# Observed Impediments to Trade between PJM and SENY

Norman Mah S&PWG 5/5/06



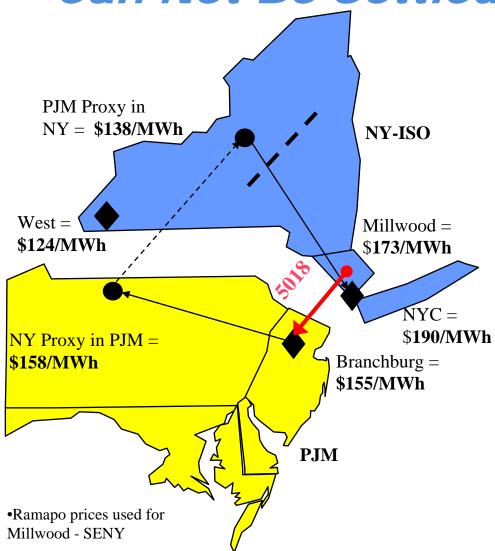


## Summary of Issues

- Economic trades between PJM and SENY are hindered by NYISO scheduling system
- PAR for Line 5018 is modeled as fixed
- Problem is more pronounced during peak periods
- Relief is needed



# Branchburg to Millwood Purchases Can Not Be Settled Economically



# Monday August 15, 2005 at 4PM (NYC over 9,800 MW, NYISO 27,700 MW)

Branchburg to Millwood \* prices in the DAM have a \$18/MWh price difference

Net Flow is from high price Millwood to PJM

Using the Single PJM proxy bus to schedule Energy from PJM to Millwood would be Uneconomical.

$$(\$158 + (\$173 - \$138) = \$193)$$

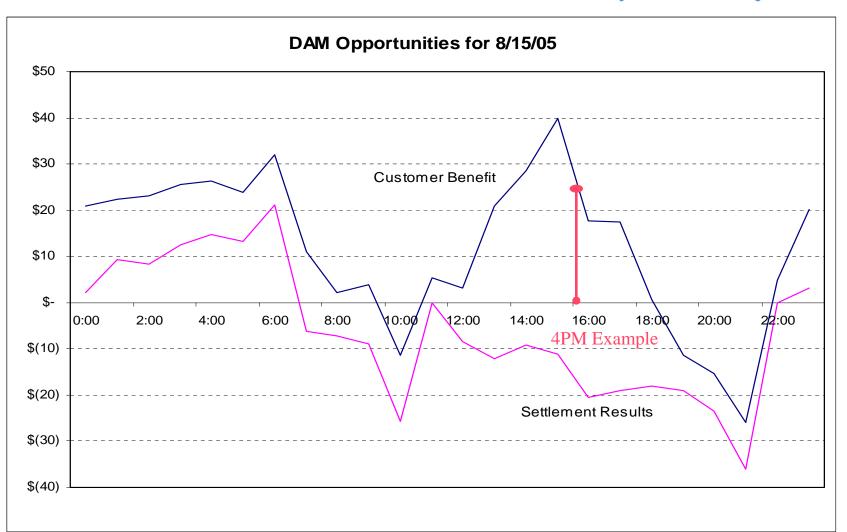
Results in a <u>\$20/MWh Loss</u> (\$173 - \$193)

Scheduling energy into PJM would be Economical (\$138 + (\$155 - \$158) = \$135)

Results in a \$20/MWh Gain (\$155 - \$135)



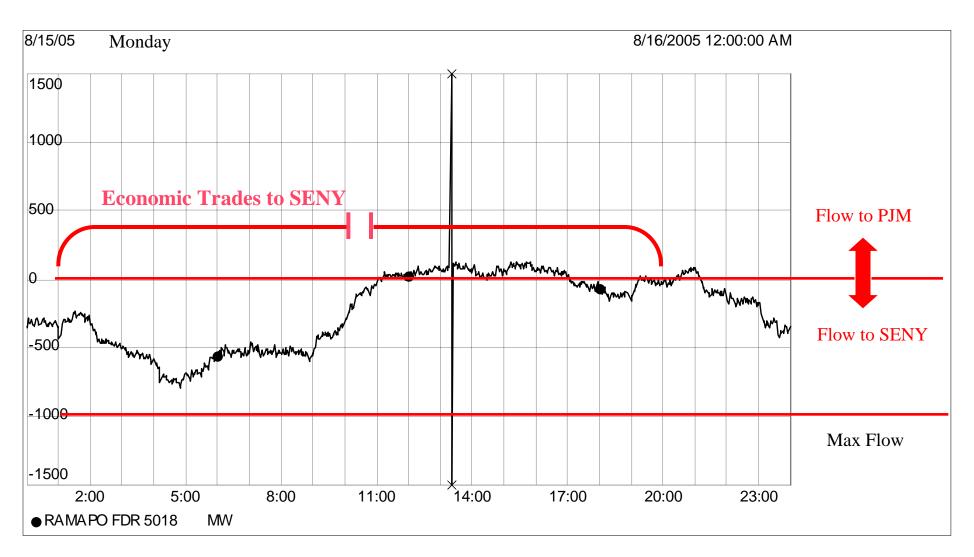
### Summary of PJM/SENY Potential vs. Actual Trade Benefits (\$/MWh)



#### **Confidential - Draft**

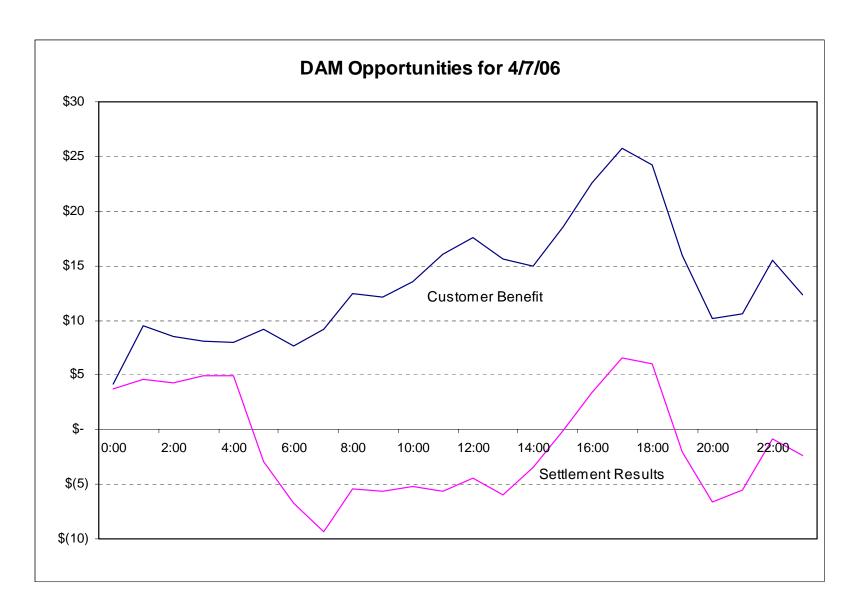


#### 8/15/05 - MW Flow on 5018





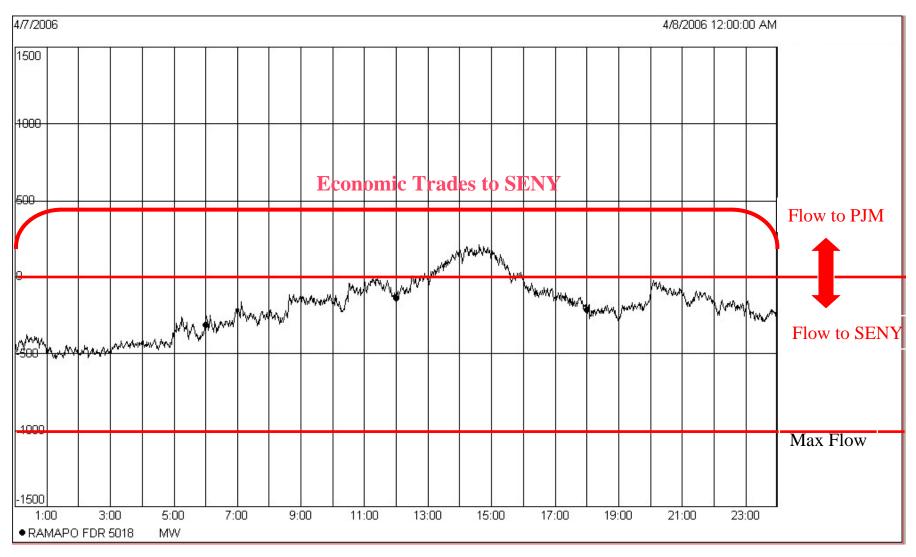
### Results in Spring 06' Period (\$/MWh)



#### **Confidential - Draft**



#### 4/7/06 - MW Flow on 5018





#### **Observations**

- 2006 Average Flow on 5018 is less than max.
  capacity
  - > 530 MW from PJM to NY, 90% of the hourly intervals
  - > 170 MW from NY to PJM, 10% of the hourly intervals
- Potential for economic trades is significantly reduced during peak periods by current NYISO settlement rules
- In current capacity market, Line 5018 provides a reliability value because of the level of subscription to PJM import rights. With imminent changes to PJM capacity markets, it will be more important to correct the price signals for economic energy trades with PJM.



## Next Steps

- Examine physical and market conditions for Line 5018 to determine the extent of problem
- Consider the benefits of enabling the NYISO scheduling software to optimize the PAR position for line 5018
- Consider other changes which can improve this seams issue
- Discuss at June S&P WG meeting