

Xiaoxuan Hou

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ENERGY AND ENVIRONMENTAL ECONOMICS, INC.

San Francisco, CA

Associate

Ms. Hou joined E3 in 2018. Her work in E3's planning group addresses issues related to optimal capacity expansion planning, long-term greenhouse gas reduction policies, and market price projections, among other areas. She develops and utilizes models to address long-term challenges associated with decarbonizing the electric power system and the broader energy sector. Prior to E3, Ms. Hou worked at ICF, where she led modeling related to environmental policies, asset valuation, capacity expansion planning, and transmission system simulation.

Ms. Hou received a Master of Public Policy from the University of California, Berkeley and bachelor's degrees in Economics and in Energy and Resources Engineering from Peking University in China.

ICF

Fairfax, VA

Associate

March 2018 – September 2018

- Led modeling efforts to analyze U.S. and international power markets using ICF's proprietary Integrated Planning Model (IPM), a linear programming-based cost optimization model
- Defined and ran policy scenarios to analyze potential regulation risks and support client long-term portfolio strategies
- Led modeling and developed tools to evaluate risks and impacts of environmental policies
- Conducted cash flow, NPV, and rate-of-return analysis for alternative projects under various scenarios
- Led transmission modeling efforts to analyze grid capability and reliability using PSLF and PowerWorld
- Developed marketing-oriented white papers
- Presented on internal meetings and client calls, and coordinate with other teams to deliver presentations, project reports, and analysis models to clients

Analyst

August 2016 – February 2018

- Led modeling efforts for projects worth more than \$2M using IPM
- Developed cost assumption databases for different power generation technologies based on capital cost, construction period, debt/equity ratio, tax schedule, rate-of-return target, etc.
- Built financial models to analyze asset pro forma and support transaction-oriented targets
- Developed econometric models to forecast long-term electricity demand
- Maintained internal databases to analyze data from regulatory agencies, utility companies, and key data vendors
- Built over 20 templates that serve as data-to-model and model results visualization interfaces using formulas and VBA

LAWRENCE BERKELEY NATIONAL LABORATORY

Berkeley, CA

Research Assistant

October 2015 – May 2016

- Designed an electricity critical peak pricing program for Jiangsu Province in China. Crafted the basic economic pricing model, determined assumptions, defined criteria, identified implementation alternatives, and provided recommendations
- Reviewed more than 100 literature sources on power sector deregulation and demand-side management
- Drafted research fundraising proposals

U.S. ENVIRONMENTAL PROTECTION AGENCY

San Francisco, CA

Student Policy Analyst

February 2016 – May 2016

- Provided policy consulting for EPA's sustainable materials management strategies. Developed policy analysis that was distributed across EPA regional offices

WORLD RESOURCES INSTITUTE

Beijing, CHINA

Intern

May 2015 – August 2015

- Independently developed an Excel based greenhouse gas inventory reporting tool that was released in November 2015 using VBA

CALIFORNIA PUBLIC UTILITIES COMMISSION

San Francisco, CA

Intern

2/2015-12/2015

- Quantified reliability and cost-effectiveness of 31 demand response (DR) programs run by investor-owned utilities in California based on budget review and load impact analysis

Education

University of California, Berkeley

Berkeley, CA

Master of Public Policy

2016

Peking University

Beijing, China

Bachelor of Engineering, Energy and Resources Engineering

2014

Bachelor of Economics

- Top 2 university in China; graduated in top 5% of class; scholarship recipient (given to 25 of 1000 students)

Research Assistant

August 2013 – April 2014

- Worked with energy and environmental economists and professors at the National School of Development to conduct research on China's energy market, with a focus on clean energy technologies
- Co-authored a report on China's energy sector reform and independently wrote the non-fossil energy market chapter

Citizenship

China