

May 20, 2008

VIA E-MAIL & U.S. MAIL

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

RE: Comment Letter – Once-Through Cooling Policy

Dear Ms. Townsend,

Southern California Edison (SCE) respectfully submits its comments on the “Scoping Document: Water Quality Control Policy on the Use of Coastal and Estuarine Waters For Power Plant Cooling” (Scoping Document) issued by the State Water Resources Control Board (Board).

I. Environmental Programs at San Onofre Nuclear Generating Station

A. SCE's Restoration Programs at San Onofre

The issue of marine impacts at the San Onofre Nuclear Generating Station (SONGS) was dealt with fully by the California Coastal Commission (CCC) when it issued SCE a coastal development permit (CDP) for SONGS 2 and 3 (Permit No. 183-73, dated 2/28/74). The CCC permit required significant study of upgrades of the extensive fish protection system designed into the plant and full compensation for identified marine impacts that could not be resolved by in-plant systems. After 15 years of study and extensive public hearing, the Commission found that there were residual marine impacts. The CCC specifically rejected requiring the installation of cooling towers as a remedy and instead chose to impose extensive mitigation conditions to eliminate all remaining marine impacts from the facility. The mitigation permit conditions include the restoration of the San Dieguito River mouth and coastal lagoon, the construction of a kelp reef, and support for a California sea bass hatchery. The conditions include detailed success criteria and monitoring requirements (including independent comparison to reference natural wetlands) to assure that the restored wetland performs as expected for the full operating life of the plant. The conditions require the establishment of a trust fund to allow for the maintenance of the restored wetland in perpetuity.

The conditions in the CDP require over 160 acres of new or restored wetlands along with 280 additional acres which will be used as open space to become a protected park at the San Dieguito River Park near Del Mar in northern San Diego County. The San Dieguito site was chosen by the CCC after extensive investigation of several other potential restoration sites. This is the largest wetlands restoration project in San Diego County since 1995. The project will provide highly productive coastal wetland habitat essential



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for foraging and reproduction of hundreds of species of native fish (including halibut), birds, and mammals, with additional emphasis placed on endangered species found within the area. This habitat is created by restoring critical tidal flow and allowing growth of plants distinctive to the California coast. The estimated cost of the project is \$86 million in 2008 dollars.

The restored wetland is protected from sedimentation due to infrequent flooding of the San Dieguito River that runs through the project by berms (designed by scientists and oceanographic engineers from the Scripps Institute of Oceanography). The berms serve as hydraulic controls keeping the flood flow in the river channel while allowing water to move back and forth through the restored wetland and transporting sediment to the ocean for beach sand replenishment.

In addition, the San Dieguito Wetlands project will allow the area to be restored to its historical natural condition while allowing the public to view and enjoy the newly created preserve. The new park will include a 2¼-mile scenic trail system punctuated by viewing platforms and an interpretive visitors' center. The trails will be connected to San Diego's Coast to Crest trail project, which winds from the mountains to the ocean throughout San Diego County.

SCE is also building a 150-acre kelp reef as a condition the CDP in order to mitigate the modeled decrease in kelp that CCC concluded results from SONGS operations. The reef is located off San Clemente Beach and will be built within an 862-acre parcel leased from the State Lands Commission that extends north three miles to the San Clemente pier. The project cost is estimated at \$16 million, with an additional \$5 to \$10 million for CCC construction monitoring and post-construction assessments. The reef will not only satisfy the CCC-required mitigation of the environmental impacts to the kelp resulting from SONGS' operation, it will also substantially enhance coastal natural resources by creating valuable habitat for fish and other marine organisms.

SCE also funded, in cooperation with the Hubbs-SeaWorld Research Institute, a new hatchery in Carlsbad, California in 1995. SCE's contribution was \$5 million. The hatchery has the potential of producing more than 350,000 young white sea bass each year. The young white sea bass are released into bays and near-shore areas of the Pacific Ocean in Southern California to replenish depleted stocks.

SCE believes that these mitigation measures, which were ordered by the CCC in compliance with the California Coastal Act requirements to protect and enhance the coastal environment, and that are funded by ratepayer dollars, fully mitigate potential environmental impacts to the marine environment from SONGS that may not be resolved by the extensive in-plant protection systems at Units 2 and 3. Additional marine protection measures are not warranted.

II. Proposed Interim Measures

The Scoping Document proposes several interim measures that would be required even as a site may be going through a site-specific review to determine if cooling towers are feasible or required. Such a requirement is not warranted at SONGS because there are no residual environmental impacts at the site due to SCE's extensive mitigation program. Further, these measures are poorly defined and should be developed in more detail before the Board issues a final policy.

Certain measures, such as large-organism exclusion, will require substantial research and permitting. The proposed measure apparently is intended to minimize the impact to marine mammals and reptiles. SCE suggests that the National Marine Fisheries Service (NMFS) is the most appropriate agency to manage these issues. Potential impacts to sea turtles already are addressed under an Endangered Species Act permit issued by NMFS for SONGS. SCE is processing a similar permit for marine mammals. Because SCE has commented extensively on this issue in past letters,¹ we will limit the discussion here except for the entrapment numbers listed. Between 1978 and 2007, the annual average entrapment of mammals at SONGS was 25 individuals.² In recent years, the numbers have increased due to increases in the population. SONGS has a comprehensive marine mammal rescue program. Over 40% of the entrapped animals are returned unharmed to the ocean. Sixty percent of the harbor seals and nearly all the green sea turtles are returned alive. NMFS has not determined the level of take to be significant. Placing exclusion devices offshore would require permits from at least six agencies (CCC, State Lands Commission, Department of Fish and Game, NMFS, U.S. Army Corps of Engineers, San Diego Regional Water Quality Control Board) and concurrence by the U.S. Coast Guard. The permitting process would likely be quite lengthy. In addition, SONGS entrains an average of 209 kg of algae a day per unit. In extreme events, this value was recorded as high as 1441 kg. This indicates a high level of clogging would result on the narrow, 4-inch mesh and would require cleaning and maintenance by divers. The draft policy does not provide any data or studies to show that this type of structure is feasible. Requiring a measure that has not been thoroughly researched could trigger substantial delays and force temporary non-compliance.

The Board staff also suggests reducing water flow to ten percent during periods when the plant is not generating. SONGS has four pumps per unit, none of which are variable flow. Therefore, the flow could not be reduced to the recommended level. Even if the reduction were possible during maintenance and refueling outages, it would jeopardize critical plant tests and operations that take weeks to conduct. The proposed restriction of the policy will not allow SONGS to operate within its design constraints. The flow minimization concept suggested in the Scoping Memo plainly is not feasible at SONGS.

Circulating water pumps must also be operated in support of plant start-up several days before the plant is on line. The circulating water pumps are required to be run to reduce corrosion rates of the circulating water piping. SONGS has four 2,500 horsepower

¹ SCE has attached to this letter its two previous comment letters from September 2006.

² These figures are derived from stranding reports that SCE submits to NMFS.

circulation pumps rated at 207,500 gallon per minute per unit. These pumps are very expensive to operate and are therefore only operated when absolutely necessary. SCE believes the following revision is warranted: "Two days after plant shutdown, main circulating water pumps shall only be run if required to maintain the plant circulating water piping and the power plant within plant design parameters."

III. Studies Show that the Current Technology at SONGS Effectively Reduces Impingement and Entrainment

Scientists have conducted many studies over the past 30 years at a variety of coastal facilities. The most notable is the Marine Review Committee (MRC)'s 15-year, \$50 million effort, which the CCC commissioned as part of the Coastal Development Permit process for SONGS. The study focused on the biological effects of the cooling system on the marine environment. After studying all aspects of entrainment, impingement, and discharges associated with plant operations, the authors concluded that the abundance of plankton near SONGS was "largely unaffected."³ Even though the plant takes in 1,400 tons of zooplankton, "there is no evidence for a local reduction in plankton, and ... these losses do not constitute a substantial adverse effect."⁴ The MRC also found that the intake of fish larvae did not show a clear pattern of decreases in their abundance. The study ultimately concluded that existing plant intake modifications were acceptable, cooling towers were not feasible, and mitigation measures fully compensated for any impacts.

Further, as described below, SCE recently completed and submitted a comprehensive demonstration study (CDS) analyzing the impact of impingement and entrainment.⁵ The Impingement Mortality and Entrainment Study included in the CDS identified three species as the most abundantly impinged species, making up approximately 90 percent of the total number of fish. The study compares the current impacts of once-through cooling to those found during previous studies and previous Section 316(b) demonstrations, and also evaluated existing technologies for the reduction of entrainment.

Three species of fish are impinged at SONGS: northern anchovy, Pacific sardine, and queenfish. When compared to commercial and recreational fishery losses, impingement totals represented 1% or less for most species.⁶ Based on a full year of sampling, it was determined that fish larvae in the present study were similar to those found during the MRC period. Sampling of the source water determined that fish larvae in the present study were similar to those found during the MRC period. No significant decline in larval density offshore has been detected.

³ Marine Review Committee, *Final Report of the Marine Review Committee to the California Coastal Commission* at 11 (1989).

⁴ *Id.*

⁵ MBC Applied Environmental Sciences, *Impingement Mortality and Entrainment Characterization Study* (December 11, 2007). SCE submitted the study to the San Diego Regional Water Quality Control Board.

⁶ *Id.* at 7-14.

The CDS also estimated the calculation baseline and determined that SONGS effectively reduced the amount of impingement and entrainment with current protective systems. The estimated efficiency in reducing impingement of fish of the SONGS velocity caps is 88.17%. Coupled with the Fish Return System, the estimated reduction in the amount of adult fish impinged at the plant is 94.22% based on abundance and 97.65% based on biomass. Although a reduction in entrainment was not estimated, study data suggest that the mid-water offshore intakes significantly reduced it as well.

Recently, an alternative cooling system analysis was completed for the Ocean Protection Council by Tetra Tech.⁷ The study, funded at \$350,000, was completed over 18 months. The Scoping Document refers to the Study repeatedly to support the assertion that cooling towers are feasible at most facilities. But the study's authors conclude their findings "do not constitute a final determination of what is feasible at any individual facility under the California Environmental Quality Act (CEQA), which is defined as 'capable of being accomplished...taking into account social, environmental, economic and technological factors.'"⁸ This study's scope and conclusions were so limited, that a more substantive and far-reaching analysis of feasibility must be conducted as required under CEQA before the Board adopts a policy.

IV. The Proposed Two Alternative Tracks Cannot be Utilized At SONGS

The Scoping Document contains two tracks for compliance: (1) the installation of cooling towers as the Best Technology Available (BTA); and (2) the use of alternative technologies that would reach the same reductions in impingement and entrainment as cooling towers. As explained below, neither option is feasible at SONGS.

A. Track I

A combination of site constraints, adverse environmental impacts, and permitting issues precludes the installation of cooling towers at SONGS. Due to protections imposed on lands south of the plant by the CCC, the presence of the state park north and south of the plant, the presence of endangered species south of the plant, and Nuclear Regulatory Commission requirements that preclude relocation of facilities located within the plant site, a significant number of the needed cooling tower complements would have to be sited on the inland side of Interstate 5, which borders the plant on the east. SCE does not know whether the Navy would agree to lease additional land to SCE. If such land could be obtained and the environmental characteristics did not bar construction, SCE would need to secure approval from the California Department of Transportation to install the necessary piping to convey water to and from the plant to the cooling towers underneath the freeway. The installation of cooling towers would also reduce the plant's efficiency compared to once-through ocean water cooling. Additional decline in plant efficiency results from the need to circulate sea water from the ocean to the cooling towers and back. SCE would need to install a pumping system to bring the water up to the elevated mesa. SCE estimates the elevation differential from the plant site to the inland cooling

⁷ Tetra Tech, *California's Coastal Power Plants: Alternative Cooling System Analysis* (Feb. 2008).

⁸ *Id.* at I-2.

towers would be 100 feet. Approximately 73 million gallons per day of salt water would need to be pumped uphill to the mesa site of the cooling towers. SCE's current estimate is that plant efficiency would be reduced by 2%, necessitating the generation of make-up power (largely fossil-based), with the resulting environmental impacts from siting and operating such facilities. Due to electrical system requirements the makeup generation would have to come from within the southern California load center where environmental issues, especially air quality requirements, make the siting of such additional generation highly problematic.

Were cooling towers required, they would have to be sited in an elevated condition above current grade because the drift (or evaporation) of salt water used for cooling would otherwise settle onto Interstate 5 causing safety problems. Elevating the towers would exacerbate aesthetic issues (the California Coastal Act requires the CCC to protect visual fields in the coastal zone).

The installation of cooling towers would have an adverse environmental impact on the SONGS area. SCE is required by the CCC to protect endangered species by leaving certain areas undeveloped. The installation of cooling towers would impact these areas. Thus, SCE would need to secure CCC approval along with permits associated with compensating for the take of endangered and threatened species and their habitat. It should also be pointed out that when the CCC adopted permit conditions for SONGS 2 and 3, it concluded that cooling towers were not appropriate. Additional adverse environmental impacts that would be caused include increased emissions of: (1) greenhouse gases associated with reduced plant efficiency; (2) particulate matter (SCE would need air quality permits for an estimated 310 tons per year of PM-10); and (3) salt drift. Given the location of the plant, it is doubtful the necessary air permits could be obtained.

Finally, SCE must seek approval from the California Public Utilities Commission before spending ratepayer funds on the Board's suggested program. Due to all of these constraints, cooling towers are not feasible at SONGS.

B. Track II

The Board's second proposed alternative is the use of other technologies that would achieve the same reductions in impingement and entrainment as a cooling tower. As demonstrated by the studies described above, however, no such alternative technologies exist. These studies investigated available technologies such as fine-mesh screens and in-plant and offshore narrow-slot wedge-wire screens. The largest drawback was the screens' tendency to be clogged with algae and fouling organisms. The inability to keep them clean would compromise the flow required to operate the plant safely. Further, the study showed even if these technologies could be applied successfully, the reduction in entrainment was only 76 percent, which would not comply with Track II.⁹ It must also be noted that this study examined 500-micron screens, not the 200-micron recommended by

⁹ Electric Power Research Institute, Comprehensive Demonstration Study for Southern California Edison's San Onofre Nuclear Generating Station (Final Report) at 28 (January 2008).

the Board. Presumably, the reduction associated with the 200-micron screens would decrease substantially, thus rendering this option even less feasible.¹⁰

The results of the MRC and CDS studies at SONGS suggest the facility is already using the best technology available. Those technologies, including the ongoing mitigation measures, already minimize impingement and entrainment.

V. The environmental review process under CEQA must inform the public and decision-makers about all adverse environmental consequences of the proposed policy.

It is well-settled law that “a paramount consideration [of the California Environmental Quality Act (“CEQA”)] is the right of the public to be informed in such a way that it can intelligently weigh the environmental consequences of any contemplated action and have an appropriate voice in the formulation of any decision.” *Envtl. Planning and Informational Council v. County of El Dorado*, 131 Cal. App. 3d 350, 354 (1982). “The requirement of a detailed [EIR] helps insure the integrity of the process of decisions by precluding stubborn problems or serious concerns from being swept under the rug.” *Sutter Sensible Planning, Inc. v. Bd. of Supervisors*, 122 Cal. App. 3d 813, 820 (1982).

Under CEQA, “[t]he purpose of an [EIR] is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant impacts of such a project might be minimized; and to indicate alternatives to such a project.” Pub. Res. Code § 21061 (emphasis added). The draft environmental review in the Scoping Document falls short of the statutory requirements. It appears that the Board has oversimplified the likely scope and detail of the CEQA document that would be required, and correspondingly underrepresented the scope and breadth of the environmental impacts that would result. The Board must complete a significantly more detailed and comprehensive environmental analysis to comply with CEQA.

As detailed in this comment letter and our previously submitted comments (a copy of which is attached for your convenience and incorporated as if fully set forth herein), the policies proposed in the Scoping Document have the potential to result in substantial and systematic direct and indirect environmental impacts, including cumulative environmental impacts, that will have to be analyzed rigorously to comply with CEQA. The Board must examine a reasonable range of alternatives and adopt all feasible mitigation measures that would reduce significant environmental impacts. Pub. Res. Code §§ 21002, 21081(a); Cal. Code Regs. tit. 14, §§ 15001(a)(3), 15021(a)(2), 15091(a)(1).

¹⁰ *Id.*

A. The Board must perform the "functional equivalent" of a rigorous and detailed EIR.

Because the planning process by which the Board proposes to review the Proposed Policy is a "certified regulatory program," the Board must produce a document that is "functionally equivalent" to an Environmental Impact Report ("EIR"). The Board cannot limit its substantive CEQA review because it proposes to act under a certified regulatory program. *Envtl. Prot. Info. Ctr. v. Johnson*, 170 Cal. App. 3d 604, 618 (1985) ("Nothing in section 21080.5 supplies a basis for concluding that the Legislature intended the section to stand as a blanket exemption from CEQA's thorough statutory scheme and its salutary substantive goals.").

Furthermore, the Board cannot avoid a complete and detailed analysis of reasonably foreseeable environmental impacts by labeling the EIR as "programmatic." *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, 40 Cal. 4th 412, 429 (2007) ("[T]iering is not a device for deferring the identification of significant environmental impacts that the adoption of a specific plan can be expected to cause"); *Al Larson Boat Shop, Inc. v. Bd. of Harbor Comm'rs*, 18 Cal. App. 4th 729, 741-42 (1993) ("The level of specificity of an EIR is determined by the nature of the project and the 'rule of reason'..., rather than any semantic label"). In this case, the policies proposed in the Scoping Document would result in a number of reasonably foreseeable significant environmental impacts that must be thoroughly addressed and reduced to the extent feasible. Pub. Resources Code §§ 21002, 21081(a). The draft environmental review in the Scoping Document falls short of this statutory requirement.¹¹

B. The Board must incorporate SONGS' existing environmental mitigation programs into the environmental baseline.

The Board cannot make a meaningful assessment of the potential environmental effects (i.e., any benefits and adverse impacts) of the policies proposed in the Scoping Document without first characterizing the baseline environment. *Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors*, 87 Cal. App. 4th 99, 120 (2001).

In this case, the baseline environmental setting includes the extensive mitigation and restoration efforts undertaken by SONGS through the CCC's regulatory process. As discussed in detail above, the CCC already has required SCE to minimize the potential environmental impacts from operations at SONGS, including the construction of a large mitigation wetland area. Because of this prior mitigation, there are no incremental environmental impacts to minimize from the operations at SONGS. Thus, the application

¹¹ The Board ostensibly has acknowledged its obligation to fully comply with CEQA. On page 50 the Scoping Document, the Board states: "CEQA imposes specific obligations on the [Board] when they adopt rules or regulations establishing performance standards or treatment requirements. Public Resources Code §21159 requires that the [State Water Board] concurrently perform an environmental analysis of the reasonably foreseeable methods of compliance. The environmental analysis must address the reasonably foreseeable environmental impacts of the methods of compliance and reasonably foreseeable alternatives and mitigation measures." (Emphasis added.)

of BTA is irrelevant at SONGS since the purpose of BTA is coupled expressly to the minimization of environmental impact.

C. *The Scoping Document oversimplifies the "project."*

Without a detailed, accurate project description, the CEQA process cannot yield accurate, clear results, this frustrating review by the public. *County of Inyo v. City of Los Angeles*, 71 Cal. App. 3d 185, 192 (1977). The "project" that must be described includes everything needed for implementation of the overall action. Cal. Code Regs. tit. 14, § 15003(h). To comply with CEQA, the Board must "[d]escribe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation." CEQA Guidelines, Appendix G (emphasis added).

As discussed above, SCE does not own any of the land on which SONGS sits; the U.S. Department of the Navy does. It may be very difficult to lease additional lands. In addition, SONGS is surrounded by a popular state park. Several sensitive species are located in the proposed area, including the San Diego fairy shrimp, two native and rare plants (the little mouse tail and Pendleton's eryngo), burrowing owls, and the California gnatcatcher. Furthermore, the MRC's 1989 study for the CCC rejected the cooling tower option at SONGS as infeasible because of "technical, environmental, and safety disadvantages."¹² The CCC accepted this recommendation.

Due to the presence of environmentally sensitive habitat and wetlands near SONGS, in addition to the important aesthetic and recreational resources associated with the state park, the CCC recently refused to approve a toll road in the area by an 8-to-2 vote. Given the important biological, recreational, water quality, and aesthetic resources that would be significantly impacted by the installation of a cooling tower, the likelihood of securing the necessary regulatory approvals is doubtful.

The Board's proposal puts SCE in a terrible bind: no technology other than cooling towers would satisfy the proposed rule, but the CCC will not likely approve cooling towers absent an express order from the Board, and such an order would violate Water Code Section 13360. Moreover, SCE has a legal obligation to serve all existing and projected electric load within its service area.

Even if SONGS is somehow able to replace once-through-cooling technology with cooling towers, it would result in direct impacts to biological, water, recreational, and aesthetic resources, and indirect impacts would flow from delays related to the loss of SONGS' consistent and reliable power supply to the grid. The "programmatic" level of review does not shield the Board from analyzing these impacts because they are reasonably foreseeable consequences of its proposed policy.

¹² MRC report, *supra* note 3, at 291.

D. The environmental and cumulative impacts from the proposed rule are grossly understated.

A significant environmental impact can result under CEQA even if it is not directly tied to project approval. *City of Santa Ana v. City of Garden Grove*, 100 Cal. App. 3d 521, 531-33 (1970) (amendment to a general plan may produce significant environmental impacts indirectly by ultimately triggering adverse changes to the environment); *Kings County Farm Bureau v. City of Hanford*, 221 Cal. App. 3d 692, 712-18 (1990) (EIR overturned in part because lead agency failed to consider secondary or indirect impacts of project).

The Board's proposal would trigger a series of significant environmental impacts that must be analyzed in the Board's functionally equivalent EIR. The potential destabilizing effects of losing the nuclear plants from the grid, even for the construction period (which could be years), present a clear and present threat to the reliability of California's electricity supply. California's two base loaded nuclear facilities (SONGS and PG&E's Diablo Canyon facility) provide core and essential reliability to the grid. Reducing or eliminating that reliability could result in socioeconomic and environmental effects throughout the state and to the economy that would lead to significant impacts under CEQA. Direct, indirect, and cumulative impacts include, but are not limited, to:

- **Greenhouse Gas Emissions** – The closure of SONGS would result in a net increase in greenhouse gas emissions because the relatively clean energy produced by SONGS likely would have to be replaced by a less efficient natural gas plant with higher emissions.
- **System Reliability** – The closure of SONGS would decrease grid stability, triggering rolling blackouts during heat waves in the Southern California summer months and driving up electricity rates.
- **Construction of Additional Power Plants** – The construction of a number of new power plants to replace SONGS could lead to myriad environmental impacts.
- **Construction of New Transmission Lines to Other Providers** – The closure of SONGS and other once-through-cooled plants will require significant electrical inputs from other providers. In addition to the environmental impacts associated with constructing new transmission lines (which are very difficult to permit in today's regulatory environment), placing California's electric future in the hands of other providers requiring transmission grid improvements is a risky and uncertain venture, the socioeconomic and environmental impacts of which are only hinted at in the draft document.
- **Biological, Water, Recreational, and Aesthetic Impacts** – Even if cooling towers could be constructed at SONGS, this would constitute a massive construction project that must be thoroughly evaluated under CEQA regarding

impacts to important biological, recreational, water quality, and aesthetic resources.

E. Alternatives

The Board is required to develop and analyze any feasible alternative that would result in fewer environmental impacts than the Proposed Policy. Cal. Code Regs. tit. 14, § 15126.6; tit. 23, § 3777(a)(2); Pub. Res. Code § 21159.

The environmental review associated with the Scoping Document does not include an alternatives analysis. The document's discussion of alternatives is qualitative in nature and does not identify either specific impacts or the means to reduce those impacts. The California Supreme Court has found that a very similar approach violates CEQA. In *Laurel Heights Improvement Assn. v. Regents of Univ. of California*, the Court stated that an adequate alternatives discussion "must contain facts and analysis, not just the agency's bare conclusions or opinions." 47 Cal. 3d 376, 403-4 (1988). The facts and analysis the Board includes in the CEQA analysis must consist of a "quantitative, comparative analysis" of the relative environmental impacts of its proposed policy and each alternative. *Kings County Farm Bureau*, 221 Cal. App. at 735.

A number of alternatives are available and have been raised in this and past comment letters that would reduce environmental impacts associated with the Board's proposal. We believe these technologies already have been used by SCE to minimize to insignificance potential adverse impacts from SONGS. Under these circumstances, additional technology is not necessary; and the Board can avoid adverse environmental impacts that would result from either the shutting down of SONGS, or the construction of a massive cooling tower complex on sensitive coastal resources. To the extent that any further impact minimization were warranted, which we do not believe is the case, the Board should recognize restoration and mitigation as among the best technologies to address entrainment and impingement.

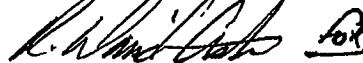
California's nuclear power plants (which provide 13% of the State's electricity) should not be lumped together in a one-size-fits-all policy with other power plants, some of which operate only intermittently. A reasonable alternative would be to allow an exception to nuclear power plants under the Board's proposal to allow for individual, case-by-case evaluation.

In addition, the existing safety exception under Section 2(D) could be expanded to include situations where the reduction of impingement and entrainment will conflict with the ability to operate the plant in accordance with its design bases, other regulatory requirements, and operating licenses from the Nuclear Regulatory Commission.

VI. Conclusion

Thank you for the opportunity to comment on the Scoping Document. If the Board members or staff has any questions regarding this filing, I can be reached at (626) 302-9456.

Very truly yours,



Michael M. Hertel, PhD
Director, Corporate Environmental Policy

Attachments (2)

cc: John R. Fielder
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