CTPG Stakeholder Meeting

Phase III: Statewide Transmission Plan Draft Methodology

December 21, 2011

MEETING WELCOME – MO BESHIR

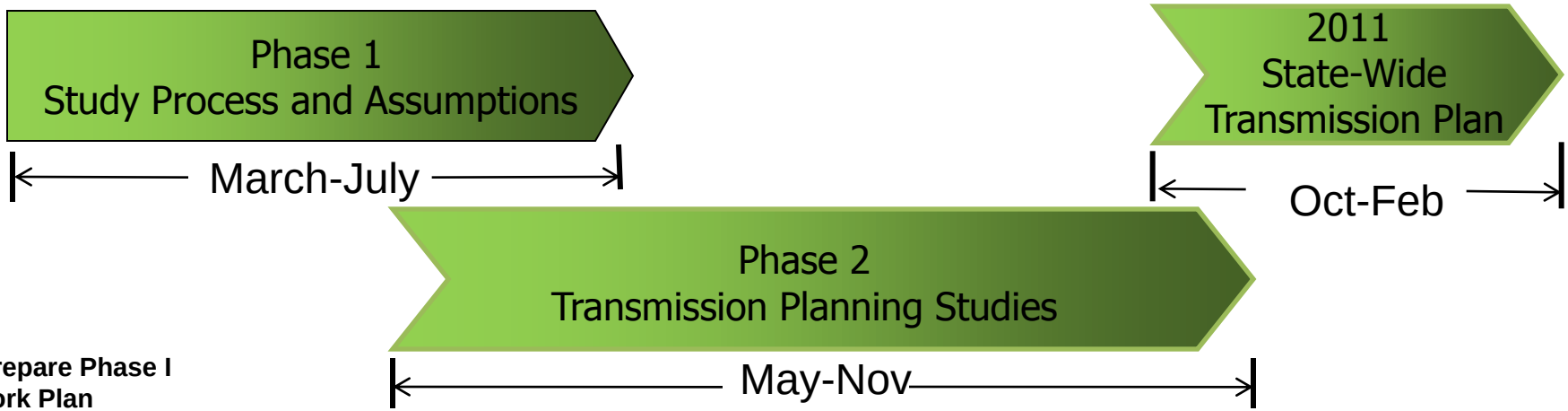
MEETING AGENDA – MO BESHIR

AGENDA

Meeting Welcome	2:30 – 2:35	Mo Beshir
Meeting Agenda	2:35 – 2:40	Mo Beshir
2011 CTPG Work Plan	2:40 – 2:45	Mike Deis
Phase III Statewide Transmission Plan Methodology	2:45 – 3:15	Mike Deis
Stakeholder Input	3:15 –4:25	Mike Deis
Meeting Wrap-Up and Next Steps	4:25 –4:30	Mo Beshir
Adjourn	4:30	

CTPG 2011 WORK PLAN – MIKE DEIS

CTPG 2011 Work Plan



- **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 of 2012 Work Plan**

2011 PHASE III STATEWIDE TRANSMISSION PLAN METHODOLOGY– MIKE DEIS

REVIEW OF
2010 STATEWIDE TRANSMISSION PLAN METHODOLOGY

2010 Statewide Transmission Plan

- The CTPG introduced a three step approach to developing the CTPG Statewide Transmission Plan
  - ➢Step 1: Identified "High Ranked CREZs" using commercial interest
    - CPUC Discounted Core
      - ✓IOUs PPA under CPUC review by 6/1/2010
      - ✓Permit application data adequate by 3/1/2010
    - CTPG Queue Portfolio
      - ✓Have or in process of signing Interconnection Agreement
      - ✓Posted financial security in ISO Cluster process

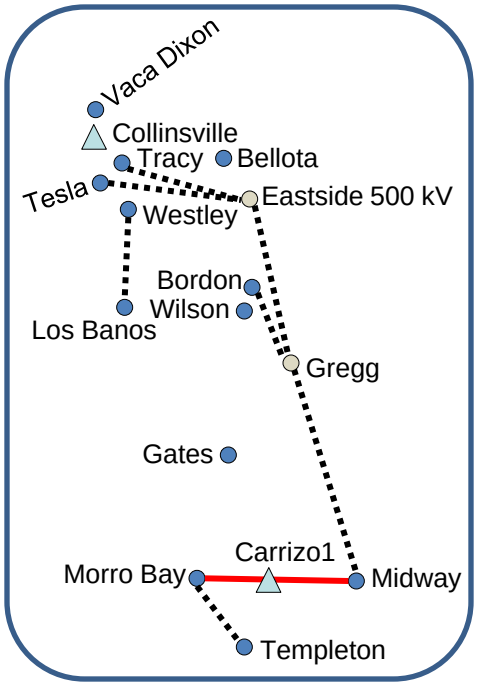
2010 High Ranked CREZs

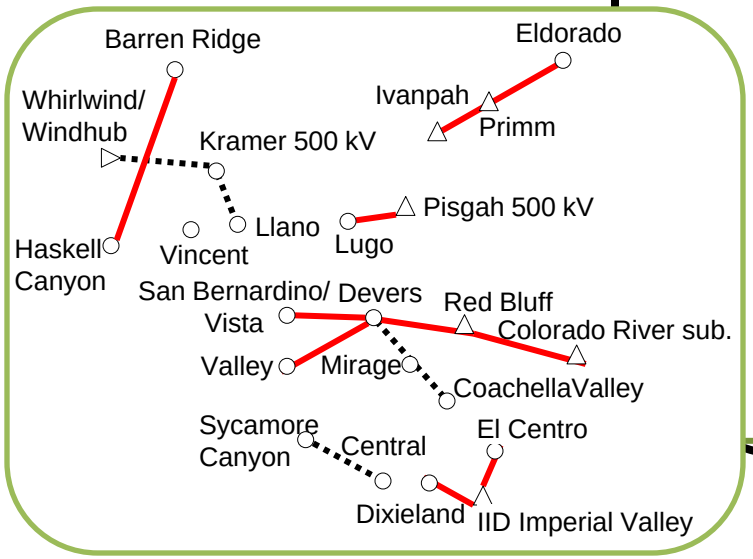
CREZ	% Discounted Core In Queue
Carrizo North/South	94
Imperial South	100
Mountain Pass	100
Palm Springs	100
Pisgah	100
Riverside East	100
Solano	100
Tehachapi	100
Round Mountain	100

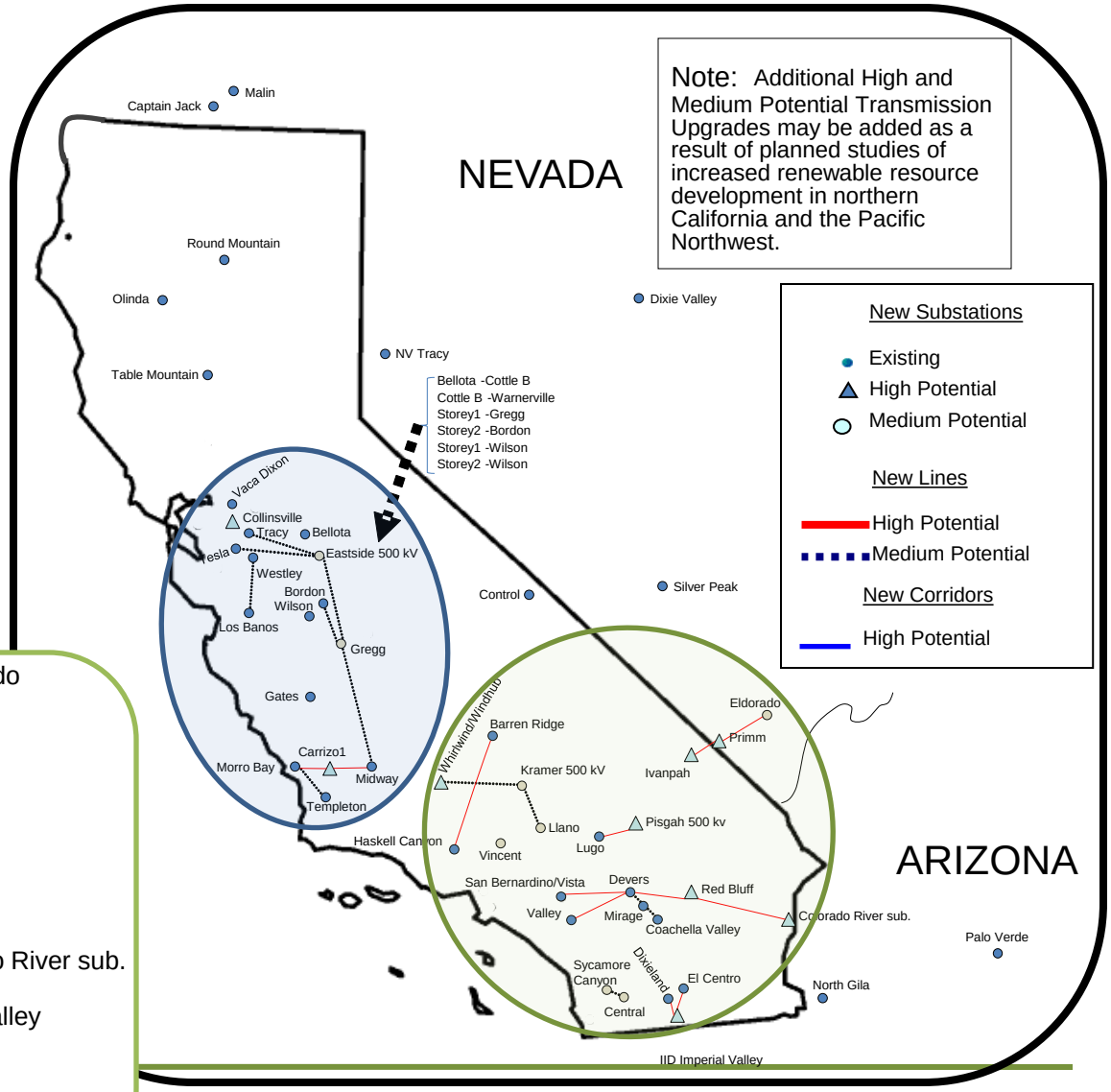
2010 Statewide Transmission Plan

- Step 2: Identified "High Potential" and "Medium Potential" Transmission Elements
  - ✓ Identified transmission elements associated with High Ranked CREZs
    - High potential elements support connection of the High Ranked CREZs to the network. Expected to carry a significant amount of renewable power from High Ranked CREZs to load.
    - Medium potential elements carry a comparatively lower level of output from High Ranked CREZ or are generally associated with a large build out of High Ranked CREZs
  - ✓ Compiled a list of "High Potential" and "Medium Potential" transmission elements

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







2010 State-Wide Transmission Plan

- Step 3: Identify "High Potential Transmission Corridors"
  - ➢ The CTPG has chose to identify "High Potential Transmission Corridors" for future study for the following reasons:
    - There remains considerable uncertainty regarding the precise location and amount of renewable resources
    - Load serving entities are still finalizing procurement decisions as the regulations and rule making surrounding renewable energy credits (REC) and green house gas reductions are developed
    - The existing purchase power agreements (PPA) may be insecure
      - ✓ Inability to meet some scheduling terms
      - ✓ PPAs may contain milestones that if not achieved render the contract terms invalid

2010 State-Wide Transmission Plan

- "High Potential Transmission Corridors" Continued:
  - Provides California's load serving entities with potential future procurement options beyond the "High Commercial Interest CREZ"
  - Recognizes the potential for renewable resource projects that may be developed faster and for less cost
  - Recognizes the potential for reduced total procurement costs, i.e., combined generation and transmission costs

2010 State-Wide Transmission Plan

- "High Potential Transmission Corridors" Continued:
  - Will sustain a competitive renewable resource development and procurement environment as final procurement decisions are made by the State's load serving entities
  - The CTPG believes that additional renewable resource options should be explored because California will have additional renewable resource needs beyond 2020 and to address future GHG reduction polices

High Potential Trans. Corridor Selection Criteria

- ***Criteria No. 1*** – The transmission corridor is associated with out-of-state transmission additions or upgrades currently being considered by other WECC planning entities for the delivery of renewable resources into California
  - ***Reason:*** WECC planning entities should continue to work together to plan for and identify mutual solutions for satisfying respective renewable energy goals

- ***Criteria No. 2 -*** The transmission corridor is associated with out-of-state transmission additions or upgrades that are known to be supported by federal and/or state government(s) for the purpose of developing and exporting renewable resources to California
  - ***Reason:*** The success of completing out-of-state renewable energy projects and transmission infrastructure that may contribute to the potential export of renewable energy to California is contingent on the support of local and state governments

High Potential Trans. Corridor Selection Criteria

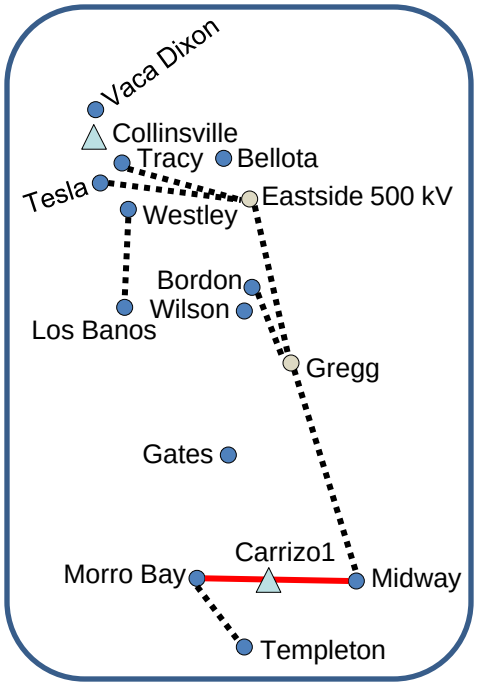
- ***Criteria No. 3 –*** The development of transmission additions or upgrades within the transmission corridor will facilitate a renewable resource portfolio for California that has geographical and weather (wind and sun) diversity
  - ***Reason:*** Renewable energy geographical and weather diversity
  - ***Reason:*** State's renewable resource portfolio is less likely to be adversely impacted by unplanned electric system disturbances or by localized weather patterns.

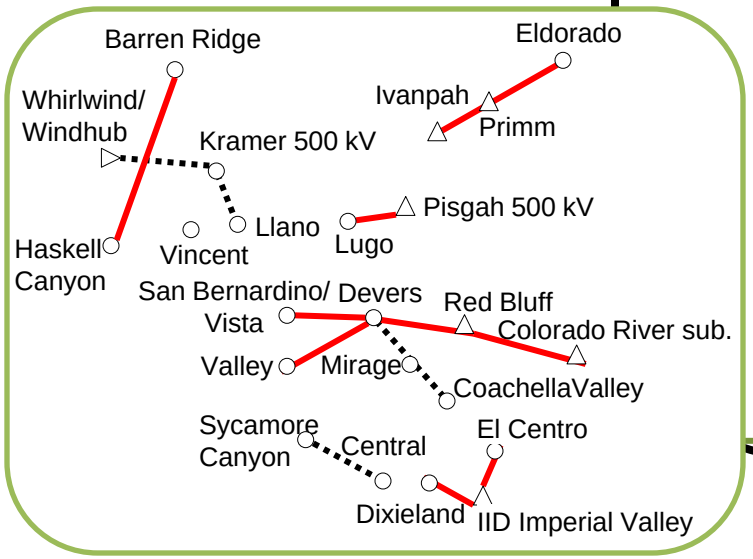
- ***Criteria No. 4 –*** The development of transmission additions or upgrades within the transmission corridor will support the delivery of energy to California from out-of-state entities that are either developing or planning for the development of renewable resources well beyond their own needs.
  - ***Reason:*** Gauges the commitment of the regions outside of California to develop renewable energy resources beyond that required for these regions' own needs in order to export to California.

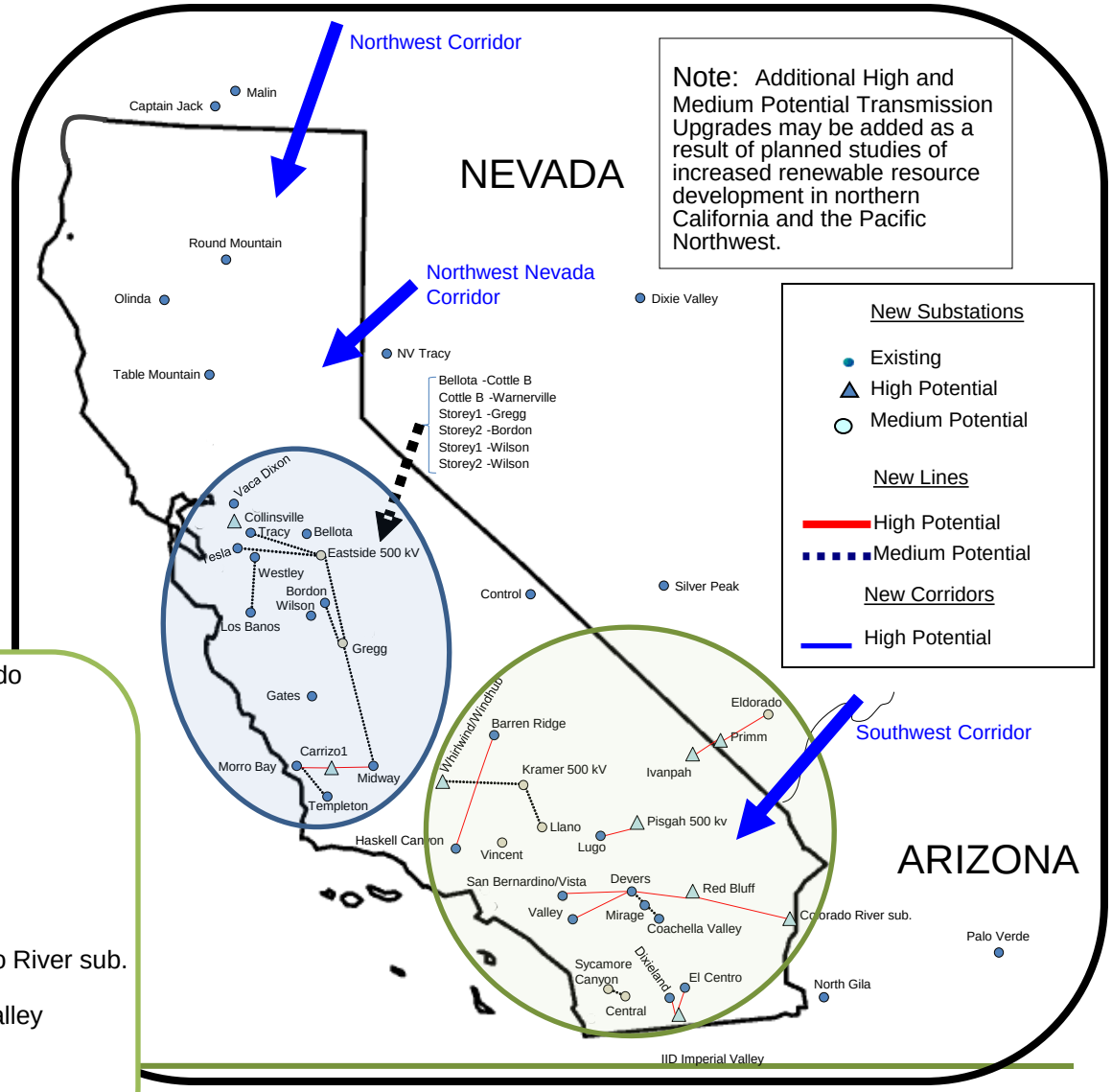
High Potential Trans. Corridor Selection Criteria

- ***Criteria No. 5 –*** The development of transmission additions or upgrades within the transmission corridor will provide access to areas that have a successful record of renewable resource development.
  - ***Reason:*** A measure of the likelihood that the renewable energy projects being considered will actually be completed. Interconnection and permitting approval and financing.

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







PROPOSED
2011 STATEWIDE TRANSMISSION PLAN METHODOLOGY

2011 Statewide Transmission Plan Methodology

- Repeat 2010 3-Step Approach
  - Update “High Ranked CREZs” utilizing queue data
  - Update “High and Medium Potential” transmission elements utilizing 2011 Study Results
  - Review “High Potential Corridor” determination
- Update BA Transmission Planning Information

2011 Statewide Transmission Plan

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Palm Springs	100
Pisgah	100
Riverside East	100
San Bernardino-Lucerne	100
Solano	100
Techachapi	100

STAKEHOLDER INPUT – MIKE DEIS

MEETING WRAP-UP AND NEXT STEPS – MO BESHIR

Next Steps

- Stakeholder comments requested by January 3rd
- Post Final Methodology by January 5th
- Post 2011 Draft Statewide Transmission Plan by January 10th
- Stakeholder meeting to receive input on the 2011 Draft Statewide Transmission Plan on January 19th in San Diego
- Stakeholder comments requested by January 30th
- Executive Committee will consider the 2011 Draft Statewide Transmission Plan for approval on February 2nd

Thank you for your input