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June 16, 2000

Richard J. Grossi
c/o William J. Museler
Chairman, Board of Directors
New York Independent System Operator
3890 Carman Road
Schenectady, NY 12303

Re: Appeal of the NYISO Management Committee's June 5, 2000 Decision to Propose Bid Caps in NYISO-Administered Markets

Dear Mr. Grossi:

Hydro Quebec Energy Services (U.S.) Inc. ("HQUS") hereby appeals to the Board of the New York Independent System Operator the decision of the NYISO's Management Committee to propose bid caps for the New York market.

Summary

HQUS urges the NYISO Board to overturn the Management Committee's decision and refrain from filing any bid cap proposal at the Federal Energy Regulatory Commission ("FERC"). Imposing bid caps would cause significant financial harm to parties who purchased Transmission Congestion Contracts ("TCCs") from the NYISO and sold Installed Capacity ("ICAP") through the auspices of the NYISO, and would contravene the basis of those sales under the NYISO's FERC-approved Open Access Transmission Tariff ("OATT") and Market Administration and Control Area Services Tariff ("Services Tariff"). Bid caps would have a number of adverse effects on the market, such as causing hedged energy purchasers to subsidize unhedged purchasers, reducing energy supplies, and compromising reliability. In addition, the NYISO is on record at FERC as opposing artificial price controls, and the Management Committee has failed to point to any facts that justify imposing a bid cap. A request by the NYISO to FERC for authority to impose bid caps – let alone any actual use of bid caps – would give the market and FERC the wrong signal about the NYISO's confidence in its market administration and its commitment to a competitive market, and therefore have a chilling effect on the continued development of a robust market.

This appeal is being submitted pursuant to the *Procedural Rules for Appeals to the ISO Board* (the "Procedural Rules"), and Section 5.07 of the ISO Agreement, which provides that the

ISO Board shall review and determine appeals from actions of the Management Committee. In support of this appeal, attached as Exhibit A is the statement of Roy Shanker. HQUS requests expedited processing of this appeal pursuant to Article 2.06 of the Procedural Rules. HQUS reserves all its rights to pursue any other remedies concurrent to processing of this appeal. Pursuant to Article 5.01 of the Procedural Rules, HQUS requests a waiver of the 10-page limit under Article 2.04.

Background

At its June 5, 2000 meeting, the Management Committee approved by a 63% majority a motion requesting that the NYISO file with FERC under Section 205 of the Federal Power Act a request for authority to impose bid cap rules. Under the approved motion (see Exhibit C), bid caps would apply to the Day-Ahead Market, Ancillary Services, and the Real-Time Market. For energy bids a $1000/MWh bid cap would apply. All internal and external bids would be subject to the cap.

The motion did not specify a proposed effective date for these changes. However, Article 7.11.f of the ISO Agreement provides that "[a]ny action taken by the [Management] Committee at any meeting shall not become effective until thirty (30) days after the Committee has acted." The Management Committee's vote in favor of bid caps took place on June 5. In light of the 30-day requirement, a bid cap could not take effect before July 5.

Basis for Appeal

1. Imposing Bid Caps Would Cause Harm to Market Participants Who Sold ICAP and Purchased TCCs in Reliance on Existing Market Conditions under Rules Proposed and Implemented by the NYISO

Imposing bid caps in New York would cause significant financial harm to sellers of ICAP and purchasers of TCCs, who at the time of these auctions relied on the OATT and Services Tariff. There were no bid caps at the time of the auctions, nor had any been proposed to the Management Committee. As a result, buyers and sellers of TCC and ICAP valued these assets based on a market without bid caps. To impose bid caps would severely undermine the elaborate and painstaking process of ensuring the market had an opportunity to value appropriately the TCCs and ICAP.

A. Installed Capacity Sales

As part of FERC's approval of the NYISO's transitional market design for ICAP, FERC authorized the NYISO to conduct auctions under which Load Serving Entities ("LSEs") could purchase capacity from suppliers to satisfy ICAP requirements.[1] FERC also authorized the NYISO to impose on market participants sanctions for violations of their ICAP obligation, such

[1] See Sections 5.9 – 5.15 of the Services Tariff.

as any failure to schedule or bid into the market during capacity-tight periods. FERC found sanctions for violations of ICAP obligations reasonable, because "ICAP generators are compensated at market rates for meeting their ICAP responsibilities, including the obligation to bid into the New York markets."[2] (Emphasis added.) Under this market design, sellers thus assume an obligation to allow the NYISO to call the energy associated with that capacity in the day-ahead market and during emergencies – in exchange for receiving market rates. (R. Shanker ¶ 10.)

At the time of these sales, FERC had not authorized any bid caps, nor had any been proposed by the NYISO to FERC (excluding the price caps for generation within New York City). The sale of ICAP was therefore predicated on a maximum call price for energy of $9,999/MWH (this is not a bid cap, but due to software limitations, it is the maximum amount payable under the NYISO's system). (R. Shanker ¶ 11.) Based on this premise of no bid caps, HQUS sold this spring significant amounts of ICAP to LSEs, for the period May 1 to October 31. Now, once that these sales have been completed, and within weeks of the auction, the Management Committee wishes to impose bid caps, yet without changing any of the ICAP obligations. If enacted, this would inflict significant harm on ICAP providers, who would still have to provide capacity under the ICAP contracts, yet would be subject to a bid cap on energy sales. The value of capacity sold with an energy call of $1,000 is significantly greater than capacity sold with an energy call of $9,999. Thus the proposed energy cap clearly harms ICAP sellers like HQUS, making them provide a much higher valued service than what they originally sold under the NYISO Services Tariff auction in April and May, without any change in compensation. (R. Shanker ¶ 12-13.) Contrary to FERC's justification for the ICAP arrangement, HQUS and other ICAP suppliers would then no longer be receiving market rates for their energy. In contrast if the NYISO had already proposed bid caps at the time of the ICAP sales, ICAP suppliers would have insisted on higher prices because the value of the right to call would have been greater under a bid cap.

B. Transmission Congestion Contract Purchases

The purchase of TCCs by HQUS and other energy suppliers from the NYISO would likewise be adversely affected by bid caps. TCCs were proposed by the NYISO, and authorized by FERC, as a tool for parties to hedge against congestion costs associated with transmitting energy.[3] A party to a TCC has the right to collect congestion rents associated with energy transmission between a specified point of injection and point of withdrawal. The TCC's value is based on the difference between the energy price in the two locations. (R. Shanker ¶ 14.) During the discussions about the proposed use of TCCs, market participants expressed concern regarding how to assess the economic value of TCCs.[4] FERC addressed such concerns by requiring the NYISO to adopt an elaborate TCC auction structure. HQUS subsequently purchased TCCs in March and April for May 1, 2000 through April 30, 2002. HQUS and numerous other parties spent tens of millions of dollars to purchase TCCs. (R. Shanker ¶ 17.) In

2 90 FERC ¶ 61,319 at 62,063 (2000).
3 See Attachment M to the OATT.
4 86 FERC ¶ 61,062 at 61,228 (1999).

evaluating what to pay for TCCs, HQUS estimated the potential congestion rents for the duration of the TCCs, based on the projected spread between energy prices on either side of a transmission constraint during various times, including the peak summer season. Of course, these calculations assumed there would be no bid cap – the presence or absence of a bid cap is essential to properly valuing a TCC, because a bid cap would cap the spreads between these energy prices, and thus cap the value of the TCC. (R. Shanker ¶ 16.) Had bid caps been in effect, the TCC prices would without doubt have been lower. But no bid caps were in effect, and this was reflected in the prices paid by HQUS and others for TCCs. Obviously, imposing bid caps at this time would severely compromise the value of the TCCs.

C. Imposing Bid Caps Retroactively Changes the Conditions of the Sales of ICAP and TCCs and Harm Market Participants Who Relied on those Conditions

As explained above, the imposition of bid caps will cause significant and unforeseen harm to market participants who sold ICAP and purchased TCCs. In voting to pursue bid caps, the Management Committee majority apparently failed to acknowledge this harm, let alone devise any methods of compensating those who took actions relying on the absence of bid caps. Moreover, imposing bid caps at this time would raise serious issues regarding the NYISO's conduct and compliance with its tariffs. Parties were induced to take part in ICAP and TCC transactions based on existing market conditions and tariff provisions, and they relied on these terms and conditions in making significant financial decisions. No notice was given at the time that the NYISO might within weeks plan to impose bid caps that would in effect retroactively change the financial terms of these transactions. Yet, this has now been proposed, and if implemented, would greatly benefit some market participants while harming others.

HQUS opposes the use of bid caps. However, if bid caps were ever to be used, they must be implemented so as to have only prospective effect, and in a way that ensures they do not harm parties who have taken actions in reliance on the absence of bid caps. In this regard, HQUS and other market participants have obligations under the NYISO tariffs that extend as far as two years into the future. As FERC stated in its recent order in which it rejected the NYISO's request for retroactive recalculation and rebilling for certain ancillary services: "We deny the request because such changes should be prospective. Customers cannot effectively revisit their economic decisions in these circumstances – there is no way for buyers and sellers to retroactively alter their conduct."[5] It is likewise impossible for participants in the TCC and ICAP auctions to retroactively alter their conduct to determine the appropriate compensation for the sales in those auctions. Accordingly, it is imperative that the NYISO Board counter the Management Committee's course of conduct by refusing to authorize a bid cap filing at FERC, and thus helping restore stability and confidence to the markets the NYISO administers.

2. Bid Caps Have an Adverse Effect on the Market

[5] *New York Independent System Operator, Inc.,* 91 FERC ¶ 61,218, slip op. at 24 (2000).

A. Bid Caps Force Market Participants Who Managed their Risks to Subsidize Those Who Failed to Manage their Risk

Bid caps would have the inequitable effect of punishing market participants who hedged to protect against higher energy prices by forcing them to subsidize market participants who failed to protect themselves through hedging. This cross-subsidy will occur because of how the NYISO distributes the costs of emergency energy purchases to market participants. (R. Shanker ¶ 18-19.)

In the absence of bid caps, energy purchasers who are unhedged would be the only ones to pay for the higher priced power as it enters the system. Parties who had planned and hedged to meet their needs would face no incremental price exposure regardless of the escalation of market prices. (R. Shanker ¶ 19.) However, bid caps would likely lead to a greater frequency of emergency purchases, because during periods of high demand, when prices would otherwise exceed $1,000, it is likely that suppliers that will refrain from selling to New York and instead sell to areas where they can obtain market prices. Suppliers could also limit the availability of energy to New York to emergencies only. As a result, the NYISO would have to make emergency purchases. This would virtually destroy the protection afforded by hedging, because the cost of emergency purchases are distributed among all market participants based on their energy consumption, regardless of whether they are hedged or not. Thus the more an entity consumes, the more it pays for emergency power, even if its total consumption is hedged. In comparison, a party that had not hedged pays lower prices than otherwise, because all market participants pay to subsidize its unhedged positions. (R. Shanker ¶ 19-20.)

It is obvious that this forced cross-subsidization between market participants obstructs the development of markets. Furthermore, it would defeat market participants' efforts to protect themselves, through hedging transactions and otherwise, against the price fluctuations that are a natural part of a competitive market. This role of hedging in the development of markets has been acknowledged by FERC.[6] Given the fact that many of the market participants appear to have taken the responsible step of hedging much of their demand, the bid caps would bring about a particularly inequitable result.

B. Bid Caps Would Reduce Energy Supply and Harm Reliability in New York

[6] *See State of the Markets 2000*, Federal Energy Regulatory Commission, March 2000 at 3. *See also., Regional Transmission Organizations*, Order No. 2000, FERC Statutes and Regulations ¶ 31,089 at 31,109 (1999), stating that a workable market approach should "provide market participants with the opportunity to hedge locational differences in energy prices; *New England Power Pool*, 88 FERC ¶ 61,147 at 61,494 (1999), ("We encourage NEPOOL and the ISO to provide as efficient a mechanism as possible for sellers to hedge congestion costs,… ."); *San Diego Gas & Electric Co. and Southern California Edison*, 80 FERC ¶ 61,128 at 61,427 (1997), ("Transmission rights will allow market participants to hedge the risk of fluctuating transmission congestion charges. Reducing risk is important in light of the large amounts of capital involved in potential future investments by market participants.").

If competitive markets are to develop in New York, the NYISO must allow the market to determine prices free of the market distortions entailed by artificial price limits. There seems to be a misapprehension of the fundamental tenet that imposing bid caps is not an innocuous measure to protect the market, but rather, will harm the market, both in the short and long-term. First, at times of the highest energy demand, energy suppliers will seek the highest price they can obtain for energy. Bid caps in New York will therefore encourage energy sales to be made outside New York by out-of-state suppliers, as well as in-state suppliers who have flexibility to bid elsewhere. These out-of-state sales will likely occur not only when the price of energy exceeds $1,000 but also when it is anticipated that the price may rise to that level. It is therefore likely that a large amount of energy supply will avoid the New York market. If supply is reduced in this way, energy prices in New York may in fact consistently rise closer to the $1000 level than would occur in the absence of bid caps. Second, imposing bid caps and the ensuing possibility that they will be re-instituted at some future time will create long-term uncertainty regarding the New York market. Whereas correct price signals would encourage development of new generation in New York, bid caps would have just the opposite effect, because energy suppliers will have a reduced incentive to sell energy in New York. (R. Shanker ¶ 28-29.) Finally, it is abundantly clear that the reduced energy supply in New York created by bid caps will inevitably threaten reliability in New York, and thus further harm consumers. (R. Shanker ¶ 24-25.) (See also R. Shanker ¶ 30 for discussion about the adverse effects of the bid caps on purchasers of generating assets in New York.)

3. The NYISO is on Record as Opposing Artificial Price Restraints

The Management Committee's decision to pursue bid caps creates a conflict with the certified statements by the NYISO to FERC – opposing artificial price controls and expressing confidence in the markets it administers. As the NYISO stated in its Answer to the complaint of New York State Electric & Gas Corporation ("NYSEG"),[7] "the underlying design of the New York markets is sound"[8] and any problems encountered by the NYISO "have been transitional in nature and are rapidly disappearing as the NYISO gains experience and implements corrections."[9] The NYISO assured FERC that it is confident it can deal with problems arising this summer,[10] and that FERC "should not underestimate the NYISO's ability to effectively address market flaws."[11] Overall, the NYISO thus expressed – backed by sworn affidavits – its full confidence in the market and its own ability to correct for any problems. Moreover, the NYISO stated its general view of the undesirable effect of artificial price controls:

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[7] On April 24, 2000, NYSEG filed a complaint with FERC requesting that market-based rates be suspended during the summer and replaced with cost-based rates. NYSEG subsequently amended the complaint to request the use of price screens rather than cost-based rates. The NYISO filed an answer with FERC on May 25, 2000, as amended on May 31, 2000 ("Answer or NYISO's Answer"), in which the NYISO stated its opposition to such measures.

[8] NYISO's Answer at 7.

[9] NYISO's Answer at 8.

[10] NYISO's Answer at 15.

[11] NYISO's Answer at 27.

> [I]f prices in the NYISO-administered markets are artificially suppressed, generation project developers that were considering entering New York can be expected to go elsewhere, particularly since they could not know with certainty when normal market operations would resume. Once market participants are driven away by the cost-based bidding scheme, they would likely be slow to re-enter the NYISO-administered markets, because they would fear its re-imposition. Existing New York generators would also suffer, since they would be deprived of their chance to earn legitimate returns during a period of high demand.[12]

The same argument applies equally to bid caps as cost-based pricing. HQUS agrees with the NYISO that artificial suppression of prices will cause energy suppliers to seek other markets, and will cause a loss of confidence in the market. Therefore, we ask that the NYISO join us in supporting the position it recently took at FERC and continue to support an open and competitive market structure.

4. No Facts Have Been Presented to Justify a Bid Cap

The Management Committee has provided no evidence to substantiate its claim that bid caps are necessary. For two reasons, this omission demonstrates the problem with the bid cap proposal. First, the NYISO has admitted that a solid factual basis is needed to justify such measures. In its Answer to NYSEG, the NYISO emphasized the need for specific evidence of market problems to justify pursuing any changes in pricing:

> While the NYISO is committed to market-based pricing, in appropriate circumstances, bid caps may be warranted. For example, if the NYISO were to determine, based on actual evidence from its summer operations, that one of the markets it administers has failed, or been distorted by market power, it now has authority to implement market mitigation measures, including bid caps."[13]

(Emphasis added.) This statement verifies that the drastic measure of imposing bid caps would be appropriate only if required by actual evidence of market failure or distortions due to market power. In the same vein, the NYISO countered NYSEG's calls for price controls by pointing out that NYSEG had "failed to substantiate its speculative claim that the NYISO-administered markets will not be workably competitive this summer".[14] (Emphasis added.) Despite the NYISO's stated position, the Management Committee, in voting to pursue bid caps, failed to produce any evidence of such market failure or distortions due to market power, and thus failed to follow the standard it had just previously told FERC would apply. Indeed, the Management Committee could not have produced any evidence of market failure during this summer, because it has yet to conduct operations during a summer season. Nevertheless, without the benefit of any experience from summer operations, the Management Committee majority concluded that

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[12] NYISO's Answer at 24.

[13] NYISO's Answer at 10. As to the conclusion of this statement, HQUS contests the NYISO's assertion that it has authority to institute bid caps.

[14] NYISO's Answer at 8.

bid caps are necessary. HQUS is concerned that this very significant decision has been taken based on perception rather than any actual experience with the market.

Second, if the NYISO were aware of any circumstances pointing to market problems, it should simply use the authority it has under the tariff to correct these problems. For example, the NYISO could and should try to address such perceived problems through its FERC-approved Market Monitoring Plan. The introduction of the Market Monitoring Plan provides as follows:

> [The NYISO Mitigation Measures] are intended to provide the means for the NYISO to mitigate the market effects of any conduct that would substantially distort competitive outcomes in the New York Electric Markets administered by the NYISO, while avoiding unnecessary interference with competitive price signals. Consistent with the provisions of the Plan, these Mitigation Measures are intended to minimize interference with open and competitive markets, and thus to permit, to the maximum extent practicable, price levels to be determined by competitive forces under the prevailing market conditions. To that end, the Mitigation Measures authorize the mitigation only of specific conduct that exceeds well-defined thresholds specified below.

NYISO Market Monitoring Plan, ¶ 1(a). The steps required by the Market Monitoring Plan represent the opposite of the premature action the Management Committee wishes to engage in by imposing a bid cap without any factual support. The Market Monitoring Plan requires the NYISO to first identify the alleged offending conduct, and, after it is shown that the questioned conduct is not consistent with competitive behavior, allows the NYISO to apply mitigation measures that are appropriately tailored to respond to the specific problem it has identified. The fact that the Market Monitoring Plan has played no role in this present issue simply demonstrates the lack of evidence of any conduct warranting action by the NYISO.

In addition, if there were any evidence of market problems this summer, the NYISO could likely use its Temporary Extraordinary Procedures (the extension of which has been sought from FERC). However, as with the Market Monitoring Plan, the use of TEPs requires specific factual findings about market problems, and no such facts have been established. The Management Committee's failure to rely on the appropriate market-monitoring and mitigation processes established through FERC is a tacit admission that there are no facts to justify instituting any kind of artificial price controls. (R. Shanker ¶ 9.)

Conclusion

There is no evidence to justify the imposition of bid caps in the NYISO-administered market. HQUS respectfully urges the NYISO Board to overturn the decision of the Management Committee, and refrain from proposing any bid caps or similar measures.

Sincerely,

Joel F. Zipp
Gunnar Birgisson

Counsel for
Hydro Quebec Energy Services (U.S.) Inc.

Attachments

cc: Robert E. Fernandez
Ira L. Freilicher

Exhibit A

Statement of Roy J. Shanker

1) My name is Roy J. Shanker. I reside at 9009 Burning Tree Road, Bethesda, MD, 20817.

2) I am self-employed as a consultant in the natural resources area, with the majority of my work related to the electric utility and natural gas industries. I have worked in these areas for approximately 27 years.

3) I have worked as an independent consultant since 1981, conducting over 400 engagements for a wide range of independent power developers, electric utilities, regulators, private investors, and financial institutions. In this capacity I have been associated with the development of numerous power facilities representing thousands of megawatts of electric generating capacity.

4) Currently I am extensively involved in the restructuring of the wholesale power markets in both the New York Independent System Operator (NYISO) and the Pennsylvania, New Jersey and Maryland Office of Interconnection (PJM OI). In New York I participated for several years in the stakeholder process leading up to the activation of the NYISO in November 1999. I am a member of the NYISO's Business Issues Committee and participate in a number of working groups including the Scheduling and Pricing Working Group, the Market Structure Working Group and the Installed Capacity Working Group. In PJM I participate in the Energy Markets Committee, Tariff Advisory Committee and Member's Committee as well as special committees on a variety of issues including the sale of ancillary services such as regulation.

5) I have served as an expert witness on numerous occasions before state and federal regulators and in various state and federal courts. A more detailed summary of my education and experience is provided as Exhibit B.

6) I was retained in this matter by Hydro Quebec Energy Services (U.S.) Inc. (HQUS). I was asked by HQUS to review the price cap that was proposed for the NYISO by the New York Public Service Commission. This proposal was adopted at a special meeting of the NYISO

Management Committee on June 5, which I attended. In summary, the proposal would put a cap on prices in the energy market of $1000. The sponsors of the proposal did not provide any further details justifying the bid cap. I was asked by HQUS to comment on the impact of the bid cap on (1) the market participants; (2) the existing functions of the market; and (3) the commercial and reliability functions of the market.

7) My conclusion is that the proposal is harmful to market participants, including both those that made commercial transactions under the tariff as well as others. There is no identified need or justification for the imposition of a price cap. No market failure or design flaw has been identified. The background is simply that market participants voted on whether they would like to pay less for energy. Not surprisingly, market buyers, governmental entities and those representing related consumer interests voted for lower prices. The result, however, is that adopting bid caps would harm all other market participants who reasonably relied on the existing tariff provisions to conduct their business.

8) For example, Transmission Congestion Contracts (TCCs) are provided for under NYISO's Open Access Transmission Tariff (OATT). Imposing bid caps would significantly decrease the value of TCCs that have already been sold in a tariff-based auction, and would thereby harm the parties who purchased TCCs. Similarly, Installed Capacity (ICAP) is specifically required of market participants under the NYISO Market Administration and Control Area Services Tariff ("Services Tariff"), and also was sold under tariff-based auctions. The energy bid cap significantly increases the value of ICAP sold into the NYISO market, harming the sellers, and resulting in a windfall for the buyers. Furthermore, the energy bid cap would result in direct subsidies from market participants who have already acted responsibly by hedging their market requirements to other participants that have not hedged. The energy bid cap also may affect operating reliability in New York, possibly discouraging or eliminating supply during the periods of greatest demand. Further, the imposition of energy price caps will work directly in opposition to many of the basic objectives of an open and competitive market, in particular conveying accurate price signals for both short term consumption and long term investment in new generation and transmission facilities. Finally, the energy price cap will adversely impact those that made commercial decisions outside of the tariff but in reliance of the tariff provisions.

In the following sections I explain each of the conclusions presented above in greater detail.

THERE IS NO JUSTIFICATION FOR INSTITUTING A PRICE CAP

9) The key in considering the proposal to institute an energy bid cap is that no market failings or market design flaws have been identified to justify this action. Had such failings been identified, the NYISO could have availed itself of existing processes, including its Market Mitigation Measures and the Temporary Extraordinary Procedures (if extended by the Federal Energy Regulatory Commission). It is telling that this path wasn't taken. The use of both the Market Mitigation Measures and the Temporary Extraordinary Procedures requires specific factual findings about market deficiencies – which at this stage have not been made. It is evident that what has occurred is that market buyers and their advocates grouped together to vote for bid caps, not because of any market flaws, but simply to get lower energy prices.

HARM TO PARTIES BUYING AND SELLING UNDER TARIFF PROVISIONS

10) A bid cap directly harms parties such as HQUS that have made sales and purchases pursuant to the NYISO tariff. This is evident in the Installed Capacity market and the Transmission Congestion Contract market. For example, HQUS has sold 950 MW of ICAP into the summer capability period (May 1-October 31). HQUS made some of these sales via the NYISO-run auction under Article 5 of the NYISO's Services Tariff. By providing ICAP into the NYISO markets, a seller such as HQUS undertakes significant obligations. In particular, it is obligated to offer all of that capacity in the day ahead market (DAM) run by the NYISO. Similarly, even if that capacity is not scheduled by the NYISO in the DAM, as a provider of ICAP, a seller is also obligated to allow the NYISO to recall the energy from that ICAP during an emergency. Thus effectively the sale of ICAP into the NYISO market is the equivalent of selling an uncapped call on the energy of the ICAP facility. Accordingly, when a facility accepts the responsibility to be ICAP and seller into that market, it also accepts the absolute obligation to allow the NYISO to call the energy associated with that capacity in the DAM and during an emergency.

11) At present, the effective cap on energy prices is $9,999 per MWH, which is a reflection of the technical limits of the NYISO bidding system. Thus when a party sells ICAP into the NYISO markets under the Services Tariff, while they are free to offer the associated energy at any price they wish (assuming the facilities are not subject to any market power mitigation requirements), they have effectively sold a capacity product with an associated right that allows the NYISO market to call the related energy at $9,999. When parties sold into the NYISO ICAP auction, they did so in reliance of these tariff properties, e.g. that they were agreeing to provide the ICAP to the NYISO subject to the $9,999 call.

12) Imposing a bid cap of $1000 per MWH would drastically change the terms of the ICAP sale between HQUS and other suppliers and NY load. This is because the New York Public Service Commission's proposal would cap energy prices but not limit any of the ICAP obligations of parties that sold ICAP in the summer capability period auction. Thus the obligation of ICAP to offer all of its capacity into the NYISO market is unchanged, but the effective call price under which the ICAP was sold has been decreased by a factor of 10 from $9,999 to $1,000.

13) The value of capacity sold with an energy call of $1,000 is significantly greater than capacity sold with an energy call of $9,999. Thus the proposed energy cap clearly harms ICAP sellers like HQUS, making them provide a much higher valued service than what they originally sold under the NYISO Services Tariff auction in April and May, without any change in compensation.

14) A similar type of harm is done to parties that have made purchases of TCCs pursuant to the auction provisions of Attachment M to the NYISO OATT. In the NYISO market system, Location Based Marginal Prices (LBMP) are established for each generation bus and load zone. Transmission customers face congestion charges based on the differences in LBMP between the point of injection for power and the point of withdrawal. TCCs are financial instruments sold under the OATT that entitle the holder to congestion rents equal to the difference in LBMP between the point of withdrawal and the point of injection. Thus parties can, if they wish, purchase TCCs as hedges against potential congestion. Revenues from the sales of TCCs go to

the Transmission Owners, and ultimately to transmission customers via formula rate adjustments contained in the tariff.

15) The NYISO held auctions for TCCs in March and April, selling TCCs for durations of both 6 months and two years.

16) In valuing a TCC for purchase in the auction, HQUS and other parties estimated the potential congestion rents that the TCC would realize over its life. In theory, a party ought to be willing to pay up to its estimate of the potential congestion rents. In making such an estimate, the presence or absence of an energy cap is important. During periods of great congestion, prices on the uncongested side of a transmission constraint should remain reasonably stable, while prices on the congested side will continue to rise as demand increases. Thus placing a cap on energy prices limits the rise and prices on the congested side of a transmission constraint and also effectively caps the spread in congestion, directly impacts the values of any associated TCCs. In New York, the general pattern of congestion is low prices in the west, and higher prices in the transmission constrained southeastern New York (SENY, i.e. New York City). A party would be willing to pay more for TCCs from the west into New York City when the maximum price for energy is $9,999 than when it is $1,000. Prices established in the recent auctions reflected this higher valuation for a period out to two years.

17) HQUS, and numerous other parties, spent tens of millions of dollars to purchase two year TCCs. The imposition of an energy rate cap now effectively de-values HQUS's investment after the money spent on TCCs has already been transferred to transmission customers in the form of lower rates.

AN ENERGY PRICE CAP CAUSES INEQUITABLE CROSS SUBSIDIES

18) The imposition of an energy price cap also creates inequitable cross subsidies among the existing market participants. In effect the imposition of a cap will result in payments from the market participants who have been responsible and hedged their consumption against exposure to high prices to market participants who have failed to make investments to protect themselves from high prices. Under a price cap parties who have been responsible in planning to meet their

requirements will be penalized, and those who failed to plan or choose to adopt a risky market strategy will be rewarded with a windfall.

19) This cross subsidy will occur because of how the NYISO distributes the costs of emergency energy purchases to market participants. With the imposition of an energy cap, the likelihood of emergency purchases increases. Basically, with the existing system, one would expect a reasonably orderly increasing supply of generation as prices rise. With the imposition of a bid cap, instead of additional supply coming into the New York control area during periods of high demand when prices would otherwise have exceeded $1,000, it becomes more likely that this supply will not be offered to the NYISO, or will be made available only on an emergency basis. Under the existing system, with an orderly clearing of greater supply at increasing prices, those parties that needed power and were unhedged would be the only ones to pay for the higher priced power as it enters the system. Parties who had planned and hedged to meet their needs would face no incremental price exposure regardless of the escalation of market prices as their supply has already been met at a fixed or capped price.

20) However, because of the increase in emergency purchases resulting from a bid cap, the process described above will no longer exist. This is because under the NYISO tariff the cost of emergency purchases are spread to all market participants based on their energy consumption, regardless of whether they are hedged or not. Thus the more you consume the more you pay for emergency power, even if your total consumption is hedged through term purchases. Alternatively, a party that doesn't hedge at all will now find its exposure to high prices significantly cut as all market participants will now pay to subsidize their unhedged positions. Given the fact that many of the market participants claim to have hedged much of their demand, this is an unjust result.

21) This cross subsidy is illustrated in the following example. Let's assume that as many of the large Load Serving Entities (LSEs) have claimed, most of their load is hedged, for example 90% of the total demand in the control area. Thus on a very high load day of 30,000 MW, only 3,000 MW would actually be purchased at market rates. Without a price cap, the hedged market participants would be indifferent if prices rose very high, say up to $6,000 per MW. Only the

3,000 MW of unhedged demand would pay this price. Thus for a single hour these unhedged loads would pay $18,000,000.

22) Alternatively, consider what happens if due to the price cap, 3,000 MW of supply is withdrawn from the market, and now the NYISO is forced to purchase the same energy on an emergency basis for the same $6,000 price. In this case all of the emergency purchase costs will go through the NYISO's OATT Schedule 1 charges and be paid by all load. Thus the 27,000 MW of load that were prudent and planned for their needs would wind up paying 90% of the emergency purchase costs or $16,200,000. Alternatively, the load that was unhedged would receive this windfall subsidy, and only pay $1,800,000.

23) While it would be possible to devise a method to avoid this type of cross subsidy, this type of perverse result has not been addressed in the price cap proposal.

RELIABILITY IMPACTS

24) Beyond the inequitable price allocation and other impacts, a bid cap can also adversely affect reliability. A basic principle of market based wholesale transactions is that the power will be committed to where it can receive the highest price. Bid caps send the wrong reliability signal, because their natural result is to cause generation to exit the NY system or to not sell into the system. The design of the NY ICAP market leads to this result. The NYISO has a 6 month capability period. This means that LSEs have an ICAP requirement for a six month period. However, the market is implemented on a monthly basis. Parties can purchase their requirements one month at a time, and generators may sell on the same basis. In addition, deficiency charges are assessed on a monthly basis, which means that if an LSE is deficient during the highest demand month of the year it faces only a deficiency payment equal to one twelfth of the annual charge. This effective cap on capacity prices, coupled with the imposition of an energy price cap would make it reasonable for a ICAP supplier who had not committed its capacity long term to withhold that capacity from NY, and to then enter into a sale for the single month or months outside of the NY area when energy prices were expected to be higher elsewhere. Similarly, in the presence of the cap, outside suppliers from adjacent control areas will now no longer have an incentive to make such supplies available on either a short term or long term firm basis.

25) In addition, the presence of the energy cap, coupled with the fact that NY only imposes a capacity deficiency charge on a monthly basis further discourages LSEs from entering into long term agreements that would require that capacity to remain in the NY control area. This concern was also expressed in a recent study sponsored by the NYISO on the reliability impacts of moving to a monthly capacity market. The conclusion of that study was that there would be no adverse reliability impacts **assuming that there was no cap on the energy market**. **The proposed energy price cap directly violates this basic assumption regarding the maintenance of reliable supply in the pool under existing procedures.**

26) While some proponents of the price cap have pointed to PJM as an example of where price caps work, they would be well served to study the details more closely, particularly with respect to reliability. In the PJM system, capacity can readily "de-list" and exit the control area with no recall obligation. Recently, prices in the PJM capacity market have, likely in response to bid caps, cleared at the administratively set deficiency charge (e.g. a daily capacity price cap). The PJM area as a whole was capacity short for a period of time, directly as a result of capacity in PJM "de-listing" and withdrawing their capacity (i.e. there were sufficient resources within the control area, but some were de-listed and not available as firm Capacity Resources). Thus true capacity shortages have occurred where price caps have been in place. As in most things there is no free lunch, if the market isn't willing to pay for a good, it will most likely be sold elsewhere.

27) Further, with respect to the orderly working of PJM in other areas, it should also be noted that PJM's cap has been in effect since the beginning of the market's operations, which means that all sales of capacity and FTRs were done in a constant environment where the parties were fully aware of the existence of the cap at the times of their purchases and sales, and could reasonably factor the energy price cap into their decisions.

THE WRONG MESSAGE TO MARKET PARTICIPANTS

28) One of the basic objectives underlying the entire NYISO market design was the importance of conveying the "right price" signals to all market participants (end users, generators and providers of transmission service and investment). This was accomplished by putting in place the system of locational based marginal prices that very accurately reflect the true

incremental cost of serving load at any location in the control area. These were to be the directions that: encouraged end users to hedge and control their use of power during the periods of highest demand; pointed out the "best" and most valued locations for new generation to be build; and identified where incremental transmission facilities would be of most value.

29) Indeed, initial indications are that these price signals are sending exactly the right information with significant amounts of new generation and new transmission facilities being planned. A number of new generation facilities have entered into the queue for interconnection with the grid, all reasonably expecting to receive the uncapped LBMP at their generation site. Similarly several new transmission facilities have already been proposed predicated on receiving the incremental TCCs created by their investments in facilities that will increase transfer capability between congested areas. These plans were predicated on the fact that in exchange for their investments, parties would have the opportunity to obtain market based value. The imposition of an energy price cap, even for only a short period, under cuts these expectations, and has to create a greater perception of risk on the part of these new market participants. In turn, this has to make the final realization of these investments less likely. Thus in acting the "protect" consumers, the proposed energy price cap actually plants the seeds for the perpetuation of the underlying cause of high prices, scarcity of supply in the most congestion regions of the ISO.

HARM TO OTHER MARKET PARTICIPANTS

30) Finally, by considering the long term context in which the proposal by the NY PSC occurs, it is clear that not only would bid caps harm those operating under the NYISO tariffs, but also the new market entrants who recently purchased generation capacity in the state. The PSC was an active advocate for the divestiture of generating assets in New York. Billions of dollars were spent by new market entrants on existing generation in the state. A significant amount of this money was above the book value of the assets that were sold, serving as a direct off set to stranded costs, and as such an explicit benefits to consumers in the state. This was exactly the type of benefit that the PSC was seeking when it encouraged these sales. Now after the fact, once money has been paid for these assets, the PSC is seeking to devalue them for the benefit of a small group of consumers that have failed to hedge their consumption. This is nothing more

than a "bait and switch" tactic that not only penalizes the new market entrants, but also many other market participants such as HQUS that have relied on the NYISO tariffs.

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Roy J. Shanker

June 16, 2000

Exhibit B

QUALIFICATIONS OF
DR. ROY J. SHANKER

EDUCATION:

Swarthmore College, Swarthmore, PA
A.B., Physics, 1970

Carnegie-Mellon University, Pittsburgh, PA
Graduate School of Industrial Administration
MSIA Industrial Administration, 1972
Ph.D., Industrial Administration, 1975

Doctoral research in the development of new non-parametric multivariate techniques for data analysis, with applications in business, marketing and finance.

EXPERIENCE:

1981 - Present

Independent Consultant
9113 Burning Tree Road
Bethesda, Md. 20817

Providing management and economic consulting services in
natural resource-related industries, primarily electric
and natural gas utilities.

1979-81

Hagler, Bailly & Company
2301 M Street, N.W.
Washington, D.C.

Principal and a founding partner of the firm; director of electric utility practice area. The firm conducts economic, financial, and technical management consulting analyses in the natural resource area.

1976-79 Resource Planning Associates, Inc.
1901 L Street, N.W.
Washington, D.C.

Principal of the firm; management consultant on resource problems, director of the Washington, D.C. utility practice. Direct supervisor of approximately 20 people.

1973-76 Institute for Defense Analysis
Professional Staff
400 Army-Navy Drive
Arlington, VA

Member of 25 person doctoral level research staff conducting economic and operations research analyses of military and resource problems.

RELEVANT EXPERIENCE:

2000

Federal Energy Regulatory Administration. Docket No. EL00-24-000. Testimony on behalf of Dayton Power and Light Company regarding the proper characterization and computation of regulation and imbalance charges.

American Arbitration Association File 71-198-00309-99. Report on behalf of Orange and Rockland Utilities, Inc. regarding the estimation of damages associated with the termination of a power marketing agreement.

Circuit Court, 15th Judicial Circuit, Palm Beach County, Florida. On behalf of Okeelanta and Osceola Power Limted Partnerships et. al. Analyses related to commercial operation provisions of a power purchase agreement.

1999

Federal Energy Regulatory Commission. Docket RM99-2-000. Analyses on behalf of Edison Mission Energy relating to the Regional Transmission Organization Notice of Proposed Rulemaking.

Federal Energy Regulatory Commission. Docket No. ER99-3508-000. On behalf of PG&E Energy Trading,

analyses associated with the proposed implementation and cutover plan for the New York Independent System Operator.

Federal Energy Regulatory Commission. Docket No. EL99-46-000. Comments on behalf of the Electric Power Supply Association relating to the Capacity Benefit Margin.

New York Public Service Commission, Case 97-F-1563. Testimony on behalf of Athens Generating Company describing the impacts on pricing and transmission of a new generation facility within the New York Power Pool under the new proposed ISO tariff.

JAMS Arbitration Case No. 1220019318 On behalf of Fellows Generation Company. Testimony related to the development of the independent power and qualifying facility industry and related industry practices with respect to transactions between cogeneration facilities and thermal hosts.

Court of Common Pleas, Philadelphia County, Pennsylvania. Analyses on behalf of Chase Manhattan Bank and Grays Ferry Cogeneration Partnership related to power purchase agreements and electric utility restructuring.

1998

Virginia State Corporation Commission. Case No. PUE 980463. Testimony on behalf of Appomattax Cogeneration related to the proper implementation of avoided cost methodology.

Virginia State Corporation Commission. Case No. PUE980462 Testimony on behalf of Virginia Independent Power Producers related to an applicaton for a certificate for new generation facilities.

Federal Energy Regulatory Commission. Analyses related to a number of dockets reflecting amendments to the PJM ISO tariff and Reliability Assurance Agreement.

U.S. District Court, Western Oklahoma. CIV96-1595-L. Testimony related to anti-competitive elements of utility rate design and promotional actions.

Federal Energy Regulatory Commission Dockets No. EL94-45-001 and QF88-84-006. Analyses related to historic measurement of spot prices for as available energy.

Circuit Court, Fourth Judicial Circuit, Duval County, Florida. Analyses related to the proper implementation of a a power purchase agreement and associated calculations of capacity payments. (Testimony 1999)

1997

United States District Court for the Eastern District of Virginia, CA No. 3:97CV 231. Analyses of the business and market behavior of Virginia Power with respect to the implementation of wholesale electric power purchase agreements.

United States District Court, Southern District of Florida, Case No. 96-594-CIV, Analyses related to anti-competitive practices by an electric utility and related contract matters regarding the appropriate calculation of energy payments.

Virginia State Corporation Commission. Case No. PUE960296. Testimony related to the restructuring proposal of Virginia Power and associated stranded cost issues.

Federal Energy Regulatory Commission. Dockets No. ER97-1523-000 and OA97-470-000, Analyses related to the restructuring of the New York Power Pool and the implementation of locational marginal cost pricing.

Federal Energy Regulatory Commission Dockets No. OA97-261-000 and ER97-1082-000 Analyses and testimony related to the restructuring of the PJM Power Pool and the implementation of locational marginal cost pricing.

Missouri Public Service Commission. Case No. ET-97-113. Testimony related to the proper definition

and rate design for standby, supplemental and maintenance service for Qualifying facilities.

American Arbitration Association. Case 79 Y 199 00070 95. Testimony and analyses related to the proper conditions necessary for the curtailment of Qualifying Facilities and the associated calculations of negative avoided costs.

Virginia State Corporation Commission. Case Number PUE960117 Testimony related to proper implementation of the differential revenue requirements methodology for the calculation of avoided costs.

New York Public Service Commission. Case 96-E-0897, Analyses related to the restructuring of Consolidated Edison Company of New York and New York Power Pool proposed Independent System Operator and related transmission tariffs.

1996

Florida Public Service Commission. Docket No. 950110-EI. Testimony related to the correct calculation of avoided costs using the Value of Deferral methodology and its implementation.

Federal Energy Regulatory Commission Dockets No. EL94-45-001 and QF88-84-006. Testimony and Analyses related to the estimation of historic market rates for electricity in the Virginia Power service territory.

Circuit Court of the City of Richmond Case No. LA-2266-4. Analyses related to the incurrence of actual and estimated damages associated with the outages of an electric generation facility.

New Hampshire Public Utility Commission, Docket No. DR96-149. Analyses related to the requirements of light loading for the curtailment of Qualifying Facilities, and the compliance of a utility with such requirements.

State of New York Supreme Court, Index No. 94-1125. Testimony related to system planning criteria and their relationship to contract

performance specifications for a purchased power facility.

United States District Court for the Western District of Pennsylvania, Civil Action No. 95-0658. Analyses related to anti-competitive actions of an electric utility with respect to a power purchase agreement.

United States District Court for the Northern District of Alabama, Southern Division. Civil Action Number CV-96-PT 0097-S. Affadavit on behalf of TVA and LG&E Power regarding displacement in wholesale power transactions.

1995

American Arbitration Association. Arbitration No. 14 198 012795 H/K. Report concerning the correct measurement of savings resulting from a commercial building cogeneration system and associated contract compensation issues.

Circuit Court City of Richmond. Law No. LX-2859-1. Analyses related to IPP contract structure and interpretation regarding plant compensation under different operating conditions.

Federal Energy Regulatory Commission. Case EL95-28-000. Affidavit concerning the provisions of the FERC regulations related to the Public Utility Regulatory Policies Act of 1978, and relationship of estimated avoided cost to traditional rate based recovery of utility investment.

New York Public Service Commission, Case 95-E-0172, Testimony on the correct design of standby, maintenance and supplemental service rates for qualifying facilities.

Florida Public Service Commission, Docket No. 941101-EQ. Testimony related to the proper analyses and procedures related to the curtailment of purchases from Qualifying Facilities under Florida and FERC regulations.

Federal Energy Regulatory Commission, Dockets ER95-267-000 and EL95-25-000. Testimony related to

the proper evaluation of generation expansion alternatives.

1994

American Arbitration Association, Case Number 11 Y198 00352 94 Analyses related to contract provisions for milestones and commercial operation date and associated termination and damages related to the construction of a NUG facility.

United States District Court, Middle District Florida, Case No. 94-303 Civ-Orl-18. Analyses related to contract pricing interpretation other contract matters in a power purchase agreement between a qualifying facility and Florida Power Corporation.

Florida Public Service Commission Docket 94037-EQ. Analyses related to a contract dispute between Orlando Power Generation and Florida Power Corporation.

Florida Public Service Commission Docket 941101-EQ. Testimony and analyses of the proper procedures for the determination and measurement for the need to curtail purchases from qualifying facilities.

New York Public Service Commission Case 93-E-0272, Testimony regarding PURPA policy considerations and the status of services provided to the generation and consuming elements of a qualifying facility.

Circuit Court for the City of Richmond. Case Number LW 730-4. Analyses of the historic avoided costs of Virginia Power, related procedures and fixed fuel transportation rate design.

New York Public Service Commission, Case 93-E-0958 Analyses of Stand-by, Supplementary and Maintenance Rates of Niagara Mohawk Power Corporation for Qualifying Facilities .

New York Public Service Commission, Case 94-E-0098. Analyses of cost of service and rate design of Niagara Mohawk Power Corporation.

American Arbitration Association, Case 55-198-0198-93, Arbitrator in contract dispute regarding the commercial operation date of a qualifying small power generation facility.

1993

U.S. District Court, Southern District of New York Case 92 Civ 5755. Analyses of contract provisions and associated commercial terms and conditions of power purchase agreements between an independent power producer and Orange and Rockland Utilities.

State Corporation Commission, Virginia. Case No. PUE920041. Testimony related to the appropriate evaluation of historic avoided costs in Virginia and the inclusion of gross receipt taxes.

Federal Energy Regulatory Commission. Docket ER93-323-000. Evaluations and analyses related to the financial and regulatory status of a cogeneration facility.

Federal Energy Regulatory Commission. Docket EL93-45-000; Docket QF83-248-002. Analyses related to the qualifying status of cogeneration facility.

Circuit Court of the Eleventh Judicial Circuit, Dade County, Florida. Case No. 92-08605-CA-06. Analyses related to compliance with electric and thermal energy purchase agreements. Damage analyses and testimony.

Board of Regulatory Commissioners, State of New Jersey. Docket EM 91010067. Testimony regarding the revised GPU/Duquesne 500 MW power sales agreement and associated transmission line.

State of North Carolina Utilities Commission. Docket No. E-100 Sub 67. Testimony in the consideration of rate making standards pursuant to Section 712 of the Energy Policy Act of 1992.

State of New York Public Service Commission. Cases 88-E-081 and 92-E-0814. Testimony regarding appropriate procedures for the determination of the need for curtailment of qualifying facilities and associated proper production cost modeling and measurement.

Pennsylvania Public Utility Commission. Docket No. A-110300f051. Testimony regarding the prudence of the revised GPU/Duquesne 500 MW power sales agreement and associated transmission line.

1992

Pennsylvania Public Service Commission. Dockets No. P-870235,C-913318,P-910515,C-913764. Testimony regarding the calculation of avoided costs for GPU/Penelec.

Public Service Commission of Maryland. Case No. 8413,8346. Testimony on the appropriate avoided costs for Pepco, and appropriate procedures for contract negotiation.

1991

Board of Regulatory Commissioners, State of New Jersey. Docket EM-91010067. Testimony regarding the planned purchase of 500 MW by GPU from Duquesne Light Company.

Public Service Commission of Wisconsin. Docket 05-EP-6. State Advance Plan. Testimony on the calculation of avoided costs and the structuring of payments to qualifying facilities.

State Corporation Commission, Virginia. Case No. PUE910033. Testimony on class rate of return and rate design for delivery point service. Northern Virginia Electric Cooperative.

State Corporation Commission, Virginia. Case No. PUE910048 Testimony on proper data and modeling procedures to be used in the evaluation of the annual Virginia Power fuel factor.

State Corporation Commission, Virginia. Case No. PUE910035. Evaluation of the differential revenue requirements method for the calculation of avoided costs.

Public Service Commission of Maryland. Case Number 8241 Phase II. Testimony related to the proper

determination of avoided costs for Baltimore Gas and Electric.

Public Service Commission of Maryland. Case Number 8315. Evaluation of the system expansion planning methodology and the associated impacts on marginal costs and rate design, PEPCO.

1990

Public Utility Commission, State of California, Application 90-12-064. Analyses related to the contractual obligations between San Diego Gas and Electric and a proposed QF.

Montana Public Service Commission. Docket 90.1.1 Testimony and analyses related to natural gas transportation, services and rates.

State Corporation Commission, Virginia. Case No. PUE890075. Testimony on the calculation of full avoided costs via the differential revenue requirements methodology.

District of Columbia Public Service Commission. Formal Case 834 Phase II. Analyses and development of demand side management programs and least cost planning for Washington Gas Light.

State Corporation Commission, Virginia. Case No. PUE890076. Analyses related to administratively set avoided costs. Determination of optimal expansion plans for Virginia Power.

State Corporation Commission, Virginia. Case No. PUE900052. Analyses supporting arbitration of a power purchase agreement with Virginia Power. Determination of expansion plan and avoided costs.

Public Service Commission of Maryland. Case Number 8251. Analyses of system expansion planning models and marginal cost rate design for PEPCO.

State Corporation Commission, Virginia. Case No. PUE900054. Evaluation of fuel factor application and short term avoided costs.

Federal Energy Regulatory Commission. Northeast Utilities Service Company Docket Nos. EC90-10-000,

ER90-143-000, ER90-144-000,ER90-145-000 and E190-9-000. Analyses of the implications of Northeast Utilities and Public Service Company of New Hampshire merger on electric supply and pricing.

Public Service Commission of Maryland. Re: Southern Maryland Electric Cooperative Inc. Contract with Advanced Power Systems, Inc. and PEPCO.

Puerto Rico Electric Power Authority, Office of the Governor of Puerto Rico. Independent evaluation for PREPA of avoided costs and the evaluation of competing QF's.

State Corporation Commission, Virginia. Case No. PUE890041. Testimony on the proper determination of avoided costs with respect to Old Dominion Electric Cooperative.

1989

Oklahoma Corporation Commission. Case Number PUD-000586. Analyses related to system planning and calculation of avoided costs for Public Service of Oklahoma.

Virginia State Corporation Commission. Case Number PUE890007. Testimony relating to the proper determination of avoided costs to the certification evaluation of new generation facilities.

Federal Energy Regulatory Commission. Docket RP85-50. Analyses of the gas transportation rates, terms and conditions filed by Florida Gas Transmission.

Circuit Court of the Fifth Judicial Circuit, Dade County, Florida. Case No. 88-48187. Analyses related to compliance with electric and thermal energy purchase agreements.

Florida Public Service Commission. Docket 880004-EU. Analysis of state wide expansion planning procedures and associated avoided unit.

1988

Virginia State Corporation Commission. Case No. PUE870081. Testimony on the implementation of the differential revenue requirements avoided cost methodology recommended by the SCC Task Force.

Virginia State Corporation Commission. Case No. PUE880014. Testimony on the design and level of standby, maintenance and supplemental power rates for qualifying facilities.

Virginia State Corporation Commission. Case No. PUE99038. Testimony on the natural gas transportation rate design and service provisions.

Montana Public Service Commission. Docket 87.8.38. Testimony on Natural Gas Transmission Rate Design and Service Provisions.

Oklahoma Corporation Commission. Cause Pud No. 00345. Testimony on estimation and level of avoided cost payments for qualifying facilities.

Florida Public Service Commission. Docket No. 8700197-EI. Testimony on the methodology for establishing non-firm load service levels.

Arizona Corporation Commission. Docket No. U-1551-86-300. Analysis of cost-of-service studies and related terms and conditions for material gas transportation rates.

1987

Virginia State Corporation Commission. Case No. PUE870028. Analysis of Virginia Power fuel factor application and relationship to avoided costs.

District of Columbia Public Service Commission. Formal Case No. 834 Phase II. Analysis of the theory and empirical basis for establishing cost effectiveness of natural gas conservation programs.

Virginia State Corporation Commission. Case No. PUE860058. Testimony on the relationship of small power producers and cogenerators to the need for power and new generation facilities.

Virginia State Corporation Commission. Case No. PUE870025. Testimony addressing the proper design of rates for standby, maintenance and supplement power sales to cogenerators.

Florida Public Service Commission. Docket No. 860004 EU. Testimony in the 1986 annual planning hearing on proper system expansion planning procedures.

1986

Florida Public Service Commission. Docket No. 860001 EI-E. Testimony on the proper methodology for the estimation of avoided O&M costs.

Florida Public Service Commission. Docket No. 860786-EI. Testimony on the proper economic analysis for the evaluation of self-service wheeling.

U.S. Bankruptcy Court, District of Ohio. Testimony on capabilities to develop and operate wood-fired qualifying facility.

Public Utility Commission, New Hampshire Docket No. DR-86-41. Testimony on pricing and contract terms for power purchase agreement between utility and QFs. (Settlement Negotiations)

Florida Public Service Commission, Docket No. 850673-EU. Testimony on generic issues related to the design of standby rates for qualifying facilities.

Virginia State Corporation Commission. Case No. 860024. Generic hearing on natural gas transportation rate design and tariff terms and conditions.

Virginia State Corporation Commission. Commonwealth Gas Pipeline Corporation. Case No. 850052. Testimony on natural gas transportation rate design and tariff terms and conditions.

Bonneville Power Administration. Case No. VI86. Testimony on the proposed Variable Industrial Power Rate for Aluminum Smelters.

Virginia Power. Case No. PUE860011. Testimony on the proper ex post facto valuation of avoided power costs for qualifying facilities.

Florida Public Service Commission. Docket No. 850004 EU. Testimony on proper analytic procedures for developing a statewide generation expansion plan and associated avoided unit.

1985

Virginia Natural Gas. Docket No. 85-0036. Testimony and cost of service procedures and rate design for natural gas transportation service.

Arkansas Louisiana Gas. Louisiana Docket No. U-16534. Testimony on proper cost of service procedures and rate design for natural gas service.

Connecticut Light and Power. Docket No. 85-08-08. Assist in the development of testimony for industrial natural gas transportation rates.

Oklahoma Gas and Electric. Cause 29727. Testimony and system operations and the development of avoided cost measurements as the basis for rates to qualifying facilities.

Florida Public Service Commission. Docket No. 840399EU. Testimony on self-service wheeling and business arrangements for qualifying facilities.

Virginia Electric and Power Company. General Rate application No. PUE840071. Testimony on proper rate design procedures and computations for development of supplemental, maintenance and standby service for cogenerators.

Virginia Electric and Power Company. Fuel Factor Proceeding No. PUE850001. Testimony on the proper use of the PROMOD model and associated procedures in setting avoided cost energy rates for cogenerators.

New York State Public Service Commission. Case No. 28962. Development of the use of multi-area

PROMOD models to estimate avoided energy costs for six private utilities in New York State.

Vermont Rate Hearings on Payments to Small Power Producers. Case No. 4933. Testimony on proper assumptions, procedures and analysis for the development of avoided cost rates.

1984

Northern Virginia Electric Cooperative. Case No. PUE840041. Testimony on class cost-of-service procedures, class rate of return and rate design.

BPA 1985 Wholesale Rate Proceedings. Analysis of Power 1985 Rate Directives. Testimony on theory and implementation of marginal cost rate design.

Virginia Electric Power Company. Application to Revise Rate Schedule 19 -- Power Purchases from Cogeneration and Small Power Production Qualifying Facilities. Case No. PUE830067. Testimony on proper PROMOD modeling procedures for power purchases and properties of PROMOD model.

Northern Virginia Electric Cooperative. Case No. PUE840041. Testimony on class cost-of-service procedures, class rate of return and rate design.

BPA 1985 Wholesale Rate Proceedings. Analysis of Power 1985 Rate Directives. Testimony on the theory and implementation of marginal cost rate design, financial performance of BPA; interactions between rate design, demand, system expansion and operation.

1983

Northern Virginia Electric Cooperative. Case No. PUE830040. Testimony on class cost-of-service procedures, class rate of return and rate design.

Vermont Rate Hearings to Small Power Producers. No.4804. Testimony on proper use and application of production costing analyses to the estimation of avoided costs.

BPA Wholesale Rate Proceedings. Testimony on the theory and implementation of marginal cost rate design; financial performance of BPA; interactions

between rate design, demand, system expansion and operation.

Idaho Power Company, PUC-U-1006-185. Analysis of system planning/production costing model play of hydro regulation and associated energy costs.

1982

Generic Conservation Proceedings, New York State. Case No. 18223. Testimony on the economic criteria for the evaluation of conservation activities; impacts on utility financial performance and rate design.

PEPCO, Washington Gas Light. DCPSC-743. Financial evaluation of conservation activities; procedures for cost classification, allocation; rate design.

PEPCO, Maryland PSC Case Nos. 7597-I, 7597-II, and 7652. Testimony on class rates of return, cost classification and allocation, power pool operations and sales.

1981

Pacific Gas and Electric. California PSC Case No. 60153. Testimony on rate design; class cost-of-service and rate of return.

Previous testimony before the District of Columbia Public Service Commission, Maryland PSC, New York Public Service Commission, FERC; Economic Regulatory Administration

Exhibit C

MOTION REGARDING BID CAP RULES—June 5, 2000

The Management Committee requests the NYISO to file as soon as possible with FERC under Section 205 of the Federal Power Act for authority to impose bid cap rules as described below.

The Management Committee requests the NYISO Staff to immediately begin developing any procedures and to take any actions necessary to implement these bid cap rules.

I. Duration

These Bid Caps shall expire October 31, 2000.

II. Markets

Caps will apply both to the Day-Ahead Market, Ancillary Services, and the Real-Time Market.

III. Levels

A. Energy

Bids will be capped at $1000/MWh.

B. Ancillary Services

1. For 10-minute and 30-minute reserves, combined payments for availability and lost opportunity costs in total are capped as for energy.

2. For regulation, combined payments are capped at 1,100 $/MWh.

IV. Other Features

A. All bids are subject to the cap, both internal and external.

B. Emergency External Purchases will not be subject to the bid caps. Payments for such purchases, however, will not set market clearing prices.

C. Recall bids are capped. ICAP Suppliers to NY not selected in the DAM will be able to make non-firm energy sales, subject to NYISO recall at capped recall bids.

D. Bid Production Cost Guarantees (BPCGs) will be suspended for a supplier which bids minimum generation levels, start-up costs, or minimum run times when LBMP at the supplier's bus averages $200/MWh or more per day. In addition, total payments including BPCGs may not exceed $24,000/MW per day.

V. Increased Price Sensitivity Load Capability (not to be included in the FERC Filing)

By the fourth quarter of calendar year 2000, the NYISO will develop specifications for metering, telemetry, business rules and software that would allow and encourage the development of widespread price sensitive load with comparable treatment. The objective would be to have this Section V proposal adopted by the BIC at its January meeting and, if required, the MC at its February meeting. Early action is required to allow the loads to be metered and allow for NYISO software development.

The specifications should allow loads to bid a specific amount of load levels at a specific price. The software should accommodate multiple loads at different prices at the same bus and should accommodate implementation at many load busses.

The specifications should initially have provisions for load to be committed and dispatched in the day-ahead market. The software should also have provisions similar to the pilot program that allows Hour Ahead scheduling of price sensitive load.

The NYISO should develop a work plan that would allow the NYISO software to accept price sensitive load bids by June 1, 2001.

In addition and in the previous time frame, the NYISO will organize and staff a Market Participant task force to address aggregating customer load for the purpose of participating in bidding Price Sensitive Load.