#### **Outline for LIPA Seams Comments**

## **Transmission Planning and Expansion**

When one region adds a new generator:

- (1) There is no assessment on whether that generator will affect or impact any neighboring region(s); and
- (2) If there is an impact on a neighboring region, there is no mechanism to recover costs from the generator to mitigate those impacts in accordance with either the native region's rules or the impacted region's rules.

### **Sale of Operating Reserves Between Control Areas**

Currently it is not possible to sell operating reserves between control areas.

### Seams Issues Between New York and New England

Real time power in New England is frequently less expensive than power on Long Island, yet scheduling power onto Long Island over the Northport/Norwalk cable (1385) to take advantage of this price differential is always challenging. These issues erect de-facto trade barriers to the purchase and sale of energy between New England and New York. For those instances where real time energy is cheaper in New England that on Long Island, scheduling energy purchases onto Long Island from New England is impeded by the following factors:

- ➤ New England Out-service Charges
- ➤ N-K Congestion as seen by the New York ISO exceeds the price difference between the pools,
- ➤ Congestion uncertainty creates price risk and hence a price risk premium that needs to factor into purchase decisions.
- ➤ There is an inability to hedge real-time congestion charges as seen by the New York ISO.
- There is an inability to know in advance the real-time re-dispatch costs as seen by New England, or to hedge these costs and New England will not schedule in real time if there are re-dispatch costs
- ➤ The use of a pre-determined schedule on the external PARs and thus an inability to set the PAR schedule based on congestion determined in the DAM

There is a concern going forward the SMD may still not address the external PAR scheduling issues, thus the timing of the closing of the respective DAMs will continue to create a barrier to trading energy among the ISOs. For example a day-ahead transaction will have to be either pre-scheduled or bid into the DAM in New York

without knowledge of what the day-ahead prices in New England will be, since the New England market bidding closes after the New York market closes.

### **New England Out-service Charges**

Prices that are offered in the (third-party) forward markets in New England must exceed what we expect the day-ahead prices to be in Long Island by at least the New England out-service charge. A rate design that increases the unit cost of inter-ISO transactions decreases the economic transactions that can flow.

## N-K Congestion as seen by the New York ISO Exceeds the Price Difference Between the Pools

The possibility and frequency with which congestion between the New England proxy bus (N) and zone K exceeds the differences in prices between forward prices in both ISOs (New England third party forward markets and NYISO DAM), creates a barrier to trading energy between these pools even when comparable prices in New England are less expensive than those in New York. This is especially problematic when the congestion is a reflection of modeling limitations rather than an accurate indicator of the market value of transmission (see PAR discussion below, for example).

## Congestion Uncertainty Creates Price Risk and Hence a Price Risk Premium Needs to be Factored into Purchase Decisions.

Uncertainty of congestion prices adds another barrier because we must judge the New England prices before knowing what either the DAM prices in Long Island will be, or what N-K congestion will be. Thus, many day-ahead opportunities in New England must be rejected to avoid exposure to increased costs.

# There is an Inability to Hedge Real-Time Congestion Charges as Seen by the New York ISO.

Given the limitations in scheduling power day-ahead, one might turn to the real time market. Unfortunately, the real time markets create barriers to the trade of energy as well. The first barrier is the inability to hedge congestion costs. If those that owned transmission between the regions did not have to pay congestion across that transmission, the congestion between the regions would be irrelevant. The sharing in Schedule 1 of real time congestion costs arising from deviations from day-ahead schedules, exposes LIPA to real time congestion costs.

There is an Inability to Know in Advance the Real-Time Re-dispatch Costs as Seen by New England, or to Hedge These Costs and New England will Not Schedule in Real Time if There are Re-dispatch Costs New England's procedure of calculating and allocating re-dispatch cost after the fact creates another trade barrier, since it prevents the costs of moving power from New England to New York from being known in advance. New England also currently cuts transactions that would otherwise incur real-time re-dispatch costs, reducing the energy flows and predictability of real-time purchases.

# The Use of a Pre-Determined Schedule on the External PARs and Thus an Inability to Set the PAR Schedule Based on Congestion Determined in the DAM

One of the modeling limitations that defines is external congestion prices inconsistently with prevailing prices is the inability to optimize the schedule on the Northport/Norwalk (1385) tie in response to market bids. The Northport/Norwalk tie is represented with a fixed schedule based on transactions that we pre-schedule. A fixed schedule defines the PAR setting used in the DAM auction and the PAR angle needed to create that schedule effectively becomes a firm constraint allowing for a non-zero shadow price and controlling the amount of congestion that will be incurred if there are other transactions that are bidding to use any NE to NY import capability.

#### N to K Losses

There is a concern that the losses as calculated from the external proxy bus at N does not match the losses over the Northport/Norwalk (1385) cable plus losses to the K zone. There is a question of whether there is double counting of these losses due to the calculation method.

#### **Post SMD Issues**

There is a concern that post SMD implementation that congestion between Long Island and New England will have to be paid twice, once to New England and once to New York.

New England's day-ahead commitment will not account for external purchases in sales in making its unit commitment decisions, committing only for its native loads. This increases the spread between the day-ahead and real time prices in New England and creates a dichotomy and hence unpredictability between New England and New York real time prices. By committing too much generation when New England is importing, it reduces the prices for those selling in real time into the New England market. By committing too little generation when New England is exporting, it would increase the real time prices from those purchasing out of New England. In either case it is creating a trade barrier. By under-committing during export they are increasing the risk that insufficient generation will be available to support the export, and thus increase the risk that the export will be cut.