EXTERNAL TRANSACTION SCHEDULING

Presentation to the Market Structures Working Group

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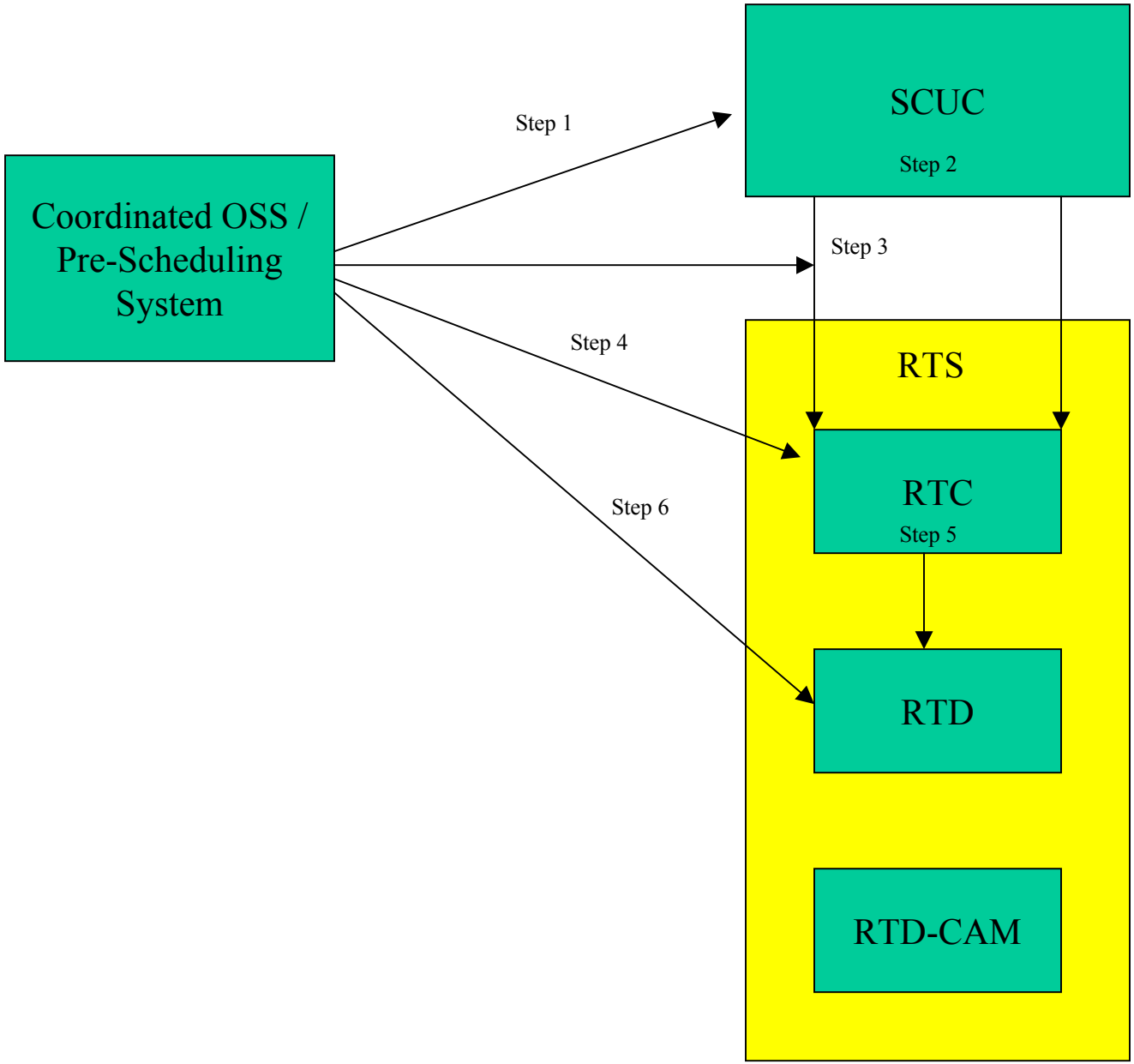
Coordinated OSS / Pre-Scheduling System
Step 1
SCUC
Step 2
Step 3
Step 4
RTS
RTC
Step 5
Step 6
RTD
RTD-CAM

DAY-AHEAD PRE-SCHEDULED Step 1

The first opportunity to schedule external transactions will be day-ahead pre-scheduling using a fully coordinated OSS/pre-scheduling tool:

- The tool will allow coordinated hourly and quarter-hourly transaction ramp and interface capacity checks and reservations between all control areas.
- Those interfaces that do not allow quarter-hourly schedule changes will be modeled with a single ramp at the top of the hour.
- We want to ensure that we at least provide the flexibility of transaction scheduling currently allowable under either the PJM or NYISO market rules, but done in a consistent and coordinated fashion between all control areas.

DAM ECONOMIC TRANSACTIONS Step 2

SCUC determines DA schedules:

- This determination will continue to be an hourly evaluation. A 96 interval quarter-hourly optimization is not feasible at this time
- Increased ramp limits to reflect the potential for four quarter hourly ramps.
- The details of appropriately balancing the capacity and energy requirements of the quarter hourly ramps and quarter-hourly pre-schedules as compared to a single hourly load target is still to be finalized.

DAM ECONOMIC TRANSACTIONS Step 2

SCUC determines DA schedules:

- SCUC transactions will indicate their willingness to be scheduled either at the top of the hour or flexibly within an hour.
- Transactions willing to be flexibly scheduled within an hour may be moved to a quarter past of half past the hour based on a coordinated checkout process with other control areas.
- These transactions would receive a pro-rated day-ahead energy schedule for the hour.
- SCUC will model top of the hour and total hour ramp limits while ensuring interface constraints are not violated.
- Day-Ahead scheduled transactions may attempt to convert to real-time pre-scheduled (Step 3) or may be reevaluated by RTC (Step 5).

DAM ECONOMIC CONVERTED Step 3

DA schedules may be converted to real-time pre-scheduled through the coordinated OSS/pre-scheduling tool.

- There will be a period of time after the posting of day-ahead schedules where the day-ahead financial transactions that are not pre-scheduled will be allowed to submit requests to be pre-scheduled into real-time.
- The same coordinated OSS/pre-scheduling functionality would be used for the conversion of the DA economic transactions including any day-ahead pre-scheduled transactions as a given and using updated ramp and interface capacity limits.

REAL-TIME PRESCHEDULED Step 4

After allowing a period of time for day-ahead scheduled transactions to convert to real-time prescheduled any remaining ramp or interface capacity may be reserved by real-time prescheduled transactions:

- Once again, the same coordinated OSS/pre-scheduling functionality would be used to accept or reject real-time pre-scheduled transactions including any day-ahead pre-scheduled or day-ahead converted transactions as a given and using updated ramp and interface capacity limits.
- This would be allowed up to the point in time where the bids close for internal generation for the hour in question. This is likely to be one hour before the top of the hour. i.e., for transactions scheduled to begin between 3:00 and 4:00 real-time pre-scheduling can occur up to 2:00.

ECONOMIC TRANSACTIONS IN RTC Step 5

RTC will re-evaluate transactions on a quarter hourly basis using all quarter hourly ramps and bids for all transactions:

- A hierarchy of bid limits for the various types of external transactions must be created for scheduling in RTC and for curtailment in real-time should the need arise;
- The economic transactions that result from the RTC schedules should be consistent with all ramp and interface capacity limits. Transactions scheduled by RTC receive ramp and interface capacity reservations.

SHORT NOTICE EXTERNALS Step 6

Any remaining ramp and interface capacity can be used by Short Notice External Transactions (SNETs):

- SNETs can be submitted up to 30 minutes before the quarter hour in question;
- Once again, the same coordinated OSS/pre-scheduling functionality would be used to accept or reject SNETs including all transactions either pre-scheduled or scheduled by RTC as a given and using updated ramp and interface capacity limits.;
- SNETs will have the lowest priority in terms of real-time curtailment, i.e., they will be curtailed before any economically evaluated or pre-scheduled transactions
- SNETs are price takers and will be settled against real-time prices. If an interface is constrained the price will be set by RTC, if an interface is not constrained it will be set by RTD.