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<th><strong>Docket Number:</strong></th>
<th>12-AFC-02C</th>
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<td><strong>Project Title:</strong></td>
<td>Huntington Beach Energy Project - Compliance</td>
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<td><strong>TN #:</strong></td>
<td>214180</td>
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<td><strong>Document Title:</strong></td>
<td>Declaration of Jennifer Krenz-Ruark in Support of Project Owner's Testimony</td>
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<tr>
<td><strong>Description:</strong></td>
<td>Declaration of Jennifer Krenz-Ruark in Support of Project Owner's Testimony (Soils)</td>
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<td><strong>Filer:</strong></td>
<td>Kimberly Hellwig</td>
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<td><strong>Organization:</strong></td>
<td>Stoel Rives LLP</td>
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<td><strong>Submitter Role:</strong></td>
<td>Applicant</td>
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Declaration of
JENNIFER KRENZ-RUARK
Huntington Beach Energy Project
(12-AFC-02C)

1. Jennifer Krenz-Ruark, declare as follows:

1. I am presently employed by CH2M Hill, Inc., under contract with AES Huntington Beach Energy, 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 Attachment A and incorporated by reference herein.

3. I prepared or caused to be prepared information related to Soils and other general topics, as identified below, in support of the Petition to Amend for HBEP. Such information was either provided by me to consultants for incorporation of such data into documents or was 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. Petition to Amend, Section 5.11 (Soil & Water Resources) (TN# 206087), docketed September 9, 2015
   b. Project Owner’s Comments on the Preliminary Staff Assessment (TN# 212379), docketed July 21, 2016

4. It is my professional opinion that the information provided to the California Energy Commission related to the HBEP’s Petition to Amend 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 presented by me 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: 10/20/2016

Jennifer Krenz-Ruark
Jennifer Krenz-Ruark
Environmental Scientist

Education
M.S., Soil Science, Purdue University, West Lafayette, IN, 2006
B.S., Natural Resources Management (Minors (3): Soil Science, Water Resources, Natural Science), University of Wisconsin-Stevens Point, Stevens Point, WI, 2000

Professional Registrations
Professional Soil Scientist: Wisconsin, 2011 (no. 205-112)

Distinguishing Qualifications
- Multidisciplinary skillset with a strong background in soil and water science
- Regulatory compliance expertise including project permit applications and compliance
- Strong background in field soil and water sampling and analysis
- Detail oriented with strong technical quality control skills
- Technical field experience includes source testing, water quality, and soil survey investigations

Relevant Experience
Ms. Krenz-Ruark is a soil scientist with more than 10 years of experience working on a variety of soils, water, and agricultural projects. Her areas of expertise include soil classification, field sampling and analysis of soil and water, regulatory compliance, and soil survey investigations.

Representative Projects
Soils Lead; Application for Certification; Huntington Beach Energy Project; AES Southland Development LLC; Huntington Beach, CA. Prepared the soils section of an AFC for a 1,185-MW combined cycle repower of the existing Huntington Beach Generating Station located in Huntington Beach, CA. Assessed potential impacts to soil and agricultural resources for the proposed project including all linear features (transmission lines, water supply and discharge lines, and natural gas supply lines). Analysis included RUSLE2 evaluation for wind and water erosion.

Soils Lead; Application for Certification; Alamitos Energy Center; AES Southland Development LLC; Long Beach, CA. Prepared the soils section of an AFC for a 1,950-MW combined cycle repower of the existing Alamitos Beach Generating Station located in Long Beach, CA. Assessed potential impacts to soil and agricultural resources for the proposed project including all linear features (transmission lines, water supply and discharge lines, and natural gas supply lines). Analysis included RUSLE2 evaluation for wind and water erosion.

Soils Lead; Application for Certification; Redondo Beach Energy Project; AES Southland Development LLC; Redondo Beach, CA. Prepared the soils section of an AFC for a 546-MW combined cycle repower of the existing Redondo Beach Generating Station located in Redondo Beach, CA. Assessed potential impacts to soil and agricultural resources for the proposed project including all linear features (transmission lines, water supply and discharge lines, and natural gas supply lines). Analysis included RUSLE2 evaluation for wind and water erosion.

Environmental Scientist. Soils and Agriculture Section – Power Plant Applications for Certification. Various Power Plant Projects and Clients. CA. Prepared CEQA-equivalent documentation for review by the California Energy Commission. Prepared report section that assesses potential impacts to soil and agricultural resources for the proposed power plant projects including all linear features (transmission lines, water supply and discharge lines, and natural gas supply lines). Analysis included RUSLE2 evaluation for wind and water erosion. Lead author or senior reviewer on 17 Application for Certification projects.
Jennifer Krenz-Ruark

Environmental Scientist and QC Officer. Rice Water Quality Programs. California Rice Commission (CRC). Sacramento, CA. Lead author and delivery lead for the CRC’s Annual Monitoring Report (AMR) submittals to the Central Valley Regional Water Quality Control Board (CVRWQCB). AMR’s are submitted in compliance with the requirements of the Conditional Waiver of Waste Discharge Requirements for Irrigated Agriculture and the Rice Pesticides Program. Tasks included compiling, reviewing, analyzing, and presenting water quality and pesticide application data. Provided ongoing review of weekly (RPP) and monthly (CWFR) field and lab results during the field season (April-Sept) to ensure quality standards were being met. Compiled and analyzed data to determine level of compliance with the program. Developed SWAMP-comparable spreadsheet of raw and QC results for submission to the CVRWQCB. Responsibilities also included supervision of junior environmental staff and coordination with editing and subconsultant staff.

Environmental Scientist. Groundwater Quality Assessment Report. Northern California Water Association. Sacramento, CA. Assisted engineers with soils investigation for groundwater vulnerability assessment. Compiled NRCS SSURGO soil map units within the Sacramento Valley and used the UC-Nitrate Groundwater Pollution Hazard Index to identify soil map units that may be vulnerable to contamination. Future work will include evaluation of cropping systems and typical pesticide load by crop to identify areas of the Sacramento Valley with high risk for groundwater contamination.

Environmental Scientist. Washington Expansion Project, WA. Lead author for the soils chapter of the Environmental Report to be submitted to FERC for the proposed expansion of the natural gas pipeline. This project dovetails into the OR LNG project. Conducted soil survey investigation to determine impact of soils along the proposed pipeline expansion route.

Environmental Scientist, Oregon LNG Project, OR. Conducted soil survey investigation to determine impact of soils along proposed pipeline expansion route, and reviewed responses to landowner comments and analyzed for completeness. Task lead on subsequent investigations due to pipeline route updates.

Environmental Scientist. Bay Delta Conservation Plan EIR/EIS. California Department of Water Resources as a subconsultant to HDR and ICF. Prepared the Soil Resources and Mineral Resources subsections of the EIR. Work included GIS compilation of the NRCS-SSURGO soil map units within the affected area and analysis of the soil properties for each of the 13 alternatives.

Environmental Scientist. California High-Speed Train System EIR/EIS. High-Speed Rail Authority, CA. Prepared the Soil Resources subsection of the EIR for the 120 mile section of the California High-Speed Train System between Merced and Sacramento. Work included GIS compilation of the NRCS-STATSGO soil map units within the affected area and analysis of the soil properties for each of the alternatives. Also assisted in the development of the Geology, Soils, and Seismicity Technical Report for the project.

Environmental Scientist. Nutrient Management Plan and Annual Report. City of Hollister, CA. Assisted with the development of a Nutrient Management Plan for irrigation reuse of recycled water at Brigantino Park. The Plan documented the water and nutrient requirements for turfgrass, and provided guidance on hydraulic loading capacity and supplemental fertilizer requirements for the reuse area. Also assisted with the city’s Annual Report, documenting water quality monitoring results for water supply, influent, effluent, biosolids disposal, compliance with the Nutrient Management Plan and Groundwater Monitoring Plan, development of rules and regulations for recycled water users, and implementation of the Long Term Salinity Management Program.