

DOCKETED

Docket Number:	12-AFC-03
Project Title:	Redondo Beach Energy Project
TN #:	201740
Document Title:	Response to resident testimony and submission
Description:	Presents evidence that contradicts certain statements in subject testimony, submission, and AES talking points for the public
Filer:	James A Light
Organization:	Building A Better Redondo
Submitter Role:	Intervenor
Submission Date:	2/13/2014 3:19:23 PM
Docketed Date:	2/12/2014

Building a Better Redondo

Intervenor

12 Feb 14

Subject: Case 12-AFC-03, Comment to Arlene Staich submission

To: CEC Staff

BBR takes issue with several statements made by a Ms. Arlene Staich at the CEC public meeting on 10 Feb and in a letter filed on the same date. Because these same and similar arguments have been publicly promulgated by AES, BBR feels it necessary to address inaccuracies contained in Ms. Staich's submission and testimony. The paragraphs below address the statements in question.

“The construction of a new power plant by AES in Redondo emission[sic] Beach on the present site will decrease the particulat[e] emissions into the air.” – This statement is not accurate.

The current plant has run on average at about 5% of annual capacity since 2005. In a report filed by AES with the City of Redondo Beach, AES stated that while they were requesting a permit limit of 72% of annual capacity, they would expect the plant to run at between 25% and 42% of annual capacity.

The table below compares the average emissions AES reported to the AQMD from 2005 to 2012 to the emissions per AES's submission on the proposed new plant. The emissions at 25% and 42% were extrapolated from the data AES supplied to the CEC.

Pollutant	New Plant			Current Plant
	25% Annual Capacity (tons)	42% Annual Capacity (tons)	Application Limit* (tons)	Average Annual Reported (tons)
NOX	41.8	70.2	121.5	17.5
SO2	2.2	3.7	6.4	1.3
VOC	22.5	37.8	65.4	12.4
CO	47.7	80.1	138.7	1.3
PM10	17.1	28.7	49.7	3.7
PM2.5	17.1	28.7	49.7	3.7

In each case, air pollution would increase over Redondo Beach due to the much higher predicted run rate. It is also important to note, that even with San Onofre offline for the entire

year, the AES Redondo Plant ran at about 3% of capacity through the 3rd quarter of 2013, representing a decreased run rate from the recent average. While it is undoubtedly true that a new plant will be more efficient and less polluting for each MWhr produced, the fact of the matter is, that in order for AES to recoup their investment, the new plant would have to run much, much more than the current power plant. And as the numbers above demonstrate, these higher run rates will result in a substantial increase in air pollution.

Furthermore, as previously submitted, the projected needs for power in 2021 and beyond are in the southern end of the LA Basin reliability area. This is due to the need for voltage stability at the northern end of Orange County with San Onofre offline. For the AES Redondo plant to support this projected need it would have to generate more power than new plants in Huntington and/or Alamitos due to the line losses from Redondo to Orange County. And generating more power means increasing the overall pollution in the LA Basin. For this reason, the people of the LA Basin would have lower rates and lower air pollution if this projected future need is met by new plants in Alamitos and/or Huntington Beach.

“This will be much less than the particulate emissions created by the automobiles in the area.” – Not accurate

According to an EPA report entitled “Emission Facts Average Annual Emissions and Fuel Consumption for Gasoline-Fueled Passenger Cars and Light Trucks” the average 2005 family passenger car produced the following emissions:

Average Emissions and Fuel Consumption for Passenger Cars¹

Pollutant/Fuel	Emission and Fuel Consumption Rates (per mile driven)	Calculation	Annual Emissions and Fuel Consumption
Hydrocarbons (HC)	1.36 grams (g)	$1.36 \text{ g/mi} * 12,000 \text{ mi/yr} * 1 \text{ lb}/454\text{g}$	36.0 lb
Carbon monoxide (CO)	12.4 g	$12.4 \text{ g/mi} * 12,000 \text{ mi/yr} * 1 \text{ lb}/454 \text{ g}$	328 lb
Nitrogen oxides (NOx)	0.95 g	$0.95 \text{ g} * 12,000 \text{ mi/yr} * 1 \text{ lb}/454 \text{ g}$	25.1 lb
Particulate matter (PM ₁₀)	0.0052 g	$0.0052 \text{ g} * 12,000 \text{ mi/yr} * 1 \text{ lb}/454 \text{ g}$	0.14 lb
Particulate matter (PM _{2.5})	0.0049 g	$0.0049 \text{ g} * 12,000 \text{ mi/yr} * 1 \text{ lb}/454 \text{ g}$	0.13 lb
Carbon dioxide (CO ₂)	369 g	$369 \text{ g/mi} * 12,000 \text{ mi/yr} * 1 \text{ lb}/454 \text{ g}$	9760 lb
Gasoline consumption	0.0417 gallons (gal)	$(12,000 \text{ mi/yr}) / (24.0 \text{ mi/gal})$	500 gal

BBR maintains the use of 2005 automobile emissions is conservative in that newer cars will have decreased emissions and greater gas mileage on average.

Based on this EPA data and the previous emissions table derived from the AES submission to the CEC, BBR calculates the annual equivalency in cars (actually car trips) driving within a 1 mile radius of the plant over a year. The results of these calculations are shown in following table:

Equivalent Cars driving in 1 mile radius of power plant per year			
Pollutant	25% Annual Capacity	42% Annual Capacity	Application Limit*
PM10	2,980,941,573	5,007,981,842	8,670,592,611
PM2.5	3,163,448,200	5,314,592,975	9,201,445,220

Reducing this table to average daily automobile trip traffic within a 1 mile radius yields:

Average Daily Car Equivalency			
Pollutant	25% Annual Capacity	42% Annual Capacity	Application Limit*
PM10	8,166,963	13,720,498	23,755,048
PM2.5	8,666,981	14,560,529	25,209,439

According to the data used in the 2012 City of Redondo Beach Circulation Element, the section of PCH from Torrance Blvd to 190th St sees 40,000 average car trips per day. The section of PCH from 190th St to Aviation sees 60,000 average car trips per day as cars feed into and out of Catalina Ave, 190th/Herondo St and other cross streets in this section of the highway. Even if we add all street segment trips within a 1 mile radius of the plant the total trips over road sections adds up to around 275,000 total trips per day on average within a one mile radius. This is a very conservative approach since these trips cannot all be additive. For example, the majority of traffic coming down or going up 190th street would turn on or off of PCH, so those trips would already be accounted for in the PCH traffic. Regardless, **even using this extremely conservative number, the particulate emissions from the power plant, even at the lowest AES projected run rate dwarfs the particulate emissions produced by the engines of the local car traffic.** BBR does caveat that this assessment is based on automobile engine emissions and does not include particulate matter from tires, brakes or from road dust stirred up by traffic.

BBR believes Ms. Staich may have derived her opinion from information AES provided the public related to all power plant and automobile pollution over the entire LA basin. We maintain this is not a valid representation of the impact to local residents downwind of the AES plant. As BBR has previously submitted, testimony by the AQMD to the City of Redondo Beach demonstrates that during prevailing wind conditions the two largest sources of air pollution for Redondo Beach are the AES power plant and vehicle traffic, and as a stationary source the AES plant pollution is of concern to those in the vicinity. The previous analysis corroborates that the particulate pollution from AES would be a dominant, if not “the” dominant, source of particulate pollution for those who live, work, play or attend school downwind of the power plant.

Although not mentioned by Ms. Straich, power plant supporters have promulgated that home use of natural gas was a greater source of local air pollution. According to natural gas utilization data supplied to the City of Redondo Beach, even at its low current run rate, the AES power plant burns over 95% of all natural gas burned in all of Redondo Beach by all other users including residential, commercial and industrial users. The 2011 total natural gas utilization is shown below:

SOUTHERN CALIFORNIA GAS COMPANY

City of Redondo Beach
Total Imputed Value on
Final Billed Transport Gas Volumes Delivered
Within the city under Ordinance No. 2674
Year ending December 31, 2011

Billed Month	Residential (DTH)	Commercial (DTH)	Industrial (DTH)	Electric Generation (DTH)	Total Volume (DTH)
January	294.20	4,586.90	22,881.50	17,490.80	45,253.40
February	261.70	3,602.00	21,009.60	1,326,025.00	1,350,898.30
March	238.80	5,016.70	21,009.60	1,156,713.20	1,182,978.30
April	176.50	3,976.60	23,513.80	639,143.50	666,810.40
May	163.00	3,479.70	20,566.80	111,734.70	135,944.20
June	123.80	3,468.70	19,531.80	449,024.80	472,149.10
July	151.60	2,785.20	18,936.70	286,231.40	308,104.90
August	141.30	2,616.70	18,549.70	137,862.90	159,170.60
September	149.10	2,636.80	18,862.90	765,738.90	787,387.70
October	171.70	2,772.80	18,037.90	472,698.30	493,680.70
November	290.90	3,232.60	19,651.10	149,274.00	172,448.60
December	435.00	3,572.60	20,899.30	71,498.70	96,405.60
	2,597.60	41,747.30	243,450.70	5,583,436.20	5,871,231.80

In conclusion, there is no denying that a new power plant is now and would be in the future one of our biggest sources of particulate pollution, if not “the” biggest contributor. Automobile manufacturers build new cars with reduced emissions and better mileage every year. Each year, home appliance manufacturers produce more efficient appliances. New homes are better insulated. So consumption and related pollution from these sources will continue to decline. Allowing a new power plant to be built in Redondo Beach would negate this trend and dramatically increase the air pollution exposure of residents downwind of the plant.

“The noise data will be analyzed [sic] from the data acquired with instruments will be included in the CEC report. The CEC will make sure that the noise levels will meet the standards for Redondo and Hermosa Beach. This monitoring process will be on doing[sic].” – Misleading

Per CEC statements at the public meeting on 10 February, the CEC will not do ongoing monitoring of the noise from the power plant. The CEC will require some measurements as the plant is commissioned, but any measurement after that would have to be after substantive resident complaints via their “hotline”. The CEC staff was unable to define any specific criteria used to determine when resident complaints rise to a level that would trigger CEC staff action.

“The people of Redondo Beach voted no to Prop A on the ballot which stated that they did not want to Phase out th[e]existing power plant,[sic]” – Inaccurate conclusion

Measure A was a citizen initiative to rezone the AES power plant property. It was not an up or down vote on a new power plant. Measure A was very narrowly defeated after a \$500,000 campaign by AES that included lawsuit threats and unsubstantiated fear mongering. Reasons people voted against Measure A included fear of future power outages, to concerns about property rights, fear that the park zoning would draw unwanted visitors and crime, and fear of a lawsuit that would bankrupt the city. As several of our current elected officials have publicly stated, when they walked the streets of the Redondo campaigning, they found the majority of residents do not want a new power plant in our harbor. These same elected officials passed a resolution opposing the new power plant unless it can be shown the power is needed for grid reliability. They also passed a moratorium and emergency zoning changes prohibiting the building of a new power plant.

BBR respects that Ms. Staich is entitled to her opinion. And in most cases we do not respond to resident inputs in the process. But, in this case these arguments are similar to those being publicly espoused by AES. We felt it important to present evidence in the public record countering some of these statements, both in written statement and public comments at the 10 February CEC meeting in Redondo Beach.