
Comments on SWRCB OTC Scoping Document

May 13, 2008



Key Points

PG&E is committed to moving away from OTC—Hunters Point closed, Humboldt being repowered without OTC, Gateway and Colusa using dry cooling

At Diablo Canyon, retrofit is not feasible

- No saltwater-cooled closed-cycle nuclear plant in the world
- Nuclear facilities do not repower--no cost savings to be realized
- Exponentially more costly to retrofit at Diablo (\$2.4 billion plus)

Track 2 provides no alternative for nuclear plants

PG&E welcomes the addition of the Task Force—encourage its use prior to adoption to resolve grid stability/resource adequacy, emissions and permitting issues

In the alternative, policy should allow alternative compliance if any of these issues present compliance problems—nuclear plants cannot be closed down and meet AB 32 goals

Diablo Canyon

- Mechanical draft towers have been evaluated and are considered infeasible –
 - Conceptual design – 130 cells 60x60x60
 - No precedent for a retrofit of this magnitude, no saltwater towers at a nuclear plant, massive modifications to existing facility
 - Downtime estimated at 18 months
 - Significant adverse environmental impacts
 - 7 million pounds of salt deposits per year will cause environmental and agricultural impacts, corrosion and arcing
 - Remaining discharge – markedly warmer and saltier, requiring cooling ponds, canals, or offshore discharge
 - Permitting challenge
 - Costs – minimum of \$2.4 billion, likely significantly greater
 - Tetra Tech feasibility study left many unanswered questions, included no cost estimate for decommissioning

Diablo Canyon – Conceptual Diagram



Risks to Grid Stability and GHG Goals

- Without a more flexible compliance option, Diablo Canyon would have to shut down as retrofit is both technically and financially infeasible
- Approach threatens state's ability to meet AB 32 goals by increasing GHG emissions, particularly if nuclear plants are affected
 - ~7-10 million metric tonnes per year of additional GHG emissions if Diablo is down or closes permanently
 - ~15 MT for the estimated 18-month downtime—nearly half of the annual electric sector reduction required by AB 32

Balanced Approach

- Alternative compliance mechanism must be available if installation of technology:
 - is not technologically feasible
 - would result in wholly disproportionate compliance costs
 - would result in significant adverse impacts on air quality, natural resources, or would impact the state's ability to meet its AB 32 goals
 - would result in significant impacts on or cause potential disruption to regional or statewide electric grid stability
 - Is not permitted by Coastal Commission, local air district, etc.