

Wendy Ong, Associate

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PROFESSIONAL EXPERIENCE

Synapse Energy Economics, Inc., Cambridge, MA. *Associate*, October 2014 – present.

Provides consulting and researching services and assists in writing testimony and reports on a wide range of issues related to the electric industry. Focuses on evaluating the impacts of proposed and existing environmental regulations on the electric sector.

Google Inc., Mountain View, CA. *Research and Operations Analyst – Global Infrastructure Group*, July 2007 – January 2012.

- Analyst and Project-management of Google’s proposed renewable energy datacenter (1 GW solar)
- Research, analysis and presentation of domestic and international renewable energy options
- Project lead: European datacenters and colocation centers exit strategy
- Project lead: Atlanta metro-area datacenters and power procurement strategy
- Project lead: Europe, Middle-East and Africa datacenter site-selection strategy
- Analyst for Google’s datacenter site search in South America
- Analyst for pan-European datacenter energy procurement strategy
- Created model for future power expenditure at Google’s European datacenter facilities
- Developed European-wide strategy for purchasing power for Europe datacenter sites
- Research, analysis and presentation of electricity markets in Europe, North America, South America
- Developed model for datacenter and co-location labor costs and development of staffing model
- Optimization of how servers are grouped for scheduled maintenance
- Google Grants Volunteer

TIAX LLC (formerly Arthur D. Little), Cupertino, CA. *Staff Engineer*, April 2005 – April 2006.

- Project managed analysis of increasing ethanol content in California reformulated gasoline
- Project management of California Energy Commission (CEC) Advanced Energy Pathways project
- Analysis of diesel emissions control technologies and fleet-optimal compliance
- Quantification of air-quality impacts of land-use mitigation measures

American Society of Mechanical Engineers Certifications

Certified Engineer-in-Training (E.I.T.) in State of California

RESEARCH EXPERIENCE

Honda Fuel Cell Project, Stanford University, Mechanical Engineering Department, *Research Assistant to Professor Kenneth Goodson*, July 2003 – June 2004.

- Modeling and experimental investigation of two-phase flow in micro-channels in PEM fuel cells

Stanford University Summer Research Fellowship, *Research Assistant to Professor Kenneth Goodson*, June 2002 – September 2002.

- Investigated effects of cross-linked micro-channels in thermal heat-sinks for use in cooling computer-chips, resulting in final paper

Stanford University Summer Research Fellowship, *Research Assistant to Professor Charles Taylor*, June 2001 – September 2001.

- Researched factors affecting the modeling of blood-flow in pigs and variability of pig MRI data
- Ran simulations to test variables affecting computer modeling of blood flow

EDUCATION

Harvard Post-Baccalaureate Program, Cambridge, MA

Pre-medical coursework requirements: Organic & General Chemistry, Physics and Biology, September 2012 – May 2014

Carnegie Mellon University, Pittsburgh, PA

PhD Engineering and Public Policy (incomplete), August 2006 – May 2007

Stanford University, Stanford, CA

M.S. in Mechanical Engineering (Heat Transfer and Fluid Mechanics Depth), July 2003 – June 2004

B.S. in Mechanical Engineering, Mathematics minor, September 1999 – June 2003

PUBLICATIONS

Woolf, T., A. Napoleon, P. Luckow, W. Ong, K. Takahashi. 2016. *Aiming Higher: Realizing the Full Potential of Cost-Effective Energy Efficiency in New York*. Synapse Energy Economics for Natural Resources Defense Council, E4TheFuture, CLEAResult, Lime Energy, Association for Energy Affordability, and Alliance for Clean Energy New York.

Stanton, E. A., P. Knight, A. Allison, T. Comings, A. Horowitz, W. Ong, N. R. Santen, K. Takahashi. 2016. *The RGGI Opportunity 2.0: RGGI as the Electric Sector Compliance Tool to Achieve 2030 State Climate Targets*. Synapse Energy Economics for Sierra Club, Pace Energy and Climate Center, and Chesapeake Climate Action Network.

Stanton, E. A., P. Knight, A. Allison, T. Comings, A. Horowitz, W. Ong, N. R. Santen, K. Takahashi. 2016. *The RGGI Opportunity: RGGI as the Electric Sector Compliance Tool to Achieve 2030 State Climate Targets*. Synapse Energy Economics for Sierra Club, Pace Energy and Climate Center, and Chesapeake Climate Action Network.

Jackson, S., J. Fisher, B. Fagan, W. Ong. 2016. *Beyond the Clean Power Plan: How the Eastern Interconnection Can Significantly Reduce CO₂ Emissions and Maintain Reliability*. Prepared by Synapse Energy Economics for the Union of Concerned Scientists.

Luckow, P., E.A. Stanton, S. Fields, W. Ong, B. Biewald, S. Jackson, J. Fisher. 2016. *Spring 2016 National Carbon Dioxide Price Forecast*. Synapse Energy Economics.

Knight, P., A. Allison, W. Ong, N. R. Santen, E. A. Stanton. 2015. *Cutting Electric Bills with the Clean Power Plan*. Synapse Energy Economics.

Knight, P., S. Fields, S. Jackson, W. Ong, N. R. Santen, B. Biewald, E. A. Stanton. 2015. *Multi-State Compliance with the Clean Power Plan in CP3T*. Synapse Energy Economics for the National Association of State Utility Consumer Advocates.

Stanton, E. A., P. Knight, J. Daniel, B. Fagan, D. Hurley, J. Kallay, E. Karaca, G. Keith, E. Malone, W. Ong, P. Peterson, L. Silvestrini, K. Takahashi, R. Wilson. 2015. *Massachusetts Low Gas Demand Analysis: Final Report*. Synapse Energy Economics for the Massachusetts Department of Energy Resources.

Jiang, L., J. Koo, E. Wang, A. Bari, E. S. Cho, W. Ong, R. Prasher, J. Maveety, M.S. Kim, T. Kenny, J. G. Santiago, K. Goodson. 2002. "Cross-Link microchannels for VLSI hotspot cooling." *American Society of Mechanical Engineers IMECE2002*.

TESTIMONY ASSISTANCE

Colorado Public Utilities Commission (Proceeding No. 16AL-0048E): Answer testimony of Tim Woolf regarding Public Service Company of Colorado's rate design proposal. On behalf of Energy Outreach Colorado. June 6, 2016.

Resume dated June 2016