



# **Combined Heat and Power Long-Term Planning**

## **Lead Commissioner Workshop on Combined Heat and Power in California**

**2012 Integrated Energy Policy Report  
Proceeding**

**February 16, 2012**

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# Targets for New CHP

- 6,500 MW by 2030 (Clean Energy Jobs Plan)
- 4,000 MW/6.7 MMT CO<sub>2</sub> by 2020 (ARB/AB32 Scoping Plan)



# Planning Assumptions

2020 LTPP assumed 50 percent of ARB target, applied to ISO control area, 50/50 split between on-site use and export. By 2020,

- **810 MW in NP26**
  - **667 MW in SP26**
  - **86 MW in San Diego**
- 1,563 MW**

2011 IEPR filings, integrated resource plans do not indicate that POUs are planning on (incremental) CHP to meet future energy or capacity needs



# Eight Years Isn't a Long Time

While current reserve margins are high

- 12,000 MW of OTC capacity is likely to be retired by 2020; this capacity provides a significant share of the flexibility expected to be needed to integrate 33 percent renewables
- Targets established for other preferred resources (energy efficiency, demand response programs) are ambitious
- Potential (local) capacity shortfalls are most likely in load centers in which CHP potential is substantial (e.g. Los Angeles basin)



# Existing Programs

- AB 1613
  - Small projects ( $\leq 20$  MW)
- Self-Generation Incentive Program (SGIP)
  - Small projects
  - Dominated by renewables, fuel cells
  - Ends at the end of 2015



# QF Settlement and Targets

- 3,000 MW of new CHP contracts but resigning existing CHP counts towards this target
- 4.3 MMT of CO<sub>2</sub> reductions, but
  - least-cost, best-fit may justify failing to reach target
  - Incremental contributions of CHP to meeting target (mt/MW) may be small



# Questions

- How much new CHP is likely to be procured as a result of the Settlement?
- What types of CHP resources are likely to be most competitive in RFOs? To meet least-cost, best fit criteria to be used by the IOUs?
- What value or range of values might be appropriate for long-term (through 2022) planning assumptions for new CHP (onsite use and export on peak)?