

Western Power Markets

The New CAISO Transmission Planning Process

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Overview

- New CAISO Planning Process
- Streamlining the Planning Process
- Subregional Planning

A Perspective About California's Longer Term Energy Future *By the Year 2030*

- Population grows to over 50 million
- Electricity peak demand approaches 80 GW
- 50% of existing 60 GW power plant stock is retired
- Total capacity requirements at 92 GW assuming 15% reserve margin
- 25% of total capacity requirements, or 23 GW met by transmission imports
- 69 GW of in-state generation and 23 GW of imports will be needed to meet total capacity requirements
- *Increase California import capacity over current planned levels by at least 5000 MW to 7000 MW*

Hurdles the CAISO Faces “Today”

- CAISO operates around a reactionary planning process
 - PTO’s develop plans, CAISO approves projects
- Reliability Must Run and system congestion issues have been increasing
 - Are addressed after the fact
 - Most of the time, but not all of the time
- The issue of “Need” – Who makes the call?
 - CAISO/CPUC/CEQA
- State agency responsibilities
 - CPUC and Resource Adequacy
 - CEC Integrated Energy Policy Report and Load Forecast
 - Electricity Oversight Board
- Everybody seems to have their fingers in the “pie”

Barriers To Successful Transmission Planning

- Sensible
- Assumptions
- State & Federal regulation
- Public participation
- Including your transmission “neighbors”
- Short-term/long-term view
- Stakeholders
- Consensus

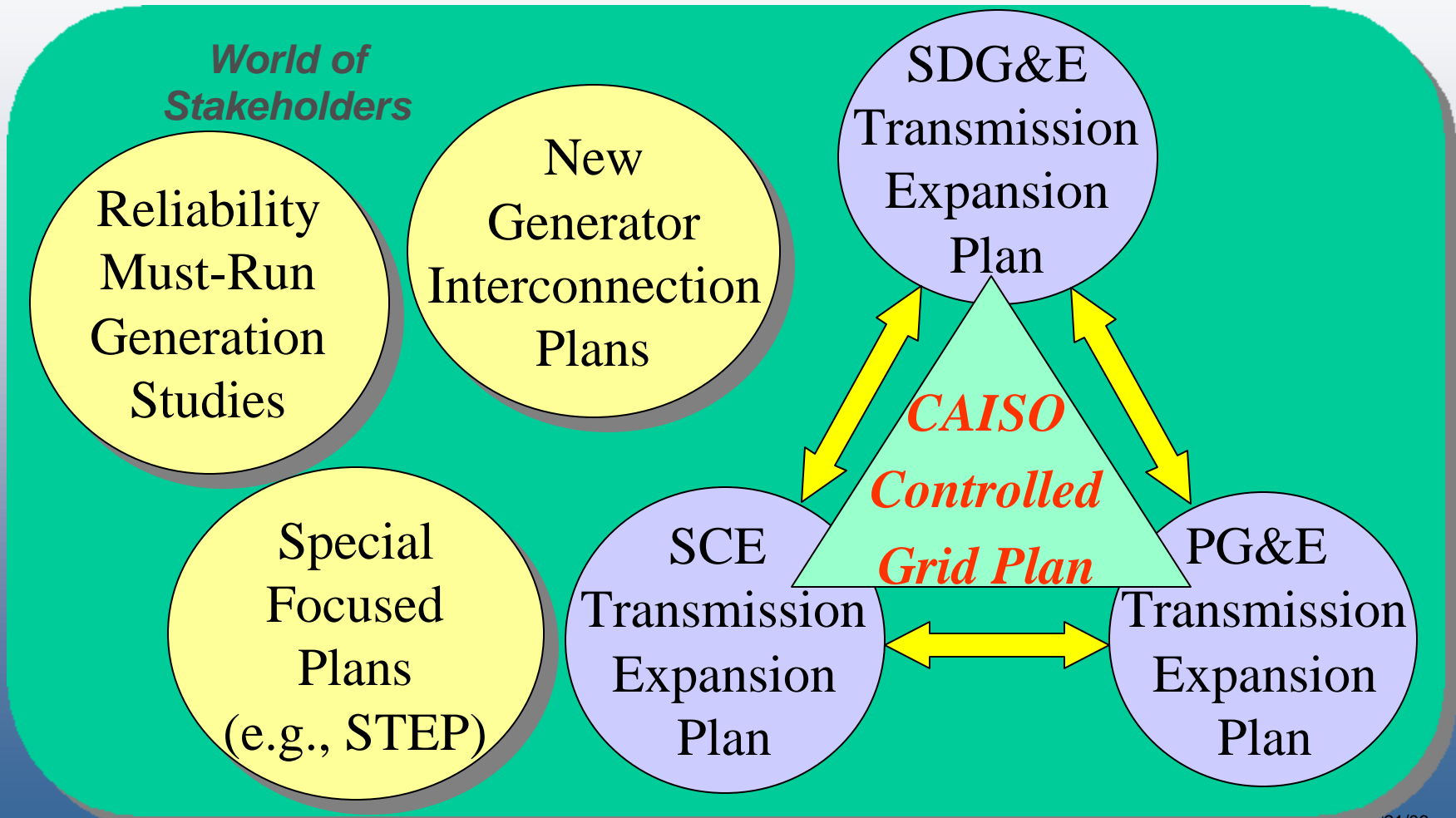
Breaking Through the Barriers

- Transmission Planning
 - Comprehensive
 - Strategic
 - Collaborative
 - Consistent and repeatable
- Work with the “Regulators”
 - They control the “game”
 - Can be an indispensable asset to success

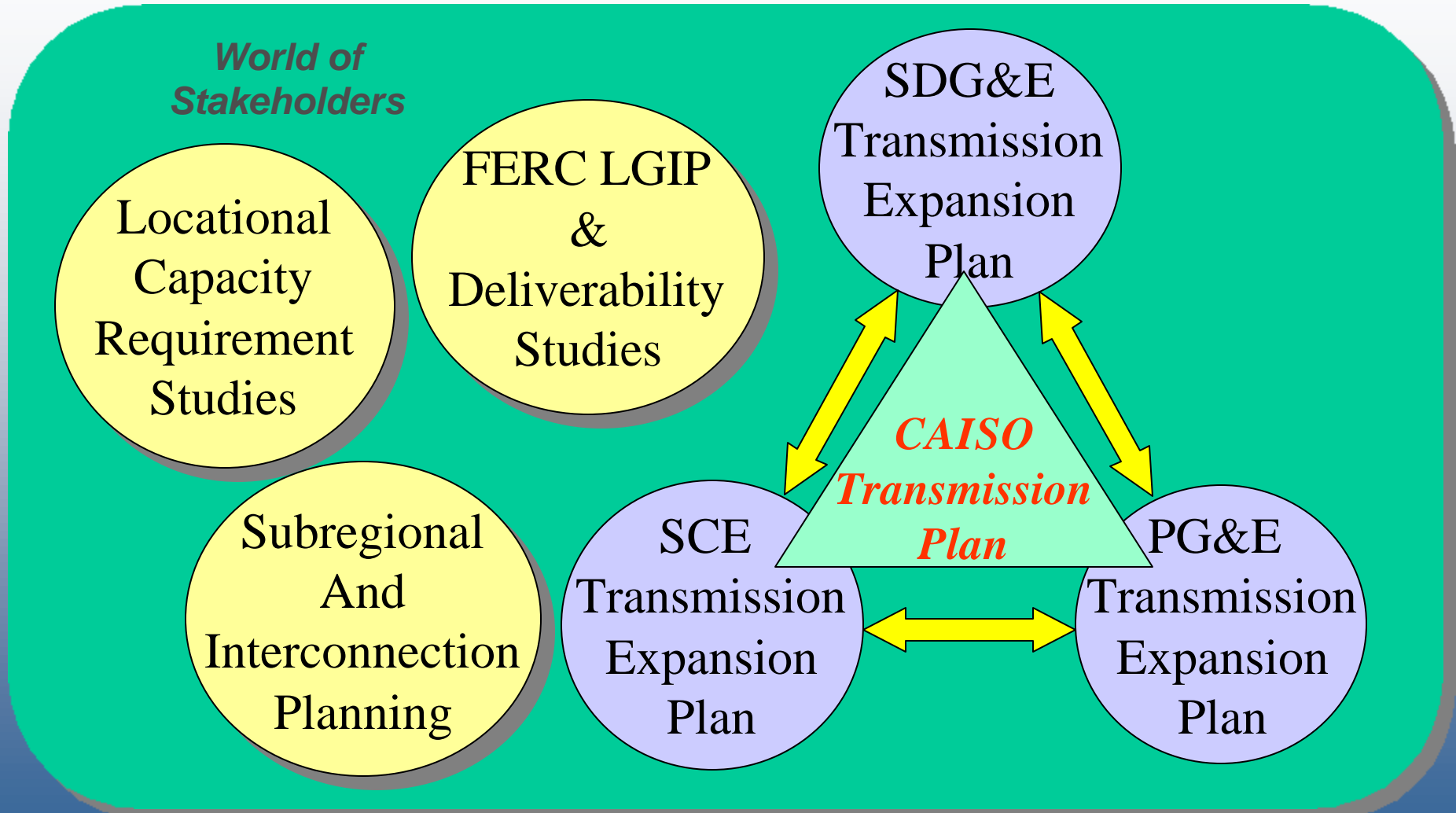
Breaking Through the Barriers

- Develop informed consent of the public
 - Ignorance leads to failure
 - Communicate through organized “open house” presentations and other similar forums
 - You don’t have to convince them you’re right, just not to oppose you
- Robust & organized subregional planning effort
 - Provides a forum for stakeholders to share ideas and needs
 - Broadens collaboration opportunities and facilitates consensus
 - Provides a strong base for regulators to act
 - Can reduce overall planning costs

Historical CAISO Role In Transmission Planning



Where the CAISO Is Headed

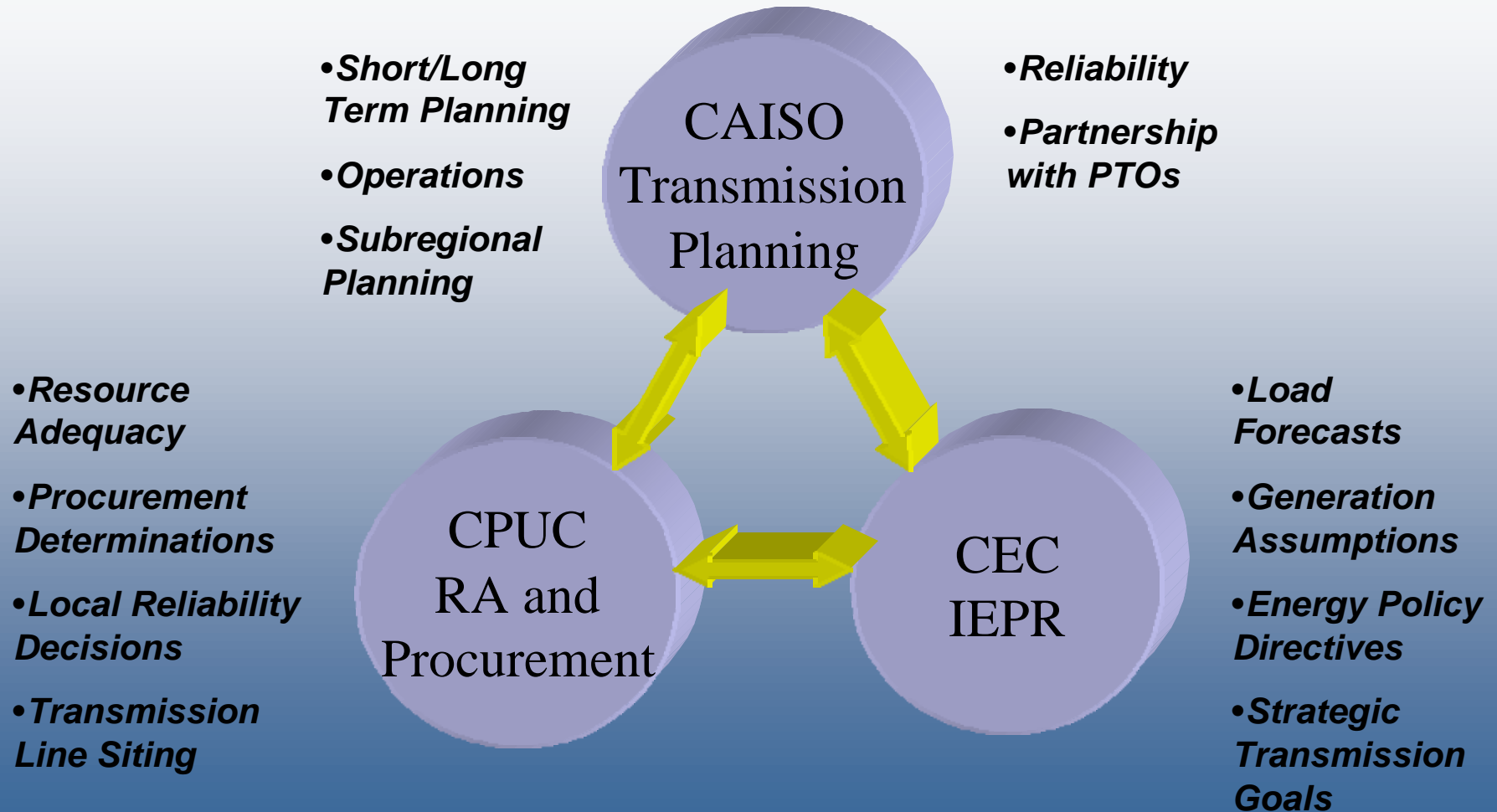


New Transmission Planning Process

- Clarify the CAISO's role and build on our core strengths of reliability, planning, and system operation
- Align our focus and core strengths with those of the CEC and CPUC towards a common objective of a coordinated planning process
- Strengthen partnership with the CAISO Participating Transmission Owners in planning
- Work towards consensus on a proactive role for the "non-CAISO" transmission owners in CAISO transmission plan
- Collaborate with stakeholders to build a statewide regional planning effort and develop a statewide strategic transmission plan

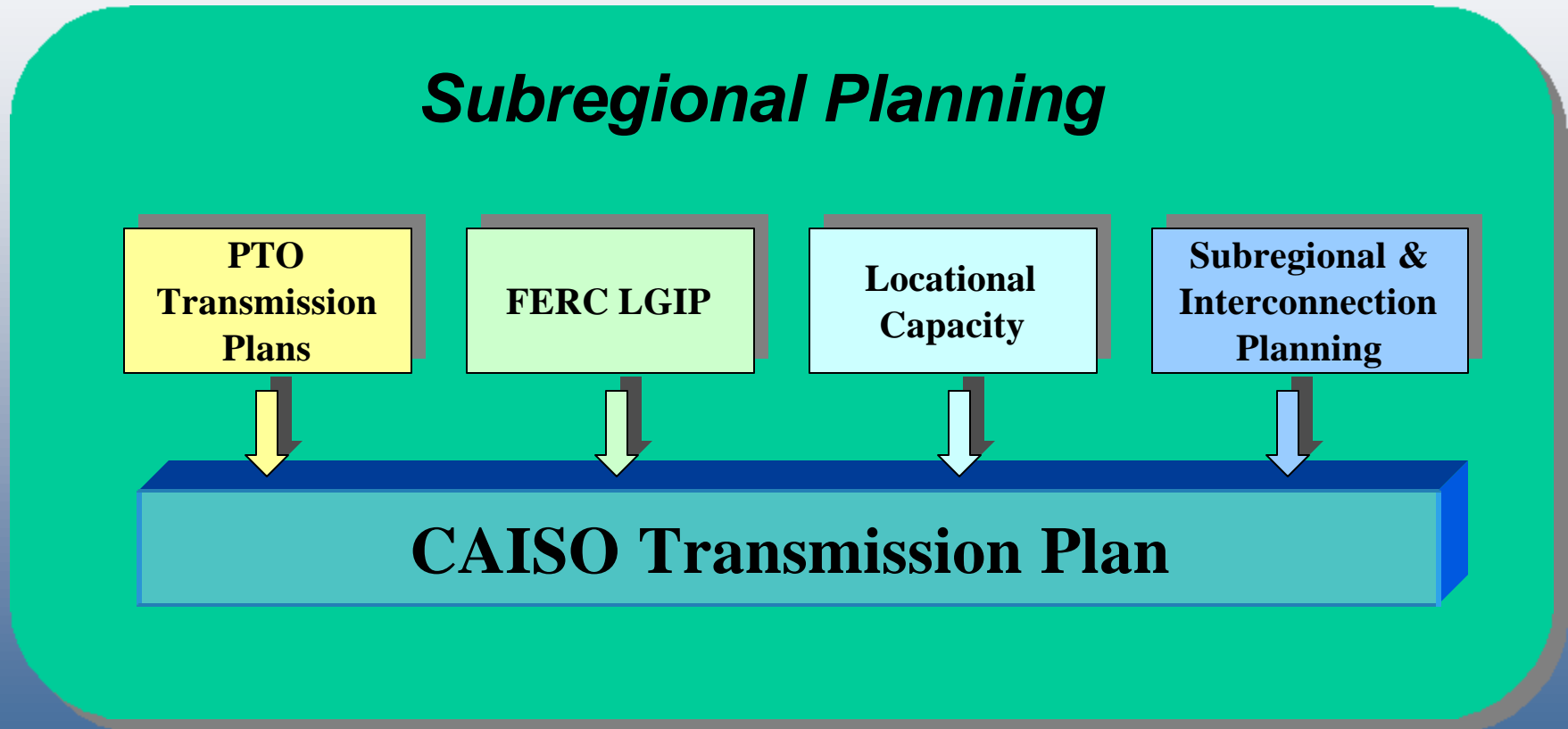
Streamlined Planning Process In California

Building On Core Strengths

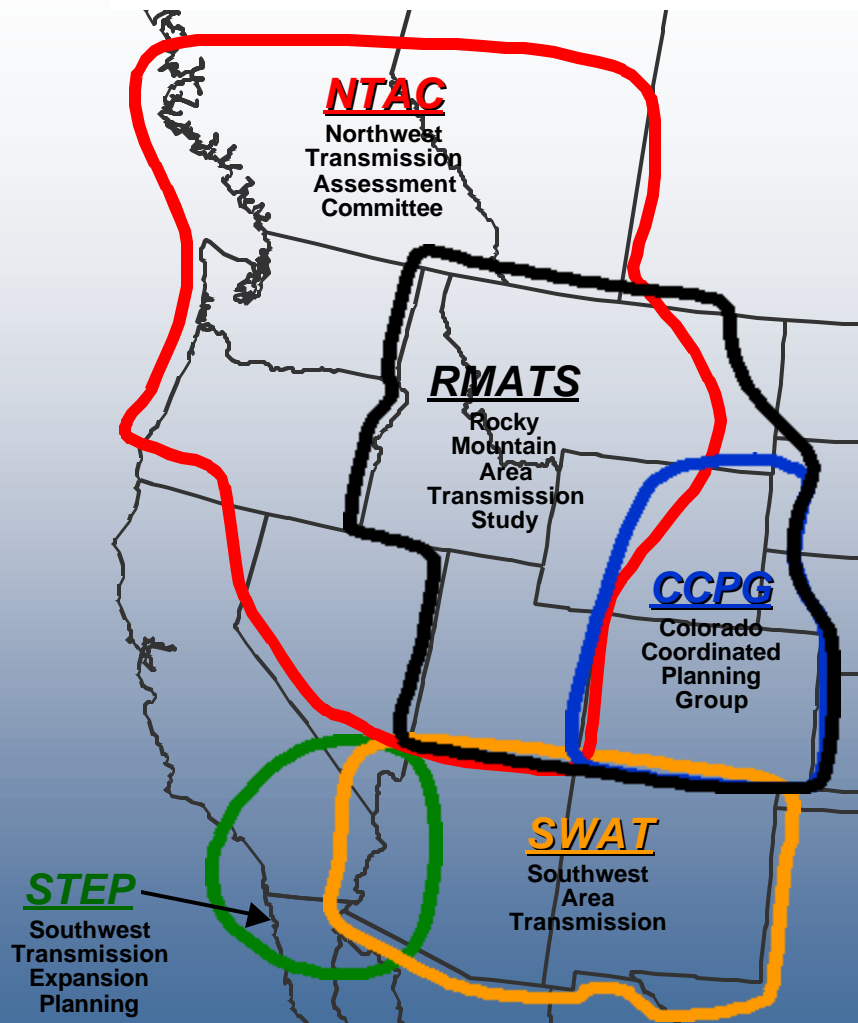


A Paradigm Change Is Desired

Support Subregional Planning



Western Interconnection Sub-Regional Planning Groups



RMATS – <http://psc.state.wy.us/htdocs/subregional/home.htm>

CAISO – <http://www.caiso.com/thegrid/planning/index.html>

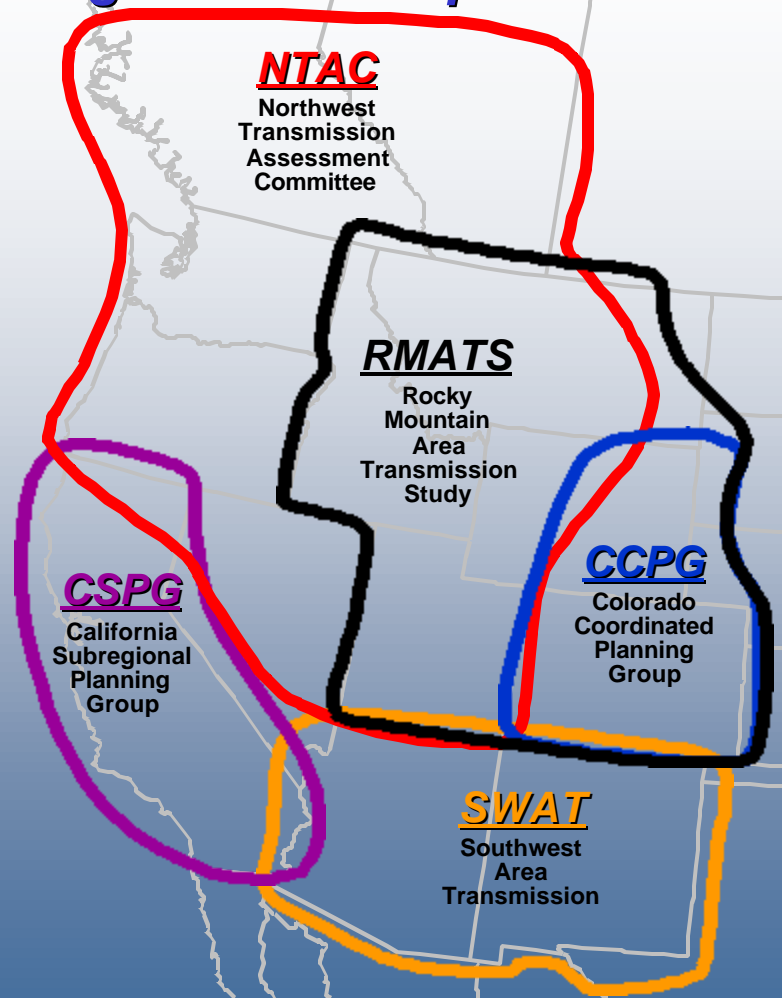
P&ID/A.Perez NTAC – <http://www.nwpp.org/ntac>

SWAT – <http://www.azpower.org/swat>

STEP – <http://www.caiso.com/docs/2002/11/04/2002110417450022131.htm>

13 CCPG – <http://ccpg.basinelectric.com>

Western Interconnection Sub-Regional Planning Groups *A Longer Term Perspective For California*





CAISO Planning and Infrastructure Development Division

- Regional Transmission – South/North
 - Operations Engineering and Trans. Planning
- Grid Assets
 - New Resources Interconnection
 - Load and Resources
 - Maintenance
- Network Applications
 - State Estimator
 - Advanced Applications



Questions?