# **Congestion Impact Calculation Update**

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## Topics

- PROBE Status
  - SCUC PROBE Alignment
  - PROBE Model Changes
- Calculation Status
  - Data Collection
  - 2003 Impact
  - 2004 & Going Forward
- Work Plan



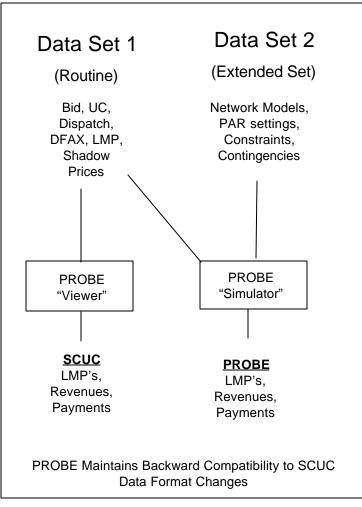
## SCUC – PROBE Alignment

- Met with Operations and MMP
- Much Follow-up Communication for Further Clarifications & Investigations
- Focusing on 2 SCUC PROBE Model Differences
  - SCUC Multi-Pass Logic Impact
    - Details of Constraint, Contingency Handling
    - Commitment Rules
  - GT Dispatch Handling After Ideal Dispatch Pass
- PROBE Being Modified to Align Modeling Assumptions
  - Early Results Indicate Significant Reduction of SCUC PROBE Differences



### Data

### Data Needs



### Data Status

- 2003
  - Set 1 Data Has Been Extracted for the Entire Year
  - Set 2 Data is Unavailable for 2003
  - 2003 Data Being Reviewed for Consistency & Completeness (Corrections and Additions Will be Needed)
- 2004
  - Data Sets 1 and 2 Being Collected
  - Routine "Production" Data Collection Being Initiated
    - Need to Anticipate SMD Effect on Data Extraction Procedures. PROBE Changes for SMD Have Started
  - Weekly Data Collection and Analysis Procedure Being Worked Out



PowerGEM Power Grid Engineering & Markets Normal Calculation Protocol

- Step 1 Compare SCUC (i.e. PROBE Viewer) and PROBE (i.e. PROBE Simulator) for the Market "as it was"
- Step 2 Check if Accuracy Target is Met
  - Yes: Go to Step 3
  - No: Advise ESPWG and Exclude/Adjust Results
- Step 3 Calculate Impacts with PROBE Simulator
- Step 4 (If Required and Instructed) Adjust for Abnormal Events & Calculate Impacts with PROBE Simulator. Compare with Step 3



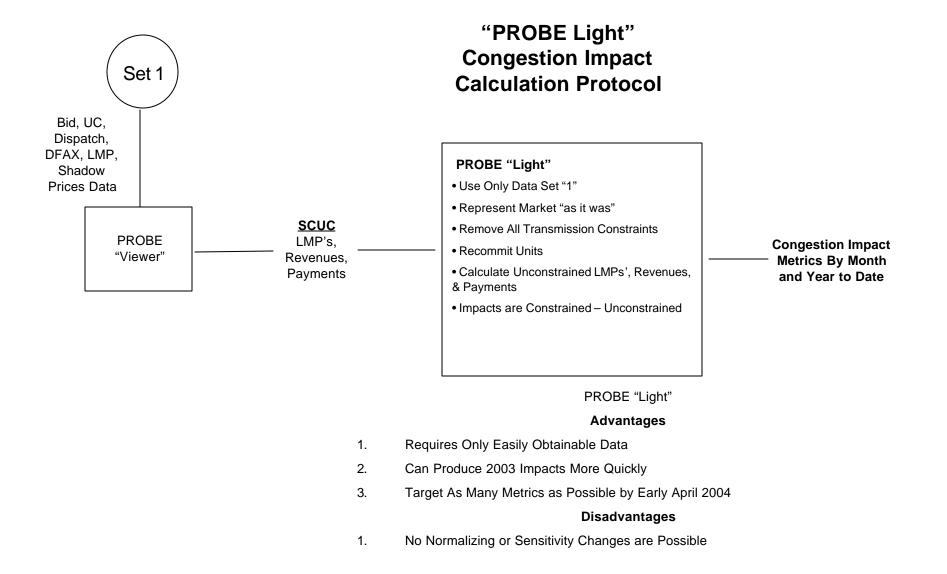
# **Calculation Status**

PROBE Simulator Cannot Be Run Without the Data Set 2

SCUC – PROBE Comparison Impossible Normal Protocol Impossible

- 2003 Calculation
  - Data Set 2 Unavailable
  - Propose Using "PROBE Light" for 2003 calculation
- 2004 Calculation
  - Starting January 1
  - All Data Should Be Available
  - Normal Protocol Will Be Used







### Next

#### PROBE Software

- Refine PROBE Modeling
- Add "PROBE Light" Capability to PROBE
- Clean Up 2003 Data (Set 1 only)
- Collect 2004 Data (Sets 1 and 2)
- Develop TCC Cost Data and PROBE Handling
- Develop PROBE Automation of Metrics Calculation
- Develop Automated Way to Handle Normalized Network and Interface to Bid Data

#### Calculation

- Document Calculation Process and Freeze
- Produce 2003 Metrics With "PROBE Light"
- Report Metrics Monthly Going Forward
  - PowerGEM Developing Routine Process
  - Routine Data processing by Summer 2004

