

## Sub-zonal dispatch proposed for '12/'13 Delivery Year and beyond

DRS (Demand Response Subcommittee) 6/13/2011





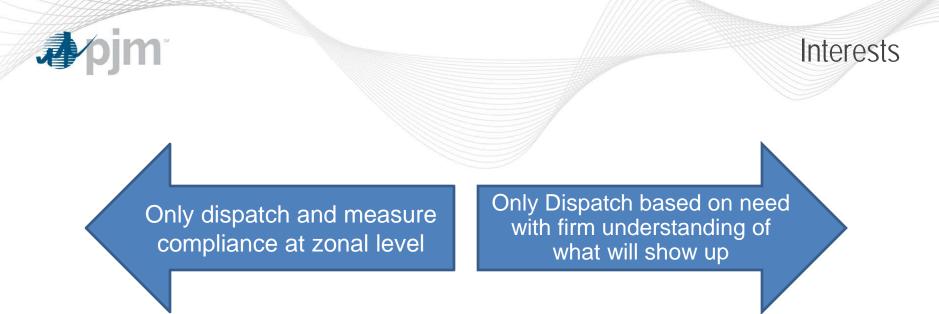
- Current market rules allow zonal, lead time and sub-zonal dispatch:
  - Key limitation based on use of ALL CALL technology
- Significant changes to system topology for '11/'12
  - ATSI integration
  - TRAIL line implementation
- Successful implementation sub-zonal dispatch through State by Zone implementation in summer 2010.



**Governing Documents** 

## • OATT

- Market Operations
- Attachment DD
- Attachment DD-1
- OA
- RAA
- M13
- M18
- M10



- Sub zones defined in advance to enable CSP to easily dispatch their customers.
- Transparency of rules from Dispatch to Settlements (clear communication for customer expectations)
- Flexibility to manage the system based on unpredictable conditions



Other identified interests

- No mandatory compliance for sub zonal event
- More effective notification solution
  - Electronic message instead of ALL CALL
- Operational feasibility for DLC
  - Normally all included on 1 registration
- Minimize member administration
  - E.g.: pnode identification & maintenance
- More effective test plans since only part of zone may actually get dispatched.



Sub zone Dispatch: Set Up

- Basis of sub zone?
  - State
  - Zip code
    - CSP must maintain accurate zip codes.
  - Pnode
    - EDC needed to assign phode to each account number.
- When do subzones get established?
  - Prior to deliver year
  - X hours before dispatch
- What is most granular dispatch instruction?
  - Registration vs location
    - considerations for DLC



Sub zonal Dispatch: Notification

- When to dispatch at sub zonal level?
  - Reliability
  - Cost
    - 1,000 MW registered in zone but only need 200 MW in certain area, should PJM dispatch entire zone (other 800 MW will not help and will not hurt)?
- How to dispatch?
  - ALL CALL (telephony)
  - Electronic notification with CSP confirmation
    - Will require CSP infrastructure



Sub zonal Dispatch: Event Compliance

- When to measure compliance for sub zonal event?
  - Always measure compliance according to current process
  - Only measure for sub zones defined prior to DY
  - Only measure for sub zone defined prior to X hours before event
  - Never measure compliance



- Number of events used to determine event multiplier based on number of events the registration has been dispatched
  - PEPCO DC dispatched twice
  - PEPCO zone dispatched once
  - 33% for PEPCO DC registrations (since they were actually dispatched 3 times) and 50% for non DC PEPCO resources (since they were actually only dispatched once and need to take min of 50% or 1/# events)
- Sub-zonal commitment based on registrations that were dispatched:
  - ILR = nominated capacity of registrations dispatched
  - DR = DR commitment \* (nominated value of DR registrations dispatched/Total nominated value of DR registrations in zone).
  - CSP may not use other zonal registrations to substitute sub-zonal registrations that are dispatched.
  - Registrations dispatched based information submitted by CSP for location in eLRS.
    - PJM will use zip codes in eLRS just prior to event to determine exactly which registrations are required to respond.



Sub Zonal Dispatch: Test

- Who should be required to test?
  - Only those registrations that were not required to respond to the event
  - All registrations in zone if not dispatched at zonal level
  - No registration in zone if any part of zone was dispatched



Sub zonal Dispatch: Current Test Process

- If registrations not dispatched then still required to perform annual test.
  - For example in 2010:
    - APS (WV, VA and MD) dispatched and therefore not required to Test
    - APS (PA) NOT dispatched and therefore required to Test
      - If test already conducted it is not necessary for CSP to submit the results.
- Sub-zonal commitment based on registrations that were NOT dispatched:
  - ILR = nominated capacity of registrations NOT dispatched
  - DR = DR commitment \* (nominated value of DR registrations NOT dispatched/Total nominated value of DR registrations in zone).
  - CSP may not use other zonal registrations that were dispatched to substitute registrations that are required to test.