

CAOR & Recallable Exports

Intertie Jurisdictional Trading Standing Committee
June 3, 2008



- CAOR and Recallable Exports
- Conference call April 2007
- CAOR Procedure put in place May 2007
- Recent Analysis
- Procedural Changes

- The current price and validity of CAOR will be discussed and/or reviewed through the MPWG.

- CAOR was introduced to the market in July 2003
- The purpose of CAOR is to assign a monetary value to an out of market control action; specifically voltage reductions and the ability to forego the acquisition of OR.
- CAOR is priced as follows:
 - In Predispatch: (RICHVIEW-230.G_3VR)
30R: 400 MW at \$30.00, 10N: 400 MW at \$30.10
 - In RealTime: (RICHVIEW-230.G_5VR)
10N: 200MW at \$75.00 and 200MW at \$100.00
- The result of valuing the CAOR is that export transactions may continue to flow even when CAOR is scheduled. If CAOR was not offered the export would not have been scheduled or would have been curtailed.

- In March 2007, NYISO stopped allowing exports which the IESO made recallable at check-out to flow (TB 151)
- A conference call was held on April 20, 2007 with the IJTSC outlining 3 options – Option 1 was agreed to with the IJTSC at the May 10th meeting
- http://www.ieso.ca/imoweb/consult/intertieTrading_sub.asp
- New York requested notification at the 90 minute check out of what transactions would be made recallable in order to have the most accurate information feed their scheduling tool.
 - Analysis at the time showed the 2 hour out pre-dispatch and 1 hour out pre-dispatch schedules of CAOR for 10 minute OR to be within 50 MW of one another (on average)

- An economic assessment of exports is made prior to the 90 minute checkout based on the 2 hour out pre-dispatch
- The number of transactions = the amount of 10 min CAOR scheduled are selected as recallable
- Any transactions from that assessment that are with New York are made recallable at the NY90 checkout
- Another economic assessment of exports is made based on the 1 hour out pre-dispatch
 - Economic stacking should not have changed
- The remaining transactions that satisfy the 10 min CAOR amount are made recallable at the 30 minute checkout
- If CAOR has increased and New York transactions are now in the stack for recallability we notify NYISO at the 30 min checkout

- Transactions are stacked economically
- 200 MW of 10 minute OR CAOR scheduled in the 2 hour out pre-dispatch
- Scenario 1 – no change in 10 minute OR CAOR - 1 hour out pre-dispatch has 125 MW of 10 minute OR CAOR remaining
- Scenario 2 - 10 minute OR CAOR has increased – 1 hour out pre-dispatch has 175 MW of 10 minute OR CAOR remaining

	MW		Scenario 1	Scenario 2
HQ	50		@ 30 min	@ 30 min
NYISO	25	@ 90 min		
MISO	75		@ 30 min	@ 30 min
NYISO	50	@ 90 min		
NYISO	50			@ 30 min
MISO	50			

- A review of the CAOR procedure following the last traders meeting showed that the CAOR was being made recallable on an economic basis 76% of the time.
- Since the last meeting the economic evaluation has improved to 80% of the time.
 - Deviations from this procedure would occur for reliability reasons only
 - i.e. - if the export curtailment will violate the import limit, requiring imports to be curtailed
 - if the number of transactions that are economic are too great to be recalled in the event of a contingency
- Higher incidence of NY export failures
MW made recallable with New York =
amount of MW economic with NY – amount of MW of export transactions curtailed at checkout

- Market Participants can estimate if CAOR is scheduled by looking at the
 - <http://reports.ieso.ca/public/PredispShadowPrices>
- If the shadow price for 10 minute OR for the resource RICHVIEW-230.G_SLACKA is at or near \$30, CAOR will be scheduled.