PRUDENCE OF PJM OATT SERVICE COSTS

Q. Please provide an update regarding the 1,000 MW transmission service that PJM renders for the Company pursuant to PJM's OATT tariff.

A. On February 14, 2013, the Commission issued an *Order Denying Petition for Recovery of Charges* ("PJM Order") in Case 09-E-0428 rejecting the Company's position that the PJM OATT costs associated with that service are recoverable through the MAC without prior Commission approval. The order stated that the Company "should have provided evidence showing that its business decision was reasonable, comparing the PJM OATT service to building transmission or any other alternative means to address its reliability concerns."

Q. What documentation did the Company previously submit in support of the reasonableness of its decision to contract for the PJM OATT service?

A. The Company previously provided factual support for the PJM OATT service contract in Case 09-E-0428 and in its Initial Testimony in this proceeding. The

following discovery responses in Case 09-E-0428 discussed certain benefits that the PJM OATT service provides and are submitted as Exhibit No. IIP-18 in support of this Supplemental Testimony: Responses DPS-1(2), DPS-1(3), DPS-2(1), DPS-2(2), DPS-2(12), and DPS-2(16). Also provided, on a confidential basis pursuant to the Protective Order, is the power point presentation that was made to Con Edison's Corporate Policy Committee recommending execution of the contract for the PJM OATT service. The presentation was previously provided in response to DPS-1(5) in Case 09-E-0428 and is submitted as Exhibit No. IIP-19 in this case. Exhibit Nos. IIP-18 and IIP-19 explain that the Company worked with the Commission in FERC Docket No. ER08-858-000, in which FERC approved a settlement that established the PJM OATT service; that the Commission actively supported the settlement in the FERC proceeding; and that the FERC relied on the Commission's support in approving the settlement. (See, for example, Petition for Rehearing, pp. 1-4, 8-11). Finally, attached as Exhibit No. IIP-20 is the

Affidavit of Michael Forte, dated March 25, 2009, which Con Edison submitted in FERC Docket No. ER08-858-000 in support of its request for approval of the PJM OATT service. The affidavit discusses the reliability benefit provided by the PJM OATT service as a continuation of the prior PSE&G transmission service, which prior service was initiated as a preventative action following the 1977 blackout of Con Edison's system.

Q. What does this Supplemental Testimony address?

A. This Supplemental Testimony provides additional support regarding the following: (1) the benefits provided by the PJM OATT service; (2) general limitations relating to the cost of alternative projects and the importation of power from PJM; (3) the Company's evaluation of transmission projects that the Company might have constructed as an alternative to the PJM OATT service; and (4) consideration of other entities' proposals, pending in 2008, to develop generation and merchant transmission facilities.

Q. What conclusions does the Supplemental Testimony support?

A. This testimony supports the following conclusions: (1) that the costs of the PJM OATT service were largely known and reasonable and its benefits were significant; (2) that, because of the PJM/NYISO proxy bus practice, the ABC Feeders could not be used by alternatives to the PJM service, and new alternating current transmission ties to New Jersey were not alternatives to the PJM service; (3) that to be economically competitive with the PJM OATT service, an alternative project would have to cost less than $170 million; (4) that alternative transmission projects that Con Edison might have constructed would have been significantly more expensive than the PJM service; and (5) that the then-proposed merchant projects would have been significantly more costly than the PJM OATT service and would not have provided comparable benefits.

General Circumstances

Q. Did Con Edison perceive a need to replace the PSE&G 1,000 MW transmission service when the 1975 and 1978 contracts for that service expired in 2012?

A. Yes. As of 2008, the Company anticipated load growth and a generator retirement that necessitated the replacement of the PSE&G transmission service. The Company's 2007 forecast projected annual load growth of approximately 1 percent and a resulting peak load for 2012 of 14,350 MW. At the same time, the anticipated retirement of NYPA's Poletti generating unit in 2010 represented the loss of approximately 900 MW of in-City capacity. Consequently, Con Edison anticipated a marginal balance between its system resources and requirements commencing in 2010 and continuing for some years -- even with (1) the initiation of the PJM OATT service, (2) NYPA's completion in 2006 of the 468 MW generator adjacent to the Poletti site, and (3) the construction of the Hudson Transmission Partners project and another merchant project. Accordingly, the Company had to either contract for the PJM OATT service or construct

or contract for an alternative supply arrangement. Taking no action was not an alternative.

Q. What were the anticipated benefits of the PJM OATT service?

A. The PJM OATT service enhances system reliability in at least three respects. First, the service provides 1,000 MW of transmission capability between NYISO Zones J and G, effectively providing Con Edison with a transmission line extending from New York City to Ramapo. Thus, it provides regional diversification by enabling Con Edison to access electric energy that is produced by many generators in the upstate region. Second, it provides fuel diversity since the upstate generators are powered by natural gas, coal, oil, nuclear, hydro, wind, and solar. The regional and fuel diversification enhances the security and reliability of the supply arrangements available to the Company and its customers. Third, the PJM OATT service enhances system reliability by diversifying the Company's transmission corridors. The service is rendered over transmission facilities that are located

in PJM, remote from Con Edison's overhead transmission facilities that extend from Pleasant Valley to Dunwoodie/Sprainbrook. That separation of transmission corridors enhances system reliability by reducing the Company's exposure to weather-related facility outages that could simultaneously affect multiple transmission facilities located in a single corridor. Moreover, the service uses various transmission paths through the PJM system and three transmission ties (the ABC Feeders) between New Jersey and New York City -- which provides operational flexibility and the ability to respond to contingencies as they occur.

Q. Are other benefits derived from the PJM OATT service?

A. Yes. The use of existing facilities for the service provided several benefits. The facilities in question included PSE&G's existing transmission facilities in New Jersey and the existing ties between the PSE&G and Con Edison systems (*i.e.*, the A, B, C, J and K Feeders). Con Edison had previously constructed or paid for those transmission ties in connection with

the prior PSE&G service. The continuation of their use in connection with the PJM OATT service avoided the cost and environmental impacts that would have been associated with alternative arrangements that required the construction of facilities. The avoided costs of alternative generation and transmission projects would include the cost of the project itself and the cost of interconnecting the project to the transmission system. Both PJM and the NYISO require developers to pay for facilities that are needed for the reliability of the interconnection and for the deliverability of the project's power. Projects that extend from the PJM region to New York may be assessed interconnection costs by both PJM and the NYISO. The interconnection facility costs often amount to hundreds of millions of dollars. Another benefit of using existing facilities was certainty: the necessary facilities would be available when the prior service expired in 2012, without the risk of delay or default associated with alternative arrangements that required

the construction of new generation and/or transmission facilities.

Q. Could any alternative project, undertaken in lieu of the PJM OATT service, have utilized the ABC Feeders?

A. No. As discussed in the following section of this testimony, the NYISO and PJM use a proxy bus procedure for scheduling and pricing transactions between their two control areas. In accordance with that procedure, the PJM OATT service is the only service that is scheduled over the ABC Feeders. No other service is scheduled over those feeders. If Con Edison had not contracted for the PJM OATT service, no alternative arrangement that utilized those feeders could have been established. Without the PJM OATT service, the use of the ABC Feeders would be limited to occasional responses to emergency conditions.

Q. Was the existence of the prior PSE&G service significant?

A. Yes. The PJM OATT service is a replacement for the 1,000 MW transmission service that PSE&G rendered to Con Edison between the same receipt and delivery

points for over 30 years. The reliability and economic benefits that the PSE&G service provided to Con Edison's system and customers were well recognized. The cost of that service was accepted as just and reasonable and was reimbursed by Con Edison's customers, without any question regarding the prudence of the service.

Q. Did the Company have the option of extending the PSE&G service at the same rate and on the same terms and conditions?

A. No, it did not. The PSE&G service pre-dated FERC's adoption, in its Order No. 888, of open access transmission requirements and the standardized Open Access Transmission Tariff. In implementing those requirements, FERC allowed pre-existing transmission contracts to remain in effect until their terms expired, but prohibited the extension of expired contracts. However, FERC did allow grandfathered contractual transmission services to be rolled-over to service under an OATT. Con Edison utilized that roll-

over procedure in contracting with PJM for the OATT service.

Q. Is the PJM OATT service comparable to the PSE&G service?

A. The PJM OATT service is superior to the PSE&G service.

Q. Please explain.

A. PJM and the NYISO implement the service pursuant to a protocol, which is more favorable to Con Edison than was the protocol that governed the PSE&G service. For example, unlike the protocol for the PSE&G service, the current protocol does not reduce scheduled flows over the ABC Feeders by a portion of the third-party transactions between PJM and New York, and it eliminates the counterflow provision that reduced Con Edison's service entitlement by up to 300 MW in response to congestion in New Jersey.

Q. What other benefits does the PJM OATT service provide?

A. The PJM OATT service was available on a contract basis for a limited term. The contract has a five-year term, with options to renew for successive five-year periods at Con Edison's election. The term

arrangement provides valuable flexibility. It allows Con Edison to reassess its resource requirements periodically. Con Edison has the option of continuing the service indefinitely if that is warranted by future circumstances. On the other hand, if the PJM OATT service were no longer needed -- because merchant resources proliferate or load declines – Con Edison could elect not to extend the contract. That flexibility is unique to the PJM OATT service. Alternative transmission and generation projects entailing the construction of facilities would have involved long term ownership or contractual commitments.

Q. Do the PSE&G service rates and terms differ from those of the PJM OATT service?

A. Yes. The PJM service rates and terms are set by the PJM OATT tariff (rather than by a contract) and are subject to change as approved by the FERC. The service is implemented by PJM and the NYISO pursuant to a protocol that FERC determined to be just and reasonable as part of a settlement that was actively

supported by the New York Commission in FERC Docket No. ER08-858-000.

Q. What is the role in this case of the PJM OATT service and its benefits?

A. That service and its benefits are the standard against which alternative arrangements had to be measured. That is true of alternative projects that might have been undertaken by the Company or by other parties. The costs and benefits of the PJM OATT service were largely known in 2008 when Con Edison decided to contract for the service. Con Edison was not aware of any alternative project that might have provided corresponding benefits at a comparable price, and experience since that time has validated that view.

Q. Please explain how the costs of alternative projects should be compared to the costs of the PJM OATT service.

A. In comparing the PJM service to alternative arrangements, all other things being equal, the cost of the alternative needed to be less than or equal to the cost of the PJM service. As of 2008, the

estimated annual cost of the PJM OATT service was in the range of $24 million to $34 million (depending on variable charges). Assuming a 20 percent carrying charge, that expense would indicate a maximum capital cost in the range of $120 million to $170 million for alternative projects (inclusive of O&M costs because such costs were included in the estimated PJM service cost). Using that cost range as a bogey for alternative projects was reasonable. Even if the equivalent cost had been $200 million (corresponding to a $40 million annual cost for the PJM service), no alternative project could have provided benefits comparable to the PJM service at that cost.

Proxy Bus Limitation

Q. Please explain the proxy bus limitation.

A. Under the PJM-NYISO proxy bus arrangement, energy transactions that market participants propose between the two control areas are scheduled between two designated pricing nodes (points) and are priced on a flow-weighted basis at those points. The New York point generally reflecting this pricing is in upstate

New York, and the PJM point is in Pennsylvania. This scheduling and pricing arrangement envisions energy flows that differ from the actual flows that might occur for a given transaction. For example, Con Edison might propose a power purchase from a generator located in New Jersey involving actual deliveries over the A, B, or C Feeders (between New York City and New Jersey). But the transaction would be scheduled and priced between the designated proxy buses. Not only does the NYISO not schedule transactions over the A, B, and C Feeders, but the transaction becomes uneconomic because congestion charges that exist between the designated proxy bus in New York and New York City are assessed. Because of the proxy bus arrangement, Con Edison has been and continues to be economically unable to purchase energy from sources in New Jersey. Con Edison sought relief from the proxy bus limitation in the prior FERC case, but the relief was denied in FERC's Opinion No. 476. Con Edison has continued to work with the NYISO and PJM on the proxy bus issues, but the arrangement remains in place.

Q. What is the effect of the proxy bus limitation?

A. Because of the proxy bus arrangement that PJM and the NYISO use to schedule and price energy transactions between the New York and PJM control areas, purchases of power from generators located in New Jersey are generally uneconomic for Con Edison. Consequently, transmission projects designed to import energy from New Jersey into New York City could not serve as alternatives to the PJM OATT service. The only exception from that limitation has been for direct current transmission projects, where the NYISO and PJM established nodal prices for such a project.

Q. What is the significance of the proxy bus arrangement in this case?

A. Because energy cannot be economically imported to New York City from New Jersey, alternating current transmission projects intended to effectuate such imports could not have been substituted for the PJM OATT service. That service was exempt from the proxy bus practice because it does not involve a purchase of power originating in PJM. The service is the only

transaction that is scheduled over the A, B, and C Feeders, based on a protocol that PJM and the NYISO use to implement the service.

Con Edison's Projects

Q. Could Con Edison have constructed its own transmission projects that might have provided reliability and economic benefits comparable to those of the PJM OATT service?

A. Con Edison investigated two transmission projects that it might have constructed as possible alternatives to the PJM service. One was the addition of an underground transmission feeder (M53), extending approximately 18 miles between the Sprain Brook and West 49th Street substations. The second was the addition of an underground transmission feeder (73), extending approximately 12 miles between the Dunwoodie and Mott Haven substations.

Q. Did the Company evaluate those transmission projects as alternatives to the PJM OATT service?

A. Yes. The Company considered those projects as possible alternatives to the PJM service in January

2008 before contracting with PJM for transmission service. But the Company rejected them for economic and reliability reasons.

Q. Please explain.

A. The Company applies the N-1-1 contingency standard in the design of its transmission system. That standard requires that the Company's facilities be able to survive the loss of its two largest generation and transmission resources without the loss of load. The lack of the 1,000 MW PJM OATT service (had the Company not contracted for the service) would have resulted in violations of the N-1-1 standard with respect to the loss of Feeders M51 and M52, or the loss of Ravenswood Unit 3, and Feeder 71. Each of the alternative projects, M53 and 73, could have solved one of the two N-1-1 contingencies, but not both. Together the alternatives could have solved both N-1-1 contingencies and returned the system to the normal operating condition following contingencies. Accordingly, the Company would have needed to

construct both projects to suffice as an alternative to the PJM OATT service.

Q. Would construction of M53 and 73 ("M53 – 73") been an acceptable alternative to the PJM service?

A. No. The combined construction cost of the two projects would have been approximately $1 billion. The carrying charge for a $1 billion investment would have substantially exceeded the annual cost of the PJM OATT wheel service: based on a 20 percent rate, the annual carrying charge would have been $200 million, as compared to $34 million for the PJM service. In addition, the alternative would not have satisfied a fundamental reliability feature of the PJM service, diversity of transmission corridors. The PJM service is provided over a transmission corridor in PJM that is remotely located from the Westchester County corridor that Con Edison's overhead transmission facilities occupy. The M53-73 alternative would have increased flows on the overhead facilities and eliminated the PJM corridor. Ever since the 1977 system blackout, Con Edison has sought to diversify

its transmission corridors in order to avoid future blackouts. The PJM OATT service provides that diversity. The M53-73 alternative would not have.

Merchant Developers' Projects

Q. Did other parties propose to construct transmission or generation projects as alternatives to the PJM OATT service?

A. No party proposed to undertake a project that would have served as an alternative to the PJM service. The expiration of the prior service by PSE&G and Con Edison's proposal to contract with PJM for transmission service were widely known by stakeholders in the electric industry, including project developers. PJM filed a formal request with FERC in April 2008 for approval of the service to Con Edison. That request was contested and triggered a protracted public proceeding that was not resolved until September 2010. Despite the publicity and passage of time, Con Edison did not receive any project proposals as alternatives to the PJM OATT service.

Q. Was Con Edison aware of any project that was proposed by other entities that might have served as an alternative to the PSE&G service?

A. No. Con Edison was of course aware of the projects for which merchant developers had submitted requests for interconnection to the NYISO-controlled transmission system. As the prospective connecting transmission owner for some of those proposed projects, Con Edison provided studies and other support to the NYISO in accordance with the NYISO's standardized interconnection procedure.

Q. Would any of those proposed merchant projects have constituted an adequate alternative to the PJM OATT service?

A. No. None of the projects with interconnection requests pending in 2008 would have provided capacity and benefits equal to those of the PJM service at a comparable price.

Q. What information was available regarding the cost and terms of the merchant project proposals pending in 2008?

A. The available information regarding the costs and benefits of the proposed merchant projects was limited, given that the cost of merchant projects is generally confidential. Developers treat their projects' capital costs as proprietary and avoid disclosing them. Required system upgrade facilities and their costs are not identified until late in the NYISO and PJM interconnection study processes. However, as of 2008, two of the proposed projects had progressed to the point in the interconnection review process where some of their costs were known. For example, the 1,000 MW Cavallo project was estimated to have a $1.2 billion PJM interconnect cost. The 660 MW HTP project had a $540 million PJM interconnection cost. These costs would be in addition to the capital cost of the projects and any potential interconnection costs in New York. Clearly these partial costs alone are significantly higher than the $170 million equivalent cost of the PJM OATT service. Consequently, the cost data that was available

suggested that the cost of merchant projects generally would far exceed the cost of the PJM OATT service.

Q. What additional risks did the merchant project proposals present?

A. Projects that had not yet received Article VII and X certificates presented a regulatory and economic risk. The denial of or delay in issuing a certificate was a material concern because Con Edison's need for a replacement of the prior PSE&G service was to commence on a specific date (May 1, 2012). The imposition of conditions on those certificates could significantly increase the project's cost and render it uneconomic relative to the PJM service. A second level of risk related to project development. A developer might be unable to obtain financing for its project. Required real estate might not be available. Construction might be delayed. Materials might be unavailable or delayed in delivery. Contractors might default.

Q. How did the Company deal with those uncertainties and risks?

A. The Company reasonably decided to contract with PJM for OATT service. That service was far and away the best option available based on cost, reliability, and risk considerations. The PJM service provided the best assurance that the necessary supply resource would be available by the deadline date. The service's reliance on existing facilities avoided the construction and permitting risks of the merchant projects. Its costs were known and reasonable. Its quality was assured by the experience gained with the prior PSE&G service and by the NYISO-PJM protocol governing the implementation of the service. It entailed a limited term commitment, which enables Con Edison to respond to changed circumstances. These factors clearly rendered the PJM service preferable to the merchant projects, which had substantially higher costs and risks.

Q. Does this complete your supplemental testimony?

A. Yes.