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Memorandum

Date: July 6, 2017
Telephone: (916) 651-0966

To: Janea A. Scott, Commissioner and Presiding Member
Karen Douglas, Commissioner and Associate Member

From: California Energy Commission – Leonidas Payne
1516 Ninth Street Project Manager
Sacramento, CA 95814-5512

Subject: **PUENTE POWER PROJECT STAFF SUPPLEMENTAL TESTIMONY DECLARATIONS AND RESUMES**

On June 13, 2017, staff filed supplemental testimony on the topics of Soil and Water Resources (coastal flooding analysis), Traffic and Transportation Alternatives (impacts on aviation), and Compliance and Closure, in response to the May 11, 2017 Revised Committee Scheduling Order.

Enclosed are staff's declarations and resumes.

**DECLARATION OF
MIKE CONWAY**

I, **MIKE CONWAY** declare as follows:

1. I am presently employed by the California Energy Commission in the **ENGINEERING OFFICE** of the Siting, Transmission, and Environmental Protection Division as an **ENGINEERING GEOLOGIST**.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I helped prepare the staff testimony on **SOIL & WATER RESOURCES**, for the Puente Power Project based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: June 19, 2017

Signed: Mike Conway

Digitally signed by Mike Conway
DN: cn=Mike Conway, o=CEC,
ou=Engineering Office, email=Mike.
conway@energy.ca.gov, c=US
Date: 2017.06.19 13:42:20 -0700

At: Sacramento, California

Resume For: Mike Conway

Education: Bachelor of Science in Geology, University of California, Davis, August 2003.
Master of Science in Geology, California State University, Sacramento, expected 2011

Certifications: Certified Professional in Erosion and Sediment Control (CPESC)
Certified Erosion, Sediment and Storm Water Inspector (CESSWI)
Leadership in Energy and Environmental Design Accredited Professional (LEED AP)

Experience:

Engineering Geologist: California Energy Commission, Sacramento, CA 2009

- Conduct analyses of soil and water resource reports submitted to Commission
- Assess impacts to soil and water resources from construction and operation of energy producing facilities
- Perform onsite evaluations of soil and water resources pre and post-project
- Implement a CEQA-like review of proposed energy projects to evaluate environmental impacts

Environmental Scientist: Central Valley Water Board, Rancho Cordova, CA 2009

- Wrote municipal storm water permits for Phase I communities in the Central Valley
- Reviewed storm water annual reports for Phase I and II municipalities
- Conducted audits of industrial sites for compliance with storm water permits
- Conducted audits of municipalities for compliance with municipal permits
- Help communities better understand how to effectively implement storm water programs
- Represented Water Board in large technical workshops and other public forums

Environmental Consultant: Wood Rodgers, Inc., Sacramento, CA 2006-2009

- Consulted clients on how to comply with Federal, State and local storm water quality and environmental regulations
- Helped public and private sector clients gain State Water Resources Control Board (SWRCB) permit coverage under Large and Small MS4 General Permits, NPDES Permits, CWA Section 401 Permits
- Consulted clients on Army Corps of Engineers, 404 Permitting
- Developed a storm water quality manual for Yolo County
- Prepared Caltrans environmental documentation and design for all project phases
- Prepared Storm Water Management Plans (SWMP) and Storm Water Pollution Prevention Plans (SWPPP)
- Drafted water pollution control exhibits using both AutoCAD and MicroStation
- Prepared Caltrans Storm Water Data Reports including cost estimates
- Designed landscaping plans for Caltrans' Modesto Ramp Rehabilitation Project
- Prepared Spill Prevention Control and Countermeasure (SPCC) plans
- Created Hazardous Materials Business Plan for City of Fort Bragg, California
- Prepared proposals for outgoing environmental quality project bids
- Performed field visits to evaluate Best Management Practice (BMP) effectiveness in reducing erosion and sedimentation
- Facilitated multiple storm water quality training workshops for groups up to 20 plus

Storm Water Quality Consultant: Envirosafety Services, Elk Grove, CA 2004-2006

- Wrote site specific SWPPPs to include guidance specific to city, county, and geographical constraints
- Designed BMP exhibits using AutoCAD
- Conducted inspections at construction sites throughout the Central Valley for (SWPPP) compliance
- Resolved storm water compliance issues in cooperation with site superintendents, county and city inspectors
- Researched current storm water protection regulations to best protect clients

Post-Graduate Researcher: Dept. of Land, Air, and Water Resources, U.C. Davis, CA 2003

- Studied the effects of irrigation practices on wetland ecology and water quality
- Independently organized monthly analyses and data processing of selenium contaminated invertebrate, algae, and water samples from the Tulare Lake Drainage District
- Managed concentrated acids, carcinogenic solutions, and final fluorescence measurements
- Compiled research data and presented findings to a team of eight colleagues

Lab Technician: Raney Geotechnical Laboratory, West Sacramento, CA 2001

- Conducted moisture density, unconfined compression tests, Atterburg Limit, curve, plasticity tests, and basic calculations for soil samples
- Administered load tests on concrete cylinders and mortar samples
- Performed percolation tests and Dynamic Cone Penetrator (DCP) tests in the field and gathered water samples for environmental analysis

**DECLARATION OF
JONATHAN FONG**

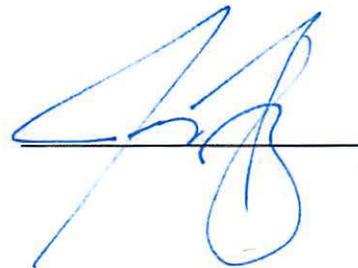
I, **JONATHAN FONG** declare as follows:

1. I am presently employed by the California Energy Commission in the **ENVIRONMENTAL OFFICE** of the Systems Assessment and Facilities Siting Division as a **ENERGY RESOURCES SPECIALIST III SUPERVISOR**.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I helped prepare and/or supervised the preparation of the staff testimony on **STAFF'S SUPPLEMENTAL TESTIMONY FILED IN RESPONSE TO THE COMMITTEE'S MARCH 10, 2017 ORDER FOR THE PUENTE POWER PROJECT** based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 6.20.2017

Signed: _____



At: Sacramento, California

Jonathan Fong
Jonathan.Fong@energy.ca.gov

EDUCATION

University of California, Irvine Graduated June 2005

- Environmental Analysis and Design, Specialization in Planning and Policy Studies

WORK EXPERIENCE

California Energy Commission

Environmental Protection Unit, Planner II- August 3, 2013 to present

Responsible for reviewing thermal power plants regulated by the State of California. As a technical expert in Land Use and Transportation and Traffic, I evaluate projects and determine potential impacts in accordance with federal, state and local regulations. Prepare expert testimony evaluating project compliance and proposed mitigation measures to reduce impacts. Regularly attend public workshop and provide expert testimony on staff analysis.

The Lyle Company

Site Acquisition and Zoning Specialist, Team Lead- January 2010 to November 2011

Working in the wireless telecommunications industry, I lead a small group of personnel in permitting projects for major wireless carriers. I gained extensive experience working with engineers and other technical staff in order to meet strict jurisdiction requirements and which met client goals. I have extensive experience using database software for project tracking through assignment to completion. I have developed the ability to review complex drawings and technical documentation as well as team leadership skills. I would routinely present projects at public hearings to decision makers as well as work with the public to explain project details and develop alternatives for contentious sites.

County of El Dorado

Planning Services, Associate Planner - October 2005 to January 2010

Land Use Planning Project Planner. Responsible for processing complex discretionary projects such as tentative subdivision maps, general plan amendments, including wireless telecommunications projects. As project planner I was in charge of preparing policy review in staff reports and CEQA review. I have developed an extensive background in reviewing general plan policies and local ordinances. Responsible for preparing staff reports and presentations for public hearing.

City of Santa Ana

Planning and Building Agency, Planning Intern- November 2004 to August 2005

As member of the Regional and Advance Planning Team assisted planners on long range documents and policy. Reviewed plans for various residential and commercial developments in the city. Worked independently and in different teams to perform various planning duties. Used GIS to produce maps as well as Access to prepare databases for reports. Responsible for creating, maintaining and updating various databases of city resources.

Jones and Stokes

Environmental Analysis Team, Student Intern – June 2004 to August 2004

Assisted the Environmental Analysis team with gathering data and writing reports. Wrote elements of Regional Master Plan for the State of Wyoming. Attended Jones and Stokes in-house training seminar on CEQA guidelines and issues with cumulative impacts.

DECLARATION OF
Joseph Hughes

I, **Joseph Hughes** declare as follows:

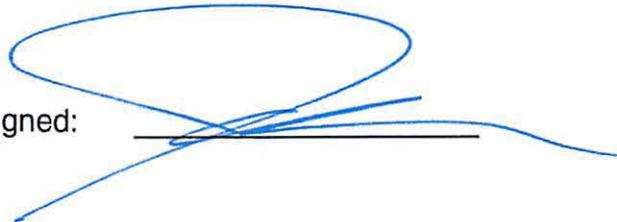
1. I am presently employed by the California Energy Commission in the **Engineering Office** of the Siting, Transmission and Environmental Protection division as an Air Resources Engineer.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I helped prepare the staff testimony on **Thermal Plume Analysis**, for the Puente Alternatives based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 06-20-2017

Signed: _____

At: Sacramento, California



Joseph Hughes

Education

Sacramento State University 2003-2008

Sacramento, Ca

Bachelor of Science, Mechanical Engineering Technology, 3.25GPA-May 2008

AA degree in liberal arts and science 3.0 GPA

Experience

California Energy Commission March 2009-Present

Sacramento, Ca

Air Resources Engineer

- Currently co-authoring air quality staff assessments for thermal power plant projects in California producing more than 50 megawatts of electricity.
- Currently working on American Recovery and Reinvestment Act (ARRA) projects, along with natural gas fired projects.
- Review and process compliance reports for multiple power plants in California.
- Currently working on project amendments and modifications requiring air quality analysis.
- Trained in CEQA and NEPA analysis, along with AERMOD air modeling.

Capital Engineering Consultants, Inc April 2008-2009

Sacramento, Ca

Mechanical Engineer

- Responsible for detailed and accurate take off calculations to ensure successful project completion.
- Completing engineering design for Heating Ventilation Air Conditioning and Plumbing by utilizing complex engineering calculations and software.
- Responsible for meeting code regulation and requirements to the degree acceptable by various organizations.
- Lead productive weekly team meetings to discuss project scheduling, cost effectiveness, request for information, and change orders.

**DECLARATION OF
Eric Knight**

I, **Eric Knight**, declare as follows:

1. I am presently employed by the California Energy Commission, Siting, Transmission & Environmental Protection Division, as the Manager of the Environmental Protection Office.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I helped prepare and am co-sponsoring staff's testimony in response to the May 11 Committee Order regarding the environmental effects of the demolition and removal of the Puente project compared to Mandalay Units 1 and 2. My testimony is based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: July 6, 2017 Signed: 

At: Sacramento, California

Eric Knight

Energy Resources Specialist III (Managerial)

Professional Experience

Eighteen years of experience with energy facility permitting and preparing environmental documentation in compliance with the California Environmental Quality Act (CEQA).

Environmental Office Manager (Office Manager II/Energy Resources Specialist III (Managerial)

*Siting, Transmission, and Environmental Protection Division, CA Energy Commission
August 2009-present*

Responsible for planning, organizing and directing the activities of the staff of the Environmental Office. Office staff are primarily responsible for preparing environmental impact analyses in the areas of land use, transportation, visual resources, socioeconomics, alternatives, biological resources, and cultural resources as required by CEQA, for thermal electric generating facilities (50 MWs and greater) and related facilities (including electric transmission lines and natural gas and water supply pipelines); identifying feasible measures to mitigate significant impacts; and providing expert witness testimony at evidentiary hearings. Responsible for quality control of all Office work products, including ensuring staff's analyses are complete, accurate, and defensible. Advise the Division Deputy Director, Executive Director, and Commissioners on a broad range of issues related to energy facility siting and the Office's responsibilities. Represent the Office/Siting Division in meetings, workshops, and hearings with energy facility applicants, project owners, intervenors, federal, state, and local agency representatives, Native American tribes, interest groups, Commissioners, and the public. Review and analyze proposed legislation related to the Division's programs.

Siting & Dockets Office Manager (Office Manager I)

*Siting, Transmission, and Environmental Protection Division, CA Energy Commission
June 2008-August 2009*

Was responsible for planning, organizing and directing the activities of the staff of the Siting & Dockets Office, which included project managers and project assistants assigned to power plant licensing cases and the staff responsible for maintaining the Energy Commission's regulatory and non-regulatory official records (Dockets). The Siting Office is responsible for coordinating the environmental and engineering assessments of proposed energy facilities conducted by the technical offices (Environmental, Engineering, and Transmission) of the Siting Division. Advised the Division Deputy Director, Executive Director, and Commissioners on a broad range of issues related to energy facility siting and the Office's responsibilities. Represented the Office/Siting Division in meetings, workshops, and hearings with energy facility applicants, intervenors, federal, state, and local agency representatives, interest groups, and the public.

Siting Program Manager (Planner III)

***Energy Facilities Siting Division, Siting & Compliance Office, CA Energy Commission
February 2008-June 2008***

Was responsible for managing the Energy Facilities Siting Program and supervising and directing the work of project managers overseeing the Siting staff's review and analysis of power plant siting cases. Represented the Division in meetings, workshops, and hearings with project applicants, intervenors, federal, state, and local agency representatives, interest groups, and the public. Advised the Siting & Compliance Office Manager and Deputy Director on technical, procedural, and legislative issues.

Community Resources Unit Supervisor (Planner III)

***Energy Facilities Siting Division, Environmental Office, CA Energy Commission
January 2007-February 2008***

Was responsible for supervising and directing the work of technical staff in the Community Resources Unit and consultants performing environmental impact assessments of power plants and related facilities as required by CEQA and the Warren-Alquist Act. The Unit was responsible for preparing environmental impact assessments in the areas of land use/agricultural resources, traffic and transportation, visual resources, and socioeconomics; identifying feasible measures to mitigate significant impacts and ensure compliance with applicable laws, ordinances, regulations and standards; and presenting expert witness testimony at evidentiary hearings. Was responsible for quality control of products originating from the Unit, including ensuring staff's analyses were complete, accurate and defensible, and completed on schedule. As Unit Senior, was responsible for completing the most complex analyses and addressing the most difficult technical issues related to the Unit's responsibilities. Advised the Environmental Office Manager and Division Deputy Director on technical, procedural, and legislative issues.

Energy Commission Specialist II

***Special Projects Office, Fuels & Transportation Division, CA Energy Commission
July 2006-January 2007***

Provided recommendations on complex, sensitive, and technical problems related to energy infrastructure assessments, particularly liquefied natural gas (LNG) projects. Was responsible for leading the Special Projects Office's LNG assessment activities. Was responsible for briefings for management, Commissioners (Natural Gas Committee), and the LNG Interagency Working Group on LNG assessment activities and projects. Was responsible for preparing reports, correspondence, and presentations related to LNG proposals. Represented the Energy Commission at the "LNG: When East Meets West - The Unfolding of the LNG Trade in the Pacific" conference.

Project Manager (Planner II)

*Energy Facility Siting Division, Siting Office, CA Energy Commission
November 2004-July 2006*

Was responsible for managing the Siting Division staff's review and analysis of Applications for Certification to construct and operate thermal electric power plants and related facilities. Was responsible for briefings for the Executive Director, Division Deputy Director, Office Managers, Supervisors, and technical staff on the schedule, strategy, progress, and issues throughout the siting case. Provided direction to project team members and was responsible for ensuring quality control on all published staff products, including the staff's assessment covering 22 environmental and engineering technical disciplines. Was responsible for organizing, scheduling, and conducting public workshops and preparing correspondence.

Environmental Planner (Planner I/II)

*Energy Facility Siting Division, Environmental Office, CA Energy Commission
October 1998-November 2004*

Was primarily responsible for preparing independent analyses of the visual, land use, and transportation impacts of power plant projects and related facilities. Evaluated project compliance with applicable laws, ordinances, regulations and standards, and identified feasible measures to mitigate significant adverse impacts as required by CEQA. Other duties included preparing data requests, conducting field visits, participating in public workshops, preparing written testimony, presenting expert witness testimony at hearings before the Commissioners, and monitoring compliance with conditions of certification in the Final Commission Decision.

Assistant Project Manager (Energy Analyst)

*Energy Facility Siting Division, Siting & Permit Assistance Unit, CA Energy Commission
June 1995-October 1998*

Worked with project manager to promote local government use of an urban planning tool emphasizing energy efficiency. Authored a chapter to the National Wind Coordinating Committee's handbook *Permitting of Wind Energy Facilities*. Assisted in the preparation of several Energy Commission publications, including the *Energy Aware Planning Guide II: Energy Facilities* and *The Energy Yardstick: Using PLACE³S to Create More Sustainable Communities*.

Program Technician

California Department of Toxic Substances Control

June 1994-June 1995 (Student Assistant, March 1993-January 1994)

Provided regulatory assistance to hazardous waste generators, transporters and storage facility operators. Compiled an instructions manual for telephone hotline staff to refer to while assisting hazardous waste handlers and the general public. Issued identification numbers to hazardous waste generators. Entered facility information into the department's database of hazardous waste handlers.

Student Intern

Sacramento Valley Toxics Campaign

January 1992-June 1992

Filed public record requests with state and federal agencies. Conducted research and authored an article for the campaign newsletter. Helped to organize community meetings, press conferences and public outreach events.

Education

Bachelor of Arts – Environmental Studies, California State University, Sacramento, 1993

Minor – Government, CSUS, 1993

Professional Education (Partial List)

Advanced CEQA, UC Davis Extension, May 2016

Expert Witness and CEQA Training, CEC Chief Counsel's Office, 2014 and 2011

EIR/EIS Preparation and Review, UC Davis Extension, October 2009

Defensible CEQA Documents, Lorman Education Services, August 2007

Airports and Land Use Compatibility Planning, UC Davis Extension, April 2007

Managing LNG Risks, ioMosaic Corporation, November 2006

Applied Project Management, DTS Training Center, May 2006

CEQA Workshop, Association of Environmental Professionals, Feb. 2004 and 1999

CEQA Overview and Update, UC Davis Extension, June 1998

Land Use Planning for Environmental Professionals, UC Davis Extension, May 1996

Introduction to ArcView and Avenue (GIS), ESRI, August 1995 and May 1998

DECLARATION OF

Andrea Koch

I, **Andrea Koch**, declare as follows:

1. I am presently employed by the California Energy Commission in the Environmental Protection Office of the Siting, Transmission, and Environmental Protection Division as an Energy Facility Siting Planner II.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I helped prepare the additional evidence for Traffic and Transportation for the Puente Power Project based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 6/22/17

Signed: Andrea Koch

At: Westwood, California

ANDREA KOCH

PROFESSIONAL EXPERIENCE

CALIFORNIA ENERGY COMMISSION, December 2009 – Present

Siting, Transmission, and Environmental Protection Division, Sacramento, California

Environmental Planner II- Perform environmental review of power plant applications.

- Review power plant applications for traffic and transportation and land use impacts.
- Write environmental analysis documents.

CITY OF SACRAMENTO, June 2007 – July 2009

Planning Department, Long-Range Planning Division, Sacramento, California

Assistant Planner- Performed long-range city planning for Sacramento.

- Coordinated review of the Draft 2030 General Plan, a comprehensive citywide land use plan.
- Prepared Ben Ali and Hagginwood neighborhood plans. Worked with City staff and community members to identify strategies for resolving neighborhood issues, such as infrastructure deficiencies.
- Reviewed 70 development applications, analyzing their consistency with City policy and providing written feedback to applicants.

COUNTY OF SANTA CRUZ, June 2005 – June 2007

Planning Department, Environmental Planning Division, Santa Cruz, California

Resource Planner II- Performed resource planning for Santa Cruz County.

- Reviewed development permit applications to ensure their consistency with regulations for creeks, wetlands, grading, geologic hazards, erosion control, and sensitive plant and animal species.
- Wrote staff reports analyzing development proposals and providing recommendations to the Environmental Planning Division Manager.
- Performed an average of 5 weekly pre-construction meetings and final inspections at project sites to ensure that development was consistent with County regulations and required mitigations.
- Regularly assisted the public with resource planning questions, both in-person and over the phone.

COUNTY OF MONTEREY, November 2004 – June 2005

Planning Department, Marina, California

Assistant Planner- Performed current planning for Monterey County.

- Reviewed development permit applications for consistency with County regulations.
- Prepared and presented staff reports for development applications. Reports provided recommendations to the Zoning Administrator.
- Assisted the public with zoning questions, both in-person and over the phone.

EDUCATION

California Polytechnic State University, San Luis Obispo, California

- Master of City and Regional Planning, Concentration in Environmental Planning, 2004

University of California, Davis

- Bachelor of Science in Wildlife, Fish, & Conservation Biology, Concentration in Conservation Biology, 2002
- Graduated with High Honors and a Department Citation

**DECLARATION OF
Matthew Layton**

I, **Matthew Layton**, declare as follows:

1. I am presently employed by the California Energy Commission, Siting, Transmission & Environmental Protection Division, as a Supervising Mechanical Engineer for the Engineering Office.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I helped prepare and am co-sponsoring staff's testimony in response to the May 11 Committee Order regarding the environmental effects of the demolition and removal of the Puente project compared to Mandalay Units 1 and 2. My testimony is based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: July 6, 2017 Signed: 

At: Sacramento, California

MATTHEW S. LAYTON

Experience Summary

Twenty eight years of experience in the electric power generation field, including regulatory compliance and modification; research and development; licensing of nuclear, coal-fired, peaking and combined cycle power plants; and engineering and policy analysis of regulatory issues.

Education

B.S., Applied Mechanics, University of California, San Diego.

Registered Professional Engineer - Mechanical, California.

Experience

2009-present – Supervising Mechanical Engineer, Systems Assessment and Facilities Siting Division, California Energy Commission.

1987-2009 – Senior Mechanical Engineer, Systems Assessment and Facilities Siting Division, California Energy Commission. Review and evaluate power plant proposals, identify issues and resolutions; coordinate with other agencies; and prepare testimony, in the areas of:

- Air quality resources and potential impacts, and mitigation measures;
- Public Health; and
- Transmission Line Safety and Nuisance.

Prepared Commission demonstration project process; contributed to the Energy Technology Status, Energy Development, and Electricity Reports; Project Manager for demonstration projects; evaluated demonstration test plans, procedures, data and reports; disseminated test results; and managed research and development contracts.

1983-1986 – Control Systems Engineer, Bechtel Power Corporation. Managed a multi-disciplined effort to environmentally qualify client's safety related nuclear plant equipment. Performed analyses, calculations and reviews against vendor test reports, NRC guidelines and plant normal and postulated accident conditions.

1981-1983 – Engineer, GA Technologies, Inc. Supervised design and procurement of full-scale test assembly used to evaluate design changes to operating reactor graphite core assembly. Conducted experiment to determine the relationship of graphite oxidation rate to water concentration, temperature, and helium pressure. Environmentally qualified essential and safety related nuclear power plant equipment to comply with NRC guidelines.

DECLARATION OF
Paul Marshall, Senior Engineering Geologist

I, Paul Marshall, declare as follows:

1. I am presently employed by the California Energy Commission in the Engineering Office of the Siting Transmission and Environmental Protection Division as a Senior Engineering Geologist.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I supervise Marylou Taylor and Mike Conway, who prepared the supplemental staff testimony on Soil and Water Resources (coastal flooding analysis) for the Puente Power Project.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: July 6, 2017 Signed:



At: Sacramento, California

Paul D. Marshall

EDUCATION

SAN DIEGO STATE UNIVERSITY, CALIFORNIA
Bachelor of Science Degree in Engineering Geology
Completed post-baccalaureate courses in Engineering Geology

FRESNO STATE UNIVERSITY, CALIFORNIA
Completed post-baccalaureate courses in Civil Engineering

LICENSES

California Registered Geologist, No. 5718
California Certified Engineering Geologist, No. 1817
California Certified Hydrogeologist, No. 468

EMPLOYMENT HISTORY

CALIFORNIA ENERGY COMMISSION

Siting, Transmission, and Environmental Protection Division – Supervisor, Soil, Water Resources, and Waste Management Unit/ January 2008 -Present

Supervise a multidisciplinary team of engineers and geologists responsible for analysis of potential environmental impacts from power plant construction and operation to soil and water resources and from waste management activities. Provide guidance and technical assistance to staff for complex analysis of power plant impacts on water supply, water quality, wastewater disposal, discharges to surface water and groundwater, development and utilization of groundwater, flood impacts and storm water management, and assessment of potential impacts on human health and the environment. Ensures staff work products are consistent with laws, regulations, and policies of the US EPA, US ACOE, SWRCB, RWQCB's, CDFG, DTSC, and other local ordinances. Contract with and direct the work of consultants conducting technical reviews of power plants. Schedule and confer with a multidisciplinary staff of planners, engineers, and scientists to ensure staff analyses are coordinated with other disciplines where there is overlap. Ensure product delivery in a timely manner. Hire and develop staff, complete probationary and performance reports, counsel and mentor staff. Take adverse actions when appropriate.

CALIFORNIA DEPARTMENT OF CONSERVATION

Office of Mine Reclamation – Supervisor, Compliance Unit/October 2006 – January 2008

Supervise a team of engineering geologists responsible for ensuring compliance with mine reclamation plans and specifications. Review and approve staff work conducted to ensure plans and specifications were adequate and enforceable. Direct staff responsible for enforcement actions and preparation of data and reports for presentation to the State Mining and Geology Board. Oversight of staff review of cost estimates for mine reclamation and conduct statewide workshops outlining requirements for mine reclamation cost estimates. Implement Lead Agency review and audit program.

STATE WATER RESOURCES CONTROL BOARD

Division of Financial Assistance – Chief, Project Implementation Unit/January 2001 – September 2006

Supervise a multidisciplinary team responsible for contract and project management associated with Prop 13, Prop 40, Prop 50, Water Bond 1986 and 1996, and the Federal Clean Water Act funding programs. Develop program policies and procedures for implementation and management of grant and loan programs and projects. Direct the work of staff and coordinate with state and federal agencies in the development of technical review criteria for selection of projects recommended for grant award. Direct the work of staff and contractors developing a Project Assessment and Evaluation Program used to evaluate program effectiveness. Provide guidance and technical support to stakeholders for project development. Represent SWRCB at public meetings and conduct training on program procedures. Ensure project integrity and compliance with State and Federal laws.

CALIFORNIA DEPARTMENT OF WATER RESOURCES

Division of Local Assistance - Senior Engineering Geologist/ July 2000 – January 2001

Manage multidisciplinary staff to identify and develop conjunctive water management programs throughout Southern California. Organize, guide, and support local stakeholder groups in development of conjunctive water management plans. Develop partnering opportunities with other local, state, and federal agencies to spread program benefits region-wide and implement CALFED goals and objectives. Write and review contract documents, task orders, grant applications, and provide input on program policy. Solicit and assist agencies with loan and grant applications for various Water Bond 2000 programs.

Division of Safety of Dams - Senior Engineering Geologist/October 1995 – June 2000

Serve as an engineering geology consultant to a staff of 47 design and field engineers performing regulatory oversight of dam construction and operation. Evaluate existing and proposed dam sites for geologic and seismic hazards; review and comment on geotechnical site assessments and construction plans and specifications; act as technical adviser to staff during construction; inspect and document geologic conditions. Communicate findings to staff, consultants, and owners through written reports, briefings, and meetings. Give presentations to DSOD Board of Consultants on development of state-of-the-art procedures. Develop information and monitor changes in the regional geologic environment.

Division of Local Assistance - Associate Engineering Geologist/November 1993 - October 1995

As a member of the Water Quality Assessment Program I independently performed surface and groundwater studies, and environmental site assessments for both DWR and federal and local government agencies. Negotiated contracts, authored task assignments, and oversaw the work of consultants. Authored reports with analysis of data from various types of exploration and sampling programs. Assembled a Department-wide Site Assessment Project Team and assisted in developing DWR policy for site assessments. Trained team members and gave staff presentations outlining program and team goals.

Division of Local Assistance - Associate Engineering Geologist/October 1992 - October 1993

Under the auspices of the Proposition 82 Water Conservation Bond Law of 1988, I directed the Department's technical, environmental, and economic review of ground water recharge and water supply loan applications. Performed independent technical review and certified feasibility and construction loan applications. Provided assistance to public water agencies regarding compliance with environmental and water rights regulations, and institutional and legal requirements for project development. Coordinated Department's technical review and comment on various CEQA documents.

KLEINFELDER, INC.

Project Geologist - 4 years

Worked in regional offices throughout Central and Southern California, Western Arizona and Southern Nevada performing geotechnical investigations and environmental site characterizations. Supervised field exploration activities throughout the Central Valley and Central Coast of California. Directed water resource, groundwater recharge, geotechnical, and environmental site characterization studies. Marketed clients, determined scope of services, and prepared cost proposals. Monitored project schedules and billing. Briefed clients and supervisors on project status. Authored reports providing geotechnical recommendations for various federal, state, municipal, and commercial projects. Inspected remediation and stabilization projects. Other responsibilities included compilation of data using spreadsheets and databases, conducting literature and aerial photograph review, and writing reports.

EARTH SYSTEMS, INC.

Staff Geologist - 3 years

Designed and supervised installation of monitoring well arrays, extraction wells, drains, dewatering, and slope monitoring equipment throughout central and southern California. Directed subsurface exploration using various drilling and geophysical techniques. Conducted liquefaction, fault rupture hazard, and coastal bluff stability studies.

Conducted special inspections of excavations, deep foundations, reinforced earth, and concrete. Performed numerical analyses for slope stability, liquefaction, and earthquake ground motion studies. Authored reports containing cross-sections, maps, and graphs presenting various types of water resource and geotechnical data.

DECLARATION OF CHRISTINE ROOT

I, Christine Root, declare as follows:

1. I am presently employed by the California Energy Commission in the Compliance Office of the Siting, Transmission, and Environmental Protection Division as the Compliance Office Manager.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I prepared or helped prepare the Compliance and Closure Supplemental Testimony for the Puente Power Project based on my independent analysis of the Application for Certification and supplements thereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issues addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 6/11/17

Signed: Christine Root

At: Sacramento, California

CHRISTINE R. STORA

EXPERIENCE SUMMARY

Over nine years of project and staff management experience related to the development of energy projects in North America and other international locations. Technical focus on NEPA, and CEQA compliance, planning, permitting, and compliance monitoring.

PROFESSIONAL EXPERIENCE AND EDUCATION

CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER 06/2010 to Present

Manages power plant compliance for licensed power plants in California including solar, geothermal, and natural gas. Duties include oversight of power plant construction and ensuring that the conditions of certification are being met throughout construction, operation, and decommissioning of various power plants in California. Reviews petitions to amend existing licenses and gives recommendations to the Commission for approval or denial of requests. Coordinate with Commission technical staff, Certified Building Officers, other regulatory agencies, developers, contractors, and the public to ensure power projects are in compliance with all applicable conditions of certification and LORS. Working knowledge of CEQA, NEPA, and the Warren-Alquist Act.

Construction Compliance Project Manager for the following projects:

- Calpine's Los Esteros 2 Power Plant conversion of the simple-cycle power plant (Los Esteros I) to a combined-cycle with a total output of 320 MW located in north San Jose CA.
- GenOn's Marsh Landing Generating Station 760 MW simple-cycle power plant located in Antioch CA.
- Northern California Power Authority's Lodi Energy Center 255 MW combined-cycle power plant located in Lodi CA.
- Turlock Irrigation District's Almond 2 Power Plant 174 MW simple-cycle peaker located in Modesto CA.
- Calpine's Sutter Energy Center Grimes Pipeline, a 2.8 mile natural gas pipeline.

Amendment Project Manager:

Responsible for all Commission Amendments from 06/2010 to 4/2011. Duties included developing the Amendment Procedures Guidance Document for Compliance Project Managers at the Commission. Coordinate with technical staff, project owners and make recommendations to the Commission regarding changes.

Amendment Highlights:

- CE Obsidian Energy, LLC, Black Rock 1, 2, and 3 Geothermal Power Project amendment to increase generating capacity to 215 MW as a multi-flash, single-generator facility.

- Calpine's Sutter Energy Center (540 MW) amendment to install the 2.8 mile, 6 inch, Grimes natural gas pipeline.
- Turlock Irrigation District's Walnut Energy Center (250 MW) amendment to change annual water usage.
- Sacramento Municipal Utility District's (SMUD's) Consumnes Power Project (500 MW) amendment to inject digester gas from the Sacramento Regional Wastewater Treatment Plant into the natural gas supply line serving the CPP.

Operational Compliance Project Manager on various projects located throughout the state of California.

**URS CORPORATION RENEWABLE ENERGY PROJECT AND STAFF MANAGER
11/2003 to 5/2010**

Managed the Renewable Energy Group in the URS Sacramento office consisting of: Environmental Scientists, Real Estate Specialists, Marketing Staff and Biologists. As a Project Manager, I provided environmental planning services for international renewable energy clients through siting, permitting, construction, and post construction, environmental monitoring and compliance. I coordinated multiple disciplines for NEPA and CEQA compliance documents (EISs/EIRs) and other environmental reports related to renewable energy development. I coordinated field surveys as the lead field technician (surveys included avian mortality studies for wind energy developments, wetland delineations, burrowing owl surveys, meteorological siting investigations, geotechnical investigations, and other technical disciplines). I also contributed to marketing and research efforts for the URS renewable energy marketing sector including attending conferences such as the annual Wind Power Conference held by the American Wind Energy Association (AWEA).

Professional awards and certifications include:

- URS Team Award for a Wind Energy Environmental Planning for a team I managed (February 2010)
- URS Monthly Outstanding Achievement Award for Marketing Efforts in the Renewable Energy Sector (December 2008)
- Individual Outstanding Achievement Award in Project Management (2007)
- URS Project Manager Certification (November 2007)

Assignment Highlights

Deputy Project Manager, Searchlight Wind Project, Searchlight, NV, Bureau of Land Management. Duke's Searchlight Wind Project is a 370 MW project consisting of up to 161 wind turbine generators. Provided wind energy planning services including the development of the Plan of Development, Environmental Assessment, and the EIS for the Searchlight Wind Power Project. Managed budget, schedule and technical staff in several URS offices for this effort.

Deputy Project Manager, Sacramento Municipal Utility District (SMUD) Solano Wind Project. November 2003 to March 2010. Responsible for overseeing budgets and schedule for all task orders. Monitored subcontractors and technical staff in a variety of efforts ranging from EIR preparation, biological field surveys, meteorological investigations, land acquisitions and other program activities. Proposal Manager for multiple efforts for this client. Developed program management plans and tracked tasks in MS Project. Managed task orders and staff. Contributed to strategic planning with client. Provided technical guidance and oversight to renewable energy technical staff.

Project Manager, Benicia Wind Project, Benicia CA, Silicon Valley Power (SVP). As a municipal utility SVP will be the lead agency for the EIR and other environmental documentation required for this 40 MW wind power project. Responsible for the direction of planning, environmental assessment, and consulting services provided to the client. These services include reviewing the Solano County General Plan and EIR's for surrounding projects in preparation of developing this project, assisting with the procurement, permitting, and installation of meteorological equipment, and contract negotiations.

Wind Contract Review Services, Gargau Wind Project, Rio de Janeiro, Brazil, for WestLB, Engineering Fatal Flaw Analysis. Assisted in engineering fatal flaw analysis. Documents under review included contractual agreements, the power purchase agreement, supply documents, balance of plant documents, and others. Provided project management support, including budget and schedule management for this project.

Project Management Assistance, Airtricity Asset Due Dilligance, USA and Canada, Confidential Client. Provided Project Management Assistance for an international technical team to assess the value and status of Airticity's operations for purchase by a private investing firm. At the time of the acquisition Airtricity was currently operating wind farms with around 210 MW installed capacity with an additional 880 MW to be operational by the end of 2008. Other Airtricity projects across US and Canada totaled more than 5,000 MW and were in an early development stage at the time of this project.

EDUCATION AND HONORS

Bachelor of Science Degree in Environmental Science from Humboldt State University (2003).

Academic honors include Cum Laude Honors Humboldt State University (2003) and Fall Presidential Scholar Humboldt State University (2001).

DECLARATION OF
Marylou Taylor, P.E.

I, **Marylou Taylor**, declare as follows:

1. I am presently employed by the California Energy Commission in the **Engineering Office** of the Siting, Transmission and Environmental Protection Division as an **Associate Civil Engineer**.
2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
3. I helped prepare the staff testimony on **Soil and Water Resources** for the **STAFF'S SUPPLEMENTAL TESTIMONY FILED IN RESPONSE TO THE COMMITTEE'S MARCH 10, 2017 ORDER FOR THE PUENTE POWER PROJECT** based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.
5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: June 19, 2017

Signed:

Marylou Taylor

At: Sacramento, California

MARYLOU P. TAYLOR, P.E.

REGISTRATIONS/LICENCES:

California Professional Engineer License # C64353

EDUCATION:

B.S. Civil Engineering
University of California, Davis

PROFESSIONAL HISTORY:

Associate Civil Engineer 2010 to Present

California Energy Commission, Sacramento, CA

Duties within the Water and Soils Unit of the Engineering Office in the Facilities Siting Division include review and evaluation of applications for certification of thermal power plants within the state of California. The focus of the work is on sensitive project sites that may have issues involving groundwater and surface water resources, soil erosion, flooding potential, water quality and plant-derived waste generation and disposal. In addition, evaluate construction, operation and maintenance of the facilities and conduct investigations to determine if violations of the program's regulations, the Energy Commission's conditions of certification, or the California Environmental Quality Act (CEQA) have occurred.

Transportation Engineer, Civil 2000 to 2010

California Department of Transportation (Caltrans), District 3, Sacramento, CA

As Project Engineer in the Office of Design, identified storm water quality issues along public highways within the Tahoe Lake area and designed appropriate features in an effort to preserve and enhance the unique natural environment; and prepared reports evaluating alternatives and proposing a design concept and scope for development and programming.

Designed drainage systems for highways throughout Northern California to comply with Caltrans standards, including: analysis of site hydrology and hydraulic design; storm water management near impaired water bodies; and preparing layouts and construction details for contract plans.

Also performed engineering inspections of State contract construction projects and enforced contractor's compliance with plans and State specifications. Duties include: assisting Resident Engineer in re-designing areas where the contract plans conflicted with field conditions; performing inspections of construction site activities; and managing problems that develop in the field.

Waste Management Engineer 1997 to 2000

California Integrated Waste Management Board, Sacramento, CA

Reviewed and analyzed construction and demolition (C&D) waste handling, processing, and treatment technologies to minimize waste disposal and increase the use of recycled material into useful products. Organized outreach (workshops, conference booth, fact sheets) of C&D programs to industry audiences.

**DECLARATION OF
Testimony of William Walters, P.E.**

I, William Walters, declare as follows:

- 1. I am presently employed by Aspen Environmental Group, a contractor to the California Energy Commission, Systems Assessment and Facilities Siting Division, as a senior associate in engineering and physical sciences.**
- 2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.**
- 3. I helped prepare the staff testimony on **Air Quality and Health Risk Assessment Alternatives Analysis** for the **Puente Power Project** based on my independent analysis of the Application for Certification and supplements hereto, data from reliable documents and sources, and my professional experience and knowledge.**
- 4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue addressed therein.**
- 5. I am personally familiar with the facts and conclusions related in the testimony and if called as a witness could testify competently thereto.**

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: December 5, 2017

Signed: _____



At: Agoura Hills, California

WILLIAM WALTERS, P.E.
Air Quality Specialist

ACADEMIC BACKGROUND

B.S., CHEMICAL ENGINEERING, 1985, CORNELL UNIVERSITY

PROFESSIONAL EXPERIENCE

Mr. Walters has over 20 years of technical and project management experience in environmental compliance work, including environmental impact reports, emissions inventories, source permitting, energy and pollution control research RCRA/CERCLA site assessment and closure, site inspection, and source monitoring.

Aspen Environmental Group

2000 to present

Responsible as lead technical and/or project manager of environmental projects, including the following specific relevant recent (2000 and forward) responsibilities and projects:

- **Engineering and Environmental Technical Assistance to Conduct Application for Certification Review for the California Energy Commission:**
 - Preparation and project management of the air quality section of the Staff Assessment and/or Initial Study and the visual plume assessment for the following licensing projects: Hanford Energy Park; United Golden Gate, Phase I; Huntington Beach Modernization Project*; Woodland Generating Station 2; Ocotillo Energy Project, Phase I; Magnolia Power Project*; Colusa Power Project; Rio Linda/Elverta Power Plant Project; Roseville Energy Center; Henrietta Peaker Project; Tracy Peaking Power Plant Project*; Avenal Energy Project; San Joaquin Valley Energy Center*; Salton Sea Unit 6 Project*; Modesto Irrigation District Electric Generation Station*; Walnut Energy Center*; Riverside Energy Resource Center*; Pastoria Energy Facility Expansion; Bullard Energy Center; Panoche Energy Center; Starwood Power Plant; Riverside Energy Resource Center Units 3 and 4 Project; Colusa Generating Station*; Chula Vista Energy Upgrade Project*; Orange Grove Power Plant Project*; Carlsbad Energy Center Power Project*; Hydrogen Energy California (in process); Canyon Power Plant Project*; Imperial Valley Solar Project*; Beacon Solar Energy Project; Calico Solar Power (in process); Abengoa Mojave Solar Project; Genesis Solar Energy Project; Blythe Solar Power Project; Palen Solar Power Project (in process); Ridgecrest Solar Power Project; Rice Solar Energy Project (in process); Ivanpah Solar Electric Generating Station project.
 - Preparation and project management of the visible plume assessment for the following licensing projects: Metcalf Energy Center Power Project*; Contra Costa Power Plant Project*; Mountainview Power Project; Potrero Power Plant Project; El Segundo Modernization Project; Morro Bay Power Plant Project; Valero Cogeneration Project; East Altamont Energy Center*; SMUD Cosumnes Power Plant Project*; Pico Power Project; Blythe Energy Project Phase II; City of Vernon Malburg Generating Station; San Francisco Electric Reliability Project; Los Esteros Critical Energy Facility Phase II; Roseville Energy Park; City of Vernon Power Plant; South Bay Replacement Project; Walnut Creek Energy Park; Sun Valley Energy Project; Highgrove Power Plant; Colusa Generating Station; Russell City Energy Center; Avenal Energy Project; Community Power Project; San Gabriel Generating Station; Sentinel Energy Project; Victorville 2 Hybrid Power Project; City of Palmdale Hybrid Energy Project (in process); Chevron Richmond Power plant Replacement Project; Tracy Combined Cycle Power Plant; Lodi Energy Center; and San Joaquin Solar 1&2 Power Plant.
 - Assistance in the aircraft safety review of thermal plume turbulence for the Riverside Energy Resources Center; Russell City Energy Center Amendment*; Eastshore Energy Power Plant*; Carlsbad Energy Center (in progress), City of Palmdale Hybrid Energy Project; Riverside Energy Resource Center Units 3 and 4 Project; Victorville 2 Hybrid Power Project; Blythe Energy Project Phase II*, Tracy Power Plant; Avenal Energy Project; and Blythe Solar Energy Project siting cases. Assistance in the aircraft safety review of

* - Includes providing expert witness testimony.

thermal and visual plumes of the operating Blythe Energy Power Plant. Preparation of a white paper on methods for the determination of vertical plume velocity determination for aircraft safety analyses.

■ **Other California Energy Commission and relevant project experience:**

- Preparation and instruction of a visual water vapor plume modeling methodology class for the CEC.
- Preparation and project management of the public health section of the Initial Study for the Woodland Generating Station 2 Energy Commission licensing project.
- Preparation of project amendment or project compliance assessments, for air quality or visual plume impacts, for several licensed power plants, including: Metcalf Energy Center; Pastoria Power Plant; Elk Hills Power Plant; Henrietta Peaker Project; Tracy Peaker Project; Magnolia Power Project; Delta Energy Center; SMUD Cosumnes Power Plant; Walnut Energy Center; San Joaquin Valley Energy Center; City of Vernon Malburg Generating Station; Otay Mesa Power Plant; Los Esteros Critical Energy Facility; Pico Power Project; Riverside Energy Resource Center; Blythe Energy Project Phase II; Inland Empire Energy Center; Salton Sea Unit 6 Project; Black Rock 1, 2, and 3 Geothermal Power Project, and Starwood Power-Midway Peaking Power Plant.
- Preparation of the air quality section of the staff paper "A Preliminary Environmental Profile of California's Imported Electricity" for the Energy Commission and presentation of the findings before the Commission.
- Preparation of the draft staff paper "Natural Gas Quality: Power Turbine Performance During Heat Content Surge", and presentation of the preliminary findings at the California Air Resources Board Compressed Natural Gas Workshop and a SoCalGas Technical Advisory Committee meeting.
- Preparation of the staff paper "Emission Offsets Availability Issues" and preparation and presentation of the Emission Offsets Constraints Workshop Summary paper for the Energy Commission.
- Preparation of information request and data analysis to update the Energy Commission's Cost of Generation Model capital and operating cost factors for combined and simple cycle gas turbine projects. Additionally, performed a review of the presentation for the revised model as part of the CEC's 2007 Integrated Energy Policy Report workshops, and attended the workshop and answering Commissioner questions on the data collection and data analysis. Prepared an update to the Energy Commission's capital and operating cost factors for combined and simple cycle gas turbine projects within the Cost of Generation model as part of the 2009 Integrated Energy Policy Report process.
- Preparation of the Air Quality Section, air quality emission calculations, or other technical studies, in support of the environmental documentation for renewable energy projects including; the Liberty Energy XXIII Renewable Energy Project; the Topaz Solar Farm, the Pacific Wind Energy Project, and the Pine Tree Wind Development Project.
- Preparation of comments on the Air Quality, Alternatives, Marine Traffic, Public Safety, and Noise section of the Cabrillo Port Liquefied Natural Gas Deepwater Port Draft EIS/EIR for the City of Oxnard.

CERTIFICATION

- **Chemical Engineer, California License 5973**

AWARDS

- **California Energy Commission Outstanding Performance Award 2001**