



Reducing Electric Sector GHG Emissions: The Role of the CPUC Procurement Process

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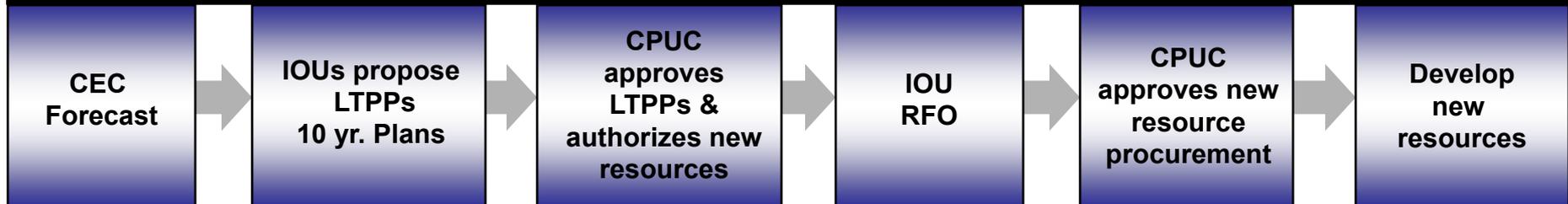


California Public Utilities Commission Procurement Process

Short Term Resource Adequacy (Annual)



Long Term Procurement Plan (Bi-Annual)**



* California ISO conducts LCR studies on a 1, 3 and 5 future year basis. ** CEC siting/permitting process is ongoing.

Acronyms:

CEC = California Energy Commission

ISO = California Independent System Operator

LCR = Local Capacity Requirement

CPUC = California Public Utility Commission

LSE = Load Serving Entity

LTTP = Long Term Procurement Proceeding

IOU = Investor Owned Utility

RFO = Request For Offer



GHG in the Procurement Process

- Need Determination
 - Top-down approach: uses the CEC load forecast and EAP Loading Order to determine residual need for fossil-fired resources
 - Offers maximum flexibility to IOUs to manage/plan for their systems

- RFO Process
 - GHG Adder factored into bid evaluation
 - CPUC provides guidance on types of resources sought. The 2007 LTPP decision states preference for:
 - Repowers and/or other resources that replace aging and once-through-cooling plants
 - Flexible resources with shaping and ramping capabilities
 - IOU RFOs utilize selection criteria that give weight to desired characteristics

- CPUC Approval Process
 - Focused on adequate fit of project within the Loading Order
 - Requires compliance with Emissions Performance Standard
 - IOU must show how the RFO design and the proposed project(s) meet its GHG reduction objectives and renewable targets



Balancing Market-Based Procurement and GHG Reduction Policies

- The CPUC supports a market-based approach to procurement.
- Since the energy crisis, the CPUC has developed, and continues to improve upon, a “hybrid market” in which both independent power producers (IPPs) and IOUs can own generation resources.
- The LTPP, RA, and MRTU processes are designed to allow IPPs, IOUs, and other load-serving entities to participate in the market on a more even footing.
- CPUC avoids overly-specific requirements (geographic or other attributes, such as the possession of a CEC permit) that could allow parties to exploit market power.



2008 LTPP Staff Proposal

- Standardizes LTPP planning process
- Employs robust scenario analysis
 - All scenarios must comply with current law: e.g., AB 32 and EPS
 - Higher levels of renewables (e.g., 33% by 2020) and energy efficiency compared to fossil alternatives
- Evaluates candidate portfolios according to defined criteria: total GHG emissions (quantitative), long-term GHG reductions (qualitative)
- Commission to select preferred portfolio based upon an informed judgment of trade-offs
- Procurement authority reflects system and/or local needs
 - Assumes retirements from once-through cooling and other drivers
 - Local reliability issues can determine need
 - ISO LCR study is an input constraint



Resource Adequacy Program and GHGs

- IOUs must comply with CPUC Resource Adequacy requirements, including Local Area Requirements.
- Meeting those objectives will require gas-fired plants for local reliability, firming and shaping of renewables, etc.
- Local Area Requirements may change
 - Transmission upgrades
 - CAISO definition changes
 - Retirements of plants using OTC under rules being promulgated by the State Water Resources Control Board



MRW Consultant Report

- Grid faces many challenges
 - Integration of renewables, once-through cooling, etc.
- Gas-fired power plants will play an integral role in meeting AB 32 goals.
 - Renewable generation support, local area reliability, general grid support, etc.
- MRTU market signals will determine best locations for new generation, as will local resource adequacy requirements.
- CPUC staff strongly support a “net GHG reductions” approach to plant permitting.