108 FERC ¶ 61,309
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
Nora Mead Brownell, Joseph T. Kelliher,
and Suedeen G. Kelly.

New York Independent System Operator, Inc. Docket No. ER01-2536-005

ORDER ON REMAND

(Issued September 22, 2004)

1. This case is before the Commission on remand from the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit Court).[1] At issue is the manner in which the Commission translated a $105/kW-year price cap for the New York City electric capacity market (in-city price cap), in authorizing the New York Independent System Operator, Inc. (NYISO) to shift from a market design based upon one form of accounting for capacity (using installed capacity, or ICAP) to another form of accounting for capacity (using unforced capacity, or UCAP).[2] More specifically, in this order, we further discuss and reaffirm our finding that 12 months of outage data, rather than data from a longer period, should be used in translating the in-city price cap.

2. This order helps promote confidence in the NYISO-administered markets, which will, in turn, help increase supply, improve reliability, and produce efficient energy prices.

Background

3. By order issued September 22, 1998, after the New York Public Service Commission (New York Commission) conditionally approved Consolidated Edison

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[1] Keyspan-Ravenswood, LLC and Orion Power New York GP, Inc. v. Federal Energy Regulatory Commission, 348 F.3d 1053 (D.C. Cir. 2003) (*Keyspan Court Remand).*

[2] *See* New York Independent System Operator, Inc., 96 FERC ¶ 61,251 (2001) *(NYISO I), order on reh'g*, 98 FERC ¶ 61,180 (2002) *(NYISO II*), *reh'g denied*, 99 FERC ¶ 61,072 (2002) *(NYISO III).*

Company's (ConEd) plan to divest its generating units in New York City (in-city units), this Commission approved the in-city price cap of $105/kW-year on capacity sales by the suppliers who purchased those in-city units.[3] The Commission approved the cap as a means of mitigating any potential market power that might be exercised by those suppliers. In early 1999, with the in-city price cap in effect, ConEd auctioned-off its in-city units to Orion Power New York GP, Inc. (Orion Power), Keyspan-Ravenswood, LLC (Keyspan), and NRG Energy, Inc. The in-city price cap applies to only them.[4]

4. The NYISO ultimately came to administer the in-city price cap as part of its mitigation measures. In July 2001, the NYISO proposed revisions to its Market Administration and Control Area Services Tariff (Service Tariff), in order to implement a market design based on a shift in its methodology for measuring capacity, and requested that the Commission determine the appropriate translation of the in-city price cap, in order to reflect the new methodology. Historically, the NYISO had measured capacity using an ICAP methodology, which measures the sustained maximum net output of a generator over a continuous period of time.[5] With its proposed revisions, the NYISO sought to measure capacity using an UCAP methodology, which accounts for the probability that a generating unit will be called upon to produce energy, but will be unable to do so due to forced (*i.e.*, unplanned) outages. Using the UCAP methodology, the NYISO would examine a generator's forced outage rate for the most recent 12-month period, in order to determine the amount of capacity the generator has available to sell.[6] The NYISO's proposal required a translation of the in-city price cap to UCAP terms, because the ICAP to UCAP conversion would necessarily lower the amount of capacity in-city generators could sell and thus upset the revenue expectation on which their purchase price for the in-city units was based.

5. The parties, including, among others, the NYISO, ConEd and other load serving entities, the New York Commission, and in-city generators generally supported implementation of the UCAP methodology. They further agreed that a rolling 12-month

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[3] *See* Consolidated Edison Co. of New York, Inc., 84 FERC ¶ 61,287 (1998).

[4] These generators will be referred to collectively as "in-city generators."

[5] Under the NYISO's then-current ICAP methodology, a generating unit's availability to provide capacity was determined based upon seasonal Dependable Maximum Net Capability (DMNC), which, as stated above, measures the sustained maximum net output of a generator over a continuous period of time.

[6] The forced outage rate is expressed in terms of a percentage, known as the Equivalent Demand Forced Outage Rate (EFORd). The amount of UCAP that a resource is qualified to supply for a particular month is based on that unit's DMNC, multiplied by one, minus its EFORd (looking at the most recent 12 months). This means that a unit's UCAP will always be lower than its ICAP.

period is appropriate for the purpose of determining UCAP available for sale. However, they disagreed about the period of outage data to be used in translating the in-city price cap, which is fixed at an amount determined on the date of the NYISO's first UCAP auction. The in-city generators preferred pre-divestiture outage data from 1992-1998 (data from the period prior to when ConEd sold its in-city generating units), resulting in an in-city price cap of $126.14. They argued that a lower price cap would confiscate the expected value of reliability investments they had made. Electricity retailers and the New York Commission favored a shorter period of time, such as 12 months, resulting in an in-city price cap of less than $126.14.

6. In *NYISO I*, the Commission accepted NYISO's proposal to implement the UCAP methodology and directed the translation of the in-city price cap based on outage data from 12 months prior to the first NYISO UCAP auction. This produced an in-city price cap of $112.95/kW-year. The Commission rejected a translation based on a longer period of data, finding that 12 months of data reflected a more current outage rate, including improved outage rates following ConEd's sale of the in-city units. The Commission further found that using 12 months of data properly ensured that suppliers would not derive financial benefits solely as a result of a change of methodology, and that the translation would therefore be revenue neutral.[7] The Commission rejected in-city generators' argument that an in-city price cap that incorporated only post-divestiture outage data (data from the period after ConEd sold its generating units) would confiscate investments they had made since acquiring the facilities in question. The Commission observed that the in-city price cap was set before the divestiture and potential purchasers "were afforded an opportunity to adjust their bids for the generation being divested by the amount necessary to compensate them for effects of mitigation measures."[8]

7. On rehearing, in-city generators renewed their confiscation argument and further contended that outage data must be based on at least five years to capture the operation and maintenance cycles of generating units and thereby normalize outage anomalies. In an initial response to the rehearing requests, the Commission requested that the NYISO supply data on the forced outage rates from the prior 24- and 36-month period.[9] The NYISO responded that the forced outage rate for in-city generators, for the 24-month

[7] *NYISO I*, 96 FERC at 61,993-94.

[8] *Id.* at 61,994.

[9] *See* Letter from Commission Staff to the NYISO, Docket No. ER01-2536-002, January 16, 2002 (data request), seeking additional information, including: (1) for the 24-month period of September 1999 to August 2001, the average aggregate EFORd rate for the in-city generators, calculated consistent with the method used to determine the UCAP of this set of generators; and (2) for the 36-month period of September 1998 to August 2001, the average aggregate EFORd rate for the in-city generators, calculated consistent with the method used to determine the UCAP of this set of generators.

period from September 1999 to August 2001, was 6.59 percent, and for the 36-month period from September 1998 to August 2001, was 12.58 percent. The NYISO further calculated the 12-month average forced outage rate prior to August 2001 to be 6.92 percent.[10]

8. In *NYISO II*, the Commission denied rehearing. The Commission restated its prior reasons for using 12 months of data and further found that in-city generators had misinterpreted *NYISO I* as changing, rather than translating (on a revenue-neutral basis), the in-city price cap. In addition, the Commission noted that a 12-month period of forced outage data is used throughout New York State for calculating the amount of UCAP available for sale.[11]

9. Orion Power again sought rehearing, arguing that: (1) the Commission failed to acknowledge or consider the NYISO's data response, which, according to Orion Power, demonstrated that outage data taken over 60 months, rather than 12 months, is more accurate for determining the appropriate in-city price cap translation; and (2) the Commission failed to articulate its reasons for rejecting in-city generators' arguments regarding the appropriateness of longer-term outage data for the in-city price cap translation.

10. In *NYISO III*, the Commission again denied rehearing. The Commission stated that, in fact, it had considered the NYISO's data response prior to issuing *NYISO II*. The Commission further found that data for the 24-month period indicated no significant change from the 12-month average forced outage rate, and that the 36-month data reached back prior to when the in-city generators obtained operational authority over the units in question and was, therefore, irrelevant.[12]

11. Keyspan-Ravenswood and Orion Power (petitioners) subsequently filed an appeal with the D.C. Circuit. They essentially raised the same substantive arguments they had previously raised before the Commission, all in favor of using a longer period of outage data in translating the in-city price cap. They further argued that the Commission neither adequately supported its decision to use 12 months of outage data as a basis for translating the price cap, nor adequately addressed the NYISO's data response, which, according to petitioners, supported their position that a longer period of time should be used.

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[10] *See* the NYISO's response to the data request, Docket No. ER01-2536-003, January 18, 2002, as amended, February 11, 2002 (data response).

[11] *NYISO II*, 98 FERC at 61,665-66.

[12] *NYISO III*, 99 FERC at 61,335.

12. In *Keyspan Court Remand*, the D.C. Circuit found that petitioners failed to preserve on appeal their original claim that the 5-7 years of outage data preceding ConEd's 1998 divestiture of the in-city units should be reflected in the in-city price cap translation.[13] In effect, the court agreed with the Commission that current, post-divestiture outage data should be used.

13. The remaining issue was how current the data should be. The court recognized that good reasons can be articulated for either of two theories: (1) use of the most current 12 months of outage data, as selected by the Commission, because of post-divestiture changes in market structure, unit performance, and recordkeeping, and because a one-year average is composed of enough generators that variance due to maintenance cycles is averaged out; or (2) use of a longer period of outage data, as favored by petitioners, to reflect the entire maintenance cycle of units.[14] Nevertheless, the court found that the Commission failed to explain why it adopted the former theory over the latter, stating that "despite record evidence of both theories, the Commission did not explain which, or what other theory, it was adopting, thereby denying petitioners the chance to respond to its reasoning."[15] Accordingly, the court vacated the Commission's prior orders in this proceeding with respect to the in-city price cap translation and remanded the issue to the Commission.[16]

Procedural Matters

14. On February 27, 2004, Orion Power filed a motion for briefing procedures on remand, in order to allow further explanation of the varied outage rates over the 36-month period examined by the Commission as part of its data request to the NYISO. We will reject Orion Power's motion. We find that there is sufficient record evidence to render a determination in this case. In addition, there is no need to update the record data, since it is entirely historical in nature and has not evolved or changed since having been filed.

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[13] 348 F.3d at 1055.

[14] *Id.* at 1056-58.

[15] *Id.* at 1058.

[16] We note that, while the D.C. Circuit generally vacated and remanded the Commission's prior orders in this proceeding, the only issue on appeal before the court involved the in-city price cap translation. Accordingly, other aspects of the Commission's prior orders in this proceeding, including the Commission's acceptance of the NYISO's tariff revisions that implement a market design based on UCAP, remain intact.

Discussion

15. We will reaffirm our finding that using outage data from the 12 months prior to August 2001, as opposed to data from 24 or 36 months (or a longer period) prior to that date, is most appropriate in translating the in-city price cap from an ICAP calculation to a UCAP calculation. As an initial matter, we emphasize that translating the in-city price cap has been from the outset a mechanical exercise; the translation must be revenue neutral. In-city generators may not derive financial benefits, or be financially harmed, and consumers should not be required to pay more, merely because of the UCAP conversion.[17] Indeed, the Commission's determination in *NYISO I* that the translation must be revenue neutral has never been in dispute.[18]

16. The key to achieving revenue neutrality is to use the same translation rate for both the quantity being sold and the price received for that quantity.[19] In other words, if both the quantity being sold and the price received for that quantity are converted using the same translation rate, the revenue stream received for that quantity will remain unchanged.[20] On the other hand, if the quantity being sold and the rate paid for that quantity are not converted using the same rate, the generator will either gain or lose revenues relative to its revenue stream under ICAP.[21]

17. Under the UCAP methodology, the NYISO relies upon a generator's forced outage rate for the most recent 12-month period, in order to determine the amount of

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[17] *See* New York Commission comments at 5; Protest of ConEd, the City of New York, the New York Energy Buyers Forum and the Association for Energy Affordability, Inc. (ConEd protest) at 13; AES NewEnergy Inc. protest at 2.

[18] *See* In-city generators' request for rehearing at 2 ("all parties agreed with the Commission that revenue neutrality should be the objective of New York's transition to UCAP.")

[19] *See* Comments of the New York Commission at 4.

[20] For example, a facility with 100 MW of available capacity under ICAP could expect revenues, under the $105/kW-year price cap of $10.5 million. Assume a 10 percent outage rate reduces the facility's available capacity to 90 MW under UCAP. To preserve its $10.5 million revenue position, the $105/kW-year cap must be increased at the same 10 percent rate, which yields a cap of $116.67 and maintains revenue at $10.5 million. *See* Stoddard Affidavit at 17-18.

[21] For example, in the previous example, if the ICAP price cap were translated at an historically-derived EFORd of 20 percent, then the UCAP price cap would become $131.25. If the generator currently has a 10 percent EFORd, it would be able to sell 90 MW and receive a maximum payment of $11.8 million, or an additional $1.3 million. *See* New York Commission comments at 4 n.4.

capacity the generator has available to sell. Since UCAP reduces available capacity for sale, using a lower outage rate (based on current data) maximizes the amount of capacity that can be sold. Conversely, since the price cap changes based on the inverse of the outage rate, using a higher outage rate (based on historical data) maximizes the price cap. In-city generators' proposal to use a period longer than 12 months for the in-city price cap translation follows a maximizing strategy on both fronts, by using historical outage levels to determine the price, but current levels, based upon the most recent 12 months, to determine the quantity of UCAP they can sell.[22] This mismatch in timing would result in a substantial increase in capacity payments to in-city generators - funded by New York ratepayers - merely due to translation of the in-city price cap.[23] This is a result we will not allow. We find that relying on 12 months of outage data is consistent with the NYISO's UCAP methodology, and, accordingly, achieves revenue neutrality.

18. In addition, the 12 months prior to August 2001 constitute a full year for which data exists that best reflects the ownership and regulatory environment in which the in-city units will operate.[24] Outage data from 36 months (or more) prior to August 2001 reaches back into the pre-divestiture period, before restructuring, and is therefore an unreliable predictor of future performance in a competitive market.[25] The record, including an affidavit from ConEd's own expert witness, shows that using pre-divestiture data improperly skews outage results, because there were different regulatory incentives for ConEd to shut down the in-city units, including the incentive to use reserve shutdowns to lower total operating costs of the generation fleet.[26] According to ConEd's witness, while these reserve shutdowns might have had no appreciable adverse effect on system reliability, they did raise the forced outage rate of the facilities.[27] After

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[22] *See* Stoddard Affidavit at 18.

[23] For example, using data from the 6-year, pre-divestiture period, as initially advocated by in-city generators, potentially would have increased in-city generators' revenues, paid by New York ratepayers, by more than $80 million per year. *See* Stoddard Affidavit at 17; New York Commission comments at 2.

[24] *See* New York Commission comments at 6.

[25] *Id.*

[26] *See* Stoddard Affidavit at 17-18. Under the regulated regime, units were often placed on reserve shutdown in order to achieve operation efficiency. Incentives in the regulated market are different than in the competitive marketplace, and while a high forced outage rate might have been in the best interests of customers in the regulated market, this is no longer the case. *Id.*

[27] *Id.* We note that, regardless of whether reserve shutdowns are better characterized as planned outages or forced outages, ConEd's own pleadings state that reserve shutdowns affected the forced outage rate.

restructuring, and with the ownership of the in-city units divided among three owners, each owner has a strong incentive to make all plants available year-round.[28] This is because a large part of their revenue for base-load and load-following units is derived from energy markets, which they cannot serve when they are forced off-line.[29] This accounts for the NYISO's finding in its data response that the 36-month outage rate was 12.58 percent. Not surprisingly, this figure is considerably higher than the outage rate for the 12- and 24-month periods (6.92 and 6.59, respectively), which do not include pre-divestiture information.[30]

19. The significant difference in outage rates between the 36- and 24-month periods can also be attributed to improvements in the physical state of the in-city units after divestiture. The in-city generators contend (or, in effect, concede) that they have made substantial investments in the reliability of these units.[31] Consequently, the post-1999 forced outage rates may be better indicators of future outage rates, because they reflect the physical state of electric plants as they are today, rather than as they were before substantial maintenance and repair work was done.[32] In short, data on forced outages prior to 1999, when the in-city generators obtained operational control of the in-city units, is of little value in predicting future outage rates.

20. While using 24-months of outage data may somewhat ameliorate the problems associated with using 36-months of outage data, no party specifically proposed using the

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[28] *Id.*

[29] *See* New York Commission comments at 5.

[30] We further note that ConEd's own availability data is flawed because: (1) units were operated under a different economic climate prior to the transition to competition, such that decisions regarding availability were based on system needs and the overall cost to end-use customers, as well as the imminent divestiture of the units; and (2) prior to divestiture, reliability data was often recorded in a manner that is inconsistent with current rules and would understate or overstate the conversion rate as a result. *See* New York Commission comments at 7 n.6.

[31] In-city generators comments at 6-7. While they have further argued that, merely because of these investments, the price cap should be increased, we disagree. As indicated above, the Commission's task in this proceeding has been to translate the in-city price cap, not change it. If the in-city generators believe the level of the price cap is unjust and unreasonable, they may challenge the cap under appropriate provisions of the Federal Power Act, 16 U.S.C. § 824e. In any case, in-city generators receive no less compensation under the 12-month UCAP methodology than they did under the plan in effect when they made their investment decisions.

[32] *See* New York Commission comments at 5-7.

24-month outage rate. In addition, it is less certain that using the 24-month outage rate, as opposed to the 12-month outage rate, would achieve revenue neutrality.[33]

21. In-city generators argue that a period longer than 12 months is necessary to account for the entire maintenance cycle of generating units. We disagree. The reliability of 12 months' data to translate the price cap is assured by the use of aggregate data from over 90 facilities, each one at a different point in its maintenance cycle.[34] Because of the large sample used, and the fact that those units are at various points in their maintenance cycles, the data can be expected to include outage histories from units operating better, and units operating worse, than the average long-term performance levels. Thus, the aggregate data used for the approved translation should smooth out any variations and anomalies by capturing a normalized outage level for the generators' collective fleet of units.[35]

22. For all of the foregoing reasons, we reaffirm our decision to use 12 months of outage data in translating the in-city price cap.

The Commission orders:

NYISO I, NYISOII, and *NYISO III* are hereby affirmed, without modification, for the reasons set forth above.

By the Commission.

(S E A L)

Magalie R. Salas,
Secretary.

[33] As discussed above, the key to achieving revenue neutrality is to use the 12-month outage rate.

[34] Indeed, generators must be on different maintenance cycles, in order to avoid having all of them shut down at once.

[35] *See* New York Commission's Answer to Request for Rehearing at 6.