

Committee on Energy and Commerce
U.S. House of Representatives
Witness Disclosure Requirement - "Truth in Testimony"
Required by House Rule XI, Clause 2(g)(5)

1. Your Name: KIRAN KUMARASWAMY		
2. Your Title: MARKET APPLICATIONS DIRECTOR		
3. The Entity(ies) You are Representing: FLOVENCE ENERGY LLC		
4. Are you testifying on behalf of the Federal, or a State or local government entity?	Yes	No X
5. Please list any Federal grants or contracts, or contracts or payments originating with a foreign government, that you or the entity(ies) you represent have received on or after January 1, 2015. Only grants, contracts, or payments related to the subject matter of the hearing must be listed. NONE		
6. Please attach your curriculum vitae to your completed disclosure form. ATTACHED		

Signature



Date: 07/13/2018

KIRAN KUMARASWAMY

Washington, DC

International battery energy storage and power markets professional with over 13 years of experience in sales, business development and customer engagement. Broad experience in development of strategic Go-To-Market (GTM) entry plans for countries like Australia, India and Southeast Asia region. Hands-on expert on storage business case formulation for customers, sales enablement and working with diverse cross-cultural teams.

Well-rounded experience on international storage market landscape, regulatory issues facing adoption, best practices, technology development, competitor landscape and future market outlook. Strong relationships with industry stakeholders, leading consultants, trade associations and other stakeholders that enable sales opportunities with potential customers. Prior testimony experience at US congress on topic of battery storage and invited speaker at several leading storage industry conferences.



Demonstrated ability to lead complex multi-disciplinary teams, implement company-wide strategic initiatives and provide product development support. High energy leader who can train new staff members and accomplish sales/P&L objectives including near-term sales, pipeline growth. Deeply grounded analytic knowledge on all aspects of power systems, battery energy storage system components and T&D systems planning.

PROFESSIONAL EXPERIENCE

Fluence, Arlington, VA
Market Applications Director

2018-Current

- Lead sales and business development activities for Fluence in US and Asia Pacific markets. Fluence is a 50-50 Joint Venture between AES and Siemens focused on energy storage.
- Drive customer development in the area of using energy storage for T&D applications. Work includes customer and stakeholder development, helping with storage business case formulation and highlighting value of storage for potential customers.
- Work with partners to push sales activities in the region and enable strong pipeline growth.
- Regulatory, media, analyst and stakeholder engagement in targeted Fluence markets.

AES Energy Storage, Arlington, VA
Market Development Director

2015-2017

- Sales enablement in US market, played a key role in several key bids and proposals that were won by AES. In particular, helped formulate business application for key projects in the PJM, AZ and CA markets.
- Internal Subject Matter Expert (SME) on T&D applications of energy storage in global markets. Enabled **5X growth** in sales pipeline over the course of 2 years.
- Strong role in US based energy storage association to develop regional markets, resolve regulatory concerns that hold up transactional activity. Role was to clear hurdles and enable sales transactions for AES.
- Continued education of all segments of customers – utilities, T&D companies, independent generation developers and C&I segment on value of storage and application fit.
- Leader in creating and implementing policy solutions that enable higher MW growth in key regional markets.
- Expert in working level relationships with electricity industry stakeholders, including utilities, regulators, other government officials, NGOs and customers.
- Invited expert in state and federal regulatory proceedings, ISO/RTO stakeholder processes, or state legislative efforts.

ICF International, Fairfax, VA

2005 – 2015

Senior Manager, Energy Advisory Solutions

2013-2015

- Led several large bid activities, proposal writing and sales, business development with P&L responsibility on projects.
- Subject Matter Expert on transmission with the Western Electricity Coordinating Council (WECC) on reviewing their Long Term Planning Tools (LTPT) and results from 20-year studies
- Led the economic benefit assessment for a proposed merchant transmission project in NY – the Anbaric Poseidon project.

Project Manager, Energy Advisory Solutions

2010-2012

- Advised numerous public and private sector clients on energy infrastructure related issues. Lead on the Non-Transmission Alternative (NTA) Study for a major proposed transmission project in the Northeast US (New England East-West Solution, NEEWS) expected to cost over \$1.5 billion.
- Reliability assessment for the Plains and Eastern Clean Line project using power flow modeling tools (GE-PSLF), a merchant facility proposed by Clean Line Energy Partners

Senior Associate, Energy Advisory Solutions

2005-2009

- Worked on several projects including Wyoming line separation, Wyoming Collector System Development and advising several generation owners on potential options for transmission interconnection.
- Performed several economic assessments for proposed generation and transmission projects using GE-MAPS framework.

University of Wisconsin, Madison, WI

2003 – 2005

Research Assistant – Department of Electrical Engineering

- Worked on modeling the dynamics of Distributed Generation Sources including Micro-Turbines and Fuel Cells. Created mathematical models and studied the characterization of different types of fuel cells.

EDUCATION

M.S. Electrical Engineering, University of Wisconsin, Madison (May 2005)

B.S. Electrical & Electronics Engineering, University of Madras, India (May 2003)

TESTIMONY AND PRESENTATIONS

- US Congress Testimony on topic of energy innovation and role of energy storage – see video transcript here <https://www.youtube.com/watch?v=18n4jCe-1R8>
- Frequent speaker on energy storage industry topics at leading industry events and quotes in media.

SELECTED INDUSTRY PUBLICATIONS

1. “Days of all or nothing transmission planning are over”, Invited Blog Post, <https://blog.aee.net/author/kiran-kumaraswamy>
2. FERC Testimony on Storage as a Transmission Asset, November 2016
3. FERC Energy Storage Workshop, November 2015
4. “Life in the Transco Age – The Competitive Transmission Genie is Out of the Bottle”, Public Utilities Fortnightly, March 2014

5. "Plug-In Electric Vehicles – Distribution System Impacts and High Level Screening Methodologies for Calculating Costs and Benefits", accepted for presentation at the IEEE Innovative Smart Grid Technologies (ISGT) 2014 Conference, Washington DC.
6. "Is Reliability Getting More Expensive – Evaluating the Cost Effectiveness of Utility Resiliency Investments", 2013 Utility Regulation: Rate Case, ROE and Reliability - SNL Energy National Conference, Washington DC. December 10, 2013
7. "Evaluating the Regulation Market Maturity for Energy Storage Devices", The Electricity Journal, December 2013
8. "How and Where Distributed Energy Resources Will Reduce the Need for Transmission", ICF White Paper, November 2013
9. "Evaluating the cost effectiveness of grid hardening investments", Public Utilities Fortnightly, October 2013
10. "Transmission, DG and NTA's – Striking the Balance", WIRES Fall Policy Session of the Annual Meeting, Washington DC. October 10, 2013
11. "Managing Power Grid Operations for Increasing Distributed Solar Generation", ICF Energy and Environment Intelligence Webinar Series, September 2013
12. "Riding out the Risk of Curtailment – Impact of New Market Rules, Technologies and Federal Policies", presented at the American Wind Energy Association (AWEA) Wind Energy Finance and Investment Seminar, New York City, NY, September 2013
13. "Economic Prospects of Market Advancements Offsetting the Growing Pain of Wind Curtailments", presented at the American Wind Energy Association (AWEA) Wind Power Conference, Chicago, IL, May 2013
14. "Innovative Technologies and Grid Modernization—DR, Dynamic Line Ratings (DLR) and Storage as Alternatives to Transmission Investment to Support Gas-fired Generation", Panel Moderator, Infocast Transmission Summit 2013, Washington DC, February 2013
15. "Transmission Landscape and Outlook 2013", presented at the Infocast Projects & Money Conference, New Orleans, LA, January 2013
16. "Wind Curtailment Outlook 2012", ICF Energy and Environment Intelligence Webinar Series, September 2012
17. "Where More is Not Merrier: The Battle Between Wind and Water in the Pacific Northwest", POWER Magazine, September 2012
18. "What's next for Domestic Transmission Planning", ICF Energy and Environment Intelligence Webinar Series, June 2012
19. "Wind Curtailment – Assessing and Mitigating Risks", ICF White Paper, April 2012
20. "Challenges of Costing Transmission in a World of Economic Volatility", The Electricity Journal, December 2011
21. "Will Recent Rule Changes Lead to Higher Wind Curtailments?", ICF Energy and Environment Intelligence Webinar Series, October 2011.
22. "Wyoming Collector and Transmission System Conceptual Design", February 2010.
23. "Framework for Analyzing Separation Distances between Transmission Lines in Wyoming", August 2009
24. "Addendum to the Independent Assessment of Midwest ISO Operational Benefits", May 2007