

Rulemaking: 10-05-006
(U 39 E)
Exhibit No.: 110
Date: August 17, 2011
Witnesses: Pacific Environment

PACIFIC GAS AND ELECTRIC COMPANY

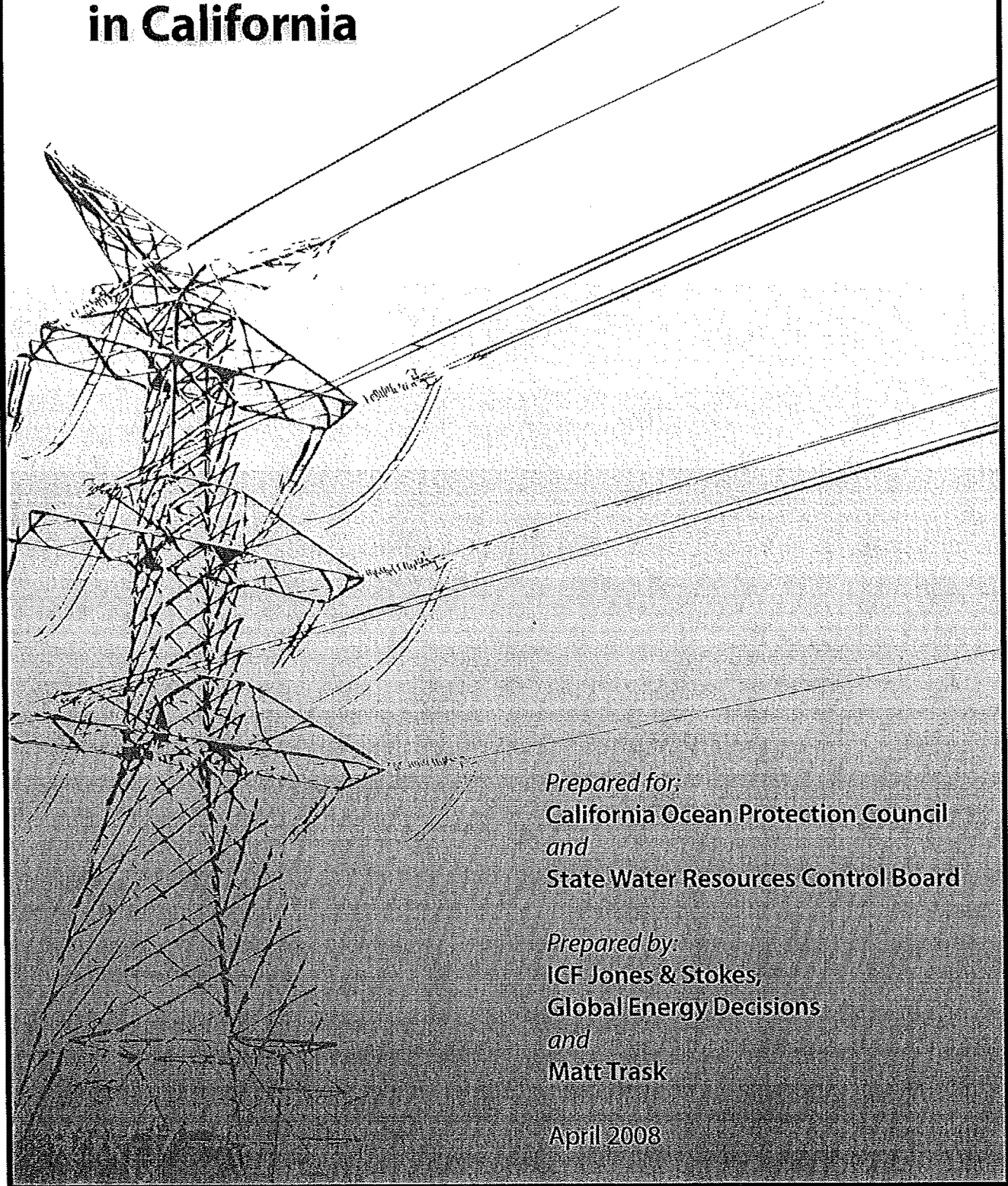
PROCUREMENT RULES

**ORDER INSTITUTING RULEMAKING TO INTEGRATE AND REFINE
PROCUREMENT POLICIES AND CONSIDER LONG-TERM
PROCUREMENT PLANS**

CROSS-EXAMINATION EXHIBIT



Electric Grid Reliability Impacts from Regulation of Once-Through Cooling in California



Prepared for:
**California Ocean Protection Council
and
State Water Resources Control Board**

Prepared by:
**ICF Jones & Stokes,
Global Energy Decisions
and
Matt Trask**

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would have no impacts, even during construction. Therefore, with proper planning and oversight, the Board's policy is not likely to result in significant cumulative impacts to public safety and the environment, though one area of concern is cumulative land use impacts because of zoning issues.

The most realistic scenarios examined, in which some OTC plants would be retired while others repower or convert their cooling systems, showed potential for significant benefits to the environment because the overall power sector would be more efficient and produce fewer emissions, and because marine ecosystem impacts caused by use of OTC technology would be greatly reduced.

Recommendations

Though this study makes optimistic conclusions about the industry's ability to compensate for mass OTC plant retirements at relatively modest costs, it is extremely important to understand that the modeling effort conducted for this study was limited in scope, capable of only taking a snapshot of the big picture, due to time constraints. Ideally, the modeling effort would have been expanded to thousands of runs examining each OTC plant in great detail, instead of the limited number of runs that were possible for this study.

Because of this limitation, the key recommendation arising from this study is that the industry must continue comprehensive study of the issue, examining the reliability implications of retirement of each plant individually and in combinations with all other plants, and constantly reassess the reliability implications of the Board's new policy as it is planned and enacted. Fortunately, such a study is now underway at the California Independent System Operator, with full participation by the state's water agencies, the energy industry, non-governmental organizations, and individuals. Cooperation amongst the agencies involved in shaping policy affecting the future reliability of the grid, including the Water Board and the energy agencies, is essential in assuring the Board's policy results in no impact to electric system reliability, nor to the environment.