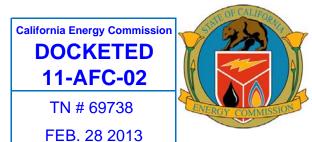
STATE OF CALIFORNIA

Energy Resources Conservation And Development Commission



Docket No. 11-AFC-2

Application for Certification for the Hidden Hills Solar Electric Generating System

In the Matter of:

ENERGY COMMISSION STAFF'S SUPPLEMENTAL FILING

Staff hereby files the attached, which contains updated and additional Energy Commission staff resumes and declarations for the following: Ed Brady, John Fio, Mark Hesters, Gregg Irvin, Mike Jaske, Paul Marshall, Aaron Nousaine, David Vidaver and Gus Yates. Collectively, these resumes and declaration constitute Staff Exhibit 325.

Respectfully submitted, Dated: February 28, 2013

RICHARD C. RATLIFF Staff Counsel IV California Energy Commission 1516 9th Street, MS 14 Sacramento, CA 95814

Tel: (916) 653-1653

E-mail: dratliff@energy.state.ca.us

DECLARATION OF EDWARD BRADY

I, EDWARD BRADY, 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 **MECHANICAL ENGINEER**.
- 2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
- 3. I participated in the preparation of the staff testimony on Facility Design and Noise and Vibration for Hidden Hills Solar Electric Generation Station (HHSEGS) 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:

221 13

Signed: Edward Berry

At:

Sacramento, California

Edward James Brady

Mechanical Engineer

Summary of Experience

Forty years of experience in the profession of mechanical engineering as a staff engineer to the California Energy Commission, engineering consultant, design group supervisor in a major power plant project, senior engineer for a gas and electric utility, sales and design engineer for a contractor, and instructor in a community college.

Education

- BSME, Santa Clara University, 1972
- Graduate Engineering Studies, Santa Clara University
- Graduate Business Studies, University of San Francisco
- Continuing Education, UC Extension

Professional Registration

Mechanical Engineer (M17924) California

(25505) Washington (33082) Colorado

(9248, Inactive) Nevada

Civil Engineer (C36194) California

Affiliations

- American Society of Mechanical Engineers (ASME), Member
- American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), Member
- International Code Council (ICC), Member
- International Association of Plumbing and Mechanical Officials (IAPMO), Member
- National Fire Protection Association (NFPA), Member

Curriculum Vitae

2011 – Present	Staff Mechanical Engineer , California Energy Commission, Siting, Transmission, and Environmental Protection Division (STEP). Performs analysis of generating capacity, reliability, efficiency, noise and vibration, and the mechanical, civil, electrical, and structural aspects of power plant siting and construction cases.
1988-2011	Principal Mechanical Engineer, Brady Engineering. Provided design and consulting services for the permitting and construction of industrial and commercial facilities, and residential buildings in the fields of heating, ventilating air conditioning (HVAC), plumbing, fire protection and energy analyses.
1984-1988	Design Group Supervisor , Joint PG&E and Bechtel Project. Worked as the mechanical group supervisor responsible for the design modifications required for the licensing of Diablo Canyon Power Plant, Units 1 and 2.
1980-1988	Senior Mechanical Engineer, PG&E Civil Engineering Department, Architectural Section. Provided work group supervision and design of building mechanical systems for common utility plant facilities (CUP) and balance of plant systems for power production facilities.
1977-1980	Mechanical Engineer , PG&E Civil Engineering Department, Architectural Section. Provided HVAC and plumbing design for CUP and power production facilities.
1974-1977	Instructor , San Francisco Community College District, John O'Connell Evening School. Provided apprenticeship training in the technical fields of HVAC and refrigeration.
1977	Design Engineer, Charles and Braun Consulting Engineers, San Francisco. Worked as a staff designer in the fields of HVAC and plumbing for commercials facilities include a sentence detention facilities and a proto-type regional facility for a federal agency.
1972-1976	Sales and Design Engineer, Scatena York Company, San Francisco. Worked as a sales and design engineer for a refrigeration contractor, which provided design and installation of refrigeration systems for supermarkets and cold storage facilities.

Power Plant/Utility Experience

- California Energy Commission, Rio Mesa Solar Electric Generation Station (RMSEGS). 500 MW Solar Power Tower. Riverside County
 - , Hidden Hills Solar Electric Generating Station (HHSEGS). 500 MW Solar Power Tower. Inyo County.
 - , Hydrogen Energy California (HECA). 405 MW Combined Cycle, Fuel Gasification, CO₂ Sequestration, Ammonia Production. Kern County
 - , Quail Brush Generating Project (QBGP). 1100 MW Reciprocating Engine Electric Generation. City of San Diego
 - , Huntington Beach Energy Project (HBEP). 939 MW Combined Cycle. City of Huntington Beach.
 - , Redondo Beach Energy Project (RBEP). 496 MW Combined Cycle. City of Redondo Beach, Los Angeles County.
- PG&E , Diablo Canyon Power Plant, Units 1 and 2. Licensing of safety related systems. , Diablo Canyon Power Plant, Administration Building, SLO County Emergency Response Building
 - , Geysers Power Plant, Units 16, 17, 20, and 21. Ventilation and cooling for turbine building and hazardous waste disposal facilities, administration building.
 - , Helms Pumped Storage Facility, Kern County. Smoke control ventilation for underground transformer vaults.
 - , Humboldt No. 3, Eureka. Decommissioning of nuclear facility and construction of hazardous materials storage and handling.
 - , Moss Landing Power Plants, Units 1 through 6, Monterey County
 - , Morro Bay Power Plant, Morro Bay
 - , Hunters Point Power Plant, San Francisco
 - , Potrero Power Plant, San Francisco. Combined Cycle

- , Gas Transmission Facilities, Line 300 and 400, Topock and Corning Compressor Stations, McDonald Island and Brentwood Gas Storage Facilities
- , Central Computer Facilities, San Francisco and Vacaville
- , 77 Beale Street, San Francisco. Energy Management System
- , 215 Market Street, San Francisco. Boiler Replacement
- , Underground Fuel Tank Replacement. Upgrade of more than 500 gallon fuel storage tanks to meet double containment requirements.
- , Contra Costa Power Plants, Unit 1 through 6, Water Treatment
- , Pittsburg Power Plants, Unit 1-5, Water Treatment Facilities
- , Avon, Martinez and Oleum (AVO), Water Treatment Upgrade
- , Tiger Creek Powerhouse, North Fork Feather River
- , Kirchoff No. 2 Pump Storage Facility.
- , Technical Support Services, Marketing Department

South Bay Sanitary Authority, 1400 Radio Road, Redwood Shores. Gas piping and boiler conversion.

DECLARATION OF MARK HESTERS

- I, Mark Hesters declare as follows:
- 1. I am presently employed by the California Energy Commission in the Siting, Transmission and Environmental Protection Division as a **Senior Electrical 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 **Alternatives** for the **Hidden Hills Solar Electric Generating System [HHSEGS] (11-AFC-2)** project based on my independent analysis of the Application for Certification and any 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 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: V

Signed:

At:

Sacramento, California

Mark Hesters

916-654-5049

mark.hesters@energy.state.ca.us

Qualifications

- Analyzed the reliability impacts of electric power plants for nine years.
- As an expert witness, produced written and oral testimony in numerous California Energy Commission proceedings on power plant licensing.
- Expertise in power flow models (GE PSLF and PowerWorld), production cost models (GE MAPS), Microsoft wordprocessing, spreadsheet and database programs.
- Contributing author to many California Energy Commission reports.
- Represented the Energy Commission in the development of electric reliability and planning standards for California.

Experience

Senior Electrical Engineer

2005-Present California Energy Commission, Sacramento, CA

- Program manager of the transmission system engineering analysis for new generator Applications of Certification.
- Lead the development of transmission data collection regulations.
- Overhauled the transmission data adequacy regulations for the Energy Commission's power plant certification process.
- Participated in the analysis of regional transmission projects.
- Technical lead for Commission in regional planning groups.
- Energy Commission representative to the Western Electric Coordinating Council Operations Committee.

Associate Electrical Engineer

1998–2005 California Energy Commission, Sacramento, CA

- Lead transmission systems analyst for power plant licensing under 12-month, 6-month and 21-day licensing processes.
- Provided expert witness testimony on the potential transmission impacts of new power plants in California Energy Commission licensing hearings.
- Authored chapters for California Energy Commission staff reports on regional transmission issues.
- Studied the economics of transmission projects using electricity production simulation tools.
- Analyzed transmission systems using the GE PSLF and PowerWorld load flow models.
- Collected and evaluated transmission data for California and the Western United States

Electric Generation Systems Specialist

1990–1998 California Energy Commission, Sacramento, CA

- Lead generation planner for southern California utilities.
- Analyzed electric generation systems using complex simulation tools.
- Provided analysis on the impact of resource plans on air quality and electricity costs for California Energy Commission reports.
- Developed modeling characteristics for emerging technologies.
- Evaluated resource plans.

Education

1985–1989 University of California at Davis

Davis, CA

B.S., Environmental Policy Analysis and Planning

DECLARATION OF

Testimony of Dr. Gregg Irvin

I, Gregg Irvin, declare as follows:

- 1. I am presently contracted by Aspen Environmental Group, a contractor to the California Energy Commission, Siting, Transmission and Environmental Protection Division, as a <u>Visual Resources / Glint and Glare Technical Specialist</u>.
- 2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
- 3. I helped prepare staff testimony on the **Traffic and Transportation** section of the **Hidden Hills Solar Electric Generating System Final Staff Assessment** (FSA). 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. I also provided input and review of the **Biological Resources** section of the FSA as it relates to avian impacts from solar flux.
- 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: February 28, 2013

Signed:

At: <u>Dayton, Ohio</u>

DECLARATION OF MICHAEL R. JASKE, PhD

I, Michael R. Jaske declare as follows:

- 1. I am presently employed by the California Energy Commission in the Electricity Supply Analysis Division as an **Electric Generation System Program Specialist III**.
- 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 **Alternatives** for the **Hidden Hills Solar Electric Generating System [HHSEGS] (11-AFC-2)** project based on my independent analysis of the Application for Certification and any 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 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:

Signed

At:

Sacramento, California

Biographical Sketch for Michael R. Jaske

Dr. Michael Jaske is a senior policy analyst in the Electricity Supply Analysis Division of the California Energy Commission (CEC). For 15 years he was the Chief Demand Forecaster giving technical direction for the Commission Staff's independent demand forecast. Dr. Jaske plays an active role in the development and advocacy of the CEC's positions on resource adequacy and other planning processes. Integrating preferred demand-side policy impacts into resource and transmission planning is a current emphasis. Since 2008, Dr. Jaske is the CEC's lead for analyses of the impacts on the generating fleet of once-through cooling mitigation policy and its implementation and the complementary issue of scarce air emission credits. Dr. Jaske has been involved in numerous collaborative efforts among the CEC, CPUC and California ISO to advise California environmental agencies. Dr. Jaske has testified numerous times before the CEC, the California Public Utilities Commission, and other California agencies.

Dr. Jaske is a participant in the WECC Loads and Resource Subcommittee developing a resource adequacy methodology for WECC. As a member of the IEEE Power Engineering Society, he serves on the Energy Policy Committee of IEEE-USA to educate national policymakers on electricity issues.

Dr. Jaske's educational background includes a BS in Chemical Engineering from Oregon State University, and a MS and Ph.D. in Systems Science, both from Michigan State University.

DECLARATION OF

Paul Marshall, CHG

- I, Paul Marshall, declare as follows:
- 1. I am presently employed by the California Energy Commission in the Engineering Office of the Siting Transmission& 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 **Water Supply** for the Hidden Hills Solar Electric Generating System 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 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.

			Rafflill
Dated:_	11-7-2012	_ Signed:	Jay Jane
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.

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

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

Aaron Nousaine

- I, Aaron Nousaine, declare as follows:
- 1. I am presently employed by the California Energy Commission in its Siting, Transmission and Environmental Protection Division as a Planner II.
- 2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
- 3. I reviewed staff testimony for the **Socioeconomics** sections of the **Final Staff Assessment** for the **Hidden Hills Solar Electric Generating Station** Application for Certification (AFC), based on my independent analysis of the AFC, supplements, data, documents, analysis and testimony from other staff and reliable sources, and based upon my own 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:	February 15, 2013	Signed:	

At: <u>Sacramento, California</u>

1516 9th Street, MS 40 Sacramento, CA 95814

(916) 654-3947 aaron.nousaine@energy.ca.gov

EDUCATION

University of North Carolina at Chapel Hill

Jun. 2011

Master of City and Regional Planning

Concentration in Economic Development and Real Estate

Monterey Institute of International Studies

Jan. 2007

Certificate in Development Project Management

California State University Monterey Bay

Bachelor of Science in Political Economy

Dec. 2006

PROFESSIONAL EXPERIENCE

Planner II - Energy Facility Siting

California Energy Commission, Sacramento, California

Aug. 2012 - Current

- Conduct socio-economic impact analysis for proposed siting cases as required under the Warren-Alquist Act and California Environmental Quality Act (CEQA)
- Develop customized input-output economic models to assess the economic effects of power plant construction and operation using the IMPLAN and JEDI modeling tools
- Conduct fiscal impact assessments for proposed power plants using estimated development costs, anticipated incremental demand changes, and applicable state and federal tax law
- Prepare legal testimony, environmental documentation, memorandums, and presentations

Senior Research Associate

Jun. 2010 - Aug. 2012

Carolina Center for Competitive Economies (C3E), Chapel Hill, North Carolina

- Conducted applied economic research and policy analysis in support of the Center's community-benefit consulting assignments for public and private sector clients
- Provided project management services, including work scope development, project budgeting, and the supervision of graduate and undergraduate level research staff
- Authored professional reports, memorandums, articles, and presentations designed to translate complex research outcomes for technical and non-technical audiences
- Facilitated community engagement events, professional panels, and one-on-one interviews

Carolina Economic Revitalization Corp (CERC) Graduate Fellow

Land-of-Sky Regional Council (LOSRC), Asheville, North Carolina

Jun. 2010 - April 2011

- Leveraged a diverse portfolio of state and federal grant funding to promote innovative economic development programs in economically distress, low capacity communities
- Drafted a Sustainable Communities Regional Planning Grant Program application that was funded for \$1.6 million over three years
- Provided guidance on program design and evaluation for an existing grant funded development project geared towards the clean energy industry in western North Carolina

Real Estate & Economic Development Analyst

Bay Area Economics (BAE), Davis, California

Jul. 2007 – Aug. 2009

- Conducted applied demographic and economic research and policy analysis in support of urban economics consulting assignments for public and private sector clients
- Developed adaptive geographic models and maps using the ArcView software package
- Leveraged a variety of national, state and local data sources, including products developed by the US Census Bureau, Bureau of Labor Statistics, and Bureau of Economic Analysis; the California Dept. of Finance and Dept. of Transportation; as well as other local agencies

1516 9th Street, MS 40 Sacramento, CA 95814

(916) 654-3947 aaron.nousaine@energy.ca.gov

EDUCATION

University of North Carolina at Chapel Hill

Jun. 2011

Master of City and Regional Planning

Concentration in Economic Development and Real Estate

Monterey Institute of International Studies

Jan. 2007

Certificate in Development Project Management

California State University Monterey Bay

Bachelor of Science in Political Economy

Dec. 2006

PROFESSIONAL EXPERIENCE

Planner II - Energy Facility Siting

Aug. 2012 – Current

California Energy Commission, Sacramento, California

- Conduct socio-economic impact analysis for proposed siting cases as required under the Warren-Alquist Act and California Environmental Quality Act (CEQA)
- Develop customized input-output economic models to assess the economic effects of power plant construction and operation using the IMPLAN and JEDI modeling tools
- Conduct fiscal impact assessments for proposed power plants using estimated development costs, anticipated incremental demand changes, and applicable state and federal tax law
- Prepare legal testimony, environmental documentation, memorandums, and presentations

Senior Research Associate

Jun. 2010 - Aug. 2012

Carolina Center for Competitive Economies (C3E), Chapel Hill, North Carolina

- Conducted applied economic research and policy analysis in support of the Center's community-benefit consulting assignments for public and private sector clients
- Provided project management services, including work scope development, project budgeting, and the supervision of graduate and undergraduate level research staff
- Authored professional reports, memorandums, articles, and presentations designed to translate complex research outcomes for technical and non-technical audiences
- Facilitated community engagement events, professional panels, and one-on-one interviews

Carolina Economic Revitalization Corp (CERC) Graduate Fellow

Land-of-Sky Regional Council (LOSRC), Asheville, North Carolina

Jun. 2010 – April 2011

- Leveraged a diverse portfolio of state and federal grant funding to promote innovative economic development programs in economically distress, low capacity communities
- Drafted a Sustainable Communities Regional Planning Grant Program application that was funded for \$1.6 million over three years
- Provided guidance on program design and evaluation for an existing grant funded development project geared towards the clean energy industry in western North Carolina

Real Estate & Economic Development Analyst

Bay Area Economics (BAE), Davis, California

Conducted applied demographic and economic research and policy analysis in support of

Jul. 2007 – Aug. 2009

urban economics consulting assignments for public and private sector clients

- Developed adaptive geographic models and maps using the ArcView software package
- Leveraged a variety of national, state and local data sources, including products developed by the US Census Bureau, Bureau of Labor Statistics, and Bureau of Economic Analysis; the California Dept. of Finance and Dept. of Transportation; as well as other local agencies

DECLARATION OF DAVID VIDAVER

I, David Vidaver declare as follows:

- I am presently employed by the California Energy Commission in the Electricity Supply Analysis Division as an Electric Generation System Program Specialist II.
- 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 Appendix Air-1 Green House Gas Emissions and Alternatives for the Hidden Hills Solar Electric Generating System [HHSEGS] (11-AFC-2) project based on my independent analysis of the Application for Certification and any 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 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: 2/27/13 Signed: Mule Vi Auxe

At:

Sacramento, California

Dave Vidaver

Electricity Analysis Office Electricity Supply Assessment Division California Energy Commission (916) 654-4656 dvidaver@energy.state.ca.us

Education

BA, Political Science University of California, Berkeley MS, Agricultural Economics, University of California, Davis

Relevant Coursework: Microeconomic Theory, Econometrics, Time Series Analysis, Operations Research, Game Theory

Employment (all with the California Energy Commission)

Electric Generation System Specialist I, Electricity Analysis Office, 1998 – 2002

Simulation modeling of WECC for studies of resource adequacy, market price forecasts, emissions and fuel use studies; assessments of market conditions; contributing and principal author of numerous papers, reports and presentations.

Electric Generation System Specialist II, Electricity Analysis Office 2002 – 2005

Supervisor of Electricity System Modeling Unit; supervised four staff responsible for studies of resource adequacy, market price forecasts, emissions and fuel use studies, assessments of market conditions, role of aging power plants; contributing and principal author of numerous reports, papers, and presentations,

Energy Commission Specialist II, Demand Analysis Office, 2005

Monitoring near-term load growth at utility and regional level across the WECC; assessing load-temperature relationships for California and major western utilities and long-term changes in temperatures and load-temperature relationships.

Electric Generation System Specialist III, Electricity Analysis Office, 2005 - 2011

Supervisor of Procurement and Resource Adequacy Unit, supervise nine staff responsible for evaluating utility procurement and resource adequacy, combined

heat and power and distributed generation issues, role of aging and oncethrough cooled power plants, compiling and maintaining office databases.

Electric Generation System Program Specialist II, Electricity Analysis Office 2011 – present

Senior analyst responsible for evaluation of procurement, resource adequacy and renewable generation development policies

Additional Information

Member of the Northwest Power and Conservation Council's Generation Resource Committee, which characterizes the cost and performance of generation technologies for studies undertaken in support of the Council's 5-year power plans; numerous reports at conferences and symposia on topics ranging from natural gas demand in California's electricity sector to implementation of resource adequacy measures in California during 2001- 2004; participant in collaborative proceedings with CPUC (resource adequacy, long-term procurement)

DECLARATION OF

Testimony of John L. Fio

I, John L. Fio, declare as follows:

- 1. I am presently employed by HydroFocus, Inc. a contractor to the California Energy Commission, Siting, Transmission and Environmental Protection Division, as a **Principal Hydrologist**.
- 2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
- 3. I helped prepare staff testimony on the **Water Supply** section of the **Hidden Hills Solar Electric Generating System Final Staff Assessment** (FSA). 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	g is true	and correct to	the bes	t of my
knowledge and belief.		\\ \).			,

Dated: February 28, 2013

Signed:

At:

Davis, California

JOHN L. FIO

QUALIFICATIONS

John L. Fio has over 26 years of problem-solving experience. Mr. Fio analyzes groundwater systems, quantifies chemical transport in the subsurface, and evaluates groundwater surface-water interactions. He is a recognized expert on hydrologic and water quality issues. Mr. Fio develops and employs numerical models for site, water district, and basin-wide investigations; calculates extraction effects on groundwater levels, stream flow, and lake levels; establishes water quality monitoring programs; designs water management plans; prepares water supply assessments; evaluates groundwater quality effects of wastewater and recycled water disposal to land; develops and implements Geographic Information System (GIS) databases; and determines water sources using chemical and age-dating techniques.

PROFESSIONAL EXPERIENCE

January, 1998 – present

Principal Hydrologist, HydroFocus, Inc.

Davis, CA

California Energy Commission (2008-2012): John has assisted Energy Commission Staff in ten power plant permitting reviews (CPV Sentinel, Beacon Solar Power, Carrizo Energy Solar Farm, Blythe Solar Project, Palen Solar Plant, Solar Millennium Ridgecrest, Abengoa Mojave, Hydrogen Energy California Power Plant, Calico Solar Project, and Imperial Valley Solar), and one compliance project (High Desert Power). In all of these projects, water for construction and operation – most notably water for power plant cooling - was a critical need and required thorough and defensible conclusions. In most of these projects, Mr. Fio was relied upon to review, critique, and implement the various groundwater-flow and well hydraulic models that simulated water budget and groundwater level changes in response to the proposed pumping and power plant water use. As part of his efforts, he reviewed model construction, assumptions, parameters, calibration, sensitivities, results, and validity. When appropriate, John recommended changes to the model approach and data inputs, and also employed the models to complete reliable analyses. He also quantified the uncertainty in the results and recommended mitigation measures in the project Conditions of Certification that could address the uncertainty. His written reports were integrated into Staff Assessments. John participated in public meetings and when necessary testified at evidentiary hearings. Mr. Fio is also providing technical analyses and support to the Desert Renewable Energy Conservation Plan (DRECP) EIR/EIS development process where he is describing the affected environment and estimating potential groundwater and habitat impacts for an area that includes 107 identified basins located in the Mojave and Sonoran Desert regions of California.

Harris Quarry Expansion AB-610 Water Supply Assessment (2012): Northern Aggregates, Inc. plans to expand its existing Quarry located south of the City of Willits in Mendocino County. The project is subject to the California Environmental Quality Act (CEQA) and therefore was required to produce a water supply assessment compliant with Senate Bills 610 and 221 (a SB 610 Water Supply Assessment). The Quarry's water demand is expected to increase as a result of the proposed expansion, and the planned water source is groundwater from the applicant's well. The well extracts water

from fractures in the surrounding bedrock aquifer. Mr. Fio directed development of a soil moisture budget model to estimate monthly groundwater recharge to the bedrock aquifer during the period 1961-2011. He utilized the results to conclude that the proposed water supply was sufficient to meet the demand for typical, single dry, and multiple dry years during a 20-year projection period.

<u>Grasslands Bypass EIR/EIS (1999 and 2008)</u>: The Grasslands Drainage Area includes 97,400 acres of farmland approximately located between the California Aqueduct on the west and San Joaquin River on the east. In 1999 and again in 2008, Mr. Fio utilized groundwater-flow and geochemical models to simulate changes in salt and selenium distributions in soil under different water- and land-management alternatives as part of NEPA/CEQA compliance documentation.

San Luis Drainage Feature Evaluation (2005-2007): John Fio completed groundwater hydraulic and soil and water quality assessments for drainage-water management alternatives. As a principal of HydroFocus, Inc., he was part of the URS team that received a commendation from the U.S. Bureau of Reclamation for outstanding performance in the successful completion and certification of the NEPA/CEQA Environmental Impact Report and Environmental Impact Statement.

Alexander Valley Resort AB-610 Water Supply Assessment (2008): The proposed Alexander Valley Resort is located in Cloverdale, California. John Fio completed the SB-610 water supply assessment as required by CEQA for the City of Cloverdale, who is both the public water supplier and the lead agency for the project. Because the City of Cloverdale did not have an adopted Urban Water Management Plan, other data sources, reports, and soil moisture budget modeling were required to determine the total available water supplies during normal, single dry, and multiple dry years for a 20-year projection. The analysis determined whether supplies met the estimated water demand associated with the proposed project and future residential and non-residential water uses.

Additional relevant projects and modeling analyses include:

- Quantitative assessment of monthly recharge and constituent loads to the water table from proposed recycled water project and estimated the resulting potential water quality impacts to the Russian River, Cloverdale, California.
- Groundwater model development, implementation, and stakeholder consensus building for improved water supply management, Westside Groundwater Basin, San Mateo and San Francisco Counties.
- Hydrogeologic and water quality assessment of groundwater adjacent to and beneath south San Francisco Bay, and determination of its potential as a supplemental water source to San Francisco Bay Area water users located in Alameda, Santa Clara, and San Mateo Counties.
- Groundwater and water quality modeling expert, Beijing Hydraulic Research Institute, Beijing, China.
- Groundwater-flow, solute-transport, and water-quality impacts from wastewater disposal to land: sanitary districts and municipalities located in San Joaquin and Contra Costa Counties, California.
- Quantitative hydrogeochemical assessment of contaminant transport near Menlo Park, California. Development of groundwater-flow and solute-transport models to quantify hydrocarbon transport beneath industrial facility near San Francisco Bay.

- Groundwater recharge and subsurface storage, Merced County, California.
 Developed and implemented regional groundwater-flow model to assess groundwater recharge and pumping projects.
- Depletion of subsurface flow to the North Platte River, Wyoming and Nebraska.
 Data analysis and modeling of stream aquifer interactions in support of interstate water rights conflict.

1995 to 1997

Senior Project Hydrologist, Hydrologic Consultants, Inc. Sacramento, CA

Project experience in the evaluation of groundwater flow, water quality, and solute transport. Consulting assignments included the following:

- Developed relationships to describe geologic controls and load-flow relationships for Santa Ynez River drainage system. The relationships were part of a network of interacting reservoir operations, surface-water, and groundwater-flow and transport models.
- Evaluation of groundwater-flow paths beneath South San Francisco Bay. The groundwater-flow system was quantified using a groundwater-flow model to assess system response to pumping centers located east and west of the Bay.
- Coordination with the California Regional Water Quality Control Board on the remediation of a VOC plume in Mountain View, California.
- Assess the response of groundwater levels, streamflow, and spring discharge to groundwater pumpage in the Mammoth Basin, California.
- Quantifying stream flow depletions owing to increased consumption and groundwater pumping.

1990 to 1995

Research Grade Hydraulic Engineer, U.S. Geological Survey Sacramento, CA

- Geohydrologic and groundwater quality investigations in the western San Joaquin Valley, California.
- Directed the development of a regional Geographic Information System database for the South San Francisco and Peninsula Area, California.
- Supervised data collection and development of databases, data analyses, and report writing.
- Constructed groundwater flow models for parts of the western San Joaquin Valley and South San Francisco Bay areas, California.
- Interacted with private and public cooperators and funding agencies.

1987 to 1990

Civil Engineer, U.S. Geological Survey

Sacramento, CA

- Conducted field-scale investigations of on-farm drainage systems.
- Developed groundwater-flow model of tile drainage system. Assessed flow paths and salt transport in shallow flow-system. Quantified regional groundwater-flow paths intercepted by on-farm drainage systems.
- Integrated particle-tracking models with groundwater-flow model results to assess advective transport of salts and selenium.

Hydrologist, U.S. Geological Survey

Sacramento, CA

- Designed and conducted sorption experiments and incorporated results into a solute transport model.
- Assessed the distribution of salts and selenium in unsaturated and saturated soil profiles.
- Developed analytical method to estimate organic selenium concentrations in soil extracts.

1983 to 1984

Research Assistant, University of California

Davis, CA

- Conducted an assessment of methods used to analyze for selenium in soil extracts, aqueous samples, and animal tissues.
- Implemented experiments to assess arsenic volatilization from soils.
- Conducted laboratory analyses to estimate the buffering capacity of soils in response to acidic deposition.

ACADEMIC BACKGROUND

Master of Science, 1987, Civil Engineering, University of California at Davis Bachelor of Science, 1984, Soil and Water Science, University of California at Davis

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers
Association of Groundwater Scientists and Engineers
California Groundwater Resources Association

DECLARATION OFTestimony of Gus Yates

I, Gus Yates, declare as follows:

- 1. I am presently employed by HydroFocus, Inc. a contractor to the California Energy Commission, Siting, Transmission and Environmental Protection Division, as a **Senior Hydrologist**.
- 2. A copy of my professional qualifications and experience is attached hereto and incorporated by reference herein.
- 3. I helped prepare staff testimony on the **Water Supply** section of the **Hidden Hills Solar Electric Generating System Final Staff Assessment** (FSA). 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: February 28, 2013

Signed⁽

At: Davis, California

EUGENE B. (GUS) YATES

QUALIFICATIONS

Gus Yates has been a professional hydrologist in California for over 25 years. His role in water resources management projects commonly bridges the technical and policy realms. He specializes in rapidly identifying the key water-related issues for a project and addressing them with appropriate quantitative tools that make the best use of available data. He ties his technical work back into management plans and regulatory compliance documents. He has extensive experience in analysis and management of groundwater basins and related surface water and habitat systems throughout central and northern California. Mr. Yates has training and experience in CEQA, NEPA, water-quality regulations, water rights, group facilitation, and litigation. He is registered with the State of California as a professional geologist and certified hydrogeologist.

PROFESSIONAL EXPERIENCE

April, 2009 – present

Senior Hydrologist, HydroFocus Inc.

Davis, CA

California Energy Commission (2009-2012): Gus has assisted Energy Commission Staff in two power plant permitting reviews (Abengoa Mojave and Calico Solar Project). In these projects, water for construction and power plant cooling was a critical need and required thorough and defensible conclusions. In Abengoa Mojave, Gus reviewed and critiqued a regional groundwater-flow model employed to simulate water budget and groundwater level changes in response to the proposed pumping and power plant water use. The results were important for identifying model limitations and uncertainty, and were used to develop mitigation measures. For the Calico Solar Project, he assessed the validity of aquifer test results and simulated water level drawdown. Additionally, Gus assembled and compiled available recharge, water level, and geologic data to define boundaries and estimate the water balance for a basin which was previously poorly understood. His analysis was needed to assess potential local and regional water level and water budget impacts resulting from proposed groundwater use. Gus is also providing technical analyses and support to the Desert Renewable Energy Conservation Plan (DRECP) EIR/EIS development process where he is describing the affected environment and estimating potential groundwater and habitat impacts for an area that includes 107 identified basins located in the Mojave and Sonoran Desert regions of California.

Westside Basin Groundwater-Flow Model (2009-2011): Utilized input from local agencies, advocacy groups and other consultants to help develop a basinwide groundwater model using MODFLOW 2000. It is a coastal basin with two seawater boundaries, a water table lake, and complex three-dimensional groundwater flow patterns. The model is being used to evaluate basin yield, conjunctive use opportunities, wellfield expansion, and lake impacts.

<u>Historical water balance of the San Antonio groundwater basin</u> (2011): Resolved conflicting estimates of groundwater overdraft through a systematic reconstruction of historical annual water budgets for the period 1935-2010. Linked various quantitative methods for estimating inflows, outflows and storage changes to improve accuracy and gauge uncertainty.

<u>Groundwater transfers for the lower Yuba River area (2010-2011)</u>: Statistically quantified historical relations between pumping and groundwater levels in four water districts located north of the Yuba River in Placer County, California. Developed algorithm to allocate groundwater-transfer pumping between districts and minimize third-party impacts.

Groundwater effects of Miller Creek restoration (2011): Developed a fine-grid MODFLOW model of a small alluvial groundwater system along Miller Creek located in Marin County, California. The creek channel is incised and enlarged due to erosion associated with downstream urbanization. The model was used to simulate the increase in groundwater levels, seasonal groundwater storage and stream base flow persistence that would result from backfilling the channel to its original elevation profile.

January, 1999 - March, 2009

Consulting Hydrologist in Private Practice

Berkeley, CA

- City of Hollister Recycled Water Program EIR, Hollister, CA Simulated impacts of using recycled municipal wastewater for crop irrigation on groundwater levels and salinity, including the effects of demineralizing the municipal water supply to decrease effluent TDS.
- City of Lompoc General Plan EIR, Santa Barbara County, CA Identified changes in the water balance of the Lompoc Plain basin over the preceding decade and developed statistical methods to estimate potential impacts of increased municipal groundwater pumping on river flow and steelhead passage.
- Groundwater flow and transport model, San Benito County, CA Developed a regional groundwater flow and salinity model with MODFLOW and MT3DMS.
- Groundwater flow model, Laguna Seca subarea, Monterey County, CA Developed and jointly calibrated a soil-moisture-recharge model and groundwater flow model to evaluate safe yield in a small, structurally complex coastal basin.
- Southeast Chico drainage study Applied MODFLOW and HEC-RAS models to determine the cause of periodic shallow flooding in a new suburb.
- Seaside Basin update on groundwater conditions, Seaside, CA Updated and improved prior estimates of pumping, recharge, aquifer characteristics and yield to help resolve a water-rights dispute.
- Cambria Community Services District water-supply master plan EIR Quantified the frequency and duration of drought-related water shortages and evaluated feasibility of water supply alternatives.
- Fish habitat improvements, Yolo Bypass, CA -- Applied HEC-RAS stream hydraulics model with input from landowners and biologist to design creek modifications that would improve anadromous fish passage and create localized inundation for splittail spawning and rearing.
- Integrated water resources management plan, Yolo County, CA -- Provided technical expertise and local knowledge as coauthor of a countywide water management plan with state and local agencies.

 Groundwater management plan, Soquel Creek Water District, Santa Cruz County, CA -- Served as technical advisor and coauthor for GMP update to meet SB1938 requirements and focus monitoring and management actions on emerging key issues.

1991-1999

Environmental Scientist, Jones & Stokes Associates

Sacramento, CA

- Groundwater flow model, Yuba goldfields wet-pit gravel quarry EIR, Yuba County, CA – Developed a local-scale MODFLOW model to estimate the impacts of a proposed gravel quarry that would penetrate a regional confining layer.
- Winery EIR, Santa Rosa, CA Prepared the hydrology chapter of an award-winning EIR for a highly controversial industrial-scale winery in rural Sonoma County. The comprehensive evaluation of impacts addressed wine processing wastewater disposal, discharges to Mark West Creek, irrigation demand, septic system feasibility, and impacts on groundwater levels and quality.
- EIR for hard rock and aggregate mine near Lincoln, Placer County, CA Evaluated impacts on groundwater and surface water flow and quality for a large, controversial quarry in the Sierra foothills. Also simulated water budgets and water levels of post-reclamation lakes in the quarries.
- EIR for vineyard water supply project on Sausal Creek, Sonoma County, CA Simulated irrigation demand and system operations for a network of creek impoundments proposed to supply vineyard irrigation water. Worked with fish biologists to evaluate impacts of changes in baseflow, fish passage and water temperature on resident native fish species.
- Fort Ord closure and reuse EIR/EIS, Monterey County, CA Characterized groundwater conditions and prepared detailed water demand estimates for various proposed reuses of a military base adjacent to Monterey Bay.
- Willow Slough watershed management plan, Yolo County, CA Facilitated stakeholder process; documented groundwater, flooding and habitat conditions; and developed BMPs for agriculture.
- Groundwater management plan, northern San Benito County, CA Served as facilitator, technical advisor and author for a multi-party planning process to identify issues and realistic solutions in a heavily-used groundwater basin.
- Subsidence impacts of groundwater pumping, Mendota, CA Developed regression equations based on extensive USGS data to predict subsidence from groundwater transfers for project EIR.
- Nitrate contamination from septic systems, Los Osos, CA Served as expert advisor for field investigation of nitrate contamination from septic systems in a sandy coastal aguifer.
- Operations model for conjunctive use of desal plant and groundwater, Cambria, CA –
 Developed a probabilistic, real-time operations model to guide the conjunctive use of
 a desalination plant with existing water-supply wells. Applied to model to evaluate
 impacts and alternatives for CEQA compliance.
- Instream flow litigation, Putah Creek, Yolo and Solano Counties, CA Expert witness in a trial challenging the adequacy of instream flows below Monticello Dam.

Sacramento, CA

- Groundwater model of Salinas Valley groundwater basin, Monterey County, CA –
 Developed one of the earliest models of the Salinas Valley groundwater basin and
 applied optimization theory to conjunctive use operations.
- Groundwater flow model, Los Osos, CA Created a groundwater flow model to evaluate 3-D interactions of Los Osos Creek, the Pacific Ocean and groundwater flow in a layered coastal groundwater basin. Subsequently added solute transport module to estimate long-term nitrate impacts of a wastewater project.
- Groundwater flow and quality, Santa Rosa and San Simeon Creek basins, Cambria, CA – Managed a comprehensive investigation of groundwater conditions in two coastal stream valleys, and developed finite-element models to integrate data and explore management options.

ACADEMIC BACKGROUND

Master of Science, 1985, Water Science, University of California at Davis Bachelor of Arts, 1979, Geology, Harvard University, Cambridge, MA

PROFESSIONAL AFFILIATIONS

American Institute of Hydrology – certified professional hydrogeologist Groundwater Resources Association of California



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 HIDDEN HILLS SOLAR ELECTRIC GENERATING SYSTEM

Docket No. 11-AFC-02

PROOF OF SERVICE (Revised 2/21/13)

SERVICE LIST:

APPLICANT

BrightSource Energy
Stephen Wiley
*Kwame Thompson
Bradley Brownlow
1999 Harrison Street, Suite 2150
Oakland, CA 94612-3500
swiley@brightsourceenergy.com
*kthompson@brightsourceenergy.com
bbrownlow@brightsourceenergy.com

BrightSource Energy Clay Jensen Gary Kazio 410 South Rampart Blvd., Suite 390 Las Vegas, NV 89145 cjensen@brightsourceenergy.com gkazio@brightsourceenergy.com

APPLICANTS' CONSULTANTS

Strachan Consulting, LLC Susan Strachan P.O. Box 1049 Davis, CA 95617 susan@strachanconsult.com

CH2MHill John Carrier 2485 Natomas Park Drive, Suite 600 Sacramento, CA 95833-2987 jcarrier@ch2m.com

APPLICANT'S COUNSEL

Chris Ellison
Jeff Harris
Samantha Pottenger
Ellison, Schneider and Harris, LLP
2600 Capitol Avenue, Suite 400
Sacramento, CA 95816-5905
cte@eslawfirm.com
jdh@eslawfirm.com
sgp@eslawfirm.com

INTERVENORS

Jon William Zellhoefer P.O. Box 34 Tecopa, CA 92389 jon@zellhoefer.info

Center for Biological Diversity Lisa T. Belenky, Sr. Attorney 351 California Street, Suite 600 San Francisco, CA 94104 Ibelenky@biologicaldiversity.org

Center for Biological Diversity Ileene Anderson Public Lands Desert Director PMB 447 8033 Sunset Boulevard Los Angeles, CA 90046 ianderson@biologicaldiversity.org

Old Spanish Trail Association Jack Prichett 857 Nowita Place Venice, CA 90291 jackprichett@ca.rr.com

INTERVENORS (Cont'd.)

Cindy R. MacDonald 3605 Silver Sand Court N. Las Vegas, NV 89032 sacredintent@centurylink.net

Richard Arnold P.O. Box 3411 Pahrump, NV 89041 rwarnold@hotmail.com

Amargosa Conservancy
Donna Lamm, Executive Director
Brian Brown
Watershed Coordinator
Route 127, P.O. Box 63
Shoshone, CA 92384
donnalamm@amargosaconservancy.org
dates@chinaranch.com

County of Inyo Randy H. Keller, County Counsel Dana Crom Deputy County Counsel 244 N. Edwards St., P.O. Box M Independence, CA 93526 dcrom@inyocounty.us

William D. Ross Law Offices of William D. Ross 520 South Grand Avenue Suite 300 Los Angeles, CA 90071-2610 wross@lawross.com

INTERVENORS (Cont'd.)

Southern Inyo Fire Protection District Larry Levy, Fire Chief 410 Tecopa Hot Springs Road Tecopa, CA 92389 Levy2717@access4less.net

INTERESTED AGENCIES

California ISO e-recipient@caiso.com

Great Basin Unified APCD
Duane Ono
Deputy Air Pollution Control Officer
157 Short Street
Bishop, CA 93514
dono@gbuapcd.org

Nye County Lorinda A. Wichman, Chairman Board of County Supervisors P.O. Box 153 Tonopah, NV 89049 lawichman@gmail.com

Nye County Water District L. Darrel Lacy Interim General Manager 2101 E. Calvada Boulevard Suite 100 Pahrump, NV 89048 Ilacy@co.nye.nv.us

National Park Service
Michael L. Elliott
Cultural Resources Specialist
National Trails Intermountain Region
P.O. Box 728
Santa Fe, NM 87504-0728
Michael_Elliott@nps.gov

Southern Inyo Fire Protection District Larry Levy, Fire Chief P.O. Box 51 Tecopa, CA 92389 sifpd@yahoo.com

ENERGY COMMISSION STAFF

Mike Monasmith Senior Project Manager mike.monasmith@energy.ca.gov

Richard Ratliff Staff Counsel IV dick.ratliff@energy.ca.gov

Kerry Willis Staff Counsel kerry.willis@energy.ca.gov

<u>ENERGY COMMISSION – PUBLIC ADVISER</u>

Blake Roberts Assistant Public Adviser publicadviser@energy.ca.gov

COMMISSION DOCKET UNIT

California Energy Commission
– Docket Unit
Attn: Docket No. 11-AFC-02
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.ca.gov

OTHER ENERGY COMMISSION
PARTICIPANTS (LISTED FOR
CONVENIENCE ONLY):
After docketing, the Docket
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KAREN DOUGLAS Commissioner and Presiding Member

DAVID HOCHSCHILD Commissioner and Associate Member

Ken Celli Hearing Adviser

Galen Lemei Adviser to Presiding Member

Jennifer Nelson Adviser to Presiding Member

TBD Adviser to Associate Member

Eileen Allen Commissioners' Technical Adviser for Facility Siting

DECLARATION OF SERVICE

I, <u>Cenne Jackson</u>, declare that on <u>February 22, 2013</u>, I served and filed copies of the attached <u>Public Workshop</u> <u>Notice</u>, dated February 22, 2013. This document is accompanied by the most recent Proof of Service, which I copied from the web page for this project at: http://www.energy.ca.gov/sitingcases/hiddenhills/.

The document has been sent to the other persons on the Service List above in the following manner:

For service to all other parties and filing with the Docket Unit at the Energy Commission:

(Check one)

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Instead of e-mailing the document, I personally delivered it or deposited it in the US mail with first class postage to all of the persons on the Service List for whom a mailing address is given.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I am over the age of 18 years.

Dated: 2/22/13 Originally signed by Cenne Jackson