Briefing on 2010 Transmission Plan

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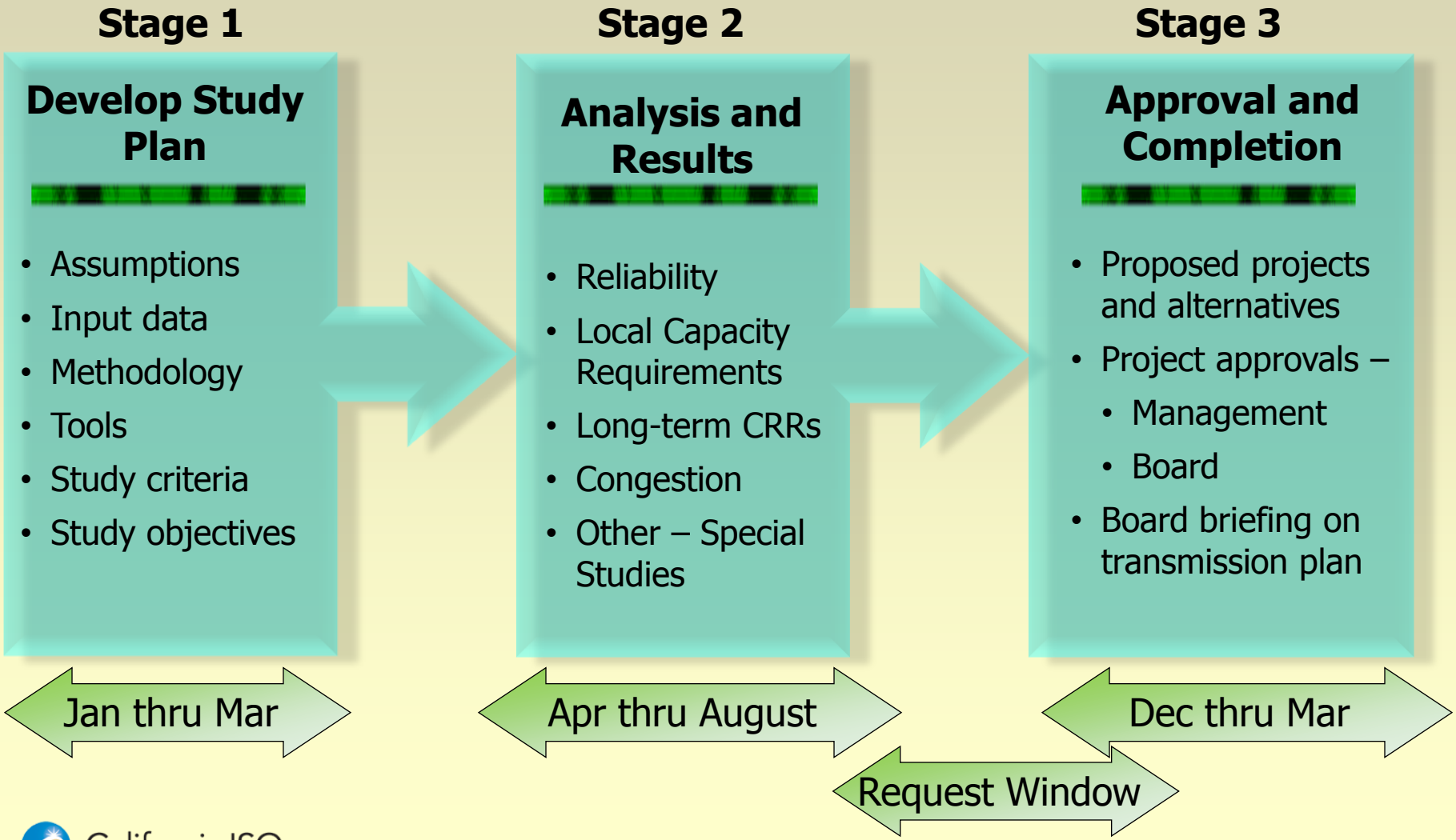
Producing an annual transmission plan is a critically important and fundamental ISO function

- Required under NERC Planning Standards and FERC Order 890
- Critical for ensuring the transmission system evolves to satisfy
  - Reliability
  - Economic efficiency
  - Open access, and
  - Environmental objectives

The ISO planning process is compliant with FERC Order 890 and NERC requirements

- Integrated open and transparent process for ensuring reliable, efficient, and non-discriminatory use of the transmission system.
- Tested system performance against NERC planning standard requirements
- Assessed Summer on-peak/off-peak scenarios across a ten-year planning horizon (2010 – 2019)
- ISO proposed transmission upgrades, operating procedures, and special protection systems to address identified criteria violations

The 2010 transmission plan is the product of a 15-month process consisting of three stages



Stakeholder engagement is a critical component of the ISO annual planning process

- Stakeholder input was received and considered during each stage of the study process.
  - Stage 1 – Development of the study plan
  - Stage 2 – Analysis and results
  - Stage 3 – Approval and completion of the plan
- ISO provided written responses to each comment received (see 2010 Transmission Plan – Appendix D)

2010 transmission plan addresses a number of planning issues and deferred others for further study

Issues addressed

- Reliability Assessment (2010-14, 2019)
- Short-term Operational Studies (2010-2013)
- Greater Bay Area Long-term Study
- San Francisco Reliability Analysis
- Long-Term Congestion Rights Study
- Local Capacity Requirements

Issues deferred for further study

- Proposed reliability projects for longer-term needs
- Economic Planning Studies
- Economic projects submitted in the 2008/2009 request window

A total of 29 transmission projects were approved in 2010 planning cycle for NERC reliability compliance

Approved by Executive Mgmt (<$50M)	**27**	**$273M**
ISO Board Approval (>$50M)	**2**	**$300M**

- SCE Alberhill Substation Project (Board-approved Dec. 09)
- SDG&E Bayfront Substation Project (Board-approved Feb. 10)

TOTAL	***29***	***$573M***

Service Territory	Number of Projects	Cost
Pacific Gas & Electric Co.	16	$135M
Southern California Edison Co.	2	$184M
San Diego Electric & Gas Co.	11	$254M
TOTAL	***29***	***$573M***

Reliably and efficiently integrating renewable resources will be the focal point of future ISO transmission plans

Effectively planning for renewable integration will:

- Require extensive outreach and coordination
  - Regional and sub-regional planning coordination
    - Western Electricity Coordination Council (WECC)
    - California Transmission Planning Group (CTPG)
  - Coordination on siting and routing issues
  - Coordination with state agencies
- Reforms to existing ISO transmission planning process
  - Renewable Energy Transmission Planning Process
    - Renewable integration as a new criterion for approving transmission
    - Improvements to streamline and better integrate various planning processes

CTPG studies will be a critical input to the ISO 2010 transmission planning cycle

- CTPG to complete a statewide conceptual transmission plan by July 2010
  - Multiple scenarios
  - No-regrets transmission elements
- CTPG results for the ISO footprint subject to further review and analysis by the ISO
- ISO plans to complete the 2011 transmission plan and present to the Board in December 2010
  - Comprehensive plan for achieving 33% RPS by 2020
  - Will include generation interconnection and reliability upgrades