# TASC EXHIBIT A

# **Nathanael Miksis**

Mr. Miksis is a power system specialist with experience in Regional Transmission Organization stakeholder processes, electric utility regulatory proceedings, Federal Energy Regulatory Commission (FERC) proceedings, electricity market design, and power system operations and electric power economics.

### **WORK HISTORY**

Power System Expert, Keyes, Fox and Wiedman LLP (Apr. 2014 - Present)

Principal, NextGrid Strategies (Jan. 2013 to Present)

Expert Market Analyst, Pacific Gas & Electric Co. (PG&E) (May 2011 to Jan. 2013)

Market Analyst, PG&E (Jan. 2010 to May 2011)

Associate Market Analyst, ISO New England, Inc. (ISO-NE) (Jun. 2007 to Dec. 2009)

Research Assistant, <u>University of Mass. Amherst</u> (UMass) (Jan. 2006 to May 2007)

Visiting Researcher, Electricite de France (Jul. 2006 to Aug. 2006)

Markets Development Intern, <u>ISO-NE</u> (Jun. 2004 to Dec. 2005)

### SELECTED EXPERIENCE

Drafted Motion to Intervene and Opposition on behalf of The Alliance for Solar Choice
in Colorado PUC Dockets 14A-0301E and 14A-0302E.
Submitted cost recovery testimony before the California Public Utility Commission on
behalf of PG&E for expenses incurred to monitor new Market Redesign and Technology
Upgrade (MRTU) rules at the California Independent System Operator (CAISO).
Led internal analysis for PG&E officers on renewable PPA portfolio impact on
residential volumetric electric rates, 2012-2020.
Wrote PG&E's Motion to Intervene before the Federal Energy Regulatory Commission
on CAISO Bid-Cost Recovery (Docket No. ER11-3856).
Wrote PG&E's Stakeholder Comments to the CAISO on Intertie Pricing and Settlement
for virtual and physical electricity imports and exports.
Drafted briefing and discussion paper on PG&E system frequency response capabilities,
including discussion of future North American Electric Reliability Corporation reliability
standards on inertial response requirements in the Western Interconnection.
Led detailed analysis and wrote PG&E's comments to the CAISO on \$300 million per
year market flaw associated with Real-Time Energy Imbalance Offset charges.
Wrote tariff language on CAISO's Flexible Ramping Constraint that was recommended

The Alliance for Solar Choice Witness Nathanael Miksis Docket No. 13-035-184 Exhibit A

by PG&E and adopted by the CAISO.
Led internal Quarterly Market Reporting function for PG&E leadership on the state of the
California wholesale electricity market, involving monitoring for, anticipating and
escalating market issues for resolution internally or through stakeholder processes.
Gave internal PG&E Market Knowledge talks on "Energy and Ancillary Services Co-
optimization," "Optimal Dispatch with a Flexible Ramping Requirement Constraint,"
"Optimal Dispatch and Locational Marginal Pricing with Transmission Congestion."
Wrote ISO-NE's Semi-Annual Ancillary Services Phase 2 Compliance Filing for FERC.
Conducted extensive internal ISO New England, Inc. review of power grid resource
adequacy, covering wholesale-retail integration, demand-side management, electricity
storage, dynamic pricing, rate design, and locational capacity markets.

### **SELECTED PUBLICATIONS**

Miksis, N., S. Wadalawala., "Impact of Convergence Bidding on CAISO Real-Time Imbalance Energy Offset Charges," Internal PG&E Whitepaper. Jan. 2011.

Miksis, Nathanael K., "Electric Power Market Modeling with Multi-Agent Reinforcement Learning,". Masters Theses 1896 - 2014. (http://scholarworks.umass.edu/theses/494). Sep. 2010.

Miksis, N., R. Entriken, M. Trotignon, "Program on Technology Innovation: Optimal Bidding in Power Markets: Q-Learning for Adaptive Agents," Electric Power Research Institute Technical Report, Co-Sponsored by Electricite de France. Dec. 2007.

Miksis, N., "Spot Pricing and Investment Decisions in an Electricity Market Simulator with Adaptive Agents." Presentation at Annual Meeting of the Institute for Operations Research and the Management Sciences (INFORMS), Pittsburgh, Nov. 2006.

## **EDUCATION**

Master of Science, Industrial Engineering/Operations Research (UMass), Sep. 2010. Bachelor of Arts, Economics (UMass), May 2006.