

## DOCKETED

<b>Docket Number:</b>	12-AFC-02
<b>Project Title:</b>	Huntington Beach Energy Project
<b>TN #:</b>	202602
<b>Document Title:</b>	Declaration of Geoffrey Spaulding in Support of Applicants Opening Testimony
<b>Description:</b>	Declaration
<b>Filer:</b>	Kimberly Hellwig
<b>Organization:</b>	Stoel Rives LLP
<b>Submitter Role:</b>	Applicant
<b>Submission Date:</b>	6/25/2014 5:54:05 PM
<b>Docketed Date:</b>	6/26/2014

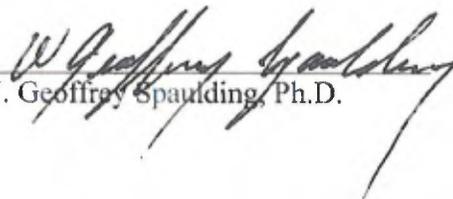
Declaration of  
**W. GEOFFREY SPAULDING, Ph.D.**  
Huntington Beach Energy Project  
(12-AFC-02)

I, W. Geoffrey Spaulding, declare as follows:

1. I am presently employed by CH2M Hill, Inc. under contract with AES Southland Development, LLC to provide environmental consulting services for the Huntington Beach Energy Project ("HBEP").
2. A copy of my professional qualifications and experience is attached hereto as Exhibit A and incorporated by reference herein.
3. I caused to be prepared or prepared information related to **Paleontological Resources** in support of the Application for Certification ("AFC") for HBEP. Such information was either provided by me to consultants for incorporation of such data into documents or based on my independent analysis of data from reliable documents and sources, as well as my professional experience and knowledge. Specifically, I prepared or caused to be prepared the following:
  - a. Application for Certification, Section 5.8 and related Appendices, dated and docketed June 27, 2012 (TN #66003).
4. It is my professional opinion that the information provided to the California Energy Commission related to the HBEP AFC proceeding is valid and accurate with respect to the issues addressed herein.
5. I am personally familiar with the facts and conclusions related in the testimony with respect to the issues addressed herein.

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

June 15, 2014  
Date

  
W. Geoffrey Spaulding, Ph.D.

**EXHIBIT A**

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## W. Geoffrey Spaulding, Ph.D.

Paleontological Resources Specialist

### Education

Ph.D., Geology (Paleobiology)

M.S., Geology (Palynology & Vertebrate Paleobiology)

B.A., Anthropology

### Registration

- Approved Paleontologic Resources Specialist by the California Energy Commission and Caltrans
- Nevada State and California State Bureau of Land Management Paleontological Resources Use Permits
- Reviewed under Secretary of the Interior's Guidelines by the California Energy Commission and Caltrans and Approved as a Geoarchaeologist
- Paleontological Resources Use Permits granted by the California and Nevada state offices of the Bureau of Land Management

### Relevant Experience

Dr. Spaulding is a senior technical consultant and paleontologist with CH2M HILL with extensive experience in paleobiology, paleontology, and paleoecology. He also is accomplished in the study of site formation processes, and the age determinations of archaeological and paleontologic sites in the western United States. He has more than three decades of technical experience in the Earth and Life sciences focusing on the deserts of western North America and on California. Representative projects that he has managed in the last 20 years are listed below. Prior to joining private industry, he was on the research faculty of the University of Washington, Seattle.

### Representative Projects

**Paleontological Resources Lead; Applications for Certification (AFCs); Huntington Beach Energy Project, Alamitos Energy Center and Redondo Beach Energy Project; AES Southland Development LLC; Huntington Beach, CA.** Directed and contributed to the preparation of the paleontological resources sections of the Applications for Certification for three complex power generation projects in coastal California. The projects required a detailed understanding of the geological history of this part of coastal California as well as an understanding of paleontological resources sensitivity of complex coastal settings almost entirely obscured by recent development and land alterations. Understanding the different project configurations and the potential impacts to paleontologically sensitive sediments was a crucial aspect of these assessments.

**Paleontological Resources Lead, AFC for AES Highgrove Power Project.** Paleontologic Resources Specialist. Develop a Paleontologic Resources Assessment and prepare appropriate documentation on paleontologic resources for the projects' Application for Certification before the California Energy Commission. Determine the relative levels of paleontologic sensitivity of Mesozoic through Quaternary rock units in the context of the geological history of the Perris Plain and Riverside area, develop the scope for and direct the field survey, and prepare the resource specific documentation.

**Senior Project Paleontologist, Licensing and Permitting Phases for Wind Energy Farm Developments in the Tehachapi Pass Area, Kern County, California.** Prepare licensing documents for the Bureau of Land Management and other agencies reviewing the paleontological potential of project areas, recommending designing and directing paleontological field surveys, and performing Phase 2 paleontological site investigations, and consequent mitigation plans. Analyzing sample efficiency and designing sampling plans for Federal and State agency lead review, and supervising their execution. Providing geological and paleontological analyses of scientifically significant sites as part of overall mitigation, and integrating those findings into reports.

## W. Geoffrey Spaulding, Ph.D.

**Paleontological and Geoarchaeological Lead, Hidden Hills Solar Electric Generating System Fatal Flaw and AFC/FSA-EIS, Inyo County, California and Clark and Nye Counties, Nevada.** Project Senior Technical Consultant, Paleontological Resources Specialist, California Cultural Resources Task Lead, and Geoarchaeologist. Provided senior technical review and task leadership in support of the site selection and then licensing of a 3,100 acre concentrated solar power generation facility in the northeastern Mojave Desert. Consult with client, project management, and agency personnel, design field programs, and direct resources surveys. Prepare and provide senior and peer-review of archaeological, paleontological, biological resources and jurisdictional waters studies. Prepare the overall paleontological and geoarchaeological assessments of the project area, as well as assist in directing cultural resources studies. Provide input to client and project management regarding local conditions and constraints based on in-depth. Adapt remote imagery analysis to the task of locating historic resources potentially affected by project development.

**Paleontological and Geoarchaeological Lead, Ivanpah Solar Electric Generating System AFC/FSA-EIS and Implementation.** Project Senior Technical Consultant, Paleontological Resources Specialist, Revegetation Ecology Lead, Geoarchaeologist. In support of the licensing and construction of a 3,400 acre solar powered electrical generation facility in the eastern Mojave Desert. Conduct records review and literature search, field reconnaissance and subsequent pedestrian field survey of paleontologically sensitive areas, and record new paleontological sites. Model pluvial lake fluctuations and alluvial fan surface development to determine distribution of paleontologically and archaeologically sensitive sediments, and prepare geoarchaeological assessment of the project area. Design and participate in an aerial survey of the surrounding mountains. Prepare appropriate Paleontological, Cultural and Biological Resources sections for BLM and California Energy Commission Staff. Prepare Technical Basis Document and long term (30 years) Restoration, Revegetation and Rehabilitation Plan to meeting the specification of the Bureau of Land Management

**Paleontological and Geoarchaeological Lead, AFC and Implementation Phase Mitigation for Turlock Irrigation District's Almond 2 Power Plant, California.** Paleontologic Resources Specialist and Geoarchaeologist. Perform detailed paleontologic resources assessments and impacts analyses, and subsurface archaeological sensitivity assessment. Design archaeological resources testing plan and implement that plan. Develop and manage paleontologic resources monitoring and mitigation program for the construction of the Walnut Energy Center south of Modesto, California. Prepare Paleontologic Resources Management and Discovery Plans, the Paleontologic Resources Module of the worker education program, and visual aids for worker education. Direct the recovery of discovered paleontologic resources (Quaternary vertebrate remains), and consult with the California Energy Commission on the adequacy of mitigation efforts. Develop site-specific stratigraphic framework to identify paleontologically sensitive sediments, and to provide client and the CEC with guidance regarding what construction activities need and need not be monitored.

**Paleontological Resources Specialist, AFCs for Walnut Creek Energy Park and Sun Valley Energy Project, Edison Mission Energy, City of Industry/Romoland, California.** Provided support for two Applications for Certification before the California Energy Commission for similarly designed 500-MW natural gas-fired peaking power plants using the GE LMS100 advanced gas turbine technology. These applications were prepared in parallel and were filed at the Energy Commission within one week of one another. The AFCs were filed in December of 2005 and the projects are scheduled to begin construction in 2007.