

## **DC Energy Comments on Long-Term Transmission Rights in New England**

May 15, 2006

### **Premise**

DC Energy is a strong proponent of locational marginal pricing (LMP) in electricity markets as it provides the most transparent price signals to the market and should drive efficient market-based investment both in the short-term (e.g., demand response, outage scheduling) as well as the long-term (e.g., transmission upgrades, generation siting). The financial transmission rights (FTR) market is the critical extension of LMP to the longer time horizon, establishing a forward curve on the LMP, which by itself is a short-term (i.e., day-ahead or real-time) price signal. Clearly, we strongly support the call for longer-term transmission rights as it is beneficial in extending the horizon of this forward curve thereby enhancing the magnitude and duration of the appropriate financial signals that will incent rational economic development of the power system.

### **Support of the ISO-NE proposal**

DC Energy supports the ISO-NE proposal presented at the May 4, 2006 meeting of the Long-Term Transmission Rights Working Group (LTTRWG). Our support is based on three key features of the proposal:

*Maintains an auction format, a market-based solution.* The auction format demands efficient allocation of investment in that participants are bound by their bids/offers to set caps/floors to their willingness to buy/sell hedge. A direct allocation enables participants to ignore the valuation process and ignore the alternative uses of their capital to mitigate congestion risk.

*Appropriately allocates capacity to long-term and short-term needs of market participants.* As 80% of load obligations are through default service, which are relatively short-term in obligation (1-3 years), it seems sensible to match the allocation of transmission capacity accordingly between long-term (25% of capacity) and short-term (up to 50% of total system capacity for one year term; remaining capacity up to 95% of total system capacity for monthly term) transmission rights. In addition, the emphasis on the shorter-term rights enables participants to reassess the value of the hedge and enables the ISO to better manage funding of target allocations of congestion rents.

*Creates a mechanism for full funding.* Full funding is beneficial in that it provides certainty to the FTR contract holder, which in turn instills confidence in the market. That is, full funding FTRs balances the risks and rewards in the market. If full funding is not in place FTR holders bear the risk if the actual FTR revenue falls below the target level. Participants would then take that risk into account and therefore discount their bids resulting in lower prices for FTRs. It also ensures symmetry between buyers and sellers of transmission; currently only buyers of capacity, as opposed to sellers or providers of counterflow, are exposed to underfunding.

We have three concerns about the ISO proposal as presented on May 4, 2006:

*Participation must be open to all market participants.* An LSE-only market is not only biased against non-LSE market participants (e.g., generators, financial participants, end users), but it is also a one-sided market of buyers in which the ISO is the only seller of capacity. This asymmetry can result in two possible outcomes:

1. Prices too high. Given the ISO's inelastic supply at the point in which it has sold all available capacity, market demand may lead to artificially high prices as the marginal demand bid sets price. When all participants are allowed to bid, elastic supply (i.e., counterflow) can be provided, helping converge prices to the true value.
2. Prices too low. Without sufficient participation, an undersubscribed scenario could result in which LSEs acquire a fraction of their hedge, but at a low (zero) price. The same rationale justifies the existence of virtual bids in the energy market in that LSEs could buy the bulk of their load obligation in the day-ahead market at one (lower) price and then pay the higher marginal price in the real-time for the incremental load only.

The inclusion of all participants who are all not necessarily looking to hedge congestion risk, but arbitrage mispricing of congestion in the market by buying capacity that is undervalued and buying counterflow (i.e., selling capacity) that is overvalued.

*The impact of renewal mechanisms on different types of market participants needs to be carefully considered.* Two suggestions were made at the May 4, 2006 LTTRWG meeting that would create inequities among market participants as proposed. 1. Granting renewal rights only to LSEs. This is a nonstarter as it creates a value inequity between LSEs and non-LSEs in which the former have option value that the latter cannot exercise. 2. Granting rights of first refusal, i.e., an incumbent FTR holder could renew the FTR at the prevailing market price regardless of bid. Because the market price is determined by the intersection of supply and demand, every winning bid has an influence on the final price. To grant a market participant the right to buy that product at the price without a winning bid would perturb the pricing outcome. For example, a market participant that is the dominant potential buyer of flow across a line that would be constrained given the total market demand can exert monopsony power by placing bids at a low or zero value. If they only win a partial volume, but at zero price, under the rights of refusal proposal they could buy the remaining volume at zero price, ahead of participants who were willing to place nonzero value. A potential solution to this is to allow the incumbent FTR holder to place a price-taker bid (i.e., at infinite price) on the expiring FTR, guaranteeing them renewal; after the auction, the incumbent FTR holder could refuse the award. In the event that they do refuse, the remaining capacity would be made available in the subsequent FTR auctions (e.g., annual, monthly).

*The ISO's proposal for full funding is a good initial step, however, a mechanism based on cost causation would lead to a more disciplined market.* We think the ISO's proposal for self-insurance is a satisfactory first step in that it provides for a source of funding in perpetuity that does not suddenly dry up just because the calendar year has ended. We do not share the concerns of other market participants that the insurance pool may not be

funded; the proposal to carry over prior excesses that exist is still an improvement on the current methodology, which ensures that the pool is drained to zero at year-end. That said, we believe that the burden of underfunding (and reward of overfunding) should be allocated to those who exacerbate (alleviate) it, i.e, the transmission owners who are responsible for properly scheduling transmission outages. Although full funding has been denounced by transmission owners across the ISOs, it should also be noted that full funding should drive higher FTR prices, which in turn will drive higher ARR revenues. We also caution the ISO from withholding too much system capacity to avoid shortfalls. The objective of the ISO should be maximize capacity sold while targeting zero shortfall/excess in the congestion fund in the long run. Consistent surpluses are indicative of overly conservative planning that reduces auction revenues and hinders market participants' ability to hedge congestion risk.

### **Opposition to the NEPS proposal**

We appreciate many of the restrictive aspects of the NEPS proposal that seem to limit its scope to a minority fraction of the available transmission capacity thereby freeing the remaining capacity for a market-based solution. However, we are opposed to any discriminatory allocation of hedging rights that remove incentives to participate in an economically rational manner given the real physical and economic constraints of the power grid. We are opposed to the view that generation should be built where it is cheapest absent considerations for power delivery to its intended load, as doing so burdens the entire market with the cost of upgrading the transmission.

The financial hedge product suggested by the NEPS proposal is an exotic derivative compared to a traditional FTR. The key feature is that the product is volume shaped to match the dispatch of the source generator. Although the rationale is that the volume shaping would detract from gaming, it should be noted that for a revenue neutral entity like the ISO to maintain simultaneous feasibility, they would have to block out the maximum capacity for the hedge product, thereby unnecessarily reducing the available capacity for other market participants in the auction. This would artificially limit the hedging capability of others and reduce auction revenues. Instead, we would encourage companies who want to hedge this risk to look to companies that specialize in this type of risk management to provide this kind of hedge.

### **Final comments on the FERC NOPR and suggested resolutions to potential outcomes of the final FERC Order**

Guideline 7 of the FERC NOPR suggests that recipients of long-term transmission rights should not be required to participate in an auction. First, it should be noted that the Energy Policy Act of 2005 lacks specific language in support of this guideline; it only requires that market participants with long-term obligations have access to transmission rights to match the term of these obligations. That said, if the FERC reiterates Guideline 7 in its final order due this summer, the ISO-NE proposal would not be compatible given the current ARR allocation process, which creates a mismatch in value between the ARR that a market participant receives and the FTR they might desire. A pathwise ARR

allocation process like the one that PJM uses would resolve this conflict, however, it has two critical flaws:

1. As discussed above, a pathwise ARR allocation creates a perfect hedge with no financial cost (clearly there is an opportunity cost) that removes the incentives to make efficient capital allocation decisions.
2. ARR allocation to peak load creates an overhedged situation at all times except during peak load that can be either harmful to the market participant or gamed by the market participant.

A potential solution is to only allocate pathwise ARRs (i.e., ARRs designated from a specific generation source to a load zone, or load node when nodal load pricing is introduced) to match an LSEs baseline load and make up the remaining ARRs with the current aggregate generator-to-zone mechanism. This would eliminate the inherent overhedging of peak load allocations and better enable a market-based solution as there is today with the current ARR system in ISO-NE.

Finally, it should be noted that although the NEPS proposal clearly follows Guideline 7, it also clearly violates Guideline 8, which states that there should be no preferential treatment of one set of market participants over another. The NEPS proposal creates a distinct financial hedge product that only a subset of market participants can acquire. On the other hand, the ISO-NE proposal satisfies both Guideline 8 of the NOPR as well as the EPAct by granting universal access to transmission rights with a longer duration to better meet the needs of market participants with longer-term obligations.

### **Summary**

1. We are strong proponents of LMP and believe that it is critical for providing appropriate short- and long-term incentives to rational economic development of the power system.
2. We are strong proponents of market-based solutions like FTR auctions in that they maintain the transparency of the LMP markets.
3. We support the ISO-NE LTTR proposal with two caveats:
  - a. All types of market participants must be allowed to participate in long-term FTR auctions.
  - b. The differential impact of renewal rights on different types of market participants needs to be carefully considered.
4. We oppose the discriminatory allocation of “perfect” financial hedges as proposed by NEPS because it biases one set of market participants over others and removes the incentive for rational economic behavior as dictated by LMP.
5. In the event that FERC insists on excusing certain market participants from participation in FTR auctions in established markets like ISO-NE, we propose that the ARR system be modified as follows:
  - a. Provide pathwise (specific generator-to-load zone) ARR allocation to match base load level of LSE.
  - b. Provide remaining ARR allocation through current aggregate generator-to-load zone methodology.