MEMORANDUM

TO: NYISO

FROM: DC ENERGY

SUBJECT: LTFTR DESIGN

DATE: 11/4/2006

Introduction:

There is a critical value issue associated with the conversion of auction revenue rights to long-term financial transmission rights (LTFTRs). The LSE's auction revenue rights (their load-share of the auction revenues for that zone) are almost certainly of different value than any given LTFTR. This is a natural result of auction revenue right value being an average of auction congestion in the TO's footprint (as per existing rules), as opposed to LTFTRs, which represent specific paths and may be substantially more valuable (or less valuable). Any LTFTR design that does not address this issue inevitably leads to cross-subsidization of some participants at the expense of others.

We believe the only fair and economically efficient way to avoid this cross-subsidization is to price the LTFTRs in an auction open to all NYISO participants. On the surface, it appears that using an auction to price LTFTRs contradicts the FERC order guideline 7; this is not the case. As FERC emphasizes in paragraph 385 of the final order:

> … we clarify that guideline (7) does not preclude a transmission organization from using an auction to allocate long-term firm transmission rights; it only precludes requiring a load serving entity to submit a winning bid in an auction in order to acquire long-term firm transmission rights.

FERC then goes on to illustrate the PJM auction mechanism, and discuss how it meets the above restrictions in paragraph 388:

> In effect, each load serving entity in PJM may, at its option, bid the value of its auction revenue rights into the auction as a "price-taker" knowing that it will win the bid for the firm transmission rights that correspond to the sources and sinks of its respective auction revenue rights. As a price-taker, the load serving entity will not know in advance the price it must pay for the firm transmission rights that it acquires, but it is secure in the knowledge that the value of its auction revenue rights will cover exactly the cost of the firm transmission rights.

We propose an LTFTR structure that uses auction pricing, allows LSEs to fund their LTFTRs through their auction revenue allocations, gives first priority to LSEs in securing LTFTRs, and focuses on a simple and realistic implementation.

Auction Structure:

We recognize the difficulty associated with running multiple auction terms with potentially overlapping time periods on the existing NYISO TCC system. To avoid these complications, we suggest keeping the auction term to an annual length.

Under this structure, LSEs (and only LSEs) nominate LTFTRs sinking in their load zone against the portion of the system capacity the ISO makes available for these nominations. If the nominations exceed this capacity (i.e. simultaneously feasibility fails), the allocations are adjusted down until simultaneously feasibility is restored[1]. The adjusted allocations are then input into the auction model as fixed injections, and the annual auction is opened to all market participants. The auction results set the price paid by LSEs for each MW of their allocations. If the auctions contain multiple rounds, the price for the allocations can be the average of all the rounds's prices.

LSEs will fund their allocations by using their share of auction revenues. If the cost of the allocations exceeds these revenues, the LSEs can use their share of auction revenue from other auctions fully contained within the period of the allocation (i.e. six month and monthly auctions)[2]. Should the allocations remain partially unfunded even with the supplemental auction revenue, LSEs will make up the difference in cash.

Note that the ISO can keep the existing TCC structure mostly unchanged; the only major difference would be the initial allocation round, and the rerouting of auction revenues (more on this later). We recommend the ISO maintain the existing five annual and five six-month auction rounds every six months, with the addition of the allocation round. If need be, the ISO can drop one of the annual auctions for a yearly schedule of one allocation round, one annual auction with five rounds, two six months auctions with five rounds, and twelve monthly auctions with one round each.

The structure suggested here doesn't directly provide Long Term FTRs, but any LSE can keep nominating volume for allocation each year without having to participate in an auction. It is possible that in a subsequent year another LSE will nominate volume on a similar path as the original LSE, which results in a potential reduction in the original LSE's final allocation. To allow for constant volume allocations the ISO could give priority to volumes that have already been nominated in the past; however, this will increase the complexity of the solution process.

[1] We leave the ISO to determine the precise mechanism by which the allocations would be reduced. A simple proportional reduction would create an incentive for participants to nominate as much volume as possible rather than the volume they actually need, and as such a more complex mechanism is required.

[2] There are some credit issues here as some of the six month auction revenue, and almost all of the monthly auction revenue, will be unknown at the time the LTFTR allocations are priced.

Volumes:

The NYISO will have to decide what portion of the system capacity it wishes to make available for LTFTR allocations, for the annual auction, and for other shorter period auctions. It is important that the ISO reserve a relatively small fraction of the system for the purpose of LTFTR allocations for the following reasons:

1. Small LTFTR allocation volume will ensure that LSEs have sufficient auction revenues to fund their allocations. Allocations remove volume from the auctions, which otherwise would be generating auction revenues.
2. The TCC markets are well functioning and useful to market participants; removing substantial volume from them will harm market participants.
3. A small ratio of allocation volume to auction volume removes incentives for auction manipulation[3].

We recommend that the ISO reserve no more than 25%[4] of the existing ETCNLs and original residual TCCs for LTFTR allocations in any given year. Any remaining non-nominated capacity up to 50% of the system capacity is available for the annual auctions. The rest of the system capacity is available in the six-month auctions and the subsequent monthly auctions.

To avoid spurious allocation nominations, we recommend the ISO limit the nominations with the following rules:

1. LTFTR paths must sink into the LSEs zone node
2. LSEs may nominate up to, but no more, than their minimum annual load peak
3. Nominations are only available to LSEs

Auction Revenues:

The existing auction revenue distribution system will have to be revamped in order to accommodate any LTFTR mechanism supported by auction revenues. We recommend that auction revenues be collected by the ISO instead of the TOs, and that the ISO then distribute the auction revenues directly to the LSEs according to the same rules the TOs use today[5]. This change has almost no financial impact on any party; the TOs should not be affected as they currently pass through the auction revenues anyway, and the LSEs will receive the same credit they used to (unless they nominate LTFTRs)[6]. Furthermore, auction revenues can now be used to support LTFTRs, *and there is no need for multiple TSC rates in each TO footprint*.

[3] If an entity with large volumes of allocations can affect the auction outcome with smaller volumes, they will have a strong financial incentive to manipulate the auction.
[4] ISO-NE is proposing that up to 25% of their system capacity be available for LTFTR allocations
[5] It may be necessary to slightly alter these to the extent the auction revenues are distributed in one go after each auction rather than monthly, or whatever the billing period is.
[6] This is a sine qua non for any LTFTR structure, as otherwise cross-subsidies would be created.

We encourage the ISO to begin discussions with its counsel on this matter.

LSE Definition:

We do not have a strong stance on this issue, although we recommend the ISO limit LSEs eligible for allocations to entities that genuinely have a need for those allocations. We also recognize that LSEs without auction revenue entitlements will not be able to request allocations.

Grandfathered Rights:

As the ISO has already recognized, grandfathered rights and TCCs (GFRTCCs) create a challenge because LSEs that own them can request LTFTRs, and there is no simple mechanism to net grandfathered rights and TCCs from LTFTR nominations. One possible solution is to prevent LSEs holding GFRTCCs from nominating LTFTRs, unless they offer all their GFRTCCs as price taker into the annual auction that prices the LTFTRs[7]. These LSEs would be able to use the funds from their sales, along with their share of auction revenues, to support their LTFTR nominations. Note that the ISO will have to prevent these LSEs from bidding to buy what they are selling, as otherwise they could simply bid to buy from themselves at any price, and circumvent this rule.

Transmission Upgrade Rights:

We do not have any comments on these at this point in time.

Full Funding:

NYISO already implements full funding; we recommend NYISO maintain this full funding.

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[7] Only the portion of the GFRTCC that matches temporally to the auction would be sold, any out years would remain in the possession of the LSE.