

## DOCKETED

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<b>Project Title:</b>	Huntington Beach Energy Project
<b>TN #:</b>	202603
<b>Document Title:</b>	Declaration of Fatuma Yusuf, Ph.D. in Support of Applicant's Opening Testimony
<b>Description:</b>	Declaration
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Declaration of  
**FATUMA YUSUF, PH.D.**  
Huntington Beach Energy Project  
(12-AFC-02)

I, Fatuma Yusuf, 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 **Socioeconomics** 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 5.10 and related Appendices, dated and docketed June 27, 2012 (TN #66003)
  - b. Responses to Staff's Data Requests, Set 1A (#40-41), docketed November 2, 2012 (TN #68366)
  - c. Responses to Staff's Data Requests, Set 2 (#78-79), dated and docketed January 22, 2013 (TN #69208)
  - d. Response to Staff's Data Requests, Set 1, #40 (SOCIO-40), dated and February 6, 2013 (TN #69415)
  - e. Applicant's Comments on PSA, Part A (specific to Socioeconomics) dated and docketed November 7, 2013 (TN #201142)
  - f. Applicant's Follow-Up to PSA Part A Workshop (Socioeconomics section) dated and docketed December 13, 2013 (TN #201437)
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.

6/23/14  
Date


  
Fatuma Yusuf, Ph.D.

EXHIBIT A



# Fatuma Yusuf

Senior Economist

## Education

Ph.D., Agricultural Economics, 2000, Washington State University, Pullman, WA

M.S., Statistics, 1999, Washington State University, Pullman, WA

M.A., Agricultural Economics, 1994, Washington State University, Pullman, WA

B.S., Range Management, 1990, University of Nairobi, Nairobi, Kenya

## Distinguishing Qualifications

- Expert in resource and regional economics
- Experienced in providing economic analysis, including benefit-cost analysis, cost allocation, project feasibility and economic impact analysis, for federal, state, and local agencies.
- Experienced in socioeconomic and environmental justice analysis
- Experienced in statistical analysis and international economic development

## Relevant Experience

Dr. Yusuf is an economist and statistician with over 15 years of experience. She has conducted economic analyses for energy, water supply, water quality, agriculture, transportation, and recreation projects; evaluated project feasibility; and assessed economic impacts associated with project implementation. She has experience in preparing the socioeconomic analysis, regional economic impact analysis, cost-benefit analysis, and rate impact analysis. She has developed statistical predictive models and has evaluated the economic impacts associated with base closures and habitat creation. She has been an economics task lead and task manager for a number of Environmental Impact Statements/Reports (EIS/R) including some on highway development or expansion, high speed rail development, and light rail development as well as on a number of important projects related to water resource issues.

## Representative Projects

**Socioeconomics Lead; Application for Certification; Huntington Beach Energy Project; AES Southland Development LLC; Huntington Beach, CA.** Managed the preparation of the socioeconomic resources section of an AFC for a 1,185-MW combined cycle repower of the existing Huntington Beach Generating Station located in Huntington Beach, CA. The analysis included the local and regional economic and socioeconomic impacts associated with the construction and operation of the project. Also, evaluated the Environmental Justice impacts associated with project implementation.

**Socioeconomics Lead; Application for Certification; Alamitos Energy Center; AES Southland Development LLC; Long Beach, CA.** Managed the preparation of the socioeconomic resources section of an AFC for a 1,950-MW combined cycle repower of the existing Alamitos Beach Generating Station located in Long Beach, CA. The analysis included the local and regional economic and socioeconomic impacts associated with the construction and operation of the project. Also, evaluated the Environmental Justice impacts associated with project implementation.

**Socioeconomics Lead; Application for Certification; Redondo Beach Energy Project; AES Southland Development LLC; Redondo Beach, CA.** Managed the preparation of the socioeconomic resources section of an AFC for a 546-MW combined cycle repower of the existing Redondo Beach Generating Station located in Redondo Beach, CA. The analysis included the local and regional economic and socioeconomic impacts associated with the construction and operation of the project. Also, evaluated the Environmental Justice impacts associated with project implementation.

# Fatuma Yusuf

**Application for Certification for a number of energy projects including the San Francisco Electric Reliability Project in San Francisco, CA, the Walnut Energy Facility in Turlock, CA and the Ivanpah Solar Electric Generating System (Ivanpah SEGS) in San Bernardino County, CA.** Economics Task Lead. Prepared the socioeconomics analysis section of the AFC. Also, analyzed the regional economic impacts of the project on employment and income.

**Industrial Siting Application for a number of energy projects including the Medicine Bow Coal-to-Liquids Project, WY, Glenrock Wind Energy Project, WY and Dave Johnson.** Analyzed the regional economic impacts of the project on employment and income.

**Socioeconomic Study Plan for the SMUD Upper American River Project Iowa Hill Pumped Storage Development Project.** Socioeconomic Task Lead. Prepared the socioeconomic study plan and evaluated the socioeconomic impacts associated with the Iowa Hill Pumped Storage Development Project as part of the Sacramento Municipal Utility District (SMUD) Upper American River Project Hydroelectric FERC relicensing application. Also, analyzed the regional economic impacts of the project on employment and income.

**Revision of SMUD Upper American River Project Socioeconomic Impact Study Report.** Socioeconomic Task Lead. Prepared Revision 1 of the SMUD UARP Socioeconomic Impact Study Report on the SMUD Upper American River Project Hydroelectric FERC relicensing. Revision 1 involved the verification of the study conducted by CSUS. Also, analyzed the regional economic impacts of the project on employment and income.

**Klamath Hydroelectric Project Resources Studies and Preparation of Relicensing Documents, PacifiCorp, Upper Klamath River, Oregon and California.** Prepared the Socioeconomic Resources Final Technical Report in support of the FERC application for a new Project license.

**Statewide Flood Management Planning Program.** Economist. On-going project. Reviewed alternative funding mechanisms that would be more economical for California state residents. The statewide flood program would be in place of the current FEMA administered National Flood Insurance Program (NFIP).

**Economic Impact Analysis for the Elk Heights Composting/Digestion, Kittitas County, WA.** Project Manager and Economics Lead. Provided screening-level economic, socioeconomic and fiscal impact analyses of the construction and operation associated with the Elk Heights Composting/Digestion project in Kittitas County, Washington.

**Economic Impact Analysis for the Teanaway Solar Reserve, Kittitas County, WA.** Economics Task Lead. Provided screening-level economic, socioeconomic and fiscal impact analyses of the construction and operation associated with the Teanaway Solar Reserve project in Kittitas County, Washington.

**Market Assessment of Additional Power Generation on Ute Mountain Ute Reservation, New Mexico.** Economics Task Lead. Analyzed the market for future power supply and demand to determine the feasibility of developing additional power generation capability on the New Mexico portion of the Ute Mountain Ute Reservation.

**Economic Analysis for the Calpine LNG Facility and Power Plant in Eureka, CA.** Project Manager and Economics Lead. Provided a screening-level economic, socioeconomic and fiscal impact analyses of the construction and operation associated with the Calpine LNG and Power Plant Projects in Eureka, CA.

**Agricultural Impact Study of the PacifiCorp's Hydroelectric Power Project.** Analyzed the socioeconomic and regional economic impacts associated with the increased energy costs faced by Klamath irrigators. Prepared the regional economic impact report.