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VIA FEDERAL EXPRESS

March 2, 2010

David W. Gibson
Executive Officer
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340

Re: Dynegy South Bay, LLC – Submittal of Rebuttal Evidence in Support of Continuation of Operations – South Bay Power Plant – NPDES Permit No. CA 0001368

Dear Mr. Gibson:

Dynegy South Bay, LLC ("Dynegy") hereby submits further evidence to rebut the assertions contained in the evidentiary submittals made by the No More Power Plant Coalition ("Coalition") and the City of Chula Vista.

As a general matter, Dynegy submits that neither the Coalition's nor the City's submittals contains substantial evidence of any water quality effects attributable to SBPP that are of sufficient magnitude or severity to necessitate or legally support rescission of the plant's NPDES permit. In fact, many of the reports cited in the Coalition's submittal, including those authored by Dr. Richard Ford, acknowledge the continuing vibrancy of the south San Diego Bay ecosystem, as studied over the past 40 years. Dr. Ford himself concluded that after 35 years of power plant operation, conditions in south San Diego Bay today are likely comparable to those that existed over 100 years ago. None of these reports describes an ecosystem that is declining in productivity, or showing signs of ecological stress or loss of marine habitat or species. The Coalition does not cite to any fish or human health advisories that are in effect for south San Diego Bay, and our own research shows that there are none.

While some alternation in the frequency and abundance of certain bottom-dwelling organisms has been documented in the near-field of the discharge channel during

summer months, the most recent scientific study of benthic conditions in this area (Tenera 2004a) confirms that the impacts are limited in scope and do not represent a significant ecological loss. According to Tenera, the "balanced indigenous community" standard of Clean Water Act Section 316(a) is being met, notwithstanding the conclusion in Finding 14 to the contrary. This study was based on data collected from a large number of sampling stations over a period of two years. Similarly, impingement and entrainment losses were quantified and evaluated in accordance with widely accepted scientific principles and approved sampling methodologies (Tenera 2004b).[1] While Duke Energy was required to begin the process of identifying a strategy for complying with the new federal Phase II BTA requirements,[2] the Water Board voted to renew the SBPP's permit in 2004, taking into consideration Tenera's conclusions about the impacts of the plant's cooling water intake. Today, with the permanent retirement of Units 3 and 4, these impacts are very significantly reduced from 2004 levels and do not warrant premature shutdown of the plant.

Upon careful reading, the Coalition's submittal reveals a largely generic discussion of the impacts of once-through cooling, coupled with speculation about site-specific effects that are alleged to be occurring in south San Diego Bay. In the absence of any actual evidence of significant ecological harm or degradation of beneficial uses of San Diego Bay, the Coalition resorts to odd and unfounded legal theories to discredit the existing scientific evidence which demonstrates that continued operation of the SBPP, in accordance with the terms and conditions of its NPDES permit, does not unreasonably affect beneficial uses of the bay. The scientific conclusions reached by Tenera Environmental in its 2004 Section 316(a) and 316(b) studies, as updated for purposes of the March 10 hearing, are accurate and reliable and confirm there is no legitimate basis for terminating the plant's NPDES permit prior to expiration of the plant's RMR status.

The balance of this letter addresses specific arguments and assertions made by the Coalition or by the City.

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[1] The Coalition's assertion that "the theory of 'Surplus Production' has been conclusively rejected" is false. "Surplus production" (most often referred to as "compensatory reserve") is an extremely well documented occurrence in fish populations and provides the foundation for fisheries management worldwide.

[2] The Clean Water Act section 316(b) regulations were in effect in 2004, but have since been vacated. At present, BTA determinations for existing facilities are based on Best Professional Judgment.

The Absence of "Baseline" Studies

The Coalition claims that because the first ecological studies of south San Diego Bay were conducted after the SBPP commenced operation, they are irrelevant and unreliable as a basis for assessing the plant's current impacts on the bay. This argument is nothing more than a contrived and convenient means of sweeping aside the large body of relevant scientific work which demonstrates the plant has not had an appreciable adverse affect on south San Diego Bay. As explained by Tenera in the attached Rebuttal Technical Memorandum, these existing studies are indeed relevant to understanding and assessing the ecological significance of the plant's effects, and confirm there is no basis for rescinding the plant's NPDES permit. See Attachments 1-16 (technical memo with attached technical references).

Moreover, as a matter of simple logic, if the existing studies were set aside as urged by the Coalition, there would be nothing left for the Water Board to consider other than the general discussions of once-through cooling referenced in their letter. The Coalition has not conducted any site-specific studies of SBPP, and has offered no other evidentiary basis for evaluating the ecological significance of impingement, entrainment and thermal effects associated with SBPP. The Coalition's position can be reduced to a simple, but erroneous, proposition, i.e., that an NPDES permit may be rescinded solely because the facility utilizes once-through cooling. There is no support for this proposition in the law, and the Water Board cannot meet its burden of proof on the basis of these generalities.

The Coalition goes even farther and claims that Dynegy – as the operator of the plant for three of the plant's 50-year history – should be required to restore south San Diego Bay to its pristine, pre-industrial condition, including removal of contaminated sediments they claim are present in the discharge channel.[3] As an initial matter, the Notice of Public Hearing for this matter does not call for the submittal of evidence on the issue of mitigation and restoration of the bay. This issue lies outside the scope of the March 10 hearing and, in fact, will be reviewed in the context of the CEQA process for the plant demolition.

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[3] The Coalition's assertion that Tenera's 2004 studies are "obsolete" in light of the State Water Resources Control Board's subsequent adoption of the Phase I Sediment Quality Objectives is baseless. See, Coalition letter, p. 27. Tenera studied the thermal effects of the plant's discharge on the benthic community; it did not conduct chemical analysis of sediments in the discharge channel.

Moreover, there is nothing in the Clean Water Act or the Water Code that requires restoration of south San Diego Bay to some higher water quality that may (or may not) have existed prior to the construction of the power plant. SBPP operations pre-date the Clean Water Act by over a decade. In this circumstance, the law prohibits degradation of "existing uses," defined as uses that were actually being achieved in the water body as of November 28, 1975. See 33 CFR § 131.3(e). Because IND (Industrial Service Supply) was an existing beneficial use of San Diego Bay in 1975, the water quality necessary to maintain this use (and other existing beneficial uses) must be protected. 33 CFR § 131.12(a). However, this basic anti-degradation principle cannot be extended conversely to require restoration of a water body to pre-1960 conditions.

Tossing out years of valid scientific study, the Coalition asserts that "any conclusions regarding impacts of the discharge on water quality and beneficial uses are speculative at best."[4] Dynegy adamantly disagrees with this position. However, even if it were true, then by the Coalition's own admission, there is no factual basis for concluding that present-day conditions are any different than those that existed in 1975 or even in 1960. The Water Board cannot make a decision based on speculation. For that reason alone (and apart from the obvious inequities of imposing any restoration or mitigation obligation of this magnitude on Dynegy), the Water Board has no authority to terminate SBPP's permit or to require Dynegy to restore the bay to some unknown baseline condition.

Classification of the Discharge Channel

The Coalition also discounts the relevance of the existing studies of the bay, claiming that "45 years of regulation and study were fundamentally flawed" due to the classification of the discharge channel as part of the plant, rather than as "waters of the United States."[5] This is just a variation on the Coalition's first argument, and is equally specious. In any event, the most recent thermal study conducted at the plant (Tenera 2004a) evaluated the entirety of the discharge channel, beginning at the property line and extending into the bay beyond the point where any thermal plume can be identified. Observable impacts to the benthic community were determined to

[4] See Coalition submittal, p. 4.

[5] Id., at p. 6.

be limited to the first 600 feet of the intertidal zone and 300 feet of the subtidal zone. Thus, even if there were some basis for criticizing past studies, the full scope and extent of the effects associated with the plant's discharge as of 2004, at a flow rate of 601 MGD, are now well understood and are of minimal ecological significance. These effects are even further reduced as a result of the retirement of Units 3 and 4 (Tenera 2010). Dynegy maintains that the results of the 2004 study validate the results of the earlier studies, and successfully refute the Coalition's arguments.

As indicated in Dynegy's February 22 submittal, the compliance monitoring point for all effluent parameters, including temperature, is now located at the property line (Station S2). This was done for the express purpose of providing a higher degree of protection to the waters in the near-field of the discharge. The Coalition's accusation that the lack of significant thermal impacts is "really just manipulation of where 'compliance' was monitored" is completely unfounded and highly disrespectful of the Water Board staff's professional regulation and oversight of the plant's operations. The fact of the matter is that Dynegy has not experienced any violation of its temperature limits at S2, and there is no basis for terminating the discharge on the basis of thermal effects.

It should not be forgotten that the plant's intake and discharge channels were originally created from dry land, east of the historical shoreline. The aerial photographs taken during the construction of the plant show the original shoreline and confirm there was no bay water in this area. See Attachment 17. The channels were excavated and the bridges were built, and then the channels were opened up to the bay. In other words, the benthic environment that is now the focus of Section 316(a) was originally upland property, completely dry and devoid of any benthic organisms. In effect, the plant's discharge channel created new benthic environment, which has been populated over time by species that are able to live in the warmer waters present in the near-field of the discharge.

Alleged Toxicity of the Discharge

With the sole exception of copper, which is discharged at levels below the applicable water quality objectives established by the California Toxics Rule, SBPP has not discharged "toxic pollutants" since 1997 when all in-plant wastes were eliminated from the discharge. The plant's effluent does not exhibit toxicity for copper, chlorine, or any other pollutant. While chlorine is used to control biofouling (as is typical in the industry), the permit very strictly limits the level of residual chlorine in the discharge. Actual chlorine usage in 2010 averages 12.1 lbs/day, in contrast to the 42 lbs/day referenced in the Coalition's letter. Moreover, at the urging of the Environmental Health Coalition in 2004, the frequency of chlorine monitoring was

increased from twice per month to once per week (the Coalition's submittal omits any reference to the increase in monitoring frequency). In short, there is no merit to the Coalition's assertions regarding toxicity of the discharge.

Dissolved Oxygen Limits

Similarly, there is no merit to the Coalition's claim that the plant's thermal discharge is largely responsible for low dissolved oxygen levels in the south bay. The NPDES permit for SBPP does not contain a numeric limit for dissolved oxygen because the Water Board has never adopted a numeric water quality objective for San Diego Bay (an enclosed bay). The Water Board is well aware that, under natural conditions, San Diego Bay (especially south San Diego Bay) -- as well as other enclosed bays in the San Diego Region -- cannot meet the numeric dissolved oxygen objectives applicable to inland surface waters or marine waters, even if those objectives were wrongly applied to them. For this reason, the Water Board determined that imposition of unrealistic and unachievable limits based on those objectives would be unreasonable. Comments submitted in 2003 by Dr. Ford advocating the imposition of dissolved oxygen limits in the SBPP permit were previously considered and rejected by the Water Board, and provide no support for the proposition that the plant's permit should now be terminated for this reason.

Temperature Limits

The Coalition asserts on page 16 of its letter that "Units 1 and 2 will continue not to comply with the protective Thermal Plan standards that would apply if they were not exempted." This almost nonsensical assertion suggests that Units 1 and 2 should be regulated as if they were new units under the Thermal Plan, which they are not. Units 1 and 2 are existing units and therefore are exempt from the numeric temperature limits in the Thermal Plan. The Coalition's tortured syntax does not change the laws, and the fact that the plant does not comply with an inapplicable regulation is irrelevant.

The Coalition raises the absence of a maximum temperature limit in the plant's permit as another reason to terminate the permit, noting that in the past, the temperature of the discharge has sometimes exceeded 100 degrees and could be as high as 107 degrees. To support this argument, they claim the plant has adversely affected the number and distribution of juvenile halibut (*Paralichthys californicus*) in the bay, noting much greater fish densities in Mission Bay.

The plant's temperature limits are established on a "delta T" basis because the plant has no control over the temperature of the ambient water entering the plant and has no

means of reducing the temperature of the discharge to compensate for excessive ambient temperatures of the intake except by reducing load. The discharge temperature that might be reached by the plant on any given day, under any particular operating scenario, is not of concern so long as the plant does not exceed its permit limits and a balanced indigenous community is maintained in the receiving waters.[6]

The shallow waters of south San Diego Bay can reach 85 degrees in the summer, unrelated to the plant's discharge. Assuming *arguendo* that "settlement of halibut has been found to decrease rapidly above 22 degrees C (72 degrees F)" (see Coalition letter, p. 17), it would appear that lower halibut density in San Diego Bay is an entirely natural phenomenon and would not change even if the plant were not operating. The Coalition has not provided any evidence that juvenile halibut are avoiding south San Diego Bay because of the plant's thermal discharge. To the contrary, Tenera has found no alteration of fish populations attributable to the discharge. Tenera 2004a.

Air Quality Impacts

The City of Chula Vista claims that air pollutants from SBPP "which settles on area streets, residences and businesses . . . and ultimately works its way into the bay, as a result of contaminated urban runoff" provide an additional grounds upon which the Water Board should terminate the plant's NPDES permit. See City letter, pp. 5-6. This argument is utterly devoid of factual or legal merit.

First, the plant's air emissions are irrelevant to a determination whether the NPDES permit should be terminated based on the criteria set forth in 40 CFR § 122.64(a). The Water Board has no authority to terminate an NPDES permit based in any manner on emissions to the atmosphere. Second, no modeling studies have been conducted to demonstrate that aerial deposition of plant emissions is in fact occurring in the vicinity of the plant or adversely affecting water quality.

Third, the emissions data contained in the City's letter does not even relate to the SBPP. The City obtained its information from Duke Energy's 2006 Application for Certification for a new power plant that was proposed to be built near the site of the

[6] The permit also contains a provision that allows the plant to seek a variance from the permit limits under certain emergency conditions. This procedure has been invoked on only one occasion.

current plant. The emissions in the AFC were the projected emissions for the new plant, not those of the current plant. As reported in the emission inventory prepared by the San Diego County Air Pollution Control District ("APCD"), SBPP NOx emissions in 2008 were 60.6 tons (with all 4 units running). NOx emissions for 2009 were approximately half that, at 34.8 tons (with all 4 units running). Now, with only Units 1 and 2 operating, NOx emissions for 2010 are projected to be even less than in 2009. These actual emission figures have no relationship to the emission estimates for the new (and different) power plant referenced in the City's letter.

Environmental Justice Considerations

While the Coalition and the City concede that the Water Board's sole function is to protect water quality, they both include in their evidentiary submissions vague assertions to the effect that SBPP should be eliminated as a matter of economics and environmental justice. Were the Water Board to rest any aspect of a decision in this matter on the past, present, or future economics or demographics of Chula Vista or any other portion of the San Diego area, its actions would be unlawful.

There have been many federal and California agency initiatives under the "environmental justice" heading in recent years. In the broadest sense, this term refers to the fair treatment of all communities with respect to environmental benefits and burdens. The primary focus of the environmental justice movement has been on governmental enforcement priorities and governmental approvals over the siting of new energy, industrial, and waste disposal facilities. Carefully considered efforts by government agencies to identify disproportionate environmental impacts on disadvantaged communities, and to devise sensible, appropriate, and legally authorized solutions to these problems, are commendable.

The same cannot be said when this important cause is co-opted and misused in a political way to try to bring about a result that is patently contrary to law. Here, the City and the Coalition are waving the environmental justice flag, seeking to have the Water Board invoke environmental justice principles as a master land use planning tool, effectively rezoning the area and paving the way for upscale commercial development.[7]

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[7] In a different section of its submission, the City refers to "public nuisance" law as if the plant could be eliminated on this basis. This is clearly not the case. The City completely ignores the fairness

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The City and Coalition seem to argue that because the plant is located in an area where the percentage of low income, minority residents has risen over time, the plant's operations should be terminated. No attempt at all was made to demonstrate that the NPDES permitted activities of the plant have any direct, or even indirect, adverse affects on Chula Vista residents, or that the plant's effects somehow fall disproportionately on the minority community in Chula Vista. The Coalition's suggestion that local subsistence fishermen and their families are adversely affected by the plant's discharge, through consumption of locally caught fish, is contradicted by the lack of any fish advisories in the bay.

Lacking actual evidence of any disproportionate burden, the Coalition implies that SBPP was part of an "an explosion of power plant construction" that occurred in the wake "of the alleged energy crisis" in 2001, disproportionately affecting low income, minority communities. Obviously, this is not the case, given that SBPP was constructed in 1960. Moreover, at the time the plant was built, the population of Chula Vista was just over 42,000, approximately one-fifth of what it is now and with a lower percentage of low income, minority residents than currently.[8]

The City argues it "should be looking to the future and its need to develop housing within its region, without the specter of an aged, dirty power plant looming over the bay front."[9] This is an economic, land use issue, not an environmental justice issue.

In apparent contradiction to the "housing" argument, the City emphasizes Gaylord Entertainment Company's plan "to deliver a world-class hotel convention center resort at the Chula Vista bayfront," as if this somehow supports their claims of environmental injustice. In a candid expression of its economic self-interest, Gaylord emphasizes that the power plant "would negatively impact the guest experience at our hotel" and that the plant is "an eyesore" that would impede the development of "the bayfront into a destination attraction that is unrivalled on the West Coast." The

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considerations traditionally expressed in nuisance doctrine through the "coming to the nuisance" concept.

[8] City of Chula Vista General Plan (available on the City's website).

[9] City letter, p. 7. Dynegy also notes that the City's letter is rife with error and reflects a fundamental misunderstanding of the applicable facts and regulations relating to extension or renewal of the permit.

Coalition echoes this view, stating that "tourism and recreation are also great assets and economic generators for local economies." Again, these purely economic, land use considerations are not environmental justice issues, much less water quality issues.

Even putting aside the fact that the Water Board has no authority to base its decision on land use considerations, it would be unprecedented for an agency to compel the elimination of a lawful business that has been in operation for 50 years on the grounds of environmental justice concerns (even if there were a legitimate showing of such concerns, which is absent here). If this were done, virtually any community with a substantial low income and/or minority population could claim that existing power, industrial, commercial, sewage treatment, or waste disposal facilities must be eliminated to make way for more attractive uses. The environmental justice movement itself does not advocate this extreme position, and it finds no support in either Cal/EPA's Intra-Agency Environmental Justice Strategy or California law.

Finally, as reflected by evidence already in the record, the planning process associated with the demolition of the plant is ongoing and will take at least two or more years to complete, given the number of agencies involved, the number of permits that must be obtained, and the complexity of the CEQA process. Shutdown of the plant now would not lead to its immediate demolition. Thus, even if the City's economic interests were relevant to this proceeding, they will not be impeded in "looking to the future" by a decision to allow RMR units at the plant to continue operating pending completion of the demolition planning and approval process.

Grid Reliability Issues

Dynegy believes the CAISO is best suited to respond to the Coalition's claims relating to the sufficiency and reliability of energy supplies in the San Diego region. Suffice to say that Dynegy disputes the Coalition's assertion that SBPP is no longer necessary for grid reliability. The Coalition lacks any foundation or expertise to "second-guess" the CAISO's RMR determination for SBPP.

Ironically, the Coalition has moderated its position and is now calling for the termination of the plant's discharge by October 1, 2010, only three months before the permit will expire, absent further action by the Board. Previously, the Coalition advocated shutdown of the plant by March 1. Similarly, the City urges the Water Board to terminate the plant's permit "no later than December 31, 2010," essentially allowing the plant to operate for the balance of the current permit term. By any reasonable measure, any water quality effects resulting from plant operations during

the period October 1-December 31, 2010 will be truly *de minimis*, and clearly cannot justify shutdown of the plant.

Quite obviously, the Coalition's and City's real objective in this proceeding is to preempt the CAISO and foreclose any operation of the plant after December 31, 2010. However, both parties acknowledge that Dynegy is entitled to apply for renewal of its NPDES permit if the CAISO designates Units 1 and 2 as RMR for calendar year 2011 and/or 2012. They also acknowledge that the Water Board cannot preclude Dynegy from submitting an application for renewal.[10] Any Board action on an application for post-2010 operations may only be taken after the application has been submitted. The Water Board has no authority to deny a permit for future operations when a permit application seeking authorization for such operations has not even been submitted.

Conclusion

For all of the foregoing reasons, and for those set forth in Dynegy's February 22 submittal, Dynegy respectfully submits there is no factual or legal basis for termination of the plant's NPDES permit prior to December 31, 2010, or prior to the CAISO's release of Units 1 and 2 from RMR status.

Thank you for your consideration of this submittal.

Very truly yours,

Margaret Rosegay

Attachments 1-17

[10] See, e.g., Coalition letter, at p. 27; City letter, at p. 3. Mr. Randy Hickok previously testified that Dynegy is required under its contract with the CAISO to submit any application that is needed to maintain SBPP's ability to operate as long as one or more units are designated as RMR.

cc: Andrew Ulmer, Esq., CAISO
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