

# Environmental Health Coalition

COALICION de SALUD AMBIENTAL

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May 2, 2007

Secretary Linda Adams  
California Environmental Protection Agency  
1001 I Street  
Sacramento, CA 95812

Chairman Robert J. Sawyer  
Air Resources Board  
1001 I Street  
Sacramento, CA 95812

## RE: ENVIRONMENTAL HEALTH COALITION COMMENTS ON AB32 EARLY ACTIONS

Dear Secretary Adams and Chairman Sawyer:

Environmental Health Coalition is a 27-year old environmental justice organization working to protect public health in the environment in the San Diego/Tijuana region. EHC serves on the AB32 Environmental Justice Advisory Committee and as a member has a keen interest in the early action measures adopted by the Air Resources Board (ARB). We are hopeful about the promise they provide to help alleviate some of the worst sources of air pollution that often impact our environmental justice neighborhoods and to arrest the devastating impacts of global climate change.

EHC testified at the second Early Actions workshop in order to alert the ARB to a major source of greenhouse gases that need action early attention. According to the CEC, aging power plants constitute 22 million tons a year of CO<sub>2</sub> or 6% of the state's global climate change emissions<sup>1</sup>. These aging power plants such as South Bay Power Plant in Chula Vista on San Diego Bay are begging for an early regulatory action from ARB to reduce greenhouse gases and improve community health and to set us on a new path to meet our energy needs. These old plants need to be phased out.

To understand our position, some background may be helpful. For over 40 years the community downwind of the SBPP has endured the burden of a facility that serves the

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<sup>1</sup> Resource, Reliability and Environmental Concerns of Aging Power Plant Operations and Retirement, Draft Staff White Paper, CEC, August 13, 2004, 100-04-005D, Table 6-2, p. 74

energy needs of a broader region. The downwind community suffering the impacts is 77% Latino and 21% of the residents closest to the plant live below the federal poverty level. The presence of the SBPP has frustrated attempts for economic development in our South Bay region for decades. Too expensive and inefficient to be used as a baseload plant, it continues to operate as a large peaking plant.

While we understand that rules developed under SB1368 did address some interim ghg measures for baseload power plants seeking long-term contracts, there are significant old polluters falling through the cracks. In the case of SBPP, the power plant, constructed in 1960, has heat rates in some units as high as 12,000 (btu/kwh) and is a major polluter of our community.

But, since the SBPP does not have a long-term contract of 5 years or more, it is not covered under SB 1368. In spite of virtually unanimous community and elected official support for getting rid of the power plant, it appears that the current rules and regulations continue to conspire against our local and global interests and threaten to keep the plant operating-or available to operate-into the future. To avoid this continued reliance on it, we need a phase out plan by 2010.

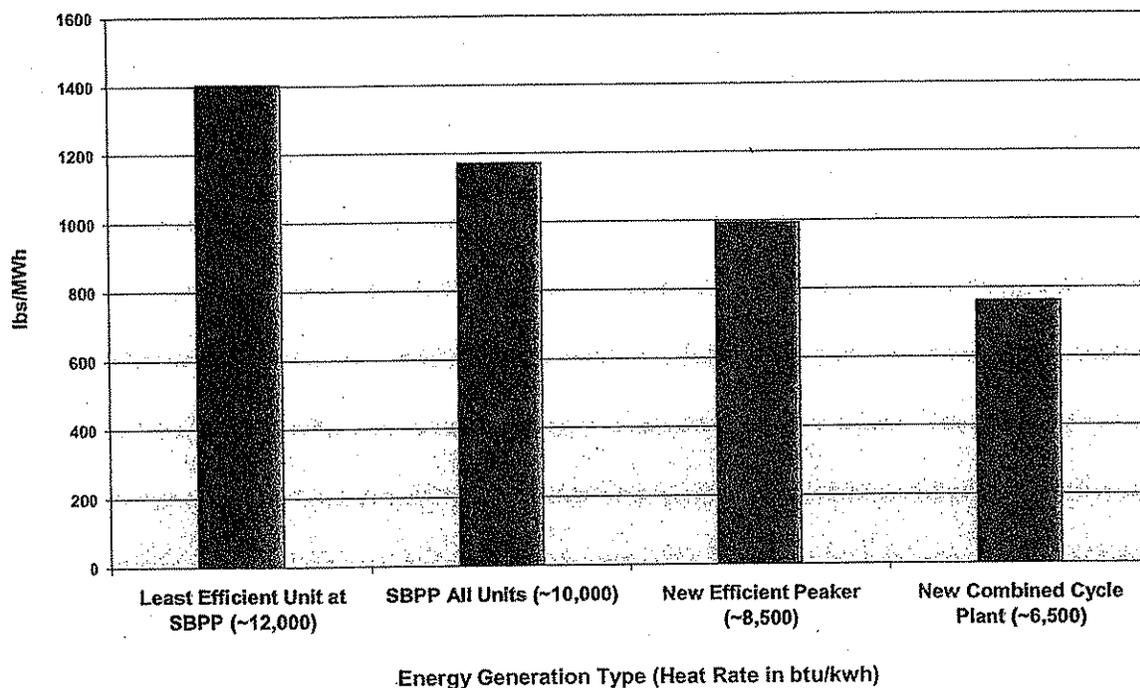
We believe that there are two primary reasons that this plant may continue to exist in our community, **even if we build replacement generation**. The first is the continued RMR designation by ISO and the second is the ability of some of this old plant to burn fuel oil in addition to natural gas, or its 'dual fuel' capability.

We wish to stress the point that this highly inefficient, greenhouse gas emitting plant is in danger of remaining available for use even if replacement generation is constructed. We have two of these obsolete power plants and even though we have brought over 700 MW of new generation on-line in the last few years, not one MW of RMR has been removed from the old plants. Even though another 560 MW base load power plant, Otay Mesa Generating Station, is permitted, contracted and will go on -line in 2009, ISO will not commit to reductions in RMR on the old SBPP.

An Early Action measure by ARB is necessary to improve and reduce emissions of these plants and set them on a clear course for phase out. As part of AB 32, ARB is responsible for developing early actions to reduce greenhouse gas emissions and we think these plants are good candidates. Today we are offering a set of three proposals for these Early Actions we are requesting CARB to adopt that we believe will result in significant CO<sub>2</sub> reductions consistent with the protection of community health. Like the Department of Water Resources proposed cancellation of the Reid-Gardener coal-fired power plant contract, these actions will accomplish the desired phase out of the oldest power plants by 2010.

Our first proposal, recommends establishing a permitting system to limit, and gradually phase out, the emission of carbon dioxide by plants rated over 100 MW and built prior to 1980. Regulating and reducing carbon dioxide (CO<sub>2</sub>) emissions through this permit system is consistent with ARB responsibilities under AB 32 and ARB is the right agency to do it. Under our concept, these plants would be given until 2010 to bring their emissions down to a level equivalent to the 2007 cleanest combined cycle plant operating at a heat rate of around 6500<sup>2</sup>. There would be a scaled and planned annual reduction in the limit between 2007 and 2010. If the plant could not meet the interim and final limits, it would have to stop operating. Below, you can see the reductions in CO<sub>2</sub> that could be achieved just at the SBPP.

CO<sub>2</sub> Emissions per Megawatt Hour from the Aging South Bay Power Plant (SBPP)  
Compared to New Power Plants



Sources: Heat rate of the South Bay Power Plant from CA Energy Commission *Resource, Reliability, and Environmental Concerns of Aging Power Plants* August 13, 2004 100-01-005D. Heat rates for new generation from General Electric Gas Turbine and Combined Cycle Products Brochure. New efficient peaker assumed to use LM 6000 turbines. New CC plant assumed to use FA class turbines.

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Our second proposal is that CARB prohibit the burning of fuel oil by base load plants over 100 MW and built before 1980. The burning of fuel oil greatly increases the health risks and pollutant loading from a power plant in the downwind community.

Our third proposal is preventative in nature and has to do with the fact that many of the new power plant proposals that have come forward with the inclusion of duct-firing. . While duct-firing makes more money for the plant owner in the peak periods

<sup>2</sup> New efficient combined cycle assumed to use FA class turbines.

when the peaking capability is used, it creates a less efficient power plant overall. It makes common sense that we should strive to make our base load generation as efficient as possible and duct-firing reduces efficiency in plants. So, we also suggest that ARB prohibit duct-firing on large base load plants over a certain size as an early action. If peaking capacity is needed in that location, we believe that it is a more efficient use of resources to construct a peaker in the same location.

ARB has the authority and responsibility to do this. These old power plants were never originally permitted by CEC. They are currently permitted by the state air permitting structure. Further, the Supreme Court recently ruled that you have the ability to regulate this air pollutant in our state. In *Massachusetts v. EPA* (2007), the court found that a state had the right to go to court to force the federal government to act on global warming and that the federal government, acting through the EPA has appeared to have "abdicated its responsibility under the Clean Air Act to regulate [greenhouse gas emissions]."

Therefore, in light of the court's decision, it is appropriate for the states to act and no longer depend on the federal government to fight this battle for us. It is imperative for ARB, as the air pollution control authority of the California state government, do its part to fight global warming through eliminating inefficient sources of greenhouse gas emissions. These old power plants are the perfect place to start.

We fully understand and agree that the energy these aging units generate needs to be replaced, but we have more options now. It is no longer pie-in-the-sky to look to cleaner, more sustainable ways to replace this old climate changing energy production. EHC recently released a report by Local Power on the feasibility of replacing the energy from the South Bay Power Plant with cleaner energy sources. Such options would significantly reduce pollution as much as 80%, improve air quality, create more jobs and provide energy that is more secure for the region. Other means, such as upgrades to the existing transmission grid, potential to use landfill methane to 'firm up' renewable generation, fuel cell and solar tracking peakers, and appropriately sited, efficient natural gas generation can all be part of the solution.

But first, we must stop the reliance on the use of the most inefficient use of natural gas to meet our peak demand which is happening now. We need ARB's help to press for more efficient and non-climate warming means to meet our peak and maximizing energy efficiency as a way to reduce the peak demand. Again, a 50- year old power plant should not be what we rely on beyond 2010.

We encourage the ARB to think of these recommendations as the basis of a paradigm shift. We will never get serious about cleaner more secure energy options as

## **Environmental Health Coalition CARB Early Actions Proposals for Aging Power Plants**

Based on AB 32, the California Air Resources Board is responsible for developing early actions to reduce greenhouse gas emissions. The following are a set of three proposals for these early actions EHC is requesting CARB to adopt. We believe these will result in significant CO<sub>2</sub> reductions consistent with the protection of community health.

### **1) CARB shall establish the Early Action Carbon Dioxide Permit system for aging power plants.**

- a. CARB will be responsible for the issuance of permits limiting the emission of carbon dioxide by electricity generating power plants rated over 100 megawatts and built prior to 1980 for the purposes of regulating and reducing carbon dioxide (CO<sub>2</sub>) emissions as stated in AB 32.
- b. In granting CO<sub>2</sub> permits for power plants, CARB must establish emission limits for CO<sub>2</sub> based on estimated CO<sub>2</sub> emissions per megawatt hour from state of the art natural gas turbine power plant built in CA in the year 2007.
- c. By 2010, all power plants of 100 megawatts or more must emit no more carbon dioxide per megawatt hour than the most efficient 2007 natural gas fired power plant of 100 megawatts or more.
  - i. Power plants that fail to meet that standard in 2010 would not receive a Carbon Dioxide Permit from CARB.
  - ii. No power plant of 100 megawatts or more would be allowed to operate in California without a Carbon Dioxide Permit from CARB.
- d. During the years between the adoption of this Early Action Carbon Dioxide Permit system and the enforcement of the 2010 standard the affected power plants are expected to decrease their carbon dioxide emissions in preparation for the establishment of final carbon dioxide standards in 2010 in the following manner:
  - i. In 2007, the power plants may emit carbon dioxide equal to their 2006 levels.
  - ii. In 2008, the power plants are required to emit at least 1/3 less CO<sub>2</sub> than the difference between their 2007 CO<sub>2</sub> emissions and the 2010 standard.
  - iii. In 2009, the power plants is required to emit at least 2/3 less CO<sub>2</sub> than the difference between their 2007 CO<sub>2</sub> emissions and the 2010 standard.
  - iv. The 2010, the power plants' carbon dioxide emissions must be equal to or less than the carbon dioxide emissions per megawatt hour of California's most efficient power plants built in 2007 that are rated of 100 megawatts or more estimated to be operating at 6,500 btu/kwh.
- e. CARB must communicate to California Independent Systems Operator (CAISO) that CARB will not allow any waiver or exception of these standards.
  - i. CAISO will be alerted that it may not use Reliability Must Run (RMR) designations in order to keep power plants that are not conforming to the carbon dioxide standards as stated above and as consistent with current ISO policy of requiring compliance with environmental rules.
  - ii. CARB's granting and revocation of Carbon Dioxide permits shall not be affected by any CAISO designation of the affected power plants at any time.

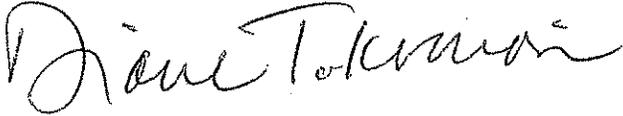
### **2) The prohibition of fuel oil burning by base load electricity generating plants over 100 MW and built before 1980.**

### **3) The prohibition of duct-firing of base load electricity generating plants in California.**

long as we continue to rely on these old polluters. They served us well, but their time is up. We are asking you to take early action to put us on a new path.

Thank you for your attention to this issue and your consideration of our request. Please contact me or Laura Hunter with any questions at (619) 474-0220.

Sincerely,

A handwritten signature in cursive script, appearing to read "Diane Takvorian". The signature is written in black ink and is positioned below the word "Sincerely,".

Diane Takvorian, Executive Director, Environmental Health Coalition  
Member, AB32 Environmental Justice Advisory Committee