The NYISO TCC Market is Broken: TCC Shortfalls Must be Reduced

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Questions We Will Address Today

- What does fully funding TCCs mean?
- Is there a TCC congestion shortfall crisis?
- What did the NYISO Board direct?
- What did FERC's White Paper on Wholesale Power Market Platform say about shortfalls
- What is being done about reducing shortfalls?
- Are there possible approaches for shortfall reduction?

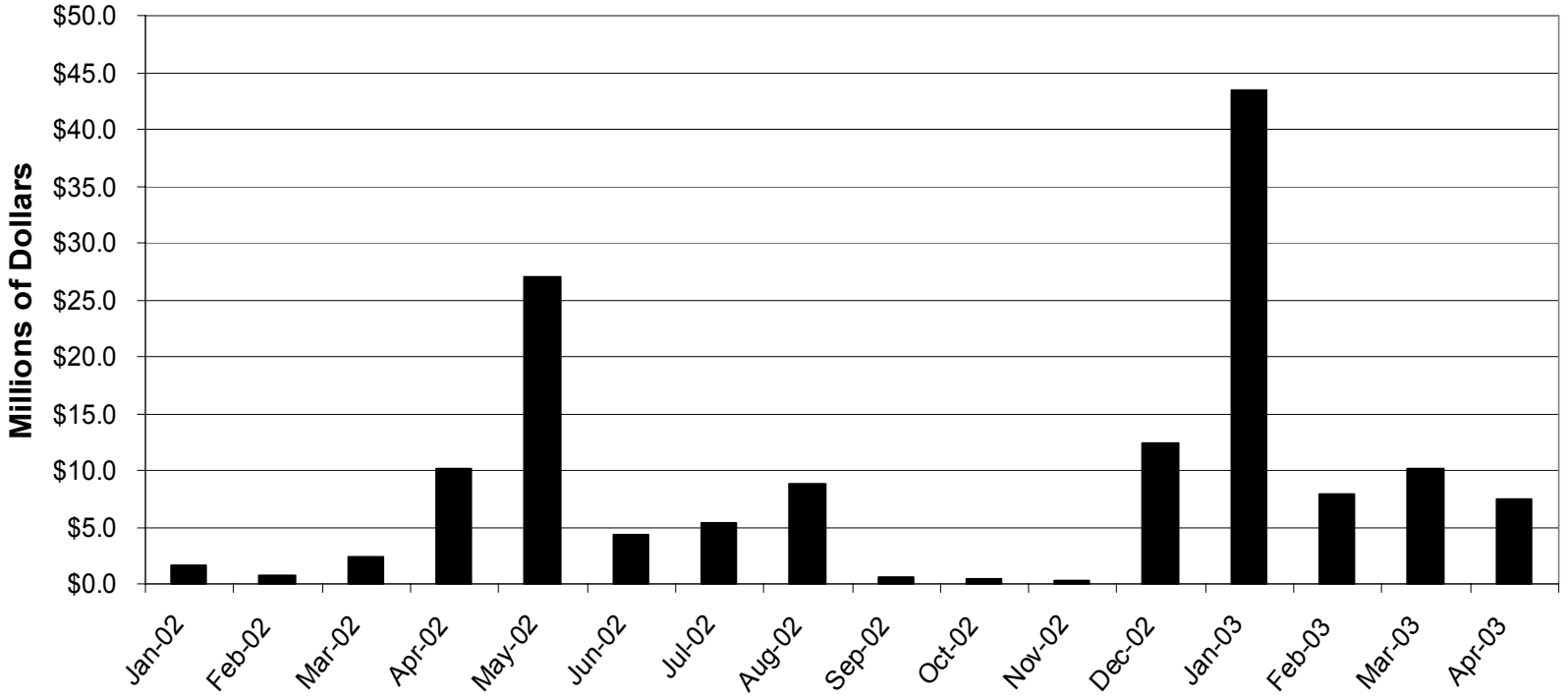
What Does Fully Funding TCCs Mean?

- If for any reason fewer MWs can flow between two points in the system than there are TCCs outstanding between the same two points, the ISO would not collect enough revenues to pay TCC holders
  - When this happens a TCC shortfall occurs
  - In the contrary, a TCC surplus is generated
- In NY, the Transmission Owners cover TCC shortfalls and collect TCC surplus
  - In all cases, the ISO is revenue neutral
  - The expectation was that these charges would be small

What Does Fully Funding TCCs Mean?

- TCC shortfalls/surplus happen any time the system model in the auction differs from the system model in the (DAM)
  - More TCCs are outstanding than energy can flow between two points in the system in the DAM
  - The NYISO does not collect enough through the DAM to pay TCC holders
- Common differences between auction and DAM models:
  - Line outages or derates
  - PAR settings
  - Parallel flows
  - Other impacts further aggravate the shortfalls

Is There a TCC Congestion Shortfall Crisis in New York?



Is There a TCC Congestion Shortfall Crisis in New York?

- The Shortfall Problem
  - TOs funded $62M of TCC shortfalls in Q1 03
  - Con Edison was charged more for shortfalls in the last 6 months than it received through the NYISO auctions!
- The Allocation Problem
  - Method used to allocate shortfalls to individual TOs do not accurately assign them to TOs that caused the shortfalls
  - Current allocation method depends on ownership of lines through which the market valued most the purchased TCCs
  - Con Edison currently gets allocated nearly 70% of shortfalls

The Generator Analogy

- Generator Owner (GO)
  - Outage creates shortfall risk for owner
    - DAM Price < RTM Price
  - GO has the opportunity for managing this risk
    - May elect not to sell all its capacity in DAM (withholding?)
    - May elect to sell at a premium in the DAM
  - GO not responsible for impact to others
- Transmission Owner (TO)
  - No protection for outages Bystander to the TCC process and unable to hedge shortfalls
  - Difficult for TO to improve maintenance or shorten outages
  - TOs be fully responsible for impact to others (lines assumed to have 100% availability)
- Consumers
  - TCCs do not provide price certainty
    - Consumers pay for TCCs they buy
    - Consumers are then charged for shortfalls in proportion to their load

Can Accurate Allocation Be Considered a Reduction in Shortfall?

- From NYISO point of view
  - Possibly
  - Part of the shortfall has been dispensed with by a direct charge to line owner
- From the TO point of view
  - No
  - Two separate charges still add up to one bigger charge
- From a Consumer point of view
  - No
  - Consumers in the end are charged for the full aggregate shortfall

What did the NYISO Board Direct?

- Not to expend resources at this time in implementing the SCRP approved by the MC
- Bring the LECG method to the MC for approval
  - The Board would decide between the SCRP and LECG approaches if the MC does not approve the LECG method (deferred decision)
  - Implement the LECG method as soon as possible
- Determine the feasibility of a method to reduce congestion rent shortfalls

What did FERC's White Paper on Wholesale Power Market Platform Say About Shortfalls

- The FTRs that are offered by the RTO or ISO must, in the aggregate, be consistent with the physical limitations of the transmission system
  - If necessary to meet these requirements, the RTO or ISO will create counterflow FTRs to make FTRs physically feasible
  - If this results in a revenue shortfall, it could be recovered through an uplift charge

What is Being Done About Reducing Shortfalls?

- Not enough yet
  - NYISO staff did not focus it's efforts or direct LECG's efforts to work on this issue
  - Perhaps work on the allocation issue was needed first to understand to causes of shortfalls and develop a fair method for educing shortfalls
- The Board's direction
  - Restated their previous order and clarified that allocation and shortfalls were two distinct and different issues
  - Specifically directed staff to report on efforts to reduce shortfalls
  - This presentation is intended to call on the NYISO to commit resources to work on this issue without further delay

Are There Possible Approaches to Shortfall Reduction?

- Option 1
  - CRTF discussed retaining some TCCs from the 6-month or longer markets and releasing most of them in the monthly markets
    - The levels of retention to be determined by the NYISO and amount could vary by line voltage level and type
    - TCCs sold in the longer period auctions might be worth more
    - There is no overall cost shifting when process limits TCCs sold in some areas due to reductions in other areas, since all remaining TCCs are for sale in monthly auctions
    - Lines with fully subscribed grandfathered TCCs can be also be managed through this process (retention followed by release)
    - This process reduces (manages) shortfall risks for TOs
    - Provides price certainty to customers to the extent it is successful in reducing shortfall

Are There Possible Approaches to Shortfall Reduction?

- Option 2
  - TCCs not fully funded at times of outages and derates
    - Similar to transmission contracts prior to restructuring
    - Market would bear the risk of impact of outages and derates on the value of TCCs
- Option 3
  - Develop an approach based on FERC's white paper with shortfalls charged through Schedule 1
- Other options or variants
  - Other approaches
  - Charge (all/some) shortfalls through uplift