Combined Heat & Power Measure

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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)
Potential CHP Benefits

- Fuel used efficiently 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
Scoping Plan measure sets a target of an additional 4,000 MW of CHP capacity by 2020

Estimated reduction in GHG emissions of 6.7 MMT in 2020

Goal based on assumptions from a CHP market penetration study
Electricity Sector Reduction Measures

- Renewable Portfolio Standard: 46%
- Energy Efficiency: 34%
- CHP Systems: 15%
- Million Solar Roofs: 5%

Total Electricity Sector Reduction: ~ 45.3 MMTCO₂E
Coordination with other Entities

- California Public Utilities Commission
- California Energy Commission
- California Independent System Operator
- Western Climate Initiative Partners
- ARB working group participants (utilities, industry reps, environmentalists, academia, manufacturers, et al)
Recommended CHP Actions

- CPUC/CEC to implement 2007 IEPR recommendations:
  - Remove market and regulatory barriers to export power
  - Provide incentives/requirements to encourage CHP development (e.g. feed-in-tariffs, utility portfolio standard)
- ARB to provide necessary support to CPUC/CEC to achieve GHG reductions
Other Issues to Consider

- Participation & role of publicly owned utilities
- Preserve existing CHP capacity
- Additional standards and incentives for GHG reductions
ARB Contact Information

Dave Mehl, Manager
Energy Section
Stationary Source Division
(916) 323-1491
dmehl@arb.ca.gov

Gary Collord
(916) 324-5548
gcollord@arb.ca.gov