member System's Comprehensive Proposal to Restructure the New York Wholesale Electric Market.

APPENDIX A: AFFIDAVIT OF J. STEPHEN HENDERSON

[provided under separate cover]

APPENDIX A

UNITED STATES OF AMERICA

BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

Central Hudson Gas & Electric Corporation) Docket Nos.	ER97-1523-000
Consolidated Edison Company of New York, In	c.)	OA97-470-000
Long Island Lighting Company)	ER97-4234-000
New York State Electric & Gas Company)	(not consolidated)
Niagara Mohawk Power Corp.)	
Orange and Rockland Utilities, Inc.)	
Rochester Gas and Electric Corp.)	
Power Authority of the State of New York)	
New York Power Pool)	

AFFIDAVIT OF J. STEPHEN HENDERSON

I. INTRODUCTION

My name is J. Stephen Henderson. I am an economist and Vice President of PHB Hagler Bailly ("PHB"). PHB, a subsidiary of Hagler Bailly, Inc., is an economics and management consulting firm with U.S. offices in Cambridge, Washington, Los Angeles, Palo Alto, and Boulder, among other cities. Hagler Bailly, Inc. is a worldwide provider of consulting, research and other professional services to corporations and governments on energy, telecommunications, transportation, and the environment. Analyzing competition and pricing issues in regulated

industries has been an important focus of my professional experience. A more complete description of my qualifications is included as Exhibit No. 1 (JSH-1).

I have been asked by the Member Systems of the New York Power Pool to provide an explanation of how and why the transmission services offered under the New York Independent System Operator (ISO) transmission tariff are equivalent or superior to those required under the Commission's Pro Forma tariff. As part of their compliance filling, the Member Systems are filing an Open Access Transmission Tariff (OATT), and an ISO Market Administration and Control Area Services Tariff (Services Tariff). These tariffs are described in the accompanying Filing Summary and are incorporated herein by reference.

Purpose and Scope of This Affidavit

In its January 27, 1999 Order the Commission stated:

With respect to absence of long-term firm transmission service at a fixed price under the New York ISO tariff . . . this proposal allows Member Systems to retain their long-term firm rights, while providing no avenue for customers under the proposed New York ISO tariff to obtain long-term firm rights. Accordingly, we direct the member Systems to reinstate the <u>pro forma</u> long-term firm tariff services and to extend to all users enough six-month TCCs to cover the length of their transmission service. January 27 Order, 86 FERC at 61,208.

The purpose of my affidavit is threefold: first, to explain how the Member Systems have addressed this directive; second, to demonstrate that the revised ISO OATT provides the Pro Forma transmission services sought by FERC in a manner consistent with the approved LBMP congestion management system; and third, to explain why the revised ISO OATT is equivalent or superior to both the Pro Forma tariff and the approach adopted by PJM.

My affidavit focuses on the revised ISO OATT and in particular on how Network Integration Transmission Service (network service or NITS) and Point-to-Point (PTP) transmission service will be provided under it. I do not address the ISO Services Tariff, per se, except to the

extent needed to discuss the congestion management system based on Locational Based Marginal Pricing (LBMP), which is common to both tariffs. I also do not address ancillary services, which are discussed in the Filing Summary.

Summary of Conclusions

In the January 27 Order, the Commission was concerned that long-term firm service be provided at a fixed price and that the incumbent utilities not be able to achieve price certainty more easily or for longer time periods than other transmission users. The revised OATT addresses both concerns. First, it ensures that long term network and firm PTP service will be made available at a fixed price so that LSEs and other transmission customers can have price certainty. Second, it provides these long-term tariff services in a manner that is comparable for incumbent utilities and new transmission customers. It accomplishes both of these objectives and, at the same time, preserves the LBMP congestion pricing model that was approved by the Commission.

As described below, network and firm PTP services are available under the OATT on a long-term fixed-price basis. The fixed-price feature is provided through the ISO's auction of long-term Transmission Congestion Contracts (TCCs with a term of one year or more), through which any transmission customer can obtain price certainty between any injection and withdrawal locations at market prices.¹ The long-term feature is provided according to the term of the TCC itself. The initial long-term TCC auction will be scheduled so as to provide long-term TCCs starting on May 1, 2000, the beginning of the 2000 Summer Capability Period. As a separate

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A TCC is a financial instrument that specifies a number of MWs, a point of injection and a zone of withdrawal. It entitles the holder to a payment in each hour during which it is effective equal to the difference between the congestion cost components of the locational prices at the zone of delivery and the point of injection for each MW. As such, it can act as a financial hedge against the corresponding day-ahead congestion cost risk. The definition of the TCC has not changed in this compliance filing.

matter, TCCs also will be available through an ISO auction for the interim period between the operational date of the ISO and April 30, 2000. Importantly, price certainty is achieved under the New York approach by paying a TSC (for residual embedded costs) and acquiring a TCC. This differs from the PJM approach of providing FTRs at an embedded cost price. I explain later in this affidavit why the New York approach has certain advantages, in my view.

To address the Commission's concern about comparability, the Member Systems have revised their proposal to eliminate the concept that Transmission Owners will hold so-called Native Load TCCs. As a result, Transmission Owners will procure their TCCs, including those needed to serve native load, through the ISO auction like all other transmission customers. This ensures that future transmission services provided under the revised OATT and future market and control area services provided under the Services Tariff will be comparable for all transmission customers, including services provided to the Member Systems on behalf of remaining native load customers and services provided to other transmission customers, such as unbundled retail transmission customers or energy service providers.

The revised OATT provides network and PTP services within the framework of the congestion pricing model approved by FERC for New York. That is, the congestion pricing model based on LBMP has not changed in this compliance filing. Rather, in this filing network and PTP transmission services are defined explicitly within the LBMP framework, whereas such services were implicit in the previously filed tariff. Network and Point-to-Point transmission services under a congestion management system based on locational prices necessarily differ somewhat from the definition of those services in the Pro Forma tariff. The basic difference between the Pro Forma tariff approach and that adopted in the ISO OATT stems from the emphasis placed on financial rights in the New York model versus the physical rights approach implicit in the Pro Forma tariff. The New York model is premised on a bid-based re-dispatch of participating

generation resources within the New York Control Area (NYCA) so as to alleviate potential overloading of the transmission system. Under this model, the ISO can use pricing mechanisms to allocate scarce transmission capacity, especially for internal transactions, more readily and efficiently than would be possible under the Pro Forma tariff, which relies more heavily on non-price allocation mechanisms.

It is important to recognize that the difference between the two approaches is a matter of degree. That is, both approaches incorporate both price and non-price allocation mechanisms, but the New York approach integrates transmission congestion management and energy trading more fully thereby obviating the need for certain non-price rationing rules, such as first-come, first-serve rules or priority-of-use rules. As I explain in depth in this affidavit, in my view the approach used in the ISO OATT is superior in some respects and essentially equivalent to the Pro Forma tariff in all other respects. The revised ISO OATT appropriately addresses the Commission's concerns in the January 27 Order, and is superior to the PJM model in certain respects.

II. DESCRIPTION OF TRANSMISSION SERVICE UNDER THE ISO OATT

A. Firm Service for Load in the New York Control Area

The ISO OATT provides unbundled transmission service to all eligible customers in the New York Control Area (NYCA). All NYCA load not served under bundled retail tariffs of individual Transmission Owners or under grandfathered transmission agreements will take transmission service under the ISO OATT and pay a volumetric (in MWh) Transmission Service Charge (TSC) covering the residual revenue requirements of their Transmission Owner.²

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The residual revenue requirement is the TO's revenue requirement net of credits for wheeling revenues, TCC auction revenues, excess congestion revenues, and other revenues. Collection of the TSC will differ by TO. In most cases it will be collected directly from end-use customers through a delivery service charge. Further details on this are provided in the Filing Summary.

Under the ISO OATT, Load-Serving Entities (LSEs), such as energy service providers that aggregate retail access load or municipally-owned utilities, can obtain network or Firm PTP service. Current municipal customers will pay the TSC for any new transmission service under the revised OATT to the appropriate Transmission Owner for either network or PTP service on the basis of the monthly energy withdrawn from the grid. The TSC is paid in Part 4 of the OATT in the case of retail access customers. In effect, all load in the New York Control Area is responsible for paying the TSC associated with any new transmission service. The LSE also will pay the ISO for ancillary services on the basis of monthly energy withdrawn. To the extent that the LSE schedules a bilateral transaction, it will pay the ISO a Transmission Usage Charge (TUC) covering congestion charges and losses attributable to its transmission schedule.³ At the LSE's option, it may purchase a TCC at a market price to provide a financial hedge against the congestion charge component of the TUC.⁴

Apart from LSEs, any other eligible customer, e.g., a generation owner or a marketer, can obtain firm transmission service from the ISO under the same terms and conditions as are available to an LSE. Such transmission customers pay the TUC and for any purchased TCCs, but do not necessarily pay the TSC, as discussed below. Payment for the TSC is made directly to the individual Transmission Owner, while the TUC and the market price for any purchased TCCs are paid to the ISO. Accordingly, the financial settlements between the ISO and eligible customers are the same for all customers, and involve the TUC and TCCs. In effect, the ISO is responsible for the congestion management system (congestion charges, TCCs, and marginal

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An LSE can elect to purchase directly from the LBMP market under the Services Tariff. In this case, the LSE will pay implicitly for transmission congestion since it is a component of the locational price. These implicit congestion charges are identical to those that are collected as an explicit transmission congestion charge in the TUC. The equivalence between these two mechanisms for collecting congestion charges is critical to preserve unbiased and rational decision making by customers in choosing between the LBMP and bilateral markets.

Similarly, an LSE may wish to purchase a TCC in order to hedge the congestion costs associated with a power deal made through the LBMP market.

losses), while the residual revenue requirement is collected by the Transmission Owners directly from load (and certain others) without the ISO acting as the intermediary. This arrangement allows the ISO to have the same financial arrangements with all eligible customers. All of the transmission customer's arrangements with the ISO (regarding scheduling and financial settlement of the TUC and TCCs) are essentially equivalent for all eligible transmission customers, whether the customer is an LSE or not. Moreover, all transmission customers are subject to the same priority rules in case of system emergencies.

Under the Pro Forma tariff, firm transmission service has two important features: the price is fixed and the service cannot be interrupted for economic reasons. Under the ISO OATT, service with both of these features is obtained in a two-step process. First, firm service is provided if the customer is willing to pay for transmission congestion costs, in which case the service is not interrupted for economic reasons. This is true for both network and PTP service. The congestion cost of firm service could be quite high, depending on the severity of the congestion in any particular hour. Accordingly, firm service does not necessarily have a fixed price under this approach. Second, a fixed price can be secured by acquiring a TCC corresponding to the service desired by the customer in terms of MWs, point of injection, and zone of withdrawal. That is, customers interested in obtaining fixed-price firm service may purchase a TCC, which in effect converts a variable congestion charge to a fixed payment for congestion for the term and quantity of the TCC. The fixed payment is the market price of the TCC. Thus, a transmission customer at risk for congestion costs can fix the price of transmission service by holding a TCC corresponding to the generation location and load zone of interest.

B. Firm Service for External Customers

External Point-to-Point transmission service is available for wheeling out and wheeling through services, in which the load ultimately served by the customer is not contained within the

NYCA. The delivery point for the New York External PTP service is a location on the border of the ISO. External Firm PTP customers pay a flow-based TSC associated with that delivery point, plus the TUC and the market price for any purchased TCCs. In effect, external transmission customers are considered to be serving an external load and as such are responsible for paying the TSC similar to the internal load.

C. Firm Service for Internal Customers that are Not LSEs

Transmission customers who are not LSEs and who use Firm PTP transmission service to deliver energy to load located within the New York control area do not pay the TSC (because it is paid directly by the load to the Transmission Owner), but are responsible for the TUC and any purchased TCCs. TCCs provide the same form of firm fixed-price transmission service for non-LSEs as is available to LSEs in the New York control area.

D. Non-firm Service

Non-firm PTP transmission service is available for transmission customers who indicate that they are not willing to pay congestion costs. In the event that a congestion charge occurs between the injection and delivery points, the customer's schedule would be interrupted. The price of this service is a charge for losses, as well as the applicable TSC. If a transmission customer schedules a non-firm transaction on behalf of load in the New York control area, and the schedule is interrupted, the load will be able to purchase energy from the LBMP market. The TSC charge would still apply, however.

III. RELATION OF SERVICES TARIFF TO TRANSMISSION TARIFF

All LSEs serving load in the NYCA must sign the Services Tariff and are required to procure generation capacity under the Installed Capacity requirements administered by the ISO.

Under the Services Tariff requirements, owners of generators that provide Installed Capacity to any LSE in New York must agree to participate in the New York day-ahead LBMP market under certain conditions. In particular, the amount of capacity sold as Installed Capacity to an LSE must be made available to the day-ahead market (either through a bilateral schedule or through the LBMP market) if the capacity is available. The ISO will establish the rules governing the operation of the Installed Capacity market. LSEs signing the Services Tariff can purchase directly from the LBMP market for their load under the Services Tariff or can schedule a bilateral transaction under the OATT.

The ICAP program fulfills an important reliability function for the NYCA. It ensures that adequate generation capacity will be available to support the energy market for all LSEs in New York. It does this by making the ICAP resources available to the market as whole through the Services Tariff. In the OATT, the aggregate amount of Installed Capacity procured by all LSEs constitutes the Designated Resources of the Network Transmission Customers as a whole. Apart from the restriction that generators supplying Installed Capacity must participate in the day-ahead market, no other restrictions apply to the Designated Resources of Network Service Customers. That is, the aggregate designation of all installed capacity resources places no restrictions on individual LSEs in scheduling or trading in any market. LSEs serving load internal to the NYCA can schedule transactions day-ahead with ICAP resources regardless of whether the LSE is taking Network or PTP service. Further, nothing prevents an LSE from entering into an Installed Capacity contract with one generator and scheduling energy deliveries from another. The former generator would be obligated to make the contractual amount of its Installed Capacity available to the day-ahead market; however, no similar obligations necessarily would pertain to the latter generator. The LSE could schedule energy deliveries from a generator that either is an Installed Capacity provider to some other LSE or is not a supplier of Installed Capacity at all. In the aggregate, reliability in terms an adequate supply of generation is assured because all ICAP

resources must be available to New York load either through the LBMP market or through a bilateral schedule to New York load supported by PTP transmission service.

Some transmission customers, those not serving load, have an option as to whether or not to sign the Services Tariff. If the transmission customer signs the Services Tariff, it can use the LBMP market to buy or sell energy. The real-time LBMP market provides a market-driven mechanism for settling energy imbalances for such customers. Accordingly, transmission customers signing the Services Tariff are assessed imbalance charges under the OATT based on the LBMP real-time market. In contrast, transmission customers who choose not to sign the Services Tariff are charged for balancing service at the higher of the LBMP price or \$100 per MWh for any energy imbalances. This approach is consistent with the Pro Forma tariff.⁵

IV. WHY THE NEW YORK APPROACH IS EQUIVALENT OR SUPERIOR TO THE PROFORMA TARIFF

The New York approach differs from that of the Pro Forma tariff in that it separates transmission access, congestion management, fixed-price transmission service and the designation of generation resources, thereby allowing the associated markets to function independently of one another. Under the Pro Forma approach, these activities are linked together in ways that can impede efficient markets. While these activities are separated under the New York approach, the transmission customer has the option to combine them so as to create any service that is functionally equivalent to the Pro Forma services. As explained below, such options benefit the transmission customer without losing any of the advantages that the Commission sought to provide in Orders 888 and 889.

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For customers choosing to sign the Services Tariff, the provision of balancing services based on bids in the ISO coordinated imbalance market most likely is superior to the imbalance provisions of the Pro Forma tariff. This is because the market coordination provided by the ISO provides an efficient market-clearing process for imbalances.

A. Elements that are Essentially Equivalent to Pro Forma Approach

1. Recovery of Revenue Requirements

New York has adopted a coordinated approach to congestion management, transmission rights and the payment of residual revenue requirements. New York load and external transmission customers pay a volumetric TSC that covers the portion of the revenue requirements not covered by the congestion management system (and other revenue credits not relevant to this discussion), including the revenues from the sale of TCCs and any excess congestion costs paid in the day-ahead and balancing markets. This approach is essentially equivalent to the Pro Forma tariff in several respects:

Each TO recovers 100 percent of its revenue requirements under the New York approach. The New York approach accomplishes this using a two-step procedure. First, the ISO administers the congestion management system. This system produces revenues from the sale of TCCs, which are sold at auction at a market-clearing price. The TCC auction revenue is passed on to the TOs by the ISO. The congestion management system also may potentially produce some excess congestion revenues if congestion charges under the LBMP system exceed payments made to TCC holders. If so, these excess congestion revenues also are passed on to the TOs. Second, these sources of revenues from the congestion management system (and other sources of transmission revenue, for example, from grandfathered transmission contracts) are credited by the Transmission Providers in the calculation of the TSC. In this way, the TSC can be considered as the load-based mechanism for recovering the residual revenue requirements (those not recovered by the congestion management system). In effect, the TSC is similar to a load-based access charge

- The New York TSC is a load-based volumetric rate, as opposed to the load-ratio demand charge approach in the Pro Forma tariff.⁶ Both approaches can be used to recover residual transmission revenue requirements with a minimum of economic distortion to consumption or production decisions, since both are charges paid by LSEs, as opposed to generators.⁷
- The TSC is adjusted monthly for various cost adjustments, such as direct sales of TCCs, excess congestion revenues or costs, and revenues from External PTP service.
 This is essentially equivalent to the Pro Forma tariff that has a monthly redetermination process.

2. Grandfathered rights

An LSE also may be a party to a grandfathered transmission contract. If so, the pricing provisions of the contract remain in effect until changed according to the terms of the contract itself or until the contract terminates. The contracting party has the option to retain the contractual rights (typically involving physical scheduling rights) or to convert the contractual rights to TCCs. If the TCC option is chosen, the basic pricing provisions of the contract remain the same and can be changed only according to the terms of the contract itself.

The New York approach recognizes the grandfathered rights that exist under current contractual arrangements. Transmission customers can continue to exercise these rights and will pay the current contractual rate. These arrangements accommodate most of the needs of the

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⁶ In effect, the TSC is an access charge assessed on the withdrawal of energy.

Economic theory suggests that residual revenue recovery of this sort should be collected from price inelastic customers, which tends to be load rather than generators in the electricity context. This reasoning applies equally well to the New York and Pro Forma approaches, so they are essentially equivalent.

wholesale market as an initial matter, but do not address native load needs as discussed below.⁸ This is consistent with the Pro Forma tariff and Order 888 in that it recognizes the need to honor prior commitments.

3. Long-term TCCs

Long term TCCs will be available to market participants for one year or longer, beginning in the Spring of 2000. The ISO will assess the market demand for TCCs of varying time periods and will decide on a set of TCC products that would satisfy market participants. TCCs could be offered that have a term as short as six months, or as long as 5 years.

As an initial matter, the ISO would offer TCCs in the first auction that would extend from the date of initial ISO operations through the 1999-2000 winter capability period, a period of about 6 to 8 months. Under this plan, TCCs from the first auction would extend from the first day of New York ISO operations until April 30, 2000. This approach will allow market participants to gain experience with the New York market and observe locational prices before making longer-term TCC commitments.

An implication of this plan is that during an interim startup period new transmission customers will not be able to obtain long-term price certainty beyond April 30, 2000; however, long-term price certainty would become available through an auction of long-term TCCs (for one year or more) in time for the 2000 Summer Capability period, starting on May 1, 2000. This approach can benefit both potential TCC buyers by providing experience that will reduce uncertainty and also transmission customers as a whole, who ultimately would pay for any inefficiencies of a premature auction through the residual cost recovery mechanism of the TSC. I

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The remainder of the market demand for transmission rights will be accommodated through the TCC auction.

understand that the ISO is willing to provide long term TCCs in the initial auction if the Commission requires it to do so. In assessing this issue, it is important to consider the following:

- A large fraction of the New York transmission capacity needed to support current wholesale customers such as municipal electric systems is currently held under long-term commitments through grandfathered contracts.
- The deferral of a long-term TCC auction for a short period of 6 to 8 months at the outset of the New York ISO markets does not mean that transmission capacity is not devoted to the support of long-term firm transmission service similar to that required under the Pro Forma tariff. Grandfathered rights perform this function for a portion of the transmission capacity as an initial matter under the New York approach, especially that needed for current wholesale service.

In my view, the issue to be assessed by the Commission here is quite narrow. It is whether the public interest would be served by allowing the ISO to postpone the long-term TCC auction for about six months in order to allow market participants to gain needed experience with locational pricing. In so doing, the interim need for fixed-price transmission service would be satisfied by the auction of interim 6 to 8 month TCCs and the secondary trading of existing rights. Apart from this issue regarding the timing for the initial offering of long-term TCCs, the New York approach provides transmission service that is essentially equivalent to the long-term firm transmission service under the Pro Forma tariff. Both approaches can provide long-term fixed-price transmission service that is not subject to interruption for economic reasons. The initial offering of *new* long-term TCCs would occur in early 2000 under the New York proposal.

4. Comparable treatment of all new service

The ISO will treat all requests for new transmission service in the same manner, regardless of whether the service is in support of wholesale or retail access programs, and also regardless of whether the load is served by one of the existing TOs or not. The provisions for paying the TSC, the TUC and obtaining TCCs apply to all new transmission service equally. During the transition to full retail competition, existing customers retain certain rights and rate treatments that have been approved by the New York Public Service Commission and other retail access programs develop by other Transmission Owners, such as NYPA and LIPA. While these voluntary arrangements differ from utility to utility in the way that they preserve these existing rights and rate provisions, they do not apply to the ISO and its provision of transmission service under the OATT. Consequently, all new transmission service obtained from the ISO will be provided under equivalent and therefore comparable conditions.

The ISO also will treat all inquiries that potentially might lead to transmission expansion in the same manner. Any customer can request a System Impact Study and the follow-on Facilities Study in order to assess its interest in paying for grid expansion. Importantly, the New York approach provides an objective way of measuring the additional transmission rights (TCCs) associated with a proposed expansion through a simultaneous feasibility test. Any customer deciding to move forward on an expansion project will have the same opportunity to receive long-term TCCs in exchange for an agreement to pay for the expansion. This principle is consistent with the Pro Forma tariff. Constitution of the expansion of the expansion of the expansion of the expansion.

The simultaneous feasibility test determines whether a set of TCCs can be simultaneously accommodated by the capacity of the New York grid in the sense that power could be injected and withdraw at the various locations and in the amounts specified by the set of TCCs.

In my view, the New York tariff potentially provides better support for a customer-driven approach to transmission expansion than does the Pro Forma tariff, and if so this would argue that the New York approach is superior. This is because the benefits of an expansion may be clearer. That is, incremental TCCs seem likely to be measured

Moreover, in the compliance filing the TOs have agreed to make the capacity previously used to support Native Load TCCs (which is called Existing Transmission Capacity for Native Load in the compliance filing) available in the ISO's TCC auction. This helps to ensure that the initial allocation of TCCs will be considered to be fair and impartial by all market participants. The utility's merchant function will need to compete on an equal basis in the TCC auction to procure any TCCs needed for any purpose, whether it is for the wholesale merchant business or retail merchant business. This helps to assure that wholesale customers, bundled retail customers, and unbundled retail customers will be treated comparably.

5. Provision of Non-Firm Service

The provision of Non-firm Point-to-Point transmission service under the New York approach is essentially equivalent to that required under the Pro Forma tariff. Both services can be interrupted for economic reasons. Such economic reasons are clearly indicated in the New York approach by a positive congestion price between the source and sink points of the transaction.

with more certainty under the New York tariff than the corresponding measurement of incremental ATC under the Pro Forma tariff. However, numerous practical details in the way each approach would be implemented must be known before a full assessment would be possible.

In the previous filing, the Member Systems proposed to retain certain non-grandfathered transmission capacity in the form of "Native Load TCCs", which would have been made available and sold into the market in the normal course of each utility's business plans. For example, these Native Load TCCs could have been retained to support native load obligations during the transition to retail competition (effectively transferred to the utility function responsible for remaining native load obligations at an internal transfer price), or they could have been sold to non-affiliates in support of the retail access program. The Commission questioned the comparability of this arrangement (New York Order Mimeo at 9, footnote 14) and separately directed the Member Systems to provide a detailed proposal for releasing the Native Load TCCs as part of a future filing dealing with retail transmission issues (New York Order Mimeo at 55). By agreeing to release the Native Load TCCs in the TCC auction, the Member Systems have addressed the comparability concern (TCCs to support retail customers are purchased through the auction, regardless of who serves the retail customer) and rendered moot the need for a detailed proposal for releasing the Native Load TCCs.

6. Provision of Firm Service

The provision of firm fixed-price transmission service (either as network or point-to-point service) under the New York approach is equivalent to firm transmission service under the Pro Forma if the transmission customer schedules transmission service that matches its TCCs. If not, the New York approach is superior in my view. This is because a customer can change its points of injection or withdrawal directly with the ISO and can receive the economic value associated with its financial transmission right (TCC) without having to enter into a separate transaction in the secondary market to resell its transmission right, which may or may not be successful. The redispatch associated with the LBMP markets in effect automatically provides a well-functioning secondary market for holders of transmission rights who want a day-ahead schedule other than the one associated with their TCC.

B. Elements that are Superior to the Pro Forma Approach

1. More Efficient Allocation of Transmission Rights than PJM

The New York approach promotes economic efficiency by allowing market participants to express their preferences for TCCs independently of any commitments to purchase Installed Capacity or payments made to cover residual revenue requirements. An alternative approach would be to tie the allocation of TCCs to the designation of generation resources and require the payment of an embedded cost rate in some fashion. PJM has adopted a version of this type of tying arrangement. In the PJM market, LSEs receive Fixed Transmission Rights (FTRs) from the location of their Designated Resources to their load, with the total number of FTRs limited by the amount of peak load. LSEs pay the embedded cost rate of their own Transmission Provider. This approach creates a linkage between generation capacity (Designated Resources) and transmission rights (FTRs), in exchange for the payment of an embedded cost rate.

While the PJM approach has certain merits, the New York approach is superior in my view. The PJM tying arrangement can reduce customer flexibility in choosing points of injection for TCCs. While the New York rules will require LSEs to hold ICAP, there is no restriction on the holdings of TCCs in relation to the ICAP requirement. Accordingly, the market for TCCs and ICAP can operate independently, thereby maximizing the efficiency of each. A tying arrangement between TCCs and ICAP, such as adopted by PJM, also creates a risk that market participants will act strategically in specifying Designated Resources so as to acquire valuable TCCs or to avoid TCCs with negative value. This type of behavior can distort the generation market, but is not expected to arise under the New York approach because the TCCs will be allocated in an auction.

A second issue that arises under the PJM tying arrangement is that the value of the transmission rights acquired with Network Service can vary from customer to customer depending on the location of the customer's Designated Resources. Accordingly, the fixed price paid by each network customer under the PJM approach can be the same (within the same zone), but the value of the transmission rights (FTRs) acquired by each customer with its Network Service can differ widely. In contrast, under the New York approach, each customer pays a market-clearing price for the TCCs that it wants to hold. This results in some customers paying different fixed prices (the same TSC, but a different TCC price); however, customers paying a higher fixed price will receive more valuable transmission rights, e.g., a TCC with a higher value associated with transmission service over a frequently congested transmission interface. In this way, a transparent pricing mechanism will allocate TCCs, some of which are more valuable than others. Requiring that all transmission rights be sold at the same price necessarily means that some degree of non-price allocation must occur, which most likely will create some opportunity for strategic behavior. The New York approach avoids such complications and is superior to that of PJM, in my view.

2. Efficient Use of the Grid and Ease of Redispatch

The economically efficient use of generation on the grid is achieved directly under the New York approach in which internal generators have the option of participating in the centrally facilitated LBMP markets, even when they are scheduling bilateral transactions to load located within or outside of the NYCA using Point-to-Point transmission service. The New York approach is superior by separating the dispatch functions and the secondary trading of financial transmission rights. Secondary trading of TCCs is not needed in order to have efficient use of the grid. In contrast, the efficient use of generation within New York would be difficult to achieve by the trading of physical transmission rights under the Pro Forma tariff approach. As is well known, efficient outcomes can require multilateral trading arrangements that go beyond bilateral secondary trading arrangements. While such multilateral trading is not prohibited by the Pro Forma tariff, it would be difficult to achieve in practice. The New York approach effectively conducts such multilateral trading in each TCC auction, and every day in the day-ahead and real-time markets. As such, it improves upon the secondary trading of transmission rights that appear to be possible under the Pro Forma tariff and promotes the development of competitive electricity markets consistent with Orders 888 and 889.

The New York congestion management system promotes economic efficiency in the use of the transmission grid by assessing the economic tradeoffs between various transactions that are scheduled on the grid. It does this through the Security Constrained Dispatch conducted in the real-time market, and also through the Security Constrained Unit Commitment conducted in the day-ahead market. Under this approach, each transmission customer bears the financial responsibility for the marginal congestion cost associated with its own transactions. In contrast, the Pro Forma tariff averages the redispatch costs of the network customer with that of the transmission provider and charges the customer an average-cost congestion price. This average

cost pricing does not send the correct price signal, which is the marginal congestion cost.

Accordingly, the New York approach is superior to the Pro Forma tariff.

Firm Point-to-Point transmission service is accommodated through the ISO's redispatch in the LBMP markets when there is congestion on the grid. Under the Pro Forma approach, it is theoretically possible for a customer to pay for the higher of embedded costs or accumulated redispatch costs and obtain firm service. In practice, the redispatch needed to support such service under the Pro Forma tariff is not practical most of the time. Accordingly, the New York approach is superior in the sense that it is likely to result in a more economically efficient use of the grid by generation resources. As such, it provides a way to implement the Commission's opportunity cost pricing policies.

3. Less Reliance on Curtailment

Under the Pro Forma tariff, customers receive firm transmission service in exchange for an embedded cost price. The Pro Forma service is physically firm, except when the service must be curtailed. Under the New York approach, the customer can receive firm fixed-price network or PTP service by scheduling a transaction and holding a TCC corresponding to the injection and delivery points of the schedule. The fixed price for such service consists of the TSC and the market price of the TCC. The TCC provides a firm financial hedge against the congestion risk between the two locations of the schedule. The New York approach is essentially equivalent to the Pro Forma approach, except that the New York approach may be superior when the Pro Forma physical rights must be curtailed. This would be true if, as seems likely, non-price curtailment must be invoked with less frequency under the ISO price-based congestion management system than would be necessary under the Pro Forma system of physical rights.

4. Improved Treatment of Designated Resources

Under the Pro Forma tariff, designated Network Resources are limited to those either contracted for or owned by the transmission customer. This limitation is needed to prevent the network customer from overspecifying Network Resources in order to obtain valuable transmission rights that could be used to import power. Under the New York approach, no such restriction is needed since the transmission customer must pay the market price for transmission service. By breaking the link between the ownership of TCCs and the designation of Network Resources, it is not necessary to protect against the potential strategic behavior anticipated by the Pro Forma tariff. Accordingly, the New York approach is superior to the Pro Forma tariff in that it imposes no restrictions on individual network customers on designating Network Resources.

Under the Pro Forma tariff, designated network resources are subject to certain restrictions. In particular, network transmission customers cannot use designated network resources to make a firm sale to a third party. Network resources, however, can be used to make non-firm sales. The Commission has indicated that the reason for this restriction is to ensure that the network customer's load can be served reliably. The New York approach provides similar assurance that NYCA load will be served reliably, but without the specific restrictions in the Pro Forma tariff. The reliability assurance in the New York approach is provided by the requirement that owners of generators that sell the Installed Capacity product in the New York market must make that capacity available to the New York day-ahead market. This type of restriction achieves the objective of assuring generation adequacy, but allows more flexibility than would be possible under the Pro Forma approach. Under the Pro Forma tariff, the restrictions are imposed on the network transmission customer, which is appropriate when the customer also owns or controls generation. Such an approach clearly would be inappropriate under the New York approach since the network customer might be an LSE, while the supplier of Installed Capacity might be an

independent power producer. Contracts for Installed Capacity will not transfer control to the LSE, so the sales restriction cannot be imposed on the LSE. Moreover, the Pro Forma restriction is customer specific, which could not be imposed on the New York market in any reasonable way. Such a customer-specific restriction would require that each supplier of Installed Capacity sell in the day-ahead market only to the LSE that purchased its Installed Capacity. This would mostly eliminate the market efficiencies from trading energy in the day-ahead market that the Commission is promoting in the first place.

Accordingly, I conclude that the New York approach of designating as network resources the aggregate of all Installed Capacity supplied in the NYCA fulfills the Commission's objective of maintaining reliability and does so with fewer market restrictions, thereby promoting market efficiency to a greater degree than is possible under the Pro Forma tariff. This aspect of the New York OATT is superior to the Pro Forma tariff, in my view.

5. Less Reliance on Service Priorities

Under the Pro Forma tariff, firm customers have priority over non-firm customers in exercising certain secondary transmission rights. Under the New York approach, such priorities are not needed. All such service (whether it is considered secondary or not) competes on an equal basis for transmission capacity through the congestion management system. Transmission customers effectively secure firm service through an economic-based "priority" system. Under the New York system, the firm customer does not need to formally schedule or designate any secondary points. This can be done automatically through the LBMP system. Those that are willing to pay the congestion charge can be expected to receive service, while those not willing to pay such charges will not receive service when transmission congestion exists. This approach is superior to the Pro Forma tariff in that the LBMP system provides an equal or more efficient

allocation of scarce transmission capacity than would be possible under the priority rules of the Pro Forma tariff combined with subsequent secondary market trading, if any.

6. Better Support for Retail Access Programs

The New York approach has several features that are designed to facilitate retail access programs. First, the New York TSC is a load-based volumetric rate, as opposed to the load-ratio demand charge approach in the Pro Forma tariff. Both approaches can be used to recover residual revenue requirements with a minimum of economic distortion to consumption or production decisions. The New York approach has an advantage of providing greater flexibility for Energy Service Companies (ESCOs) under the New York retail access program. Customers that switch between ESCOs can create artificial peak demand profiles for particular ESCOs that could lead to an unreasonably large demand charge. An energy-based TSC, such as proposed by New York, avoids this complication and more easily accommodates retail access programs.

Second, ESCOs do not need to designate network resources or contend with primary and secondary usage priorities, as required under the Pro Forma tariff. While these elements of the Pro Forma tariff are workable for wholesale competitive markets, they do not work as well under a retail access program having an Installed Capacity requirement. Instead of customer-specific designated resources and a system of priorities, the New York approach separates three major components of the electricity market: congestion management (TUC), transmission rights (TCCs), and Installed Capacity. The transparent prices associated with each of these three components allows ESCOs substantial flexibility in serving retail customers.

Third, the New York approach provides a mechanism for supporting retail customer choice by literally millions of retail end users. The LBMP market provides an efficient way to deal with the millions of small scheduling discrepancies that necessarily will be associated with a retail access

program and it provides the support needed by ESCOs to compete in the New York retail market on comparable terms and conditions with all other ESCOs.

V. CONCLUSION

In my view, the revised OATT of the New York ISO is superior to the Pro Forma tariff in many respects and is functionally equivalent in all other respects. It is superior in that it supports a security constrained dispatch approach that results in more efficient use of the grid, it imposes fewer market restrictions on designated resources, it allows for a market-driven approach to acquiring financial transmission rights (TCCs) that is comparable for all customers seeking new service from the ISO, it provides greater scope for market solutions to transmission congestion problems, and it supports the retail access programs of the New York utilities. It is essentially equivalent in all other respects, in that it provides for firm network and point-to-point transmission service that is not interruptible for economic reasons, it provides a mechanism for fixing the price of this firm service through the purchase of a TCC, it recovers no more than the transmission owner's revenue requirements, and it honors past commitments. The proposal provides for longterm TCCs beginning in the Spring of 2000, although not until that time. As a result, customers desiring long-term TCCs in the interim between the operational date of the ISO and April 30, 2000 must acquire them through bilateral arrangements. The ISO's initial auction will provide TCCs with a term ending on April 30, 2000. As an interim measure, this approach seems reasonable, in my view, in that it provides an opportunity for market participants to become familiar with the workings of the LBMP market and to assess the need for long-term TCCs.

APPENDIX B:

EXPLANATION OF DEVIATIONS FROM THE PRO FORMA TARIFF

This section delineates those areas where the Member Systems modified certain aspects of the language in the *pro forma* tariff in the development of the revised ISO OATT. ¹ Most of the changes to the *pro forma* language were made to accommodate the melding of the Member Systems' LBMP model, which was accepted by the Commission in the January 27 Order, into the Commission's *pro forma* tariff. In some cases, as explained by Dr. Henderson in his affidavit, LBMP does not conform to the Commission's *pro forma* language, although consistent with the Commission's objectives.

In his affidavit, Dr. Henderson states that:

Network Integration and Point-to-Point transmission services under a Congestion management system based on locational prices necessarily differ somewhat from the definition of those services in the *pro forma* tariff. The basic difference between the *pro forma* tariff approach and that adopted in the ISO OATT stems from the emphasis placed on financial rights in the New York model versus the physical rights approach implicit in the *pro forma* tariff. The New York model is premised on a bid-based re-dispatch of participating generation resources within the New York Control Area (NYCA) so as to alleviate potential overloading of the transmission system.

Henderson affidavit at 4.

Dr. Henderson continues by stating that "[i]n my view, the approach used in the ISO OATT is superior in some respects and essentially equivalent to the *pro forma* in all other aspects." <u>Id</u>. In addition to the changes made to meld the LBMP model with the *pro forma* tariff, the Member Systems made certain changes with respect to the tax-exempt obligations of NYPA and LIPA.

The following represents a listing of the changes made to the *pro forma* tariff:

A. Part I- Definitions

General - The Member Systems have changed the definition of Transmission Provider to Transmission Owner when referring to the owners of transmission facilities and have specifically referred to the ISO when appropriate to avoid confusion.

¹ Only substantive deviations are listed discussed in this Appendix, a redlined version of the OATT compared to the *Pro Forma* Tariff is included in this Compliance Filing.

Definitions 1.13 Firm Point-to-Point Transmission Service, 1.18 Long-Term Firm Point-to-Point Transmission Service, 1.27 Non-Firm Point-To-Point Transmission Service, and 1.42 Short-Term Firm Point-to-Point Transmission Service: These definitions have been changed to reflect the fact that under the LBMP model approved by the Commission Firm Point-to-Point service is available to customers willing to pay Congestion. Fixed-price Firm Point-to-Point service is available to a customer that purchases Transmission Congestion Contracts from the auction with the same Points of Receipt and Delivery as its Transmission Service. Long-Term Firm Point-to-Point service is replaced by Firm Point-to-Point service, the price of which is fixed for a long term by a Transmission Customer acquiring sufficient TCCs with the same Points of Receipt and Delivery as its Transmission Service. These changes are noted in the ISO OATT and discussed further in the Filing Summary.

Definition 1.16 Load Ratio Share: This is changed to the ratio of an LSE's Load to Load within the NYCA during a specified time period. The concept of Load Ratio Share under the *pro forma* as a means to access cost responsibility for Network Customers is not applicable in the LBMP model approved in New York.

Definitions 1.24 Network Operating Committee: The ISO Operating Committee will serve the function of the Network Operating Committee. The Commission has approved similar arrangements for other ISOs.²

Definition 1.25 Network Resource: This definition has been changed to reflect the fact that under the LBMP pricing model approved by the Commission, network customers are not limited to calling upon network resources that are "owned, purchased or leased by a Network Customer." Instead, Network Customers can designate any Installed Capacity Supplier to be its designated Network Resource. As explained in the Filing Summary, the Commission's objective of ensuring that Network Resources are available when needed to serve Network Load from a stand point of reliability is addressed by the fact that ICAP providers must be scheduled day-ahead and have an obligation to serve load within the NYCA prior to serving load outside the NYCA. This requirement addresses the Commission's reliability concern. The Commission also indicated that the "owned, purchased, or leased" requirement is designed to prevent the Transmission Owners from being forced to overbuild by upgrading the system to accommodate too many network resources. However, as explained in the Filing Summary, the Commission's concerns are not applicable here because, under the proposed network upgrade provisions of the New York ISO contained in Sections 31 and 32 of the Tariff, this situation will not occur.

The following represent changes that were made to Part 1 of the *pro forma*:

Section 1A This is a section on Term and Termination included in the Tariff filed by the Member Systems on December 19, 1997, which the Commission conditionally accepted. This section has been modified slightly.

² See Midwest Independent Transmission System Operator, Inc., 84 FERC ¶ 61,231 at 62,178 (1998).

2.1 Initial Allocation of Available Transmission Capability. This section is revised to include both the changes needed to accommodate LBMP pricing, <u>e.g.</u>, all customers willing to pay Congestion will receive firm service, and the concept of purchasing TCCS through an auction to obtain fixed price service. This section was also modified to reflect the fact that the ISO uses Security Constrained Unit Commitment, Balancing Market Evaluation, and Security Constrained Dispatch programs to determine whether existing capacity of the system is sufficient to accommodate all requests for firm service.

Section 2.2 Reservation Priority for Existing Firm Service Customers. This section was revised to reflect the fact that all transmission capacity associated with Grandfathered Rights and/or TCCs shall revert to the ISO and shall be offered for sale as TCCs in the next TCC auction.

Section 3 Ancillary Services. This section is revised to reflect the fact that discounting of ancillary services is not available or necessary under the New York model. Therefore, there is no need to include the provisions on how to discount on a non-discriminatory basis that are included in the *pro forma* tariff. This section was also revised to reflect the fact that under the LBMP model it is not possible to self-supply imbalance service because the ISO will balance load in Real-Time.

Section 3.1 - 3.6 This section is modified to reflect the fact that the ancillary services that the Commission approved in the January 27th Order are slightly different from the *pro forma* tariff.

Section 4 Open-Access Same Time Information System ("OASIS"). This section is revised to refer to the ISO's OASIS which includes a bid-post system. As discussed in the attached testimony of Dean Chapman, P.E., the ISO's OASIS provides much of the information that is required by the Commission's regulations along with some information which is not normally provided under OASIS (e.g., availability of TCCs). Moreover, the concept of Available Transmission Capacity (ATC) is treated differently, consistent with the LBMP method of allocating capacity by price. Finally, the ISO's OASIS also includes the Bid/Post system which is how requests for scheduling and bids to purchase and supply energy and ancillary services are handled.

Section 5 Local Furnishing Bonds. This section is modified to reflect some unique issues related to LIPA, NYPA and Con Edison's bond requirements. The title of this section was modified to make it applicable to NYPA and LIPA. The changes are consistent with the requirements of Order 888-A.

Section 7 Billing and Payment. This section is revised to reflect the billing and accounting system that has been established for the ISO. In general, the ISO will provide settlement and billing information to customers and suppliers. In certain instances, the ISO will facilitate the settling, billing and collection of charges. Specifically, to facilitate the workings of LBMP for the pricing of transmission services as well as energy, the ISO will establish an ISO Clearing Account. Market participants (including transmission customers)

will make payments to the account and receive payments from the account for the services they have received or provided. The ISO, as trustee of the Clearing Account, will administer this account (along with the associated invoicing and accounting) on behalf of all market participants. As such, although the ISO may facilitate the collection and disbursement of monies, it will not take title to any of the monies associated with the Clearing Account. Second, the billing and payment section includes a new provision, Section 7B, which explains the application of the TSC, TUC, NTAC, and other charges for services provided by the ISO to wholesale customers. As explained herein, the application of the TSC charge on Load located in the Transmission Owner's traditional franchise area was approved in the January 27 Order,³ and is consistent with the concept of a Grid Access Charge based on the local Transmission Owner's revenue requirement approved in California.⁴ All firm transmission customers pay for Congestion, unless they are served under Grandfathered arrangements. Non-firm customers pay only the losses component of the TUC (i.e., marginal losses). The TSC is always billed at least once for every transaction, and is never double charged. So, in the case of a marketer purchasing Point-to-Point service which is ultimately destined to serve load within the NYCA, the load pays the TSC and the firm Point-to-Point customer pays the Congestion and losses charges.

The TSC is similar to the charge approved in California. On November 26, 1996, the Commission approved the California ISO transmission access charge/grid access charge,⁵ which was reaffirmed by the Commission in a subsequent order.⁶ The California ISO's transmission access charge applies to parties that withdraw power from the ISO grid and recovers the revenue requirement associated with the facilities that the Transmission Owners transfer to the ISO.⁷ The access charge for a particular transaction is based on the Transmission District in which the customer withdraws power from the ISO grid.⁸ Accordingly, a customer pays a single transmission charge which may differ depending on where the power is withdrawn.⁹

According to the order, entities wheeling power through or out of the ISO grid would

³ January 27th Order at 61,211-213.

⁴ <u>Pacific Gas & Electric Co., et al.,</u> ("PG&E"), 81 FERC ¶ 61,122 at 61,504-505 (1997); <u>Pacific Gas & Electric Co., et al.,</u> ("PG&E"), 77 FERC ¶ 61,204 at 61,798-800 (1996).

⁵ PG&E, 77 FERC at 61,798-800.

⁶ PG&E., 81 FERC at 61,504-505 (1997)("In our November 26 order we stated that our preliminary review indicated that the ISO's transmission Access Charge rate proposal appeared to be a reasonable method of recovering the transmission revenue requirements of Participating Transmission Owners. We reaffirm that finding here.")

⁷ PG&E, 77 FERC at 61,798.

⁸ <u>Id.</u> at 61,798-99.

⁹ Id. at 61,799.

pay the transmission access fee of the Transmission Owner located where the power leaves the ISO grid.¹⁰ Where two or more Transmission Owners own the facilities at the exit point, the charge could be the weighted average access charge of all Transmission Owners of the exit point.¹¹ Further, parties wheeling power into the ISO grid and selling to either a direct access customer purchasing transmission service, a Transmission Owner, or a wholesale customer pooling transmission through the ISO, would not pay a transmission access fee, rather that charge would be paid by the power purchaser.¹² Additionally, all wheeling revenues would be treated as revenue credits to the Transmission Owners that are paid the access charge.¹³

Section 9 Regulatory Filings. This section has been revised to reflect the fact that Transmission Owners have the right to file changes in their revenue requirements. This section has also been revised to include the term Network Operating Agreement in addition to the Service Agreement.

Section 11 Creditworthiness. This section has been modified to include specific references to add detail as to how the ISO will determine creditworthiness and also includes a provision that the ISO can terminate service, upon sixty-days prior notice, if a customer cannot demonstrate its creditworthiness. In practice, the ISO will request waiver of the sixty-day notice requirement to the extent required in order to protect itself from risk of bad debt, which, under the ISO OATT is passed through to all customers under Schedule No. 1.

Section 12 Dispute Resolution. This section was modified to make it consistent with the ADR process contained in the Services Tariff and the ISO Agreement. This ADR process provides for both mediation and arbitration. The main difference is that the revised ADR process takes out references to choosing multiple arbitrators if the parties cannot agree on one arbitrator. It does, however, provide a mechanism for selecting a single arbitrator. In response to the Commission's order, the ADR provision in the OATT has been modified to require that all arbitration decisions be filed with the Commission.

The following represent changes that were made to Part II. (Point-to-Point Transmission Service) from the *pro forma* tariff:

Preamble. As indicated above, these changes were made to meld the mechanics of the LBMP model with the language in the *pro forma* tariff. Specifically, the Preamble was modified to reflect that under the LBMP model approved by the Commission, Firm Point-to-Point service is available to customers willing to pay Congestion. Fixed-price firm Point-to-

¹⁰ <u>Id.</u>

¹¹ <u>Id.</u>

¹² <u>Id.</u>

¹³ Id.

Point service is available to a customer that purchases Transmission Congestion Contracts with the same Points of Receipt and Delivery as its Transmission Service. Long-Term Firm Point-to-Point service is replaced by Firm Point-to-Point service, the price of which is fixed for a long term by a Transmission Customer acquiring sufficient TCCs with the same Points of Receipt and Delivery as its Transmission Service. Long-term TCCS are now available through the auction process. Dr. Henderson states in his affidavit that these changes are superior or essentially equivalent to the *pro forma* tariff.

Section 13 Nature of Firm Point-to-Point Transmission Service. As previously explained, this section was modified to accommodate the LBMP model.

Section 13.1 Term. This section has been modified to reflect the fact the under LBMP the minimum term of firm Point-to-Point transmission service is one hour.

Section 13.2 - 13.3 Reservation Priority and Use of Firm Transmission Service by the Transmission Provider. As discussed above, and in the transmittal letter, under LBMP all customers willing to pay Congestion will receive firm service. This pricing allocation method eliminates the need for prioritizing requests on the basis of first-come, first-served, as explained in Dr. Henderson's affidavit.

Section 13.4 Service Agreements. Under the LBMP model, market participants schedule their service daily and the system is redispatched every hour. Thus, there is no need for a transmission customer to specify a term of service on the service agreement. As explained elsewhere in this Filing Summary, should a transmission customer desire to have Long-Term Fixed-Price Transmission Service, that customer can do so through the purchase a TCC corresponding to the customer's Points of Delivery and Receipt.

Sections 13.5 Transmission Customer Obligation for Facility Additions or Redispatch Costs; Section 30.5 Network Customer Redispatch Obligations; Section 33.2 Transmission Constraints; Section 33.3 Cost Responsibility for Relieving Transmission Constraints. These sections are revised to reflect the fact that under LBMP the system is continuously redispatched and that the redispatch costs will be assigned consistent with the LBMP pricing model described in Attachment J.

Section 13.6 Curtailment of Firm Transmission Service. This section is revised to reflect the fact that the ISO will proportionally allocate curtailment among the Network Customers and the Point-to-Point Transmission Customers, which will include the Transmission Owner's service to its native load.

It is also revised to reflect the transmission customer's obligation to follow ISO directions during a Major Emergency State and also to reflect that the ISO will follow the Lake Erie Emergency Redispatch procedures and NERC TLR Procedures that are on file with the Commission in Docket Nos. EL98-52, et al.

Section 13.7 Classification of Firm Transmission Service; Section 13.8, Scheduling of Firm Transmission Service; Section 29.2 Application Procedures. These sections of the tariff have been modified to accommodate the LBMP model approved by the Commission. In order to accommodate LBMP pricing, (a) all customers willing to pay Congestion will receive firm service. This pricing allocation method eliminates the need for prioritizing requests on the basis of first-come, first-served, as explained in Dr. Henderson's affidavit; (b) all customers receive fixed-price service by purchasing TCCs; and (c) all customers receive Long-Term Fixed-Price service by purchasing long-term TCCs which are now available in the auction.

Additionally, Section 13.8, Scheduling of Firm Point-to-Point Transmission Service, reflects regional differences in timing for scheduling transmission service. The Commission allows deviations to reflect regional requirements.¹⁴

New Section 13.8A, Scheduling of Firm Point to Point Transmission Service in the Real-Time Market, has been added to reflect this additional market under the LBMP model.

Section 14 Nature of Non-Firm Point-To-Point Transmission Service. Similar to the Firm Point-to-Point section, this section has been modified to capture the workings of the LBMP model.

Section 14.1 Term. This section has been modified to reflect the fact the under LBMP the minimum term of non-firm Point-to-Point transmission service is one hour.

Section 14.2 Reservation Priority. This section of the tariff has been modified to accommodate the LBMP model approved by the Commission. In order to accommodate LBMP pricing, customers not willing to pay Congestion will receive service only so long as there are no constraints on the system. As a result, non-firm customers always have a lower priority than firm Point-to-Point and Network customers if there is constraint. Moreover, Network customers obtaining service from secondary resource (i.e. non-firm) are treated comparably with non-firm Point-to-Point. None of these customers will receive service if there is a constraint. However, if these non-firm customers are not scheduled day-ahead they can request firm service by indicating that they are willing to pay Congestion up to ninety minutes prior to the dispatch hour.

Section 14.6 Scheduling of Non-Firm Point-to-Point Transmission Service. Section 14.6 reflects regional differences in timing for scheduling transmission service. The Commission allows deviations to reflect regional requirements.¹⁵

¹⁴ Central Maine Power Company, 82 FERC ¶ 61,251 at 62,003 (1998).

¹⁵ Central Maine Power Company, 82 FERC ¶ 61,251 at 62,003.

Section 14.6A Scheduling of Non-Firm Point-to-Point Transmission Service in the Real-Time Market. This section has been added to reflect this additional option which reflects the LBMP model approved by the Commission.

Section 14.7 Curtailment or Interruption of Service. This section of the tariff has been modified to accommodate the LBMP model. In order to accommodate LBMP pricing, customers not willing to pay Congestion will receive service only so long as there are no constraints on the system.

Section 15.2 and Section 18.4 Determination of Available Transmission Capacity. This section has been revised to reflect the fact that under LBMP, the ISO continuously redispatches the transmission system to maximize available transmission capacity through the use of SCUC and SCD. Moreover, the ISO will post information regarding TCC availability on the OASIS. These deviations from the *pro forma* are consistent with LBMP and are supported also in the affidavit of Dean Chapman.

Section 15.4 - 15.5 Obligation to Provide Transmission Service that Requires Expansion or Modification of the Transmission System and Deferral of Service; Section 17.5 Response to a Completed Application; Section 19 Additional Study Procedures for Firm Point-To-Point Transmission Service Requests; Section 32 Additional Study Procedures for Network Integration Transmission Service Requests. As explained in the Filing Summary, these revisions are consistent with LBMP, in that under the LBMP model, all customers willing to pay Congestion will receive service, so a request for service will not trigger automatically a need to expand the transmission system. However, transmission customers can request a system expansion study, which request could be prompted by the customers' assessment that TCCs are too expensive. The study would be aimed at determining the extent to which construction options would result in additional incremental transfer capability and additional TCCs, or resolve a reliability issue.

Sections 15.7 and 28.5 Real Power Losses: These sections have been modified to reflect the marginal losses provisions in the Tariff. The Commission approved marginal losses in it January 27 Order, subject to a hearing to determine how to implement it.¹⁶

Section 17 Procedures for Arranging Firm Point-to-Point Transmission Service. Application. This section has been modified to be consistent with the fact that under the New York model, a transmission customer may fix the price of firm service by acquiring TCCs.

Section 17.3 Deposit. This section is not applicable because no deposit is required for service under the ISO OATT.

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¹⁶ January 27th Order, at 61,213-214.

Section 17.4 Notice of Deficient Application; Section 17.6 Execution of Service Agreement. These sections have been modified to eliminate references to priorities based upon the date of application, consistent with the LBMP model which provides that all customers willing to pay Congestion will receive service. Thus, priority by date is not needed, as explained in the Henderson Affidavit.

Section 18 Procedures for Arranging Non-Firm Point-to-Point Transmission Service; Section 18.3 Reservations for Non-Firm Point-to-Point Transmission Service. These sections have been revised to indicate that, consistent with LBMP, requests for non-firm service will be accommodated unless there is Congestion on the system.

Section 19A Additional ISO Transmission System Expansion Responsibilities. This new section provides more detail on the role of the ISO in assessing transmission expansion options requested by customers and in assessing their impacts on system reliability, as well as the ISO's role in compiling a New York State Transmission Plan and Assessment of Reliability.

Section 19B Study Procedures for New Interconnections to the NYS Power System. This new section details how new interconnections of load and generation will be studied.

Section 19C Prioritizing Transmission and Interconnection Studies. This new section was added to clarify the procedures for prioritizing requests.

Section 23 Sale or Assignment of Transmission Service. This section has been modified to indicate that nothing in this section affects the secondary market for TCCs.

Section 26 Stranded Cost Recovery. This section has been modified to address issues related to LIPA's non-jurisdictional status.

The following represents the modifications that were made to Part III. Network Integration Service of the *pro forma* tariff.

Preamble and Section 28.4 Secondary Service. These sections have been modified to reflect the fact that under LBMP, Network service will be provided to customers that are willing to pay Congestion associated with their request. The Network Customer may fix the price of its Network service by purchasing TCCs corresponding with its designated Network Resources and its Network Load. As discussed in the Filing Summary, this approach is consistent with the Commission's understanding that Network service continues to exist under LBMP, a concept that the Commission approved in PJM.¹⁷ Moreover, for secondary service (<u>i.e.</u> from non-designated resources) such requests will be accommodated day ahead absent Congestion. Similar to non-firm Point-to-Point, if the customer is not able to be accommodated day ahead due to Congestion it can upgrade to firm service by agreeing up

¹⁷ See PJM, at 62,253-56.

to ninety minutes prior to the dispatch hour to pay Congestion.

Section 29.4 Network Customer Facilities. This section has been modified to accommodate retail access.

Section 30.1 Designation of Network Resources; Section 30.7 Limitation on Designation of Network Resources. As discussed in the Filing Summary, these sections have been modified to reflect the fact that under the LBMP pricing model, Network customers are not limited to calling upon network resources that are "owned, purchased or leased by a Network Customer." Instead, Network Customers can designate any Installed Capacity Supplier to be its designated Network Resource. As explained in the Filing Summary, the Commission's objective of ensuring that Network Resources are available when need to serve Network Load from a stand point of reliability is addressed by the fact that ICAP providers must be scheduled day-ahead and have an obligation to serve load within the NYCA prior to serving load outside the NYCA. This requirement addresses the Commission's reliability concern. The Commission has also indicated that the "owned, purchased, or leased" requirement is designed to prevent the Transmission Owners from being forced to overbuild by upgrading the system to accommodate too many Network resources. However, the Commission's concerns are not applicable here, because of the proposed network upgrade provisions of the New York ISO contained in Sections 31 and 32 of the ISO OATT.

Section 34.1 Monthly Demand Charge. As approved by the Commission in the January 27th Order,¹⁸ the New York ISO will charge a TSC, TUC and NTAC as well as losses. The Filing Summary describes the application of these charges to wholesale customers under the new Section 7B and to retail customers under the new Part IV.

The following represent a description of a new Part IV that was added to the tariff:

The Member Systems have added a Part IV to the OATT to provide the necessary linkage between the individual retail access tariffs of the Member Systems and the ISO OATT.

For customers taking service under retail access, special provisions are now included in new Part IV of the ISO OATT. These provisions provide:

- 1. Details as to how each of the retail access programs work;
- 2. Details as to how they interface with the ISO;
- 3. The rights and obligations of LSEs and retail access customers;
- 4. The linkage between each retail access tariff and the OATT, including a

¹⁸ January 27th Order, at 61,211-214.

reference for the individual retail access tariffs and programs.

As noted above, the Commission has allowed deviations from the *pro forma* where required by the state-approved retail access program.

APPENDIX C: CHAPMAN AFFIDAVIT

[provided under separate cover]

APPENDIX C

UNITED STATES OF AMERICA

BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

Central Hudson Gas & Electric Corporation)	Docket Nos.	ER97-1523-000
Consolidated Edison Company of New York, Inc.)		OA97-470-000, and
Long Island Lighting Company)		ER97-4234-000
New York State Electric & Gas Company)		(not consolidated)
Niagara Mohawk Power Corp.)		
Orange and Rockland Utilities, Inc.)		
Rochester Gas and Electric Corp.)		
Power Authority of the State of New York)		
)		
New York Power Pool)		

Affidavit of Dean J. Chapman P.E.

My name is Dean J. Chapman. I am an employee of the New York Power Pool ("NYPP"), 3890 Carmen Road, Schenectady, New York 12303. My office is located at that same address. I am presently employed by NYPP as Director of Information Systems. My salary and benefits are administered by Niagara Mohawk Power Corporation for NYPP.

I received a Bachelor of Electrical Engineering from Rensselaer Polytechnic Institute in 1961 and a Master of Science in Electrical Engineering from Syracuse University in 1967. I am a licensed Professional Engineer in the State of New York. I began my career with General Electric in Utica, NY in 1961 as a Radar Systems Engineer. In 1970, I moved to Syracuse Research Corporation as a Radar Systems Engineer. In 1977, I moved to Niagara Mohawk Power Corporation as an Energy Management Computer Systems Engineer in the Power Control Department. In 1987, I became Manager of Energy Management Systems. In 1996, I transferred to the NYPP and in 1998, I was appointed Director of Information Systems. I was a charter member of the OASIS "How" Group formed under the auspices of NERC and EPRI.

Since coming to NYPP, I have been closely involved with the specification, design, and implementation of the software and systems being configured to support the formation and operation of the New York Independent System Operator ("NYISO"). This system is based upon the principles of Locational-Based Marginal Pricing ("LBMP"). Much of the software has been developed by Information Systems staff at the NYPP.

A new OASIS is required for the NYISO.

The purpose of my affidavit is to describe the role of the new OASIS in the NYISO LBMP system. The stated purpose of OASIS is to provide a uniform method for users of the transmission system to obtain transmission service and to access related transmission system information. NYPP currently operates an OASIS on behalf of the NYPP Member Systems. Each Member System uses this system to make transmission facilities available to transmission users in accordance with the principles stated in FERC Order Nos. 888 and 889 and in conjunction with their individual Open Access Transmission Tariffs. On January 27, 1999, the Commission conditionally approved a single statewide tariff for the New York Independent System Operator that is based upon Locational Based Marginal Pricing for energy and upon congestion-based transmission pricing. Because the NYISO will displace the New York Power Pool organization and because it will now operate the New York Transmission System on behalf of its owners, a new OASIS is required.

The new OASIS is different than the current Phase 1A design in two ways.

Because of the nature of the operation of the NYISO LBMP system, the requirements of the interface to Market Participants are different than the current OASIS model characterized as "Phase 1A". The ISO will conduct a market for energy. Accordingly, a Market Information System (MIS) has been constructed as well. It can be thought of as an adjunct to the OASIS itself. The MIS has the same operating characteristics as OASIS

and provides the capability to support the energy market. Suppliers wishing to bid energy into the market and load serving entities wishing to procure energy will access the MIS portion of the system.

The other major difference between the current Phase 1A OASIS and the NYISO OASIS is the absence of the transmission reservation process. Currently, customers receive priority in the process of acquiring transmission service on a first come, first served basis. Therefore, it is necessary to reserve transmission service well in advance of the time of use in order to establish one's priority. In the NYISO, the priority is determined by a financial bidding process. Transmission customers are able to specify a decremental energy price below which they do not wish to be scheduled. The ISO uses these bids to establish priority of service, should it be necessary. Therefore, there is no need for advanced reservations.

<u>Users can request transmission service to be scheduled in either the day-ahead or hourahead market.</u>

Users wishing to obtain transmission service will be able to schedule point-to-point transactions in both the day-ahead and hour-ahead markets. Thus, rather than making a reservation for transmission service at some future date, users will actually be scheduling transmission service in either the day-ahead or hour-ahead markets. Transmission customers who request firm transmission service will be scheduled to the extent the system can support them. This process includes the ability to redispatch the system to

accommodate these requests. The service will be subject to congestion charges if the affected interfaces are congested. Those who request non-firm service will be accommodated only if there is no congestion. Requests for transmission service are entered into the MIS portion of the system.

The NYSIO OASIS will post other required information as well as market settlement results.

In addition to providing access to transmission service, OASIS normally provides other information and postings regarding the operation of the transmission system. Transmission Owners or operators are required to post items such as organization charts and personnel transfers, transmission system outage schedules and TTC/ATC ratings, Tariffs, Standards of Conduct, a Glossary, and a Want Ad page. The NYISO OASIS will not only provide this information but will also post results of market activities. Among the additional items to be posted are locational prices for both the day-ahead and real-time markets, ancillary services clearing prices and zonal load forecasts.

In the NYISO, ATC postings have a different significance.

Because the reservation process is not required in the NYISO, the entire capacity of the transmission system is available for both firm and non-firm service prior to each day-ahead market. After the close of the day-ahead market, ATC is calculated and posted based on the transactions accepted in the day-ahead market. The ATC results indicate

whether NYCA interfaces are congested or not. At this point, available capacity is an indication of the lack of congestion and can be viewed as a forecast of the availability of additional non-firm transmission capacity in the hourly market. If the posted capacity is zero, then the interface is congested and additional non-firm capacity cannot be accommodated. However, the presence of congestion does not rule out the availability of additional firm capacity in the hour-ahead market. Additional firm transactions can be accepted subject to the ability of the system to be redispatched to relieve any resulting overloads.

The NYISO OASIS is compliant with existing regulations or provides equivalent functionality where the LBMP system model differs from what was envisioned in the original OASIS model.

The NYISO OASIS will be compliant with the requirements of FERC Order Nos. 889 and 889A and the associated protocol standards with the exception of certain areas where the NYISO LBMP system model differs from the model envisioned by the "HOW" group when the original OASIS standard was developed. The following table summarizes the major functions of the OASIS and compares the NYISO system to the baseline Phase 1A requirement, particularly in those areas where differences exist.

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¹ In the NYISO, non-firm service means that the transmission customer does not wish to pay congestion charges. Therefore, the request will be granted only if there is no congestion

OASIS Function	Phase 1A OASIS	NYISO OASIS
Accepts reservations for transmission service	Yes	Not applicable (see text) Customers enter requests for scheduling directly.
a) Unmasking of POI/POW	Yes	Not applicable, NYISO will post results of TCC Auction
b) On-Line negotiations	Yes	Not applicable for reservation, Transmission Service Charge discount negotiations are pro- vided
c) Posting of Discounts	Yes	Congestion charges not subject to discount. Transmission Service Charge discounts will be posted
2) Posting of TTC/ATC	Yes	Entire system available before day-ahead closing, ATC posted for non-firm hour-ahead service (see text). TTC is posted as well.
3) Posting of Transmission Outage Schedule	Yes	Yes
4) Posting of Code of Conduct, Employee transfers, etc.	Yes	Yes
5) Posting of Ancillary Service Prices	Yes	Yes. Prices are market driven – clearing prices will be posted after market has cleared.
6) Posting of Locational-based Marginal Prices	N/A	Yes – both day-ahead and real- time prices for all zones and generator buses.
7) Posting of Zonal Load Forecasts	N/A	Yes - Day-ahead forecast upon which unit commitment was run will be posted

In addition to the OASIS itself, the MIS conforms to the same protocols and standards established for OASIS in order to provide a closely integrated system.

The NYISO OASIS and MIS are easily accessed via the Internet.

The NYISO OASIS and the MIS will be operated in close coordination with each other. The interface between them will be seamless. Users will access the OASIS using a URL such as "OASIS.NYISO.COM". The home page will contain links to various posted

information required by the applicable Commission rulings. In addition, there will be a link to the MIS for those market participants who wish to schedule transmission service, place bids or obtain scheduling and other information specific to their organization. Those market participants that wish to access the MIS directly would enter a URL similar to "MIS.NYISO.COM" and, upon presenting the proper security information, would be granted access to the MIS. On the MIS home page, there will be links to the various bidding functions. A link will also be provided to the OASIS home page. Note that much of the MIS information is proprietary to each user and is protected from general access. The postings on OASIS, by contrast, are public and can be accessed by all users.

The NYISO OASIS and MIS provide the required functionality to support the operation of the energy and transmission services market in New York.

In summary then, the New York ISO will provide an OASIS and Market Information System as a part of its implementation of Locational-Based Marginal Pricing for New York. This system will provide the primary interface to the marketplace for the ISO. Market participants will not only be able to schedule transmission in the day-ahead and hour-ahead markets but will also have access to pricing and other related information in addition to the usual OASIS postings. The system will also allow energy suppliers to bid their energy into the LBMP market and will provide the ability for Load Serving Entities to purchase energy from the day-ahead and real-time markets.

APPENDIX D:

PROPOSED ALTERNATIVE LANGUAGE

1. Announcement by ISO of Percentages of ATC that will be sold each round of the TCC Auction.

OATT Attachment M

Original Sheet No. 296, Section 8.5, change the following statement from:

"The ISO shall not announce these percentages before the auction."

"The ISO shall announce these percentages before the auction."

2. Disclosure of Bid Information

to:

OATT Attachment M

Original Sheet No. 301, change the following statement from:

"Neither the ISO nor the auctioneer shall reveal the Bid Prices submitted by any bidder in the auction until six months following the date of the auction".

to:

"Neither the ISO nor the auctioneer shall reveal the Bid Prices submitted by any bidder in the auction.

In addition, the provision in Section 6.3 of the ISO Services Tariff, Original page 84, would change from:

"Pursuant to Commission requirements the ISO shall make public Bid information from the Energy Capacity and Ancillary Services markets six-months after the Bids are submitted. Prior to such disclosure, Bid information submitted to the ISO by Market participants shall be considered Confidential Information."

to:

"Bid information submitted to the ISO by Market Participants shall be considered Confidential Information."