



CWA Section 316(b) Workshop State Water Resources Control Board

December 7, 2005
Oakland, California



Existing Coastal Power Plants



21 plants, estimated that over 16 billion gallons per day are sent through the cooling water systems of once through cooled coastal power plants



Once Through Cooling Water Intakes – NPDES Permitting

- ★ Regional Water Boards issue and renew permits
- ★ EPA's 316(b) rules are to be implemented in these permits
- ★ Up until now each Regional Board has been independently addressing intake impacts in their NPDES renewal processes.

Phase I: New Facilities

- Regulations established for cooling water intake structures at new facilities under section 316 (b) of the Clean Water Act.
- Essentially prohibits the use of once-through-cooling





September 26th Workshop – Question

- *How do rules relate to “New” vs. “Retrofit” facilities?*
 - *“New” facility (Phase I), after January 2002, having a newly constructed intake structure, or design capacity increased for additional cooling water flow.*
 - *A complete “retrofit” could be considered an existing Phase II facility as long as the old intake structure is used and design capacity is not increased.*
 - *A retrofit could also be considered a major modification for discharge permitting.*



Phase II: Existing Facilities

- Data Collection Requirements – PICs, CDS, NPDES application – deadline January 7, 2008
- Performance Standards for the Reduction of Impingement (80 to 95 %) and Entrainment (60 to 90 %)
- Allows Mitigation/Restoration Projects
 - **Litigation/ court decision may change this**
- Allows Site Specific Determination by the Regional Board



September 26th Workshop – Question

- *What does State of New York 316(b) Implementation Policy require?*
 - *State Regulation*
 - *Intake Structures must meet Best Technology Available (BTA)*
 - *Targets reductions in I/E are high ends of the ranges (95 and 90 %)*
 - *State has deemed that Restoration and Site Specific Determinations do not meet BTA*
 - *Baseline - maximum permitted flows allowed*



Interagency Staff Meeting

- State Water Board staff met with staff from:
 - Coastal Commission
 - Coastal Conservancy
 - Resources Agency
 - Department of Fish and Game
 - California Energy Commission
- Major Topics – PIC/CDS, Restoration, Ecological Cost Determination, Cooling Water Flow w/no Power Generation, Cumulative Impacts

Staff Proposed Recommendations: Statewide 316(b) Policy

- ✦ Include policy in the Thermal Plan
- ✦ Standardized data collection methods
- ✦ Baseline Calculation – Actual vs. Permitted Maximum
- ✦ Upper end of Performance Standards (95 and 90%) should be targets
- ✦ Discourage cooling water use when no power is generated.
- ✦ Mitigation/restoration
 - Standardize – e.g., “habitat production foregone”
 - In-kind mitigation preferred
 - Mitigate for net impact (difference from target reductions)
- ✦ Cumulative Impacts when more than one plant in close proximity
- ✦ Additional Surcharge for Regional Board PIC/CDS Review



September 26th Workshop – Question

- *What are alternatives to Once Through Cooling? What are the economics of conversion to those alternatives?*
- *John Maulbestsch, consultant,
California Energy Commission*