



## The California Energy Commission Urges Policy Changes to Preserve and Expand Cogeneration Use in California

After exhaustive study, the California Energy Commission recently released a blueprint outlining policy changes that must occur for cogeneration to continue to meet California's energy demands.

### Excerpted quotes from the 2005 Integrated Energy Policy Report:

*"As the state's demand for electricity increases, California could face severe shortages in the next few years."*

*"Cogeneration, or combined heat and power (CHP), is the most efficient and cost-effective form of DG [distributed generation], providing numerous benefits to California including reduced energy costs; more efficient fuel use; fewer environmental impacts; improved reliability and power quality; locations near load centers; and support of utility transmission and distribution systems."*

*"By recycling waste heat, these systems are much more efficient than systems that separately serve thermal and electric loads. They are also considerably more efficient than almost all conventional gas-fired power plants."*

*"California has more than 9,000 MW of combined heat and power systems throughout the state, representing approximately 17 percent of statewide generation. Most of these systems are larger than 5 MW, suggesting that the state should focus its efforts on large-scale projects that could provide more than 5,000 MW of additional generating capacity over the next 15 years. Current state policy must change for California to tap into this potential generation source and retain the existing pool of combined heat and power facilities so critical to reliable operation of the state grid."*

*"Despite policy preferences, DG and CHP in California still struggle with major barriers to market entry in the context of traditional utility cost-of-service grid management. In fact, many of the state's operating larger-scale CHP systems still run under the terms of generation contracts signed during the early 1980s following the national energy crisis of the late 1970s. These projects could shut down in the near future as their contracts expire. It is estimated as much as 2,000 MW could shut down between now and 2010 because project owners have been unable to renew their utility contracts."*

*"For existing facilities, the unwillingness of utilities to renew existing qualifying facility contracts has led some operators to remove their combined heat and power systems entirely and rely instead on less efficient boilers to meet their heating needs. There will be serious adverse consequences for electric reliability, natural gas demand, and air quality if this trend is allowed to continue."*

*"California should particularly encourage CHP at the state's petroleum refineries to make them less vulnerable to power outages. An electricity outage on September 12, 2005, in Southern California caused the shutdown of three refineries in Wilmington. These shutdowns resulted in pressure buildups that forced refinery operators to flare excess gases, affecting air quality in the area. The shutdown also impacted gasoline production and supply, causing shortages and price spikes. Increased CHP use at refineries is an important strategy that can help insulate refineries from these kinds of electric grid problems and maintain gasoline production and refinery safety."*

1-12-06

## California Energy Commission Recommendations:

- “The CPUC and the Energy Commission should establish annual utility procurement targets for CHP facilities by the end of 2006
- The CPUC should require investor-owned utilities to purchase electricity from CHP facilities at prevailing wholesale prices.
- The CPUC should explore regulatory incentives that reward utilities for promoting customer and utility-owned combined heat and power projects.
- The CPUC should require that investor-owned utilities provide CA ISO scheduling services for these facilities and be compensated for doing so.”
- “California should encourage the use of CHP at California refineries to make them less vulnerable to power outages.
- The state should require utilities to design and build distribution systems that are more DG and CHP compatible.
- The CPUC should require utilities to develop and implement planning models to determine where DG and CHP would be most beneficial, from transmission and distribution perspectives.
- California should explore establishing production credits for CO<sub>2</sub> reductions from CHP.
- By the end of 2006, the CPUC should direct utilities to make transmission and distribution capacity payments to CHP projects.”