DOCKETED
----------

DOCKETED	
Docket Number:	12-AFC-02
<b>Project Title:</b>	Huntington Beach Energy Project
TN #:	202601
<b>Document Title:</b>	Declaration of Horacio Larios in Support of Applicants Opening Testimon
Description:	Declaration
Filer:	Kimberly Hellwig
Organization:	Stoel Rives LLP
Submitter Role:	Applicant
Submission Date:	6/25/2014 5:55:49 PM
Docketed Date:	6/25/2014

# Declaration of HORACIO LARIOS Huntington Beach Energy Project (12-AFC-02)

I, Horacio Larios, declare as follows:

- 1. I am presently employed by Power Engineers Collaborative under contract with AES Southland Development, LLC to provide engineering consulting services for the Huntington Beach Energy Project ("HBEP").
- 2. A copy of my professional qualifications and experience is attached hereto as <u>Exhibit A</u> and incorporated by reference herein.
- 3. I caused to be prepared or prepared information related to the **Facility Design and Project Description** 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 2.0 and related appendices, dated and docketed June 27, 2012 (TN #66003)
  - b. Email to F. Miller from Robert Mason, CH2M Hill re Response to Email Request from CEC Staff on Use and Number of Stories for Specific HBEP Building, dated and docketed March 8, 2013 (TN #69878)
  - c. Email Correspondence related to Huntington Beach Construction and Demolition Activities, dated March 9, 2013, docketed March 18, 2013 (TN #69948)
  - d. Applicant's Revision to Construction and Demolition Schedule, dated March 18, 2013 and docketed March 19, 2013 (TN #69661)
  - e. Applicant's Submittal of Additional Construction and Demolition Information, dated March 19, 2013 and docketed March 20, 2013 (TN #69967)
- 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.

10 JUNE 2014 Date

Horacio Larios

**EXHIBIT A** 

## **Power Engineers Collaborative, L.L.C.**

#### Area of Specialization

- Power Plant Project
  Development
- Engineering Management

#### Education

- B.S. Systems Engineering, The University of Arizona, Tucson, AZ, 2000
- Navy Nuclear Power Training Command, Charleston, SC, 2002. Over 30 semester hours of nuclear physics, materials science, thermodynamics, electrical instrumentation, chemistry and operational reactor plant systems.
- The University of Chicago Booth School of Business, Executive MBA Candidate.

#### Professional Registrations

 Professional Engineer – Wisconsin (License No: 41729-6)

## Horacio Larios, P.E.

Project Manager / Project Engineer - Mechanical

### Summary of Experience:

Mr. Larios has 13 years of experience in power project management and implementation, both in the private sector and in the military plant including power operations, engineering and design, and troubleshooting, commissioning power project business development, purchasing, and environmental health and safety programs. He has developed and negotiated specifications and scope for engineering services agreements for power generating projects, and has been responsible for managing multiple engineering disciplines during engineering design. He has managed power project's Environmental Impact Study Assessments (EIS) and Permitting Processes.

## Select Project Experience:

## The AES Corporation, Southland Power Plant Asset Repowering

Performs project management and engineering tasks during front end engineering design, cost estimating, permitting, gas turbine and combined cycle equipment evaluation in support of the proposed repowering of industrial gas boiler power plants with advanced combined cycle technology.

### WE Energies, Elm Road Generating Station (ERGS)

Performs project management and engineering tasks during the retrofits required to allow the ERGS to use Powder River Basin Coal as fuel.

### Thilmany Paper, Kaukana WI

Directly performed Industrial Boiler MACT (Maximum Achievable Control Technology) analysis for the compliance plan for a wood –fired and two cyclone fired coal power boilers at this mill in anticipation of the 2011-2 IB MACT rule revisions. As project engineer, conducted boiler performance, emissions and byproduct calculations, evaluated AQCS technology, developed general layouts as well as capital and operating costs for the selected control strategy and alternative new power island scenarios.

## Invenergy, Ector County Simple Cycle Power Plant Project

Performed mechanical and project engineering tasks during detail design of gas turbine power project.

Milwaukee Metropolitan Sewerage District NFPA 820 Water Reclamation Facility and Conveyance System Facility Assessments for NFPA 820 Compliance Performed Project Engineering tasks to include field surveys, NFPA compliance assessments, HVAC upgrade estimates and operational risk management evaluations.

# Duke Energy International, Coal Power Plant Construction/Commissioning

### Guatemala, Central America

Mechanical Systems Commissioning and Project Controls Engineer. Wrote procedures for Boiler Boilout, Feed and Condensate Cleaning and Steam Blows. Performed construction management of mechanical systems in support of commissioning. Performed project controls functions – activity scheduling, procurement and review of P&ID's to assess system readiness for commissioning/start-up.

## University of Wisconsin Madison, Charter Street Heating Plant Rebuild, Madison, WI

Led the interdisciplinary engineering team which developed the IBC, IFC, NFPA and Wisconsin Administrative Codes fire protection and risk management assessment for the project. This assessment required the identification, interpretation and discussion of the various codes with all project stakeholders to include MFD and WI Department of Commerce entities.

# Duke Energy International – Combined Cycle Power Plant, Monterrey Mexico

Owner's Engineer support in engineering design review, project estimating, scheduling.

## The AES Corporation – Landfill Gas to Energy Projects, San Salvador, El Salvador

Project Manager – Negotiated power plant purchase contracts for internal combustion generation sets as well as balance of plant equipment. Responsible developing project scope and managing design engineering. Responsible for Negotiating Engineering Procurement and Construction Contract.

## US Navy – Nuclear Power Plant Assistant Engineer

- Responsible for implementing short and long term maintenance, repair and upgrade schedules for mechanical, electrical and instrumentation engineering plant equipment.
- Supervised reactor and steam plant operations, overseeing 10 plant operators on a rotating shift basis.
- Supervised all engineering projects during reactor shutdown periods.

## Work History

- 2009-Present: Power Engineers Collaborative, LLC
- 2008-2009: The AES Corporation Project Manager
- 2000-2008: US Navy Nuclear Submarine Officer
- 2007-2008: Iraq War Counter IED Task Force
- 2005-2007: Submarine Modernization Project Manager
- 2002-2005: Submarine Officer/Nuclear Power Plant Assistant Engineer.
- 2000 2002: Naval Nuclear Power Training Command Student.