NO MORE SOUTH BAY POWER PLANT COALITION

Environmental Health Coalition San Diego Coastkeeper South Bay Forum
Southwest Chula Vista Civic Association Coastal Environmental Rights Foundation
San Diego Audubon Society San Diego Chapter of Sierra Club
Surfrider Foundation, San Diego Chapter

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Item No. 13
May 12, 2010

April 21, 2010

Chairman King and Board members
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340

RE: No More Power Plant Coalition Comments on Staff Report and Tentative Order re: CA0001368, Order No. R9-2004-0154 for Dynegy South Bay, LLC- South Bay Power Plant

Dear Chairman King and Members of the Regional Board:

On behalf of the members of the No More Power Plant Coalition,[1] a designated party to these proceedings, we offer the following comments on the Staff Report and Tentative Order for the South Bay Power Plant.

We have previously provided documents and testimony to support our position that the South Bay Power Plant must terminate all of its operations by June 1, 2010 to adequately protect the Bay now and into the future. We hereby incorporate by reference our testimony dated February 22, 2010 and March 3, 2010, and provide the following additional comments on the Staff Report and Tentative Order.

I. Evidence in the Record Demonstrates that the South Bay Power Plant Endangers the South Bay Environment.

Federal regulations authorize state agencies to terminate a NPDES permit during its term or deny a renewal application if the discharge "endangers human health or the environment and can only be regulated to acceptable levels by NPDES modification or termination."[2] While the staff accepted testimony to address this issue, the Staff Report fails to directly address the "endangerment" standard. Instead, the Staff Report dances around the issue, tentatively concluding that the South Bay Power Plant's near-term impacts do not pose an "unacceptable risk" to human health or the environment.[3] But the standard is not whether the facility's discharge poses an acceptable risk to human health or the environment—it is whether the discharge "endangers" human health or the environment. By using the term "unacceptable risk," the staff is making it clear that it is balancing harm to the environment against the area's energy needs—a balancing that is not allowed under the law. For example, staff admits that it has not gathered enough information to "determine[] at this time whether the SBPP is adversely affecting the DO concentration or percent saturation in San Diego Bay."[4] Yet the staff concludes that

[1] Environmental Health Coalition, San Diego Coastkeeper, South Bay Forum, Southwest Chula Vista Civic Association, Coastal Environmental Rights Foundation, San Diego Audubon Society, San Diego Chapter of the Sierra Club, and Surfrider Foundation, San Diego Chapter

[2] 40 C.F.R. § 122.64(a)(3).

[3] *See* Staff Report at 8, 9, 10, 15.

[4] Staff Report at 15.

the unidentified impacts nevertheless do not pose "unacceptable risk" to human health or the environment over the short term.[5]

Further, the Staff Report fails to address the issue of whether the South Bay Power Plant will endanger the South Bay environment if allowed to operate past December 31, 2010. The staff has admitted in its report that there is a possibility that Dynegy will seek to continue to operate beyond December 31, 2010. But the staff refused to address whether those continued discharges will endanger the environment, instead leaving open that "[a]ny proposed discharge beyond 2010, however, must be evaluated to determine whether it poses an unacceptable risk to human health or the environment in the longer term."[6] In fact, the staff's entire analysis seems to hinge on the fact that the South Bay Power Plant has been operating for so long that letting the impacts continue for a few more months can't be *that* bad, and if Dynegy does ask to discharge longer, staff can revisit the issue later and analyze whether another year… or two or five… would really have that many more negative impacts to the South Bay when the plant has already been wreaking havoc to the environment since the 1960's.

By failing to assess the facts through the lens of endangerment and focusing instead on an undefined measure of unacceptable risk, the Staff Report fails to clearly demonstrate the full extent of endangerment faced by organisms dependent on the South Bay ecosystem. We urge the Regional Board to acknowledge and incorporate the impacts discussed below into the staff report, and revise the Tentative Order to reflect a June 1, 2010 termination. At a minimum, Sections 3c, 3d, 3e, and 3f of the Staff Report must acknowledge the following facts:

A. The South Bay Power Plant Causes or Contributes To Low Dissolved Oxygen Levels that Endanger the South Bay Environment and Can only be Brought to Acceptable Levels by Terminating the Plant's Operations.

Dissolved oxygen is one of the most important physical factors in aquatic ecosystems; without sufficient oxygen, most life cannot survive in water. In its discussion of dissolved oxygen, the Staff Report has omitted and misinterpreted several key aspects of the regulatory framework and the physical factors that affect concentrations of dissolved oxygen.

The Staff Report provides a confusing description of the water quality regulations pertaining to dissolved oxygen water quality criteria. It begins by referring to the Basin Plan's DO objective for inland surface waters[7] . It goes on to state that "It is not clear if enclosed bays such as San Diego Bay should appropriately be classified as 'Inland surface waters with designated MAR beneficial uses' as implied in the Basin Plan. Inland surface waters are generally fresh water and do not have the beneficial use designation of MARINE. San Diego Bay is considered an enclosed bay with the designated MARINE beneficial use, not inland surface water. The Basin Plan does not explicitly designate a DO objective for enclosed bays like San Diego Bay."[8] Staff is correct that San Diego Bay should not be classified as an

[5] *See* Staff Report at 15.
[6] Staff Report at 10.
[7] Staff Report at 12.
[8] Staff Report at 12.

'inland surface water'. This is likely why the Basin Plan designates the Bay as a Coastal Water[9] in Table 2-3 with an existing Beneficial Use of 'MARINE'. Further, the Basin Plan does in fact designate a DO criteria that is appropriate for San Diego Bay. In Appendix C, Table C-1: Inorganic Constituents Water Quality Criteria, DO has a criteria associated with three categories of water bodies: Ocean Waters, Bays and Estuaries, and Inland Surface Waters. Given that San Diego Bay is indisputably a bay and that the Basin Plan has also clearly established an existing beneficial use of MAR for San Diego Bay, we can in fact apply the water quality criteria for bays and estuaries: 'Shall not be less than 5.0 mg/l with designated MAR. The annual mean DO shall not be less than 7 mg/l more than 10% of the time'. While the discharge DO concentrations depicted in the Staff Report[10] do not fall below 5.0 mg/l, all but two are below 7 mg/l. Further, the hourly mean DO graph (figure ES-5) presented in the Tenera Environmental report[11] clearly shows that the DO curve for the SBPP discharge channel does not have the same daily pattern of daily highs reaching up to 9 mg/l that the reference stations do. The DO curve for the SBPP discharge channel is dampened with little variation throughout the day and generally hovers around 5 mg/l.

The Staff Report states that DO concentrations in the discharge channel are occasionally higher than the intake, but misinterprets why this counterintuitive result might occur. The concentration of DO in a water column is related to the temperature, salinity, and atmospheric pressure. Given that temperature of the water is higher at the discharge than the intake, and there is no difference between the salinity and pressure between the intake and the discharge, there must be another physical factor affecting the DO at the discharge pipe. The most reasonable explanation lies in the turbulence of the discharge water that in turns aerates the discharge water.

The Staff Report omits an important line of reasoning when interpreting available DO data. At no point does the Staff Report really examine why the DO is below saturation levels.[12] One likely explanation for this pattern is that DO consumption is greater than production. This potential is acknowledged in the Tenera Environmental report "It is notable that … the mean daily DO curves were consistently below the saturation levels for the mean temperatures experienced at the stations. This suggests that DO consumption was typically higher than production at all locations throughout the study."[13]

A likely driver of this phenomenon is the biological oxygen demand created by the degradation of organic matter. The power plant discharges both impinged and entrained aquatic life (organic matter) and once or twice a year discharges scraped growth from the forebay and walls and pipes into the discharge channel. This organic matter is decayed by bacterial action, which consumes oxygen in the receiving water. This link between the impacts of biological oxygen demand of waste material and dissolved oxygen is reflected in the State Ocean Plan: "The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the

[9] California Regional Water Quality Control Board San Diego Region Water Quality Control Plan For The San Diego Basin (9) September 8, 1994 (with amendments effective prior to April 25, 2007). San Diego Bay is listed in Table 2-3, chapter 2 Beneficial Uses, as a 'Coastal Water' with no existing beneficial use for WARM but an existing beneficial use of MAR.

[10] Staff Report at 14.

[11] Tenera Environmental at ES-8

[12] *See* graph on pg 15 Staff Report.

[13] Tenera Report at 2.4-9.

discharge of oxygen demanding waste materials." Because Dynegy has never been required to measure BOD, it is not possible to conclude at this time that the discharge is not currently impacting the oxygen regime of the South Bay.

We recommend that staff amend the language in the Staff Report at section 3d, page 15 to state that San Diego Bay is a Coastal Water with an existing beneficial use of MAR and an applicable water quality criteria of 5.0 mg/l and an annual mean DO that shall not be less than 7 mg/l more than 10% of the time. The Staff Report should also make note that Plant discharges are too often just at or below the criteria and thus constitutes endangerment to the South Bay ecosystem.

B. The South Bay Power Plant Discharges Cause High Temperatures that Endanger the Environment in South Bay and Can Only Be Brought to Acceptable Levels By Terminating the Plant's Operations.

The South Bay is a shallow, and for some portions of the year, a warm aquatic environment. Given the already high thermal regime of the South Bay, it is likely that aquatic organisms in the South Bay are already living at or near organisms' maximum metabolic thresholds. Thus, the use of the delta temperature continues to provide a flawed measure of potential impact to organisms living in or downstream of the discharge plume. As a result, the full extent of endangerment to organisms is not known.

Staff indicates that changing location of compliance point has decreased heat loading.[14] This conclusion by staff is problematic on several counts. First, the Staff Report bases its conclusion on Dynegy's submittal, Attachment 5 "Assessment of the 2009 Flow Reduction of South Bay Power Plant Intake and Discharge Effect". The Flow Reduction study assesses the effect of flow reduction on the thermal plume of the plant through an evaluation of only eight days of operation in 2003. This is not an adequate sample size from which to draw any strong conclusions. Further, while the Flow Reduction Study concludes that the thermal plume is 63% smaller by volume, it does not actually provide information on how that reduction in volume was calculated or derived from the data given. The Flow Reduction Study discusses a small set of thermal measurements, provides a statistical analysis that compares the delta T (°C) between ambient sites and sites within the area of the discharge plume under various operating conditions, but it does not describe how that translates into a 63% reduction in volume of the thermal plume. Staff seems to acknowledge that there is still insufficient information to understand the extent of the thermal plume ("Additional studies have not been performed to evaluate the effects of the change in the temperature compliance point…. The effects of the smaller volume and lower temperature have not been fully evaluated, but will reduce impact to beneficial uses by an unquantified amount")[15] and yet staff still concludes that there is no short term harm posed by continued operation of the Units 1 and 2.

The Staff Report argues that the change in compliance point location has led to a decrease in impacts to the Bay ("In particular, this relocation may have helped in abating some of the detrimental thermal impacts to the discharge channel."[16]). The change in compliance point's impact on whether the

[14] *See* Staff Report at 11 – 12.
[15] Staff Report at 11.
[16] Staff Report at 11.

discharge's thermal plume is endangering wildlife is still uncertain. The thermal plume discharged from Units 1 and 2 still represents water that is at temperatures that are higher than safe levels for wildlife. For example, research conducted on the thermal tolerances of fish species impacted by San Onofre Nuclear Generating Station's Fish Return System found some species (spotfin croaker and barred sand bass) became stressed at higher temperatures (25–30°C).[17] Based on the graphs of the temperature measurements of the thermal plume,[18] it is clear that the South Bay Power Plant discharges water at temperatures in ranges that can stress fish. Continued exposure to such elevated temperatures will impose unnecessary stress to wildlife that comes into contact with the thermal plume from Units 1 and 2.

We recommend that the Staff Report be amended in the second paragraph of page 12 to state: "given the current temperature of the discharge and the uncertainties surrounding how much the closure of Units 3 and 4 have reduced the impacts to biota, we conclude that the discharge from the South Bay Power Plant represents an endangerment to the South Bay ecosystem."

C. The South Bay Power Plant Causes Turbidity that Endangers the South Bay Environment and Can Only Be Brought to Acceptable Levels by Terminating the Plant's Operations.

The Staff Report correctly acknowledges that "The distribution of particle sizes within soft sediment marine environments is a significant factor affecting the composition of infaunal assemblages, and the suspension of fine sediments by currents can increase turbidity thus decreasing light penetration through the water column and affect the growth of bottom vegetation. Although the SBPP discharge is not likely to cause increases in the amount of suspended material in the South Bay, it can influence the distribution of turbid water within the South Bay."[19] In that light, the Tenera Environmental report concluded that turbidity levels are indeed higher in the southeastern portion of the South Bay and that while the plant has a marginal impact on the *production* of turbidity, it does affect the *transport* of turbidity in the area south of the Chula Vista Wildlife Reserve.

Unfortunately, the Staff Report again misinterprets some key points when examining available data. The Staff Report relies on distribution maps of turbidity in the South Bay when discharge volume is at 601 mgd (full capacity) and 441 mgd (reduced capacity but not as low as that expected from closure of units 3 & 4). Staff jumps to the conclusion that "due to the reduced flow rate, turbidity effects are expected to be less than shown by the figure with flow at 441 mgd."[20] This conclusion is erroneous – although the turbidity distribution map does indicate that the total extent of turbidity is decreased for the 441 mgd flow, it appears that turbidity NTUs increase in the center of the distribution – approximately in the area that is currently devoid of eelgrass. Thus, it would appear that the reduced flow has concentrated the turbidity into one area of the Bay, which in turn may be actually increasing the threat to the resources. The only remedy for this situation would be to completely shut down the flow and thereby eliminate the turbidity caused by the discharge.

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[17] Miller, E. 2007. Post-Impingement Survival and Inferred Maximum Thermal Tolerances for Common Nearshore Marine Fish Species of Southern California. Bulletin, Southern California Academy of Sciences 106(3):193-207. 2007

[18] Staff Report at 18.

[19] Staff Report at 15.

[20] Staff Report at 18.

D. These Physical Changes to the Environment Have Endangered Eelgrass.

The above discussed physical factors are important because of the impact that they can have on the organisms that depend on this habitat. The South Bay is the most important area for eelgrass beds – a keystone habitat for the Bay. The changes that the South Bay Power Plant has caused to the physical environment of the South Bay have led to measurable negative impacts to the eelgrass beds in the South Bay and constitute "endangerment."

The Staff Report correctly acknowledges that the discharge plume has negatively affected the eelgrass beds in the area of the discharge channel due to turbidity and perhaps more significantly, because of temperature "In the area of the discharge channel nearest the South Bay Power Plant summer season discharge temperatures alone may limit the occurrence of eelgrass, and thus turbidity may not be a significant factor in structuring eelgrass habitat within these areas. Published scientific literature has shown that eelgrass suffers reduced growth at temperatures above 25-30 degrees C (86 F) and temperatures of 35 degrees C (95 F) or higher would contribute to direct mortality."[21] Yet despite the monitoring data that clearly demonstrates that temperatures are regularly elevated well into levels that would reduce growth and even above temperatures that would cause direct mortality, the Staff Report still concludes that there is no unacceptable risk to eelgrass. This conclusion is based on the presumption that the reduced flows will reduce the risk but acknowledges that they cannot quantify by how much. Thus staff has taken the least protective approach, one that cannot be justified given the importance of eelgrass to the overall health and resilience of the Bay.

We recommend that staff remove the following statement from page 18: "but is certainly less than the amount caused by flows of 601 MGD or 441 MGD", as it is not certain. We also recommend that Staff include language at page 19 (first paragraph) that states "Based upon the above evidence, we conclude that the continued discharge from the SBPP represents an endangerment to the South Bay ecosystem".

E. Endangerment is not equal across the year – there are seasonal impacts that must be considered.

Perhaps the most important omission of the Staff Report is that it assumes that because the South Bay Power Plant has been harming the South Bay for several decades, continued discharge until December will not make it worse.[22] In other words, staff has assumed that there are no factors to consider that make the next few months different from previous months. However, we know this is a false assumption. There are seasons where endangerment is significantly greater than others.

May through August is a period of time where larval fish concentrations are much higher than other times of the year. This pattern of increased larval numbers has been documented in Southern California.[23] The implications of this biological pattern are significant to the discussion of short-term endangerment, and one that is not mitigated by the closure of Units 3 and 4. In its Draft Final

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[21] Staff Report at 18.

[22] *See, e.g.* Staff Report at 15.

[23] Water Quality Control Policy On The Use Of Coastal And Estuarine Waters For Power Plant Cooling Draft Final Substitute Environmental Document, State Water Board at 55, *available at* http://www.swrcb.ca.gov/water_issues/programs/npdes/docs/cwa316may2010/otcpolicydraftfinal.pdf

Substitute Environmental Document for its Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling, the State Water Resources Control Board acknowledges:

> A facility's [capacity utilization rate] is not necessarily indicative of the impact it may have on the aquatic environment since the potential for harm is not equally distributed throughout the year, particularly for entrainment; spawning typically peaks in spring and early summer throughout the state....Data show, however, that it is possible to operate less that 15 percent of the time and cause a greater impact than would be assumed if entrainment was uniform at all times.[24]

In addition to potentially greater risk of higher entrainment during these critical months, these larval organisms (along with other organisms) will have to deal with the greater metabolic stress of higher temperature regime and lower oxygen profiles. Thus, the next few months represent a critical window for organisms in the South Bay.

Available data on the overall health of fish populations in the South Bay add a considerable degree of urgency to the short term threat faced by South Bay wildlife. A fisheries inventory of San Diego Bay[25] clearly indicates that species richness, total catch and total biomass of fish in the South Bay have been steadily decreasing since 1995.

F. The Staff Report Fails to Acknowledge the Known Unknowns.

The Staff Report fails to acknowledge that there is significant information that is lacking to fully understand the true extent of endangerment. As mentioned previously, the South Bay Power Plant has never been required to measure Biological Oxygen Demand (BOD), a critical indicator of biological impacts. Further, Dynegy has never been required to monitor for the potential harmful by-products of the chlorine discharged by the facility. Without monitoring data, Dynegy cannot continue to claim that the chlorine discharged by the plant is broken down into 'harmless ions'. Just because monitoring is not done, does not mean that the substances are not forming. We know from research in other areas that chlorine is known to break down, complex with other substances, and form new compounds, such as trihalomethanes and haloacetic acids, also known as disinfection by-products.[26] The chlorination by-products are toxic and can remain so for long periods[27]. However, the Staff Report does not address what we currently do not know about the impacts of the plant's discharge or incorporate that into the Staff Report's assessment of potential endangerment.

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[24] *See id.*

[25] Pondella, Daniel J., and J.P. Williams Fisheries Inventory And Utilization Of San Diego Bay, San Diego, California For Surveys Conducted In April And July 2008. February 2009. 74 pgs.

[26] *See* Jolley, R. L. 1975, "Chlorine-containing organic constituents in sewage effluents," *J. Water Poll. Control Fed*., Vol. 47, p. 601-618, as cited in Majewski and Miller, op cit., p. 22; *see also* Jenner, H.A., J. L. Taylor, M. van Donk, M. Khalanski. Chlorination by-products in chlorinated cooling water of some European coastal power stations. Marine Environmental Research Vol. 43, Issue 4, June 1997, pp. 279-293.

[27] Gehrs et al, 1974, "Effects of stable chlorine-containing organics on aquatic environments." *Nature,* Vol. 249, p. 675-676, as cited in Majewski and Miller, op cit., p. 22.

To accurately assess the true and continued impact of the continued discharge, these pieces of information must be known. If they are not known, staff should take the most protective stance and assume that the discharge is posing a current risk.

G. The Staff Report Misunderstands the Significance of the Lack of Appropriate Baseline.

The lack of appropriate background conditions by which to compare the impacts of the South Bay Power Plant has been and continues to be a significant flaw in all of the assessments of the South Bay Power Plant's impacts – this flaw is unfortunately carried through the Staff Report. The Staff Report argues that the discharge of sewage until 1963 and lack of adequate additional water quality data makes it difficult to establish a real 'baseline' by which to compare the South Bay Power Plant. The Staff Report further argues that the environmental reports have used "an accepted method of identifying reference stations for comparison with discharge stations."[28] However, the Staff Report does not recognize that previous studies still chose open water stations for comparison to the SBPP sites in areas that are known to be affected by the discharge[29], thus invalidating them as an appropriate comparison by which to measure the impacts of the discharge plume. The Staff Report does recognize that the inappropriate former location of the compliance point has resulted in effects "not being fully characterized in the portion of San Diego Bay between the property line and the old compliance point in the middle of the southeast portion of San Diego Bay."[30] Yet the Staff Report does not take the next step to state that we do not currently have an appropriate set of data for comparison to fully understand the true extent of harm caused by the South Bay Power Plant.

Throughout the Staff Report, there is a clear accumulation of facts that, if interpreted correctly, would lead directly to a conclusion that the South Bay Power Plant discharge is endangering the South Bay ecosystem.

II. The State Water Board's Once Through Cooling Policy May Negatively Impact the Regional Board's Ability to Protect the South Bay Environment by Terminating the South Bay Power Plant's Discharges.

On March 22, 2010, the State Water Quality Control Board issued a final draft policy on the use of coastal and estuarine waters for power plant cooling.[31] This new once-through-cooling policy (the "OTC" policy), if approved, will have significant negative impacts on this Board's ability to protect the South Bay environment from further degradation by the South Bay Power Plant.

If the OTC policy goes into effect as written, the Regional Board will no longer have control to determine, using best professional judgment, whether South Bay Power Plant is implementing the Best Technology Available, as the Clean Water Act requires. Once the OTC policy goes into effect, it sets out

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[28] Staff Report at 5.

[29] For example open water station 4, 5, 8 appear to be directly in the turbidity plume caused by the discharge (turbidity figure on pg 16 Staff Report).

[30] Staff Report at 6.

[31] *See* "Statewide Water Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling", available *at* http://www.swrcb.ca.gov/water_issues/programs/npdes/docs/cwa316may2010/otcpolicy_redline.pdf, hereinafter "OTC policy."

two different ways South Bay Power Plant could reduce impingement and entrainment impacts through technology-based or operational changes.[32] Neither Track 1 nor Track 2 reflects Best Technology Available because they allow a facility to reduce intake flow compared to the facility's design rate—not the facility's actual flow rate.[33] Further, facilities are free to elect either Track 1 or the less protective Track 2, without showing that the more protective Track 1 is infeasible. [34]

The OTC Policy also strips the Regional Board of its discretion in determining how soon the South Bay Power Plant must achieve necessary improvements. Instead, the policy mandates that South Bay Power Plant has until December 31, 2012 to reduce the plant's impingement and entrainment impacts.[35] However, the OTC policy gives CAISO discretion to unilaterally extend South Bay Power Plant's compliance date for up to 90 days if CAISO determines that continued operation of South Bay Power Plant is "necessary to maintain the reliability of the electric system in the short term."[36] CAISO could push back the compliance date by more than 90 days unless that State Water Board finds "compelling evidence not to follow a recommendation and makes a finding of overriding considerations."[37] The Regional Board would have no say in whether or not the compliance date gets extended, regardless of the negative impacts or endangerment to the environment that would occur during the extension. Further, the OTC policy mandates that any NPDES permit that the Regional Board issues for the South Bay Power Plant must contain a provision allowing CAISO to suspend the compliance date without reopening the permit.[38]

The most recent draft of the OTC policy is not only bad policy, but it violates the Clean Water Act and California law. Opponents of the policy in its current form have submitted a 40-page comment letter detailing the extensive problems with the policy that could lead to litigation if the policy is not fixed. The State Water Quality Control Board will be considering the draft policy on May 4, and, if approved, the policy would then move to the Office of Administrative Law and the Environmental Protection Agency. We sincerely hope that the policy will be fixed to restore the Regional Board's ability to protect water quality before the policy becomes effective.

Fortunately, this Board can, and must avoid the drawn out and uncertain OTC process in regard to the South Bay Power Plant. The Regional Board can retain the ability to protect the South Bay and to remove the South Bay Power Plant's impacts by terminating the South Bay Power Plant's discharge before the OTC policy goes into effect. As explained above, the South Bay Power Plant's discharges have endangered—and continue to endanger—the environment in the South Bay. If the Regional Board acts now, exercising its ability to terminate the discharge based on the current endangerment, as well as the additional harm the plant will cause during this year's larval season, it can ensure the termination of a harmful discharge regardless of how the OTC Policy resolves.

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[32] *See* OTC Policy at 4-6.
[33] *See* OTC Policy at 4-6.
[34] *See* OTC Policy at 4-6.
[35] *See* OTC Policy at 14, tbl 1.
[36] The extension could be stopped only if the Executive Directors of the California Energy Commission and the California Public Utilities Commission object to CAISO's written notification within 10 days. *See* OTC Policy at 6-7.
[37] OTC Policy at 7.
[38] *See* OTC Policy at 11.

III. The Regional Board Should Terminate the South Bay Power Plant's Discharge Before CAISO Begins its Process to Designate Facilities as Reliability—Must Run for 2011.

The Regional Board should terminate South Bay Power Plant's discharge by June 1 because the discharge is endangering the environment. This date would also avoid the possibility of South Bay Power Plant receiving another year of unnecessary "Reliability Must Run" designation.

Because the plant's discharge is endangering the environment, the Regional Board should terminate South Bay Power Plant's discharge permit before CAISO completes its analysis for determining Reliability Must Run for 2011, which will most likely occur in September 2010. This will ensure that CAISO does not include South Bay Power Plant in the list of available power sources for 2011. While the Regional Board has the power to terminate South Bay Power Plant's discharge permit even if CAISO designates the facility Reliability Must Run for 2011, there will be fewer complications if South Bay Power Plant is taken out of consideration for 2011 Reliability Must Run status before CAISO completes its 2011 analysis.

The Regional Board may terminate the South Bay Power Plant discharge before the end of the year without jeopardizing local power reliability because sufficient new power sources—96 MW from Orange Grove and 25 MW from Celerity—have become available. Further, CAISO's determination that the plant was necessary to ensure the reliability of the region's power supply was based on an inflated draft estimate of power needs that the California Energy Commission has since corrected and reduced. The California Energy Commission released corrected forecasts for the region in December 2009, reducing the 1-in-10 peak demand forecast by **160 MW** from the number CAISO used to make its RMR analysis for 2010. Further, the Reliability Must Run contract between CAISO and Dynegy also contemplates that the RMR contract could be terminated before the end of the year, and specifically sets out procedure for terminating the contract if any of the facility's permits are terminated.

But CAISO has not yet released Dynegy from its Reliability Must Run contract for the remainder of 2010 even though: ***1)*** at least 120 MW of additional power has become available in the region so far this year, ***2)*** CAISO used a number 160 MW greater than necessary to assure local power reliability when it completed its RMR analysis for 2010 and ***3)*** CAISO's current contract with Dynegy provides that it could terminate the plant's RMR designation prior to the end of the year.[39] While CAISO and Dynegy may have convinced the Regional Board last December that their plans were to shut down the South Bay Power Plant this year, neither has followed through with that plan. In fact, CAISO's testimony states that CAISO plans to continue forcing South Bay Power Plant to operate "at least through December 31, 2010."[40]

Even though CAISO itself initially touted to the Regional Board that its analysis was "simple math," when confronted with corrected "simple math," CAISO changed its tune, claiming that there are other reasons to keep South Bay Power Plant running through 2010 even though other power sources could replace it. Interestingly, CAISO never addressed the Coalition's point that its RMR designation for 2010 used an energy needs forecast 160 MW greater than the number California Energy Commission adopted in December 2009 for the region. Further, CAISO criticized the Coalition's simple math by saying that it

[39] *See* No More Power Plant Coalition Testimony from February 22, 2010 and March 3, 2010.
[40] *See* CAISO testimony, Prepared testimony of Dr. Ali Asraf Chowdhury February 22, 2010, A21.

included "resource additions that are not currently operational," without specifying which sources it thinks the Coalition got wrong.[41] On the contrary, the Coalition's "simple math" in its testimony included 573 MW from Otay, 94 MW from Pala/Orange Grove, and 25 MW from Celerity—all of which are currently available.[42] Because the South Bay Power Plant endangers the environment and stopping the plant's operations would not harm the region's power stability, the Regional Board should terminate the plant's discharges by June 1.

IV. To Provide Procedural Certainty, the Regional Board Should Deny Dynegy's Renewal Application as Moot.

The evidence shows that the South Bay Power Plant is endangering the South Bay environment and should be terminated by June 1. Staff has recommended that the discharge be allowed to continue to the earlier of December 31, 2010 or when CAISO removes the plant from Reliability Must Run status. If the Regional Board chooses not to terminate the discharge before December 31, 2010, it must take decisive action regarding Dynegy's renewal application to provide procedural certainty to all parties on a going-forward basis.

The Coalition strongly recommends that the Regional Board deny South Bay Power Plant's renewal application as moot. While Dynegy initially filed a renewal application seeking to discharge for the full 5-year permit term, Dynegy modified that request last October and now has only asked for permission to operate until December 31, 2010. Because the Regional Board has extended order R9-2004-0154 to expire on December 31, 2010, the Regional Board has effectively already granted Dynegy the relief that it seeks and the permit renewal application is moot because granting or denying the renewal application in its current form would have no effect.

However, the Regional Board must make clear in any adopted order that if Dynegy desires to operate after December 31, 2010, it must file a new, fully-supported renewal application to discharge within the appropriate timeframe. That application would need to include studies of the current levels of impingement and entrainment from Units 1 and 2 supported by actual data—not estimates based on prior data from when all four units were operating. Further, Dynegy could no longer rely on outdated studies from 2004 to justify operating the plant beyond the current permit term. It would need to submit new studies on the plant's impacts to eelgrass and impacts to temperature, dissolved oxygen, biological oxygen demand, and turbidity; all at the facility's existing compliance point.

If the Regional Board fails to act on Dynegy's renewal application or leaves the application active, Dynegy is free to seek an extension of the renewal application at any time. This means that on December 30, 2010, Dynegy could send a letter to the Regional Board asking for the application to be extended another year—or worse for another five years. The Regional Board could then continue to allow Dynegy to discharge under R9-2004-0154 or an "emergency order" until the Regional Board did the necessary work to issue Dynegy a new permit. In other words, without specific action to the contrary by the Regional Board, we could find ourselves in the very same position we were a year ago.

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[41] *See* CAISO Rebuttal Testimony, Mar. 3, 2010 at A4.

[42] *See* No More South Bay Power Plant Coalition Testimony, Feb. 22, 2010 at 30.

V. Conclusion

In light of the above, we urge the Board to terminate Dynegy's NPDES permit and Order R9-2004-00154 as of June 1, 2010 because the South Bay Power Plant is endangering the environment in South Bay and the only way to bring the impacts to an acceptable level is to stop operating the plant. The Coalition recommends that the Staff Report add the language suggested above to accurately reflect the negative impacts—that rise to the level of endangerment—that the South Bay Power Plant has had and will continue to have on the South Bay environment so long as the plant continues to operate.

Should the Regional Board choose to ignore the evidence that the South Bay Power Plant is endangering the environment in the South Bay and decide not to terminate the permit as of June 1, 2010, Order R9-2004-00154 will terminate upon its expiration on the earlier of December 31, 2010 or the date when CAISO releases Units 1 and 2 from "Reliability Must Run" status.

To provide all parties with procedural clarity on a going-forward basis, the Regional Board should act on Dynegy's renewal application, denying it as moot. Should the Regional Board not terminate the current discharge on June 1, 2010 as recommended, the Board should specifically state that if Dynegy seeks to discharge after R9-2004-00154 expires, Dynegy is required to submit a new, complete application to discharge, fully supported by new studies of the existing facility's impingement and entrainment impacts, impacts to eelgrass, and impacts to temperature, dissolved oxygen, biological oxygen demand, and turbidity; all at the facility's existing compliance point.

Sincerely,

Gabriel Solmer

Gabriel Solmer
Legal Director
San Diego Coastkeeper