

# Path 49 Series Capacitor Upgrade Implementation Team

Progress Report to STEP

December 10, 2003

Bob Smith – Sub-group Chair

# Team Activities

- November 14<sup>th</sup> meeting
  - Owner interest in project
    - All owners interested
    - Navajo-Crystal owners have cost/benefit and timing concerns
  - Detailed equipment discussion
    - Some series capacitors can be upgraded, other very old and scheduled for replacement
    - No showstoppers
  - CAISO/SCE/SDG&E effort to determine series capacitor ratings
  - Allocation
- December 9<sup>th</sup> meeting
  - Allocation discussion

# Allocation of Capability Increase

- Three allocation methods proposed
  1. Allocate based on \$ investment in upgrade
    - Result uncertain until project complete
    - Incentive to overspend
    - This option eliminated
  2. Allocate equal amount to each line upgraded
  3. Allocate based on existing entitlement
- The remaining two options (2 and 3 above) give relatively similar results

# Major Issues for Implementation

- Specific ratings required for series capacitor upgrades
  - Path 49 study
  - CAISO STEP recommendations
  - Team wants to use Path 49 Rating Peer Review Group to determine required ratings
- Moenkopi-Eldorado series capacitor upgrade necessary?
  - Mohave status may impact need
  - SDG&E and SCE studies show different results
  - Team wants to use Path 49 Rating Peer Review Group to determine whether upgrade to Moenkopi-Eldorado is necessary
- Allocation of increase capability
- Commitment to project

# Next Steps

- Develop table of possible allocation results
- Determine lead time for upgrades
  - Series Capacitors
  - 2<sup>nd</sup> Devers 500/230kV transformer
  - SVCs
- Begin developing project timeline
  - Proposed in service June 2006
  - Alternative aggressive in service November 2005
- Begin project contract negotiations
- Goal to have timeline and MOU by April 2004
  - Dependent on Path 49 Peer Review Group results
    - Series capacitor ratings
    - Moenkopi-Eldorado upgrade