

DOCKETED

Docket Number:	12-AFC-02
Project Title:	Huntington Beach Energy Project
TN #:	201168
Document Title:	Monica Rudman Comments: Comments on Huntington Beach Energy Project Preliminary Staff Assesment
Description:	N/A
Filer:	System
Organization:	Monica Rudman
Submitter Role:	Public
Submission Date:	11/12/2013 2:46:04 PM
Docketed Date:	11/12/2013

Comment Received From: Monica Rudman

Submitted On: 11/12/2013

Docket Number: 12-AFC-02

Comments on Huntington Beach Energy Project Preliminary Staff Assessment

Additional submitted attachment is included below.

November 10, 2013

Felicia Miller
California Energy Commission
1516 Ninth Street
Sacramento California 95814

Dear Ms Miller:

I am submitting this comment letter in response to the Energy Commission staff releasing a Preliminary Staff Assessment (PSA) on the Huntington Beach Energy Project (HBEP).

Huntington Beach has a long history of being an important location for the production of energy supplies. Since the early twentieth century, the city was known for its oil reserves and active oil wells. In the late 1950's, the Huntington Beach Generation Station (HBGS) was built using the ocean as an abundant source of cooling water. Starting in the late 1960's, when many of the oil wells became uneconomical, the oil companies capped the wells and sold the land to real estate developers. New, affordably-priced homes sprouted up almost overnight. In the 1970's, during this housing boom, my parents bought a home. This home, that happens to be located about a mile downwind from the HBGS, is where my mother still lives. So I have strong connection to Huntington Beach. As does almost every Huntington Beach resident that I know, my family and I felt incredibly fortunate to have the opportunity to live a mile from the beach in such a lovely location. I attended Wardlow elementary school, Gisler and Sowers junior high schools and Edison High School. First as a junior lifeguard, and later as an older teenager, I went to the beach almost daily in the summer. It was a great place to grow up and it seemed very healthy.

However, at the beach, the power plant dominated the views and we all agreed that it was an eyesore. At school, we frequently saw the plumes emitting from the HBGS, but we were told that it was harmless steam. Now, many of my school classmates have died from cancer and I'm concerned about the health and environment of the current residents and children.

On the other hand, I'm also an Energy Specialist employed by the Energy Commission. I know that it is vital to ensure safe and reliable energy supplies. I also understand some of the constraints that California's electricity system places on options to supply electricity and to incorporate preferred resources such as energy efficiency, demand response and solar.

I was presenting an item to the Energy Commission at the same business meeting where the Huntington Beach Energy Project's (HBEP) application for siting was found data adequate. I was quite surprised that there were not any public comments. Given that I'm aware that Huntington Beach residents are

concerned about their quality of life and economic health, I am acting to represent myself as a private citizen with strong ties to Huntington Beach. I am not representing the Energy Commission.

My comments on the PSA are as follows:

Project Definition and Ability of AES to Deliver the Project

Table 1: HBEP Master List of Cumulative Projects omits the synchronous condenser project currently at Units 3 and 4. On March 2, 2010, AES Huntington Beach, LLC filed a petition with the California Energy Commission (Energy Commission) to extend the license for the HBGS Units 3 and 4, for an additional 10-year period (September 30, 2011 to December 31, 2020). The purpose was to convert the units to synchronous condensers to provide voltage support needed with the closure of San Onofre Nuclear Generation station. Energy Commission staff reviewed the amendment and prepared an analysis approving the proposed extension. The California Independent System Operator (CAISO) also took the unusual action of approving this project in an expedited manner. The project has now been installed and is operating.

However, AES' application for the HBEP includes demolishing the existing HBGS' units to make way for the new HBEP Blocks 1 and 2. AES' application is predicated on this definition of the project. Accordingly, the PSA includes an analysis of visual impacts of the project assuming that the HBGS units 1-4 will be demolished. In addition, while this PSA does not cover the issues of air quality and public health, the record shows correspondence regarding these topics between staff, the applicant and South Coast Air Quality Management District. This correspondence clearly documents that the project includes demolition of units 3 and 4 starting in 2016 and units 1 and 2 starting in 2020. If units 3 and 4 are not demolished starting in 2016 and the impact of the synchronous condenser project is not considered, then visual impact, the air quality and public health modeling input assumptions are inaccurate. Also in terms of visual impacts, the existing HBGS' units 1-4 are over 200 feet tall and, as such, are existing legal nonconforming structures. Unless units 3 and 4 are demolished, as the application for certification and AES's discussion with the City of Huntington Beach clearly leads one to believe, the somewhat slightly improved visual impacts to residents and attendees of the beach of the HBEP will not occur.

In their initial application, AES admits that they do not own units 3 and 4 but they said that the units were scheduled to be demolished under their existing licenses and would occur regardless of the HBEP. Since the proposal and approval of the synchronous condenser project occurred after AES's initial application for certification for the HBEP, it raises questions if the PSA is describing and analyzing the environmental impacts of the correct project.

Impacts on Sensitive Receptors

The PSA listed schools near the proposed HBEP (note: it did not include Eader Elementary School, which is located at 9291 Banning Avenue, less than 4000 feet from the proposed project site). In 2005, the California Air Resources Board published *The Air Quality and Land Use Handbook: A Community Health Perspective*. The potential health impacts associated with proximity of sensitive receptors to various categories of air pollution sources should be considered. Children, pregnant women, the elderly and those with existing health problems are especially vulnerable to the non-cancer effects of air pollution. Examples of non-cancer effects are asthma attacks, heart attacks and increases in daily mortality and hospitalization for heart and respiratory disease. This publication also presents substantial evidence that children are more sensitive to cancer causing chemicals. With the passage of the Children's Environmental Health Protection Act (Senate Bill 25, Statutes of 1998) the health impacts on school children from the HBEP needs to be assessed. The California Environmental Protection Agency Office of Environmental Health Hazard Assessment (OEHHA) has a methodology for performing an air toxics health risk analysis on school children. As part of the assessment of public health impacts, I request the applicant and the CEC staff use OEHHA guidance for health risk assessment parameters including the risk assessment exposures on school children and other sensitive receptors. In addition, the health impacts should be assessed in accordance with State risk assessment and risk management policies and guidelines in effect as of June 1, 2009.

Water Supply

The proposed HBEP will use about 115 AFY of potable water provided by the city of Huntington Beach for process water. In addition during the construction phase the applicant proposes to potable water for dust suppression. Average water use during construction would be about 18,000 gallons per day (gpd) and around 24,000 gpd during hydrostatic testing and commissioning. Commissioning is expected to take about 60 days. The expected water use for domestic purposes would be about 1 gpm, or about 1.2 AFY (HBEP 2012a).

Huntington Beach's water supply source is part groundwater (62 percent) and part imported surface water (38 percent). Groundwater is provided to the city by 10 groundwater wells operated by the Orange County Water District. The Metropolitan Water District provides Huntington Beach with surface water supplies sourced from the Colorado River and the State Water Project.

The PSA says that there were no public comments addressing water and soil. However, during the informational hearing and initial site visit held September 10 2012, staff heard comments from Shawn Thompson of Huntington Beach who requested that HBEP use recycled water. The PSR does not acknowledge or adequately address this comment. A potential source of recycled water could be

from the wastewater treatment plant operated by the Orange County Sanitation District and located less than 2 miles away, at 22212 Brookhurst Street.

Any use of potable water for power plant cooling when recycled water is available is clearly contrary to state water policy calling for the use of recycled water for industrial use. The state's policies discourage the use of freshwater (surface water) and groundwater for industrial purposes. The California Energy Commission, under legislative mandate specified in the 2003 Integrated Energy Policy Report, would approve the use of fresh water for power plant cooling purposes only where alternative water supply sources and alternative cooling technologies are shown to be environmentally undesirable or economically unsound. State Water Resources Control Board (SWRCB) Resolution 75-58 states that fresh inland waters should only be used for power plant cooling if other sources or other methods of cooling would be environmentally undesirable or economically unsound. The Warren-Alquist Act promotes all feasible means of water conservation (Pub. Resources Code, Div. 15, § 25000 et seq.). SWRCB Resolution 77-1 promotes the use of reclaimed water for non-potable uses and to supplement existing surface and groundwater supplies. SWRCB Resolution 2009-0011 promotes the use of reclaimed water as a means to achieve sustainable local water supplies and to reduce greenhouse gases.

Environmental Justice

On page 4-84 Of the PSA, staff states that the impact of the project are most significant within 6 miles. Staff uses the six-mile buffer to determine the area of potential project impacts and then uses that information to assess environmental justice. Environmental justice is defined in California law (Government Code section 65040.12) as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws and policies". Federal environmental justice law as defined by *Environmental Justice: Guidance Under the National Environmental Policy Act*, says that an environmental justice population is identified when the minority population of the potentially affected area is greater than fifty percent or the minority population percentage is meaningfully greater than the minority population in the general population or other appropriate unit of geographical analysis. According to *Environmental Justice: Guidance Under the National Environmental Policy Act*, minority individuals are defined as members of the following groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic.

Staff checked and found that the federal conditions were not met and said that no further scrutiny of this population is required for purposes of an environmental justice analysis.

However, this ignores California law. The PSA is supposed to assess project compliance with all laws and not pick and choose the law. The PSA should

assess if all people within 6 miles of the project are treated fairly with respect to people living outside of 6 miles. In fact, people in Huntington Beach continue to be disproportionately impacted by electricity generation even though the benefits from power generated in Huntington Beach accrue to people living throughout the entire Los Angeles Basin. The analysis should assess the environmental justice issues that arise from constructing and operating new project in Huntington Beach when nearby residents have already lived near a generating plant for more than 50 years.

Market Manipulation

The City of Huntington Beach and its residents have had a history of being cooperative with the owners and operators of the power plant. In 2001, because of the energy crisis, and in order to help with the emergency situation, Huntington Beach agreed to an expedited certification of a retooling of units 3 and 4.

One condition of the 2001 emergency certification that was proposed and discussed was that if the applicant was found to be involved in market manipulation that the license would be revoked. This condition did not get adopted. However, as it turned out in 2001, many aspects of the energy crisis were caused by manipulations of the market by power providersⁱ. Also, recently JP Morgan was accused using Huntington Beach units 1 and 2 to manipulate the electricity marketsⁱⁱ. In order to protect Huntington Beach residents and ratepayers, I request that a condition for certification should include one that imposes consequences for market manipulation.

Socioeconomics

HBEP would employ an average of 192 workers per month during the 7.5-year demolition and construction period. Construction workforce would peak during months 82 and 83 with 236 workers onsite. HBEP would require 33 full-time employees during project operation; one plant manager, one operations leader, one maintenance leader, one environmental engineer, one maintenance planner, twenty power plant operators, five controls specialty workers, two mechanics and one administrative worker (HBEP 2012a, pg. 5.10-13). Once operational, the HBEP would permanently employ 33 workers. Currently, 33 workers are employed at the Huntington Beach Generation Station (HBEP 2013g). Consequently, once the existing units are demolished and new ones built, the net employment impact compared to the current conditions would be zero. I request that staff compare the employment impact from this project to employment impacts of alternative projects including: 1) demolishing all units and restoring the land, and 2) demolishing all units and building and operating a hotel (nearby hotels employ over 300 workers).

Visual Resources

The project site is in the state's Coastal Zone. Section 30251 of the California Coastal Act requires that the scenic and visual qualities of coastal areas be considered and protected as resources of public importance. Permitted development must be sited and designed to restore and enhance visual quality in visually degraded areas where feasible. The PSA says most landside views in the vicinity of the existing HBGS include built elements typical of coastal development in similar urbanized areas near the coast. The PSA also says that no particular view in the project vicinity has a level of scenic appeal that could distinguish it as a scenic vista and as a consequence the HBEP would have no impact on a scenic vista and no further analysis of the project relating to this criterion is necessary. I take issue with this conclusion.

In fact, in the Decision of 2001, the Energy Commission acknowledged that repowering units 3 and 4 meant that the facility would not be as efficient, clean or visually unobtrusive as a state of the art power plant. The Commission Decision, (May 2001 (00-AFC-13) P800-01-016), thanks the people of Huntington Beach because "absent responding to the current emergency, the AES project does not present sufficient justification to perpetuate the vintage Huntington Beach power plant on a coastline of world-renowned scenic, recreational and environmental value." The quality of the coast has not degraded since this decision was issued.

Facility Design

As pointed by in a letter from the Coastal Commission, the HBEP sits on the south branch of the Newport-Inglewood fault zone that can present a hazard. The PSA says that the site is prone to lateral movement and liquefaction of soils. I propose that AES conduct an in-depth, site-specific analysis of the potential for lateral spread and determine what measures will be needed to avoid or reduce this potential. AES will not be able to conduct a full investigation until it removes facilities from the site. As a special condition, AES should have its structural and geotechnical engineers devise a structural foundation capable of accommodating up to 38 inches of lateral soil spread and provide confirmation from a licensed structural engineer at key points in the project. To ensure the project remains structurally stable in the face of potential liquefaction, thereby minimizing risks from hazards and ensuring that appropriate engineering and building practices are used, I propose requiring that AES, prior to permit issuance, obtain confirmation from a licensed structural engineer that all facility structures are designed to resist liquefaction-induced settlement.

Land Use

The existing HBGS is defined as a coastal-dependent energy facility within the city of Huntington Beach. However, as pointed out by city staff, the proposed HBEP is not a coastal dependent energy facility. It will not use ocean water for

cooling, as this technology is no longer allowed due to its impact on oceans and wildlife resources. Projects using the same technology as HBEP could be located away from the coast. Nevertheless, the proposed HBEP site was chosen because the existing HBGS has been there since the 1950's and supporting infrastructure is in place. While reusing this infrastructure currently connected to HBGS would be expedient, this is not the best and highest use of the land. The proposed HBEP would sit directly across from the Huntington State Beach, a major destination for over 13 million yearly local, state, US and international visitors. Three times as many visitors go to Huntington beaches as go to Yosemite and about as many people go there as to Disneyland. Having hosted many such visitors over the years, I can tell you that when they see the HBGS they always comment to the effect that it is such a shame that California has not implemented better alternatives. If California has made a commitment to a clean and green economy, then it should also be concerned that one of its prominent structures broadcasts the opposite message to people.

Consistency with other Laws and Regulations

The city of Huntington beach general plan objective c 8.2 . states: encourage the production of energy resources as efficiently as possible with minimal adverse impacts.

Different power generating options and options to manage load all have different characteristics. Currently, the CAISO is assessing what types of resources are needed where. This task is ongoing but much is already known. Even though the closure of San Onofre nuclear power plant presents challenges, the probability of outages is very low. There are so many power plants that many operate infrequently many of these will be available when needed. Also, the current reliability standards are set so high that outages are not expected to occur even with extreme weather conditions and the loss of two major facilities. The loss of San Onofre raised concerns about voltage support, but the synchronous condenser project at units 3 and 4 goes a long way to resolve that issue. In the future, synchronous condensers could be built and operated at various substations and at the San Onofre site. Also, new technologies are emerging that can direct the flow of power.

The HBEP applicant asserts that the proposed project's fast ramping capabilities will be needed to integrate renewables. However, the south LA basin is a load pocket, meaning that renewables must be located with the area for this fast ramping capability to be needed. Most large-scale renewable projects are located outside of the LA basin, so fast ramping capability is less critical locally. Also, the El Segundo power plant has been in operation since August. El Segundo already provides fast ramping capability so the CAISO may not need more in the LA Basin.

California policy now requires that energy efficiency, demand response, and renewables (the loading order) be used before fossil fuels. Reducing load with

energy efficiency and demand response could serve needs very inexpensively. Solar PV and energy storage are also promising technologies.

California is now at a crossroads and rather than over building fossil-fueled power plants; it is time to develop facilities, programs and procedures that support policy goals and which have fewer adverse impacts. In addition, these preferred resources will create even more jobs than the fossil-fueled power plants and they have the added benefits of lowering energy bills. Reducing businesses and people's energy costs leaves more money to spend on other goods and services.

Thank you for your time and consideration.

Sincerely,

Monica Rudman

ⁱ http://legacy.utsandiego.com/news/reports/power/20021116-9999_1b16power.html

ⁱⁱ <http://www.sacbee.com/2013/07/17/5574303/jp-morgan-reportedly-could-settle.html>