

Agenda  
California Transmission Planning Group  
Stakeholders Meeting  
Embassy Suite

Meeting Introduction  
Introduction on CTPG

(PG&E)  
(LADWP)

Purpose and Objectives  
Committees  
Leaderships  
General Principles

CTPG 2009 Work Plan  
RETI Phase 2A Recommendations  
2009 Study Plan

(CAISO)  
Rich F.  
(SMUD)

Objective  
Approach  
Load and resource assumptions  
Basecase assumptions  
Schedule

Stakeholders' Comments and Suggestions  
Action Items/Next Steps

(All)  
(PG&E)

Adjourn  
CTPG Technical Steering  
Committee

# California Transmission Planning Group *Overview*

Mo Beshir  
Presented at  
CTPG Stakeholders Meeting  
August 11, 2009

CTPG Technical Steering  
Committee

# Purpose and Objectives

- Forum for conducting joint transmission planning and coordination in transmission activities to meet the needs of California consistent with FERC Order 890

# Executive Committee

- Transmission POU, IOU, and California ISO
  - California Independent System Operator (ISO)
  - Imperial Irrigation District (IID)
  - Los Angeles Department of Water and Power (LADWP)
  - Pacific Gas and Electric (PG&E)
  - Southern California Edison (SCE)
  - Southern California Public Power Authority (SCPPA)
  - San Diego Gas and Electric (SDG&E)
  - Sacramento Municipal Utility District (SMUD)
  - Transmission Agency of Northern California (TANC)
  - Turlock Irrigation District (TID)
  - Western Area Power Administration (Western)

# Leadership

- Alternate between POU and IOU
  - Executive Committee
    - Chair - Jim Avery (SDG&E)
    - Vice chair – Jim Shetler (SMUD)
    - Secretary – PJ Martinez (PG&E)
  
  - Technical Steering Committee
    - Chair - Mo Beshir (LADWP)
    - Vice chair – Pat Arons (SCE)
    - Secretary – Gary DeShazo (ISO)

# General Principles

- *Initiate planning coordination among CAISO, POU's and IOU's to take advantage of planning windows for the development of transmission plan for California.*
- *Develop and implement cost-effective transmission system expansions to promote transmission reliability, efficiency, and accessibility on a voluntary basis and without pre-established institutional requirements that any expansions or upgrades be operated or controlled by a specific balancing authority or under any specific contract or tariff arrangement.*
- *Perform studies to evaluate the reliability impacts, costs and benefits of proposed transmission projects.*
- *Meet NERC and WECC reliability standards.*
- *Implement and adhere to the nine FERC Order 890 planning principles*

# Questions



# California Transmission Planning Group *2009-2010 Work Plan*

Robert Sparks  
Presented at  
CTPG Stakeholders Meeting  
August 11, 2009

CTPG Technical Steering  
Committee



# Through coordination, there are broad-based California issues where the CTPG can provide meaningful technical input

- *California's 33% proposed Renewable Portfolio Standard (RPS)*
  - *Not yet a California mandate, but is being considered*
  - *Significant operational and planning issues*
  - *Impacts all of California's transmission providers/owners*
- *Renewable Energy Transmission Initiative (RETI)*
  - *A successful stakeholder initiative to address renewable integration*
  - *Renewable energy zones have been identified & ranked*
  - *A viable transmission plan is needed to integrate renewables onto the grid*
- *Once-through cooling*
  - *State Water Policy is to reduce Once-through cooled resources*
  - *Can impact over 32% of California's installed capacity*
  - *Broad impacts on system operation and achieving successful RPS goals*
- *AB 32 GHG reduction goals*
  - *See all of the above*

# Coordination of assumptions, data, & methodology across California's "planning" institutions will occur

- **Focus for 2009 will be RETI, but time is short**
  - *Study horizon will be 2010 to 2020 case study*
  - *Focus on 33% renewable integration*
- **Key Assumptions and Study Methodology**
  - *RETI Phase 2A analysis provides framework for detailed planning study*
  - *Identified energy zones and conceptual transmission segments*
- **Focus of analysis will be power system studies**
- **Study Responsibility and Time line**
  - *Members share study responsibility*
  - *Study cycle – July 1 to December 31*
  - *Final report January 2010*

# Questions



# RETI

# California Transmission Planning Group *2009 Study Plan*

Craig Cameron  
Presented at  
CTPG Stakeholders Meeting  
August 11, 2009

# 2009 Study Plan

- Objectives
- Base Case Assumptions
- Reliability Standards & Criteria
- Study Guidelines
- Schedule

# 2009 Study Plan

## ➤ Objectives

- Develop Statewide Plan to meet 33% RPS
- Use RETI Phase 2A Conceptual Plan
- Coordinate with Existing Plans

# 2009 Study Plan

## ➤ Base Case Assumptions

- WECC 2019 Heavy Summer Case
- Year 2020
  - NoCal Adverse Weather
  - SoCal Adverse Weather
  - 1 in 2 Weather Statewide
  - Sensitivity
    - South to North Off-Peak



# 2009 Study Plan

## ➤ Reliability Criteria

- NERC Standards
  - TPL - (001 -003)
- WECC Criteria
  - TPL – (001 thru 004) – WECC – 1 – CR – System Performance Criteria
- Local Criteria

# 2009 Study Plan

## ➤ Study Guidelines

- Generation (**Peak Cases**)
  - Renewable Resources based on RETI 2A study
    - Wind - 20% of nameplate capacity
    - Solar / Geothermal / Biomass – 100% of nameplate capacity
  - Adjust existing generation dispatch as needed to balance load and generation
  - NoCal Hydro within existing nomogram limits based on average water year

# 2009 Study Plan

## ➤ Study Guidelines

- Generation (**Off-Peak Case**)
  - Renewable Resources based on RETI 2A study
    - Wind - 100% of nameplate capacity
    - Solar – 0% of nameplate capacity
    - Geothermal/Biomass – 100% capacity
  - Adjust existing generation dispatch as needed to balance load and generation
  - NoCal Hydro within existing nomogram limits based on average water year

# 2009 Study Plan

## ➤ Schedule

- Stakeholder Meeting – Aug. 11, 2009
- Complete Base Case Development – Aug. 15, 2009
- Complete Technical Studies – Nov. 2, 2009
- Present to Executive Committee – Nov. 13, 2009
- Draft Report – Dec. 2009
- Stakeholder Meeting – Dec 2009
- Final Report – Jan. 2010

# Questions

