# WATSON COGENERATION STEAM AND ELECTRIC RELIABILITY PROJECT (09-AFC-01)

DOCKET
09-AFC-1
DATE OCT 14 2011
RECD. OCT 14 2011

## PUBLIC HEALTH

**Response to Public Comments**
**Alvin Greenberg, Ph.D.**

**Public Comment**
Subsequent to the release of the FSA, members of the public expressed a concern about asthma rates in the project vicinity and asked if the FSA addressed this issue.

**Response**
Staff has identified the current incidence of respiratory disease in the project vicinity of Carson, Los Angeles County and found that when compared to the prevalence of respiratory disease found in populations located in other parts of Los Angeles County and in the State of California, it is similar. Furthermore, in comparison to other sources, gas-fired power plants in California produce limited amounts of pollutants capable of causing or exacerbating asthma. Given the emissions controls and offsets for PM2.5/10, NOx, $SO_2$, and CO required to permit such facilities, gas-fired power plants in California do not create any significant unmitigated direct or indirect adverse air quality impacts. Therefore, staff believes that the available scientific evidence supports a finding that any incremental impact on asthma rates from the Watson Project would not be significant.

**Discussion**
Los Angeles County is divided into eight Service Planning Areas (SPAs). The City of Carson (and thus the Watson Project) is located in SPA 8, South Bay, which is the southernmost SPA in the County. SPAs 6 and 7 (South and East, respectively) are located to the north and northeast of SPA 8 (see Figure 1).The incidence of asthma and other respiratory diseases in Los Angeles County are measured using results of the most recently available California and Los Angeles health surveys and other data sources. Health surveys report asthma prevalence and asthma hospitalization rates and emergency department visits, among many other parameters. Approximately 13.7 percent of adults and 8.6 percent of children in the State of California have been diagnosed with asthma (Milet 2007).

### 1. Demographics of Los Angeles County and SPAs 6, 7 & 8

The LA County Public Health Department (lacounty.gov) reports population characteristics with regards to racial/ethnic makeup of Los Angeles County and of the SPAs (6, 7 and 8 shown here), in percentage:



PROOF OF SERVICE ( REVISED 8/15/11 ) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 10/14/11
MS

| | Los Angeles County Year 2000 | SPA 6 South Year 2000 | SPA 7 East Year 2006 | SPA 8 South Bay Year 2000 |
|---|---|---|---|---|
| White | 33% | 3% | 19% | 37% |
| African American | 9% | 36% | 3% | 13% |
| American Indian | 1% | <1% | 0.3% | 1% |
| Asian/Pacific Islander | 12% | 2% | 8% | 16% |
| Latino | 45% | 59% | 68% | 33% |

## 2. Asthma Mortality Data

California Breathing, a division of the Environmental Health Investigations Branch of the California Department of Public Health, reported asthma mortality statistics for 2006-2008 in county asthma profiles posted online (http://www.californiabreathing.org/asthma-data/county-asthma-profiles). Age-adjusted asthma mortality rates are shown below:

| | Age-adjusted asthma mortality rate (in deaths per million) | |
|---|---|---|
| Age | Los Angeles County | State of California |
| 0-17 years old | n/a | 2.0 |
| 18+ years old | 15.4 | 15.6 |
| All ages | 11.9 | 12.1 |

CDHS reports age-adjusted asthma deaths for counties in California based on 2000-2004 aggregate data from the Behavioral Risk Factor Surveillance System (BRFSS) and the California Health Interview Survey (CHIS). For all counties in California the asthma death rate is 15.5 per million and 14.5 per million for Los Angeles County (Milet 2007).

Asthma mortality data can also be compared to the Healthy People 2010 and 2020 target levels published by the Centers for Disease Control and Prevention and the National Institutes of Health. The Healthy People 2010 target for asthma deaths is 6.0 per million in ages 35-64 and 22.9 per million for ages 65 and older. The Healthy People 2020 targets are 8 and 47 per million, respectively.

## 3. Asthma Prevalence

Data on lifetime asthma prevalence in California residents were collected in the 2009 California Health Interview Survey (CHIS) and are available on-line at californiabreathing.org/asthma-data/county-asthma-profiles/los-angeles-county asthma-profile. Pertinent data collected on lifetime asthma prevalence are summarized below:

Lifetime Asthma Prevalence by Age (2009):

| | LA County | California |
|---|---|---|
| Children (0-4 yrs) | 7.8% | 7.7% |
| Children (ages 5-17) | 15.5% | 16.2% |
| Adults (ages 18-64) | 12.2% | 13.8% |
| Adults (> 65 yrs) | 11.2% | 11.8% |
| All Ages | 12.5% | 13.7% |

The Los Angeles County Department of Public Health published "Key Indicators of Health by Service Plan Area (LACDPH 2009) and presented the following data for prevalence of asthma in children ages 0-17:

Asthma Prevalence in Children, ages 0-17 (LACDPH 2009):

| | Los Angeles County | SPA 6 South | SPA 7 East | SPA 8 South Bay |
|---|---|---|---|---|
| 2002 – 2003 | 8.1% | 6.0% | 7.7% | 8.8% |
| 2005 | 8.8% | 9.0% | 8.8% | 11.0% |
| 2007 | 7.9% | 7.8% | 8.8% | 9.5% |

LA Health Data Now! Is an online system that allows the user to query datasets of the Los Angeles County Health Survey for information on diseases and provides summaries of disease trends (http://dqs.hasten.ladhs.org/default.aspx). The following information was obtained by querying the dataset:

Percent of adults (>18 years old) with current asthma:

| | 2005 | 2002-03 |
|---|---|---|
| Los Angeles County | 6.5% | 6.1% |
| SPA 6 (South) | 7.2% | 7.0% |
| SPA 7 (East) | 5.1% | 6.5% |
| SPA 8 (South Bay) | 6.7% | 6.7% |

Percent of children (0-17 years old) with current asthma:

| | 2007 | 2005 | 2002-03 |
|---|---|---|---|
| Los Angeles County | 7.9% | 8.8% | 8.1% |
| SPA 6 (South) | 7.8% | 9.0% | 6.0% |
| SPA 7 (East) | 8.8% | 8.8% | 7.7% |
| SPA 8 (South Bay) | 9.5% | 11.0% | 8.8% |

Information was obtained from *LA Health Data Now!* regarding rates of current asthma in adults and children based on race/ethnicity:

Percent of adults (>18 years old) with current asthma:

| | 2005 | 2002-03 |
|---|---|---|
| Latino | 4.8% | 4.4% |
| White | 8.1% | 7.7% |
| African-American | 10.4% | 10.0% |
| Asian/Pacific Islander | 4.6% | 4.6% |

Percent of children (0-17 years old) with current asthma:

| | 2007 | 2005 | 2002-03 |
|---|---|---|---|
| Latino | 6.4% | 7.3% | 6.5% |
| White | 8.1% | 8.4% | 9.1% |
| African-American | 18.4% | 18.5% | 15.3% |
| Asian/Pacific Islander | 6.7% | 7.9% | 8.8% |

Liu (2010) reports that based on data obtained during the 2007 CHIS, the statewide prevalence of active asthma is 8.1 percent in adults and 10.4 percent in children. In Los Angeles County the rates are 6.8 percent in adults and 10.9 percent in children while in SPA 8 (South Bay), the values are 8.1 percent and 12.4 percent, respectively.

Milet (2007) reports lifetime asthma prevalence to be 12.4% for all counties in California compared to 11.3 percent for Los Angeles County (based on 2001-2003 data reported by CHIS).

### 4. Asthma Hospitalization and Emergency Department Visit Data

Asthma hospitalization data provide information on patients with asthma so severe that they are admitted to the hospital for treatment. These data do not provide information on asthma incidence in the population or on how many people visit private doctors, emergency rooms or outpatient clinics for asthma, or on the mortality rate of asthma.

Age-adjusted asthma hospitalization rates are reported by CDHS in the California County Chart Book for asthma hospitalization rates in California and Los Angeles County for 1998 to 2000 (Stockman 2003). Age-adjusted asthma hospitalization rates by race/ethnicity for all ages and for children (ages 0-14) are presented below (annual rates per 10,000):

| | Total | non-Hispanic White | African-American | Hispanic | Asian/ Pacific Islander |
|---|---|---|---|---|---|
| All Ages: | | | | | |
| California | 11.1 | 9.5 | 33.0 | 10.3 | 7.8 |
| LA County | 12.5 | 10.5 | 32.9 | 11.5 | 7.6 |
| Children (ages 0-14): | | | | | |
| California | 18.1 | 14.9 | 57.6 | 14.9 | 9.7 |
| LA County | 19.4 | 16.6 | 57.9 | 15.1 | 9.9 |

The Asthma Coalition of Los Angeles County (ACLAC) reported asthma hospitalizations and Emergency Department visits by Los Angeles County Service Planning Areas (Scully 2010). 2006-2008 aggregate data were reported (annual rates per 10,000):

| SPA | Asthma Hospitalizations (0-17 yrs old) | Asthma Emergency Dept Visits |
|---|---|---|
| 1 – Antelope Valley | 18 | 58.4 |
| 2 – San Fernando | 7.8 | 35.6 |
| 3 – San Gabriel | 13 | 35 |
| 4 – Metro | 8 | 41.1 |
| 5 – West | 6.2 | 26.1 |
| 6 – South | 17.3 | 79.4 |
| 7 – East | 9.9 | 43.7 |
| 8 – South Bay | 10.9 | 46.4 |

Trends in hospitalizations for adult asthma are reported over a 10-year period, 1999 – 2008 for SPAs, LA County and California (discharges per 100,000 adults; OSHPD 2010):

| | State of California | Los Angeles County | SPA 6 South | SPA 7 East | SPA 8 South Bay |
|---|---|---|---|---|---|
| 1999 | 96.1 | 110.2 | 212.7 | 108.4 | 121.8 |
| 2000 | 80.9 | 92.8 | 178.1 | 99.5 | 98.2 |
| 2001 | 83.5 | 101.4 | 201.0 | 121.7 | 111.2 |
| 2002 | 82.3 | 100.3 | 177.7 | 107.8 | 107.5 |
| 2003 | 93.5 | 113.6 | 222.4 | 128.7 | 116.6 |
| 2004 | 80.6 | 98.0 | 193.4 | 105.4 | 92.6 |
| 2005 | 89.5 | 113.4 | 243.0 | 125.3 | 107.2 |
| 2006 | 79.8 | 98.2 | 211.4 | 108.5 | 86.5 |
| 2007 | 77.0 | 94.3 | 196.9 | 110.1 | 83.9 |
| 2008 | 84.5 | 103.9 | 224.4 | 131.5 | 90.6 |

Data on lifetime asthma hospitalizations and Emergency Department visits in California residents were collected in the 2009 California Health Interview Survey (CHIS) and are available on-line at californiabreathing.org/asthma-data/county-asthma-profiles/los-angeles-county asthma-profile. Pertinent data are summarized below for hospitalization rates, emergency department visits and by race/ethnicity:

Asthma Hospitalization data for LA County and California in 2008 compared to Healthy People 2010 and 2020 targets (age-adjusted rate per 10,000 residents):

| | LA County | California | HP 2010 | HP 2020 |
|---|---|---|---|---|
| 0-4 yrs old | 21.2 | 22 | 25 | 18.1 |
| 5-64 years old | 6.9 | 6.0 | 7.7 | 11.1 |
| 65+ years old | 29.9 | 21.9 | 11 | 20.3 |

Asthma Emergency Department Visits for LA County and California and compared to Healthy People 2010 targets (in 2008, age-adjusted rate per 10,000 residents):

| | LA County | California | HP 2010 | HP 2020 |
|---|---|---|---|---|
| 0-4 yrs old | 101.2 | 102.5 | 80 | 95.5 |
| 5-64 years old | 39.8 | 39.8 | 50 | 49.1 |
| 65+ years old | 41.2 | 37.7 | 15 | 13.2 |

Age-adjusted asthma hospitalizations and emergency department visits by Race/Ethnicity (in 2008; per 10,000 LA County residents):

| | Hospitalizations | ED Visits |
|---|---|---|
| White | 8.7 | 33.9 |
| African-American | 28.3 | 132.9 |
| Hispanic | 11 | 29.9 |
| Asian/Pacific Islander | 5.6 | 13.9 |

Trends in hospitalizations for children with asthma are also reported over a 10-year period, 1999 – 2008 for LA County and California (discharges per 100,000; data not available for SPAs) (OSHPD 2010):

| | State of California | Los Angeles County |
|---|---|---|
| 1999 | 126.9 | 124.6 |
| 2000 | 131 | 131.8 |
| 2001 | 109.6 | 107.9 |
| 2002 | 117.7 | 121.1 |
| 2003 | 113.3 | 103.9 |
| 2004 | 98.2 | 93.8 |
| 2005 | 90.1 | 89.1 |
| 2006 | 87.3 | 85 |
| 2007 | 78.5 | 74.1 |
| 2008 | 77.6 | 70.2 |

Milet (2007) reports age-adjusted asthma hospitalization rates. For all counties in California, based on 2000-2005 aggregate data, the asthma hospitalization rate is reported to be 10.5 per 10,000 residents while the rate for Los Angeles County is 12.3 per 10,000 residents. The age-adjusted asthma emergency department visit rate is 39.1 per 10,000 residents for all counties in California and 38.5 per 10,000 residents for Los Angeles County.

### 5. Chronic Obstructive Pulmonary Disease (COPD)

Chronic Obstructive Pulmonary Disease or COPD is a term to describe a group of lung diseases that includes emphysema and chronic bronchitis. COPD is characterized by air flow obstruction in the lungs that interferes with normal breathing. 82 percent of deaths due to COPD are caused by cigarette smoking (DHS 1998). According to the American Lung Association, COPD is the fourth leading cause of death in the United States with an age-adjusted death rate of 42.2 deaths per 100,000 population in 2001. COPD is the only lung disease with a higher age-adjusted death rate in Whites than in African-Americans (ALA 2004). The Healthy People 2010 target rate for COPD hospitalizations is 50.1 per 10,000 and 55.2 per 10,000 for COPD emergency department visits.

Trends in hospitalizations for adult chronic obstructive pulmonary disease (COPD) are reported over a 10-year period, 1999 – 2008 for SPAs, LA County and California (discharges per 100,000 adults; OSHPD 2010):

| | State of California | Los Angeles County | SPA 6 South | SPA 7 East | SPA 8 South Bay |
|---|---|---|---|---|---|
| 1999 | 210.3 | 241.2 | 374.8 | 283.8 | 249.2 |
| 2000 | 188.1 | 214.7 | 344.7 | 255.6 | 216.8 |
| 2001 | 177.9 | 206.4 | 335.5 | 252.4 | 192.6 |
| 2002 | 169.0 | 194.1 | 317.0 | 233.2 | 177.3 |
| 2003 | 160.5 | 184.5 | 300.8 | 218.9 | 160.3 |
| 2004 | 133.0 | 149.4 | 254.9 | 154.0 | 148.1 |
| 2005 | 120.4 | 137.9 | 257.1 | 130.4 | 133.5 |
| 2006 | 108.4 | 115.9 | 216.9 | 113.3 | 113.4 |
| 2007 | 109.9 | 116.4 | 224.0 | 110.8 | 113.6 |
| 2008 | 127.8 | 131.6 | 261.2 | 127.6 | 124.0 |

The asthma mortality rate in Los Angeles County is similar to the rate reported for the State of California. Likewise, asthma prevalence for all ages in LA County is similar to the prevalence observed in California and in Service Planning Areas (SPAs) 6, 7 and 8 (South, East and South Bay).

Asthma hospitalization rates for children in Los Angeles County are less than the asthma target rates recommended by the Healthy People 2010 objectives, but higher than the rates recommended by Healthy People 2020. Pediatric emergency department visit rates exceed the HP 2010 and HP 2020 target rates, as do the rates for the elderly.

Within the County of Los Angeles, SPA 6 (South) has somewhat higher hospitalizations and emergency department visit rates in children compared to SPA 7 (East) and SPA 8 (South Bay). Over the 10-year period of 1999-2008, hospitalization rates for adults with asthma in California, Los Angeles County and SPA 8 and declined while the rate in SPAs 6 and 7 has increased. For childhood

asthma, the hospitalization rate has decreased over that time period in California and Los Angeles County.

Review of asthma hospitalization rates in Los Angeles County by race/ethnicity shows that the hospitalization rate for African-Americans is approximately 3 times greater than the rate for Whites and approximately 2.6 times greater than the rate for Hispanics. Similarly, the emergency department visit rate for African-Americans is approximately 4 times greater than the rate for Whites and about 4.4 times greater than the rate for Hispanics.

Over the 10-year period of 1999-2008, hospitalization rates for adults with COPD in California, Los Angeles County and SPAs 6, 7 and 8 have declined.

**Conclusion**

This review has shown that the prevalence of asthma and the rates of asthma hospitalization, asthma emergency department visits and COPD hospitalization are similar in the area of Carson, California (SPA 8) to the prevalence and rates seen in Los Angeles County and in California as a whole. In Los Angeles County, the rates of asthma hospitalization and emergency department visits are 3-4 times higher for African-Americans than Whites and Hispanics.

There is not one single cause of asthma. Studies attempting to identify specific environmental exposures associated with the development of asthma have not produced a unifying theory to explain the asthma epidemic. It is well documented that outdoor environmental exposures to criteria pollutants such as ozone, particulate matter, sulfur dioxide, and nitrogen oxides exacerbate asthma and ozone can also cause asthma. It is interesting to note that at a gross level, air pollution levels in Southern California and in the United States are substantially lower than they were in the past, yet asthma prevalence has risen substantially over the past 20 years.

Despite the fact that the United States and California are experiencing an increase in asthma incidence rates of epidemic proportions (U.S. EPA 2003; Kreutzer 1998), it is extremely difficult to ascribe either causation or exacerbation to emissions from a gas power plant. Data is lacking because the examination of existing background asthma incident rates at a location pre-power plant construction is fraught with scientific uncertainty and many confounding variable such as the well-documented impacts from mobile sources. Certain air pollutants are a cause of asthma and others exacerbate asthma, but how many cases are caused or exacerbated by air pollution and at what levels of pollution is not known. Data specific to asthma rates for specific neighborhoods is non-existent and that for cities and counties limited. Even when data is available, different data-bases lead to results portraying different locations as having the “highest” rates of asthma. For example, one report from UCLA shows Solano County as having the highest childhood asthma rate in the state. To confound matters, the UCLA report has certain limitations, including self-

reporting of asthma in adults and children and a very low response rate for Solano County which could result in a skewed level of asthma found.

The California Department of Public Health compiled data on hospital admissions due to physician-diagnosed asthma which ranked Solano County near the middle of all counties, below the state average and below the Health People 2000 goal for children and minorities (California Department of Health Services, Environmental Health Investigations Branch, 2000). This report, however, also has certain limitations. While all asthma cases were physician-diagnosed, only hospital admissions – thus indicating only severe cases of asthma - were included. Since the goal of preventative medicine is to avoid hospitalization, many asthma cases go unreported to physicians, and many of those that are reported do not result in hospital admissions, this study may only examine a small sub-set of the actual number of asthma cases in California or a specific county.

In comparison to other sources, gas-fired power plants in California produce limited amounts of pollutants capable of causing or exacerbating asthma. Given the emissions controls and offsets for PM2.5/10, NOx, $SO_2$, and CO required to permit such facilities, gas-fired power plants in California do not create any significant unmitigated direct or indirect adverse air quality impacts. Therefore, staff believes that the available scientific evidence supports a finding that any incremental impact on asthma rates would not be significant.

**References**

American Lung Association (ALA). 2004. "Trends in Chronic Bronchitis and Emphysema: Morbidity and Mortality." Epidemiology and Statistics Unit, Research and Scientific Affairs. April. http://www.lungusa.org/atf/cf/{7A8D42C2-FCCA-4604-8ADE-7F5D5E762256}/COPD1.PDF

California Department of Health Services (DHS), Environmental Health Investigations Branch, 2000. "California County Asthma Hospitalization Chart Book." August.

Kreutzer, Richard et al., 1998. "Asthma in California: Laying the Foundations for a Statewide Strategy." California Policy Seminars Brief Series. August.

LACDPH (Los Angeles County Department of Public Health). 2009. "Key Indicators of Health by Service Planning Area." Office of Health Assessment and Epidemiology. June.

Liu, C. 2010. "Chronic Conditions of Californians. 2007 California Health Interview Study." UCLA Center for Health Policy Research. March.

Milet, M. et al. 2007. "The Burden of Asthma in California: A Surveillance Report. Richmond, CA: California Department of Health Services, Environmental Health Investigations Branch. June.

OSHPD. 2010. "Preventable Hospitalizations in California: Statewide and County Trends, 1999 – 2008. Office of Statewide Health Planning and Development, Agency for Healthcare Research and Quality, Prevention Quality Indicators.

Scully, J. 2010. Asthma Coalition Presentation, September 16. Asthma Coalition of Los Angeles County (ACLAC). http://publichealth.lacounty.gov/mch/AsthmaCoalition/docs/Asthma%20Coalition%20Presentation%209.16.10.pdf

Stockman JK et al. 2003. "California County Asthma Hospitalization Chart Book: Data from 1998 to 2000." Oakland, CA: California Department of Health Services (CDHS), Environmental Health Investigations Branch. September. http://www.ehib.org/cma/papers/Hosp_Cht_Book_2003.pdf

U. S. EPA 2003. "America's Children and the Environment: Measures of Contaminants, Body Burdens, and Illnesses." 2nd edition. EPA 240-R-03-001. Office of Children's Health Protection, February.

Figure 1. Map of Los Angeles County Service Planning Areas.


Source: http://publichealth.lacounty.gov/spa/spamap.htm

**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA**
**1516 NINTH STREET, SACRAMENTO, CA 95814**
**1-800-822-6228 – WWW.ENERGY.CA.GOV**

**APPLICATION FOR CERTIFICATION**
**FOR THE *WATSON COGENERATION STEAM AND ELECTRICITY RELIABILITY PROJECT***

DOCKET NO. 09-AFC-1
PROOF OF SERVICE LIST
(Revised 8/15/11)

APPLICANT

Ross Metersky
BP Products North America, Inc.
700 Louisiana Street, 12th Floor
Houston, Texas 77002
ross.metersky@bp.com

APPLICANT'S CONSULTANTS

URS Corporation
Cynthia H. Kyle-Fischer
8181 East Tufts Avenue
Denver, Colorado 80237
cindy_kyle-fischer@urscorp.com

COUNSEL FOR APPLICANT

Chris Ellison
Ellison Schneider and Harris LLP
2600 Capitol Avenue, Suite 400
Sacramento, CA 95816
cte@eslawfirm.com

INTERESTED AGENCIES

California ISO
e-recipient@caiso.com

INTERVENORS

California Unions for Reliable Energy (CURE)
c/o: Tanya A. Gulesserian
Marc D. Joseph
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
tgulesserian@adamsbroadwell.com

ENERGY COMMISSION – DECISIONMAKERS

CARLA PETERMAN
Commissioner and Presiding Member
cpeterma@energy.state.ca.us

Jim Bartridge
Adviser to Commissioner Peterman
jbartrid@energy.state.ca.us

KAREN DOUGLAS
Commissioner and Associate Member
kldougla@energy.state.ca.us

Galen Lemei
Adviser to Commissioner Douglas
glemei@energy.state.ca.us

Raoul Renaud
Hearing Officer
rrenaud@energy.state.ca.us

ENERGY COMMISSION STAFF

Alan Solomon
Project Manager
asolomon@energy.state.ca.us

Christine Hammond
Staff Counsel
chammond@energy.state.ca.us

ENERGY COMMISSION – PUBLIC ADVISER
Jennifer Jennings
Public Adviser's Office
*e-mail service preferred*
publicadviser@energy.state.ca.us

*indicates change

## DECLARATION OF SERVICE

I, Maria Santourdjian, declare that on, October 14, 2011, I served and filed copies of the attached CEC Staff Response to Public comment Concerning Asthma for BP Watson Project (09-AFC-1). The original document, filed with the Docket Unit or the Chief Counsel, as required by the applicable regulation, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: [www.energy.ca.gov/sitingcases/watson/index.html].

The document has been sent to the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit or Chief Counsel, as appropriate, in the following manner:

(*Check all that Apply*)

For service to all other parties:

__x__ Served electronically to all e-mail addresses on the Proof of Service list;

__x__ Served by delivering on this date, either personally, or for mailing with the U.S. Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses NOT marked "e-mail preferred."

*AND*

For filing with the Docket Unit at the Energy Commission:

__x__ by sending an original paper copy and one electronic copy, mailed with the U.S. Postal Service with first class postage thereon fully prepaid and e-mailed respectively, to the address below (preferred method); *OR*

____ by depositing an original and 12 paper copies in the mail with the U.S. Postal Service with first class postage thereon fully prepaid, as follows:

CALIFORNIA ENERGY COMMISSION – DOCKET UNIT
Attn: Docket No. 09-AFC-1
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

*OR, if filing a Petition for Reconsideration of Decision or Order pursuant to Title 20, § 1720:*

____ Served by delivering on this date one electronic copy by e-mail, and an original paper copy to the Chief Counsel at the following address, either personally, or for mailing with the U.S. Postal Service with first class postage thereon fully prepaid:

California Energy Commission
Michael J. Levy, Chief Counsel
1516 Ninth Street MS-14
Sacramento, CA 95814
mlevy@energy.state.ca.us

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Originally Signed by
Maria Santourdjian