

CEC IEPR Committee Workshop

Transmission Needed to Meet State Renewable Policy

Mandates and Goals

California Transmission Planning Group 2010 Statewide Transmission Plan

11-IEP-1E

**DOCKET** 

11-IEP-1G

DATE May 17 2011

RECD. May 18 2011























#### CTPG: Who We Are

- CTPG is a coalition comprised of all the entities within California responsible for transmission planning for the intrastate and interstate grids:
  - Publicly Owned Utilities: IID, TID, SMUD and LADWP
  - o California ISO
  - Investor Owned Utilities: PG&E, SCE, and SDG&E
  - Other planning organizations: WAPA, TANC, and SCPPA
- CTPG's role is to coordinate transmission planning studies:
  - NOT a decision-making or approval authority, or development group
- CTPG study process is open and transparent:
  - Assumptions, methods, and results are documented and publicly available (<a href="http://www.ctpg.us/public/index.php">http://www.ctpg.us/public/index.php</a>)
  - Conduct stakeholder meetings, and solicits and responds to written comments



# **Coordinating Transmission Planning for all of California**

- Identify transmission additions and upgrades needed to achieve 33% RPS for California by 2020
- Integrate the delivery of renewable energy to load centers with the reliability and operational needs of the grid
- Benefit from collaborative planning approach that could significantly reduce the economic and environmental costs of achieving a 33% RPS



## Study Objectives for the 2010 Statewide Transmission Plan

- Complete a statewide conceptual transmission plan by the end of 2010 and vet results with stakeholders
- Conceptual plan based on results of multiple scenarios runs with consideration of how likely each is
- Goal was to identify "high-potential" transmission needs for consideration by state Balancing Authority Areas in early 2011
- Remaining 33% RPS transmission needs subject to further study in 2011



### **CTPG 2010 Study Process**

Phase 1 Phase 2 Phase 3 Phase 4 2010 State-Wide Transmission Plan

- •Development of the CTPG membership
- •Development of the CTPG 2010 Stakeholder and Study process
- •Load Serving Entity Scenario

- •Stakeholder recommended Generation Queue
- •RETI recommended Heavy In State Scenario
- •RETI Net Short
- •Analysis of Stakeholder Alternatives
- Stakeholder recommended Northwest and Southwest
   Scenarios

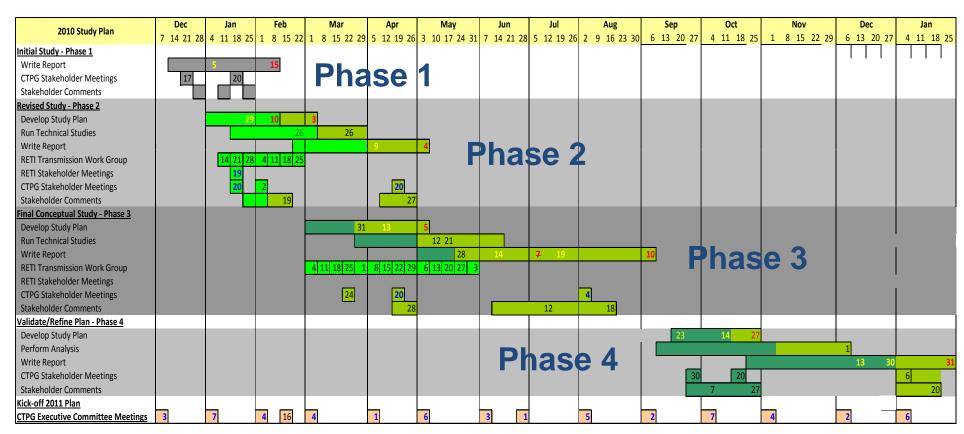
- •RETI Best CREZ Scenario
- •Analysis of Stakeholder Alternatives
- •Fall off-peak scenario
- •Identification of High Ranked CREZs
- •Identification of High and Medium Potential transmission elements

- •Analysis of progress towards a 33% RPS
- •Assess potential for increased out-of-state imports and potential impact on state-wide transmission plan
- •Finalize 2010 Study High and Medium Potential transmission elements

- •Identification of statewide transmission plan elements
- •2010 Lessons Learned
- •Begin preparation of 2011 Study Plan



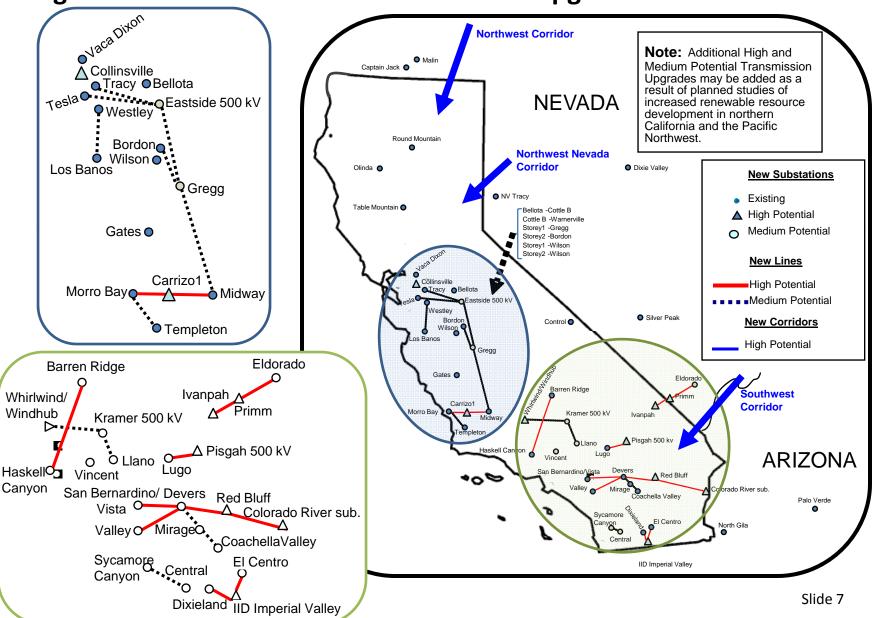
# CTPG 2010 Four-phase Timeline Supported Active Stakeholder Participation







## 2010 CTPG Statewide Transmission Plan High and Medium Potential Transmission Upgrades and Corridors



## CTPG 2010 Statewide Transmission Plan Recommendations

- High Potential Transmission Needs:
  - 26 transmission items
  - Should be focus for transmission project developers,
     balancing authorities, regulatory bodies, and state agencies
  - Solutions to Needs should be submitted for regulatory approval and environmental authorizations
- Medium Potential Transmission Needs:
  - 34 transmission items
  - Study further in the ongoing transmission planning processes
- High Potential Transmission Corridors:
  - 3 transmission corridors identified
  - Warrant further study by the CTPG in 2011



#### CTPG 2011 Work Plan





## Phase 2 Transmission Planning Studies

May-Oct –

- •Prepare Phase I Work Plan
- Determine Base Case Approach
- Verify Existing Renewables
- •Incorporate OTC Assumptions
- Review Path Flow Assumptions Prior To Dispatch of Renewables

- Update Net Short
- •Review Re-dispatch Methodology
- •Review Dynamic Stability Study Approach
- Coordinate with TEPPC

- Prepare Phase II Work Plan
- Develop Renewable Portfolios/Scenarios
- Prepare Study Plan(s)
- •Update Renewable Development Information
- Perform Studies
- •Refine the Determination of the High and Medium Potential Transmission Needs and Corridors

- Identify 2011 State-Wide Transmission Plan Elements
- •Identify 2011 Lessons Learned
- Begin Preparation of2012 Work Plan



### Thank you!

