

# CHP in California

## Supporting California's Energy & Environmental Goals

*July 14, 2014*

California Energy Commission

**DOCKETED**

**14-CHP-1**

TN 73347

JUL 10 2014

# CHP Systems & Applications

- Generate electricity & useful thermal energy in an integrated system
- Use variety of fuels and technologies
- Topping & bottoming cycle configurations
- Used for host of commercial, institutional & industrial applications
- Wide system size range (<500 kW to >100 MW)

# CHP Benefits

- Efficient fuel usage reduces energy costs and GHG emissions
- Reduce need for new or expanded central station power plants and transmission systems
- Improve electricity system efficiency, reliability & security
- Provide protection against outages & brownouts
- Reduce transmission and distribution congestion

# California's CHP Goals

- Governor Brown set a goal for 6,500 MW of additional CHP capacity by 2030 as part of his Clean Energy Jobs Plan
- The Updated Scoping Plan continues the goal for emission reductions equivalent to 4,000 MW of new CHP generation by 2020, and builds to 6,500 MW by 2030
- Estimated annual reduction in GHG emissions of 6.7 MMTCO<sub>2</sub>e by 2020

# CHP Status in California

- CHP capacity has remained stagnant or declined since adoption of the initial Scoping Plan
- The State's adopted GHG emission reduction goals from CHP development are not being met
- Barriers to CHP have not been fully addressed
- Potential for CHP in California is significant

# Viewpoint

- California needs to support and utilize the most fuel efficient form of electricity and thermal energy production
- California needs comprehensive and cohesive CHP implementation strategy
- Power plants should be sited near thermal loads and utilize CHP
- Permitting should be streamlined; and interconnection barriers and excessive costs for CHP should be removed



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