



2012 LTPP Background & RPS Portfolios



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Outline

- LTPP overview
- Background on renewable scenarios in the LTPP
- Environmental scoring data and use





Overview

- The LTPP has two primary purposes
 - 1) The adoption and oversight of AB 57 bundled procurement plans for the IOUs (PG&E, SCE, and SDG&E)
 - 2) Authorizing the IOUs to procure new resources on behalf of the electrical system to maintain reliability





2012 LTPP Components

- Currently has three tracks
 - Track 1: Local Capacity Needs for LA Basin & Big Creek / Ventura [Concluded]
 - Driven by the state's policy on once through cooled power plants
 - Track 2: Planning assumptions, operating flexibility, generic need [Assumptions concluded; studies underway]
 - Establishes assumptions for use in resource planning
 - Will assess methodologies and needs for operating flexibility
 - Can authorize new resources to meet operating or generic needs
 - Track 3: Bundled IOU plans [Underway]
 - Assesses and adopts (typically with modifications) the IOUs procurement plans pursuant to AB 57
 - Looks at any new procurement rules that may be needed
 - SONGS Studies [Underway]





Track 1 – Local Areas

- Decision 13-02-015 authorized
 - 1400-1800 MW in the LA Basin
 - 215-290 MW in Big Creek / Ventura
 - Based on 2010 LTPP assumptions including the 2009 IEPR
- Decision 13-03-029 authorized
 - 343 MW in San Diego
 - 45 MW repower of Escondido and 298 MW of further resources
- Key issues
 - How much need for OTC power plant replacement is there in LA Basin, Big Creek / Ventura, and San Diego?
 - What types of resources can meet this need?
 - Loading Order resources may be able to meet some needs
 - When are the resources needed?





Track 2 - System

- Establishes overall system needs and modeling for operating flexibility (also known as renewable integration)
- D.12-12-010 established Assumptions and Scenarios
- Scenarios and assumptions are used in modeling underway in 2013
 - Decision authorizing new resources expected late 2013 (to extent any resources are needed)

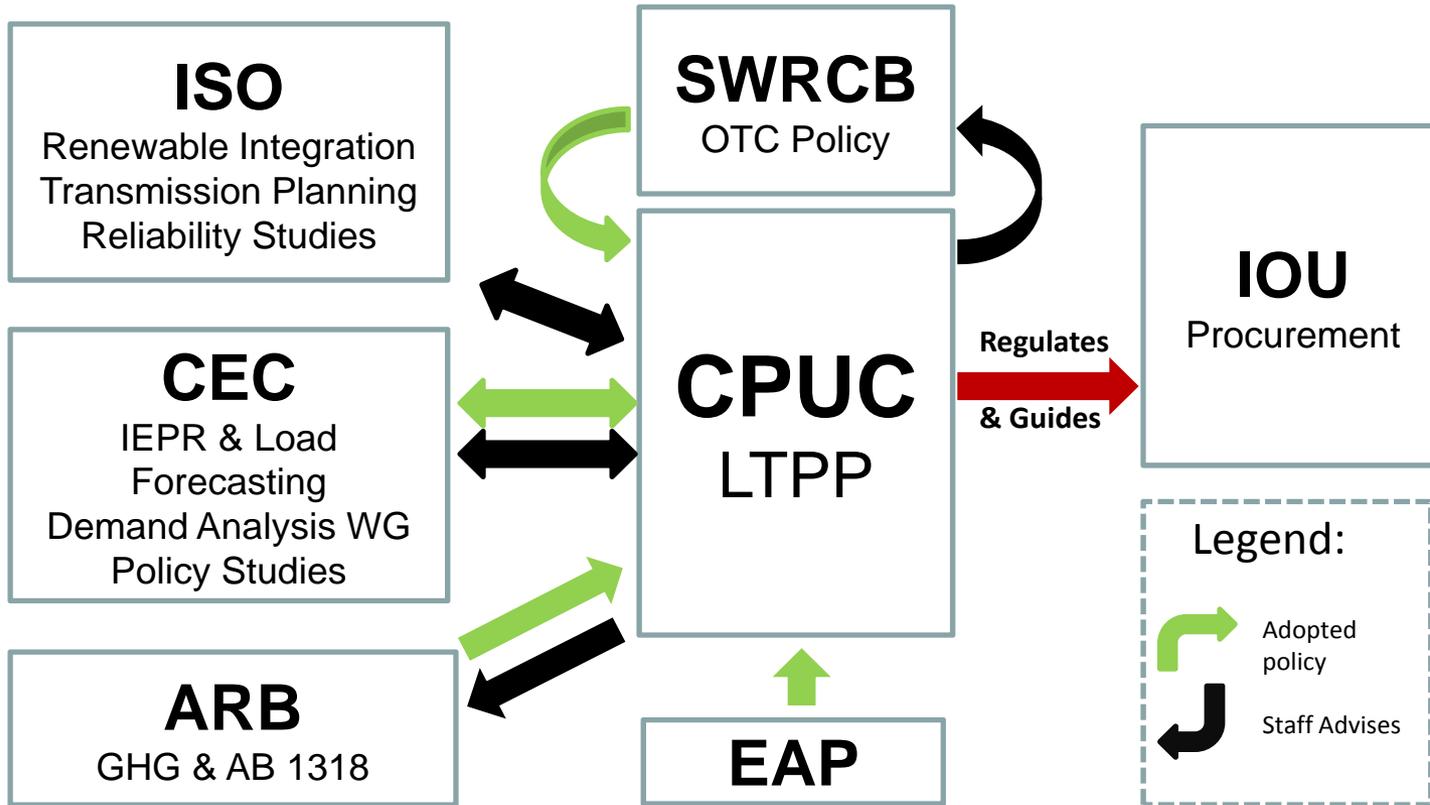




Track 3 – Bundled

- Establishes rules for IOU bundled procurement and authorizes IOU bundled procurement plans
- Issues
 - Changes to IOU forward procurement limits and hedging
 - Procurement transparency
 - Long-term contract solicitations
 - Cost allocation mechanisms





Air Resource Board (ARB), California Energy Commission (CEC), Energy Action Plan (EAP), Investor Owned Utility (IOU), CA Independent System Operator (ISO), Long Term Procurement Proceeding (LTPP), Once-through-Cooling (OTC), and State Water Resources Control Board (SWTCB).





Timing





Timing

Infrastructure planning is approximately a 3 year cycle:

- A. CEC adopts IEPR forecast (Year 1)
- B. CPUC adopts scenarios and assumptions (Year 2)
- C. CAISO conducts long term transmission studies (Year 2 & Year 3)
- D. CPUC authorizes new resources (Year 3)
 - The length of the process can lead to concerns over data staleness or delays in proceedings if necessary information is delayed

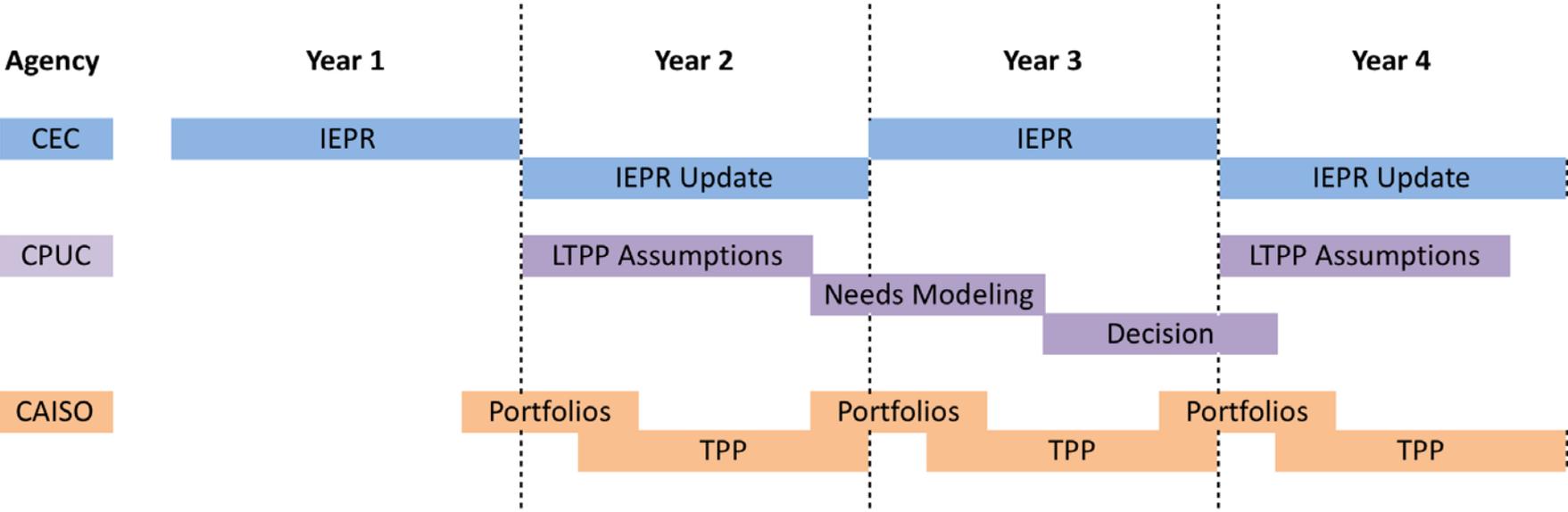
Example:

The 2012 LTPP (current proceeding) uses the 2011 IEPR / 2012 IEPR update as the base forecast. Assumptions and scenarios for the LTPP were adopted in December 2012, and a need authorization decision is expected in late 2013





Conceptual Calendar





Renewable Resources





Renewable Scenarios

- Three renewable portfolio methods in the LTPP
 - Commercial interest, reflecting preference to projects with Power Purchase Agreements and completed permit applications
 - High DG, using the commercial interest preference but representing a shift to transmission-level distributed generation projects (less than 20 MW in size) close to load
 - Environmental, representing a preference for projects in environmentally preferred locations





Renewable Scenarios (cont)

- Commercial interest portfolios are used in most LTPP scenarios. The difference in commercial portfolio project composition is expansion or contraction of retail sales based on different demand-side assumptions
- In the LTPP, final study results are relatively indifferent to RPS portfolio compositions due to the small renewable net short





LTPP Scenario Composition

Scenario			Supply
#	Name	Modeling Priority	RPS Portfolio
1	Base	1	Commercial
2	Replicating the TPP	2	Commercial
1A	Early SONGS Retirement	3	Commercial
3	High DG + High DSM	4	High DG
1C	Stress Case	5 (if time allows)	Commercial
3A	High DG + High DSM, 40% RPS by 2030	6 (if time allows)	High DG
1B	Early Nuclear Retirement	7 (not at this time)	Commercial
1D	Environmental	8 (not at this time)	Environmental





How are portfolios used?

- Portfolios will be studied in the CAISO 13/14 TPP and CPUC 2012 LTPP
 - Based on the 2011 IEPR and 2012 IEPR update
- Inform authorization decisions
 - Need for additional resources to meet reliability needs
 - Transmission
- These authorization decisions will constrain other future alternatives





Use of Energy Commission Environmental Scoring Data





Use of Environmental Data

- Commercial interest and the high DG variant portfolios are calculated by selecting projects in based on commercial interest score [70% weight], with lesser emphasis [10% weight] on the environmental score
- The Environmental portfolio uses preferred locations score [70% weight], defined as
 - Low environmental score (25 or less) in 33% RPS calculator
 - Site in a region generally near low-scoring sites and not near high scoring sites
 - Site evaluated by CEC staff in this proceeding as having a low environmental score
 - Generation project already possessing an environmental permit





Procurement

- Other environmental data is used much later in CPUC procurement processes but not the LTPP
- Projects must have appropriate permits, either from the Energy Commission or local government, before they can ultimately receive their final status and begin construction

