

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

PJM Interconnection, L.L.C.

Docket No. ER03-406-000

Affidavit

Of

Roy J. Shanker Ph. D.

February, 2003

1) My name is Roy J. Shanker. I am an independent consultant. My office is located at 9009 Burning Tree Road, Bethesda, Maryland. My consulting practice is focused on the natural resources area, particularly issues related to the electric utility sector. I have consulted in this area since 1973, and worked independently since 1982. Over the last seven years I have been very active in the restructuring of the electricity markets. I have actively been involved in both the PJM and NYISO markets and their development, and have frequently testified before this Commission, including participating in a number of the technical sessions related to the SMD process.

Of particular relevance to this Docket, I have had continuing involvement in the development and implementation of the PJM and New York ISOs procedures and market design elements related to financial transmission rights as they operate within an overall Locational Marginal Price (LMP) market structure. Specifically within PJM I have actively participated in the market design and development starting over a year before the actual beginning of ISO operations in April, 1997. I currently participate in a number of working groups and committees in PJM including the Energy Markets Committee and the Market Implementation Working Group. I have been a member of these committees since the inception of the market. It is within these two committees that all of the deliberations, debate and development related to the current proposal by PJM to implement an annual auction system for Financial Transmission Rights (FTRs¹) coupled with a system of Auction Revenue Rights (ARRs) has taken place.

¹ As noted in the PJM filing, the previous definition of Fixed Transmission Rights were renamed to Financial Transmission Rights.

- 2) My experience in these committees is particularly relevant, as ever since the inception of the market I have continued to propose a modification to the PJM FTR allocation system that would eventually put in place a long term auction of such rights. I also have actively supported the development of the ability of the auction process to allow for the availability of FTR options as well as obligations. The portion of the current proposal that PJM filed with FERC on January 10, 2003 related to the implementation of an annual FTR auction process with ARR's is a direct outgrowth of an initiative that I presented to the Market Implementation Working Group (MIWG) over a year ago. As such I am well qualified to comment to the Commission not only on the specifics of the PJM proposal and the benefits that it will bring to market participants, but also on the workings of the collaborative stakeholder process that supported the development of the proposal.
- 3) I have been asked to comment in this proceeding by Commonwealth Chesapeake Company, LLC, Duke Energy North America, Edison Mission Energy Marketing & Trading, Inc, Mirant Potomac River, LLC, NRG Energy Power Marketing Inc., the PSEG Companies, and Reliant Energy Northeast Generation, Inc. While these companies are sponsoring this testimony, and collectively support the PJM filing, the comments presented in this statement solely reflect my own opinions.
- 4) The purpose of this testimony is to express my support of the PJM filing, and to explain why I believe that this ARR/FTR proposal represents a significant advancement in the PJM market design that is not only consistent with the overall

objectives of the Commission's recent SMD proposal, but also remedies major existing and past limitations in the PJM market design that disadvantaged certain market participants. Basically, a system with an inherent bias that favored certain transmission providers over others with respect to access to the beneficial use of the transmission system is being replaced with one that offers a neutral and non-discriminatory allocation of the benefits of the system in the form of financial rights² to transmission customers.

- 5) I also wish to make clear that most of the objections that have been raised by the various parties are without merit, and most if not all represent misunderstandings of the reality of the PJM proposal. Further, the content of the concerns and objections are not new, and virtually all of them were debated and resolved by consensus within the stakeholder process, resulting in the specific proposal now in front of the Commission. To the extent any material problems were identified during the stakeholder process, I believe all have been remedied, or shown not to represent actual problems with the proposal.

Specifically I am offering these comments to provide the Commission with some perspective with respect to three major areas. The first relates to the historic problems and limitations that existed with the previous system for allocating FTR's among market participants. Not surprisingly these problems advantaged certain market participants and disadvantaged others. In turn, the second area I

² At several places within this testimony I will refer to the benefits or beneficial use of the transmission system. In all instances I am making this comment within the construct of a system of financial rights and entitlements, and do not wish to imply any physical entitlement.

discuss is how the stakeholder process successfully negotiated a compromise that overcame these market design limitations, and resulted in a transitional process over two years to an end result that successfully resolves most if not all of the existing market limitations. Finally, I address the specifics of the PJM proposal in the context of both resolving the initial market limitations, addressing some of the objectives identified by the Commission's SMD NOPR, and also the inappropriateness of the various criticisms that have been voiced with respect to the PJM ARR/FTR proposal.

Background-The Evolution of the Existing FTR System in PJM and Its Limitations

- 6) Under the PJM market design and the Commission's SMD, generators receive the LMP at the point at which they inject power into the market and load pays the LMP at the point at which they withdraw power from the market. As such, when the LMP is different between the generator which a load "relies" on to serve its needs and the LMP at the load's location, the load may be subject to "congestion costs", i.e. the difference in LMP's between the generator and load locations. FTRs entitle the holders to receive the value of congestion as established by the difference in the price at the point of withdrawal of power (e.g. the load location) less the price at the point of injection (e.g. the generator location). Thus a holder of an FTR between a generator located at point A servicing load at point B would be indifferent to any difference in the LMP between the generator and load locations. Effectively the FTR would reimburse the holder the exact same amount

that they would pay in congestion³. As the Commission has recognized, in an LMP market, FTRs result in the holder receiving the financial equivalent of firm transmission service, i.e. a hedge against congestion costs.

- 7) In the initial PJM market design, the parties wished to put in place an allocation of the FTRs in the system that essentially “held everyone harmless,” e.g. that came close to replicating the status quo, where each of the original vertically integrated utility companies had access to their generation resources without paying congestion. An FTR allocation system was put in place whose intention was to have this property, but at the detailed level, it also had some unintended and biased consequences.
- 8) At the outset of the PJM LMP market, FTRs were allocated to existing Network Customers and to customers taking firm Point to Point (PTP) service. All Network Service customers received the right to nominate FTRs from Network Resources⁴ that they owned or controlled to the zone(s) where their load was located in a quantity up to their coincident peak load within each zone. To the extent that the combination of FTRs nominated by Network Service customers

³ The PJM FTR system is not fully funded, so in some instances, e.g. where there are significant transmission outages, there may not be sufficient congestion rents to pay all FTRs in full. In these cases payments are reduced pro-rata. Excess rents are used to make up these deficiencies where possible.

⁴ Defined terms are intended to have the same meaning as in the PJM OATT. Network Resources are defined as generators that meet the PJM deliverability requirements, and may be nominated by a market participant to be a Capacity Resource service that LSE’s capacity obligations.

and firm Point to Point customers was not simultaneously feasible⁵, FTR allocations to these customers were reduced on a pro-rata basis.

- 9) As initially implemented, once a Network Service customer had obtained an FTR allocation, they retained that allocation so long as they retained adequate levels of load and the associated Network Resources used to qualify them to make the initial nomination of that FTR. The holders of such FTRs also had no obligation, nor incentive, to reduce the level of FTRs they held if they lost load via retail access to other load serving entities (LSE's) so long as their remaining load exceeded the level of FTR's that they choose to nominate.⁶
- 10) As a result of the above properties, under the initial PJM FTR allocation process there were some significant biases in the system. First, and foremost, rights to the benefits of FTRs, which are financial entitlements in the beneficial use of the transmission system were inextricably tied to ownership of generation resources. This essentially vested owners of generation in lower cost remote areas where parties might wish to "source" their FTR's a valuable financial entitlement to a portion of the financial rights to be allocated of the transmission system. Not

⁵ This is the same concept of simultaneous feasibility contained within the Commission's SMD NOPR. To be considered simultaneously feasible, the set of injections and withdrawals as characterized by the FTRs must result in a power flow that is feasible or "solves" for the underlying transmission network and associated transmission constraints or contingencies. PJM performs this simultaneous feasibility test (SFT) using a linear or DC characterization of the transmission system.

⁶ For example if a Network Service customer was the LSE for 10,000 MW's of load, and only nominated or received 8,000 FTRs, that customer would not have to yield any FTRs until they lost over 2,000 MW of load to other LSE's. Typically one would expect that a Network Service customer would chose or could choose to nominate FTRs only in an amount less than their zonal peak due to the distribution of their generation resources that qualified as Network Resources. For example, a company with significant load in eastern PJM might wish to hedge via FTRs any generation resources it owned in western PJM, but find little if any value from selecting FTRs from generation they owned in the east to their load in the east. Thus until such a Network Service customer lost load equal to the "unhedged" portion of their load, they were under no obligation to release any, let alone valuable FTRs to new LSEs who might subsequently serve that load.

surprisingly this bias became manifest as parties paid a financial premium for the capacity rights of generation resources in western PJM in order to claim them as a Capacity Resource, and thus qualify for an allocation of FTRs sourced at that location. Thus generation owners were essentially receiving some of the financial benefit of the transmission system through the valuation of their assets in the capacity markets.

- 11) In turn, it also meant that two identical retail customers, located next door to each other, both paying the identical share of the embedded cost of the transmission system, received different financial entitlements to the beneficial use of the transmission system through FTR's. This different entitlement was based on the generation resources owned by the LSE's that served them, as well as the sequence in which those LSE's obtained the rights to claim such generation as a Capacity Resource (i.e. to some extent there was a first come first served character to the nomination process over time.)
- 12) Another bias was introduced via the mechanism under which LSE/Network Service customers had to release FTR's when they lost retail load (i.e. had a lower peak load and thus lower maximum entitlement to nominate FTRs). Because an existing Network Service customer only had to yield FTR's once its FTR holdings exceeded its peak load, it had the right to selectively choose which FTRs to release when this occurred. Thus, a significant barrier to entry was created for new parties seeking to become LSE's. Effectively all the "good" FTRs were "locked up" by the initial allocation, and the incumbent LSEs had no obligation to

release any or “good” FTRs as they lost load depending on their overall peak load share and level of FTR holding. This meant new LSE entrants could become responsible for serving load, pay equivalent shares of the embedded cost of transmission, and receive no FTRs, or only have access to the FTRs of the most limited commercial value.

- 13) Finally, under the initial system, once an LSE held an FTR, it could keep that FTR indefinitely so long as it retained an adequate level of Network Resources and Load. Again this created a significant bias, as both existing customers who failed to recognize the “best” strategies for nominating FTRs, or new customers, would never receive an opportunity to compete for these FTRs after the initial market allocation. This again advantaged incumbents and was a barrier to new entrants.
- 14) In combination, all of these features created a major bias in favor of the incumbent LSEs who owned generation resources and/or were able to nominate the “good” FTRs early in the market process. Similarly the same problems raised significant barriers to both new entrants competing in the retail markets, those who didn’t directly own or control Network Resources and/or LSE’s who initially failed to fully understand the workings of the market design.

Modifications to “Fix” the FTR Allocation Design-A Challenge to the Stakeholder Process that was Met Successfully

- 15) As would be expected, whenever such biases occur there are winners and losers. To those who have participated in the stakeholder governance processes elsewhere in the country, such a situation typically leads not only to acrimony but stalemate. In these situations the ultimate remediation has typically only come through third party or regulatory intervention. **The Commission should be very sensitive to the fact that while it has taken some time, a consensus process within the PJM stakeholder committee system has effectively remedied all of the limitations and biases identified above.**
- 16) The first “fix” was the elimination of the “grandfathering” of FTR nominations. This meant that starting in the spring of 2000 parties no longer could indefinitely hold on to their existing FTR positions, but each year had to start at parity in the nomination process with all other LSEs. As a result, all market participants had access to the “good” FTRs to the extent that they controlled appropriate Network Resources and served load in appropriate quantities.
- 17) However, while this change removed part of the historic problems, the major bias, the link between generation resources and ability to nominate FTRs, still remained. Similarly, the potential lack of any entitlements to those LSEs that acquired new load within an annual nomination cycle remained as well.

- 18) Over a period of several years I proposed on a number of occasions that the market participants consider removing these two significant remaining biases by implementing an ARR/FTR auction system where there was no direct link between ARR allocations and generation ownership. These ideas were presented in both the Energy Markets Committee (EMC), and the working group that ultimately was called the Market Implementation Working Group (MIWG). Not surprisingly, because such a change would disadvantage some of the incumbents, particularly those who held generation assets, the idea was initially not well received.
- 19) However, approximately a year ago the “stalemate” was broken on these issues when some stakeholders, acting against their own short term interests, but in consideration of the longer term equity of the market, agreed to “break the link” between generation ownership and the nomination/allocation of FTRs. With this barrier removed, the way was open to significant improvements in the overall market design. This major concession by several key stakeholders was the direct outgrowth of negotiations and exchange of alternative market design concepts that occurred at the MIWG coupled with the support of the PJM staff in seeking a more equitable market structure.
- 20) The resulting proposal was essentially a compromise, where over a two year period the market would transition from the current form, to one where all transmission customers would have fully equal entitlements to the financial benefits of the transmission system in the form of equal non discriminatory access

to FTRs. This was to be implemented in an efficient manner via the combined ARR/FTR proposal that PJM has presented. The two year transition was a negotiated adjustment period to allow an orderly transition for those parties that had acted in reliance on the historic procedures.

- 21) The details of the compromise are faithfully presented in both the discussion and tariff language presented in the PJM filing letter and attached tariff. However it is worth summarizing the overall agreement, and its properties in the context of the above discussion.
- 22) The basic structure for the new ARR/FTR process proceeds in two steps. In the first step, LSEs are allocated ARRs. In an ARR market design, parties are allocated point to point revenue rights. That is, the ARR has a designated source and sink. The allocation of these revenue rights can be done in any of several ways. In year one, as part of the compromise, LSEs will only be able to nominate ARRs from a Network Resource that they control to their load zone. In turn these nominations will be subject to the same type of simultaneous feasibility test as is currently done for FTRs, and reduced pro-rata if necessary to insure feasibility.
- 23) Thus, for the first year, there will be a continuing linkage between generation ownership and entitlement to transmission value. However, as the culmination of the compromise, after year one, there will no longer be a specific requirement for ARR nominations to be sourced at a Network Resource under the control of any specific LSE. **Effectively at this point, all transmission customers will be**

equal to each other, with all load in a zone paying the same price for services and receiving the same non-discriminatory allocation of financial rights or entitlement in the transmission system. This is exactly the result the Commission itself identified as an objective in the SMD NOPR.

- 24) In the second step of the overall process, an annual FTR auction will be held to auction all FTRs so that none will be allocated. The auction will allow for the sale of both FTRs structured as obligations and as options. Unlike obligations, under which the holder of an FTR must pay the difference between the point of injection and point of withdrawal, whether positive or negative, options give the holder the right only receive payments when the value is positive, and pay nothing when the value is negative. PJM, as part of the MIWG process investigated the feasibility of including the option alternatives in the implementation of the auction system. Working with a technical contractor, they jointly developed the “HEDGE” software which allows for the solution of an auction including options. Another of the explicit benefits of the PJM proposal is the greater flexibility to market participants offered by the ability to financial “choose” between FTRs structured as options or as obligations. The auction will also allow for multiple products to be sold in terms of on-peak, off-peak and 24 hour FTRs.⁷ Proceeds from the sale

⁷ It is my hope that this is the first step in moving ARR/FTR auction process forward to the point where longer term rights are offered for sale, e.g. five or ten year FTRs, with participants able to purchase any combination of products over any segment of time within the auction horizon. At this time the software for this type of auction exists, and it is again, only a question of the evolution of the stakeholder process that is needed to move forward with these further market enhancements.

will then be allocated to transmission customers based on the ARR holders that they hold⁸.

- 25) Under the proposed system, the remaining bias, e.g. the lack of ability of new entrant LSEs to equitably have access to the value of the transmission system supported by their customers will also be remedied. After the FTR auction, effectively there is a “pot of money” associated with the sale of those FTRs that “sink” in any load zone. These funds are effectively paid to the holders of the ARRs whose ARRs sink in that same zone.
- 26) As load migrates between various LSEs that serve load within the zone, a transfer will also occur of a proportionate share of the funds tied to that load zone. In turn, this will give the new LSE serving that load the funds to purchase new FTRs in the monthly auctions (or the next annual auction) held by PJM. Similarly, as an LSE loses load, and loses the pro-rata share of revenues, that LSE has an incentive to sell FTRs that it previously purchased to hedge the lost load.
- 27) **Thus the overall PJM proposal removes all of the significant biases that have existed in the original PJM FTR allocation system**, and sets the stage for further market progress in the form of longer term auctions, and more flexible

⁸ An FTR auction essentially results with the establishment of an LMP for each location in the transmission system. ARR holders are entitled to the price difference between the withdrawal point LMP and injection point LMP established in the FTR auction times the number of ARRs that they hold. Because the ARRs will be tested for simultaneous feasibility on the same transmission network topology and constraints as that used in the FTR auction (whose results are also simultaneously feasible) it can be proven that there will be sufficient funds from the FTR auction to satisfy the revenue requirements for all ARRs. This results in the ARRs being fully funded.

transmission hedging products. Also, with the introduction of an annual auction process for the FTRs that is not tied to the holding of Network Load or Resources, it allows for greater liquidity in the market, as well as more rational pricing and valuation of the FTRs. This is contrasted with the current system where there is limited liquidity and transparency as to the market value of annual rights.

- 28) Perhaps the easiest way to see the workings of the proposal is to step through a simplified example. Assume during the first year an LSE has 10 MW of network load in the PECO zone, and the entitlement to claim 10 MW of a Network Resource (say Homer City) as a Capacity Resource. Then in year one, the LSE will have the right to nominate 10 ARRs from Homer City to PECO. PJM will then conduct a simultaneous feasibility test, and if feasible with all other nominations, the LSE would be awarded the 10 ARRs.
- 29) Immediately following the ARR allocation, PJM would hold the annual FTR auction. In that auction the LSE will have several alternatives. First he can “self schedule” the 10 FTRs from Homer City to PECO. If he chooses this option, than he has essentially agreed to “pay” whatever it takes to purchase the 10 FTRs. Because his 10 ARRs were shown to be simultaneously feasible, he is assured that in the auction process his self schedule of 10 MW from the same injection and withdrawal point will also be feasible, and thus awarded. The LSE will pay a price for the FTRs based on the auction clearing results. The clearing price will be

established by the bids of others for FTR in the auction.⁹ In turn, as a holder of 10 ARR from Homer City to PECO, he will receive the exact same amount of money. For example if the price of the Homer City to PECO FTR was established as \$10,000 for one MW for one year, then the LSE would pay \$100,000 for the 10 FTRs in the auction. Similarly he would receive \$100,000 in payments based on his 10 ARRs between the same injection and withdrawal points.

- 30) In this specific example, if the LSE lost 5 MW of load immediately following the FTR auction, the LSE would retain ownership of (and the obligation to pay for) the 10 FTRs. However, because the entitlement to ARRs was associated with the underlying load, the LSE would then only receive 5 MW of ARRs (\$50,000) based on his remaining 5 MW of load. The remaining funds would then go to whichever LSE now serves the 5 MW of load that transferred. It would then make sense for the original LSE to consider selling his “excess” 5 FTRs, and similarly the LSE receiving the transferred load would now have \$50,000 to apply towards purchases of FTRs to satisfy the hedging requirements of the new load they obtained.

- 31) Alternatively the LSE could simply bid whatever he chose as a reservation price for these 10 FTRs from Homer City to PECO. Say he put in a reservation price of

⁹ Some parties have asked what happens if everyone only “self schedules” their ARRs as FTRs in the FTR auction. If no one else bid at all, all of the self schedules would be feasible, no constraints would be binding in the auction as nothing else was asked for, and the clearing price would be zero. If however, other parties bid their preferences for FTRs into the auction, to the extent that any of these bids were incrementally feasible, but the entire system was then constrained, these incremental FTR bids would then set prices over the entire system. However, again, the ARR holders who self scheduled would be assured of receiving the associated FTRs.

\$5,000. In this case he would be assured that either the FTRs from Homer City to PECO would “clear” for greater than \$5000 (and he would in turn receive these funds for his ARRs) or that he would purchase the FTRs himself for the reservation price or less, and then pay himself the clearing price.

- 32) Finally, the LSE could do nothing, and simply receive whatever revenues were generated in the auction based on his ARRs.
- 33) In year two, the process would be similar, but now, the LSE would no longer have to source his ARRs at a Network Resource that he had the right to claim as a capacity resource. It is anticipated that the stakeholder process will continue to refine elements of both the allocation and revenue transfer mechanisms that will operate in the future.

Inappropriate Criticisms of the Proposal

- 34) The biases in the existing PJM system tended to disadvantage parties that either didn’t hold significant generation assets in “good” locations to support FTR nominations, and/or new LSE entrants in the retail market system. The corrections that result from the PJM proposal eliminate these biases. Surprisingly, much of the criticisms that have been voiced regarding the PJM proposal appear to be from the very parties who have been historically disadvantaged by the existing system, and who are the main beneficiaries of the changes. Others who have objected, particularly those who never participated at all in the stakeholder process, appear

to be commenting more from a general disapproval of the LMP and SMD market structure as well as in ignorance of the details of the actual proposal.

- 35) In reviewing some the comments of others who have objected to the PJM proposal, much of the criticism seems based on a misunderstanding of some of the basic attributes of the overall ARR/FTR system as proposed. A key element of this ARR/FTR structure is understanding the linkage between holding point to point ARRs, which represent an equitable allocation of the financial rights to the transmission system, and the ability to convert these ARRs into FTRs with a similar source and sink.
- 36) While this was frequently discussed at the PJM stakeholder meetings, and fully explained in the PJM filing, it appears from the comments that people still do not understand this characteristic of the proposed ARR/FTR system, and continue to make unwarranted criticisms of the proposal based on this misunderstanding. **The simple reality is that any party receiving an allocation to a specific point to point ARR that they deem desirable has the absolute ability to convert that ARR to an FTR with the same points of injection and withdrawal.** I explain this further below.
- 37) An oft repeated criticism is that somehow an auction system will result in unsophisticated market participants being taken advantage of, and losing the hedge protections available from the ownership of FTRs. This simply isn't true. As explained above, biases in the current system result in an inequitable

allocation of existing rights, which the current proposal is specifically designed to rectify. In contrast in the proposed ARR/FTR system parties will start with equal nondiscriminatory entitlements in the form of ARRs, which can be converted to FTRs if the party wishes. It appears that people continually make the mistake of equating an auction with the “loss of rights” in interpreting the properties of the ARR/FTR system because they fail to understand the implications of the fact that the exact same transmission system configuration is used to establish the simultaneous feasibility of the ARRs and the FTRs.

- 38) This means that parties holding ARRs from any source to sink pair can effectively bid an infinite amount for an FTR with the exact same points of injection and withdrawal, and be assured of “winning” the bid, and effectively “paying whatever the final clearing price is to themselves”, e.g. they are totally indifferent to the pricing in the auction if they chose to convert their ARRs to FTRs. This has to occur, as if the ARRs are simultaneously feasible, the exact same set of injection and withdrawal points has to be simultaneously feasible as FTRs.
- 39) PJM has described this ability as “self scheduling” FTRs. Basically a party that self schedules the same FTR pair points as its ARRs is indicating a willingness to be a “price taker” in the FTR auction, e.g. a willingness to bid whatever it takes to successfully purchase FTRs on these point pairs. As the simultaneous feasibility test assures the joint feasibility of all the ARRs, this effectively means that if all ARRs are bid as FTRs, the FTR must be feasible, and thus also infra-marginal, and the ARR holder is assured of receiving the FTR’s, and effectively paying the

money to himself.¹⁰ As a result of being infra-marginal, the clearing price for any specific path will not be set by the ARR holder themselves, but rather by other bidders who may also wish to use the transmission system.

- 40) In turn, this results in another one of the major benefits I have always associated with the switch to an ARR/FTR auction system. While the ARR holder is guaranteed that he can effectively convert his rights to FTRs, the overall process also creates a transparent valuation of those rights in terms of the values that others would put on the same injection/withdrawal pair in the auction. This means that while the holder of the ARRs is guaranteed the ability to convert his ARRs to FTRs, the holder also will directly see the marginal price or opportunity cost that he faces by holding the rights and not selling them. Ultimately this transparency should lead to a more efficient overall market, as parties then have a benchmark with which to rationally compare the continued holding of the ARRs as FTRs, or whether to release them into the marketplace at market prices. Indeed the auction structure will ultimately facilitate this process as it also allows for “reserve or reservation” pricing on the part of ARR holders with respect to the sale of FTR’s with the same source/sink pairs. Effectively a reservation system allows holders of ARRs to establish a price at which they would rather release the associated FTRs for sale, rather than convert their ARRs into FTRs.

¹⁰ Indeed one of the reasons that PJM has offered the “self scheduling” option is to remove even the appearance of payment or net payments from those that chose to convert their ARRs to FTRs. This was in response to some stakeholder concerns that this might represent a “private use” issue with respect to tax free financing indentures or other such agreements.

- 41) In combination, all of this assures that if an equitable process is used to allocate the ARR, parties are also assured that they can be converted into FTRs. As one of the predicates of the entire process was to move from a biased initial allocation process to one that “delinks” generation from transmission, it would seem that there should be no problem with the associated underlying ARR allocation system.
- 42) Another objection that has been voiced, and that also is without merit, seems to be the assertion that the creation of a liquid and transparent market for FTR via an auction mechanism would somehow facilitate the exercise of market power. As PJM itself commented this simply makes no sense, as any position that can be established via the auction system could also be put in place bilaterally. As has continually been pointed out, no market design is immune to market power, the real issue is the ability to detect and mitigate the exercise of market power when it exists¹¹. In this respect the PJM proposal is superior to the status quo in that the transparency of the auction process will make market monitoring of any such potential market power abuses easier to detect, and mitigation more effective. Indeed one would expect that because it will be easier to monitor all market positions via the expanded auction process, detection of market power will also be easier.
- 43) This concludes my affidavit.

¹¹ Both PJM and NYISO are already fully aware of the potential to exercise market power via market participants holding certain FTR positions. Both markets monitor this type of behavior, and there is no reason at all to believe that the introduction of the ARR/FTR proposal will either create more opportunities for the exercise of market power, or make mitigation more

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Affidavit of Roy J. Shanker Ph.D.

I, the undersigned, being duly sworn, depose and say that the foregoing is the testimony of the undersigned, and that such testimony is to the best of my knowledge, information and belief, true, correct, accurate and complete, and I hereby adopt said testimony as if given by me in formal hearing, under oath.

Shanker

Roy J.

Subscribed and sworn to before me,
this 20th day of February, 2003

Linda Nowicki

Notary Public

LINDA NOWICKI
Commission # 1290905
Notary Public – California
Monterey County