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February 12, 2007

Robert Worl,

The new Colton Joint Unified School District high school will be a positive step forward for Grand Terrace, and other local communities. I believe that this new state-of-the-art facility will bring pride, increased accessibility to technology, and may help to raise API scores. Thus, I support the high school project. However, due to the proximity of the proposed Highgrove power plant to the high school, many concerns are raised. I set forth, for the following reasons, that the proposed power plant is incompatible with the high school, and the power plant must not be allowed to be permitted. The following comes from APC and other supporting documents for the Highgrove Power plant. Please see the following points as outlined on the next pages:

- \*Demonstration for Need of Project
- \*Amendment to District Rule 1309.1
- \*Fine Particulate Matter (PM2.5)
- \*Land Use
- \*Carbon Monoxide (CO) Mitigation and District CO
- \*Nitrogen Oxides (NOx) Mitigation & the District RECLAIM Program
- \*Volatile Organic Compound (VOC) Mitigation
- \*Observing California Environmental Quality Act (CEQA) Requirements
- \*Soil and Water
- \*Biological Resources
- \*Hazardous Materials Management

In addition, I am requesting electronic copies of:

PROOF OF SERVICE (REVISED 8/2/06) FILED WITH

JRIGINAL MAILED FROM SACRAMENTO ON 2/5/07

Appendix 8.14AR1, NCDC CD 144 meteorological data files, Attachment WM-82 A,B, and C, WM-1.

## Demonstration for Need of Project

Given the number of existing power plants in San Bernadino County since 1999, Drews-Alliance, Century-Alliance, High Desert-Constellation, Mountainview Units 3 & 4-SCE, City of Victorville Hybrid, Stirling Solar Thermal One, Hybrid Gas-Solar-City of Palmdale, and Harper Lake Solar Plan, the need for this facility needs to be demonstrated. As such, the previously mentioned power plants total 2,790 MW, representing 12% of the total of 23,549 MW currently operating or approved projects in California since 1999. This is an overwhelming share for our county, considering that San Bernadino represents 1 county out of 58, with a population of 200,000, which is a minute 0.56% of the 36,000,000 Californian population. Thus, the County of San Bernadino is disproportionately reflected, bearing the burden of energy.

## • Amendment to District Rule 1309.1

Members of my community and I are expressly concerned about the California Energy Commission's (CEC) upcoming Proposed Amended Rule 1309.1 regarding Priority Reserve (PAR 1309.1). Energy Reduction Credits (ERC) have been used as a tool to reduce ambient pollution, restrict energy companies from building in heavily polluted areas, and ultimately reduce concentrations of PM2.5, a serious and unhealthy emission. However, the device (PAR 1309.1), that was designed to help mitigate bad air quality now has become a loophole for power companies, who normally would be forced to go to the open market to purchase ERCs in order to operate. Yet, the unexpected has happened. Instead of restricting power companies from building in heavily polluted areas, such as our region (Zone 3), power plants, like AES are just waiting until March 2, when they'll likely be authorized to tap into the Priority Reserve Credits. I am deeply troubled by the impending date, for it is practically the "green light" to build and pollute.

# • Fine Particulate Matter (PM2.5)-The District is in "non-attainment" for state and federal PM2.5 standards

-PM10 and PM2.5 stand for particulate matter, less than 10 microns and 2.5 microns, respectively. These particles are made of dust, soot, and various chemicals arising from sources such cars, factories, and power plants. Recent evidence from the Department of Environmental Quality, the Environmental Protection Agency, and the New England Journal of Medicine found that long-term exposure to fine particulates in polluted air increased a risk of cardiovascular disease among older women. These fine particles linger in the air for days or weeks, and then can enter the lungs, causing inflammation there and in blood vessels. This is a suspected heart attack trigger. Unfortunately, the South Coast Air Basin, in which the Inland Empire is contained, is designated as non-attainment area for both federal and state PM10 and PM2.5 standards.

### Land Use

-Data Response 36: Conflicting information of ownership, stating "the existing plant has not undergone a change in ownership since the existing plant has operated as RCPC since 1998".

Yet, it is stated in Data Response #38 that, "AES currently owns the Generating Station Property on which the existing power plant is located."

- -Conflict of actual distance of the proposed school from the proposed power plant. Actual distance of "property line" to "property line" is as little as 75 feet.
- -Data Response 41: AES design for the signs are incomplete.

Data Response 42: AES needs to get clarification regarding M2 zoning.

- -A proposed high school across Taylor Street from the AES power plant raises the potential for land use incompatibility issues.
- -The California Department of Education (CDE) has established standards under Title 5, Article 2 California Regulations that pertain to new or proposed schools that are within 1,500 feet of above-ground water storage, fuel storage tanks, or underground pipelines that can pose a safety hazard, and 100 feet from 50-133 kV lines triggering a requirement for risk assessment and consideration of mitigation measures. CDE concerns include traffic, toxic substances, powerline location, hazardous pipeline (gas pipeline) locations, hazardous material deliveries, and air quality/public health issues.

### Proximity to Pressurized Gas, Gasoline, or Sewer Pipeline

- 1. Education Code Section 17213 prohibits the acquisition of a school site by a school district if the site "contains one or more pipelines, situated underground or aboveground, which carries hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line which is used only to supply natural gas to that school or neighborhood." Public Resources Code Section 21151.8 uses the same language with reference to approval of environmental impact reports or negative declarations. (See CCR, Title 5, Section 14010(h))
- 2. The 7 mile natural gas line violates: CDE guidelines (CCR Title 5, 14010(h)) that a school site shall not be located within 1,500 feet of the easement of an aboveground or underground pipeline that can pose a safety hazard."

#### Proximity to High-Voltage Power Transmission Lines

1. The CDE requires the following limits for locating any of a part of a school site property line near the edge of easements for high-voltage power transmission lines: 100 feet for 50 to 133 kV transmission lines. The exact location route, easement, the EMF exposure, and audible noise should be stated. Each site will be evaluated according to its own potential hazards by the Department consultant (See *CCR*, *Title5*, Section 14010(c))

## Presence of Toxic and Hazardous Substances

-Storage of aqueous and/or anhydrous ammonia requires a development of risk management plans and modeling of potential release under the CCR, Title 19, Chapter 45-California Accidental Release Prevention (CalARP) Program. In addition, transport of ammonia, sulfuric acid, sodium hydroxide, sodium hypochlorite, and cyclohexamine could pose risks to students'

health; hours and routes that children will use while traveling to/from school, and transport routes of the chemicals should be stated.

- -The presence of potentially toxic or hazardous substances on or in the vicinity of a prospective school site is another concern relating to the safety of students, staff, and the public. Persons responsible for site evaluation should give special consideration to the following hazards:
  - 1. Proximity of the site to current or former dump areas, chemical plants, oil fields, refineries, fuel storage facilities, nuclear generating plants, **abandoned farms and dairies**, and agricultural areas where pesticides and fertilizer have been heavily used
  - Naturally occurring hazardous materials, such as asbestos, oil, and gas (See CCR, Title 5, Section 14011(j).)

## Hazardous Air Emissions and Facilities within A Quarter Mile

- -The CDE requires an evaluation of emissions from all facilities within a 0.25 miles radius of a proposed school site to determine the potential endangerment to public health of the students and staff (Education Code 17213(c). (See *Education Code* Section 17213(b) and *Public Resources Code* Section 21151.8(a)(2))
  - The LEA shall consult with the administering agency and the local air pollution control
    district or air quality management district to identify facilities within a quarter mile of the
    proposed site that might reasonably be anticipated to emit hazardous air emissions or
    handle hazardous materials, substances, or wastes and shall provide written notification
    of those findings.
  - 2. The LEA shall make the finding either that no such facilities were identified or that they do exist but that the health risks do not or will not constitute an actual or potential endangerment of public health at the site or that corrective measures will be taken that will result in emissions mitigation to levels that will not constitute endangerment. In the final instance the LEA should make an additional finding that emissions will have been mitigated before occupancy of the school.
  - 3. These written findings, as adopted by the LEA governing board, must be submitted to the Department as a part of the site approval package. Often this information is included in the Phase I site assessment and in the adopted California Environmental Quality Act (CEQA) document. (See CCR, Title 5, Section 14011(i))

## Other Health Hazards

(See Education Code Section 17213(a) and Public Resources Code Section 21151.8(a)(1); see also CCR, Title 5, Section 14011(h))

-AES HP is a Resource Conservation and Recovery Act (RCRA) contaminated site based on a 1994 Stipulation Order placed upon Southern California Edison (SCE). This allows the States Department of Toxic Substances Control (DTSC) and the local Certified Unified Program Agency (CUPA) RCRA authority over the site for monitoring and mandating remediation for contaminants. Contaminants arise from the old SCE'S lined retention basins which contain chemical contaminants from boiler water and cooling tower blow-down. In addition, the DTSC is in the process of an RCRA investigation at the fuel tank farm, the power generation facilities, and Cage Park. There is a DTSC Corrective Action for the site for solid waste management and the retention basins at the project site.

- 1. Metals were detected in soil matrix, trichloroethylene (TCE), and methyl tertiary butyl ether (MTBE) in soil vapor samples.
- 2. Some liquid and volatile organic compounds (VOC) were found in soil vapor, which triggered a groundwater investigation. An investigation is being done to determine whether there was release of contaminants (metals) into the soil.
- -The LEA shall include in an environmental impact report or a negative declaration the information needed to determine that the proposed site is not any of the following type:
  - 1. The site of a current or former hazardous waste disposal site or a solid waste disposal site unless, if the site was a former solid waste disposal site, the LEA governing board concludes that the wastes have been removed.
  - 2. A hazardous substance release site identified by the DTSC
  - 3. The site of one or more pipelines, situated underground or aboveground, which carry hazardous substances, materials, or wastes, unless the pipeline is used only to supply natural gas to that school or neighborhood
- -These written determinations, as adopted by the LEA governing board, must be submitted to the Department as a part of the site approval package. Often this information is included in the Phase I site assessment and in the adopted CEQA document.
- -Other factors to consider are as follows:
  - If the proposed land has been designated a border zone property by the Department of Toxic Substances Control (DTSC), then a school may not be located on the site without a specific variance in writing by DTSC. Contact DTSC, Site Mitigation, (916) 255-3745. See *Health and Safety Code* Section 25220.

From a nuisance standpoint the site selection committee should also consider whether a site is located near or downwind from a stockyard, fertilizer plant, soil-processing operation, auto dismantling facility, sewage treatment plant, or other potentially hazardous facility.

## **Proximity to Railroads**

When evaluating a site near railroad tracks, a study should be conducted to answer the following questions (See CCR, Title 5, Section 14010(d)):

- 1. The proposed high school site represents a distance of less than 1,500 feet from a railroad track. If the proposed site is within 1,500 feet of a railroad track easement, a safety study shall be done by a competent professional trained in assessing cargo manifests, frequency, speed, and schedule of railroad traffic, grade, curves, type and condition of track, need for sound or safety barriers, need for pedestrian and vehicle safeguards at railroad crossing, presence of high pressure gas lines near the tracks that could rupture in the event of a derailment, preparation of an evacuation plan. In addition to the analysis, possible and reasonable mitigation measures must be identified.
- 2. Studies for AES power plant, evaluating train derailment, have not been done for best/worse case scenarios, in spite of the recent Burlington Northern Railroad derailment at the Main St./railroad line in 2006. In addition, what would be the

- best/worst case scenario for a train derailment onto the AES Power plant and the adjoining tank #13 ammonia storage facility, or the #15 gas compressors? What would be the case for the newly proposed natural gas line route, which approximates the power plant, Riverside Canal, and the train tracks?
- 3. While most railroads have detailed instructions for handling hazardous materials, no setback distance between railroad tracks and schools is defined in law. However, the *California Code of Regulations*, *Title 5*, Section 14010(d), established the following regulations pertaining to proximity to railroads:
  - a. The National Transportation Safety Board has called for a uniform standard separation of at least 100 feet between hazardous materials storage and production facilities and mainline railroad tracks. Hazardous materials authorities have evacuated homes within a radius of 1,500 feet to 2,500 feet of railroad accidents when toxic gas and explosives were involved.

## Proximity to High-Pressure Water Pipelines, Reservoirs, Water Storage Tanks

- -The toxic waste disposal via truck to SARI line violates CDE:
  - 1. The proposed high school may fall within a distance of 1,500 feet from the proposed natural gas line, whose route begins on the northwest side of the AES power plant. In addition, the Riverside Canal is still being considered for non-potable water for the power plant, and its pressure, proximity, and impact on the high school should be considered as well.
  - 2. Large, buried pipelines are commonly used for delivery of water. The ground surfaces over these buried pipelines are covered with roadways or green belts or remain undeveloped, and the general public is unaware of their existence. Designs of such pipelines include a wide margin of safety for the operating water pressures within the pipe, but a severe earthquake, damage by an adjacent construction activity, or highly corrosive conditions surrounding soils can contribute to leakage or even failure of the pipe. A sudden rupturing of a high-pressure pipeline can result in the release of a large volume of water at the point of failure and fragments of concrete pipe being hurled throughout the immediate area. Subsequent flooding of the immediate area and along the path of drainage to lower ground levels might occur.
  - 3. To ensure the protection of students, faculty, and school property if the proposed school site is within 1,500 feet of the easement of an aboveground or underground pipeline that can pose a safety hazard, the school district should obtain the following information from the pipeline owner or operator:
    - The pipeline alignment, size, type of pipe, depth of cover
    - Operating water pressures in pipelines near the proposed school site
    - Estimated volume of water that might be released from the pipeline should a rupture occur on the site
    - Owner's assessment of the structural condition of the pipeline (Periodic reassessment would be appropriate as long as both the pipeline and the school remain operational.)
    - School districts should determine form topographic maps and in consultation with appropriate local officials the general direction that water released from the

pipeline would drain. If site selection must involve such pipelines, districts should seek to (1) avoid or minimize students use of ground surfaces above or in close proximity to the buried pipeline; (2) locate facilities safely or provide safeguards to preclude flooding in the event of a pipeline failure; and (3) prepare and implement emergency response plans for the safety of students and faculty in the event of pipeline failure and flooding.

- -AES has not proposed any mitigation for PM2.5.
- -Per Data Request #4 and Data Responses Set 1A, AES has still not met the required mitigation steps for PM2.5. Recall, AES was advised in the Issues Identification Report that "conditions of certification for the Commission decision that could result in a delay to the schedule." Although AES has outlined possible options for mitigation via the Priority Reserve, as of now, this option is not currently feasible, leaving AES in non-compliance to PM2.5.

## Carbon Monoxide (CO) Mitigation and District CO

- -AES has not yet obtained sufficient CO ERCs and has not provided a schedule to obtaining these offsets.
- -The Confidential Offset strategy for Requests #1, #2, and #3 do not allow the public access to critical information. Without disclosing names or affiliations, AES should still be able to reveal evidence of ERCs for CO, staff should verify that these credits have been obtained, and staff should make this information available to the public on the website.

## • Nitrogen Oxides (NOx) Mitigation & the District RECLAIM Program

- -As the project is required to participate in the District RECLAIM program for NOx (District Regulation XX), AES needs to provide proof that they have obtained sufficient NOx RECLAIM trading credits (RTCs) for the first year of operation through either option contracts or outright ownership, by the time of Evidentiary Hearings.
- -Regardless of the AES plan to transfer SCE's Highgrove Generating Station allocations, the quantity for these credits will still be insufficient, and thus, AES will still have to mitigate NOx.
- -Information for Data Response #7, #8, and #9 is unreliable since no technology standards exists for the LMS100 unit, and broad assumptions were made, including a calculation of a 40% error.

## • Volatile Organic Compound (VOC) Mitigation

- -The District Regulation XIII requires VOC offsetting with ERCs, and District Priority Reserve Rule (1309.1) will not be available for this project. AES has not provided VOC ERCs, nor has provided a schedule for obtaining these offsets.
- -Numerical numbers for Data Response # 10 and #11 are misleading, have flawed statistics, and are missing information. The average used here may not be the most scientific mode of

comparison, as high maximums have skewed the data left, even though values fall outside of acceptable standards. The graph fails to show other critical factors, such as temperature, time of year, etc.

## Observing California Environmental Quality Act (CEQA) Requirements

The California Environmental Quality Act (CEQA) is located in the *Public Resources Code* Section 21000 et seq.; the CEQA guidelines are found in the *California Code of Regulations*, *Title 14*, Section 15000 et seq. Enacted in 1970, CEQA was primarily intended for use by public agencies in considering the potential environmental implications of their actions when approving projects. The Act establishes a duty for public agencies, including school districts, to analyze, avoid, mitigate, or where feasible, minimize foreseeable environmental damage.

## Soil and Water

- On a daily basis, AES will haul wastewater by truck (11-19 per day) to the SARI brine line, according to staff estimates. Although AES has attenuated this truck figure to about 7/day, this still represents movement of toxic substances adjacent to a school, and along the same street of travel, Taylor St.
- An adequate environmental and economic analysis was not conducted comparing the
  relative merits of alternative wastewater disposal methods with zero liquid discharge
  system (ZLD), piping to the SARI line, as AES deemed this operation "too costly". Yet,
  AES still chooses to transport hazardous wastes on a commonly-traveled street, Taylor, in
  which AES does not have the right of way. Proximity of these trucks and the potential
  for spills due to collisions or other nature of accidents poses a real threat to the school
  children.
- AES is proposing to provide the HP's needed cooling water from two on-site wells that have the potential to affect wells adjacent to the project that are owned by the Riverside Highlands Water Company (RHWC). State Law and policy (State Constitution Article X, section 2; State Water Resources Control Board, Resolution 75-58) states the use of fresh water for power plant cooling will not be approved unless alternate sources or cooling technologies are deemed economically unsound or environmentally infeasible. AES should still continue to evaluate the efficacy of Riverside Canal water as a potable source, instead.

## Biological Resources

• Data Response 22: The start up phase of the project will involve construction 24 hours, 7 days a week. Although AES says that the majority of construction will be scheduled between 7 a.m. and 7 p.m., welding, piping, erection activities, electrical conduits and circuits, and maintenance on construction equipment will take place. Does the permit or General Plan prohibit hours after 7 p.m.?

- Data Response 22: Noise levels during construction (demolition, clearing, excavation, concrete pouring, steel erection, mechanical, and cleanup) will average 89 decibels (dBA), which is very noisy. A comparable sound to 89 dBA is the horn of a train, which is 96 dBA.
- Data Request 23: Record of a conversation regarding the potential impacts to sensitive biological resources or waters of the U.S. demonstrated that a Streambed Alteration Agreement would be required. No attached documentation exists.
- Hazardous Materials Management
- Data Request 37: Does not answer question and does not comply to request. Documentation still needed.

#### References

- 1 MSNBC, internet article. "Pollution Puts Women's Health at Risk", by Dara Brown.
- 2 California Energy Commission, Air Quality Section, Application for Certification, Highgrove Power plant, 2007.
- 3 California Energy Commission, Application for Certification and Supporting Documents, Highgrove Power plant, 2006-2007.
- 4 California Department of Education, Title 5, California Code of Regulations

## BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA

APPLICATION FOR CERTIFICATION FOR THE AES HIGHGROVE POWER PLANT PROJECT

Docket No. 06-AFC-2 PROOF OF SERVICE (Established 8/2/06)

<u>INSTRUCTIONS:</u> All parties shall 1) send an original signed document plus 12 copies <u>OR</u> 2) mail one original signed copy AND e-mail the document to the web address below, AND 3) all parties shall also send a printed <u>OR</u> electronic copy of the documents that <u>shall include a proof of service declaration</u> to each of the individuals on the proof of service:

CALIFORNIA ENERGY COMMISSION Attn: Docket No. 04-AFC-01 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512 docket@energy.state.ca.us

### <u>APPLICANT</u>

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## **ENERGY COMMISSION**

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### **DECLARATION OF SERVICE**

I, Angela Hockaday, declare that on <u>February 15, 2007</u>, I deposited copies of the attached <u>Letter from Roxanne Williams to Robert Worl / CEC dated 2/12/07 for the Highgrove Project (06-AFC-2)</u>, in the United States mail at <u>Sacramento, CA</u> with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above.

## <u>OR</u>

Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

I declare under penalty of perjury that the foregoing is true and correct.

Original Signed in Dockets
[signature]