

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE

Southwest Region 501 West Ocean Boulevard, Suite 4200 Long Beach, California 90802- 4213

Item 5 9/21/06 BdMtg Core Regulatory Fee Sched Deadline: 9/15/06 5pm

Song Her Clerk to the Board State Water Resources Control Board 1001 I Street Sacramento, California 95814



SUBJECT: Comment Letter - Proposed Statewide Policy for Once-Through Cooling

Dear Ms. Her:

NOAA's National Marine Fisheries Service (NMFS) appreciates the opportunity to comment on the proposed Statewide Policy on Clean Water Act Section 316(b) Regulations (Policy). As you know, NMFS has been following this topic for several years and we are pleased to see the State Water Resources Control Board (SWRCB) develop guidance through this Policy. NMFS provides the following comments on the scoping document and the Policy itself (Appendix I in the June 13, 2006 draft document).

Consideration of Essential Fish Habitat

The scoping document identifies threatened, endangered, and protected species in the source water body as issues for special consideration in the Policy. In addition to species managed pursuant to the Endangered Species Act and Marine Mammal Protection Act, NMFS believes that the SWRCB should provide special consideration for Essential Fish Habitat (EFH) for various federally managed species within the Coastal Pelagics, Pacific Groundfish, and Pacific Salmon Fishery Management Plans pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (MSA). The MSA mandates that where NMFS receives information from a Fishery Management Council or federal or state agency or determines from other sources that an action authorized, funded, or undertaken, or proposed to be, by any federal or state agency would adversely affect any EFH, NMFS has an obligation to recommend to such agency measures that can be taken by such agency to conserve EFH. 16 U.S.C. §1855(4)(A). The term "adverse effect" is interpreted at 50 C.F.R. §600.810(a) as any impact that reduces quality and/or quantity of EFH and may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components, if such modifications reduce quantity and/or quality of EFH. In addition, adverse effects to EFH may result from actions occurring within EFH or outside EFH and may include site-specific or habitat-wide impacts. including individual, cumulative, or synergistic consequences of actions.



Specific Policy Comments

Under provision 2.b.ii, the Policy allows for a power plant with a capacity utilization rate of less than 15% to be exempt from all entrainment provisions of the Policy. NMFS has the following concerns regarding this provision and recommends that the SWRCB address them in the subsequent draft environmental CEQA document. A facility may fall under this utilization rate on an annual basis currently, but may operate at a higher rate seasonally (e.g. during the warm summer months when additional energy production is needed) and thus impact a segment of the ecosystem in a relatively predictable manner. Additionally, existing facilities may exceed this utilization rate at any given time due to increased demand (e.g. a long warm summer, population growth or lack of new facilities being constructed) or for mechanical reasons (e.g. another facility or facilities break down for a period of time). The Policy could be strengthened by a requirement for all facilities to mitigate for their damages to the ecosystem despite their utilization capacity. In addition, the Policy could require facilities that qualify for this exemption to report their utilization rate quarterly or annually so their impacts may be addressed if they begin to operate at a higher capacity.

Also, under section 2.b of the Policy, NMFS recommends that the SWRCB evaluate the feasibility of requiring all entrainment impacts be avoided or offset by a combination of operation, structural, and/or restoration measures. NMFS supports requiring a facility to minimize impacts through structural and operational controls before restoration measures are considered for the remaining impacts.

Provision 2.c is related to 2.a and 2.b, but gives a potential exception to nuclear power facilities due to their inherently different safety requirements. NMFS concurs that this provision is logical although, as stated above, the SWRCB should evaluate the feasibility of increasing the mitigation requirement to account for all entrainment and impingement impacts.

Provision 2.e and supporting language in the scoping document suggest that the baseline flow be determined as the average intake flow rate during the last NPDES permit cycle (i.e. a five year period). The intake flow rate over this period of time may vary considerably on a seasonal basis, particularly in facilities that are mainly used as peaker plants as compared to base load facilities. NMFS is concerned that mean flow rates calculated over a five year period may not adequately protect aquatic resources for situations in which the times of peak demand and intake flow coincide with a seasonal peak in biological production or the maximum time a species is subject to entrainment at a given facility. NMFS recommends the SCWRB compare mean flow rates calculated by season with the proposed calculation baseline method to determine whether the proposed approach is adequately protective of aquatic resources. In addition, NMFS recommends the SCWRB evaluate other potential alternatives for determining baseline flows for plants that consistently demonstrate seasonal intake patterns.

Provision 2.f of the provisions discusses credits for flow reductions and other control measures already implemented or required under an existing NPDES permit to reduce impingement and entrainment. NMFS recommends defining a time frame for which these credits may be taken (e.g. actions taken within the last decade). The Policy should also clarify how to determine if flow reduction and other control measures were implemented for the purpose of reducing entrainment or impingement impacts as opposed to reactions to market trends.

Provision 2.g discusses cumulative impact assessments. NMFS supports the concept of this requirement, but has some questions regarding its definition and execution. Who will determine if the intake water sources are overlapping? Will this determination fall upon the proposed Expert Review Panel when they are reviewing study designs or upon the local Regional Board?

The document properly states that the impacts of the power plants occur in conjunction with other anthropogenic impacts in the regional area. However, there are a number of other intake systems (e.g. water supply, manufacturing, etc.) that are also impacting the same regional ecosystems. A comprehensive cumulative impact assessment would account for other types of impacts, some also regulated by the SWRCB and the Regional Boards via NPDES permits such as discharges from wastewater treatment plants or urban stormwater systems. In some areas, these other impacts may need to be examined in order to determine if a restoration proposal has a viable chance of performing as planned.

NMFS supports the concept of provision 2.h. This is a logical approach to classifying restoration measures and is consistent with NMFS SWR Habitat Protection Policy. We offer our biological expertise to the SWRCB and the Regional Boards in this process should it prove necessary.

NMFS supports provisions 2.i and 6 requiring the use of the habitat production foregone methodology and the assessment of impacts to all species and the marine community. This is consistent with our regulations, our comments on several power plant projects in recent years and with how NOAA calculates ecosystem damage through the Natural Resource Damage Assessment program. We agree that the benefits assessment in the development of the Phase II rule did not account for the vast majority of species or the ecosystem functions they serve. These same species and functions are usually not accounted for by standard fishery impact modeling methods. We agree with the SWRCB that protection of the entire community is essential for promoting a healthy ecosystem as envisioned by the State and the MSA.

NMFS also supports provision 2.j regarding the use of cost considerations in determining the best available site, design, technology and mitigation measures feasible. As mentioned previously, the modeling methods typically used in these evaluations do not account for the vast majority of impacts to species or their habitats. There are also numerous uncertainties present in the models or in the data used to populate the models that routinely result in large margins of error in the results. It is a credit to the State of

California that their policies seek to eliminate these uncertainties in order to protect the beneficial uses of the State's waterbodies.

NMFS also supports the remaining provisions of the Policy regarding reductions of intake flow during non-operational periods (achievable with modern variable speed pumps), examination of the availability and use of treated wastewater for cooling (common in cooling towers in new power plants), creation of an expert review panel, and the potential use of reference stations in calculating baseline conditions. NMFS will assist the SWRCB and the Regional Boards in these processes as requested.

Regarding the monitoring of entrainment and impingement impacts, NMFS supports the requirement that studies be performed once per permit cycle unless the permittee can demonstrate that conditions have not changed. In the past, decades have passed without any monitoring taking place resulting in a lack of data to inform many of these processes or to require changes that could have alleviated the impacts.

Finally, NMFS supports the inclusion of eggs in the definitions of ichthyoplankton and zooplankton and the resulting collection and enumeration of eggs in the impact assessments.

Overall, NMFS concurs with most provisions of this Policy. We also offer the SWRCB some suggestions for strengthening or clarifying other portions of the proposal. It has been our pleasure to discuss this issue with you and your staff at several venues in the last few years. We hope to continue this useful dialogue and offer the SWRCB our continued assistance in this matter. Please contact Joe Dillon, SWR Water Quality Coordinator at (707) 575-6093, or Bryant Chesney, SWR EFH Coordinator at (562) 980-4037, with any questions.

Sincerely,

Robert S. Hoffman

Assistant Regional Administrator

for Habitat Conservation

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CC: Russ Strach, NMFS, Sacramento, California Steve Edmondson, NMFS, Santa Rosa, California Nancy Yoshikawa, USEPA Region IX, San Francisco, California Joe Dillon, NMFS, Santa Rosa, California